

DELHI UNIVERSITY
LIBRARY

DELHI UNIVERSITY LIBRARY

Cl. No. P13-

Ac. No. 54

B8·1

Date of release for loan

This book should be returned on or before the date last stamped below. An overdue charge of 5 Paise will be collected for each day the book is kept overtime.

ELEMENTS

OF THE

COMPARATIVE GRAMMAR

OF THE

INDO-GERMANIC LANGUAGES.

Da muss sich manches Rätsel lösen.
Doch manches Rätsel knüpft sich auch

Goethe's Faust, Part I

ELEMENTS

OF THE

COMPARATIVE GRAMMAR

OF THE

INDO-GERMANIC LANGUAGES.

A CONCISE EXPOSITION

OF THE HISTORY

OF SANSKRIT, OLD IRANIAN (AVESTIC AND OLD PERSIAN), OLD ARMENIAN, OLD GREEK, LATIN, UMBRIAN-SAMNITIC, OLD IRISH, GOTHIC, OLD HIGH GERMAN, LITHUANIAN AND OLD BULGARIAN

BY

KARL BRUGMANN,

PROFESSOR OF COMPARATIVE PHILOLOGY IN THE UNIVERSITY OF LEIPZIG

VOLUME I.

INTRODUCTION AND PHONOLOGY

TRANSLATED FROM [redacted]

BY

JOSEPH WRIGHT, PH D.

NEW-YORK.

B. WESTERMANN & CO., 812 BROADWAY.

1888.

Printed in Germany by G. Otto, Darmstadt

PREFACE TO THE ORIGINAL EDITION.

Those who have impartially followed the development of comparative philology in the last twenty years will be aware of the great progress it has made in the interval In both the scope and the nature of its work it has shewn all the elasticity and creative vigour of a science that is still young in spite of its seventy years That its diverse and scattered details need to be once again brought together under one systematic arrangement will hardly be doubted by any competent judge The first edition of Schleicher's excellent Compendium' appeared in 1861, and was since twice published in a revised form by the author, the second time shortly before his death When it was edited finally in 1876 with very few changes indeed, the two editors were already of opinion that it required complete remodelling (see the preface p IX) Thus I feel sure that the 'Elements', the first volume of which is now before the reader, meets a real need

Time and competent criticism will decide whether it has solved the problem in any degree satisfactorily and whether it can claim to be of the same service to our science and its students as was Schleicher's book in its time My task was attended by all manner of difficulties and I am fully conscious that in some respects it is inadequately discharged. I trust nevertheless that the result may be of some service, at least for the present.

I take this opportunity of drawing especial attention to one or two points in the plan and execution of my work.

It was not my object to collect all the various views, often widely divergent, which have been from time to time put forward by authorities, on questions relating to the history of the Indo-Germanic languages As a rule I give only the views that I consider right or at least probable, after submitting them to repeated tests. A mere regard to the size of the book necessitated this course. The most important authorities will be found summarily enumerated in the introduction and at the beginning of the separate sections To mention in each case who has treated the subject, and who was the first author of the view I have accepted, seemed to me unnecessary to the purpose of the book, and excluded by the small space at my disposal. I took what was good wherever I was sure I had found it; all parties among the different methods and schools of linguistic science are fairly represented in these pages. Hence though I may per-

haps have overlooked much that is useful, I still hope that approximately at any rate I have attained the aim I had set before me: to exhibit the present state of our knowledge in a concise form, giving prominence to all the more important points.

At the same time I have not confined myself to stating such results as seem certain to stand for all future time I have spoken of many problems that are still unsolved, in order to give the reader not only a survey of what has been already accomplished, but also a glimpse of the work that still remains to be done. This was indispensable in view of the position in which the science of the Indg languages at present stands. Thanks to the discovery of many fresh sources of information, and still more, I think, to the fertile combination, which the past ten years have brought about between minute investigation on the one hand and the philosophy of language on the other (the character of which I have endeavoured to sketch in my essay, 'Zum heutigen Stand der Sprachwissenschaft' p 33 ff.), new problems to be solved have of late arisen on all sides, and that in such numbers that many decades of work will still be needed to master them, so far as we can reckon that they are to be solved at all.[1]) Had I silently passed over all such unsettled questions in the history of the Indg languages, the picture of the whole subject which I tried to draw would have been marred by many grievous blanks. But further I hoped to incite the reader to independent investigation, by referring to much that has not yet passed the stage of problem and hypothesis In doing so I have taken care that what is uncertain should not preponderate over what is certain, and should everywhere be clearly distinguished from it. And if, instead of merely marking the phenomenon in question as unexplained, I have often hazarded a conjecture, at all events in something like the direction in which the solution of the riddle is to be sought, despite those who resent every 'probably' or 'perhaps' in scientific works, I may quote Goethe's words 'The opinions you venture, are like the pawns you move forward on the chess-board, they may be taken, but they have introduced a game that will be won'. The conjectures I have admitted into this book should always be regarded only as challenges to more minute investigation.

As regards the arrangement of the material my aim is to let the different branches of language and the separate languages appear each as a unit complete in itself on the common background of the Indo-Germanic primitive community, yet in such a way that each single phenomenon appears separated as little as possible from the kindred examples in other languages. My method of exposition takes about the middle course between that of Bopp's Comparative Grammar on the one hand, which may

1) As regards exceptions and irregularities it has now become the effort of all scholars to aim at seeking for the reason of the exception, not occasionally only, but in every case, and systematically, and we consider our duty to science undischarged until we have found the answer to the 'why' How many phenomena of language, which once were thought perfectly clear, so that a final judgment could be pronounced upon them, have by this means become unanswered problems!

be described as a connected picture sinking what belongs to the separate languages in the Indo-Germanic whole, and that of Schleicher's Compendium, on the other, which does little more than string together a number of separate grammars It seeks to unite the excellences of both This of course could not be done without some sacrifice of system In the phonology I was obliged to add a series of chapters on combinatory sound-change after tracing the development of the primitive Indo-Germanic sounds one by one Here I have had now and then to repeat in sum what had already been mentioned or to expand and supplement what before had been merely hinted at I prefer to submit to this incongruity of arrangement, which Schleicher has avoided, than to disregard consciously the considerable didactic advantage that it affords, and in this point at least I hope to have on my side the academical teachers who lecture on comparative grammar

In the transcription I have been as far as possible conservative. The reader will easily perceive why I was obliged to discard one or two symbols widely in use, e g the representation of the Sanskrit palatal and cerebral sibilants by ç and ŝ (or *sh*) I ought perhaps in general to have paid even more attention than I have done to the rule that the same sound in different languages should be represented by the same sign e g Av ʒ, not γ, on account of the Germanic (Ags) ʒ, Gothic *g*, not *r*, on account of the Old High German *c*. And in several other points the notation might certainly be improved, at least if it be thought desirable to sacrifice what is widely or universally in use in favour of less usual methods. As regards the Aryan languages and Armenian especially, I gladly take this opportunity of expressing a wish, which, I think, most Indo-Germanic scholars share with me, that the Congress of Oriental scholars [1]) should sanction by its authority as soon as it is practicable to do so, some suitable system of transcription for these languages, which should have regard to the needs both of special philologists and of comparative scholars, so that the vagaries of the prevailing usage in the matter may be at last brought within bounds That the question of transcription is not yet ready for a final settlement is no valid objection

My work has been least independent in dealing with the phonology of Iranian and Armenian. Here I could generally connect it very closely with the excellent works of Bartholomae and Hübschmann, especially with the former's Handbook of the Old Iranian Dialects, and the latter's Armenian Studies I have only deviated in a very few points from Hübschmann's treatment of the history of the Armenian sounds. In the Keltic branch many will look for a more detailed account of the British dialects. I fully admit that comparative philology must devote more attention to these dialects than has hitherto been the case. But my knowledge in this department is too small for me to venture to set any

[1]) The attempt made in the fifth Congress (see 'Verhandlungen des fünften internationalen Orientalisten-Congresses', Berlin 1881, p. 89) has unfortunately led to no result.

dialect of the British group side by side with Irish It was my intention two years ago to make myself so far familiar with Cymric as to be able to treat the chief features at least of this language along with the rest. My removal to Freiburg however at that time cut me off almost entirely from all Keltological literature, and I was thus obliged to abandon my design As regards Irish also the want of a library[1]) sufficiently furnished with philological literature caused me difficulties in many ways I am hence all the more thankful to Prof *Thurneysen* of Jena [now in Freiburg], who not only sent me information on many points of Keltic philology, but also at my request undertook the trouble of revising the proof-sheets relating to Keltic Both have been a help to my work in many details, in far more places than has been indicated by a reference to his name In particular it was such help only that made it possible in all cases to distinguish the British forms correctly according to dialect and period It may also be remarked that almost all the addenda relating to Keltic p 565 ff [now incorporated with the text of this translation] were due to communications from Thurneysen If I add lastly that my treatment of some of the phenomena of Keltic philology is not in harmony with the views of this scholar, it is in order to prevent misunderstanding, that he may not in any way be made responsible for mistakes that might be found in the Keltic parts of this book I have to thank Dr Holthausen of Heidelberg [now in Halle] for some notices relating to Germanic, which he placed at my disposal after an inspection of several proof- and the finally revised sheets and of which I have for the most part made use

I have not been able consistently to take account of the scientific literature which has appeared this year I especially lament that the second edition of G Meyer's Greek Grammar, Braune's Old High German Grammar and the second edition of Leskien's Hand-book of the Old Bulgarian Language did not appear until after my printing had begun

To facilitate reference, I shall add an index of words at the end of the whole work

Its continuation and conclusion shall follow as quickly as time and strength permit

Freiburg i. B., July 1886

KARL BRUGMANN.

[1]) It is only since the founding of the chair for comparative philology that the University library here has systematically purchased works on this subject (apart of course from the classical languages and Germanic), so that the necessary material can only be procured very gradually.

TRANSLATOR'S PREFACE.

When Prof Brugmann and Mr. Trubner proposed to me, two years ago, while I was still a student in Heidelberg, that I should translate the 'Grundriss der vergleichenden Grammatik der indo-germanischen Sprachen' into English as soon as it appeared, I gladly accepted the proposal, in the hope that I should thus be rendering valuable service both to English and American students of philology, especially to the former who would otherwise very possibly, if they did not happen to know German, have to remain an indefinite length of time without being able to enter into a systematic and scientific study of languages, based on firm and rigid principles.

If the work of translating the original has taken me longer than I at first anticipated it would, this is almost entirely due to the poverty-stricken state of our language as regards current philological technical terms. Some of the terms employed by me, e g slurred and broken accent, intersonantal, initiality strong-grade etc , will no doubt sound strange at first reading. But those, who have either been trained at a German university or are familiar with German philological literature, will readily confess how difficult it sometimes is to find a very exact and appropriate English equivalent for many of the German grammatical technicalities. Time will of course show whether I have in each case hit upon the best term, but I have everywhere tried rather to represent as exactly as I could the meaning of the author than to produce an elegant English paraphrase, which could preserve neither the brevity nor the rigidly scientific form of the original

Last spring Prof. Brugmann gave me in Leipzig a list of corrections, consisting partly of misprints not given at the end of the original work, and partly of a few slight mistakes which were mentioned in the reviews of the work. These as also the corrections and emendations at the end of the German edition have been worked into the body of the translation. I also received from the author a short time ago one or two other corrections of the original which will be found at the end of the present edition.

At the end of the volume will be found a short list of those abbreviations which would be likely to cause the reader any difficulty.

In conclusion I have to express my sincere gratitude to Prof. Brugmann and Mr. P Giles, Fellow of Gonville and Cajus College Cambridge, for the great assistance they have rendered me by helping in the reading of the proof-sheets.

J. WRIGHT.

London, November 29, 1887

CONTENTS OF THE FIRST VOLUME.

INTRODUCTION.

Page

DEFINITION OF THE SCIENCE OF THE INDO-GERMANIC LANGUAGES, AND THE DIVISION OF THE INDG. FAMILY OF LANGUAGES INTO ITS VARIOUS BRANCHES . . 1

Definition of the science of the Indg languages (§ 1) . 1
Primitive home of the Indg people (§ 2) . . . 2
Differentiation of dialects (§ 3) . . 2
1 The Aryan branch (§ 4) 4
2. The Armenian branch (§ 5) 5
3. The Greek branch (§ 6) . . . 6
4 The Albanian branch (§ 7) . 7
5 The Italic branch (§ 8) . 8
6 The Keltic branch (§ 9) 9
7 The Germanic branch (§ 10) 10
8 The Baltic-Slavonic branch (§ 11) 11
Sketch of the Indg phases of development to be discussed in this book (§ 12) 12

ON THE STRUCTURE OF THE INDG. LANGUAGES IN GENERAL. ROOT AND SUFFIXES 13

Development of word-formation and inflexion from composition (§ 13) 13
Meaning of the hyphens usual in the analysis of words (§ 14) . . 16

PHONOLOGY.

THE SOUNDS OF THE INDG. PRIMITIVE LANGUAGE (§ 15) . . 19

PHONETIC ELUCIDATIONS 20

1. Voiced and voiceless sounds (§ 16) 20
2. Sonorous and noised sounds (§ 17) 21
3. Sonants and consonants (§ 18) 21

Page

ON THE PRONUNCIATION OF THE LETTERS . . 22
The different kinds of alphabets and transcription (§ 19) . . 22
Sanskrit (§ 20) . . 23
Iranian (§ 21) . . 24
Armenian (§ 22) . . 25
Umbrian-Samnitic (§ 23) . . 26
Old Irish (§ 24) . . 27
Gothic (§ 25) . . 28
Lithuanian (§ 26) . . 28
Old Bulgarian (§ 27) . . 30

HISTORY OF THE SEPARATE PRIM. INDG SOUNDS

THE VOWELS.

A The vowels as sonants . . 30
The prim Indg. vowel sounds (§ 28) . . 30
Indg. *e* . . 30
Prim Indg. (§ 29) . . 32
Aryan (§ 30) . . 32
Armenian (§ 31) . . 32
Greek (§ 32) . . 32
Italic (§ 33) . . 33
O Irish (§ 34) . . 34
Germanic (§ 35) . . 35
Baltic-Slavonic (§ 36) . . 35
Indg. *ē* . . 37
Prim. Indg (§ 37) . . 37
Aryan (§ 38) . . 38
Armenian (§ 39) . . 38
Greek (§ 40) . . 38
Italic (§ 41) . . 38
O Irish (§ 42) . . 39
Germanic (§ 43) . . 39
Baltic-Slavonic (§ 44) . . 39
Indg. *a* . . 40
Prim. Indg. (§ 45) . . 40
Aryan (§ 46) . . 40
Armenian (§ 47) . . 40
Greek (§ 48) . . 41
Italic (§ 49) . . 41
O.Irish (§ 50) . . 42
Germanic (§ 51) . . 43
Baltic-Slavonic (§ 52) . . 43
Indg. *ă* . . 45
Prim. Indg (§ 53) . . 45
Aryan (§ 54) . . 45

Page

Armenian (§ 55) 45
Greek (§ 56) 45
Italic (§ 57) 46
O.Irish (§ 58) 46
Germanic (§ 59) 47
Baltic-Slavonic (§ 60) 47

Indg. *e* 47
Prim. Indg. (§ 61) 47
Aryan (§ 62) 49
Armenian (§ 63) 50
Greek (§ 64) 50
Italic (§ 65) 51
O.Irish (§ 66) 54
Germanic (§ 67) 56
Baltic-Slavonic (§ 68) 59

Indg. *ē* 61
Prim. Indg. (§ 69) 61
Aryan (§ 70) 62
Armenian (§ 71) 62
Greek (§ 72) 63
Italic (§ 73) 63
O.Irish (§ 74) 64
Germanic (§ 75) 64
Baltic-Slavonic (§ 76) 65

Indg. *o* 66
Prim. Indg. (§ 77) 66
Aryan (§ 78) 68
Armenian (§ 79) 70
Greek (§ 80) 71
Italic (§ 81) 72
O.Irish (§ 82) 76
Germanic (§ 83) 77
Baltic-Slavonic (§ 84) 79

Indg. *ō* 83
Prim. Indg. (§ 85) 83
Aryan (§ 86) 83
Armenian (§ 87) 84
Greek (§ 88) 84
Italic (§ 89) 84
O.Irish (§ 90) 85
Germanic (§ 91) 85
Baltic-Slavonic (§ 92) 86

Indg. *a* 87
Prim. Indg. (§ 93) 87
Aryan (§ 94) 88

Page

Armenian (§ 95) 89
Greek (§ 96) 90
Italic (§ 97) 91
O.Irish (§ 98) 93
Germanic (§ 99) 94
Baltic-Slavonic (§ 100) 94

Indg. *ā* 96

Prim. Indg. (§ 101) 96
Aryan (§ 102) 96
Armenian (§ 103) 97
Greek (§ 104) 97
Italic (§ 105) 98
O Irish (§ 106) 99
Germanic (§ 107) 99
Baltic-Slavonic (§ 108) 99

Indg. *ə* (§ 109—110) 100

Primitive Indg vowel contraction 105
General remarks (§ 111) 105
I. Contraction of *a*-, *e*-, *o*-vowels with *a*-, *e*-, *o*-vowels (§ 112—115) 106
II. Contraction of *a*-, *e*-, *o*-vowels with *i*- and *u*-vowels (§ 116) 108

B. The vowels as consonants . . . 109

General remarks (§ 117) 109

Indg. *i̯* 110

Prim. Indg. (§ 118—122) 110
Aryan (§ 123—127) 113
Armenian (§ 128) 117
Greek (§ 129—132) 117
Italic (§ 133—136) 120
O Irish (§ 137—140) 124
Germanic (§ 141—144) 125
Baltic-Slavonic (§ 145—148) 130
Loss of *i̯* in the prim. Indg. period (§ 149—150) 135

Indg. *u̯* 137

Prim. Indg. (§ 151—156) 137
Aryan (§ 157—161) 140
Armenian (§ 162) 145
Greek (§ 163—167) 145
Italic (§ 168—172) 149
O Irish (§ 173—176) 153
Germanic (§ 177—181) 155
Baltic-Slavonic (§ 182—186) 159
Loss of *u̯* in the prim. Indg. period (§ 187—188) 162

Page

NASALS.

A. The nasals as consonants 162
Prim. Indg. period (§ 189—196) 162
Aryan (§ 197—200) 166
Armenian (§ 201—202) 169
Greek (§ 203 -205) 169
Italic (§ 206—209) 173
O.Irish (§ 210—212) 177
Germanic (§ 213—215) 180
Baltic-Slavonic (§ 216—219) 183
Nasal changes in the prim. Indg period (§ 220—221) 188

B The nasals as sonants 190
Preliminary remarks (§ 222) 190
1 The short sonant nasals (§ 223—252) 190
General remarks (§ 223) 190
Prim. Indg period (§ 224 227) 191
Aryan (§ 228—231) 194
Armenian (§ 232) 197
Greek (§ 233 -236) 197
Italic (§ 237—241) 199
O Irish (§ 242-243) 200
Germanic (§ 244—247) 201
Baltic-Slavonic (§ 248—252) 204
2 The long sonant nasals (§ 253) 206

LIQUIDS.

A. The liquids as consonants 207
Prim. Indg period (§ 254—256) 207
Aryan (§ 257—261) 210
Armenian (§ 262—263) 213
Greek (§ 264—266) 214
Italic (§ 267—271) 216
O.Irish (§ 272-274) 219
Germanic (§ 275—277) 220
Baltic-Slavonic (§ 278—281) 222
Changes of liquids in the prim. Indg. period (§ 282) 225

B. The liquids as sonants 226
Preliminary remarks (§ 283) 226
1. The short sonant liquids (§ 284—305) 226
General remarks (§ 284) 226
Prim. Indg. period (§ 285—287) 227
Aryan (§ 288—290) 229
Armenian (§ 291) 232
Greek (§ 292—294) 233

Page

Italic (§ 295–297) 235
O.Irish (§ 298) 236
Germanic (§ 299–301) 237
Baltic-Slavonic (§ 302–305) 239
2. The long sonant liquids (§ 306) 241

ABLAUT (VOWEL GRADATION).

The nature of ablaut and the different grades of ablaut in general (§ 307–310) 244
1. The *e*-series (§ 311–314) 247
2. The *ē*-series (§ 315) 254
3. The *ā*-series (§ 316) 255
4. The *o*-series (§ 317) 255
5. The *a*-series (§ 318) 256
6. The *o*-series (§ 319) 258

EXPLOSIVES.

General remarks: The nature of explosives (§ 320), place of articulation (§ 321), form of articulation (§ 322), system of the Indg. explosives (§ 323) 261

A. The explosives according to their place of articulation 262

1. The labial explosives 262
Indg. prim. period (§ 324–326) 262
Aryan (§ 327–329) 264
Armenian (§ 330–332) 265
Greek (§ 333–335) 266
Italic (§ 336–338) 267
O Irish (§ 339–341) 268
Germanic (§ 342–344) 270
Baltic-Slavonic (§ 345–347) 271

2. The dental explosives 272
Prim. Indg. period (§ 348–350) 272
Aryan (§ 351–359) 273
Armenian (§ 360–362) 275
Greek (§ 363–365) 277
Italic (§ 366–370) 278
O.Irish (§ 371–373) 282
Germanic (§ 374–376) 283
Baltic-Slavonic (§ 377–379) 285

3. The palatal explosives 286
General remarks (§ 380) 286
Prim. Indg. period (§ 381–383) 288

Page

a. The language-group with explosives 289
Greek (§ 384—386) 289
Italic (§ 387—389) 290
O Irish (§ 390—392) 292
Germanic (§ 393—395) 293

b. The language-group with spirants or affricatae . . . 295
Aryan (§ 396—407) 295
Armenian (§ 408—410) 300
Albanian (§ 411) 302
Baltic-Slavonic (§ 412—416) 302

4 The velar explosives . . 305
General remarks (§ 417) 305
Prim Indg period (§ 418—423) . . . 306

a The language-group with labialisation . . . 309
Preliminary remark on the irregular appearance of labialisation (§ 424 . . 309
Greek (§ 425—429) 311
Italic (§ 430—433) 318
O Irish (§ 434—438) 323
Germanic (§ 439—444) 326

b The language-group without labialisation . . 331
Aryan (§ 445—454) . 331
Armenian (§ 455—457) . . 336
Albanian (§ 458—460) . . . 337
Baltic-Slavonic (§ 461—465) 337
Retrospect of the history of the velar explosives (§ 466) 341
Interchange of the palatal and velar explosives (§ 467) . 342

B The explosives after their form of articulation.

Prim Indg period (§ 468—469) 344
Aryan (470—482) 347
Armenian (§ 483—485) 357
Greek (§ 486—497) 359
Italic (§ 498—511) 365
O Irish (§§ 512—526) 375
Germanic (§ 527—541) 381
Baltic-Slavonic (§ 542—551) 396
The combination media asp + *t*, *s* (§ 552) 403
The Indg. tenues aspiratae (§ 553) 405

THE SPIRANTS.

General remarks on the prim Indg. spirants (§ 554) 407
Indg *s*.
Prim. Indg. period (§ 555) 408

*

Page

Aryan (§ 556—558) 410
Armenian (§ 559—562) 416
Greek (§ 563—566) . 418
Italic (§ 567—572) 424
O.Irish (§ 573—576) 430
Germanic (577—583) 432
Baltic-Slavonic (§ 584—588) 438
Prim. Indg. changes of s (§ 489) . 445

Indg. z
Prim. Indg period (§ 590) . . . 447
Aryan (§ 591) . 447
Armenian (§ 592) . 449
Greek (§ 593) 449
Italic (§ 594) . 450
O Irish (§ 595) 451
Germanic (§ 596) 451
Baltic-Slavonic (§ 597) 452

Indg / (§ 598) 452

OTHER COMBINATORY SOUND-CHANGES

Preliminary remarks (§ 599) 453

CONTRACTION (HIATUS, ELISION).

General remarks (§ 600) . 453
Aryan (§ 601) 455
Armenian (§ 602) 455
Greek (§ 603) 455
Italic (§ 604) 457
O.Irish (§ 605) 458
Germanic (§ 606) 459
Baltic-Slavonic (§ 607) 460

SHORTENING OF LONG VOWELS.

General remarks (§ 608) . . 461
Aryan (§ 609) 461
Armenian (§ 610) 461
Greek (§ 611) 461
Italic (§ 612) . 462
O.Irish (§ 613) . 464
Germanic (§ 614) . . . 464
Baltic-Slavonic (§ 615) . . 465

LENTHENING OF SHORT VOWELS.

Aryan (§ 616) 465

Page

Armenian (§ 617) . . 466
Greek (§ 618) . 466
Italic (§ 619) . . 466
O Irish (§ 620) 467
Germanic (§ 621) . 467
Baltic-Slavonic (§ 622) 467

ANAPTYXIS FROM CONSONANTS

General remarks (§ 623) 468
Aryan (§ 624) 469
Armenian (§ 625) 470
Greek (§ 626) . 470
Italic (§ 627) 470
Germanic (§ 628) 472
Baltic-Slavonic (§ 629) 472

VOWEL ABSORPTION

General remarks (§ 630) . . . 473
Aryan (§ 631) 473
Armenian (§ 632) 473
Italic (§ 633) 473
O Irish (§ 634) 474
Germanic (§ 635) 475
Baltic-Slavonic (§ 636) 477

PALATALISATION AND LABIALISATION WITH EPENTHESIS.

General remarks (§ 637) . . 477
Aryan (§ 638) . 478
Greek (§ 639) 478
O Irish (§ 640) 479
Germanic (§ 641) 481
Baltic-Slavonic (§ 642) 481

LOSS OF SYLLABLE BY DISSIMILATION (§ 643) 481

SANDHI (SATZPHONETIK).

Sandhi in general (§ 644) 483
Prim. Indg period (§ 645) . . 488
Aryan (§ 646—650) 490
Armenian (§ 651) . . 497
Greek (§ 652—654) 498
Italic (§ 655—656) 501
O.Irish (§ 657—658) 506
Germanic (§ 659—662) 512
Baltic-Slavonic (§ 663—666) 521

Page

ACCENTUATION.

Accentuation in general (§ 667—668) 527
Prim. Indg period (§ 669—671) 532
Aryan (§ 672—674) 537
Armenian (§ 675) 539
Greek (§ 676—678) 540
Italic (§ 679—683) 545
O.Irish (§ 684—685) 550
Germanic (§ 686—689) 552
Balto-Slavonic (§ 690—692) 556

ADDITIONS AND CORRECTIONS 562

INTRODUCTION.

DEFINITION OF THE SCIENCE OF THE INDO-GERMANIC LANGUAGES, AND THE DIVISION OF THE INDO-GERMANIC FAMILY INTO ITS VARIOUS BRANCHES.

§ 1. The science of the Indg. languages forms, like Indg. Mythology, a section of Indg. '*Philology*', i. e. of that science, which has to investigate the intellectual development of the Indg. peoples from the time before their separation up to the present day. Its method accordingly is historical and its task is to investigate the whole development of the Indg. languages from the time when they were still one language down to the present day. Its unity is in no sense broken by the results furnished by the specialists in Sanskrit, Ancient and Modern Greek, Latin and the Romance languages, Keltic etc., for the sciences of the Indian languages, of cient and Mod. Greek etc. are integral components of the grand whole formed by that of the Indo-Germanic.

It is true that the so called comparative science of language has hitherto been almost exclusively confined to the older periods of the Indg. languages, but this is due to the division of labour which was involved in the method by which alone progress could be made, as well as to the limitations of human strength. Probably the same division of labour will still be necessary, but it implies no real opposition between the different parts of the science.

Compare the author's inaugural address 'Sprachwissenschaft und Philologie' (in his 'Zum heutigen Stand der Sprachwissenschaft', Strassburg 1885, p. 3 ff.).

§ 2. We are not at present in a position to determine finally what was the primitive home of the Indg. tribes. Only so much is clear, that these tribes in pre-historic times must have been far less widely diffused than they were at the beginning of the historic era. It was formerly usual to place this primitive home somewhere in Asia, whereas at present scholars lean rather to the opinion that the Asiatic members of the stock passed over from Europe. Cp. O. Schrader 'Sprachvergleichung und Urgeschichte', Jena 1883, p. 442 ff.

§ 3. It is impossible to suppose that a language should have gone through a long course of development, and be spoken by a people of any considerable numbers, without a certain amount of dialectical variation; and hence we cannot look upon the speech of the Indogermans, even while they still occupied a comparatively small territory and maintained a fairly close degree of intercourse with one another, as bearing in any strict sense, a uniform character. Local differences had no doubt already arisen, though actual instances of this have hardly as yet been established with perfect certainty. One such I have maintained, though only as a conjecture, in §§ 380, 417. In historical times there appear a multitude of dialects, diverging in a greater or less degree, the whole field of which can hardly be included in any one survey. We may take for granted that the differentiation of dialects about the year 2000 B. C. had gone so far, that a number of communities existed side by side, which could no longer, or only with difficulty understand one another. The historic record of the various individual developments begins at very different periods. E. g. the Indian development is known to us from about the year 1500 B. C. onwards, the Latin from about 300 B. C., the Irish since the eighth century of the Christian era (with the exception of the Ogam inscriptions, cp. § 9), and the Lithuanian from the middle of the sixteenth century.

A number of separate developments, which sprung from the primitive Indg. language, have perished without leaving any traces of their existence. Of others we have only very scanty fragments left, on which it is scarcely, if at all, possible to found a grammar, as of Phrygian, Macedonian, Messapian, Gallic, and Burgundian. The remainder have come down to us with a more abundant supply of material.

The dialects belonging to this last class, are arranged into eight groups (branches of language): 1. Aryan, 2. Armenian, 3. Greek, 4. Albanian, 5. Italic, 6. Keltic, 7. Germanic, 8. Baltic-Slavonic. Each group is distinguished by the fact that its individual members show in common a considerable number of changes in sound, inflexion, syntax and vocabulary; e. g. the shifting of the prim. Indg. explosives, discussed in § 527 ff. (what is known as the first sound-shifting), is one of the numerous characteristics of the close relation existing between the Germanic dialects.

Of the dialects, which have come down to us only in scanty fragments, there are a certain number which can be assigned with certainty to one or other of these eight groups, e. g. the Burgundian to the Germanic, and the Gallic to the Keltic group, whilst others, e. g. the Macedonian, seem to belong to none of them.

It is in itself very possible that some of these eight chief members stand to each other in a closer relationship, and form a single group historically distinct from the rest. All attempts, however, to establish such a closer relationship, have hitherto proved futile. The Italo-Keltic hypothesis has perhaps the best prospect of attaining a greater degree of probability in the future.

Cp. Johannes Schmidt Die Verwandtschaftsverhältnisse der indogermanischen Sprachen, Weimar 1872. Leskien Die Declination im Slavisch-Litauischen und Germanischen, Leipzig 1876, introduction. Delbrück Einleitung in das Sprachstudium, Edition 2. 1884, p. 131 ff. C. Schrader op. cit. p. 66 ff. The Author, Zur Frage nach den Verwandtschaftsverhältnissen

der indogermanischen Sprachen, in Techmer's Internat. Zeitschr. für allg. Sprachwissenschaft I 226 ff.

§ 4. (1) The Aryan branch consists of the Indian and Iranian groups.

The oldest and most archaic dialect of the Indian group is the language of the Veda, the oldest portions of which (the hymns of the Rigveda) possibly go back as far as 1500 B.C.[1]). Next comes Sanskrit in the stricter sense of the word (also called classical Sanskrit), the continuation of a dialect now lost, which existed side by side with the Vedic and differed but slightly from it in the formation of its sounds and inflexions. It became separated from the popular development as the literary language, and was stereotyped in a fixed and purely artificial form. The vulgar language, called Prākrit, as early as the third century B.C. differed very materially from Sanskrit and at that time was divided into at least three chief dialects. Through the influence of Buddhism, Prākrit was also raised to a literary language (Pāli). From the popular dialects of Prākrit have descended the numerous modern Indian languages and dialects, Hindi (Hindustani), Bengali, Uriya, Maharatti, Guzerati, Sindhi, Penjabi and others.

In this work we shall only deal with the Vedic language and classical Sankrit.

Cp. Bopp Kritische Grammatik der Sanskrita-Sprache in kürzerer Fassung, Edit. 3., Berlin 1863. Benfey Vollständige Grammatik der Sanskritsprache, Leipzig 1852. The same Author's Kurze Sanskrit-Grammatik, Leipzig 1855. Whitney Sanskrit Grammar, Leipzig 1879 (with supplement I, Grammatisches aus dem Mahabharata, by A. Holtzmann, 1884; supplement II, The roots, verb-forms, and primary derivatives of the Sanskrit language, by Whitney, 1885).

The oldest recorded dialects of the Iranian group are Old Persian (West Iranian), the language of the Persian

1) Cp. A. Kaegi Der Rigveda, die älteste Literatur der Inder, Edition 2, Leipzig 1881.

cuneiform inscripitions dating from about 520 to 350 B.C., and Avestic, also called Zend and Old Bactrian (East Iranian), the language of the Avesta, the sacred book of the Zoroastrians, which has come down to us with corruptions of many kinds, deviating considerably from its original form. The various portions of the work were composed at very different periods[1]). Some parts of the Avesta, including 17 hymns (gāϑā f.), are written in a peculiar dialect, which is more archaic than the language of the other parts, and as distinct from which the latter is called Later Avestic or Zend in the stricter sense. Not one of the Modern Iranian languages is a direct continuation of Old Persian or Avestic. The Modern Persian dialects (Gilani etc.), Kurdic and probably also Ossetian (spoken in the neighbourhood of the Caucasus) are more closely related to the former, and the language of Afghanistan (Paštu) to the latter.

We shall only deal with the two Old Iranian languages.

Cp. Spiegel Die altpersischen Keilinschriften, Edition 2., Leipzig 1881. Justi Handbuch der Zendsprache, Leipzig 1864. Bartholomae Handbuch der altiranischen Dialekte, Leipzig 1883.

§ 5. (2) Armenian, which de Lagarde and Friedr. Müller assigned to the Iranian group, but Hübschmann (Kuhn's Ztschr. XXIII 5 ff., 400 ff.) has proved to be an independent member of the Indg. family of languages, is known to us since the fifth century of our era. The literary language (O.Armenian), which had then become fixed, remained in this usage without any material changes down to modern times, and is separated by a great interval from the modern dialects. Historical investigations have hitherto been almost exclusively confined to O.Armenian. The term Armenian will always be used in the sense of O.Armenian.

Cp. Petermann, Grammatica linguae Armeniacae, Berlin 1837. The same Author, Brevis linguae armeniacae grammatica, litteratura, chrestomathia cum glossario, ed. II, Berlin 1872.

1) On the difficult question as to the age of the Avesta cp. Eduard Meyer Geschichte des Alterthums I (1884) p. 501 ff.

Hübschmann Armenische Studien I, Leipzig 1883 (of special importance for the phonology).

§ 6. (3) Greek had strongly marked variations in different localities long before Homer's time and in the historic era appears split up into numerous dialects.

These may be classified in the following manner: 1. Ionic-Attic, a. The district of Ionia, b. Attica. 2. Doric, a. Laconia with Tarentum and Heraclea, b. Messenia, c. Argolis and Aegina, d. Corinth with Corcyra, e. Megara with Byzantium, f the Peloponnesian colonies of Sicily, g. Crete, h Thera and Melos together with Cyrene, i. Rhodes with Gela and Acragas, k. the other Dor. islands in the Aegean, as Carpathus, Astypalaea etc. 3. North West Greek, a. Phocis, b. Locris, c. Aetolia, d. Acarnania, e. Phthiotis and the district of the Aenianes, f. Epirus, g. probably also Achaia. 4. Aeolic, a. Lesbos and Aeolian Asia Minor, b. North Thessaly, c. Boeotia. 5. Elean (belonging to North West Greek?). 6. Arcadian-Cyprian[1]). 7. Pamphylian.

These dialects are found in their purest form on inscriptions. The literary language, especially that of the poets, is in many respects artificially constructed; even the language of the Homeric poems is in great measure an artificial dialect.

Towards the end of the fifth century B. C. there was formed on the basis of the Attic dialect a literary language common to all Greeks, which almost entirely excluded the use of the other dialects from the later prose literature of antiquity. Hence it is that we have to gather our knowledge of most of the non-Attic local dialects either entirely, or almost entirely, from inscriptions.

The language of mediaevel Greek literature is an artificial mixture of ancient Greek with forms of the then spoken popular language in varying degrees of modification. Modern Greek

1) Collitz (Die Verwandtschaftsverhältnisse der griech. Dialekte 1885) places this dialect in close relation with Aeolic and puts forward the hypothesis that 'the Thessalian dialect in point of language forms the transition-stage from Boeotian to Lesbian, from Lesbian to Cyprian-Arcadian and from Cyprian-Arcadian to Boeotian' (p. 9)

exhibits a rich development of dialects; as yet little has been done towards fixing the historical relation of the separate dialects to ancient Greek[1]).

We shall confine our attention to the development of the O.Gr. dialects.

Cp. Ahrens De Graecae linguae dialectis, I. De dialectis Aeolicis, Gottingen 1839, II. De dialecto Dorica, Göttingen 1843. R. Meister Die griechischen Dialekte, I. Asiatisch-Äolisch. Böotisch, Thessalisch, Göttingen 1882. G. Curtius Grundzüge der griechischen Etymologie, Edit. 5., Leipzig 1879. R. Kühner Ausführliche Grammatik der griechischen Sprache, 2 vols., Edit. 2., Hannover 1869—1870. G. Meyer Griechische Grammatik, Leipzig 1880 (Edit. 2. 1886) Delbrück Die Grundlagen der griechischen Syntax, Halle 1879. The Author, Griechische Grammatik, in Iw. Müller's Handbuch der klassischen Altertumswissenschaft II (1885) p. 1—126.

§ 7. (4) Albanian, the language of ancient Illyria, has only been known to us from monuments of any extent since the seventeenth century. The historical treatment of this language, which is beset with manifold difficulties — the greatest of which lies in clearly separating pure Albanian words from those borrowed from the Greek, Latin, Romance, Slavonic and Turkish languages —, is still in its infancy.

Cp. Gustav Meyer Albanesische Studien, Wien I 1883, II 1884 (in which the whole of the older literature has been collected together) and 'Der Einfluss des Lateinischen auf die alban. Formenlehre' in the Miscellanea di Filologia, dedicata alla memoria dei professori Caix e Canello p. 103 ff.[2]).

We shall only take this language into account in discussing

1) Considerations introductory to the study of the relation of Middle and Modern Greek to O.Greek and the researches on the subject are given by Krumbacher Beiträge zu einer Geschichte der griech. Sprache, in Kuhn's Ztschr. XXVII 481 ff.

2) The treatise of the same scholar 'Über Sprache und Literatur der Albanesen' in his 'Essays und Studien zur Sprachgeschichte und Volkskunde', Berlin 1885, p. 49 ff. is strongly to be recommended as an introduction to this subject.

the development of the Indg. palatal and guttural explosives § 411 and § 458—460.

§ 8. (5) The Italic branch consists of Latin on the one hand and of the Umbrian-Samnitic dialects on the other.

Latin, with which the little known dialect of Falerii was closely related, is known to us from about 300 B. C. onwards. So long as the language was confined to Latium, there existed no dialectical differences of any importance. The contrast between the popular and the literary language, which had already arisen at the beginning of the archaic period of literature (from Livius Andronicus to Cicero), became still sharper in the classical period, and the further development of the former is almost entirely lost to our observation until the Middle Ages, when the popular Latin of the various provinces of the Roman empire meets us in a form more or less changed and with a rich development of dialects (Romance languages: Portuguese, Spanish, Catalanian, Provençal, French, Italian, Raetoromanic and Roumanian) [1]).

We shall only consider the development of the Latin of antiquity.

Cp. Corssen Über Aussprache, Vocalismus und Betonung der lateinischen Sprache, 2 vols., Leipzig 1858. 1859, edit. 2., 1868. 1870. R. Kühner Ausführliche Grammatik der lateinischen Sprache, 2 vols., Hannover 1877. 1879. F. Stolz and J. G. Schmalz Lateinische Grammatik, in Iw. Müller's Handbuch der klass. Altertumsw. II (1885) p. 127—364.

The Umbrian-Samnitic dialects are known to a certain extent through inscriptions, which for the most part belong to the last centuries before our era, and through words quoted by Roman writers. We are best acquainted with Umbrian (Bréal Les tables Eugubines, Paris 1875, Bücheler Umbrica, Bonn 1883) and Oscan (Zvetaieff Sylloge inscriptionum Oscarum, Petersburg-Leipzig 1878). Of the Volscian, Picentine, Sabine,

1) Cp. Budinszky Die Ausbreitung der lat. Sprache über Italien und die Provinzen des römischen Reiches, Berlin 1881, Gröber in the Archiv für lat. Lexikographie I 35 ff., 204 ff.

Aequiculan, Vestinian, Marsian, Pelignian and Marrucinian dialects we have only very scanty remains (Zvetaieff Inscriptiones Italiae Mediae dialecticae, Leipzig 1884). All these dialects were forced into the background at an early period by the intrusion of Latin. The Sabines, who received citizenship in 267 B. C., seem to have been the first to become romanised. The slowest to give way was Oscan, which in the mountains did not perhaps become fully extinct for centuries after the Christian era.

Cp. further Bruppacher Osk. Lautlehre, Zürich 1869, Enderis Versuch einer Formenlehre der osk. Sprache, Zürich 1871.

§ 9. (6) The Keltic languages fall into three groups: Gallic, Britannic and Gaelic[1]).

We know something of Gallic through Keltic names and words quoted by Greek and Latin authors, through inscriptions and coins. But the interpretation of the forms, mostly proper names, is in most cases so uncertain that from these remains linguistic research has hitherto gained comparatively little.

Britannic broke up into Cymric (or Welsh), Cornish and Bas Breton (or Armorican); the connexion between the last two is especially close. We are acquainted with Cymric and Bas Breton from the eighth or ninth century onward, at first through glosses; the oldest records of Cornish are somewhat later. The last named dialect became extinct at the end of the eighteenth or beginning of the nineteenth century, both the others are still living.

Irish-Gaelic, Scotch-Gaelic (which is also known as Gaelic in the stricter sense), and Manx (spoken in the Isle of Man) form the Gaelic division. All three of these are still living. The first two languages seem hardly to have differed from each other in the ninth century. The oldest monuments are the O.Gaelic Ogam inscriptions (Ogam is the native name for the

1) The first two languages have often been classed together as a special group, but without sufficient reason. See Thurneysen Kelto-romanisches 1884 p. 7 ff.

Gaelic runes), which possibly date as far back as about 500 A.D. The literary record of Irish begins in the eighth century, at first with glosses, and then from the year 1100 onward we have many extensive manuscripts which contain sagas, ecclesiastical literature etc. Scotch-Gaelic literature begins somewhat later than that of Irish and in the older period is closely connected with Irish. Manx is only known to us during the last few centuries[1]).

We shall consider chiefly Old Irish.

Cp. J. C. Zeuss Grammatica Celtica (e monumentis vetustis tam Hibernicae linguae quam Britannicarum dialectorum Cambricae Cornicae Aremoricae comparatis Gallicae priscae reliquiis construxit J. C. Z.), Edit 2. by H. Ebel, Berlin 1871. Windisch Kurzgefasste irische Grammatik, Leipzig 1879.

§ 10. (7) The Germanic branch is divided into Gothic, Norse, and West Germanic.

Gothic, the most archaic language of the Germanic group, is chiefly accessible to us through the biblical translation of the West Gothic bishop Ulfilas (311—381 A.D.). The language perished with the Gothic nation. (The East Goths, who dwelt in the Crimea, retained their language down to modern times; but of this branch of Gothic we possess only a few isolated words.)

Norse (or Scandinavian), which in certain special points closely coincides with Gothic[2]) and is therefore by some writers classed together with it as East Germanic as opposed to West Germanic, down to the Viking period (800—1000 A. D.) was practically a single language, but later on became broken up into four languages, Icelandic and Norwegian (West Norse) on the one hand, Swedish and Danish (East Norse) on the other. The earliest records are runic inscriptions, the oldest of which

1) Windisch's article «Keltische Sprachen» in Ersch und Gruber's A. Encykl. d. W. u. K. second section, XXXV p. 132 ff., serves as a good introduction to the Keltic languages generally, the monuments of these languages and Keltological literature.

2) The most important of these coincidences are Goth. *ddj* = O.Icel. *ggj* from *i* (§ 142) and Goth. *ggv* = O.Icel. *ggv* from *u* (§ 179). Cp. Braune in Paul-Braune's Beitr. IX 546 f.

appear to belong to the fifth century. By O.Norse was, in former times, generally understood O.West Norse only; the term is now more properly applied to the whole development of the Scandinavian languages up to the sixteenth century.

The oldest representatives of West-Germanic are Anglo-Saxon, the continuation of which is Mod.English; O.Frisian; O.Saxon, now Low German; O Low Franconian, now Dutch, Flemish, and the language of the German Lower Franconia; and O.High German, the present Upper- und Middle German dialects. The oldest records of these languages date from the eighth or ninth century, the oldest OHG. record belonging to about the period 740–745; but with Frisian we are acquainted only since the fourteenth century.

We shall limit ourselves chiefly to Gothic and Old High German.

Cp. J. Grimm Deutsche Grammatik, I^2, II^2, new reprint, Berlin 1870. 1878, III, IV Göttingen 1831, 1837. Rumpelt Deutsche Grammatik, mit Rucksicht auf vergleichende Sprachforschung, I (Lautlehre) Berlin 1860. A. Holtzmann Altdeutsche Grammatik I, 1 (Die specielle Lautlehre), 2 (Vergleichung der deutschen Laute unter einander), Leipzig 1870. 1875. W. Scherer Zur Geschichte der deutschen Sprache, edit. 2., Berlin 1878. Leo Meyer Die gothische Sprache, ihre Lautgestaltung insbesondere im Verhaltniss zum Altindischen, Griechischen und Lateinischen, Berlin 1869. W. Braune Gotische Grammatik, edit. 2., Halle 1882. L. Wimmer Altnordische Grammatik, translated from the Danish by E. Sievers, Halle 1871. A. Noreen Altnordische Grammatik I (Altisl. und Altnorw. Gramm. unter Berücksichtigung des Urnordischen), Halle 1884. E. Sievers Angelsächsische Grammatik, Halle 1882 (2. ed. 1886). W. Braune Althochdeutsche Grammatik, Halle 1886. O. Behaghel Die deutsche Sprache, Leipzig und Prag 1886.

§ 11. (X) The Baltic-Slavonic branch The Baltic division consists of Prussian, Lithuanian, and Lettic. The former died out in the seventeenth century and we only possess very few imperfectly recorded specimens dating from the fifteenth and

sixteenth centuries. The two latter are still living and their oldest records belong to the sixteenth century.

We confine ourselves chiefly to Lithuanian.

Cp. Nesselmann Die Sprache der alten Preussen, Berlin 1845. The same author, Thesaurus linguae Prussicae, Berlin 1873. Schleicher Litauische Grammatik, Prag 1856. Kurschat Grammatik der littauischen Sprache, Halle 1876. Bielenstein Die lettische Sprache, nach ihren Lauten und Formen erklärend und vergleichend dargestellt, 2 Theile, Berlin 1863 1864. The same author, Lettische Grammatik, Mitau 1863.

The Slavonic languages fall into a South-Eastern and a Western group. To te former belong Russian (a. Great Russian and White Russian, b. Little Russian), Bulgarian and Illyrian (a. Servian and Croatian, b. Slovenian), to the latter Czech (Czech in the stricter sense, Moravian and Slovakian), Sorabian or Wendish (Upper- and Lower Sorabian) and Lechish (Polish and Polabian or Elbe-Slavonian). All these languages, with the exception of Polabian, are still living. The most archaic, and for Indg. grammar the most important, is the language in which the Slavonic apostles Cyril and Methodius (ninth century) wrote. In our investigations we accordingly consider this language of the first importance. It is called O.Slovenian by Miklosich, but by Schleicher, Schaffarik and others with more justness O.Bulgarian. It became the ecclesiastical language of the Greek church, and that form of it, which was modified through the influence of other Slavonic languages, especially of Russian, is generally known by the name of Church Slavonic.

Cp. Miklosich Vergleichende Grammatik der slavischen Sprachen 4 vols. Vienna, I² 1879, II 1875, III² 1876, IV 1874. Schleicher Die Formenlehre der kirchenslavischen Sprache erklärend und vergleichend dargestellt, Bonn 1852. Leskien Handbuch der altbulgarischen (altkirchenslawischen) Sprache, Weimar 1871, edit. 2., 1886.

§ 12. In accordance with what has been said in §§ 4—11, we shall speak exclusively or at all events especially of the oldest periods of those languages whose developments are

known to us through records extending over a great length of time. The term 'science of the Indg. languages', as has been already stated in § 1, does not demand such a restriction. This division of labour is wholly due to the course which the science has hitherto taken, and is fully justified by the present state of the science. Bopp in his Vergleichende Grammatik (3 vols., edit. 3, Berlin 1868—1871) and Schleicher in his Compendium der vergleichenden Grammatik der indogermanischen Sprachen edit. 4, Weimar 1876) also limit themselves similarly as we have done.

When we speak of primitive Indg. forms; of prim. Ar.; of prim. Gr. or of prim. Ital. etc., we generally mean those forms which were in use towards the close of the primitive period of these languages. But we also often mean such forms as belonged to an earlier period of this stage, and which had already undergone a change towards its termination. For instance, we therefore speak equally well of prim. Germ. **faxχō* and of prim. Germ. **fāχō* (Goth. *fāha*, s. § 214), of prim. Gr. **πορσι* and prim. Gr. **ποσσι* (Att. *ποσί*, s. § 490), as of Lat. *sequontur* and Lat. *secuntur* (§ 431). Forms, put down by us as prim. Ind., prim. Ar. etc., are therefore not to be indiscriminately regarded as belonging to the same period. Again, if we, for example, uniformly write *χ*, not *h*, in prim. Germ. forms where we put *h* for Gothic words, it must not be implied that *χ* had not in certain cases already become *h* in prim. Germanic (cp. § 529).

ON THE STRUCTURE OF THE INDO-GERMANIC LANGUAGES IN GENERAL. ROOT AND SUFFIXES.[1]

§ 13. The Indg. languages belong to the inflexional class. The inflexion of words has not existed from the very beginning, but has been gradually developed and perfected.

1) With what follows compare Delbrück Einleitung in das Sprachstudium[2] (Leipzig 1884) p. 61 ff. and Paul Principien der Sprachgeschichte (Halle 1880) p. 154 ff.

We have to presuppose a period in which suffixal elements were not yet attached to words. The word-forms of this period are called roots, and the space of time prior to inflexion, is called the root-period. It dates much further back than that stage of development whose word-forms we are able to deduce by a comparison of the separate Indg. groups of languages. This stage is usually simply called the Indg. parent-language.

What we understand by word-formation and inflexion arose by composition, that is, by the following process: a group of words which formed a syntactical complex was fused into a unity, in which the whole was in some way isolated in relation to its elements[1]). This word-fusion from the beginning onwards occurred in the same way, just as afterwards, in the age of separate languages (partly even in historical periods) the final members of compounds became suffixes, e. g. Goth *-k* in *mik* (Mod. HG. *mich*) from prehistoric **me ge* (cp. Gr. ἐμέγε beside ἐμέ), French *-ment* in *fièrement* from *fera mente*, MHG. and Mod.HG. *-heit* in *schœnheit*, originally meaning 'schöne Beschaffenheit' (beautiful state or condition), where *heit* is still an independent word in MHG. and OHG., Mod.Irish *-mhar* in *buadhmhar* 'victorious' = O.Ir. *mār mōr* Cymr. *mawr* 'magnus' (Zimmer Kelt. Studien II p. 22 ff). The formation of suffixes is not a work which belongs to any special prehistoric period and which was concluded at any definite point of time. But when once this process had begun, it was performed anew through all periods of the history of the Indg. languages and will probably also be repeated again in the future, so long as our languages continue to develop.

1) "With respect both to meaning and form either the whole may pass through a development in which the separate parts do not participate when used independently, or vice versa the separate parts may pass through a development in which the whole does not participate, or it may happen that the separate parts cease to be employed independently, while they are preserved in combination, or lastly the mode of combination may vanish from living use and only remain preserved in certain set forms". Paul in the above work p. 165.

Suffixes are divided into word-forming suffixes or inflexional suffixes in the stricter sense, to which on the one hand belong case endings (e. g. *-m* in Indg. **ékuom* = Lat. *equom*, Skr. *áśvam*), and on the other, personal endings (e. g. *-mi* in Indg. **ḗimi* = Gr. *εἶμι*, Skr. *émi*), and stem-forming suffixes (e. g. *-ter-* in Indg. **pətéres* = Gr. *πατέρες*, Skr. *pitáras*, *-sḱo-* in Indg. **gn̥sḱónti* = Gr. *βάσκοντι βάσκουσι*, Skr. *gácchanti*). It is impossible to draw a sharp line between the two species of suffixes, since many an element, which was originally only stem-forming, has come to be treated on the same level with word-forming suffixes. Cp. e. g. Lat. *legiminī*, whose final part *minī*, felt by the Romans as a personal ending (like *-mur* etc.), contains the stem-forming suffix *-meno-* (cp. Gr. *λεγόμενοι*); properly *legiminī estis* = *λεγόμενοι ἐστε*.

The derivation as well as the original value of those suffixal elements, which in the Indg. prim. period were already no longer felt to be the members of a compositum, is for the most part very doubtful. Of the conjectures which have been put forth regarding these suffixes, there are only a few to which one can allow a certain amount of probability. To these belongs especially the hypothesis, that a part of the personal endings were originally independent substantival pronouns, cp. the *-m* of the 1. sg. impf. Indg. **ébherom* (Skr. *ábharam*, Gr. *ἔφερον*) with the pronominal stem **-me* (Lat. *mē*, Goth. *mi-k*).

There are in the Indg. languages many words of which we can not prove that they either contain or ever did contain a suffix. These, therefore, apparently represent the form they had in the pre-inflexional period, e. g. Gr. *μὲ*, Goth. *mi(-k)* cpf. **me*; Skr. *nú*, Gr. *νύ*, Lat. *nu(-dius)*, O.Ir. *nu no*, OHG. *nu no*, Lit. *nù(-gi)* 'now'. In other cases, root-words had disappeared in those compositions which we call inflected words. We must guard against fancying that, towards the close of the primitive period, or even later, elements like *es*, which we abstract as root from such forms as Indog. **ésti*, (Gr. *ἔστι*, Skr. *ásti*), had an independent existence and a meaning without any definite syntactical relation.

§ 14. According to the analogy of such forms as Fr. *vis-à-vis*, *rouge-gorge*, it has become usual to indicate component parts of inflected words by hyphens, e. g. Gr. *εἶ-μι*, *πα-τέρ-ες*, *φέρ-ο-ι*, in the same manner Indg. **éi̯-mi*, **pə-tér-es*, **bhér-o-i̯-t*. It is thus intended to give a clear idea as to what parts of an inflected word once had an independent existence.

With regard to this mode of proceeding the following remarks are to be made.

1. We have seen in § 13, that as the first foundations of derivation and inflexion were laid by the fusion of independent elements, so this process has been continually repeated up to the present time. But the great majority of inflexional forms do not directly depend upon it. No sooner did the first inflexional compounds make their appearance, than they served as the models upon which other words were formed after their analogy, just in the same manner as most of the Mod. HG. compositа in *-heit*, *-bar*, *-lich* etc. can no longer be conceived as proper syntactical compounds, but only as imitations of model forms, made at an earlier period. Compositа, the formation of which we are able to trace in the younger stages of the separate languages, often exhibit manifold shiftings and deviations. The reason of these latter is, that all feeling for the mode of composition of the model forms became extinct. Thus, for instance, according to the analogy of Mid.HG. *miltekeit* from *miltec-heit* (cp. *miltec-līch*) etc. have arisen such forms as Mod.HG. *frömmigkeit*. *eitelkeit* etc., by the abstraction of a suffix *-keit*. Such shiftings may also have taken place in the oldest stages of the inflexional period, so that, strictly speaking, we are never sure in the case of a suffix which has come down to us from the Indg. parent language, whether it ever existed as an independent word exactly in the same shape as we extract it from the body of a word, or whether it originally consisted of elements which passed into this shape by regular phonetic changes.

2. It very frequently happens, that two or more suffixes become fused into a unity in those periods of a language which we are able to control. E. g. Mod.HG. *-ner* in *bild-ner*, *harf-ner*

etc. is due to the *-ner* in such forms as *gärtn-er* (Mid. HG. *garten-œre*), which is a derivative of *garten*; Gr. *-αίνω* in *κερδ-αίνω*, *λευκ-αίνω* etc. to the *-αίνω* in such forms as *τεκταίνω* from **τεκταν-jω* (to *τέκτων*). In like manner many of the prim. Indog. suffixes, which we are wont to regard as a unity, e. g. the *-ter-* in **pə-tér-es* (Gr. *πατέρες*), may have been fused together out of several suffixal elements. Our inability to analyse a prim. Indg. element proves nothing for its primitive unity.

3. It is theoretically correct when we say that the root of a word is found after we have removed all formative syllables from it. But in the first place we do not know what shape Indg words had towards the end of the root-period, and this applies especially to the fact that we are unable to say whether the language at this stage possessed only monosyllabic words, or only words of more than one syllable, or both categories. Secondly the analysis of elements, which were directly annexed to the ends of roots, is of a most doubtful nature. And lastly we are unable to determine what phonetic changes inflexional compounds had undergone from the beginning up to the dissolution of the primitive community. Hence it must not be supposed that the roots, which we in ordinary practice abstract from words, are at all to be relied upon as representing the word-forms of the root-period. We are utterly unable to determine e. g. whether the complex **anə-* in Gr. *ἄνε-μο-ς*, Lat. *ani-mu-s*, Skr. 3. sg. *áni-ti* 'breathes' (cp. § 110) represents a unitary word of the root-period, or whether it is to be resolved into **an-ə-*, that is, whether *-ə-* was a suffix, and thus originally an independent element.

Such being the state of things, we shall retain the terms 'root' and 'suffix' in this work for such parts of a word as *seq-* and *-e-*, *-taị* in Indg. **séqetaị* (Skr. *sácatē*, Gr. *ἕπεται*). We do not however assert that the elements, to which we give these names, ever existed as independent words. We merely indicate by means of hyphens (1) what was probably felt at any particular period as the nucleus (so to speak) of a whole system of word-forms (*seq-*), and (2) what was regarded as the formative

element (*-e-* and *-taị* in **séq-e-taị*, **bhéụdh-e-taị*, **bhér-e-taị* etc.), shared in common by a greater or less number of different words. The elements *-e-* and *-ə-* in cases as Gr. *ἑπ-ε-ται* (Indg. **seq-e-*) and fut. *τενέω τενῶ* from **τεν-ε-σω* (Indg. **ten-ə-*, op. Skr. fut. *tan-i-ṣyámi*) may nevertheless originally have been parts of roots (dissyllabic root-words); but on account of forms like *πενθεται*, *φέρεται*, *ἄγεται* and *νεμέω*, *φθερέω*, *βαλέω* on the one hand and of forms like *ἕψομαι* and *τείνω* (from **τενɣω*, §§ 131. 618) on the other, it becomes highly probable that they simply were for the perception of language (sprachempfindung) that which grammarians call "suffix"[1]).

1) 'A certain analysis of forms takes place in the formation of associated concepts which refer to the system of word-formation and inflexion, whereby categories arise which are analogous to the grammatical notions of root, stem, and suffix. But it must always be borne in mind, firstly, that the mind remains entirely unconscious of these categories as such; secondly that they have nothing to do with the original mode of the formation of words, but purely accommodate themselves to the sound-series (Lautreihe) which regularly goes through a number of forms in the language for the time being, so that e. g. in Mod. Germ *tag-*, *hirt-* appear as nominal stems, *trag-* and *brenn-* as verbal and present stems, *trug-* and *brannt-* as the preterite stems of *tragen* and *brennen*; thirdly that the elements arising from analysis are never felt as something entitled to an independent existence, but only as something which is possible in certain modes of combination'. Paul Principien p. 64.

PHONOLOGY.

§ 15. By a comparison of the eight Indo-Germanic dialects (§ 3) we are in a position to arrive at the number and nature of the sounds possessed by the Indg. parent language. These were as follow: —

Vowels. In the function of sonants: *ı̯ ī, u ū, e ē, o ō, a ā, ə.* In the function of consonants: *i̯, u̯.*

Nasals. In the function of consonants: *ṅ* (velar), *n̂* (palatal), *n* (dental), *m* (labial). In the function of sonants: *ṇ̊ ṇ̄, n̥̂ n̂̄, ṉ̥ ṉ̄, ṃ ṃ̄.*

Liquids. In the function of consonants: *r, l.* In the function of sonants: *r̥ r̄, l̥ l̄*

Explosives·

p	*b*	*ph*	*bh*	(labial).
t	*d*	*th*	*dh*	(dental).
k̂	*ĝ*	*k̂h*	*ĝh*	(palatal).
q	*g*	*qh*	*gh*	(velar).

To these is probably further to be added the spiritus lenis, a laryngeal explosive, e. g. Indg. **ėsti* 'is', Gr. *ἔστι*. In the following paragraphs we shall indicate this sound only in Greek words.

Spirants: *s, z, j, v.*

Phonetic Elucidations[1]).

§ 16. 1. Voiced and voiceless sounds. Speech-sounds[2]) are produced by the breath, expelled from the lungs, undergoing a checking which gives rise to an acoustic effect. This checking takes place partly in the larynx, partly in the organs above the larynx (mouth, or nose), and partly in both at the same time. When the checking in the larynx takes place in such a manner that the vocal cords (which in a state of rest are far apart) are so far brought together as to come into (rhythmical) vibration, a musical clang arises which is called voice. All sounds, which are spoken with voice, are called voiced, and all those without voice voiceless. In the Indg. prim. language the vowels, nasals, liquids, of the explosives the mediae *b*, *d*, *ĝ*, *g* and the mediae aspiratae *bh*, *dh*, *ĝh*, *gh*, and the spirants *z*, *j*, *v* were voiced, on the other hand the tenues *p*, *t*, *k̂*, *q* and the tenues aspiratae *ph*, *th*, *k̂h*, *qh* and the spirant *s* were voiceless.

The voiceless vowels (the *h*-sounds), nasals and liquids[3])

1) Cp Ed Sievers Grundzuge der Phonetik, zur Einfuhrung in das Studium der Lautlehre der indogermanischen Sprachen, 2. Edit Leipzig 1881, 3. Edit. Leipzig 1885

2) It is not without considerable justification that the expression 'speech-sound' ('Sprachlaut') has of late been found fault with, so far as it is used to express the smallest elements of language in general, because among the so called explosives there are moments of perfect absence of sound which are also to be taken into consideration. And these moments form an element of a syllable just as much as the moments of sound, while in the analysis of a syllable they can no more be left out of consideration than the pauses in music can be regarded as not existing Cp. § 320. If in this work we have not attached that amount of importance to the latest principles of phonetics — viz. that in the classification of speech-elements, their genesis, not their acoustic effect, should form the chief principle — which some phoneticians might wish to see, it is out of consideration that we do not yet possess a system and terminology, based on these views, which might be applied without considerable difficulties to the historical results of the science of languages

3) Cp Hoffory Kuhn's Ztschr. XXIII 533 ff, 541 ff., 554 ff., XXV 425 f., 'Prof. Sievers und die Principien der Sprachphysiologie' 24 ff.

in the course of the individual developments were added to the respective voiced sounds of the primitive period.

§ 17. 2. Sonorous sounds and noised sounds. The mouth and nose on the one hand, serve to modify the clangs formed in the larynx, on the other hand 'noises', which are independent of the activity of the larynx, can be produced in these organs through the current of breath undergoing a checking and friction. In uttering *t, s,* e. g. a noise is made on the inner side of the upper teeth, or on their sockets. Voice and noise formed in the mouth and nose (Ansatzrohrgeräusch) can be combined, e. g. in *d* and *z* (Fr. *zéro*, Russ. *zoloto* 'gold'). Those sounds, which are formed with noise, whether they be voiceless or voiced, are called noised sounds, whereas those, in which the formation of voice takes place in the larynx, while the mouth and nose merely serve as resonance chambers, are called sonorous sounds. The Indg. explosives and spirants were noised sounds, and the Indg. vowels and nasals, sonorous sounds. The *r*- and *l*-sounds were and are in the historic periods of the Indg. languages partly sonorous and partly spirantal in their formation. And it is not improbable, that the spirantal pronunciation, where it occurs in historic times, had everywhere first come into being during the course of the separate history of the respective Indg. languages.

§ 18. 3. Sonants and Consonants. Every syllable contains one sound, which is either alone or at least principally the bearer of the accent, e. g. the bearers of this accent in the word *hóff-níng* are *o* and *u*. Such sounds are called sonants. The other elements of a syllable are to a certain extent only adjuncts to the sonant which forms the nucleus of the syllable, and are therefore called consonants. Every syllable must contain one sonant and can contain only one, whereas it can have several consonants (Mod. German *strúmpfs*) or none at all (Lat. imperative *ī*[1]). One set of sounds can be used both as sonants and as consonants, especially the vowels —

1) By this classification we omit to take account of the spiritus lenis, which strictly speaking ought to be reckoned among the consonants.

amongst these particularly *i*, *u* —, the nasals and liquids; we write these sounds *i u ṇ, ṛ* etc. when used as sonants, and *i̯, u̯, n, r* etc. when used as consonants. Cp. Mod. German *Á-si̯én* beside *Á-si-én* (in poets); Lat. *á-qu̯ám* beside *á-cú-ám*, *stín-gu̯ó* beside *úr-gú-ó*; English *ré-pṛ́-zṇ̥-tḗ̯-šn̥* (*representation*); Mod.Germ. *réch-né* beside *ré-chn̥t* (*rechnet*), *gṇ̥-núg* (*genug*), *hán-dlé* beside *hán-dĺ̥*, *gṛ́-rá-dé* (*gerade*); Czech *kŕt* (*krt* 'mole'), *vĺ̥k* (*vlk* 'wolf'); Skr. *pi-trá* (*pitrá*, instr. sg. of *pitár-* 'father') beside *pi-tṛ́-šú* (*pitŕšu*, loc. pl. of the same word)[1]; in Slovakian *sŕ̥n*, *vĺ̥n* (*srn*, *vln*) gen. pl. to *sŕ̥-ná* (*srna* 'roe'), *vĺ̥-ná* (*vlna* 'wave').

In our representation of pre-historic forms we consequently mark *i* and *u* also as consonants when they form the second component of a diphthong, e. g. Indg. 3 sg. **éi̯ti* = Gr. *εἶσι* Skr. *éti*, **bhéu̯dhetai̯* = Gr. *πεύθεται* Skr. *bṓdhatē*. The vowels *i* and *u* had here the same function as e. g. *r* in the 3. sg. **bhérti* from rt. *bher-* 'bear' (Skr. *bhárti*, Lat. *fert*) and *n* in the 3. sg. **bhebhóndhe* from rt. *bhendh-* 'bind' (Skr. *babándha*, Goth. *band*). Cp. § 308.

Rem. A few phonetic elucidations on the explosives and spirants will be found in § 320 ff. and § 554

On the pronunciation of the letters.

§ 19. The various Indg. languages and dialects were and still are written in various alphabets by the respective peoples and their subdivisions. Sometimes different kinds of alphabets were even employed in different districts lying within the sphere of the same dialect, or also in the same district for different purposes, e. g. in Oscan (inscriptions in the Oscan-Samnitic, Latin, and Greek alphabets) and in Servian (the Cyrillic alphabet is employed by the followers of the Greek Church, and the Latin by the Roman catholics). It also frequently happened that one alphabet was permanently given up in favour of another, cp.

1) Skr. *pitrá* stands in the same relation to *pitŕšu* as *hánvā* i. e. *hánu̯ā* does to *hánuṣu* (stem *hánu-* 'jaw-bone') and as *ávyā* i. e. *ávi̯ā* does to *ávíṣu* (stem *ávi-* 'sheep').

e. g. the change from the runic to the Latin alphabet among the Germanic races.

It has become usual in works on Indg. grammar to employ native characters only in the case of Greek, Latin, and those younger developments which were and still are written in the Latin alphabet, but for the rest to make use of a transcription, based on the Latin alphabet. Now the Latin system of letters is insufficient for the transliteration of most foreign alphabets, and when this is the case, it is usual either to add a diacritic sign to the Latin letter, or to borrow a letter from other known alphabets.

The exposition of the history of the various sounds will furnish further information as to the living value of the letters. With regard to the transcription which we have adopted for the various languages, we simply make such observations here as will enable the reader to pronounce the words correctly or at least approximately so; in the case of dead languages it is, of course, often impossible to determine precisely the value of a letter.

§ 20. Sanskrit. The alphabet is as follows:

a ā i ī u ū ṛ ṝ ḷ ē āi ō āu ḥ ṁ k kh g gh ṅ c ch j jh ñ ṭ th ḍ ḍh ṇ t th d dh n p ph b bh m y r l v ś ṣ s h.

ṛ, ṝ, ḷ are sonants (s. § 18). *ṛ, ṝ* like consonantal *r* are cerebral (cp. *ṭ, ṭh* etc. below), i. e. similar to English *r*; *ḷ* and *l* are dental.

ḥ (visarga) is our spiritus asper.

We indicate the nasal pronunciation of the sonants by ˜, e. g. *qṣ̃ú-ṣ* 'thread, beam of light', acc. *svādīyq̃s-am* 'suaviorem', *r̃, ṝ̃* = nasalised *ṛ, ṝ*, e. g. in *tr̃há-ti* 'he shatters', *nṝ̃ś-ca* 'viros-que'.

The voiceless aspirate explosives *kh, ch, ṭh, th, ph* and the voiced aspirate explosives *gh, jh, ḍh, dh, bh* are to be pronounced as explosives followed by an *h*, but cp. however Whitney's Skr. Gram. § 37.

The palatals *c, ch, j, jh* are generally pronounced as (compound) *tsh*-sounds, e. g. the initial sounds of *ca* 'and' and *jána-s* 'creature' like the initial sounds of Italian *cento* and *gente* or those

of English *church* and *judge*. But they were simple sounds, similar to Mod.HG. *k* and *g* before palatal vowels, e. g. in *kind*, *gift*.

The cerebrals (cacuminals) *ṭ*, *ṭh*, *ḍ*, *dh* are uttered with the tip of the tongue turned up and drawn back into the dome of the palate.

ṇ is the guttural, *ñ* the palatal, and *n* the cerebral nasal. *y* = *j*, *v* = *u̯* or spirantal *v*, s. §§ 18. 127. 161.

s is like Mod.HG. dental *s*, cp. *ásti* and Mod.HG. *ist*. On the other hand *ś* and *ṣ* are *sh*-sounds; *ś* is the palatal and *ṣ* the cerebral *sh*-sound; *ś* is thus the softened *š* (*sz*) found in Slavonic and Lithuanian.

h is pronounced like our spiritus asper; it was however a voiced sound, the character of which is doubtful, cp Whitney's Skr. Gram § 65.

§ 21. Iranian.

1. Avestic.

The vowels are: *a i u e ę o*

ā ī ū ē ę̄ ō å.

e, *ē* represent the open and *e*, *ę̄* the close *e*-vowel, *å* a dull *ā* sound approaching to *ō*. *ą* is the nasal vowel of *a* and *ā* (§ 200). *y* = *i̯* or spirantal, *v* = *u̯* or spirantal (§§ 18. 127. 161).

Diphthongs: *aę ōi*, *ao ēu̯*, *āi āu*. *aę*, *ao* may be pronounced like the *ai*, *au* in the Middle German pronunciation of *kaiser*, *haus* etc. (cp. Bœot. *αε* and Ion. *ωο* § 96, Lat. *ae* § 97).

Liquid: *r*. Nasals: *ṇ* guttural, *ṅ* is palatalised *n* (§ 200), *n* dental, *m* labial; the value of *ṋ* and *ṅ* is doubtful (§ 558, 3).

Explosives: *k c t p*, *g j d b*. *c* and *j* are like Skr. *c* and *j* (§ 20).

Spirants: *x* = Mod. HG. *ch* in *dach*, to which the corresponding voiced sound is *γ*. *ẋ*, a palatalised sound, seems to have been similar to the Mod. HG. *ch* in *ich*. *s* = our voiceless *s* in *nest*, *z* = Fr. *z*. *þ* = Mod. Gr. *θ* and our *th* in *thin*, *đ* = Mod. Gr. *δ* and our *th* in *then*. *f*, *w* = our *f*, *v*. *š* is our *sh*, *ž* the corresponding voiced sound = Fr. *j*. *ś́* = Skr. *ś*. The pronunciation of *ṣ́*, *þ́*, *đ́* cannot be more exactly defined.

h is our spiritus asper (not = Skr. *h*).

2. Old Persian.

Vowels. *a i u, ā ī ū.* *y* = *i̯* or spirantal (§ 127), *v* = *u̯* or spirantal (§ 161). *y* and *v* were not pronounced in words ending in *-iy, īy, -uv, -ūv.* Final *-hy* is to be pronounced as *-hi.* Diphthongs: *ai au, āi āu.*

Liquids: *r, l.*

Nasals. *n, m.*

Explosives: *k c t p, g ǰ d b* as in Avestic. *d* had also the value of *đ* (§ 402).

Spirants: *x, s, z, þ, f, š* as in Avestic. The value of *ś* is not clear (§ 261).

h = Av. *h.*

Difficulties are caused by *iy, uv, īy, ūv,* which in certain special cases represent *y* and *v*, cp. §§ 125. 159. 558, 3.

Rem. The peculiar character of Old Persian cuneiform letters makes it, in some respects, difficult to decipher the words rightly. A syllable consisting of a consonant and a short vowel (*a, i, u*) was represented by one sign (*da, di, du*) Medially and finally the letters *a, i, u,* which initially expressed both *a, i, u* and also *ā, ī, ū,* were added to the corresponding sign to express length of vowel, e g. *da* + *a* = *dā*, *di* + *i* = *dī*. A consonant which was not followed by a vowel, was also always represented by a syllabic sign, e g *pa* + *a* + *ra* + *sa* + *ma* = *pārsam* (acc. sg 'a Persian'). Consequently in order to express a final consonant + *a*, an extra letter *a* was added at the end Therefore, e. g. *-ma* + *a* (*-mā*) might mean both *-mā* and *-ma.* The letters *i, u* were usually added again to the signs for consonant + *i*, or *u*, so that e. g. *vi* + *i* + *sa* + *ma* may be read either as *vīsam* or *visam* and thus we are not able to make a clear distinction between *i, u* and *ī, ū.* Cp. Bartholomae Handbuch p. 5 f. § 21 rem. 1. § 24 rem. 1.

§ 22. Armenian[1]).

Vowels. *a, u, i, o ō, e ē.* *ę* is an indefinite vowel somewhat resembling German *ö.* Pronounce *y, v* as *i̯, u̯* (§ 18). Diphthongs: *ea, ai, oi, au, iu.*

Liquids: *r, ṙ; l, ł.* The difference in the pronunciation has not been determined. Nasals: *n, m.*

1) In the transcription of this language we entirely follow Hübschmann. Cp. his treatise 'Die Umschreibung der iranischen Sprachen und des Armenischen' (1882) p. 31 ff.

Explosives: *k t p, g d b. k̇ ṫ ṗ* are aspirate tenues.

The Affricatae *č ǧ ǰ, c ç j* may be pronounced as *tš thš dž, ts ths dz*[1]).

Spirants. *x* is a deep guttural *ch* like the *ch* in Scot. *loch*. *s* and *ś*, the latter = Fr. *z*. *š* and *ž*, the former a voiceless, the latter a voiced *sh*-sound.

h = our spiritus asper.

§ 23. Umbrian-Samnitic. The monuments of this dialect-group are almost exclusively inscriptions, which are written partly in the native, partly in the Latin and also occasionally in the Greek alphabet. We reproduce the native writing by spaced Roman type, whereas those words which have come down to us written in the Latin alphabet are printed in italics.

The Umbrian native alphabet does not possess any special letters for *o*, *g* and *d*, but represents them by u, k and t.

The *c*, in monuments written in Latin characters, must always be pronounced as *k*.

The sibilant (§§ 387. 502), which arose from *k* before palatal vowels and which we represent by ś and ś (*s*), may be pronounced like Skr. *ś*. The precise pronunciation of this sound, given by d in the native alphabet, and by S (or S) in the Latin, is not known.

The modification of *d* (§ 369), which on the tables written in Latin is represented by *rs*, and also occasionally simply by *r* or *s*, has the sign ϙ in the native alphabet. It was probably a strongly spirantal *sh*-kind of *r*, similar to Czech *ř*. We transcribe this Umbrian symbol with ṙ, and it may be pronounced like Czech *ř*.

Pronounce z as *ts*.

h occurs in both kinds of writing as sign of vowel lengthening, e. g. kumnahkle read kumnākle, *spahmu* read *spāmu*. On tables written in Latin this sign also appears between a double vowel which in itself already indicates vowel length, e. g. *spahamu* beside *spahmu*.

1) More will be found on the pronunciation of these sounds in Hübschmann's work quoted above p. 35 rem 3.

Oscan í is a close *e*, in the function both of a sonant, e. g. íst 'est', and a consonant, e. g. in the diphthong aí; ú is a close *o*.

Pronounce z as *ts*, e. g. húrz, az, keenzstur (nz's = ntss, cf. kvaísstur), Vezkeí. But *z* is a voiced *s* (Fr. *z*), e. g. *egmazum*.

In Umbrian-Samnitic we uniformly omit the mark of length over vowels. We write e. g. *matrer* 'matris', although *ā* was undoubtedly spoken (§ 105). This plan has been adopted because the cases are too numerous in which the quantity of the vowel can not be determined with certainty.

§ 24. Old Irish writing, a variety of Latin, presents many diphthongs and triphthongs which were in reality only monophthongs and diphthongs. E. g. the *i* in *eich* 'of a horse' and in *tuaith* 'to the people' only marks the *i*-timbre of the following consonant. Hence some write *e'ch tua'th*. S. § 640.

c is everywhere to be pronounced as *k*. On the pronunciation of *c* and *t* compare moreover § 212 rem. and §§ 513. 658.

ch, *th*, *ph* denote the guttural, interdental, labial voiceless spirants (*χ*, *þ*, *f*,), s. § 514. *th* occasionally also stands for the voiced interdental spirant *đ*. *g*, *d*, *b* are both voiced mediae (§ 519) and voiced spirants *ʒ*, *đ*, *b̆* (§ 522), *g* and *d* are even also used for the voiceless spirants *χ* and *þ* (§ 514). In Middle Irish *gh*, *dh*, *bh* took the place of *g*, *d*, *b* as signs for the voiced spirants; after the manner of Modern Irish we pronounce *gh* and *dh* before or after a palatal vowel like our *y* and before or after other vowels as *ʒ*.

ṡ is *h*. *ḟ* is silent. *mh* is a nasalised labial spirant.

Rem. In the Britannic dialects *u* has the sound of *ü*, in the greater part of Wales that of *i*. So far as Cymric is specially concerned, it may be remarked that *y* denotes partly a vowel, similar to that in the English word *fur*, and partly = Cymr. *u*; *w* is partly a sonantal vowel *u*, and partly *ụ*; *ch*, *th*, *ff* (*ph*) are voiceless, and *dd*, *f* voiced spirants; *m*, *n*, *r*, *l* are voiced, *mh*, *nh*, *rh*, *ll* voiceless. These values apply in the first instance to the living language only.

§ 25. Gothic.

aí is a short open *e*, and *aú* a short open *o*. On the other hand *ái* and *áu* are to be pronounced as diphthongs. Antevocalic *aí* and *au* (e. g. *saian* and *staua*) were probably the long vowels to *aí* and *aú*, *i. e.* open *ē* and open *ō* (§§ 142. 179) Gothic writing leaves both *aí*, *ái*, *ai* and *aú*, *áu*, *au* undistinguished.

ei = *ī*. *ē* and *ō* were close. *v* = *u̯*, *j* = *i̯* (§ 18).

The guttural nasal (*ŋ*) was generally (after the analogy of Greek) expressed by *g* before homorganic explosives, e. g. *laggs* 'long', *driŋkan* 'to drink', seldom by *gg* (*driggkan*) or *n* (*briŋgan* 'to bring').

q (e. g. *riqis* 'darkness') = Lat. *qu*.

d initially and medially after *n*, *l*, *r*, *z* was a voiced explosive, whereas medially after vowels it was the interdental spirant *đ*. *b* initially and medially after consonants was a voiced explosive, whereas medially after vowels it was the labial spirant *b̦*. A corresponding difference is also to be assumed for *g*. S. §§ 530. 538 and cp. also §§ 531. 539.

þ is a voiceless interdental, *f* a bilabial spirant, *z* = Fr. *z*.

Pronounce initial *h* before vowels (e. g. *haban* 'to have') like our spiritus asper, in other cases (e. g. *hláifs* 'loaf, bread', *raíhts* 'right', *táuh* 'I led') it is a spirant like German *ch*.

§ 26. Lithuanian.

Vowels: *a e i u*, *ā ē y ū*, *ė o*. *e* and *ē* are to be pronounced very open. *y* = *ī*. *e* and *o* are very close and always long (hence we omit the sign of vowel length). The vowels *ą ę į ų* do not differ in pronunciation from *a e i u*; initially and medially they are always to be pronounced long, finally they are partly long, partly short. The little hook under a vowel indicates that the vowel was originally followed by a nasal, this sign has therefore only an etymological value (§ 218).

Diphthongs: *ai ei au*, *āi ēi āu*, *ui oi ė ů*. The *o* in *oi* is to be pronounced long; this diphthong occurs in locatives as *toi* (from the feminine pronominal stem *to-* 'this'), where it is usually

written *-oj* (*toj*). Pronounce *ë* as *ię̯* with a very open *ę* or as *ią̯*. Pronounce *ů* as *uo̯* with a very open *o* or as *ua̯*.

When the accent is on a short vowel, it is represented by ` e. g. *pìktas* 'bad'. In cases where ´ and ~ are placed over simple vowels to indicate the accent, these vowels are always to be read long, e. g. *várpa* 'ear of corn', *gẽras* 'good'. In like manner *ái áu éi* are also to be read as *á̯i, á̯u, ẽ̯i*. More will be found on the accent signs ´ and ~ in § 691. *j* is to be pronounced as *i̯*, and *v* as a spirant (English *v*)[1]).

Liquids: *r, l*. On the difference between *l* and *ł* see 'Palatalisation of Consonants' below.

Nasals: *n, m*. *n* is to be pronounced as *ŋ* (guttural nasal) before *k* and *g*, e. g. in *rankà* 'hand'.

Explosives: *k t p* (voiceless), *g d b* (voiced).

Spirants *s, z* (= Fr. *z*), *sz* (= our *sh*), *ž* (voiced *sh*, Fr. *j*).

c = *ts*, *cz* = English *tsh*.

Palatalisation of Consonants. All consonants (with the exception of *j*) are liable to palatalisation. This uniformly takes place before palatal vowels (*e, ė, i, y*): the *t, n, r, ž* in *svéte, kúne, múre, bérže* (voc. sg. of the stems *svéta-* 'world', *kúna-* 'body', *múra-* 'wall', *bérža-* 'birch') are therefore not to be pronounced the same as in *svétas, kúnas, múras, béržas* (nom. sg. of the same stems). When palatalised pronunciation takes place before non-palatal vowels, it is indicated by an *i* placed after the consonant, but this *i* must neither be read as syllabic *i* nor as *i̯*, e. g. *kiaũle* 'pig', *pióviau* 'I cut' (past t), *piáusiu* 'I shall cut', *nèsziu* 'I shall carry'. We express the non-palatalised *l* by *ł*; it is the 'guttural' *l*, which in those districts bordering on Poland, has a great resemblance to Polish *ł*, and often sounds like *u̯*, s. § 280. *l* is the palatalised liquid; we therefore write *galù* 'I can', not *galiù*[2]).

1) This fixing of the pronunciation of *v* is on the authority of Schleicher, who had Prussian Lithuanian in mind It is pronounced *u̯* in one part of Russian Lithuania

2) In this mode of writing we have followed Juszkiewicz.

§ 27. Old Church Slavonic (Old Bulgarian).

a e o ı ĭ u ŭ y ě. *e* and *o* are open. Pronounce *ĭ* as a very close *ĕ*; *ŭ* somewhat the same as the *u* in English *but*; *ě* as *ē*; *y* as *ū*. On the quantity of *a*, *i*, *u*, *y*, *ě* cp. § 615. *ę* and *ą* are nasal vowels, the former = Fr. *in*, the latter = Fr. *on*. *j* = *i̯*, *v* = *u̯* or spirantal (§ 186).

ch like German *ch* in *ach*, *š* like English *sh*, *ž* like Fr. *j*, *z* like Fr. *z*.

c = *ts*, *č* = *tsh* (Lith. *cz*).

Rem. We use *ṛn*, *ṛr* to denote the prim. Baltic-Slavonic representation of Indg. *n̥*, *r̥*. See §§ 248 302. Pronounce the *ı* as a sound lying between *ı* and *e*.

HISTORY OF THE SEPARATE PRIMITIVE INDO-GERMANIC SOUNDS[1]).

THE VOWELS[2]).

A. THE VOWELS AS SONANTS.

§ 28. The Indo-Germanic parent-language had *i ī*, *u ū*, *e ē*, *o ō*, *a ā*, *ə*.

e, *o* (both long and short) were probably pronounced open. Hence some scholars write them *é*, *ó*. On the representation

1) Cp. § 599

2) Amelung die Bildung der Tempusstämme durch Vocalsteigerung im Deutschen (1871); Ztschr f. deutsch. Altert. XVIII 161 ff, Kuhn's Ztschr. XXII 369. — Osthoff in Paul-Braune's Beitr. III 1 ff, Morph. Unt. I 207 ff., IV 1 ff., Zur Gesch. des Perf. (1884). — The Author in Curtius' Stud. IX 361 ff., Kuhn's Ztschr. XXIV 1 ff., XXVII 201 ff., Morph. Unt. III 91 ff., Zum heutigen Stand der Sprachwissensch. 98 ff. — Fick in Bezzenberger's Beitr. II 193 ff., III 157 ff., IV 167 ff., IX 318 ff., Gött. gel. Anz. 1880 p. 420 ff, 1881 p 1425 ff — Collitz in Bezzenberg. Beitr. II 291 ff., III 177 ff., X 1 ff. — Ferd Masing Das Verhältniss der griechischen Vocalabstufung zur sanskritischen (1878). — Verner in Morph. Unt. I 116 ff. — G. Meyer Kuhn's Ztschr. XXIV 226 ff. — Paul in Paul-Braune's Beitr. VI 108 ff. — Kluge Beitr. zur Gesch. d.

of these vowels cp. the Author in Curtius' Stud. IX 367, Morph. Unt. II p. III, Kuhn's Ztschr. XXVII 201 ff.

The value of *ə* can not be more precisely defined. It may be pronounced as *ä*, that is, an *a* somewhat approaching the sound of *e*.

The regular representation of these prim. Indg. vowels in the individual developments is as follows:

Idg	Ar	Arm.	Greek	Lat (in accented syllables).	O Irish (in accented syllables).	Teutonic.	Baltic-Slavonic	
							Lith.	O. Bulg.
ı	*i*	*i*	*ι*	*ı, e*	*ı, e*	*ı, e*	*ı*	*ĭ*
ī	*ī*	*i* (?)	*ɪ*	*ı*	*ī*	Got. *ei* i. e. *ī*, OHG. *ī*	*y* i. e. *ī*	*ı*
u	*u*	*u*	*υ* (Boeotian etc *u*)	*u*	*u, o*	*u, o*	*u*	*ŭ*
ū	*ū*	*u* (?)	*ῡ* (Boeotian etc *ū*)	*ŭ*	*ū*	*ū*	*ū*	*y*
e	*a*	*e, ı*	*ε*	*e*	*e*	*e, ı*	*e*	*e*
ē	*ā*	*i*	*η*	*ē*	*ī*	Got. *ē*, OHG *ā*	*ė*	*ě*
o	*a, ā*	*o, (u)*	*o*	*o*	*o*	*a*	*a*	*o*
ō	*ā*	*u*	*ω*	*ō*	*ā*	Got. *ō*, OHG. *uo*	*ů*	*a*
a	*a*	*a*	*α*	*a*	*a*	*a*	*a*	*o*
ā	*ā*	*a*	*α*	*ā*	*ā*	Got *ō*, OHG. *uo*	*ō*	*a*
ə	*i*	*a*	*α*	*a*	*a*	*a*	*a*	*o*

german. Conjugation 1 ff. — De Saussure Mémoire sur le système primitif des voyelles dans les langues indo-européennes (1879). — Mahlow Die langen Vocale A, E, O in den eur. Sprachen (1879). — Möller in Paul-Braune's Beitr. VII 482 ff — Bezzenberger in his Beitr. V 312 ff. Fröhde Bezzenberger's Beitr. V 265 ff, VI 161 ff, VII 97 ff. — J Schmidt in Kuhn's Ztschr. XXV 1 ff. — Bartholomae Ar. Forsch. I 25 ff — Bloomfield American Journal of Philology I 281 ff. — W. Schulze Kuhn's Ztschr. XXVII 420 ff. — Curtius Zur Kritik der neuesten Sprachforschung 90 ff. — Delbrück die neueste Sprachf. 30 ff. — Hübschmann Das indogerm. Vocalsystem (1885). — Bremer in Paul-Braune's Beitr. XI 262 ff.

Indg. *i*.

§ 29. Indg. **i-* weak present-stem of rt. *eį-* 'go'; 1. pers. pl. Skr. *i-más*, Gr. *ἴ-μεν*. Indg. **μid-* weak perfect stem of rt. *μeįd-* 'see, know': 1 pers. pl. Skr. *vid-má*, Hom. *ϝίδ-μεν*, Goth. *vit-um*. Indg. **diμ-* 'sky': loc. sing. Skr. *div-í*, Gr. *Διϝ-ί*. Indg. **i-* pronoun of the 3. pers.: Skr. neut *i-d-ám*, Lat. *i-s i-d*, Goth. *i-s* 'he' *i-t-a* 'it'. Indg. *-i-* in reduplicated syllables, e. g. pres. Skr. *ti-ṣṭhāmi* (3. pers. sing. *tíṣthati*), Gr. *ἵ-στημι*, Lat. *si-stō* from rt. *stā-* 'stand', Skr. *bi-bhēmi*, OHG. *bi-bēm* from rt. *bheį-* 'tremble at, be in fear'.

Nominal suffixes Indg. *-i-*, *-ti-*, *-ni-*, e. g. Skr. *ávi-ṣ* 'ovis', Gr. *ὄι-ς οἶς*, Lat. *ovi-s*, O.Ir. dat. pl. *tri-b* 'tribus', Goth. dat. pl. *gasti-m* 'to guests', Lith. *akì-s* 'eye', O.Bulg. *pąti* 'way' fr. **pąti-s* (§ 588, 7). Superlative suffix Indg. *-is-to-*, e. g. Skr. *svád-iṣṭha-s* Gr. *ἡδ-ιστο-ς* Goth. *sut-ista-* 'suavissimus', cp. also Lat. *mag-is-ter*. Locative suffix Indg. *-i*, e. g. Skr. *div-i*, Gr. *Διϝ-ί*, Lat. *rūr-e*. Personal ending Indg. *-mi*, e. g. Skr. *ás-mi*, Gr. *εἰμὶ* fr. **ἐσ-μι* (§ 565), Lith. *es-mì*, O.Bulg. *jes-mĭ*.

§ 30. Aryan. Interrogative and indefinite pronoun *ci-*, Skr. *ci-d* Av. *ci-þ* O.Pers. *ciy* (read *ci*), enclitic particle: Gr. *τί-ς τὶ-ς*, Lat. *qui-s*, Indg. **qi-s *qi-d*. Skr. *víś-* O.Pers. *viþ-* 'clan', Indg. **μiḱ-*: cp. O.Bulg. *vĭs-ĭ* 'vicus' from **μiḱ-i-s*. Skr. *díṣṭi-* 'order, direction', Av. *ā-dišti-* 'assignment': OHG. MHG. *in-ziht* 'accusation', Indg. **diḱti-*. Skr. *ásti* Av. *asti* O.Pers. *astiy* (read *astiy*) 'is': Gr. *ἔστι* O.Bulg. *jestĭ* 'is', Indg. **és-ti*. Skr. *ihí* Av. *iδi* O.Pers. *idīy* (read *idi*) 'go': Gr. *ἴθι*, Indg. **i-dhí*.

§ 31. Armenian *e-liḳ* 'he left': Gr. *ἔ-λιπε*, from rt. *leįq-*. *e-git* 'he found' (*g* from *y*, § 162): Skr. *á-vid-a-t*, from rt. *μeįd-*. *tiv* 'day': Skr. instr. *divā* 'by day'. Stem *eri-* 'three' = Indg. **tri-* (for the initial forms cp. §§ 263. 483), instr. *erivk̔*. cp. Skr. *tri-bhíṣ*.

i, except in final syllables, disappeared e. g. *gt-ane-m* 'I find', *lk̔-ane-m* 'I leave'. Cp. § 632.

§ 32. Greek. *πιθ-ί-σθαι* 'to obey': Lat. *fid-ēs*, from rt. *bheįdh-*. *δι-* 'two' (from **δϝι-*, § 166) in *δί-ς*, *δί-πους*: Skr. *dvi-*, Lat. *bi-*, Ags. *twi-*, OHG. *zwi-*, Indg. **dμi-*. *ἔπι* 'on': Skr. *ápi*.

The ε in Elean *πόλερ* (= Att. *πόλις*) beside *πόλιν* and in Thessal. *κρεννέμεν* (inf., cp. Lesb. *κρίννην*, Att. *κρίνειν*), *Ὑβρέστᾱς* (= Att. *Ὑβρίστης*) seems to have arisen through the proximity of the *ρ*.

§ 33. Italic. Lat. *qui-s*, Umbr. Osc. *pi-s:* Gr. *τί-ς*. Lat. *mi-nu-ō mi-nor*, Osc. *mi-nstreis* 'minoris': Skr. *mi-nṓ-mi* Gr. *μι-νύ-ω μι-νύ-θω* 'lessen', Goth. adv. *mi-ns* 'minus', O.Bulg. *mĭ-nijĭ* 'minor', from rt. *mei̯-*. Lat. *tri-* in *tri-bus tri-plex*, Umbr. tri-pler 'triplis': Skr. *tri-*, Gr. *τρι-*.

Already at an early period Lat. *i* had a tendency towards *e* close (open *i* or *i* pingue), hence e. g. the spelling *tempestatebus* (C. I. L. 32) for *tempes-tāti-bus* (cp. Skr. *arišṭátāti-bhyas* dat., abl. pl. of *arišṭá-tāti-* 'unimpairedness'). This was especially so before vowels (where *ι* had partly arisen from *i̯*, see § 135), hence the inscriptional forms *fileai*, *Oveo* for *filiai*, *Ovio*. This intermediate sound was also represented by *ei*, e. g. *fileiai*.

e purum arose from *ι:*

1. Before *r* = Indg. *s* (§ 569). *serō* from **si-sō*. Gr. *ἵημι*, original form **si-sē-mi*, from rt. *sē-* 'throw, sow'. *cineris* fr. **cinis-is*, cp. *cinis-culu-s*.

2. Finally *mare* fr. **marι*, *leve* fr. **levi*, cp. *mari-a marι-timus*, *levi-bus levi-ter*, and Gr. neut. *ἴδρι* 'acquainted with', Skr. *bhúri* 'multum'. Loc. sing. *rūr-e:* cp. Skr. *div-í*. *ante* fr. **anti* cp. *anti-stō*, Gr. *ἀντί*, Skr. *ánti*.

Rem. 1. On the other hand the *e* in the suffix of the acc. case sing of *e̯*-stems as *ignem* (Skr. *agní-m*, Lith. *ùgnį*), *mortem* (Skr. *mṛtí-m*, O.Bulg. *sŭ-mrŭtĭ*), *facilem* (cp *facilι-a*), was borrowed from such forms as *ped-em* (*-em* = Indg. *-ṃ*, §§ 224, 238), as *sitι-m*, *parti-m* etc. show. The *e* in *jū-dex*, *in-dex* beside *-dic-is* etc. (from rt. *dei̯k-* 'direct', Skr. *diš-* 'order, direction', Gr. *δίκ-η*) and the *e* in *comes* by the side of *comitis* etc. (stem *com-i-t-* 'accompanying', from rt. *ei̯-* 'go') has also probably arisen through the influence of analogy; cp. *opi-fex* beside *facio*, *super-stes* beside *status* etc.

The combination *-ri-*, between consonants in unaccented syllables (according to the principle of accentuation in primitive Latin, § 680), became *r̥*, which passed into *er*. *in-certu-s* fr. **in-*

cri-to-s = Gr. ἄ-κριτο-ς, *sĕ-cernō* fr. **sē-crinō*. *ăbs-tergō* fr. **abs-trigō* (cp. Gr. τρίβω); later also uncompounded *cernō, tergō*, cp. § 65 rem. 2. In the same manner, perhaps, also arose the forms *cŏn-testor testor testāmentu-m* (*test-* from **terst-*, cp. § 269) beside Osc. trĭstaamentud abl. 'testamento'. The process was the same as that whereby **ágro-s* (Gr. ἀγρό-ς) became **agŗs *agers* and lastly *ager* (§ 623 rem. 1. 655, 9). This process may be dated back to the Italic primitive period. Cp. also § 633.

Rem. 2 *ācrĭ-bus ācrĭ-tās* etc. are new forms, made by analogy

The orthographical fluctuation in Umbrian between *i* and *e*, as neut. pĭr-e *pirs-e*, pĕr-e *pers-e* 'quid, quodcunque'; imper. *aha-tripursatu*, ah-trepŭratu 'abs-tripodato'; acc. sing. of *ei*-stems in *-i-m* and *-e-m*, and the Oscan representation of this sound in its native alphabet by ĺ, e. g. píd 'quid', slagí-m acc. sing. of the stem *slagi-* 'locus', show that *i* was pronounced open in both dialects

§ 34. Old Irish. *fiss* 'knowledge' from prim. Ir. **ɥissu-s*, that is, **ɥid+tu-s*, root. *ɥeid-*. *fid* 'tree' from prim. Kelt. **ɥidu-s* (Gall. *Vidu-casses*). OHG. *witu* 'wood'. Gen. sing *fir* fr. **firī* from Indg. stem **ɥi-ro-* 'man': Lat. *vir*, Goth. *vaír* fr. **ɥira-z* (§ 35).

Cp. also Gall. *Ambi-gatus* (Liv.), Ἀμβι-δρανοί (Ptol.): Gr. ἀμφί; Gall. *tri-* 'three' in *tri-garanus*, O.Ir. dat. pl. *tri-b* 'tribus'.

i became *e* (by assimilation), when an *a* or *o* stood in the following syllable e. g. *fer* nom. sg. fr. original **ɥiro-s*, *fedo feda* gen. sg. to *fid*

In syllables with secondary accent *i*, so far as it did not entirely disappear (§§ 634. 657), became an irrational vowel, whose quality regulated itself after the timbre of the following consonants. E. g. beside the simple *fiss* stood the compound *cúbus* 'conscientia' fr. **cón-f(i)uss*, that is, the *u*-timbre of the *ss* (presupposed through the older form **ɥissu-s*) had caused the preceding irrational vowel to become *u* in the compound, whilst it left the accented *i* in the simple *fiss* unchanged. The *u* in *fiuss* beside *fiss* merely indicates the *u*-timbre of the *ss*.

§ 35. Germanic. Goth. *viduvō* OHG. *wituwa* OS. *widowa* Ags. *widewe* 'widow': Skr. *vidhávā-*, Lat *vidua*, O.Ir. *fedb*, O.Bulg. *vĭdova*. Pret. 1. pers. pl. Goth. *bitum* OHG. *bizzum* O.Icel. *bitom* 'we bit': Skr. *bi-bhidimá*, Lat. *fidimus*. Goth. *fisks* OHG. and OS. *fisk* O.Icel. *fiskr* 'fish': Lat. *piscis*. Pronominal stem *hi-* 'this', Goth. dat. sing. *hi-mma* 'huic' adv. *hi-drē* 'huc', Engl. *hither* : Lat. *ci-* in *ci-ter ci-trā*, Lith. *szì-s* O.Bulg. *sĭ* 'hic' (§ 84. rem. 1), Indg. **ḱi-*.

In Gothic *i*, before *h* and *r*, became *aí*, that is, open *e*. *maihstus* 'dung': OHG. *mist* 'dung', Ags. *mist* 'misty vapour', Skr. *míh-* Gr. *ὀμίχλη* O.Bulg. *mĭgla* Lith. *miglà* 'fog'. *vaír* (pl. *vairōs*) 'man': Lat. *vir*, O.Ir. *fer*, Indg. **u̯i-ro-s*.

In High German, the Indg. and Prim. Germanic *i* became *e* through the influence of a following *a*, *e* or *o* (cp. Irish). OHG. *wehsal* 'change': Dutch *wissel* O.Icel. *vīxl* 'change', prim. Germ. stem **u̯ixsla-*, Lat. *vic- vic-ēs* 'change', Gr. *ϝείκω* 'yield'. *lecchōn* 'to lick': Ags. *liccean* 'to lick', Gr. *λιχνεύω* 'I lick'. *wer* 'man': Goth. *vaír*. *wessa* 'I knew': Goth. *vissa* 'I knew', pret. of OHG. *wizzan* Goth. *vitan* 'to know'. To this rule there are a number of exceptions of which some are difficult to explain. It may be assumed that they have arisen through form-association, e. g in *-zigan* 'pulled together' by the side of pret. pl. *zigum* opt. *zigi* from rt. **deiḱ-* 'show', and in *wissa* (= *wessa*) by the side of *wissum*, *wissi*. Cp. Paul's article in Paul and Braune's Beitr. VI 82 ff

Rem Some scholars assume that *i*, already in prim. Germanic, passed into *e* through the influence of an *a* or *o* of the following syllable, e. g. in OHG. *wehsal* The difficulties, however, opposed to this theory seem to me greater than those presented by the hypothesis given above.

§ 36. Baltic-Slavonic. Lith. *pìkis* (gen. *pìkio*) O.Bulg. *pĭklŭ* 'pitch': Lat. *pix*, Gr. *πίσσα* (from **πικ̯α*, § 489) 'pitch'. Lith. *limpù* (pret. *lipaũ*) 'I stick' (intr.), O.Bulg. *pri-lĭnǫ* from **-lĭpnǫ* (§ 545) 'I stick to, remain hanging': Skr. *limpáti* 'he smears', Gr. *λίπος* (neut.) 'fat'. Lith. *deszinė̃* 'right hand', O.Bulg. *desĭnŭ* 'dexter': Skr. *dákṣiṇa-* 'dexter'. Lith. *tri-sè*, O.Bulg. *trĭ-chŭ*: Skr. *tri-ṣú*, Gr. *τρι-σί*, loc. pl. from *tri-* 'three'.

In one portion of the Lithuanian dialects *i* is at the present day pronounced very open; hence such frequent spellings as *lepau lepo* = *lipaũ lĩpo* 1. and 3. pers. sing. pret. of *limpù*.

Slavonic ĭ must, already in prim. Slav., have been a reduced sound, with a quality approaching *e*.

In Modern Slavonic developments ĭ became a full vowel in closed syllables (such syllables often arose through the falling out of an ĭ or ŭ in the following syllable), Russ. *e*, Serv. *a*: e. g. Russ. *deń* Serv. *dan* = O.Bulg. *dĭnĭ* 'day'; Russ. *čest* Serv. *čast* = O.Bulg. *čĭstĭ* 'honour' On the other hand final ĭ as a sonantal vowel disappeared in every case; e. g. Russ. Serv. *dam* = O.Bulg. *da-mĭ* Lith *dů'-mi* 'I give' (Balt.-Slav. original form **dōdmi* from rt. *dō-*, Gr. δίδωμι, § 547). Medial ĭ also, as a rule, disappeared in open syllables, e. g. Russ. *vdová* = O.Bulg *vĭdova* 'widow'; Serv. *dne* = O.Bulg. *dĭn-e* gen. sing. of *dĭn-* 'day'. All these modifications can be traced as far back as the period of Old Church Slavonic. On the one hand they follow from such double spellings as *trechŭ trĭchŭ, pątemĭ pątĭmĭ* (instr. sing), *pątechŭ pątĭchŭ* loc pl. from *pątĭ* 'way', *denĭ dĭnĭ* 'day', *vesĭ vĭsĭ* 'entire', *levŭ lĭvŭ* 'lion' — these forms can only be understood by assuming that the final -ĭ and -ŭ were no longer syllabic (because *e* did not become ĭ e. g. in *pątimi* Instr. pl.)[1]) — on the other hand from such double spellings as *vsi vĭsi* gen. 'vici' (cp. Skr *víś-* 'clan'), *psatı pĭsatı* 'to write' (cp. Skr. *paś-* 'adorn', rt. *peiḱ-* 'cut, cut out'). The same laws hold for ĭ in the combinations *ĭn, ĭm, ĭr* from Indg. *ṇn, ṇm, ṛr* (§§ 252. 305). E. g. pres. O.Bulg. *mĭnǫ* 'I press, tread under foot': Lith. *minù* 'I tread', original form **mṇn-ó*, rt. *men-*; thence Russ. *mnu*. O.Bulg. *tĭmĭnica* 'prison' from *tĭmĭnŭ* 'dark', adj. to *tĭma* 'darkness' from **tṃm-ā* rt. *tem-*; thence Russ. and also already O.Bulg. *temnica*. O.Bulg. *tĭrǫ* 'tero' original form **tṛr-ṁ*, thence Russ. *tru*. The analogous treatment of ŭ § 52 may also be compared with these modifications of ĭ.

1) Cp. also such spellings as *legŭko* (i. e. *legko*) for *lĭgŭko* 'leve, facile' (§ 52).

ĭ before *j* became *i* in the period of Old Church Slavonic. *prĭja-znĭ* and *prija-znĭ* 'love, 'good will': Skr. *priyá-* 'dear', Goth. *frijōn* 'to love', Indg. adj. **priu̯ó-* 'dear'. Gen. pl. *trĭjĭ* and *trijĭ*: Lith. *trijū* 'trium'. ĭ in the combination *-ĭj-* from Indg. *-ei̯-* (§ 68) underwent the same treatment, e. g. *vĭją* and *vija* = Lith. *veju̇* 'I turn, wind', Skr. *váyāmi*, Indg. **u̯éi̯ō*. The change of *ŭ* to *y* before *j* went parallel to this modification, e. g. *dobrŭjĭ* and *dobryjĭ* 'the good man' (§ 84).

Rem. In the Zographos gospel *ŭ* frequently is found for ĭ before non-palatal vowels; e g. *vŭdova* 'widow'. Cp § 252 rem. and § 305 rem.

Indg. ī.

§ 37. Indg. **gu̯ī-u̯o-s* 'living': Skr. *jīvá-s*, Lat. *vīvo-s*, Lith. *gývas* O.Bulg. *živŭ*. Indg **pī-u̯o-*, **pī-u̯en-*. Skr. *pī-van-* 'swelling (partic.), plump, fat', Gr. *πῑ̄-(ϝ)ο-ς πῑ́-(ϝ)ων* 'fat, plump. Indg. **sī-men-:* Skr. *sī-mán-* 'parting of the hair on the top of the head', Gr. *ἶ-μᾶς* (st *ἶ-μαν-τ-*) 'a leathern strap, rein', *ἶ-μον-ιά* 'rope of a draw-well', O.Icel. *sī-me sī-mi* 'cord, rope'

Nominal suffix-form Indg. *-ī-*: Skr. *naptí-š* 'daughter, granddaughter', *vidúšī* 'ἰδυῖα', Lat. *vic-tr-ī-c-s*, Goth. *frijōndi* 'female-friend' from prim. Germanic **friu̯ōnd-ī* (§ 660, 2), Lith. *vil̃kusi* O Bulg. *vlŭkŭši* from prim. Baltic-Slav. **u̯ilkusī* (§§ 303. 664), fem. particip. pret. act. of Lith. *velkù* O.Bulg. *vlěką* 'I draw, pull' (rt. *u̯elq-*). Nominal suffix *-īno-*, forming adjectives denoting origin or material: Lat. *haed-īnu-s*, Goth. *gáit-eins* 'kid's', Lat. *su-īnu-s*, O.Bulg. *sv-inŭ* 'pig's', Goth. *sv-ein* (neut.) 'a pig' (cp. *gáitein* neut. 'a young he-goat'), Gr. *κορακ-ῖνο-ς* 'a young raven'. Indg. *-ī* the ending of the Nom. Acc. dual of *ei̯*-stems: Skr. *pátī* to nom. sing. *páti-š* 'master', O.Ir. *fāith* (original form **u̯ātī*) to nom. sing. *fāith* (original form **u̯āti-s*) 'poet', Lith. *naktì* O.Bulg. *nošti* (prim. Baltic-Slav. **noktī*, § 664, 3) to nom. sing. Lith. *naktìs* O.Bulg. *noštĭ* 'night'. Weak form of the optative suffix *-ī-*: Skr. *dviṣ-ī-máhi* 1. pers. pl. Mid. of *dvéṣ-mi* 'I hate', Gr. *εἰδεῖμεν* from **εἰδεσ-ῑ-μεν* to *ᾔδεα* 'I knew' from **ἠ-ϝειδ-εσ-α*, Lat. *s-ī-mus*, Goth. *vil-ei-ma* = Lat. *vel-ī-mus*,

OHG. 1. pers. pl. *s-ī-m s-ī-n* 'we may be' = Lat. *sīmus*, O.Bulg. *jad-i-mŭ* from *jad-* (*ĕd-*) 'eat' (§ 76), cp. Lat. *ed-ī-mus*.

Rem. Of all the prim. Indg. vowels ī is the one which has been least changed in the development of the separate languages.

§ 38. Aryan. Skr. *vī-rá-s* Av *vī-ra-* 'man, hero': Umbr. *veiro-* 'vir' (cp. § 41), secondary form of Indg. **ϱi-ro-s* (§ 34), denoted originally, 'endowed with strength', and is related to Lat. *vī-s*. Skr. *jī-rá-* Avest. *-jī-ra-* 'active', imper. 2. pers. sing. Skr. *jíva* O.Pers. *jīvā* (read *jīva*) 'live'. Skr. *lṛhat-ī-m* Avest. *ber'zaiṭ-ī-m* 'magnam, altam', cpf. **lhṛĝh-ϱt-ī-m*.

§ 39. Armenian. I do not know any certain examples for the representation of ī. See, however, *siun* 'pillar' = Gr. *κίων* and *çin* 'milvus' = Gr. *ἰκτῖνος* in Hubschmann's Arm. Stud. I 49. 53.

§ 40. Greek. *ἴ-ς ἶ-φι* 'strength': Lat. *vī-s*. *ἰό-ς* 'poison' fr. **ϝῑσυ-ς* : Lat. *vīru-s*, O.Ir. *fí*. *ῥῖγος* 'frost' : Lat. *frīgus* (§ 570). *πί-νω* 'I drink', imper. *πῖ-θι* : Skr. *pī-tá-s* 'drunk, having drunk' *pī-tí-š* 'draught (of liquids)', O.Bulg. *pi-ti* 'to drink' *pi-vo* (neut.) 'potus, beer'.

§ 41. Italic. Lat. *vīvo-s*, Osc. bivus nom. pl. 'vivi'. Lat. *in-clī-nŏ*, *ac-clī-ni-s* : Gr. *κλί-νη κλῑ-τύ-ς*, Skr *abhi-śrī-nā-ti* 'leads on, unites with'. Lat. *s-ī-mus*, Umbr. 2. pers. sing. *sir* 'sis', Osc. *fefac-i-d* 'fecerit' opt. of redupl. perf. (cp. Skr. 3. pers. sing. opt. pf. mid. *va-vṛt-ī-tá* from *vart-* 'roll, turn'); the *-i-* (*-ī-*) in the Umbr. and Osc. forms, as well as in Lat. *sim sīs* (O.Lat. *siem siēs*), has been taken over from the 1. and 2. pers. pl. Osc. li-mu 'famem' : Gr. *λῑ-μό-ς*.

In Latin *ei* was also written for this ī, e. g. *veivos, faxseis*. It was not, however, pronounced as a diphthong, but as a long (probably open) *i*. The old diphthong *ei* in *deicō* (cp. *δείκ-νῡ-μι*), *feidō* (cp. *πείθω*) etc. had become ī, but the spelling *ei* for this ī was still retained. At this period the sign *ei* began to be used for the old ī which had fallen together with *eĭ* (cp. also the late Greek spelling *ει* for original ī, as *πολείτης*). Cf. § 65.

The *i* in the Umbr. and Osc. words *sir* and bivus, limu (quoted above) is to be pronounced long. This quantity can be directly proved in Umbr. persnihmu *persnihimu*, i. e. *persnīmu* (§ 23) 'precamino', depon. 3. sing. imper. from a verbal stem *persnī-*, cp. Lat. *fīnī-re*. It also follows from the spelling *ei* (on tables in Latin alphabet) in *sei* beside *sir si* = Lat. *sīs*, in *veiro* beside *viro* 'viros' (cp Skr. *vīrá-s* § 38), probably also in *pers-ei* beside *pers-i* 'quid', the ending of which was a demonstrative particle corresponding to the *-ī* in Gr. *οὑτοσ-ί*. This spelling *ei* is to be put on a like footing with the *ei* in Lat. *veivos* and similar forms (see above), and points to an open pronunciation of the ī. The same quality of the ī-sound follows for Oscan from fusíd 'foret, esset' (opt. of the *s*-aorist, cp. Skr. 3. sing. mid. *mą-s-ī-tá* from *man-* 'think'), assuming that the vowel in the end syllable had not been shortened and then become í.

§ 42. Old Irish. *lī* Cymr. *lliw* 'color, splendor': Lat. *līvor*. It is less certain that the ī in *crīthid* 'emax' = Indg. ī: Skr. *krī-ṇā-ti* 'buys'.

For the treatment of ī in unaccented syllables see §§ 613. 634. 657, 2. 6.

§ 43. Germanic Goth. *skeirs* (st. *skei-ra-*) O.Sax. *skīr* O Icel. *skīrr* 'clear, bright', prim. Germ. **skī-ra-*, related to Gr. *σκιᾱ́* 'shadow' or to Lat. *dē-scī-scō* 'I withdraw, depart from'. Goth. *freidjan* 'to spare', OHG. *vrīten* 'to foster, pamper', O.Icel. *frīða* 'to adorn, decorate': cp. Skr. *prī-tá-s* 'dear, pleased, joyful, satisfied'. Goth. *sv-ein* OHG. OS. *swīn* Ags. *swīn* O.Icel. *svīn* 'pig': O.Bulg. *sv-inŭ* Lat. *su-īnu-s* 'pig's (adj.), belonging to a pig'. 1. pers. pl. opt. pf. Goth. *vēs-ei-ma* OHG. *wār-ī-m* O.Sax. *wār-i-n*, O.Icel. *vær-i-m* 'we might be': cp. Skr. 3. sing. opt. pf. mid. *vavṛt-ī-ṭá* (from *vart-*).

It must be observed that *ei* in Goth. always signifies the monophthong ī (§ 25).

§ 44. Baltic-Slavonic. Lith. *vý-ti* O.Bulg. *vi-ti* 'to wind, turn' : Gr. *ἰ-τέᾱ* 'willow, salix' fr. **Fī-τεᾱ*. Lith *dvynù* (dual) 'twins' : Lat *bīnī*. O.Bulg. *griva* 'mane' : Skr. *grīvā-* 'nape'.

Observe that *y* is the Lith. symbol. for ī (§ 26).

Indg. *u*.

§ 45. Indg. **jug-ó-m* 'yoke' : Skr. *yugá-m*, Gr. *ζυγό-ν*, Lat. *jugu-m*, Goth. *juk*, O.Bulg. *igo* fr. **i̯ŭgo*. Indg. weak stemform **ku-n-* 'dog' (strong stemform **kṷ-on-*, Skr acc. sing. *śvān-am*): Skr. gen. sing. *śú-n-as*, Gr. gen. sing. *κυ-ν-ός*, O.Cymric nom. pl. *cún cun*, Goth. *hun-d-s*, Lith. gen sing. *szu-ñ-s* fr. **szu-n-es* (§ 664, 2). Indg. **nu* 'now': Skt. *nú*, Gr. *νύ*, Lat. *nu-diu-s*, O.Ir. *nu no*, OHG. *nu no*, Lith. *nù-gi* 'now then'.

Weak nominal suffixes Indg. *-u-*, *-tu-*, *-nu-*: Skr. *svād-ú-ṣ*, Gr. *ἡδ-ύ-ς* 'sweet', Lat. *fruc-tu-s*, O.Ir. *fiuss fiss* 'knowledge' from **u̯issu-s*, Goth. *su-nu-s* Lith. *sū-nù-s* O.Bulg. *sy-nŭ* (from **sy-nŭ-s*, § 665, 4) 'son'. Weak form of the suffix of the pf. part. act. Indg. *-us-*: Skr. *vid-úṣ-ī* Gr. *ἰδνῖα* from **ϝιδ-νσ-ι̯α* (§ 131) fem. 'knowing', Goth. *bēr-us-jōs* 'parents' (properly 'those who have brought forth'), Lith. *vil̃k-us-i* O.Bulg. *vlŭk-ŭši* fem., to Lith. *velkù* O.Bulg. *vlĕką* 'I draw'.

§ 46. Aryan Skr. *putrá-* Avest. *puθra-* O.Pers. *puša-* (§ 261) 'son': Osc. puklo- 'son'. Skr. *úpa* Avest. *upa* O.Pers. *upā* (read *upa*) prep. 'to'. Gr. *ὕπο*, Lat. *s-ub*. Skr. *su-* Avest. *hu-* O.Pers. *u-* prefix = 'well, good, very': O Ir. *su- so-* Suffix of the loc. pl. Ar. *-su*: Skr *áśvē-šu* Avest. *aspaę-šu* 'in equis', O.Pers. *mādai-šuv-ā* 'in Medis' (*-ā* is postposition): O Lith. *knygo-su* (Mod. *knỹgo-se* is formed by analogy) 'in libro' from *knỹgos* pl. 'liber', O.Bulg. *rąka-chŭ* 'in manibus' from *rąka* 'manus'.

In Sanskrit *ru* before a following *u* seems to have passed into *ɣ* (dissimilation). Present stem *śɣ-nu-* ('hear') from **śru-nu-*, cp. Avest. 2. pers. sing. opt. *srunu-yå* (Skr. *śṛnu-yās*), O.Ir. 1. pers. sing. pres. *clu-n-m*, rt. *k̂leu̯-*. *bhɣ-kuṭi-ṣ* 'distortion of the eye-brows' beside *bhru-bhaṅga-s bhrū-bhaṅga-s* the same. Cp. Osthoff Morph. Unt. IV. 215 f.

§ 47. Armenian. *dustr* 'daughter': Skr. *duhitár-* Gr. *θυγάτηρ* Goth. *daúhtar* (§ 51) Lith. *duktẽ* O.Bulg. *dŭšti* 'daughter'. *surb* 'clean': Skr. *śubhrá-s* 'clear, bright'. *nu* 'daughter-in-law': Skr. *snuṣā* Gr. *νυό-ς* OHG. *snur* O.Bulg. *snŭcha* 'daughter-in-law'.

u in non-final syllables was dropped: *dster* gen. of *dustr*, *srboy* gen. of *surb*, verb *srbem* 'I clean'. Cp. § 632.

§ 48. Greek. *κλυ-τό-ς* 'celebrated': Skr. *śru-tá-s* 'heard, celebrated', Lat. *in-clu-tu-s*, O.Ir. *cloth* from **clu-to-s* (§ 50) 'celebrated', OHG. *Hlud-rīch Hlud-olf Hlot-hari* (§ 51). *ὑπειρ ὑπὲρ* 'over': Skr. *upári* 'above, over', Lat. *s-uper*, Goth. *ufar* 'over'. Weak present suffix *-nu-* in *τά-νυ-ται*: Skr. *ta-nu-tḗ*, from root *ten-* 'stretch', Lat. *mi-nu-ō*.

In prim. Gr. and probably also for some time after the introduction of the letter *Y*, *u* was spoken by all Greeks. At an early period one part of the dialects changed *u* into *u* which in the christian era was further changed into *i*. Another part, the Bœotians, Laconians, and probably also the Arcadians, Cyprians, Pamphylians, Chalcidians and Lesbians, retained *u* until far into historical times, e. g. Bœot. *λιγυρό-ς* (*ου* = *ŭ*) = Att. *λιγυρό-ς*. Meanwhile the vowel *u* in Bœot. underwent a modification which cannot be precisely defined, after *τ*, *θ*, *δ*, *ν*, *λ*, as is seen by the spelling *ιου* instead of *ου*, e. g. *Πολιού-ξενος* = Att. *Πολύ-ξενος*; cp. Osc. *ıu* = *u* § 49.

The spiritus asper in *ὕδωρ* (Skr. *udán-* 'water'), *ὑπο ὑπερ* (Skr. *úpa úpari*) etc. seems to point to a transition from initial *u-* to *χυ* in prim. Greek. Cp. *ὑμεῖς*: Skr. *yušma-*. It is not improbable that *ν* became *ι* through the dissimilating influence of a following *ν*, as *πιννυτό-ς* from **πν-νυ-τό-ς*, Skr. *pu-nā́-mi* 'I clean, clear up'.

§ 49. Italic. Lat. *rubro-* (nom. ruber) Umbr. rufro- 'red': Skr. *rudhirá-s* Gr. *ἐρυθρό-ς* O.Bulg. *rŭdrŭ* 'red'. Lat. *duō* Umbr. neut. tuva 'two': Skr. ved. *duvá* Gr. *δύω* 'two'. Osc. pu-klo- Pelig. Mars. *pu-clo-* 'son' Lat. *pu-tu-s* 'boy': Skr. *pu-trá-s* 'son'.

In Latin, before labials and perhaps also before *l*, a frequent sound, lying between *u* und *i*, made its appearance for Indg. *u*. *libet*, older *lubet*: Skr. *lubh-* 'to feel a strong desire'. *fimu-s fimu-m*, probably related to Gr. *θύ-μο-ν*. *limpa* (*limpidus*), older form

lumpa to Osc. Diumpaís 'Nymphis', prim. Italic **dumpā-*[1]). The relation between *silua silva* and Gr. *ὕλη* is uncertain (cp. Osthoff Morph. Unt. IV 158 f., W. Meyer Kuhn's Ztschr. XXVIII 163 f.). This *i* occurs especially often for the *-u-* of *u-(eu̯-)*stems, e. g. *lacri-ma*, older form *lacru-ma, laci-bus fluctı-bus fluctı-vagus manifestus* beside *lacu-bus manu-festus*. Compare the change of *a* to the same *u*: *ı*-sound (§ 97) in unaccented syllables before the same consonants.

Rem. It has been conjectured (Osthoff in the above named work pages 125, 158) that the *ı* in *lıbet*, *fimus*, *limpa*, *sılua* arose from *u* phonetically only in unaccented syllables, in such combinations as *quī lubet, cónlubet, in fumō* (cp *ulcō* from **in slocō*). But should not the historical relation of *loebertatem leiber* to Osc. Lúvfreís 'Liberi' Falisc. *loferta* 'liberta' be such that in Lat **loub-* (= prim Italic **loub̯-*, § 65 page 52) the consonantal *u* before *b* underwent precisely the same change as the sonantal *u* of *lubet*, so that **loub* first became **loub̯*, then *loɸb*, and lastly *lūb-*? In that case the change of *lubet* (with *u* in the chief accented syllable) to *lıbet* could scarcely be questioned For the change of *loeb-* to *līb-* cp. § 81 rem 2. I cannot resolve to separate Lat *līber līberta* from Osc. Lúvfreís and Falisc *loferta*, although I do not fail to recognise the overwhelming difficulties which present themselves (s Danielsson in Pauli's Ital. Stud 4, 156 ff).

The spelling with *o* shows that *u* in Umbr. had, in certain cases or everywhere, an open sound: *sopam* 'suppam, supinam', *somo* summum', *trıfo* 'tribum'. For Umbr. *ı-* from *u̯u-* see § 133.

In Osc., *u* after *d*, *t*, *n*, *s* underwent a change which was represented by iu. Diumpaís 'Nymphis', Lat. *lumpa* (see above); eítiuvam beside *eítuam* 'pecuniam' (suffix *-u(u̯)ā-*). tiurrí 'turrim' (a borrowed word?). Niumsieís *Νινμσδιηις* gen. 'Numisii', to Lat. *numeru-s*. Siuttiis 'Suttius'. Cp. Bœot. *ιον* = *ον* § 48.

§ 50. O. Irish. *suth* neut. 'birth, fruit' fr. **su-tu*: Skr. *su-tá-s* Gr. *υἱύ-ς υἱό-ς* 'son'. *sruth* neut. 'river' fr. **sru-tu*: Skr. *sru-tá-s* Gr. *ῥυ-τό-ς* 'flowing', Lith. *sru-tà* 'dung-water'. *clu-ni-m* 'I hear': Skr. *śru-* Gr. *κλυ-*, rt. *ḱleu̯-*.

1) The spellings of the Lat. word as *lumpha, limpha, lympha* are due to the supposed derivation from *νύμφη*, which even gave rise to *nymphaticus* (Löwe Archiv. f. Lat. Lexikogr. I 25).

Compare also Gall. *Druid-es*, O.Ir. *drui* (pl. *druid*) perhaps to, Skr. *dru-* Gr. δρυ- 'wood'; Gall. *catu-* 'combat' in *Catu-rīg-es* etc. (O.Ir. *cath*, gen. *catha*): OHG. *hadu-* 'war'.

u became *o* through the assimilating influence of *a* or *o* in the following syllable (cp. the similar change of *i* to *e* § 34). *cloth* from **clu-to-s*: Gr. κλυ-τό-ς etc. (§ 48). *srotho srotha* gen. of *sruth*. *bond bonn* 'solea' fr. **bundo-s*: Lat. *fundu-s* Skr. *budh-ná-s* 'bottom' (§ 469, 8). Compare West Germanic and Norse *o* from *u* § 51.

u became *o* in monosyllabic words. *nu no* = Skr. *nú* etc. (§ 45). *su- so-* 'well' = Skr. *su-*. *du- do-* 'bad' = Skr. *duš-* Gr. δυς- Goth. *tuz-*. In this case too it is probable that the change from *u* to *o* was caused by the vowels of the following syllables.

For the fate of *u* in other than chief accented syllables cp. §§ 634. 657.

§ 51. Germanic. 1. pers. pl. pf. Goth. *ana-budum* 'we bade', OHG. *butum* O.Icel. *buðom* 'we offered': Skr. *bu-budh-imá* 'we watched, observed', Gr. πέ-πυσται πυθ-έσθαι, Lith. *bùd-inti* 'to rouse', O.Bulg. *bŭd-ĕti* 'to wake', from rt. *bheudh-* 'wake, observe'. Goth. *ga-kusts* (st. *ga-kusti-*) OHG. *kust* 'test, choice': Skr. *júṣṭu-ś* 'show of affection, favour'; *kustu-s* 'trial': Lat. *gustu-s* 'taste' from rt. *ĝeus-* 'choose, γεύεσθαι'.

Before *h* and *r* Indg *u* appears in Goth. as *aú*. *aúhsa* (st. *aúhsin-*) 'ox'. Skr. *ukṣá* (st. *ukṣán-*) 'bull, ox'. *daúr* (st. *daúra-*) neut. 'door': Skr. *dúr-* (concerning the *d-* see § 480) Arm. *durn* Gr. θύρᾱ Lith. pl. *dùrys* 'door'.

In West Germanic and Norse *u* became *o* through the influence of an *a* or *o* of the following syllable. Part. passive OHG. *botan* (Mod. High Germ. *ge-boten*) O.Sax. *bodan* Ags. *boden* O.Icel. *boðenn* = Goth. *budans*, cp. Skr. part. *budhāná-s*. OHG. *tor* = Goth. *daúr* (prim. Germ. **ðura-m*) beside *turi* 'door'. Cp. §§ 247. 299.

Rem. Some scholars look upon this umlaut also as prim. Germ. (cp. § 35 rem.).

§ 52. Baltic-Slavonic. Lith. *krùvina-s* O.Bulg. *krŭvĭnŭ* 'bloody': Lat. *cruentus*. Lith. pl. *musaĩ* (stem *musa-*) 'mould

on sour milk', O.Bulg. *mŭchŭ* 'moss': Lat. *mus-cu-s*, OHG. *mos* (prim. Germ. stem **musa*-) 'moss'. Lith. *sū-nù-s* O.Bulg. *sy-nŭ* 'son': Skr. *sū-nú-ṣ* 'son'.

In some Lith. dialects *u* is pronounced very open, so that it can be regarded as a closed *o*, e. g. *sukaũ sùko* (1. and 3. pers. sing. pret. of *sukù* 'I turn') appear as *sõkaũ*, *sòkõ*.

Slavonic *ŭ* must, already in prim. Slav., have been a reduced sound, approaching the quality of *o*.

ŭ, in Modern Slavonic developments, became a full vowel in closed syllables (such syllables often arose through the falling out of an *ĭ* or *ŭ* in the following syllable), Russ. *o*, Serv. *a*, e. g. Russ. *son* Serv. *san* = O.Bulg. *sŭnŭ* from **sŭpnŭ* (§ 545) 'sleep': Gr. *ὕπ-νο-ς*; Russ. *doč'* = O.Bulg. *dŭšti* 'daughter': Lith. *duktẽ*. On the other hand final *ŭ* disappeared, e. g. Russ *syn* O.Bulg. *synŭ*, loc. pl. Russ. *rybach* Serv. *ribah* = O.Bulg. *rybachŭ* (from *ryba*- fem. 'fish'), cp. Skr. loc. pl. *áśvā-su* (from *áśvā*- 'mare'). Medial *ŭ* also, as a rule, disappeared in open syllables, e. g. Russ. Serv. *sna* = O.Bulg. *sŭna* (gen. sing of *sŭnŭ*), Russ. *spat'* = O.Bulg. *sŭpati* 'to sleep', *legka* = O.Bulg. *lĭgŭka* nom. fem. of *lĭgŭ-kŭ* 'easy' (further formation of an old *ŭ*-stem by means of the suffix *-ko*-). All these modifications can be traced as far back as the period of old Church Slavonic. On the one hand they follow from such double spellings as *krovĭ krŭvĭ* 'blood', *domochŭ domŭchŭ* (loc. pl. from the stem *domŭ*- 'house' = Lat. *domu*-); these forms can only be understood by assuming that the final *ĭ* and *ŭ* were no longer syllabic; on the other hand from such double spellings as *rekšu rekŭšu* dat. sing. of the stem *rekŭše*-, that is, **rek-ŭs-i̯o*- according to §§ 84 and 147 (part. pf. act. of *reką* 'I say'), *legŭko* beside *lĭgŭko* neut. to *lĭgŭkŭ*. With these modifications of *ŭ*, compare the parallel treatment of *ĭ* § 36.

Prim. Slav. *i̯ŭ* became *i̯ĭ* (cp. *i̯i* from *i̯y* § 60 and *i̯e* from *i̯o* § 84). O.Bulg. *žĭvą* 'I chew' from **zi̯ŭvą*: OHG. *chiuwu* (§§ 143. 147). *igo* 'yoke' from **i̯ĭgo* (§ 145) and this fr. **i̯ŭgo*: Skr. *yugá-m*, Lat. *jugu-m*.

Rem. In the Zographos gospel ъ for ŭ occurs occasionally before palatal vowels, e. g. *bъdětь* = *bŭdětь* 'to wake', *dъva* m., but *dъvě* fem. neutr. 'two'.

Indg. ū.

§ 53. Indg. **dhū-mó-s* 'ebullition, smoke': Skr. *dhūmá-s*, Gr. *θῡμό-ς* ('courage, passion'), Lat. *fūmu-s*, Lith. pl. *dúmai*, O.Bulg. *dymъ*. Indg. **bhū-*, weak form of the the rt. *bheu̯-* 'be, become' (§ 312): Skr. *bhū-tá-* 'become, been' *ábhū-tam* 'ye two were' *bhū-tí-š* 'good condition, well-being', Gr. *φῡ-ταλιή* 'a planted place' 2. pers. du. *ἔφῡ-τον*, Lith. inf. *bú-ti* O.Bulg. *by-ti* 'to be'. Indg. **mūs-* 'mouse': Skr. *múš-*, Gr. *μῦς*, Lat. *mūs mūr-is*; OHG. *mūs* and O.Bulg. *myšь* fr. **mychъ* (§ 588, 2), that is, originally **mūs-i-s*, show the change of the monosyllabic stem into the *ei̯*-declension.

Indg. *-ū* as ending of the nom. acc. du. of *eu̯*-stems: Skr. *sūnú* O Bulg *syny* from Indg. stem **sū-neu̯-* **sū-nu-* 'son', Lith. *žmogù* fr. **žmogŭ* (§ 664, 3) to *žmogù-s* 'man', O.Ir. *mug* fr. **mogū* (§ 657, 2) from stem *mogu-* 'servant'.

§ 54. Aryan. Skr. *dū-rá-* Avest. O.Pers. *dū-ra-* 'far' from rt *deu̯-* 'withdraw' (Gr. Hom *δεύεσθαι* 'fall short of'). Skr. *šū-ra-* 'hero', Avest. *sū-ra-* 'strong': Gr. *ἄ-κῡρος* 'weak, invalid'. Skr. *nú* Avest. *nū* 'now': Gr. *νῦ-ν* O.Bulg. *ny-ně* 'now'.

§ 55. Armenian. I do not know any sure examples for the regular representation of Indg. ū. The following comparison of words may, however, be taken into consideration. *ku*, gen. *ku-oy*, 'dung' to Skr. *gūtha-* 'excrement', Avest. *gūθa-* 'dirt'. *mukn*, gen. *mkan*, 'mouse, muscle', to Skr. *múšikā- mūšakā-* 'rat, mouse,' O.Bulg. *myšьka* 'mouse', Lat. *mŭsculu-s* (cp. Hübschmann Zeitschr. d. deutsch. morgenl. Ges. XXXV 170, Osthoff Morph. Unt. IV 217 f.). Pl. *srun-ĕ* (*-ĕ* is the sign of the plural) 'shins, shanks', to Lat *crūr-a* (Hübschmann, as above, page 177). Compare also Hübschmann Armen. Stud. I 62.

§ 56. Greek. *ὀφρῦς ὀφρῦν* 'eye-brow': Skr. *bhrú-š* O.Icel. *brū-n* Ags. *brū* 'eye-brow'. *βου-λῡ-τό-* 'the time for unyoking oxen': Lat. *so-lū-tu-s*, O.Icel. *lūðr* 'bruised, crushed, deafened,

tired out' (cp. λύτο γούνατα). στῡ-λο-ς 'pillar': Skr. *sthū-rá-* *sthū-lá-* 'coarse, thick, massive'.

The change from ū to ŭ went parallel with that of u to ŭ (§ 48). The dialects, which retained u, retained also ū: Bœot. *Εὔ-θουμο-ς* = Att. *Εὔ-θῡμο-ς*, Lac. *μουσίδδει* (which according to Hesychius means λαλεῖ) = Att. **μῡθιζει*

It is doubtful whether ῡ became ī through the dissimilating influence of a following v (cp. § 48). *φῑ-τυ* (neut.) 'twig, sprout' has been brought together with Skr. gerund *bhū-tv-á* and Lat. *fu-tu-ō* It may, however, be connected with Lat *fīō* and O.Ir. *biu* 'fio, sum', the original form of which was **bhu̯-i̯ṓ* (§§ 170. 175). It is still more uncertain whether ἴθύ-ς has come from **ῑ̓θυ-ς* (Osthoff Morph. Unt. IV 188 ff.).

§ 57. Italic. O.Lat. pf. *fū-ī* *fū-imus* (Inscript. *fuueit*), Osc. Fuutreí 'deae creatrici': Skr. *bhū-tá-* etc. (§ 53). Lat. *sū-s* *sū-bus*: Skr. *sū-karí-* 'pig, boar', Gr. ὗ-ς ὗ-ν, OHG *sū* (Mod.HG. *sau*) from prim. West-Germ. **sū-z* (§ 583). Lat. *cūpa* 'vat, recess for the dead': Skr. *kū́pa-s* 'pit, hole'

It is quite possible that in Umbr the ŭ in pir (*πῦρ*) beside abl. pure Osc. purasiaí (loc. sing. of the stem *purasiā-* 'igniaria'), in sim (Gr. ὖν, Lat. *suem*) and sif (acc. pl.) beside suřum *sorsum* 'suillum', and in *frif* acc. pl. 'fruges', represents an older ū which may have been pronounced ū̆. (cp. O.Bulg. *y* fr. ū beside ŭ fr. u, §§ 52. 60.). It is however impossible to form a correct judgment owing to the quantities not being marked, and the scantiness of the material. Cp. Osthoff Morph. Unt. IV 16, Zur Gesch. d. Perf. 432.

§ 58. Old Irish. *rūn* (fem.) 'secret': OHG. *rūna* O.Icel. *rūn* f. 'secret, rune'. *dūn* (neut.) 'castle', Gall. *-dūnum* in names of towns (*Lupo-dūnum* and others): O.Sax. Ags. masc. *tūn* OHG. masc. *zūn* O.Icel. neut. *tūn* 'hedge, enclosure'. Pron. *tū* 'thou': Avest. *tū* Gr. *τύ-ν-η* Lat. *tū* O.Icel. *þū* O.Bulg. *ty*

For such forms as acc. sing. *rūin* beside nom. sing. *rūn* see § 640.

For ŭ in unaccented syllables cp. §§ 613. 634. 657.

§ 59. Germanic. In Goth., where *u* and *ū* in the native alphabet were not kept apart, *ū* can scarcely ever be established without the help of the other languages Goth. *fūls* OHG. Ags. *fūl* O.Icel. *fūll* 'foul': Lith. pl. *púlei* 'matter', Gr. *πύθω* 'I make to rot, putrefy', Lat. *pūs pūris* 'matter, spittle' *pū-teō* 'I smell bad, stink'. Goth. *rūms* OHG. O.Sax. m. *rūm*, O.Icel. neut. *rūm* 'room, open place', from the same root as Lat *rūs rūris* 'open field, country', Avest. *ravah-* 'free'. OHG. *ūtar* Ags. *ūder* 'udder': Skr. *údhar* 'udder'. OHG. *hlūt* Ags. O.Sax. *hlūd* 'loud' from rt. *klеu̯-* 'hear': cp Gr. imperative *κλῦ-τε*, O.Bulg. *sly-šati* 'to hear', *sly-tьje* neut. 'call, name'.

§ 60. Baltic-Slavonic. Lith. *túla-s* adj. 'so many a', originally a substantive denoting 'a mass', O Bulg. *tylū* 'nape', originally 'intumescence': Skr. *tūla-* neut. 'panicle, tuft, cotton', Gr. *τύλη* 'a swelling or lump, callosity', from rt. *teu̯-* 'tumere'. Lith. *súra-s* 'salme', O.Bulg. *syrъ* 'raw': OHG. *sūr* O.Icel. *sūrr* 'sour, bitter'. Lith. *jūs* 'ye': Avest. *yūš yūžem* 'ye'. O.Bulg. *svekry* 'mother-in-law': Skr *śvaśrú-ṣ* 'mother-in-law'.

The change of *ū* to *y* belonged to the prim. Slav. period.

Prim Slav. *i̯y* became *i̯i* (cp. *jь* from *i̯ū* § 52). O.Bulg. *šiti* fr. **si̯ti* (§ 147), and this fr. **si̯yti* : Lith. *siúti* 'to sew', Skr. *syūti-š* fem. 'sewing, sack'. Compare also *kraji* instr. pl. of *krajь* 'edge' but *raby* instr. pl. of *rabū* 'servant'.

Indg. *e*.

§ 61. Indg. pres stem **bhero- *bhere-* 'bear': Skr. *bhárāmi*, Arm. *berem*, Gr. *φέρω*, Lat. *ferō*, O.Ir. *berim*, Goth. *baira*, O.Bulg. *berą*. Indg. **és-ti* 'is': Skr. *ásti*, Gr. *ἔστι*, Lat. *est*, O.Ir. *is* (proclitic), Goth. *ist*, Lith. *esti* (now archaic), O.Bulg. *jestь*. Indg. *e* in the root syllable of neuters in *-es-*, e. g. Indg. **régos* 'vapour, darkness': Skr. *rájas*, Arm. *erek*, Gr. *ἔρεβος*, Goth. *riqiz-a-*; Indg. **nébhos*, 'cloud, atmosphere': Skr. *nábhas*, Gr. *νέφος*, Lith. *debes-i-s* (the origin of the *d-* instead of *n-* is not clear), O.Bulg. *nebo*, comp. also with *l*-suffix Gr. *νεφέλη* Lat. *nebula* O.Ir. *nēl* (prim. kelt. stem **neblo-*, § 526) OHG. *nebul* 'cloud, fog'. Indg. **qe* 'and': Skr. *ca*, Gr. *τε*, Lat. *que*. Augment

of the past tenses of the Indicative (originally an independent particle) Indg. *é*: 3. pers. sing. Skr. *á-dṛśat* Gr. *ἔ-δρακε* (rt. *derḱ-* 'see'), Arm. *e-liḱ* Gr. *ἔ-λιπε* (rt. *leiq-* 'leave'), Goth. *i-ddja* Skr. *á-yāt* 'he went' (for Goth. *ddj* see § 142).

-e Indg. ending of voc. sing. of *o*-stems: Skr. *vṛ́ka* Gr. *λύκε* Lat. *lupe* 'wolf', O.Ir. *maicc* *maic* from prim. kelt. **makue* 'son', Lith. *vilkè* O.Bulg. *vlŭče* 'wolf'. The 'thematic vowel' Indg. *-e-* (by the side of *-o-*): e. g. 2. pers. pl. Skr. *bhár-a-tha*, Gr. *φέρ-ε-τε*, Lat. *veh-i-tis*, Goth. *baír-i-þ*, O.Bulg *ber-e-te*. Nominal suffix Indg. *-es-*: gen. sing Skr *nábh-as-as* Gr. *νέφ-ε(σ)-ος* Lat. *gen-er-is* O.Bulg. *neb-es-e*, Goth. stem *riq-iz-a-* (a further formation by means of *-a-*), Lith. nom. sing. *deb-es-ì-s* (a further formation by means of *-i-*). Nominal suffix Indg. *-ter-*: Nom. pl. Skr. *pi-tár-as* 'fathers', Arm *ds-ter-ḱ* 'daughters', Gr. *πα-τέρ-ες*, gen. sing. Lith. *mo-teř-s* O.Bulg. *ma-ter-e*. Ending of the nom. pl. Indg. *-es*: Skr. *áśmān-as* from *áśman-* 'stone', Gr. *ἄκμον-ες*, O.Lat. *turbin-ēs*, Lith. *ākmens* from **akmen-es* (§ 664, 2) O.Bulg. *kamen-e* from **kamen-es* (§ 665, 4) 'stones'. Ending of the 3. pers. sing. indic. pf. act. Indg. *-e*, e. g. **de-dórḱ-e* (from rt. *derḱ-* 'see'): Skr. *dadárś-a*, Gr. *δέδορκ-ε*, O.Ir. *ad-con-dairc* from prim. Kelt. **-dorke*.

Indg. tautosyllabic *eɻ*[1]). Skr. (ved.) *bhédāmi* 'I cleave', Goth. *beita* 'I bite', original form **bhéɻdō*; Arm. *lizem* Gr. *λείχω* 'I lick', original form **léɻǧhō*; Lat. *fīdō* Gr. *πείθω*, orig. form **bhéɻdhō*; O.Ir. *tiagim* 'I go', Gr. *στείχω* 'I go', Goth. *steiga* 'I climb', orig. form **stéɻghō*; Lith. *geidžiù* 'I have a desire' for older **geidu* = O.Bulg *židą* 'I wait, expect', orig. form **ghéɻdhō*. Indg. **éɻ-ti* 'he goes': Skr. *éti*, Gr *εἶσι*, Lat. *it*, Lith. *eĩti* *eĩt*, cp. O.Bulg. *i-dą* 'I go'. Indg. **ǧheɻ-men-*: Skr. *hémān-* 'winter', Arm. *jiun* 'snow', from **jivn*, **jiman* (§ 202), Gr. *χεῖμα* *χειμών*.

1) We call a sound-group tautosyllabic, when its elements belong to the same syllable, i. e. are uttered with the same expiration-impulse; heterosyllabic, when the last element or elements are produced by a fresh expiration-impulse *eɻ* e. g. is tautosyllabic before consonants (**bheɻdhō* = Gr. *πείθω*) and in a pause (**μοɻ/ḱeɻ/* = Gr. *οἶκει*). It is, as a rule, heterosyllabic before sonants (**gṃ/te/ɻes* = Skr *gátayas*, Gr. *βάσεις* from **βασε(ɻ)ες*).

Indog. tautosyllabic *eu̯*. Skr. *bŏdhāmi*, Gr. *πεύθομαι*, Goth. *ana-biuda*, cpf. **bhéu̯dhō* 'I watch, observe'; Lat. *dūcō* 'I lead', Goth. *tiuha* I draw'; O.Bulg. *skubą* 'I pull, tear', Goth. *af-skiuba* 'I shove off', Skr. *kṣṓbhatē* 'falls in motion, wavers'. Indg. **kleu̯-men-* **kleu̯-mn̥-to-* : Skr. *śrṓmata-* neut. 'the act of hearing' Avest. *sraoman-* neut. 'hearing', Goth. *hliuma* masc. (gen. *hliumins*) 'hearing' OHG. *hliumunt* 'renown'. Gr. *ῥεῦμα* 'that which flows', O.Ir. *sruaim* (dat. pl. *sruamannaib*) 'stream', cpf. **sreu̯-men-*. Gr. voc. *Ζεῦ*, Indg. **di̯eu̯*.

§ 62. Aryan. Indg. *e* became *a* in the prim. Aryan period. This change however did not take place until after the vowel had changed the preceding *q*, *g*, *gh* into *c*, *j*, *jh* (§ 445). Skr. Av. *ca* O.Pers. *cā* (read *ca*) 'and' : Lat. *que*. Skr. *páñca* Av. *panca* 'five' : Arm. *hing*, Gr. *πέντε*, Lat *quīnque*, O.Ir. *cōic* from prim. Kelt. **kᵘenkᵘe* (cp. § 212), Goth. *fimf*, Indg. **pénqe* 'five'. Skr. *śrávas-* neut 'renown', Av. *sravah-* neut. 'word, prayer' : Gr. *κλέϝ-ος* 'renown', O.Bulg. *slovo* 'word' (§ 68), Indg. **kléu̯-os* (stem **kleu̯-es-*) Present stem Ar. *pat-a-* 'fly, fall' Skr. 3 sing. pres. act. *páta-ti* av. 3. sing. pret. act. *a-pata-þ* O.Pers. 3. sing. pret. mid. *a-pata-tā* (read *-ta*) : Gr. *πέτε-ται*, Lat. *peti-t*. Skr. *párι* Av. *pairι* O.Pers. *parιy* (read *pari*) 'round, about' : Gr. *πέρι*.

Indg. tautosyllabic *eɨ̯*, *eu̯* became *aɨ̯*, *au̯* in prim. Aryan, thence Skr. *ē*, *ō*, Av. *aę*, *ōι*, *ao* *ēu*, O.Pers. *aι*, *au* (cp. §§ 126. 160). Skr. *ḗ-ti* Av. *aeiti* (= **aę-ti*, § 638) O.Pers. *ai-tiy* (read *aiti*) 'he goes' : Gr. *εἶσι*. Skr. *bŏdhatē* Av. *baoδaitę* : Gr. *πεύθεται*, Indg. **bhéu̯dhetaɨ̯* from rt. *bheu̯dh-* 'guard, watch, observe'. O.Pers *dauštar-* 'friend', Skr. *jṓṣṭár-* 'one who desires' from rt. *ǧeu̯s-* 'choose' : cp. Gr. *γευστήριο-ν* 'a thing to taste with, a cup'.

Rem. Av. final *ae* became *ē*, see §§ 78, 94. Here would have to be mentioned loc. sing. *aspē* beside *aspōι* and *aspaę-ca* (*-ca* = Gr. *τε*, Lat. *-que*) = Skr. *áśvē* (from Indg stem **ekᵘo-* 'horse'), if *-aɨ̯*, the prim. Ar. ending of *o*-stems, arose from Indg. *-eɨ̯* (cp. *οἶκαι*). This, however, can also be traced back to Indg. *-oɨ̯*. Cp. § 116 and the accidence.

For Av. *e*, *i*, *ę*, *o* from prim. Iran., prim. Ar. *a* = Indg. *e* see § 94.

§ 63. Armenian. *cer* 'old man': Gr. *γέρων* 'old man', Skr. *járant-* 'fragile, old man'. *elń* (gen *elin*) 'stag': Gr *ἔλαφος* (orig. form **elǫ-bho-s*) 'stag', Cymric *elain* 'cerva', Lith. *élni-s* O.Bulg *jelen-ĭ* 'stag', cpf. **elen-*. *evtn* 'seven' Gr. *ἑπτά*, Lat. *septem*, O.Ir. *secht n-* (§§ 211, 243), Goth. *sibun*, Lith. *septyni*, O.Bulg. *sedmĭ*, Skr. *saptá ev* 'and, also'. Gr *ἔπι* 'on, at', Skr. *ápi* 'also', cpf. **épi*

e became *i* before nasals *hin* (gen *hnoy*) 'old': Gr. *ἑνο-ς* 'old', Lat. *sen-ior*, O.Ir *sen* 'old', Goth. *sin-ista* 'the oldest (man)', Lith. *sẽna-s* Skr. *sána-s* 'old', Indg. **seno-s cin* 'birth' : Gr. *γένος*. *hing* 'five' . Gr. *πέντε*

Occasionally *a* is found instead of *e*, e. g *tasn* 'ten'. Gr. *δέκα*, Lat. *decem*. The circumstances under which *a* occurs for *e* have not been ascertained

Indg. tautosyllabic *eǫ* appears as *ē* in final syllables, in other syllables as *i* *dizem* 'I accumulate', orig. form **dhéiǭhō* (cp Gr. *τεῖχος* 'wall', Av. *pairi-daeza-* 'fence'), aor. 1.sing. *dizi*, 3. sing. *e-dēz*. *lizem, lizanem* 'I lick': Gr *λείχω* *jiwn* 'snow': Gr. *χιμών*

Indg tautosyllabic *eu* appears as *oi* in final, as *u* in non-final syllables. *lois*, gen *lusoy*, 'light'· Gr *λευκό-ς* 'white', Goth. *liuh-ad* 'light'. *unain* 'empty' from **oin-ain*· Gr *εὐ-νι-ς* 'bereft' *eu* probably in the first place became *ou*; cp § 79 and *nor* (gen *noroy*) 'new' as compared with Gr. *νέϝο-ς*, *νε(ϝ)αρό-ς*.

§ 64. Greek *ἕπεται* 'he is together with, follows': Lat. *sequitur*, O.Ir. *sechur* 'sequor', Lith *sekù* 'I follow', Skr. *sácatē* 'he is together with, follows', Indg. 3 sing. pres. mid **séq-e-tai* 1. sing. *ἕω ὦ*: Lat. *erō* (used as future), Skr. *ásāni*, conj to Indg **és-mi* 'I am *γένος* neut. 'sex, race': Lat. *genus*, Skr. *jánas*, Indg. **ǧénos* *πλέ(ϝ)ω* 'I sail, swim': O.Bulg *plovą* 'I flow, sail' (§ 68), Skr *plávatē* 'he swims, sails', Indg 1. sing. act. **pléu-ō*. *ἐγώ* 'I' : Arm *es*, Lat. *ego*, Goth. *ik*, Skr *ahám*. Comparative suffix *-τερο-* · *πό-τερο-ς*, *ὠμό-τερο-ς* : Skr. *i-tara-s* 'other', Lat. *i-teru-m*, O.Ir *luathi-ther* 'quicker', O.Bulg. *je-terŭ* 'quidam'.

λείπω 'I leave' : Goth. *leihva* 'I lend', cpf. **léiq-ō*. *ζεῦγος* neut 'yoke': Lat. *jūger-o-* (cf. dat. abl. *jūger-ibus*) 'acre'. *ζευκτῆρες*

'straps of the yoke' Skr. *yōktár-* 'he who puts the harness on'.

In the Elean dialect *ε* was pronounced very open, as is seen through the representation of this sound on inscriptions by *α*, e. g *σκευάων* gen pl beside *σκεύεα*, *ενσαβέοι* = Att. *ἐνσεβοῖ*.

In the Locrian dialect *εϱ* became *αϱ*, e. g. *παιάϱα* = *πατέϱα*, *ἀνφώταϱος* = *ἀμφότεϱος*

In the Doric dialects, as well as in Lesbian, Thessalian, Pamphylian and Cyprian *ε* became *ι* before vowels, especially before *ο* and *α*, e. g. Lacon. *θιός* = *θεός*, Cypr *ϝίπιμα* = Ion. *ἔπεα*, whilst *ε* in this case at least, was pronounced close in the Boeot. and Ionic-Attic dialects. This is shown by the representation of this short vowel by means of *ε*, *ει*, *ι* in Boeot (e g *θεο-θειο- θιο-*) and by *ε*, *ει* in Ionic-Attic (e g *ἑαυτόν* and *εἑαυτόν* from **σε(ϝ)αὐτον*, *ἐννεα* and *ἐννεία* from **ἐν-νε(ϝ)α*).

The Indg tautosyllabic *eu̯* in *λείπω* etc. was still a diphthong in Ionic and Attic at the beginning of the V. century B. C , but during this century it became a close *ē* and in the III cent B C *ι*, though the spelling *ει* was retained This change also took place in the other dialects, earliest in Boeot., where *ī* appears on inscriptions already in the V cent B C and *ει* was dislodged from the written language

In Cret. *ευ* became *ου* by the assimilation of the *ε* to the second component of the diphthong, e g *ψουδία* = *ψευδέα* *ψευδῆ* *eu̯* for *eu̯* in Ionic can be traced back to the V cent. B C, e g *φεύγειν* (cp *au̯* from *au̯i* § 96)

§ 65 Italic Lat Falisc. Umbr *est*, Volsc *estu* 'esto', Osc. *estud* 'esto': Gr *ἔστι*, *ἔστω* Lat *decem*, Umbr *desen-duf* (i e. *dèsenduf* see §§ 23. 387) 'duodecim', Osc dekkvíarím 'decurialem': Gr *δέκα*, O Ir. *deich n-* fr prim. Kelt **deken* (§ 66), Goth. *taíhun*, Lith *dẽszimt*, O Bulg *desętĭ*, Skr. *dáśa*. Lat. *en* (*en manom* 'in mortuum') *en-do*, *in in-du*, Umbr imper. en-etu 'inito, Osc em-bratur 'imperator', Pelign. abl. pl *em-pratois* 'imperatis, iussu' · Gr. *ἐν*, Goth. *in*. *e* in the perfect reduplication, O.Lat. *pe-pugī*, Umbr. pe-purkurent 'rogaverint', Osc. *fe-facid* fecerit': Gr. *πε-φύᾱσι* Skr *ba-bhūva* from rt *bheu̯-* 'to be, be-

come', O.Ir. *ce-chan* 'cecini' (cp. Lat. *canō, ce-cinī*), Goth. *raí-rōþ* (to pres. *rēda* 'I advise'). Lat. *pecu*, Umbr. *pequo* 'pecua': Goth *faihu*, Skr. *páśu*, cpf **péḳu* 'cattle' Lat. Umbr *et*: Gr. ἔτι. Lat *mediu-s*, Osc mefiaí loc. from st mefiā- 'media': Gr. μέσσο-ς μέσο-ς 'medius', O Ir. *medōn* 'the middle', Goth. *midjis* 'medius', O Bulg *meždа* 'medium, boundary', Skr *mádhya-s* 'medius, Indg. **médhi̯o-s* 'medius'.

Heterosyllabic and tautosyllabic Indg *eu* became common Italic *ou*.

1. O Lat *tovos* 'tuus, Umbr gen *tover* 'tui', Osc dat. tuvai 'tuae', prim Italic **touo-s* Gr τε(ϝ)ός O Lat. *sovo-s* 'suus', Osc abl súvad 'sua', prim It **souo-s* Gr ἑός from **σεϝός. Lat *novem* (for **noven*, formed after the analogy of *septem, decem*, cp § 233), Umbr nuvis novies · Goth. *niun*, Skr. *náva*, Indg. **néu̯n* 'nine'. Lat *novo-s*, Osc acc Núvellum 'Novellum' nom pl Núvlanús 'Nolani', Mars dat pl *Novesede* 'Novensilibus', prim. It **nouo-s* 'new': Gr *νέϝο-*, Lat *plovēbat, perplovere* Gr πλέ(ϝ)-ω For *-u-* from *-ou-* in unaccented syllables, as *dēnuō* from *dē novō*, see § 172, 1

2. Lat *douco dūcō* 'I lead Goth *tuha*, cpf **déu̯kō ūrō* 'I burn': Gr εὔω εὖω 'I singe, Skr *óšāmi* 'I burn', Indg **éu̯sō*. Cp. also O.Lat *Polouces* (*l* = *ll*), later *Pollūcēs* = *Πολυδεύκης* Umbr *totam* 'civitatem', Osc *τωϝτο* 'civitas' *tovtad* civitate' túvtíks 'publicus', Marruc *tovtai totai* 'civitati' Goth *þiuda* 'people', cpf **teu̯tā-*. Osc gen. Lúvfreís, Falisc *loferta* 'liberta': Gr. ἐλεύθερος, concerning Lat. *loebertatem līber* see § 49 rem. On the history of this tautosyllabic It. *ou*, which fell together with Indg. *ou*, cp § 81 page 77.

Rem. 1 The nature of the transmission and the historical facts of the language, as exhibited above, exclude any importance being attached to the form *Leucesie* in the Salian hymn, cp. also Jordan Krit Beitr. zur Gesch. der lat Sprache 1879, p 31 ff

e remained unchanged in Latin·

1. Before *r*. *ferō, cōnferō, vertō, convertō, alter, alterus* with *r* = Indg. *r*, the form *lēvir* 'brother-in-law' arose through popular etymological association with *vir*, cp. Gr. δᾱήρ acc δαέρα, Lith. *derer-ì-s gerō, ingerō, sceleris* with *r* from *s* (cp. § 569)

2. Finally. *lupe* λύκε. *age agite* ἄγε ἄγετε. *quīnque* : πέντε.

3 As a rule before double consonants: *scelestu-s, ob-sessu-s* (*ob-sidēō*), *au-spex* (*au-spic-is*).

Change of *e* to *i*

1. According to prim Lat. accentuation in unaccented syllables (§ 680) followed by a single consonant (except *r*). *colligō legō* λέγω. *ob-sidēō sedeō* ἕδος *oppidum Pedum* πέδον. *prō-tinus tenus. agite agitō* · ἄγετε ἀγέτω. *agiminī*. ἀγόμενοι.

Rem 2 The *i* instead of *e* in *pliō* (Gr πλέκω), O Lat *spiciō* (rt *spek-*) *miniscor* (rt *men-*), and others, is to be explained from the fact that the form, which regularly arose in composition, made itself independent (*com-pliō, cōn-spicio, re-miniscor*)

Rem 3 *juven-em* with *-en-* instead of *-in-* was, perhaps, influenced by *juventūs juvencu-s* etc *ap-petō, ex-petō* for **ap-petō*, **ex-petō* re-formed from analogy with the simple form *petō*, or else formed at a time when the activity of the law had died out according to which *colligō* etc. arose, cp *exquaerō* beside *exquīrō, exaequō* beside *inīquo-s, conclausu-s* beside *conclusu-s* etc

2 Independent of accent, in closed syllables before nasals. *quīnque*[1]) πέντε *tinguō* τέγγω 'I wet' *in intus* ἐν ἐντός. To which may be added *dīgnu-s* beside *decet*, as well as *līgnu-m, tīgnu-m*, in case they really are related to *legō* 'I gather, collect' and τέχνη; for *gn* was pronounced *nn* (§§ 500. 506) This change also affected *en* and *em* from *ǫ* and *ǭ* (§ 237), e. g. *vīgintī*. Dor *Ϝίκατι, sim-plex*. *ἁ-πλοῦς* There are, however, in both cases many exceptions, the explanation of which is difficult, e g. *offendimentu-m* (*fend-* = Indg. **bhendh-* and *-mento-* = Indg. **-mn̥to-*), supine *ventum* (= Skr. *gántu-m*, Indg. **gém-tu-m*), part *in-ventu-s* (= Gr *βατό-ς*, Skr. *gatá-s*, Indg. **gm̥-tó-s*). Cp further *decem* (= Skr. *dáśa*, Indg. **déḱm̥*) beside *undecim*

For Lat. *-o-* from *-ue-* see § 172, 3

Tautosyllabic *ei* seems to have still been a diphthong in Lat. at the period of the oldest monuments, cp. the spellings *dewos deiva, deico, feido* and others The diphthong, however,

1) Concerning the long vowel in *quīnque, dīgnu-s, līgnu-m*, and *tīgnu-m* see § 619

at an early date became an open *ī*, and the sign *ei* now became also employed for the representation of open *ī*-vowels (or close *ē*-vowels) of other origin (see §§ 41. 73).

In Umbrian and Oscan Indg. *e* was mostly represented by *e*. Besides the examples already mentioned, the following may be compared: Umbr *petur-pursus* 'quadrupedibus', Osc. *petora* 'τέτταρα', Umbr. *co-vertu* 'convertito', *destram-e* 'in dextram', Osc dat. Genetaí 'Genitae' (to Lat. *genitor*) Beside these occurs also *i*, Osc *í*. e. g Umbr. tiśit 'decet', Osc. íst 'est' (beside estud 'esto'), nistrus 'propiores' (beside *nesimum* 'proximum') Owing to the scarcity of the material it is impossible to decide whether the change to *i* (open) took place under certain conditions, unknown to us, or whether *e* had everywhere the same close pronunciation in Umbrian-Oscan, and that we have here to do with a mere irregularity of the graphic representation of the sound.

Tautosyllabic *ei* was represented in Oscan by eí, *ei* and (rarely) íí deíkum *deicum* inf 'dicere'. deívaí dat. 'divae', *deivatud* imper. 'iurato', díviniai dat. 'divinae' (a derivative like Umbr *deveia* 'divina'). tereí loc 'in terra', cp. Gr οἴκει. The spelling íí points to a passage of the diphthong into open *ī*. In Umbrian *ei* certainly became closed *ē*. etu *eetu* 'ito'. *deveia* 'divina'. *destre* loc. 'in dextro', cp Osc. loc. tereí.

§ 66. Old Irish. *e* was often retained as such in chief-accented syllables *con-dercar* 'conspicitur': Gr. δέρκομαι 'I see', from rt. *der̂k-*. *celim* 'I hide': OHG *hilu* 'I hide', cpf. **k̂elō*. Gen. *meda* 'of mead', Skr. *mádhu* 'sweetness, honey', Gr. μέθυ 'wine', OHG *metu* 'mead', O.Bulg *medŭ* 'honey', Indg **médhu*. *ech*, Gall. *epo-* (in *Epo-rēdia* name of a town): Lat. *equo-s* Goth. *aíhva-* (in *aíhva-tundi* 'thorn bush') Skr. *áśva-s* Indg. **ek̑uo-s* 'horse' *tech teg* 'house' from **tegos* · Gr. τέγος. *cethir* 'four' : Gr. τέτταρες. Cp. further Gall. πεμπέ-δουλα 'quinquefolium': Gr. πέντε, Indg. **pénqe*.

In such cases as: gen. *eich* 'equi' from prim. Kelt. **ekuī* (*-i* still in Ogam inscriptions, as *maqui* 'filii', and in Gall. *Segomari* etc.): Lat. *equī;* 3. sing. pres. *as-beir* 'he brings forward,

says' from **berıt*, prim. Indg. **bheret*, *dech n-* 'decem' from **dekm*, Indg. **dekm* (§§ 242 243) the *i* after the *e* only indicates the palatal timbre of the following consonant, which had been produced through the palatal vowel of the next following syllable. In a corresponding manner the *u*-(*o*-)timbre of the following consonants is represented by *u* and *o* in the dat sing. *neurt*, *eoch* from **nertō*, **ekuō* (nom. *nert*, *ech*, stem *nerto-* 'power, might', *echo-* 'horse'; with *nerto-* cp Gall *Nerto-marus*, *Cob-nertus* etc.) See § 634. Under certain conditions chief-accented *e* became *i* before a following palatal vowel or *u*. *tige* fr. **tegesos*, gen. sg. to *tech* 'house' *as-bir* 'thou sayest' fr. **beri(s)*, prim. f. **bhere-s*. *mid* 'mead' fr. **medu*, to gen. sg. *meda*, s. above. *as-biur* 'I say' fr. **beru*, prim. f. **bherō*.

e in other than chief-accented syllables, in case it did not entirely vanish, (§§ 634. 657), became an irrational vowel, the quality of which adjusted itself mostly to the timbre of the following consonants.

i. *as-bérid* 'you say' = Gr. *φέρετε*. *is* 'est' always proclitic = Gr. *ἐστι*, the accented form would be **eis*.

a. *as-* 'ex' in *as-bérid*, *as-rénaim* 'reddo' and others beside *és-* (O Gall. *ex-*, Cymr. *eh-*: Lat. *ex*, Gr. *ἐξ*) in *és-rechtaid* 'exlex' *és-orgun* 'a striking, killing' etc.

u. (*ni*) *épur* (fr. **éd-bur*) beside *as-biur* 'dico' fr. **beru*, prim. Kelt. **berō* = *φέρω*. *cóm-mus* 'proportion, weight, worth' to *méss* 'measure, judgment' fr. **messu-s* (**med + tu-s*, to Goth. *mitan* 'to measure').

In forms like *só-nerti* adj. pl. 'strong, brave', *só-nerte* 'strength, power' compar. *só-nertu* 'stronger' beside *nért er* had first become *ɣ*. S. § 634. In the later orthography *só-nairti* *só-nairte* beside *só-nert* *só-nirte* *a* merely indicates the timbre of the preceding consonant. S. § 640.

Indg. and prim. Keltic tautosyllabic *eį* became *ē*, whence *ia*, if *a*, *o*, or *u* followed. *ad-fēded* 'narrabat', *ad-fiadat* 'narrant': Gr. *Fείδομαι*, rt. *ueįd-*. Fut. 2. pers. pl. *for-tēsid* 1. pers. pl. *for-tiasam*, to 1. sg. pres. *for-tiagaim* 'I help': Gr. *στείχω* *στείξω*, Goth. *steiga*. Voc. *dē* 'O God' from **dē(u)e* (Lat. *deive*), nom.

dia from **dē(ɣ)o-s* (Lat. *deivos*). On the 2. sing. *for-tēis* cp. § 640. *ē* = Indg. *eɣ* is to be held for prim Kelt. Cp. e. g Gall. *rēda* 'waggon' *Epo-rēdia*, O Ir. *rēid* 'passable, free, even, smooth' Cymr *rhwydd* 'prosper, expeditus' (st **rēdi-*), O Ir. *riadaim* 'I drive, ride', rt. *reɣdh-*: OHG. *rītan* 'to move oneself away, drive, ride' and *be-reiti* 'ready, equipped' (the latter with rt. form *roɣdh-*)

Indg tauto- and heterosyllabic *eɣ* The Irish and British branch concurrently point to *oɣ*. This, before consonants, became in O.Ir. *ō*, whence probably in the first instance *ua*, when *a, o* followed, in British *u* O Ir *tuath* Cymr Bret *tut* Corn. *tus* 'people' from **tōtā*: Goth. *þiuda*, cpf **teɣtā*. O Ir *lōche* (gen. *lōchet*) 'lightning', *luach* 'white' in *luach-te* 'whitehot'. Goth. *liuhaþ* 'light', Gr. *λευκό-ς* 'white'. O Ir. dat pl. *srua-mannaib*, nom. sing. *sruaim* 'stream' · Gr. *ῥεῦ-μα*, Indg. stem **sreɣ-men-*. In like manner we have *ō* from antesonantal *oɣ* in O.Ir. *nōi n-* 'nine' (beside Cymr. *naw* Corn. *naw* Bret *nav nao*), fr **noɣen*, Indg **néɣɣ* (cp. §§ 65 174 233); whereas *ā* in O Ir *clū* 'renown' = Gr. *κλέϝ-ος* and in *nūe* 'new' beside O Bret *nowid*, to Skr *návya-s* (cp. §§ 139 154)

Rem If the change from *o* to *ua* in O Ir was occasioned by an *a* or *o* in the following syllable, then such forms as nom *sruaim* fr **sromin*, dat. *tuath* from **tōti* cannot have been formed according to law, but are merely due to a levelling with the forms of other cases

eɣ is still found in Gall. in forms like *Teuto-matus*, *Leucetius* (Zeuss-Ebel G. C 34 f.); beside these already also *Toutus* Τουτιος etc (as quoted above) In like manner also *Nivella*, *Nivisium*, the *i* of which is also probably a direct continuation of *e*, but also already *Novesium* and *Novio-dūnum* 'New-castle' (as quoted above 56). The question is probably here a difference of dialect within the Gallic branch itself

§ 67. Germanic Indg *e* became *i* in prim. Germ in the following cases:

1. before nasal + consonant. Goth. O.Sax. Ags. *bindan* OHG. *bintan* O.Icel *binda* 'to bind', 1 sing. Indg. **bhéndhō*: Skr. *bándhana-m* 'a binding' fut. *bandhišyá-ti* 'he will bind', Lat. *of-fendimen-tu-m* 'chin-cloth'.

Rem 1 That this *i* made its appearance already in prim Germ, is confirmed by the fact that the verb Goth. *rinna* OHG *rinnu* 'I run', whose orig form **ri-nu̯-ō* contains Indg *u̯*, and which belongs to Skr *ri-ṇā́-ti* 'lets flow, lets run', *ri-ṇu̯-té* 'begins to flow' (Osthoff Morph Unt IV 45), passed over into the series *binda* · *band* in its tense-formation in every Germ. dialect (pret Goth OHG etc *rann*). This could only have taken place, if the *i* in *bindan* etc had already arisen.

2. In hetero- and tautosyllabic *ei̯*.

a. Nom pl Goth *þreis* OHG *drī* O.Icel *þrīr* 'three' from **þrii̯(i)z* **þrei̯ez* : O Bulg. *trĭje* (§ 68), Skr. *tráyas*, Gr τρεῖς from **τρε(ι̯)ες*, Indg. **tréi̯-es*. Goth. *gasteis* OHG *gesti* O.Icel. *gester gestir* 'guests' from **ǯastii̯(i)z*, **ǯastei̯ez* O.Bulg. *gostĭje*, cpf. **ghostei̯-es*, cp. Skr. *ávay-as* (nom sing. *áviš*). Goth. *satjan* O Sax *settian* O Icel *setja* infin 'to cause to sit, to set', 1 sing Goth *satja* from **satii̯ō*, **sodéi̯ō*, causat from rt *sed-* 'sit' : cp. Skr *sādáyā-mi* 'I make to sit, set', Gr φοβέω 'I make to flee, scare' from **φοβεi̯ω*.

b Goth. *steigan* OHG *stīgan* O Icel *stīga* 'to climb', prim. Germ 1. sing **stii̯ǯō* from **stai̯ǯō* . Gr στείχω, Indg **stéi̯ghō*.

Rem 2 The great antiquity of this *ī* is confirmed by the fact, that the present Goth. *þeihu* OHG *dīhu* 'I extend', which in prim. Germ had arisen from **þinχō*, older **þenχo* (= Lith *tenkù* 'I reach out with something') (§ 214), gave occasion for the formation of the pret. form Goth. *þáih* OHG *dah* etc (after the analogy of preterites from such roots as *steigh-*) This was only possible, if the *ī* in **stīǯō* (goth *steiga*) was already there

3. When the following syllable contained a pre-Germanic *i(i̯)* or *ī*. From 3. sing. **esti* (= ἔστι) **isti* : Goth. OHG. O.Sax. *ist*, Ags *is*. From 3. sing **bhereti* (O.Bulg. *beretĭ*, Skr. *bháratі*) **bereði*, thence **berid* Goth *baíriþ*, OHG. *birit* Prim. Germ. **liǯi̯ana-n* 'to lie' : O Icel. *liggja* O.Sax *liggian* OHG. *likkan* · Gr. λέχος 'bed' rt. *legh-*. Prim. Germ **irþīnaz* 'earthen' (OHG. *irdīn*) beside **erþō* 'earth' (OHG. *erda*) : Gr. ἔρ-α-δε 'on to the earth'.

Rem 3 We have also here a proof of the great antiquity of the *i*. The verb **biđi̯ana-n* 'to beg' (Goth. *bidjan* O Sax *biddian* O Icel *biđja*), which belongs to Gr πείθω 'I prevail upon, persuade' rt *bheidh-*, would not have had *a* in the pret of all Germ. dialects (3 sg **bađ(i)* Goth. *baþ* etc), had not prim Germ **liǯi̯ana-n*, **sitǯana-n* (rt *sed-*) been pronounced with *i*.

4. Finally, e. g. 2. sing. imper. **fari* (Goth. *far*) from **fare* cp. Gr. ἄγε. Such an *-i*, like Indg. *i* (see 3) had influence upon a preceding *e*, hence 2. pers. pl. **faridi* (Goth. *farip* OHG. dial *ferit*): Gr. ἄγετε; acc. **mi-ki* (Goth. O Icel. *mik* OHG. *mih* 'me'). Gr. ἐμέ-γε, etc. Cp. Kogel in Paul u. Br. Beitr. VIII 135 f.

5. In isolated cases, where no reason for the change has yet been discovered, especially in unaccented syllables: e. g. Nominal suffix prim. Germ. *-iz-* = Skr. *-as-* Gr. *-εσ-* Lat. *-es-* (Goth *ag-iz-a-* 'fear'). Cp. Paul's article in Paul-Braune's Beitr. VI 85, Osthoff Zur Gesch. d. Perf. 419.

The West Germanic dialects in general stopped at this point. An *e*, preserved in uninterrupted continuity from the Indg. prim. language, is retained e. g. in OHG. *beran* 'to bear' = prim. Germ **beranа-n* (Gr. φέρειν) and *reht* 'right' = prim. Germ. **rexta-z* (Gr. ὀρεκτό-ς).

Rem. 4 The change of *e* to *i* through the influence of a following *u* is questionable E g in OHG. 1 pers sg *biru*, *nimu*, to *beran*, *neman* *situ* m 'custom', probably to Gr ἔθος 'custom' *sibun* 'seven' Lat *septem* *hiruz* 'stag' fr prim Germ. **χerut-* (with anaptyctic *u*, s § 628)· Gr κέρας 'horn'. See Paul in Paul-Braune's Beitr VI 78 f, Brate in Bezzenb. Beitr. XI 185, Braune Ahd Gramm p. 19

The *i* also of the root syllable in *biris*, *birit* etc. might only have been produced in West Germanic through the following *i*

The Norse dialects have also such an old *e*, e. g. O.Icel. *bera* = OHG. *beran*.

On the other hand every *e*, which had remained in prim. Germ., became *i* in Goth. Then this *i*, through the influence of a special Gothic law, which also concerned *i* = Indg. *i* (§ 35), became *e* (*ai*) again before *r* and *h*. *niman* 'to take', as opposed to OHG. *neman* O.Icel *nema* = Gr. *νέμειν*. *ga-vigan* 'to stir, move', as opposed to OHG. *wegan* O.Icel. *vega* 'to move oneself' = Lat. *vehere* *fill* (neut.) 'hide' (in *þruts-fill* 'leprosy'), but OHG. *fel* Ags. *fell* O Icel *fjall* 'hide' from **fella-* **felna-* (§ 214) = Lat. *pelli-s*, Gr. *πέλλα*; but *baíran* from **biran* = OHG. *beran*, *raíhts* from **rihts* = OHG. *reht*. The forms *airþeins* = OHG. *irdīn* 'earthen' and *ga-raihtjan* = O.Sax.

rihtian OHG. *rihtan* 'to judge' may serve as evidence to show that *bairan* and *raihts* had not an *e* which had been preserved in uninterrupted continuity through the influence of *r* and *h*. For it is scarcely possible to separate the *ai* in these forms from that in *airþa* 'earth' and *raihts* 'right'.

Indg. tautosyllabic *eu̯* appears in Goth. as *iu*. *kiusa* 'I choose, test, select': Gr. *γεύομαι*, cpf. **ǵeu̯s-ō*. *ana-biuda* 'I bid, command': Gr. *πεύθομαι*, cpf. **bheu̯dhō* *þiuda* 'people': Osc. *toutad* 'civitate', O.Ir. *tuath* 'people', cpf. **teu̯tā-*. In High German it became, before *a-*, *e-*, *o-* vowels, in the oldest period *eo*, then *io*, in all other cases *iu*. *deota diota* 'people', but *diutisc* 'popularis' (Goth. *þiudiskō* adv. 'ἐθνικῶς'). *reozan riozan* 'to weep' = Goth. **riutan*: Skr *rṓdana-m* 'weeping' (noun), rt. *reu̯d-*. It is probable that the pronunciation *eu̯* still existed generally in prim. Germ and that *iu̯* only arose at that time when there was an *i* in the following syllable, e. g. **þiu̯diska-z* (OHG. *diutisc*) beside **þeu̯dō* (OHG. *deota*)

§ 68. Baltic-Slavonic. Lith. *vežù* O.Bulg *iezą* 'I drive': Gr. Pamphyl. *Ϝέχω* Lat. *vehō* Goth *ga-viga* Skr. *váhāmi*, Indg. **u̯éǵhō* 'I move, drive'. Lith *velkù* O Bulg. *vlěką* from **velką* (§ 281) 'I draw, drag': Gr. *ἕλκω* (cp § 164 rem.), cpf. **u̯élgō*. Lith. *ketur̃i* O.Bulg. *četyrije* 'four'. Gr. *τέτταρες* Umbr. *petur-* O.Ir. *cethir* Skr. *catvár-as* Nominal suffix *-ter-*, gen. pl. Lith. *mo-ter-ũ* O.Bulg. *ma-ter-ŭ* 'matrum'. cp. Gr. *μη-τέρ-ες* Voc. sing. *vilkè* O Bulg. *vlŭče* 'wolf': Gr. *λύκε*, Lat. *lupe*. Personal suffix of the 2. pers pl. Lith. *es-te* *ěsa-te* O.Bulg. *jes-te* 'estis': cp. Gr. *ἐστέ*.

In Lith. *e* is mostly pronounced very open and in some southern and eastern dialects it regularly became *a*, when initial, e. g. *asù* = *esù* 'I am' (§ 666, 2).

Indg. hetero- and tautosyllabic *eu̯* apparently became *ou̯*, whence Balt. *au̯* (cp. § 84), already in the period of the Baltic-Slavonic prim. community.

a. Heterosyllabic: Lith. *av*, O Bulg. *ov*. Lith. *tava-s* 'tuus', *sava-s* 'suus': Gr. *τε(Ϝ)ό-ς*, *ἑ(Ϝ)ό-ς*. O.Bulg. *novŭ* 'new': Gr. *νέϜο-ς*. O.Bulg. *plovą* 'I flow, sail': Gr. *πλέ(Ϝ)ω*. O.Bulg. nom.

pl. *synove* 'sons' from **sūneu̯-es*. cp Gr. *ὑδέ(ϝ)-ες*, Goth. *sunjus* 'sons' from **sunu̯s* prim. Germ **suneu̯-ez* (§ 179), Skr. *sūnáv-as*. — Lith *devynì* Lett *dewiņ* 'nine', Pruss *newīnts* 'the ninth', O Bulg. *devętĭ* 'nine' are to be explained as being formed from analogy with Lith. *dẽszimt* O.Bulg *desętĭ* 'ten'; we may observe also that the initial *d-* instead of *n-* cannot well be explained otherwise than as being borrowed from the word for ten

Rem 1 It is doubtful whether the *d-* of the Lith and Lett word for 'nine' was due to Slavonic influence and *neu̯-* was the right form in prim Baltic, which was retained in Pruss, or whether already in prim Baltic-Slavonic *deu̯-* took the place of *neu̯-* and the *n-* of the Pruss form was borrowed from Germ (cp Bopp Vergleich Gramm I[3] 76, Fick Wortcrb. II[3] 588. 744, Brückner Litu-Slav Studien I 80, Osthoff Morph. Unt I 93)

b. Tautosyllabic. Lith. *au*, O.Bulg. *u* (fr. *ou̯* § 185) Inf Lith *pláu-ti* 'to rinse' O Bulg *plu-ti* (1 sing pres *plovą*), supine Lith *pláu-tu* O Bulg *plu-tŭ* cp Gr. *ἔπλευ-σα*, Skr inf *plŏtu-m* (3. sing. pres mid *pláv-a-tē* 'he swims'). Lith *raudmi* (an archaic pres form, now *raudóju*) 'I lament, complain': Skr. *rŏdā-mi* 'I lament, weep', Indg. **réu̯d-mi* or **rédə-mi* Lith *raugiù* 'I belch'. cp Gr. *ἐρεύγομαι*. Lith *naŭje-s* 'new': Goth *niuji-s* 'new'. O Bulg inf *slutı* 'to be called', supine *slutŭ*: Skr. inf. *śrŏtu-m* 'to hear', to O.Bulg. *slovo* (stem *sloves-*) 'word': Gr. *κλέϝος*, Skr. *śrávas* (neut.) 'renown'.

Heterosyllabic Indg prim Baltic-Slav. *eu̯* became *ŭu̯* in prim Slav and this *ŭ* was, in the period of Old Church Slavonic, lengthened to *u* (cp § 36 page 37) O Bulg. *vŭjq vijq*: Lith. *vejù* 'I turn, wind', Skr. *váyāmi* 'I weave', Indg. **u̯éi̯ō* Nom pl. *gostĭje*, *gostije* 'guests' (nom. sing *gostĭ*) from **gosteu̯-e(s)*: cp Skr. *ávay-as* 'oves'. *trĭje trije* 'three' · Skr *tráy-as*, Indg **tréu̯-es*.

Indg. tautosyllabic *ei̯* appears in Lith. as *ei* and *e*, in Slavonic as *i*. The course of development of the latter was **eu̯*, **iu̯* (**ĭu̯*), *ī*, cp the change of heterosyllabic *eu̯* Lith 1 sing *eimì* 'I go', 3 sing. *eĩti* (Pruss. *ēit*): Gr. *εἶμι εἶσι*; supine *ēitu* O.Bulg. *itŭ*: Skr. inf. *étum* from Indg. **ei̯-tu-m*, rt. *ei̯-* Lith. *szlei-va-s szlei-vi-s* 'having crooked legs' (Lett *slēi-ga* 'stripe', *slēi-ju* 'I lean against') : Gr. *κλει-τύ-ς*, rt *klei̯-*. Lith. *véida-s* 'face' O.Bulg. *vidŭ*

'looks' (noun), Lith. *véizdžiu* 'I see' (for the *z* cp. § 547 rem.), O.Bulg. *viždą* 'I look' from **u̯īdi̯ą* (§ 147): Gr. *ϝείδομαι, ϝεῖδος*. Lith. *geidžiù* 'I long for', Pruss. 3. pl *geide* 'they wait', O.Bulg *židą* 'I wait'. Lith. *deivỹ-s* 'idol' *deivė̃* (fem.) 'ghost' beside *dẽva-s* (Lett *dîws*) 'god', Pruss. *deiwa-s* 'god': Lat *deivos dīvus*. Lith. *že-mà* (Lett. *ſîma*) O Bulg. *zi-ma* 'winter': Gr *χεῖ-μα, χει-μών*. Lith *de-nà* (Lett. *dîna*) 'day', Pruss. *dei-na-n* acc. sing. 'day' from a stem **dei̯-n-* (**dei̯-en-*) beside **di-n-* (O Bulg gen. *dĭ-n-e* 'day's') Lith *snẽga* (Lett. *snîg*) 'it snows': Gr *νείφει*, rt. *sne̯igh-*. Lith. *lekù* 'I leave' (Lett. *lîku* 'I lay'): Gr. *λείπω*, rt. *le̯ig-* O.Bulg. *pišą* 'I write' from **pīs-i̯ą* (§ 147). Gr. *πείκω* 'I scratch' rt. *pe̯ik-*.

Rem. 2. The circumstances, under which *ei̯* at one time remained (*ei*) in Lith., and at another time became *ė*, have not been ascertained (cp. Mahlow Die langen Vocale A, E, O, page 143 f. and Osthoff Morph. Unt. IV 112). We are inclined to think that only circumflexed *ei̯*, e. g. in *eĩti* 'to go' (cp. § 691), regularly became *ė* when the following consonant had not a palatal timbre, caused by an *i*- or *ī*- vowel in the next following syllable (cp. the double forms *ė* and *ia* in Irish § 66), hence *dėvas* beside *deivỹs deivė̃, eimì* beside *leĩkù*. The supine *eĩtu* instead of **ėĩtu* would have been formed after the analogy of *eĩti, einù eĩna* 'I go' 'he goes' (instead of **enù *ẽina*) with *ei*-, because they were not formed until after this sound-law had ceased to operate. Such verbs as *lužù lėszti* 'to lick' = O Bul. *ližą* (from **līz-i̯ą*) beside such as *geidžù geĩsti* (Leskien Der Ablaut in Wurzelsilben im Litauischen p. 144 f.) present difficulties. For it is certainly hardly probable that the few forms as sup. *lėsztu* etc. could have extended their *ė* to the whole verb. Cp. the change *ai* > *ė* § 84 rem. 2.

en, em before explosives and spirants became *ę* in Slavonic e. g. *svętŭ* 'holy', *zębą* 'dilacero, frigeo'. S. § 219.

Indg. *ē*.

§ 69. Indg. *dhē-* 'set, lay': Skr. fut. *dhā-syámi dhána-* (neut.) 'position', Gr. fut. *θή-σω*, Goth. *ga-dēps* (st. *ga-dēdi-*) 'deed, position', Lith. fut. *dė́-siu* inf. *dė́-ti*, O.Bulg. aor. *dě-chŭ* inf. *dě-ti*. Indg *plē-* 'fill': Skr. part. *prā-tá-*, Arm. *li* (gen. *lioy*) 'full' from **plē-i̯o-s*. Gr. *πλή-ρης* 'full' aor. *ἔπλη-σα*, Lat. *plē-mu-s im-plē-tu-s*, O.Ir. *līn* 'numerus, pars', O Icel. *fleire fleiri* 'more' (from st. **flē-i̯z-en-*, cp. § 614).

Optative suffix Indg. *-i̯ē-* *-i̯ē-*: 2 pers. sing. Skr. *s-i̯á-s s-yá-s*,

Gr εἴης from *ἐσ-ιη-ς, Lat. *s-iē-s* from rt. *es-* 'be'. *-tē(r)* nom. sing. ending of *-tei*-stems. Skr. *mā-tá* Arm. *mair* from **mā-tēr* Gr. Dor *μᾱ́-τηρ* 'mother', Lith *mo-tẽ* and *mó-te* 'wife, married woman', O. Bulg *mati* from **matē* 'mother'. *-ē* Indg. ending of the instr. sing. of *o*-stems: Skr. *uccā́* 'above', Gr. Lacon. *πῆ-ποκα* 'usquam' or 'unquam', Goth *þē* to *þa-* 'the', *hwē* to *hva-* 'who'[1]).

Perfect stem Indg. *ēd-* from rt. *ed-* 'eat'. Skr. part. *ād-i-vān*, Gr. *ἐδ-ηδ-ώς*, Lat. *ēd-imus*, Goth. *ēt-um*, Lith. part. *ėd-ęs*, O Bulg part. *jad-ъ̄*. Imperfect stem Indg. *ēs-* from *es-* 'be': Skr. 1 sing. *ā́s-am* 3. sing. *ās*, Gr 1 sing Hom. *ἦα* 3. sing. Dor. *ἦς*, Indg. 1. sing **ḗs-m* 3 sing **ḗs-t* Cp § 114.

The tautosyllabic diphthongs *ēi* and *ēu* probably did not frequently occur in the prim. language E. g. Imperfect stem Indg. *ēi-* from *ei-* 'go' · 2. sing Skr. *āíṣ*, Indg **ḗi-s* **plēistó-* 'most'. Gr. *πλεῖστο-ς* O.Icel. *flestr* (§§ 116, 611, 614). Nom sing. Indg. **dieḗu-s* 'sky'. skr *dyāúṣ*, Gr. *Ζεύς* from *Ζηυς* (§ 611)

§ 70. Aryan 3 sing. piet. Skr. *á-dhā-t* Avest. *dā-þ* O Pers *a-dā* from rt *dhē-* 'put'. Skr *vá-ti* Avest *vāiti* 'it blows' · Gr *ἀ(ϝ)η-σι* 'it blows', OHG *wāan* 'to blow', Lith. *vė̃-je-s* 'wind', O.Bulg. *vě-je-tъ̄* 'it blows', it. *uē-*

The change from *ē* to *ā* took place in the prim Aryan period, after the vowel (like Indg. *e*) had palatalised the preceding *q*-sounds, e g. Skr *-jāni-ś* 'wife, spouse' : Goth. *qēns* (st. *qēni-*) 'wife', Indg. **gēni-* (§ 445).

For Avest *ē, ō, å* from prim. Iran. prim Aryan *ā* = Indg. *ē* see § 102

§ 71. Armenian. *mi* 'that not': Skr. *má*, Gr. Dor. *μή*. *mit* (Gen *mti*) 'sense' : Gr *μῆδος* 'advice' *μήδομαι* 'I contrive', O.Ir. *ro mīdar* 'iudicavi' (cp § 314). *li* 'full', aor. 3. sing. *e-li-ę* 'he filled', Indg *plē-* (§ 69) This *i* disappeared in non-final syllables Besides gen. *mt-i* cp further gen. *amsoy* 'of the month' beside nom *amis* (*-s-* from *-ns-* § 202): Gr. Lesb. gen.

1) Skr *uccā* is not a certain example for Indg. *-ē*, since it might also represent Indg *-ō* The *e*-type must, at all events, be claimed for the prim. Indg. language s §§ 114 115

μῆνν-ος (cp § 72); *l-nu-m* 'I fill' : Lat. 3. pl. *ex-plē-nu-nt*, O.Ir. *lī-naim* 'I fill'.

The representation by *ē* in *alnēs* 'fox' beside Gr. *ἀλώπηξ*, Skr. *lōpāśa-* is uncertain (Hübschmann Kuhn's Ztschr. XXVI 603).

§ 72. Greek. *ἵημι* from **σι-ση-μι* 'I throw, jerk, send off' *ἧ-μα* 'a throw' . Lat. *sē-men*, O Ir *sī-l* 'seed', Goth. *mana-sēþs* 'mankind, world', Lith *sėju* O Bulg. *sějǫ* 'I sow' *sě-mę* 'seed', rt *sē-* 'throw, sow' *μήν*, gen. *μην-ός* Lesb *μῆνν-ος*, 'month' (concerning nom sing. *μείς* cp § 611) *μήνη* 'moon' : Skr. *mās-* 'moon', Arm *amis* (gen *amsoy*) 'month', Lat. *mēns-i-s* (cp. however, § 612), O Ir. *mī* (gen. *mīs*) 'month' (cp §§ 212 574), Goth. *mēna* 'moon', Lith. *mėnů* (gen *mėnes-io*) 'moon', O.Bulg. *měsęcь* 'moon' (cp §§ 220. 221) *ἥβα ἥβη* 'youth': Lith *jegù* 'I am able' Nom *δυσ-μενής* 'evil disposed, hostile' : Skr *dur-manās* 'downcast, sad', cpf **dus-menēs*

This *η*, which was probably pronounced open in prim. Greek, and which is marked as open *ē* in Lesb by the spelling *αι* (*αἰμάσεων* : Lat *sēmi-* 'half'; *Ἠσίοδος* = Dor Att. *Ἡσίοδος* Boeot. *Ἠσίοδος*), became *ā* in Elean, e g *μά, ἐᾶ, πατάρ*, whereas in Boeot and Thessal it became closed *ē* which, after the introduction of the Ionic alphabet, was represented by *ει*, e g. Boeot *μεῖνα, πατείρ*, Thess *ὑστερο-μεινία, εἶβᾶ*; the latter pronunciation can also be established for the Ionic dialects (§ 104).

§ 73 Italic Lat *fē-mina* 'woman' *fē-lō* 'I suck', Umbr feliuf *filiu* 'lactantes' fel (abbreviation) 'filius'· Arm *di-em* 'I suck' (aor *di-ec-i*), Gr. *θή-σατο* 'he sucked' *θη-λή* 'teat, nipple', O.Ir. *dī-nu* 'lamb', OHG *tāan* 'to suckle', Lith. *delė̃* 'leech' *prm-delỹs* 'first-birth', O.Bulg. *dě-tę* 'infans', Skr *dhā-trī* 'wetnurse'. Lat. *plē-nu-s*, Umbr. *plener* 'plenis' : Gr. *πλή-ρης* Lat. *mēns-i-s*, Umbr. menzne 'mense' (i e. mentsne from **mensne*, § 209), se-menies 'semenstribus' . Gr. *μήν*; for the Lat. *ē* cp § 612. Lat. *rē-s*, Umbr. *re-per* 'pro re' abl. ri 're' : Skr. *rá-s* 'wealth, treasure, kingdom' Lat *rēx rēg-is*, Osc. regatureí 'rectori', Marruc. *regen[a* dat 'reginae' . O.Ir. *rī* (gen. *rīg*) Skr. *rájan-* 'king'. Lat. *lēx lēg-is, lēgātu-s*, Osc. *liuud* 'lege' *lígatúis* dat. 'legatis', prim Ital. stem *lēg-* Lat. *diēs diem, diē-cula*, Osc.

ze-colois 'diebus' (to which probably also d]iíkúlús pl. 'dies'): cp. Skr. acc. *dyām* 'sky, day', Gr. *Zῆν* (§ 188).

The fluctuation of the spelling *e, i* in Umbr. and *e, í, i, ei* in Osc. points to a close ē. Since orig long *e* is represented on the tab. Bant. by *i*, and on the cippus Abell by *í*, while the new ē, which arose from the lengthening of ĕ on Ital. soil, is represented by *e*, we must conclude that the latter had a more open sound in Osc

That Indg. ē had a close pronunciation also in Lat follows from such spellings as *pleib[es, leigibus* on inscriptions (see §§ 41, 65)

The ī, which arose from ē in Lat *fīlius* (*fē-*), *suspīciō* (*spēc-*), *convīciu-m* (*vēc-*, rt. *ueq-* in *vocāre*) is by Osthoff, perhaps rightly, assigned to the influence of the following *i* (*i̯*); cp. also *dē-līniō* beside *dē-lēniō*, *sub-tilis*.

§ 74. Old Irish In accented stem-syllables ī *fīr* 'true': Lat. *vēru-s*, Goth *tuz-wērjan* 'to doubt', O Bulg. *věra* 'faith'. *mīl* 'animal' · Gr. *μῆλο-ν* (Boeot. Thess *μεῖλο-ν*).

The other Kelt dialects also present ī (*i*), e. g O Cymr. O.Bret *-ri* = O Ir. *rī* 'rex', O Corn. O Bret *guir* = O.Ir. *fīr* 'verus' and so also Gall ī in *rīx* 'rex' (*Catu-riges* etc.) The great antiquity of this sound-change would also be supported by the Germ **rīk-* 'ruler' (Goth. *reiks*), if this, as it is believed to be, was borrowed from Kelt *rīg-* in prim. Germ. times.

Rem The form *Dubno-rix* beside *Dumno-rix* (Zeuss-Ebel G C 20) is due to the influence of Lat *rēx*.

Concerning the treatment of ē in secondary accented syllables see §§ 613 634 657.

§ 75. Germanic Prim. Germ. open ē Goth. ē, which was pronounced very close, as follows most clearly from the pretty frequent spelling *ei*, e g *qeins* beside *qēns* 'wife' (occasionally also *i*, e g *spidists* beside *spēdists* 'the last'). German ā. This change to ā had its beginning in High German, where it is first found in Bavarian (about 170 A.D) From thence it was gradually extended to North Germany. ā was

established in Franconian in the seventh century, but in Saxon not until several centuries later See Bremer in Paul and Braune's Beitr XI p 1 ff. *ā* is found in Norse already in the oldest runic monuments, e. g. *-marix* = Goth *-mērs* (*vâila-mērs* 'of good report') I must leave the difficult question undecided as to whether Ags *æ* and O Fris *ē* represent the retention of the prim. Germ *e*-quality, or have passed through the intermediate stage *ā* Bremer and Siebs (in the above named work p. 12 ff. and 226 ff.) accept the first theory

Rem 1. *e*, in unaccented syllables, seems not to have undergone the change to *a*, but to have retained its quality, unaccented prim Germ *e* appears in OHG OS as *e*, and in ON as *e*, *i* See Bremer's article in the above named work p 29 ff

Goth. *mana-sēps* 'mankind, world', Ags *sǣd* O Fris *sēd* OHG *sāt* OS *sād* 'seed' . Lat *sē-men* O Bulg *sě-mę* 'seed', rt *sē-* Goth. *ga-dēps* Ags *dǣd* OHG *tāt* OS *dād* 'deed' · Gr *θή-σω*, Lith *dē-siu* 'I shall place' rt *dhē-* Goth. *ga-rēdan* 'to reflect', Ags *rǣdan* O Fris *rēda* OHG *rātan* OS *rādan* O.Icel *rāða* 'to advise' : Lat *rē-rī* 'to think' *rē-bar* Goth *nēpla* OHG *nādala* 'needle', OHG *nāan* 'to sew' : Gr *νῆμα* 'yarn, *νῆτρο-ν* 'distaff', Lat *nēmen* 'yarn, thread' *nētu-s* 'spun', rt. *snē-nē-* (§ 589, 3) OHG *sāmi-* 'half' *sāmi-quick* . Gr. *ἡμί-βιο-*, Lat *sēmi-uīvos* 'half-alive', Skr. *sāmí* adv. 'half', Indg. **sēmi*.

Concerning Goth. *ai* fr. Indg. *ē* in *saia* 'I sow' fr. rt *sē-*, see § 142

Rem 2 Side by side with prim Germ open *e* there existed also a close *ē*, which appears in Goth also as *ē*, in OHG as *ea*, *ia* (OS *e*. O Icel *e*), as Goth *hēr* OHG *hea hiar* OS *hēr* O Icel *hér* 'here', Goth *fera* 'side, country, district', OHG *feara fiara* 'side, part', OHG *heaz hiaz* O Icel. *hét* I was called', OHG *leaz liaz* O Icel *lét* 'I left' The origin of this prim. Germ *e* has not yet been satisfactorily explained (cp the chapter on Germ strong preterites in the accidence) The sound can scarcely be traced back in any case to an Indg *ē*

§ 76. Baltic-Slavonic Lith. *spė́ju spė́ti* 'to have leisure, or time for a thing, to be quick enough', O Bulg *spějǫ spě́ti* 'to progress, to have success': Lat *spē-s spēr-āre*, Goth compar *spēdizo* 'later' OHG. *spāti* 'late' Lith. *dedė̃* 'uncle', O Bulg *dědŭ* 'grandfather' . Gr *τήθη* 'grandmother' *τηθίς* 'aunt' O Bulg.

měra 'measure'. Lat *mētior* 'I measure', Goth *mēl* 'time' (O.Icel. *māl* 'measure, time', OHG. *māl* 'mark, sign'), Skr *mátra* 'measure'. Verbal stems in Lith. *-e-* O Bulg *-ě-*, e g. Lith. *sedė-ti* O Bulg *sědě-ti* 'to sit' · cp Lat. *sēdē- sĕdēre.*

Throughout the whole domain of Lithuanian *e* is pronounced very close, and in some places can hardly be distinguished from *y* (*ė*)

In Slavonic the sound-combinations *kě, gě, chě, jě* passed into *čā, (d)ʒā, šā, jā* (cp §§ 461—464. 588). O Bulg. inf. *kričati* 'to scream' fr **krikěti · krikŭ* 'scream, cry' *bĕžati* 'to flee' fr. **bĕgĕti bĕgŭ* 'flight' *slyšati* 'to hear' fr. **slychĕti* cp *sluchŭ* 'a hearing' *stojati* 'to stand' fr **stojĕti.*

In like manner initial *ě-* became *jā- jastī* 'eats'. Lith. *ėst(i)* 'eats like an animal', cp Lat *ēst ĕd-* became first **jĕd-*, as *jestĭ* fr **estĭ* = Gr *ἐστί* (§ 666, 1), then *jad-* as *stojati* fr. **stojĕti*

Final *-ě* became *-i* Nom *mati* 'mother', = Lith. *motė̃* 'wife' Skr *māta* 'mother', cpf **mātē* cp §§ 84. 665, 3

Indg *o*

§ 77. Indg 3 sg pf act. Indg **de-dórḱ-e* fr rt *derḱ-* 'see': Skr *dadárša*, Gr *δ'δορκε*, Lat. *memordit momordit* 'he bit', Skr *mamárda* 'he rubbed, ground' fr rt *merd-*; Goth *band* Skr. *babándha* 'he bound' fr rt *bhendh-*, Gr *γ'γονε* Skr *jajāna* fr. rt. *ĝen-* 'gignere' 1 sg pres act. causat Indg **dorḱéi̯ō* 'let see' fr. rt. *derḱ-* Skr *darśáyami* 'let see', Goth *ga-tarhja* 'mark'; Gr *ὀχ'ω* 'let go, ride', mid 'go, ride, swim', Goth *vagja* 'move', O Bulg *vožą* fr. **vozi̯ą* (§ 147) 'let go', Skr. *vāháyāmi* 'let go, run' fr. rt. *u̯eĝh-*, Lat. *torreō* fr **tors-eō* (§ 134) 'cause to dry up', Skr. *tarśáyāmi* 'let thirst, languish', OHG *derran* O.Icel. *þerra* 'to dry, wither' fr prim Germ **þarzi̯ana-n* (cp Goth. *ga-þairsan* 'to wither') fr rt. *ters-*. Indg *o* in the root syllable of nominal stems, and the *-o-* which serves to form nominal stems. Arm suffix *-a-vor* (properly 'bearing, bringing', cp. Mod HG. *-bar*) in *lus-a-vor* 'clear' (§§ 332 485), Gr. *λευκο-φόρος*, cpf **bhoro-s*, Gr Acc. *ὀχο-ν* 'waggon, carriage' O Bulg. acc. *vozŭ* 'waggon, carriage,

epf **ǫoĝho-m*; Lat *procus* 'wooer' to *precor* 'I beg'; Goth *dags* fr **dăga-z* 'day' (the flexional *-a-* retained in Norse runic inscriptions. *dagaR*), Lith *išz-daga-s* 'burnt out place' *dāga-s* m (beside *dagà* f) 'harvest' properly 'hot season, time', Skr. *dāha-s* 'burning, fire-brand' *m-dāghá-s* 'heat, hot season, summer', Indg. **dhogho-s* fr rt. *dhegh-* 'burn'; Skr *tāna-s* Gr. *τόνο-ς* 'thread, string' from rt *ten-* 'stretch out, extend' Skr. *vṛ́ka-s* 'wolf', Gr *λύκο-ς* Lat *equo-s lupu-s*, O Ir *fer* 'man' fr **ǫuro-s* (in Gall. still the prim form of the ending, e g *tarvo-s* 'bull'), Goth Acc pl *vulfa-ns* 'lupos', Lith *vil̃ka-s* 'wolf', O Bulg. dat. du *vlŭko-ma* to nom sg *vlŭkŭ* 'wolf' Indg. pronominal stem **to-* 'this, the', nom acc neut Skr. *tá-d*, Gr *τό*, Lat. *istu-d*, Goth *þa-t-a*, O Bulg *to*, Indg. **tó-d* The so-called thematic vowel *-o-*, e g Indg pres stem **bhero-* fr. rt *bher-* 'carry, bear' 3 pl Skr *bhára-nti* 1 pl *bhárā-maṣ*, Gr Dor. *φέρο-ντι φέρο-μες*, Lat *fĕro-nt fer-nt*, Goth 3. pl *baira-nd* 1 pl *baira-m*, Lith 1 pl *vẽža-me* (*vežù* 'I ride'), O Bulg 3. pl. *vezǫtĭ* fr **vezo-ntĭ* (§ 219) aor 1 pl *vezo-mŭ* (1 sg. pres. *vezǫ* 'ride'), *-os* Indg suffix of the gen sing (beside *-es* in O Bulg *kamen-e* Lat *patr-is*, § 81 rem. 1). Gr *πατρ-ός*, O Lat. *patr-us*, O Ir *athar* fr **pater-os* or **patr-os*

Indg **oḱtṓ *oḱtṓu* 'eight' Skr *aṣṭā aṣṭáú*, Arm *uṭ*, Gr. *ὀκτώ*, Lat *octō*, O Ir *ocht* Goth *ahtáu*, Lith *aszṭůni* O Bulg *osmĭ*. Indg. **poti-s* 'master' **potnī* 'mistress': Skr *pátiṣ* 'mistress', Gr *πόσι-ς* 'husband' *πότνια* 'lady, mistress', Lat *poti-s* 'capable, able', Goth. *brūþ-faþs* 'bridegroom', Lith. *pats* 'husband' *vẽsz-patis* 'sovereign master' Skr *ákṣi* neut. 'eye', Arm *ač-k* pl 'eyes', Gr *ὄσσε* du. 'eyes' fr **okʷ-ie* (§ 489), *ὄψομαι* 'I shall see', Lat *oculu-s*, Lith. *akì-s* 'eye', O Bulg *oko* neut 'eye' Indg. **pró* 'before, in front, forth' · Skr *prá*, Gr *πρό*, O Ir *ro*, Goth *fra-*, Lith *pra-* O Bulg *pro-*. Personal ending of the 3 sg mid Indg *-to*: Skr *ábhara-ta*, Gr *ἐφέρε-το*

Indg. tautosyllabic *oi* 3 sg pf Indg **ǫóid-e* 'he knows': Skr *véda*, Gr *Fοῖδε*, Goth *váit*; O Bulg *vĕmĭ* fr. **vĕd-mĭ* 'I know' (the pl personal endings have been replaced by the pres.) also represents the stem **ǫoid-*, 3 sg pf Indg **le-lóiǫ-e* 'has

left' : Skr. *rireca*, Gr λέλοιπε, Goth. *láihv*. Indg. pres. causat. **μoiδéiο-* fr. rt. *μeid-* 'see, know' : Skr. *vēdáyāmi* 'I let know, communicate', OHG *weizen* (prim. Germ **μaitμana-n* 'to cause to know, prove'; O Bulg. *bědĭti* 'to compel', Goth. *báidjan* OHG. *peittan beitan* 'to compel', cpf. 1 sg. pres. **bhoidhéiō*. Gr. λοιπό-ς 'remaining', Lith. *lĕka-s* 'remaining single, odd' *āt-lèka-s* and *āt-laika-s* 'remnant, remainder' O.Bulg. *otŭ-lĕkŭ* 'remnant' fr. rt. *leiq-*. Av. *kaenā-* fem. 'penalty, punishment', Gr ποινή 'ransom, reward, penalty', O.Bulg. *cěna* 'pretium' (Lith *kaina* according to Mikuckij in Geitler Fonolog. 38. 110), cpf **qoinā-* 'ransom' fr. rt. *qei-*. Indg. nom. pl. masc **toi* fr stem *to-* 'this, the' : Skr *tḗ*, Gr τοί, Lat *istī* (cp *poploe popalī*), Goth. *þái*, Lith *tẽ* O.Bulg. *ti* The gen sg of *ei*-stems in Indg *-oiṣ* : Skr. *áveṣ* (*ávi-ṣ* 'ovis'), Goth *anstáis* (*ansts* 'favour'), Lith *akẽs* (*akì-s* 'eye') O Bulg *pqti* (*pqtĭ* 'way'). The optative of the thematic tenses with Indg *-oi-*, 2. sg **bhéroi-s* (indic. 2. sg. **bhére-si* 'thou bearest'): Skr *bhárēs*, Gr φέροις, Goth *baírais*, O.Bulg *beri*, Lith. 3 sg (permissive) *te-sukẽ* (*sukù* 'I turn').

Indg tautosyllabic *oi*. 3 sg. pf Indg **bhe-bhóidh-e* 'has waked, marked'. Skr. *bubṓdha*, Goth. *báuþ*, Gr Hom. εἰλήλουθε (with the added Attic reduplication) beside ἐλεύσομαι 'I shall come'. Pres. causat Indg **bhoidhéiō* 'I cause to awake, wake, remind' : Skr. *bōdháyāmi*, O.Bulg. inf. *buditi*; Goth. *káusja* 'I taste, test', Skr. *jōṣáyatē* mid. 'likes, finds pleasure in', Indg. 1. sg. **ĝoiséiō*. The Gen sg. of *ei*-stems in Indg. *-oiṣ* Skr. *sūnṓṣ* (*sūnú-ṣ* 'son'), Osc. *castrovs* (*castru-* 'fundus'), Goth. *sunáus* (*sunu-s* 'son'), Lith *sūnaũs* (*sūnù-s* 'son') O Bulg *synu* (*synŭ* 'son').

§ 78. Aryan. Indg. *o*, in closed syllables and finally became *a* in the prim. Ar. period. 3 sg pf. Skr. *tatákṣa* Av. *tataša* 'has made, created' fr. rt *teḱs-* (cp. § 401), prim f. **tetókse*. Skr. *aṣṭā́* Av *ašta* 'eight' : Gr ὀκτώ. Skr *bhára-nti* Av. *bara-nti* : Gr. Dor φέρο-ντι Skr *ábhara-m* O.Pers. *abara-m* : Gr. ἔφερο-ν. Skr. opt mid *bhárē-ta* Av. *bara-ẹ-ta* : Gr. φέροι-το.

Indg tautosyllabic *oi̯*, *ou̯* became in prim. Ar. *ai̯*, *au̯*, thence Skr. *e*, *ō*, Av. *ae ōi*, *ao ēu*, O.Pers. *ai*, *au* (cp. §§ 126. 160)

1. *oi̯*. Prim. Ar. perfect stem **μaid-* = Indg. **μoid-* fr.

rt. *u̯eid-* see, know' : Skr. 3. sg *véda* 2. sg. *véttha* Av. Gāp. *vaēdā vōisthā* : Gr. οἶδε οἶσθα. Prim. Ar **aɪ̯-u̯a-* = Indg **oɪ̯-u̯o-*, Av. *aeva-* O Pers. *aiva-* 'unus' : Gr οἶ(ϝ)ο-ς. Prim. Ar. optative stem **bharaɪ̯-* = Indg. **bheroɪ̯-* fr. rt. *bher-* 'bear' : Skr. 1. pl. *bhárēma* 3 sg. *bhárēt*, Av. 1. pl. *baraēma* 3 sg. *barōiṯ* : Gr φέροιμεν φέροι Final *ai* became *ē* in Av. : *tē* nom. pl. 'hi' beside *tai-ca tōi* Skr. *té* Gr. τοί, Indg. **toɪ* 'the, these', cp. O.Pers *tyaiy* (read *tyai*) 'qui' fr. stem **tɪo-*

2. *ou̯* Prim. Ar causative stem **bhou̯dhái̯a-* = Indg. **bhou̯dhéɪ̯o-* fr. rt. *bheu̯dh-* 'wake' : 3. sg. Skr. *bōdháya-ti* Av. *baoδayeiti*, cp. O Bulg inf. *buditi* Prim. Ar *-au̯š* = Indg. *-ou̯s*, the ending of the Gen. sg of *eu̯*-stems, Skr. *sūnóš* 'filii', Av. *vayaoš* 'aeris', O.Pers *kūraušˇ* 'Cyri'

In Aryan *a* = Indg *o* can still be distinguished from *a* = Indg. *e* (§ 62), in so far as *q*-sounds were not palatalised before it, e g prim. Ar fem. **kai̯nā-* (Av *kaenā-* 'penalty') fr. Indg. **qoɪ̯-nā-* (cp Gr ποινή) beside prim. Ar. pres 3 sg mid. **cai̯-ataɪ̯* (Skr *cáyatē*) fr Indg **qeɪ̯-e-taɪ̯*. See § 445 ff.

Indg *o* in open syllables probably became *ā* in the prim. Ar period Acc sg Skr. *pā́d-am* Av. *pāδ-em* 'pedem' : Gr *πόδ-α* 3 sg pf Skr *ja-jā́n-a* 'genuit' : Gr *γέ-γον-ε*, Av *da-dār-a* = Skr *da-dhár-a* 'held fast', fr rt *dher-* (Lith. *derù* 'I hire'). Causat. Skr *dhāráyāmi* Av *dārayēmi* O.Pers. *dārayāmīy* (read *-mi*) fr the same rt *dher-*; Skr. *bhāráyāmi* Av. *bārayemi* fr rt *bher-* 'bear' : Gr φορέω, Skr. *sādáyāmi* Av *hāδayēmi* O Pers *hādayāmīy* (read *-mi*) fr. rt. *sed-* 'sit' : Goth. *satja*. Skr *jā́nu* 'knee' : Gr. γόνυ. 1. pl. Skr. *bhárā-masi* Av *barā-mahi* 'ferimus', O.Pers. *þahyā-mahy* (read *-mahi*) 'dicimur' : Gr. Dor. φέρο-μες. Acc. sg. Skr *áśmān-am* O.Pers. *asmān-am* 'stone' : Gr. ἄκμον-α 'anvil', cp Goth. *ahman* 'spirit'; Skr. *tákšān-am* 'carpenter' Av. *tašān-em* 'creator' : Gr. τέκτον-α; Skr. *svásār-am* 'sister' : O.Ir. *siair* cp. Goth. *svistar*; Skr. *dā-tār-am* Av. *dātār-em* 'giver' : Gr. δώτορα; nom. pl. Skr. *nápāt-as* Av. *napāt-ō* 'descendants, grand-children' : Gr. νέποδες (concerning *δ* instead of *τ* see § 327). Participial suffix Skr. Av. *-āna-* (Skr. *dádh-āna-* Av. *daþ-āna-* fr. rt. *dhē-* 'set, do', Skr. *juš-*

-anâ- fr rt. *ǵeus-* 'taste'): Goth. *-ana-* (*baúr-ans, gib-ans* etc.), perhaps also Gr *-ονο-* (e g *Κρ-όνο-ς* = Skr. *kr-ánâ-s* 'efficient, active', see Osthoff Morph Unt. IV 374, and on the other hand Froehde Bezzenb Beitr VII 322).

Rem Some scholars, especially Collitz and Joh Schmidt, dispute the validity of this sound-law and assume that Indg *o* was in every case regularly represented by *a* in Aryan I too am still far from considering my theory given above as mathematically certain (cp Morph. Unt III 129) But the difficulties, which it leaves unexplained, seem to me to be less and easier to dispose of than those which the hypothesis of Collitz and Schmidt presents Nor does Collitz's latest treatment of the graded declensions (though containing certain acute ideas which further the subject) convince me of the validity of his standpoint, since among other things it leaves the distribution of *e* and *o* in the Germanic declension (*ahmans, ahman ahman, ahmans*) unexplained Cp the author's articles in Stud IX p 367 ff p 380 ff and Morph Unt III 102 ff, Collitz Bezzenberger's Beit III p 291 ff, X p 2 ff, Joh. Schmidt Kuhn's Ztschr XXV p 2 ff, Osthoff Morph Unt I p 207 ff., IV p XV and pp 226 303 368 ff, Hubschmann Das Indg Vocalsystem 1885

Concerning Av *e, i, e, o* fr prim. Iran. prim Ar. *a* = Indg *o* see § 94.

§ 79. Armenian *ost* 'branch': Gr. *ὄζος* Goth *asts* 'bough', cpf **ozdo-s orb* 'orphan': Gr *ὀρφο-* in the pl. compound *ὀρφο-βόται* (*ἐπίτροποι ὀρφανῶν*, Hesych), Lat. *orbu-s* The nominal suffix *-o-*: *mardo-* 'man', gen *mard-o-y*, cp Gr. *-ο-ιο*, Indg. **-o-sio*

o is often weakened to *u*, a process which may be regarded as regular for the combination of *o* with a following nasal + consonant *-sun* in *ere-sun* 'thirty' etc : Gr. *-κοντα*. *hun* 'ford, way': Lat *pons* 'bridge', O.Bul. *pątĭ* 'way'

Beside *o* (*u*) appears also *a*, without the special conditions for this representation being ascertained. *ač-k* 'eyes': Gr. *ὄσσε*, Lat. *oculu-s*. *at-ea-m* 'I hate' · Lat. *od-iu-m* [1])

Indg. tauto-syllabic *oi* appears as *ai* in *ait-nu-m* 'I swell' *ait* (gen. *aiti*) 'cheek': Gr. *οἰδάω οἰδέω* 'I swell' *οἶδος* 'tumour', OHG. *eiz* 'ulcer'. By the side of this perhaps also as *ē*, which became *i* in non-final syllables, e. g. *mēg*, Gen. *migi* 'mist': Skr. *mēghá-* 'cloud'; *gini* 'wine': Gr. *οἶνο-ς*. It is not certain

1) Cp now also Bartholomae Ar. Forsch. II 46.

whether *ē*, *i* in these words (cp. Hübschmann Armen. Stud. I p. 60) do not rather represent Indg. *ei* (cp § 63).

Indg. tautosyllabic *ou* seems to occur as *oi* (thence *u* in non-final syllables) in *ῥοιτ*, gen. *ῥυτου*, 'σπονδή', *ῥυτᾶμ* 'σπονδάζω'. *oi* (*u*), however, can here and in other cases (Hübschmann Stud. I p. 62) be also regarded as representing Indg *eu* (cp § 63).

§ 80. Greek Pf *κέκλοφε* (instead of **κεκλοπε* after the analogy of *τέτροφε* and others): Goth *hlaf*, cpf. **qe-qlóp-e* 'has stolen' fr rt. *qlep-*. Causat. *σοβέω* 'I drive away, scare': Skr *tyājáyāmi* 'I bid one leave a thing', to *οἴβομαι* 'I step back before something, am afraid, reverence'; Skr. *tyájāmi* 'betake myself away, stand back from a thing'. *λόχο-ς* 'bed, couch, ambush' *ἄ-λοχος* (fr. **ά-λοχο-ς*, § 564) 'bed-mate, wife': O.Bulg. *sǫ-logŭ* 'consors tori', fr rt. *legh-* *δύς-πορο-ς* 'hard to pass'· Skr. *duš-pāra-*, fr. rt. *per-*. *ολκό-ς* *ὁλκή* 'a dragging, furrow': Lith. *úž-valka-s* 'over-coat, bed-cover', cpf. **u̯olqo-s* fr. rt. **u̯elq-* (cp. § 164 rem.) *δόμο-ς* 'house': Lat *domu-s* O.Bulg *domŭ* 'house' *ἀ-σσητήρ* 'helper' (§ 489). Lat *sociu-s* *ῥοϳά* *ῥοή* 'stream', prim f. **srou̯-ā* fr. rt. *sreu̯-* *φθόη* 'consumption, decline' fr. **φθοι̯-ā* fr rt. *φθει-* in *φθί-σι-ς*. *ὀστέο-ν* 'bone': Lat *os ossis*, Skr *ásthi* (neut.) 'bone'. *ὄζω* 'I smell'. Lat *odor*. 2 du. impf. act. *ἐφέρε-τον*: Skr. *ábhara-tam*, cpf. **é-bhere-tom*; 3. sg. impf. mid. *ἐφέρε-το*: Skr. *ábhara-ta*, cpf. **é-bhere-to*, fr. rt *bher-* 'bear'.

In Aeolic (Lesb., Thessal., Bœot), Arcadian-Cyprian and Pamphylian *o* either became fully *u* or a sound approaching it (written *υ*), e. g. Thess. *ἀπὺ* = *ἀπό*, Arcad. *ἄλλυ* = *ἄλλο*, Pamph. gen. *Κοιρασίων-ις* = *-ων-ος*. *o* certainly did not undergo this sound-change in every sound-combination and word-position; the limits and conditions, however, under which it took place, cannot be precisely determined owing to the scarcity of monuments.

Tautosyllabic *oi* *πέποιθε* 'trusts': Goth. *báiþ* 'has waited for' (pres *beida*), cpf. **bhe-bhóidh-e* *οἰνό-ς* *οἰνή*: Lat. *oino-s* *ūnu-s*, O.Ir. *oen*, Goth. *áins*, Pruss. acc. *aina-n*, cpf. **oi̯-no-s* 'unus'. Loc. pl. *λύκοι-σι*: O.Bulg. *vlŭcě-chŭ*, Skr. *vṛ́kē-ṣu*, Indg. **u̯lqoi̯-su*, stem **u̯lqo-* 'wolf'.

oi̯ became *oe* in Bœotian, e. g. *Ἀριστέ-θοινο-ς* inscript. of Tanagra (to *θοίνη* 'feast' fr. rt. *dhei̯-*, Skr. *dhi-nó-mi* 'I satiate'), thence *ū* in the third century B. C., *Θῦναρχο-ς*, *ϝῦνίᾱ* (= *ϝοινίᾱ*) and in the youngest Bœot. inscriptions beside *ū* also *ει*, that is, *ī* or a sound closely approaching it, e. g pl *ποιόμενει* = *ποιούμενοι* (cp. *τοί*: Skr. *tḗ*, Goth. *þái*). The change to *ū* took place in the other dialects (but not before the second century A. D) and led to the Mid. and Mod. Gr *ī*.

Tautosyllabic *ou*. Hom *εἰλήλουθε* 'has come' beside fut. *ἐλεύσομαι* *σπουδή* 'zeal' beside pres. *σπεύδω* This diphthong became *ū* in Ionic and Attic in the fifth century B C, but the spelling *ou* was retained The diphthongic pronunciation may have remained longer in the other dialects The representation in Cypr. is noteworthy *o-vo* = *οὐ*, *a-ro-u-ra-i* = *ἀρούρᾳι*.

§ 81. Italic In the prim. Italic period *o* appears, with the exception of certain reductions in final syllables, to have been still unchanged in every sound-combination

Lat *totondit* 'has shorn' pf to **tendō* = Gr *τένδω* *τένθω* 'I gnaw at'. Causat *noceō* 'I injure' (Skr *nāśáyāmi* 'I make to disappear, destroy') to *nex necis* *procu-s* 'wooer' to *precor*. Abl *pondō* 'by weight' to *pendo*

The *o* in unaccented syllables, which in older Latin still remains unchanged (e g. *fīlio-s*, *dōno-m*, *opos*), became *u*, except before *r* = *s* (§ 569) and after *u̯* and *u*: *fīliu-s*, *dōnu-m*, *opus*, *rehunt*, *tetulī*, *con-tulī*, *sēdulō* (fr *sḗ-dolō*). *o* was retained before *r* = *s*, e. g in *temporis* fr. **tempoz-is* (a new form, in place of **tempez-is*, after the analogy of the Nom. acc *tempos*), and after *u̯*, *u*, e. g. in *vīvos*, *vīvom*, *vīvont*, *equos*, *sequontur*, *mortuos*. The forms *vīvus*, *vīvum*, *vīvunt*, *mortuus* etc. (like *locus*, *legunt*), do not occur before the eighth century A U. C., by which process *qu* (*kṷ*), *gu* (*gṷ*) passed into *c*, *g* : *ecus* (gen. *equī*), *relincunt* (1. pl. *relinquimus*), *ungunt* (1. pl. *unguimus*) etc. (cp Bersu Die Gutturalen und ihre Verbindung mit *v* im Lat., Berlin 1885, p. 53 ff.).

u fr. *o* occurs also in chief accented syllables, especially before nasals. *uncu-s*: Gr. *ὄγκο-ς* 'bow, hook'. *uncia* older *oncia* 'ounce'

to Gr *ὄγκο-ς* 'mass, bulk'. *hunc* fr. older *honc*. *unguis* to Gr. *ὄνυξ*. *umbō* 'boss of a shield' and *umbil-īcu-s*, to Gr. *ὀμφαλό-ς*. In like manner *ursu-s* fr. **or(c)so-s*, *mulctu-s* fr. **molcto-s*, whose *or*, *ol* arose from Indg. *r̥*, *l̥*, § 295

Final *-o*, like *-a* (§ 97), became *e* Imper. *sequere*: Gr. *ἕπε(σ)ο* Nom *olle* (*ille* seems to be a new form after *iste*, *ipse*) fr. **ol-se* (§ 571), *iste* a new form for **is-se* (with *t* transferred from such forms as *istum istō*): the second component of these compounds is identical with Skr *sá*, Gr *ὁ* (Indg. **so*), cp. the accidence.

Also in other cases *o* in unaccented syllables seems occasionally to have become *e*, *i*, that is, an irrational vowel, which appears after *i* and in closed syllables as *e*, and in other cases as *i* *ūlicō* fr **in slocō* *hospes hospitis* fr. **hos(ti)-pit-* (§ 633) beside *potis sum* (*com-pos -potis*) *anni-culus* to *anno-*, *auri-fex* to *auro-*, *socie-tās* to *socio-*, *novi-tās* (Gr *νεό-τη-ς*) to *novo-*. *legi-mus* = Gr *λέγο-μεν* It, of course, still remains to be determined in what relations this change stands to the *u* in *fīlius* etc and for what reasons here the one, there the other course of variation was introduced; cp § 680 The question might also be raised as to whether Indg *e* does not occur in *anni-culus*, *auri-fex*, *socie-tās*, *novi-tās* and in *legi-mus*. *anni-culus* etc like *οἰκέ-τη-ς*, *legi-mus*. new formation after *legi-tis* = Gr *λέγε-τε*.

Rem 1. The genitive suffix *-es -is* (*salūt-es salūt-is*) has not arisen from *-os -us* (*senatu-os*, *homin-us*). *-is* and *-os* were both old inherited forms (see p 67)

Thurneysen Kuhn's Ztschr XXVIII p. 154 ff assumes the transition of *ov* to *av*, e. g *caveō*· Gr. *κο(ϝ)έω* 'I mark'; *cavo-s*: Gr. *κόοι* 'excavations'; *lavō*: Gr *λόε* 'he washed'. Cp. however, Hübschmann Das Idg. Vocalsystem p. 190.

The fluctuation of the orthography between *o* and *u* in the Umbrian-Samnitic dialects points to a close pronunciation of the *o*. Since the Umbr. u was the sign both for *o* and *u* (§ 23), the tables written in the national alphabet contribute nothing towards determining the quality of the *o*-sound; the tables written

in Lat. have both *o* and *u*. In Oscan ú u, *o u*. Umbr. purka *porca* 'porcas': Lat *porcu-s*, Gr. *πόρκο-ς*, O Ir. *orc*, OHG. *farh farah* (§ 277), Lith. *paršza-s*, cpf. **porko-s* 'pig, sucking-pig'. Umbr uvef *ovi* acc 'oves': Lat. *ovi-s*, Gr. *ὀι-ς*, Goth. *avēþi* neut. 'flock of sheep', Lith *avì-s*, O Bulg *ovĭ-ca*, cpf **ou-s* 'sheep' Umbr *curnac-o* 'cornicem' · Lat. *cornīx* Gr. *κορώνη* 'crow', prim st. **kor-en- kor-n-*. Osc pútíad putiad 'possit' putíans 'possint': Lat *potis*, Gr *πόσι-ς* Umbr puř-e 'quod', Osc púd *pod* 'quod': Lat Faliscan *quo-d*, Gr *πο-*, Goth *hva-*, Indg. **qo-*. Nominal suffix *-o-* in Umbr puplu-m *poplom* 'populum', Osc húrtú-m 'hortum, templum', *dolo-m dolu-m* 'dolum', Volsc *pho-m* 'pium': Lat *dolo-m dolu-m*, Falisc *vootu-m* 'votum'

The diphthongs *oi* and *ou*

Tautosyllabic *oi* in chief accented stem syllables became *oe*, *ū* in Lat *ouno-s oeno-s ūno-s* Gr *οἰνό-ς*, cpf **oi-no-s* 'one' *moini-cipio-m moenia mūnia*. Goth *ga-mains* 'common', Lith *maĩna-s* 'exchange', Gr. Sicel *μοῖ-το-ς* 'requital'.

oi, *ī* arose in final syllables Nom pl *poploe* (Salian hymn), *ploirumī* (C I. L I 32), *plūrimī* Gr. *τοί*, *λυγοί*, Goth *þái*, Indg. *-oi*, **toi* fr. stem *to-* 'the, this' Cp instr pl **-ois*, *-oes* (*oloes*) *-īs* (*equīs*) fr **-ōis* (§ 612). In like manner also *ī* in the monosyllabic nom pl *hī quī*, instr pl *hīs quīs* *quī* and *quīs* may have originated from an unaccented position (*sī qui*, *ūlī-quī* etc.) and *hī* and *hīs* may be due partly to assimilation to *quī*, *quīs*, and partly to assimilation to the polysyllabic forms *illī*, *illīs*. Cp. also the nom. sg *quī* fr. O Lat. *quoi* (*qoi* = *quoi* on the Dvenos-inscrip., cp Bersu Die Gutturalen, Berlin 1885, p. 40) i. e **quo* + particle *i* (*ī*)

Rem. 2 *oi* is also said to have become *ī* in chief accented syllables, when preceded by *v* or *l*. *vīdit oidit*, *vīnu-m oinos*, *vīcu-s oikos*, *līquit leloiket*, *līber loebertatem* and others This sound-change cannot, however, be accepted as definitely proved, since almost all examples under this category can also be easily explained otherwise See Osthoff Morph. Unt IV p 129, Zur Gesch des Perf p. 191, Danielsson in Pauli's Altit Stud. 4 156 f

Rem. 3. Why *ferēs*, which I (against Thurneysen Bezzenberger's Beitr VIII 269) consider equal to Gr. *φέροις* Goth. *baíraís*, with *ē* and not *ī*? It is possible that *ē* arose regularly in the 1 sg. (O.Lat. *ferem*)

and 3 pl, and then from these two forms was extended to the other persons I leave it undecided as to whether *-enī*, *-ent* were the continuation of prim Lat **-oi̯-m*, **oi̯-nt* (cp Gr 1 sg Att *τρέφων*, 3 pl. Delph *παρ-έχον*, Goth. 3. pl. *bafriun-a*), or that of Indg **-oi̯m*, **-oi̯-nt*, which, according to Lat. sound-laws (§ 237), must, first of all, have become **-o(i̯)em*, **-o(i̯)ent* It is also conceivable that *capiēs* and *audiēs* are regularly formed, but that **ferīs* arose with the same contrast as that in which *socie-tās* and *novi-tās* stand to each other In that case **ferīs* has been transformed to *ferēs* after the analogy of *capis*, but then *mediī*, *mediīs* (*μέσοι μέσοις*) must also be regarded as modifications of **mediē*, **mediēs* after *noviī*, *noviis*

In Umbrian u = *oi̯* whereas the Oscan-Sabell monuments still present the diphthong, as to which it is certainly questionable, whether the written diphthong still existed everywhere as such in the language itself Umbr unu '*unum*', Osc úín[itú 'unita' Osc múínikad abl 'communi': O.Lat *comoinus* Umbr. kuraia 'curet', Peligman *coisatens* 'curaverunt'. Lat *coirō coerō cūro* (the forms *coraveront* C I L I 73 and *couraverunt* l c 1419 are very singular; in the latter *ū* was certainly meant), prim. Ital stem fem **koisā-* Cp. also the Osc instr pl. Núvlanúís 'Nolanis' *zicolois* 'diebus', Peligman *suois* 'suis', Umbr. veskles ·is 'vasculis' Lat *oloes illīs*; Umbr, like Lat., indicates here a special manner of treating *oi* in final syllables

Tautosyllabic Indg *oi̯*, fell together with Indg *ei̯* (§ 65) and is still only traceable in Osc as diphthong: Gen. sg. *castrovs* fr. stem *castru-* 'fundus' (§ 77) In Umbr ō: gen. *trifor* 'tribus'; *rofu* 'rubos'. Goth. *ráuþs*, cpf. **roi̯dho-s* *ū* arose in Lat, e. g. gen. sg. *fructūs*; pf. *fūdit*· cp Goth *gáut* 'poured out' (pres. *giutan* 'to pour out'). By side of it also ō: *rōbu-s* = Umbr. *rōfo-*, gen. *domōs* = *domūs* (Augustus wrote *domos*); cp also the inscrip. forms with (long) *o*, *losna* (= *lūna* fr. **loi̯c-snā*, § 570), *poplicod* (beside *poublicom pūblicus*), *nondinum* (beside *noundinum nūndinum*). It remains doubtful how this duality *ū* and *ō* in Lat. is to be estimated. It was hardly a mere graphic duality.

Rem 4. In a number of Ital. words containing *oi̯*, it cannot be decided, whether this diphthong represents prim. Indg. *ei̯* (§ 65) or *oi̯*, e. g. in those containing *loi̯k-* as Osc. gen. Lúvkanateís 'Lucanatis' Luvkis Luvikis 'Lucius', Lat *Loucina Lucius* etc, fr. rt. *leu̯k-* 'illumine' (Gr. *λευκός λοῦσσον*).

§ 82. Old Irish. In chief accented syllables *o*. *ocht* 'eight' : Gr. *ὀκτώ*. *roth* 'wheel' : Lat. *rota* 'wheel', OHG *rad* 'wheel'. Lith. *rãta-s* 'wheel'. *orc* 'pig' . Gr. *πόρκο-ς*. *gorim* 'I heat, warm, burn' : O Bulg. *gorĕti* 'to burn', Lith. *gãra-s* 'steam', fr. rt. *gher-*. Prep. *co n-* 'with' Lat. *cum*, Umbr Osc. *com*. It passes into *u* with the palatalisation of the following consonant : *suide* 'seat' fr. **sodio-* = Lat *solio-m* (*l* = *d*, § 369), rt. *sed-* 'sit' (§ 640) Cp. also *muiq* 'slave' fr. **mogu-s* (Goth. *magu-s* 'boy, servant'), *ru-* beside *ro-* (Indg **pro* 'before, in front', p. 67), *cum-* beside *com-* *con-* (*co n-*, see above).

In secondary accented syllables o, so far as it did not entirely disappear (§§ 634 657), became an irrational vowel, whose sound quality mostly regulated itself according to the timbre of the following consonant

a 1. pl. *as-béram* 'dicimus', 3 pl. *as-bérat* Gr *φέρομεν*, (Doric) *φέροντι*, *ἔφερον*, Goth. *baíram*, *baírand*, *-berat* may be middle = Gr *φέροντο*, or it is, as Thurneysen thinks, to be regarded as the regular continuation of **beront*, Indg **bheront* (*t* in the combination *nt* had not the same development as *t* in other cases in Irish, and we have no evidence that original *t* in the final combination *-nt* was dropped in Irish)

i Gen *bíid* 'victus' fr. **bi(u̯)otī*, to nom *bíad* fr **bi(u̯)oto-m*. Gr *βίοτο-ς* Lith *gyvatà* O.Bulg. *životŭ* 'life'

u Dat. *bíud* (to the above named *bíad*) fr **bi(u̯)otō*.

In forms like *cómarbus* 'cohereditas' beside *órpe* 'hereditas' (Goth. *arbi* neut 'inheritance') *or* had first of all become *ṙ*. S. § 634

In the 3 sg *ad-con-daire* (Gr *δέδορκε*), *réraig* 'dixerit' (O Icel. *ral*, rt *reĝ-*) *a* only indicates the timbre of the preceding consonant See § 640

Cp. Gall *o* in *tarvo-s* 'bull' · Gr. *ταῦρο-ς*, *νεμητο-ν* neut. 'sanctuary' (O Ir. *nemed n-*) : cp. Gr *ζυγό-ν*, *epo-* 'horse' in *Epo-rēdia* = Lat. *equo-*.

In chief accented syllables Indg. *oi̯* became *oe̯* (written *oe* and *oi*) *oen* 'unus' : Lat *oino-s* *ūnus*. *cloen* 'oblique, unjust, bad' : Goth. *hláins* 'hill', fr. rt *klei̯-* 'lean, incline'. Before pala-

talised consonants *oi̯* for *oę*, e. g. *cloine* 'obliqueness, injustice'. Old *oi̯* may, therefore, have been retained here.

Rem. Beside *oe*, *oi* was also written *ae*, *ai*, e. g. *aen* 'unus' beside *oen*; *clain* nom pl. of *cloen*, *maini* 'dona, pretiosa' (to Lat. *moenia*, *mūnia*).

In final syllables *oi̯* became *ī*, which disappeared and only left its traces in the palatalisation of the preceding consonant. Nom. pl. *ech* 'equi' fr **ekṷī*, cp. Gr. ἵπποι, Lat. *poploe populī* (§ 657, 4). In Gall inscrip. the nom. pl. still ends in *-oi*: *Tanotaliknoi*.

Indg. *oṷ* fell together with *eṷ* (§ 66) It became *ō*, whence later *ua*. *ruad* 'red', Cymr *rhudd* Corn. *rudh* Bret. *ruz*: Goth. *ráuþs* (stem *ráuda-*), cpf **roṷdho-s*, cp. Gall *Roudu-s Anderoudu-s*.

§ 83. Germanic. Pf. 3. sg Goth. *varþ* OHG. *ward* O Icel. *varð* 'he took a direction, became' : Skr *vavárta*, cpf **ṷe-ṷórt-e*, fr rt. *ṷert-* 'turn' Causat Got *us-vakjan* 'to awake', OHG *wecchan* · Skr *vājayati* 'he urges on, drives on', cpf. 1. sg. **ṷoǧéi̯ō*, fr rt *ṷeg-* 'be active, strong'. Causat. Goth. *fra-vardjan* OHG *far-warttan* 'to let perish, destroy' : Skr. *vartáyati* 'lets something take a turning or course', cpf. 1. sg **ṷortéi̯ō*, fr rt *uert-* OHG OS O Icel. *band* (neut) 'band, cord', prim f. **bhondho-m*, fr rt. *bhendh-* 'bind', cp Skr 3. sg pf. *babándha*. Goth *gasts* OHG OS. *gast*, O Icel *gestr* 'guest' Norse Runes *gastiʀ*. Lat *hosti-s* 'stranger, enemy', O.Bulg *gostĭ* 'guest', cpf. **ghosti-s*. Goth. *asts* OHG *ast* (masc) 'branch' : Gr ὄζος, cpf. **ozdo-s*. Goth *þat-a*, OHG *daz*, O Icel *þat* 'that, the' : Gr. *τό*, cpf **tó-d*.

Rem 1 Indg *o* fell indiscriminately together with Indg. *a* (§ 99) and Indg *ə* (§§ 109, 110) already in prim Germ. At this period *a* was used for the three vowels in chief accented syllables, in other syllables frequently or always *o* The latter quality was still retained in Westgerm in historical times e g in the dat pl. OHG *worto-m wort-um* OS. *wordo-n wordu-n*, Ags. *wordu-m* fr. stem orig **ṷṛdho-* or **ṷṛ-to-* 'word' (but Goth *vaúrda-m*). See Paul's article in Paul-Braune's Beitr. IV p. 358 ff and VI p 186 ff. Since it has not been definitely settled for many syllables, whether *o* or *a* was spoken in prim Germ, we write the prim. Germ forms throughout with *a* according to the Goth. notation, an inexactness, which is of little importance for this comparative grammar.

Indg. tautosyllabic *oi*. 3. sg Goth. *váit* OHG *weiz* OS. *wēt* Ags. *wāt* O Icel *veit* 'knows' · Gr *οἶδε* Goth *láihv* OHG. *lēh* Ags. *lāh* 'he lent': Gr *λέλοιπε* Causat Goth *láisjan* (for regular **láizjan*, § 581) OHG *lērran lēran*, OS *lērian* 'to teach', beside Goth. *leisan* 'to learn', rt *leis-*. Goth. *áins* OHG. *ein* OS *ēn* Ags. *ān* O Icel *einn* 'one' Lat *oino-s ūnu-s* 2 sg. opt. Goth *baíráis* Gr *φέροις* Gen sg Goth *anstáis* (fr *anstı-* 'favour'): cp Lith *akìs* (fr *akı-* 'eye'), Indg ending *-oįs*.

Indg tautosyllabic *ou* Pf 3 sg Goth *báuþ* OHG *bōt* OS *bōd* Ags *bēad* O Icel *bauð* 'bade' Skr. *bubódha*, Indg **bhebhoudh-e* Goth. *ráuþs* (st *ráuda-*) OHG *rōt* OS *rōd* Ags. *rēad* O Icel *rauðr* 'red' · Gall. *Roudu-s* O Ir *ruad* 'red', cpf. **roudho-s* Gen sg Goth *sunáus* (fr *sunu-* 'son'). Lith *sūnaũs* (fr. *sūnu-* 'son'), Indg ending *-ous*

In the eighth century *a* became *e* in OHG., caused by a consonantal or sonantal *i* in the following syllable *nerian* i. e *neriau* = Goth *nasjan* (for regular **nazjan*, § 581) 'to rescue', causat to *ga-nesan* = Goth. *ga-nisan* 'to become healed', fr rt *nes-*, Gr *νέομαι* Nom pl. *gesti* (sg *gast*) 'guests' = Goth *gasteis* (sg. *gasts*, st *gasti-*) This umlaut, however, was hindered by *r, l, h* + Consonant (see Braune in Paul-Braune's Beitr IV p. 540 ff), e g. *far-u arttan* 'destroy' (p 77) dat *nahti-m* 'noctibus' (st. *nahti-* = Lat *nocti-* Lith *nakti-*) But the *e*, which arose from this *i*-umlaut, differed from the *e* which arose out of prim. Germ *i*, *e* (§§ 35, 67) not only in OHG. but also in MHG. and even in NHG : the latter, also written *e* by way of distinction, was open, the former close (J. Franck Zeitschr f deutsch. Altert. XXV 218 f., W. Braune Lit Centralbl. 1884. column 124 f., Luick Paul-Braune's Beitr XI 492 f).

Prim. Germ. *ai* became *ei* (*ueiz, ein*) except before *r, h, w* where it became *ē*. *lērran, lēh*

Prim. Germ *au* remained partly as diphthong, *au* and later *ou*, e. g. pf. *scaub scoub* = Goth *skáuf* 'pushed' (pres Goth. *skuba*), *boug* = Goth. *báug* 'bent' (pres. Goth. *buga*), and partly became *ō* viz. before dental consonants and *r, l, h* (= Goth *h*), e. g *bōt, rōt*, pf. *drōz* = Goth. *þráut* 'troubled' (pres. Goth.

þrūta), *trōran* 'to make to drop, spill' = Goth. *dráusjan* (for regular **drauzjan*, § 581) 'make to fall, fell, throw' (causat. to Goth. *driusan* 'to fall'), pf. *zōh* 'drew' = Goth. *táuh* 'led' (pres. Goth. *tiuha*).

Quite independent of this change of *aį* and *aų* to *ē* and *ō*, there was an older (prim. Westgerm.) reduction of the same diphthongs to *ē* and *ō*, which took place in unaccented syllables. Final *ē* and *ō* were shortened according to § 661, 6. OHG. *blinte* nom. pl. masc 'blind', *blintēm* dat. (instr.) pl. 'blind' = Goth. *blindái*, *blindáim*, prim. Germ. **blindaį*, **blindaį-mi*. *berēs* 2 sg. opt. = Goth. *baíráis* (p. 78). *taye* dat. loc. sg. (to *tag* 'day') = prim. Germ. **dagaį*, cp. Gr. loc. *οἴκοι* and dat. *οἴκῳ* (§ 659, 2. 3). *suno* gen. sg. (to *sunu* 'son') = Goth. *sunáus* (p. 78).

Here belongs also OHG. *dē* 'the', *dēm* 'the' = Goth. *þái*, *þáim*, since the pronoun regularly suffered the change in those cases, where it was unaccented.

The forms *dia die* = *dē* and *deam diem* = *dēm* show that this *ē* = prim. Germ. *aį* was equivalent to the *ē* discussed in § 75 rem. 2.

Rem. 2. These OHG. (Westgerm.) sound-laws in like manner held good for Germ. *a* = Indg. *a* and Indg. *ə*. See § 99 and § 109.

§ 84. Baltic-Slavonic. Indg. *o* was *o* in the Baltic-Slav. unitary period, and generally remained *o* in Slav., whilst it became *a* in Baltic.

Lith. *tāka-s* 'path', O.Bulg. *tokŭ* 'course', to Lith. *tekù* O.Bulg. *tekǫ* 'I run'. O.Bulg. *raz-dorŭ* 'rent, gap': Gr. *δορά* 'skin, hide', fr. rt. *der-* 'tear, flay'. O.Bulg. causat. *ložiti* 'ponere': Goth. *lagjan* 'to lay', fr. rt. *legh-* 'lay, make a bed'; *topiti* 'to heat': Skr. *tāpáyāmi* 'I heat', fr. rt. *tep-*. Lith. *naktì-s*, O.Bulg. *noštĭ* 'night': Lat. *nox noctis*, Goth. *nahts* 'night'. Lith. *avì-s* O.Bulg. *ovĭ-ca* 'sheep' Lat. *ovi-s*. Nominal suffix *-o-*: Lith. nom. sg. *vil̃ka-s* 'wolf', dat. pl. *vil̃kà-ms* O.Bulg. *vlŭko-mŭ*, prim. Balt.-Slav. st. **wilko-* (§ 302) 'wolf': Gr. *λύκο-ς*. The thematic vowel *-o-* Lith. 1. pl. pres. *nẽsza-me* 'we carry', O.Bulg. 1. pl. aor. *nesa-mŭ* 'we carried': Gr. *φέρο-μεν*.

om, *on* before consonants (except *i̯*) generally appear as *ą* in Slavonic. *zą̀bu* 'tooth' Gr. *γόμφο-ς* 'plug, bolt', rt. *ĝembh-*. *blądŭ* 'error' beside *blędą* 'erro', rt. *bhlendh-*. *o* became *u* (*ŭ*) in final syllables before final nasal and before *-ns*. Thus Indg. **-o-m* (in the acc. sg. of *-o*-stems and in the 1. sg. pret.) became **-u-n* (§ 217) *-ŭ* (§ 219), as *vlŭkŭ* 'lupum', *nesŭ* 'I carried'; Indg **-o-ns* in the acc. pl (cp Gr Cret *τόρμονς*) became **-uns* whence further the *-y* of historical times, as *vlŭky* 'lupos' (§ 219) Final *-ŭ* = Indg **-om* was lengthened to *y* before *j*, e. g. *dobrŭ-jĭ* and *dobry-jĭ* 'the good (man)' (*dobrŭ* is the accusative form, used as nom., see the accidence), cp § 36 p. 37

In the same language *i̯o* became *i̯e*. Nom. acc. sg. neut. *je* 'it'. Gr. *ὅ* 'quod', Skr. *yá-d* 'quod', cpf. **i̯o-d* Dat pl. *konje-mŭ* fr. st. *konje-* fr **konio-* 'horse', *mąže-mŭ* fr st *mąže-* fr **mąg-i̯e-* (§ 147), **mąg-i̯o-* 'man', cp dat. pl. *vlŭko-mŭ*.

In like manner *i̯* influenced a following *a* in Lithuanian. *a*, in this combination and after consonants which have been palatalised by *i̯*, is pronounced as an open *e* in many dialects, e. g *kraŭjes* 'blood', pl *kraujeĩ* = *kraũjas*, *kraujaĩ*; *svẽczes* 'guest', pl. *sveczeĩ* = *svẽczias*, *svecziaĩ*, dat. sg *jém* 'him', instr. pl. *jeĩs* = *jám*, *jaĩs*.

Rem 1 Lith *jì-s* 'he' is not equal to Gr *ὁ-ς* Skr. *yá-s*, but stands to these in the same relation as Gr *τι-ς*, Lat *qui-s* stand to Skr *ká-s* Goth *hva-s* Also *szì-s* 'this' (beside gen *szĩõ*) is not fr **ki̯o-s*, but like O Bulg *sĭ* 'this' = orig **ki-s* (O Bulg gen *sego*, dat *semu* etc. for regular **šego*, **šemu* etc fr **si̯o-go* etc after the analogy of the nom. *sĭ* and acc. *sĭ*). After the same manner as *jìs* stands to gen *jõ*, dat. *jém* etc. are also to be explained nominatives sg like *mẽdis* (gen *mẽdžio*) 'tree', whose *-i-* instead of *-i̯-* is on the same level as the *-i-* in *geràs-is* (definite form to *gẽra-s* 'good'), and those like *gaĩdys* (Gen *gaĩdžio* 'cock', whose *y* arose from *i̯i* (§ 147). Indg *i* was likewise contained in the final syllables of O Bulg. nom and Acc *konji* 'horse' (st. *konje-*), Goth. nom. as *harji-s* 'army, host' (st *harja-*) and *hairdeis* fr **χirdi̯i-s* 'shepherd' (st prim Germ. **χirdi̯a-*), O.Lat *Cornelis Cornēlium*, *alis alim* beside *Cornēlius*, *alius* Osc. Kíipiís 'Cipius', Umbr Trutitis 'Truttidius' To these may possibly be added the Greek proper names in *-ι̃ς* beside *-ιο-* *-ιᾶς*, as *Δᾶμις Δεῖνις* etc Cp §§ 120 143 219 rem 1. 660 rem 3 and the accidence

Indg. tautosyllabic *oi̯* appears in Lith. as *ë* and *ai*, in Slav. as *ě*. Lith. *snëga-s* 'snow' (beside *snaigalà*[1]) 'snow flake' *snaigýti* 'to snow a little') Pruss. *snaygis* O.Bulg. *sněgŭ* 'snow': Goth. *snáivs* 'snow', cpf. **snoi̯gho-s*, fr. rt. *snei̯gh-*. Lith. *ãt-lëka-s* and *ãt-laika-s* 'remnant, rest' *laikýti* 'to hold', O.Bulg. *otŭ-lěkŭ* 'remnant, rest' : Gr. λοιπό-ς, fr. rt. *lei̯q-*. Lith. *laipnti* 'to let rise', O.Bulg. *pri-lěpŭ* 'salve, grease' : Gr. ἀλοιφή 'salve', fr. rt. *lei̯p-* stick, glue'. Lith. *maĩszala-s* 'medley, compound' *maiszýti* 'to 'mix', Pruss. *maysota-n* 'mingled', O.Bulg. *pri-měsŭ* 'admixtio' *měsiti* 'to mix', from rt. *mei̯k-* (Gr. μείξις), cp. § 414 rem. Lith. 3. sg. opt *te-sukĕ* (*sukù* 'I turn'), O.Bulg. 2. pl. opt. *berĕte* (*berą* 'fero') : Gr. φέροι, φέροιτε. Lith. *kẽma-s* 'farm, village' *kaimýna-s* 'neighbour' : Goth. *háims* 'village', cpf. **qoi̯-mo-s* (cp. O.Bulg. *po-kojĭ* 'rest, repose'), fr. rt. *qei̯-*. Pruss. *waisei waisse* 'thou knowest', O.Bulg. *věmĭ* fr. **věd-mĭ* and *věd-ě* 'I know' : Gr. οἶδε, Indg. pf stem *u̯oi̯d-*. Lith. *pemũ* 'shepherd boy' : Gr. ποιμήν. Lith. *staigà* 'sudden' *staigýti-s* 'hasten' : Gr. στοῖχο-ς 'row', fr. rt. *stei̯gh-* 'rise'.

Rem 2. It is undetermined after what law *ë* and *ai* interchange in Lith. I conjecture that originally *ai* regularly remained only when the following consonants had a palatal timbre, which had been caused by an *e-* or *i*-vowel in the following syllable, in other cases *ai̯* became *aĩ*, then open *ë*, and later *e* Cp. e. g. *kaimýnas* with *kẽma-s*, *pá-saiti-s* (masc) 'a binding thong' with *sẽta-s* 'cord' (§ 100), and the numerous verbs in *-yti* as *laikýti* (*laikaũ*, *laikiaũ*, *laikýsiu*) In this case *kaĩma-s* (another form of *kẽma-s*) would be a new formation after *kaimýnas*, and *laikaũ* after *laikiaũ* etc ; in the case of nouns like *ãt-laika-s* 'remnant', *maĩna-s* 'exchange', the verbs in *-yti* and the like which exist side by side with them would come into consideration, etc. Only slurred ('geschliffen') *ai* (*aĩ*) seems to have undergone the change to *e*, whereas *ái* (*dáikta-s* 'place, thing', *pa-láida-s* 'loose, slack') remained also before consonants having a labial timbre Cp. *e* and *ei* = Indg. *ei̯* § 68 rem. 2

Slav *ě* = Indg. *oi̯* and = Indg. *ai̯* (§ 100) are to be distinguished from *ě* = Indg. *ē* (§ 76) in historical times from the fact that before them *k, g, ch* do not appear changed into *č*, (*d*)*ž*, *š*, but into *c*, (*d*)*z*, *s*. Loc. pl. *vlŭcĕchŭ* (*vlŭkŭ* 'wolf'), *bo*(*d*)*zĕchŭ* (*bogŭ* 'god') with the Indg. ending **-oi̯su*, cp. Gr.

1) Kurschat in Lith.-Germ. Dict. accents it thus *snaĩgala*.

λύγοισι Skr. *vṛkēšu* Instr sg. *tacěmĭ*, instr. pl. *tacěmi*, dat. pl. *tacěmŭ* fr. *takŭ* 'talis'. Opt. 2. pl. *rĭcěte* from *reką* 'I say', cp. Gr. φέροιτε. Cp. §§ 461. 462. 463. 464. 588.

Final *ě* = Indg. *oi̯ ai̯* mostly became *i* Nom. pl. *ti* : Lith. *tẽ*, Gr. τοί, stem *to-* 'the'; in like manner *vlŭci* : Gr. λύκοι. Gen. sg. *pąti* (*pątĭ* 'way') : Lith. *akẽs* (*akì-s* 'eye'), Goth. *anstáis* (*ansti-* 'favour'), Indg **-oi̯s*. Opt. 2 3. sg *beri* : Gr φέροις, φέροι, cpf. **bhéroi̯s*, **bhéroi̯t* In the same way *-ě* = Indg *-ē* became *-i* in the nom. *mati* 'mother' = Lith. *motẽ*, § 76

Rem 3 It remains undetermined why the loc sg had *-ě*, not *-i*, *vlŭcě* (cp Gr οἴκοι, OHG *tage* fr **dhogh-oi̯*, orig **dhoghoi̯*) Cp dat loc sg *rące*, nom acc du *rące* (§ 100) of *rąka* hand', and 1 sg *vědě* 'I know' with the personal ending of the Skr pf. mid *tutud-é* fr *tud-* 'push'. Cp. Leskien Die Declin. im Slav.-Lit u Germ p 53, Mahlow Die langen Vocale *A E O* p 103 f., and Osthoff Zur Gesch des Perf p 194.

Initial *ě-* = Indg. *oi̯- ai̯-* likewise became *i-*. *inŭ* 'unus' : Lith. *v-ẽna-s* (§ 666, 1), Pruss *ama-n* acc., Lat *oino-s ūnu-s*. *iskati* 'to seek' · Lith. *j-ieszkóti* 'to seek' OHG *eiscōn* 'to seek', a verb whose root is probably to be set down as *ai̯s-*, not *ei̯s-* (Osthoff Zur Gesch d Perf p 133); *iskati* certainly incurs the suspicion of being a Germanic borrowed word, see § 414 rem. Also here a difference is shown in comparison with Indg. *ē* For this latter, when initial, became *ja-*, see §§ 76. 666, 1. Cp. further § 666 rem 2

Just as **i̯o* became *i̯e* (see above), so also **i̯oi̯* became **i̯ei̯* and further (by § 68) *i̯i*. Loc pl. *jichŭ* (fr st *je-* 'he' fr. **i̯o-*), *konjichŭ* (fr st. *konje-* 'horse' fr **konio-*) as opposed to *těchŭ*, *vlŭcěchŭ* Opt 2 pl *dějte* (*dějǫ* 'I put'), as opposed to *berěte*.

Indg. tautosyllabic *ou̯* as well as the *oi̯* (§ 68) which arose from *eu̯* in the Balt.-Slav. unitary period, appears in Lith as *au*, and in Slav as *u* Gen sg. Lith *sūnaũs*, O.Bulg. *synu* : Goth. *sunáus*, Indg **-ou̯s*. Lith. *raudà* 'red colour', O.Bulg. *ruda* 'metal' : Goth *ráuþs* 'red', rt. *reu̯dh-*. Lith. *naudà* 'profit, wealth, property' . OHG. *nōz* O.Icel. *naut* (neut.) 'domesticated animal' to Goth. *niutan* 'to obtain, enjoy', rt. *neu̯d-*. Lith. *raudà* 'lamentation' : OHG. *rōz* (masc.) 'weeping' to *riozan* 'to weep', rt. *reu̯d-*

Indg. ō.

§ 85. Indg. *jōs-* 'gird' : Av *yāsta-* 'girded', Gr. *ζωστό-ς* 'girded' *ζωστήρ* 'girdle', Lith. *jůsta* 'girdle' O.Bulg. *po-jasŭ* 'girdle' Indg. *dō-* 'give' : Skr. fut. *dā-syámi* 'dabo' *dá-na-m* 'donum', Arm. *tu-r* 'gift', Gr *δώ-σω δῶ-ρο-ν*, Lat. *dō-nu-m, dōs dotis*, Lith. fut. *dů'-siu* 'dabo' inf *du'-ti* 'dare', O Bulg *da-ti* dare' *da-rŭ* 'donum'

The abl sg of *-o*-stems in Indg *-ōd* . Skr. *vṛ́kād* (*vṛ́ka-s* "wolf"), Gr. Locr. Dial. *ὦ* 'unde', Lat *Gnaivōd Gnaeō* 1 sg of stems with thematic vowel in Indg. *-ō*. Av. *manya* 'I think' fr prim. Ar. **manyā* (§ 649, 1). Skr *bhárā-mi* 'fero' (*-mi* was here newly added), Gr *φέρω*, Lat *ferō*, O.Ir *as-biur* 'effero, dico' fr. prim. Kelt **berō*, Goth. *baira* 'fero' fr prim. Germ **berō*, Lith refl. *sukâ'-s* 'I turn myself' Nom sg. in Indg *-ō(r)* : Skr *svásā* 'soror', Gr *δώτωρ* 'giver', Lat *dator dator*, O Ir *suir* Lith. *sesů̃* 'soror'.

The diphthongs *ōi̯* and *ōu̯* were probably not very often tautosyllabic in the Indg. prim. period. Dat. sg. of *-o*-stems in *-ōi* Av. *haomāi* (*haoma-*, a plant), Gr. *ἵππῳ*, Osc. Abellanúí 'Abellano' Lat. *equō*, Lith. *vil̃kui* 'lupo' Instr. pl. of the same stems in *-ōi̯s* : Skr. *áśvāis*, Gr. *ἵπποις* fr. **ἵπποις* (§ 611), Pelign. *cnatois* 'gnatis, filiis', Lat. *oloes illīs* fr. prim. Ital. *-ōi̯s* (§ 612), Lith. *vilkaĩs* · Skr. *vṛ́kāis* (§ 615). Nom. sg. Indg. **gōu̯-s* 'bullock' : Skr. *gáuṣ*, Gr. *βοῦς* (§ 611). Loc. sg. Indg. **sūnṓu̯* (nom. **sūnú-s* 'son') . Skr. *sūnāú*, O.Bulg. *synu*, Umbr. manuv-e 'in manu' (*v* was a glide as in tuva 'duo' and others, § 169), probably also Goth. *sunáu*, Lat. (dat.) *ūsū*. Indg. **oḱtṓu̯* 'eight' (beside **oḱtō*) · Skr. *aṣṭāú*, Goth. *ahtáu*; **duṓu̯* 'two' (beside **duō*) Skr. *dvāú*, O.Ir. *dau dō*, older *dāu* (§ 645 final 1).

§ 86. Aryan. Skr. *āśú-ṣ* Av. *āsu-š* 'quick' : Gr. *ὠκύ-ς*, Lat. *ōc-ior*. Skr. *dádā-ti* Av. *daδāiti* 'dat' Gr. *δίδω-σι*. Nom. acc. du. in **-ō* (cp. § 645 final 1): Vedic *hástā* Av Gāp. *zastā* O.Pers. *dastā* 'both hands': Gr *ἵππω*, Lat. *ambō*. Imper. in **-tōd* . Skr. vedic *bháratād* Gr. *φερέτω*, Lat. *estōd estō*.

Concerning Av. *ē, ō, å* = prim. Iran. prim. Ar. *ā* fr. Indg. *ō* see § 102.

§ 87. Armenian. The regular representation seems to have been *u*. *e-tu* 'I gave' : Skr. *ádām*. *tur* 'gift' : Gr. *δῶρο-ν*, rt. *dō-*. *hum* 'raw' : Gr. *ὠμό-ς* Skr. *āmá-s* 'raw'; the initial *h-* has no etymological value. *šun* 'dog' fr. Indg. **ḱṷōn*, Lith. *szu̯ō* (§ 92 rem.).

§ 88. Greek. *γνω-* 'perceive, know' *ἔγνω-ν γνω-τό-ς γνῶ-σις* : Skr. *jñā-* 'perceive, know' fut 3. sg. *jñā-syáti* partic. *jñā-tá-s*, Lat. *gnō-scō nō-tu-s*, OHG. *ein-chnuadil* 'insignis, egregius' *be-cnuodelen* 'to give a countersign', O Bulg. inf. *zna-tī* 'know', *zna-mę* 'sign' Aeol *πα̃-νω* 'I drink' pf. *πέπω-κα ἄπ-πωτι-ς* 'ebb-tide' · Skr. *pā́ti* 'he drinks', *pāna-m* 'drink', Lat. *pōtu-s pōtiō pōtor*, Lith. *pū́ta* (fem) 'drinking-bout'. Acc *βῶν* 'bovem' · Skr. *gā́m* 'bovem', cpf **gṓm*, to nom. **gōu̯-s* (§ 85). Derivative verbal stems in *-ō-*, *ὑπνώ-σσω ὕπνω-τέον* : Lat. *aegrō-tu-s*, Lith *sapnū́-ti* 'to dream'

* In the Thessalian dialect *ω* passed into *ᾱ* (*ον*) : e. g. *ἐδονντε* = *ἔδω-κε*, *γναμᾱ* = *γνώ-μη*, *Ἀρίστανν* = *Ἀρίστων*.

§ 89. Italic. Lat. *ō*. The fluctuation of the orthography between *o* and *u* in the Umbrian-Samn. dialects points to a close *ō* (cp. short *o* § 81)· in Umbr. u, *o*, *u*, in Osc ú, u (also uu, a proof for the length of the vowel), *o*, *u* Lat *dō-nu-m*, Falisc. *donum*, Umbr. *ŭnu*, Osc. dúnúm, dJuunated ('donavit'), Mars. *dunom*, Vestin *duno* : Gr. *δῶ-ρο-ν* Lat. *pō-tu-s*, Umbr. puni *poni* abl. 'posca' · Gr *πέπω-κα*. Lat. *flōs flōris*, *Flōra*, Osc Fluusaí dat 'Florae', Sabin. *Flusare* 'Florali' : MHG. *bluost* (fem) 'blossom, bloom' Ags *blōstma* (masc) 'flower', st. **bhlōs-*. Umbr. aŕ-fertur-e *ars-fertur-e* dat. 'adfertori, flamini', Osc regaturei dat. 'rectori' kenzsur *censtur* nom. 'censores', Umbr. aimune dat. 'alimoni', Akeĭunia- *Acersonia-* Osc. Akudunnia- 'Aquilonia-', Pelign. *Semunu* gen. 'Semonum', Lat. suffix forms *-tōr-*, *-mōn-*. Abl. sg of *-o*-stems: Lat. *Gnaivōd*, Umbr. *poplu* 'populo' *somo* 'summo', Osc. Búvaianúd 'Boviano' *preivatud* 'privato', Volsc. *vinu* 'vino' : Gr. Locr. Cret. *ὦ* 'unde'. Umbr.-Osc. nom. pl. of the same stems in *-ōs* : Umbr. prinuvatus *prinvatur* 'legati' *screihtor* 'scripti', Osc. Núvlanús.

'Nolani' : Skr. *vṛ́kās* Goth. *vulfōs* 'lupi'. Imperatives in *-tōd* : Lat. *estōd*, Umbr. *fertu* 'ferto', Osc. líkítud *licitud* 'liceto', Pel. *ꝑetiedu* 'petito' (?), Volsc. *estu* 'esto' : Gr. ἔστω.

The *ū* instead of the expected *ō* in Lat. *datūr-u-s quaestūr-a*, *fūr* = Gr. φώρ 'thief', *hū-c* beside *quō* (are they to be compared with *fāg-u-s* beside *equ-o-s*? § 81) and others (Corssen Aussprache II 2 p. 193 f) is unexplained.

§ 90 Old Irish In chief accented syllables *ā*. *gnāth* 'known, accustomed' : Gr. γνωτό-ς. *blāth* 'bloom, blossom' : OHG. *bluot* 'bloom, blossom', fr st. *bhlē- bhlō-*, cp Goth. *uf-blēsan -bnáiblōs* 'to blow up, make to swell', Lat. *flōs*. *lār* 'floor, ground' : MHG. *vluor* Ags. *flōr* 'floor', to Gr. πλη- πλω- Lat. *plē- plō-* 'fill, swell, overflow'. *dā* 'two' : Gr δώ-δεκα, Skr. Ved. *dvá*, Indg. **dṷō* 'two' (O.Ir *dau do* = Indg. **dṷōṷ*, see § 85). Cp also O.Cymr. *di-auc* 'segnem' (properly 'not quick'). Gr. ὠκύ-ς; O.Cymr. *au* = *ā* (Zeuss-Ebel G. C. 93).

Rem. As to whether *ā* was also spoken in Gallic depends, so far as I see, upon the view taken of proper names in *-gnāto-s*. Zeuss-Ebel (p 16) identify this word with O Ir *gnāth*, whereas Thurneysen identifies it with Lat. *gnātu-s* (*Cintugnātus* 'first-born', Keltoroman p 2).

In final syllables *ō* passed into *ū*, and became shortened. 1 sg. pres. *no guidiu* 'I beg' *biu* 'I am' cp. Gr. κλαίω etc. Nom. sg. of *n*-stems, *air-mitiu* 'reverentia' (acc. *air-mitin n-*) : Lat. *mentiō*. Dat. (instr.) sg. of *-o*-stems, *cēliu* 'socio' : Lat. *modo* (adv.). Voc. pl. *a fíru* 'o viri' fr. prim. Kelt. **ꝑirōs* : Goth. *vaírōs*, Osc Núvlanús 'Nolani'. In *as-bur* 'effero, dico' fr. **biru* **berō*, *fiur* 'viro' fr. **viru* **virō* this vowel is still reflected only in the labial timbre of the consonant which preceded the once present *u* = *ō*. Cp. on *ō* in unaccented syllables also §§ 613 634. 657, 2. 6 7

§ 91. Germanic. In prim. Germ. *ō*. Goth. *flōdu-s* OHG. *flōt float fluat fluot* OS. Ags. *flōd* O.Icel. *flōð* 'flood, tide' : Gr. πλωτό-ς 'swimming', Lat. *plōrāre* (cp. Hom. δάκρυ πλώειν τ 122). Goth. *fōdr* neut. 'sheath', OHG. *fōtar fuatar fuotar* 'case' : Gr. πῶ-μα 'lid, cover', Skr. *pā-tra-m* 'vessel, receptacle'. Goth. *fōtu-s* OHG. *fōz foaz fuaz fuoz* OS. Ags. *fōt* O.Icel. *fōtr* 'foot' : Gr. Dor.

nom. sg. *πώς* 'foot'. Goth. *saí-sō* pf. 'sowed' : Gr. *ἀφέωκα, ἀν-ἑωνται*, Heracl. *ἀν-ἑῶσθαι*, pf. of *ἀφίημι ἀνίημι* fr. rt. *sē-* 'throw, sow'. OHG. *spuot* OS. *spōd* 'success, speed' fr. *spē- · spō-*, cp. the ablaut grade *spē-* in Goth. *spē-diza* 'later' Lith. *spė̃-ti* 'to be at leisure' (§ 76). O.Icel. *ōss* (masc.) 'estuary' : Lat. *ōs ōris, ōstium* Nom pl. Goth. *vulfōs* 'lupi' : Osc Núvlanús 'Nolani'

Indg. *ō* and *ā* fell together in *ō* in the prim. Germ. period, and were therefore similarly treated in all Germ dialects. Cp § 107.

Goth. *ō* was a close sound approaching closely to *ū*, hence it is occasionally also written *u*

In OHG. *ō* is only retained in the oldest monuments This became first of all *oa, ua*, and then later *uo*, which, from about the year 900, became the universally predominant form This change of *ō* to *oa* etc. did not take place in unaccented final syllables

Prim. Germ. final *-ō* became *-a* in Goth and *-u* in HG . Goth. *haira* OHG *hiru* = Gr *κέρα*. Prim. Germ *-ōn* became *-ō* in Goth and *-o* in OHG Goth. nom *raþjō* 'number, account', OHG. *hano* 'cock' See §§ 659—661

§ **92.** Baltic-Slavonic. Slav *a*, Lith. (Lett) *ů*. Lith. *dů́-ti* O Bulg. *da-ti* 'to give' . Lat *dōs dōtis*. Lith *jů́s-ta* O.Bulg *po-jas-nъ* 'girdle' Gr *ζωσ-τό-ς ζώ-νη* Lith. *nů̃* 'of, from', O.Bulg. *na* 'on, up' : Gr. *ἄνα* Nom. acc. du. masc. of *-o*-stems : Lith. *gerù́-ju* 'the two good (men)' (Nom. sg. *geràs-is*), O.Bulg. *vlъ̃kъ* (nom sg. *vlъ̃kъ* 'wolf') : Gr. *λύκα*. Lith. *ů́džiu* 'I smell, scent' : Gr *ὠδ-* in pf. *ὄδ-ωδα, δυσ-ώδης*. Lett. *znůts* 'son-in-law' : Gr. *γνωτό-ς* 'relation, brother'.

In Lithuanian this vowel, when it had the broken ('gestossen') accent, became *u* in final syllables. *gerù* '*ἀγαθώ*' beside *gerů́-ju* '*τὼ ἀγαθώ*'. *sukù* 'I turn' beside the refl. *suků́-si suků́-s* cp. § 664, 3.

In both sections of this branch final **-ōm, *-ōn* became **-ūn*, whence Lith. *-ų*, O.Bulg. *-y*. Lith. gen. pl. *dėvū* (which properly ought to be written *dėvų̄*), in dialects still *dėvų* (fr. *dėva-s* 'god'), orig. form **deiu̯ōm*, Skr. Ved. *dēvā́m*, cp. § 218.

O.Bulg. nom. sg. *kamy* 'stone' (st. *kamen-*) fr. **-mōn* : cp. Gr. *ἄκ-μων* 'anvil', OHG. *hano* (prim. Germ. **χanōn*) 'cock', Goth. *raþjō* (prim. Germ. **raþiōn*) 'number, account'. The participle *bery* 'ferens' can quite as well be considered equal to Gr. *φέρων* as to Skr *bhúran* fr. **bheront-s.* (§§ 84. 219).

Rem Lith. *szů* 'dog', *akmů* 'stone' have the same formation as Lat. *homō*, Goth *guma* fr. prim Germ **gumō*, Skr. *áśmā*, cp. also Pruss. *smoy* = Lith *žmů* 'man'. On the other hand the dial. form *szuõ* (beside *szů*) is a formation in *-ōn* (cp. Armen *šun* Gr. *κύων*)

Indg *a.*

§ 93. Indg **áǧō* 'I drive, lead' (rt *aǧ-*): Skr. *ájāmi*) Arm *acem*, Gr. *ἄγω*, Lat. *agō*, O.Ir *agim*, O Icel inf. *aka*. Indg **aǧro-s* 'field, acre': Skr *ájra-s*, Gr. *ἀγρό-ς*, Lat. *ager*, Goth. *akrs* Skr. *ákša-s* Gr *ἄξων* Lat. *axi-s* OHG. *ahsa* Lith. *aszì-s* O Bulg. *osĭ* 'axle' Indg. **alio-* 'alius' · Armen. *ail*, Gr *ἄλλο-ς*, Lat *alius-*, O Ir. *aile*, Goth. *alja-s*. Skr. *ápa* Gr. *ἀπο* Lat *ab* Goth. *af* 'of, from, by' Skr. *mádati* 'undulates (of water), is drunk, drinks immoderately', Gr *μαδάω* 'I am wet', Lat *madeō* 'I drop with wet' Voc sg. of *ā*-stems in Indg. *-a*: Skr *ámba* 'O mother', Gr. *νύμφᾰ δέσποτα*, O Bulg. *ženo* 'O wife'. Suffix of the instr sg *-a*: Skr gerunds in *-y-a* and *-ty-a*, e. g. *ā-gám-y-a ā-gá-ty-a* 'by approaching', Gr. *πεδ-ᾰ́* (§ 311), *παρ-ᾰ́*, *ἄμι-α*, Lat. *ped-e*

Indg tautosyllabic *ai*. Skr. *édha-s* 'fire-wood', Gr. *αἴθω* 'I burn', Lat *aedēs* (originally 'fire-place, hearth'), *aestu-s* 'heat, ebullition', O.Ir. *aed* 'fire', OHG. MHG. *eit* Ags. *ād* 'a burning pile', rt *aidh-* 'glow'. Skr. *sé-tu-š* 'fettering, binding' *sē-tár-* 'one who puts in fetters', Lat. *sae-ta* 'strong hair, bristle', OHG. *sei-d* (neut.) 'cord, knot', Lith. *sẽ-ta-s* 'cord', *pá-sai-ti-s* (masc.) 'a binding thong', O Bulg. *sě-tĭ* (fem.) 'cord', rt. *sai-* 'bind'. 3. sg. mid. in Indg. *-tai*: Skr. *bháratē*, Gr. *φέρεται* (rt. *bher-* 'ferre'); this orig form *-tai* is not, however, quite certain, since **-təi* would also necessarily become Skr. *-tē* Gr. *-ται* (§ 109).

Indg. tautosyllabic *au*. Skr. *ójas-* (neut.) *ójmán-* (masc.) 'power, strength', Lat. *augeō augus-tu-s augmen augmentu-m*, O.Ir. *ōg* 'integer', Goth. *áuka* 'I add, augment', Lith. *áugu* 'I grow'

augmĕ̄ (gen. *augmeñs*) 'growth, excrescence', rt. *aug̑-*. Gr. *παύ-σω* 'I shall check', Lat. *pau-cu-s*, cp. Goth. pl. *fav-ái* 'few'.

§ 94. Aryan. Skr. *ápa* Av. *apa* O.Pers. *apa-* 'away, off': Gr. *ἄπο*. Skr. *áśman-* Av. O.Pers. *asman-* 'stone, thunderbolt, sky': Gr. *ἄκμων* 'anvil, thunder-bolt'. Skr *ávati* 'notices, favours', Av. *avah-* (neut.) 'protection': Lat. *aveō* Skr. *yajñá-* Av. *yasna-* (masc.) 'veneration of the gods, offering': Gr. *ἁγνό-ς*, rt. *yag̑-*.

Indg. and prim. Ar. tautosyllabic *aį̯*, *aų̯* became *ē*, *ō* in Skr., *aę̯ ōi*, *ao ēu* in Av and *ai*, *au* in O.Pers. (cp §§ 126. 160):

1. *aį̯* Skr. *édha-s* 'fire-wood', Av. *aesma-* (masc.) (Av. *-sm-* fr. *-dm-* is remarkable, cp however § 403): Gr. *αἴθω*. Skr *sétu-ṣ* 'string, bridge', Av. *haętu-š* 'bridge, way': Lat. *saeta*, rt. *sa*į̯*-* 'bind'.

Avestic had *ę̄* for *aę̯*, when final Dat sg Skr. *gáv-ē* Av. *gav-ōi qav-ē* 'bovi': Gr. *ἴδμεν-αι* 3 sg mid. Skr. *bháratē*. Gr. *φέρεται*; Av *vaęnaitē* O Pers. *vainataiy* 'seems'. Nom. Acc. du. of *ā*-stems, Skr. *ubhē* Av. *uwē* 'both': O Bulg *ženě* (*žena* 'wife').

2. *aų̯*. Skr. *ójas-* Av. *aojah-* (neut.) 'strength, power' Lat. *augus-tu-s*, rt. *aug̑-*. —

Aryan *a* corresponds, in addition to Indg. *a*, also to Indg. *e* (§ 62) and *o* (§ 78), further to Indg. sonant nasal (§§ 228—231) and occasionally to Indg. *ə* (§ 109a) To these was added further in prim. Iran. a new *a* in the combination *ar* = Skr. *ur ṛ*, Indg. *ṝr* (§ 290). Here may be discussed a few changes which prim. Iran. *a*, irrespective of its origin, underwent in Av.

1. *a* became *e* before *m*, *n* or *v*, and the *e*-quality seems to have been most clearly marked in final syllables, since it is here written most consistently. *nemah-* (neut.) 'reverence': Skr. prim. Ar. *námas-*, Indg. **nemes-*, rt. *nem-*. *te-m* acc. 'the': Skr. prim. Ar. *tá-m*, Indg. **tó-m*, Gr. *τό-ν*. *bare-m* 'I brought': O.Pers. (*a-*)*bara-m* Skr. (*á-*)*bhara-m*, Indg. *(*é-*)*bhero-m*, Gr. (*ἐ-*)*φερο-ν*. *dasema-* 'decimus': Skr. *daśamá-* Indg. **dekm̥mó-* (§ 231). 3. pl. pres. *bare-nti*, impf. *bare-n*: Skr. *bhára-nti*,

(á-)bhara-n, Indg. **bhéro-nti*, **(é-)bhero-nt*, Gr. Dor. *φέρο-ντι*, *(ε-)φερο-ν*. *tevīšī-* (fem.) 'strength': Skr. *távišī-*, rt. *teu̯-*. *e-vista-* 'unknown': Skr. *á-vitta-*; *a-* = Indg. *n̥-* (§ 232), cp. also Gr. *ἄ-ιστο-ς*.

e, which arose from *a* before *m*, *n* or *v*, passed into *i* after *y*, *c*, *j*, *š*, but the orthography is also here inconsequent. *yi-m* 'quem': Skr. *yá-m*, Gr. *ὅ-ν*. *yimá-*, name of a hero: Skr. *yamá-*. *haci-mna-* part. of *haca-itē* 'accompanies', cp Skr. *sáca-māna-*. *vāc-im* acc of *vāxš* 'word': Skr. *vāc-am*; *-am* = Indg. *-m̥(m)* (§ 231 rem.). *jimaƀ* 3. sg. conj aor. fr rt. *gem-* 'go', cp Skr. *gámat* for regular **jámat* (§ 451 rem.). *snaẽžint-* 'snowing' to *snaẽžaiti* 'snows'.

Rem The Gaƀa dialect had also *ē* for *e* and *i* before *m n r*, especially in final syllables *emavant-* 'vigorous' late Av *amavant-* Skr. *ámavant-* Acc. *kehrp-ēm*. late Av *kehrp-em* 'figure, body', Skr *kṛ́p-am*. *yēm* beside *yim*. Skr. *yá-m* *xšaṇmēn-ē* dat. fr *xšaṇman-* 'grief, affliction', cp. Skr. *vártman-ē* *ē-viști-* 'want of acquaintance' beside late Av *e-vista-* (see above)

2 *a* became *e* after *y* before *i*, *ī*, *ē*, *y*, *ńh* (fr. Ar. *s̱*, § 125), *c* or *j* in the following syllable The orthography is also here inconsistent, since *a* appears also beside *ẽ*. 3. sg. act. *kārayẽiti*, 3. pl. act *kārayẽinti*, 3. sg mid *kārayẽtē* of *kārayēmi*, Causat. fr. *kar-* 'make'. *yẽsnya-* 'adorable' beside *yasna-* 'offering, price': Skr. *yajñá-* Gr. *ἁγνό-ς* Gāƀ. gen. masc. *yehyā* 'cuius' = Skr. *yásya*, late Av *yẽńhå* (fem) 'cuius': Skr. *yásyās*. *iƀyẽjah-* 'need, danger': Skr. *tyájas-*. Cp *ē* fr. *ā* § 102.

3. *a* became *o* before *u*, *ū* or *v* in the following syllable, especially after labial sounds, and before *r* + consonant. The spelling with *o* is also in this case not consistent; since beside it *a* also occurs. *pouru-š* (fr. **poru-š*, § 638) 'multus' beside nom. pl. *parav-ō*: Skr. *purú-ṣ*, *purāv-as* (§ 290). *vohu* 'bonum': Skr. *vásu*. *mošu* 'soon, quick': Skr. *makṣú*. Gāƀ. *verᵉzyotū* 3. sg. imper. of *verᵉzyēmi* 'I work'. *aš-bourva-* 'having much food': cp. Skr. Ved. *sú-bharva-* 'much consuming'. *corᵉƀ* 3. sg. aor. 'made.': cp. Skr. *ákar* fr. **a-kart*, prim. Ar. **a-cart*. Cp. *ō* fr *a* § 102.

§ 95. Armenian. *aselն* (gen. *aslan*) 'needle': Gr. *ἄκρο-ς*

'point', Lat. *acu-s* 'needle', Lith. *asz-t-rù-s* O Bulg. *os-t-rŭ* 'sharp'. *argel* 'hinderance': Gr *ἀρκέω* 'I ward or keep off', Lat. *arceō*.

taigr, gen. *taiger* (*g* fr. *ɣ* § 162): Skr. *dēvár-*, Gr *δᾱήρ* (§ 96), Lat *lēvir* (§§ 65. 368), Ags. *tācor* OHG. *zeihhur* (with remarkable guttural), Lith. *dever-ì-s* O.Bulg *dĕver-ĭ*, Indg. prim. t. **daɱér-* **daɱɣ-* 'husband's brother, brother-in-law' (§ 155 rem.

§ 96. Greek *δάκρυ*: Lat *dacruma lacruma* O Bret. *dacr* Goth. *tagr* 'tear' *καχανό-ς* (Hesych) 'little finger', *κακό-ς* 'bad' compar *κακίων* Av. *kasu-* 'small' compar *kasyå*. *μακρό-ς* 'long': Av. *masah-* 'greatness' O.Pers *maθišta-* 'uppermost', Lat. *macer*, OHG. *magar* 'lean' *ἄγχω* 'I press tight', *ἄγχι* 'near': Skr. *áṃhas-* 'tightness, oppression', Av *azah-* 'tightness, anxiety', Lat. *angō angor*, Goth. *aggv-u-s* 'close, tight', Lith *añksztа-s* 'close, tight', O.Bulg. *ęzĕ-kŭ* 'tight, close', rt. *aṅĝh-* 'straiten'.

Tautosyllabic *αι* and *αυ*. *λαιό-ς*: Lat. *laevo-s*, O.Bulg. *lĕvŭ*, cpf. **laɱa-s* 'left'; here also OHG. *slēo* 'powerless', prim. Germ **slaɱa-z*? *αἰών* 'time, life-time', *αἰϝεί αἰεί* 'always': Lat *aevo-m* 'time, life-time', Goth *áivs* (st. *áiva-*) 'time'. *ναί* 'yea, verily': Lat *nae* *καυλό-ς* 'stalk' · Lat. *caulis* 'stalk' *caulae* 'holes, cavities', Lith *káula-s* 'bone' *δεδαυ-μένος*, to *δαΐω* (fr. **δαϝ-ιω*, § 131) 'I kindle' *αὖ* 'again' (*αἶ-ψε*, *αἶ-τις*): Lat *au-t*, *aut-em*.

In Bœotian *αɣ* became *αᾳ* (e. g. *Ἀϝαχρωΐνδᾱς*, *Ἀνανίας*, inscript. of Tanagra), for which *η* (e. g *ἠί* = *αἰϝεί*) appears from about 400 B C and on the latest inscriptions *ει* i. e. close *ē* (e g. *Εἴμων*) The same *ει* = *αι* in Thessalian about 220 B. C., e. g. 3. sg conj. mid. *βέλλει-τει* = Dor *δήλη-ται* 'velit'. Later, but probably not before the second century A. D., *αι* passed into *ē* also elsewhere in Greece.

In Ionic-Attic *ᾱ* fr *αϝ* before *e-*, *ι-* and *α-* sounds *δᾱήρ* fr. **δαϝηρ*: Skr. *dēvár-*. *ἀεί* (*ἀϝεί*) = *αἰϝεί*. Hom. *ἄϊσσω* Att. *ᾤττω* fr. **ϝαι-ϝι-χω* (a reduplicated form like *δαι-δάλλω*, *παι-φάσσω*) *ἐλάᾱ* = *ἐλαί(ϝ)ᾱ* (cp. the Lat. borrowed word *olīva*). Cp § 131.

αϙ for *αɣ* can be established for Ionic from the fifth century B. C. onwards, e. g. *αὐτόν* = *αὐτόν*. Cp. *εϙ* fr. *εɣ* § 64.

§ 97. Italic. Lat. *agō*, Umbr. *aitu* Osc. *actud* 'agito': Gr. *ἄγω*. Lat. *amb-itu-s*, Umbr *ambr-etuto* 'circumeunto' (concerning *-b-* cp. § 209), Osc. amfr-et 'ambiunt': Gr. *ἀμφί ἀμφίς*, 'circum'. Lat. *albu-s*, Umbr. alfu 'alba', Osc Alafatornum 'Alfaternorum': Gr. *ἀλφό-ς* 'white leprosy', cpf. **albho-*. Lat. *caper capra*, Umbr *cabriner* gen. 'caprini': Gr *κάπρο-ς* 'wild-boar', O.Icel. *hafr* 'buck' Lat *ante*, Osc. *ant* 'ante': Gr. *ἀντί* 'opposite', Skr. *ánti* 'opposite, before'. Lat *am-āru-s* 'bitter': Skr. *am-lá-s am-bla-s* (§ 199) 'sour, sourness'.

In Latin, *a* (we here also take into account *ā* = Indg. *ə*, § 109 d, and *ar, al* which arose from *r̥, l̥*, § 306) was changed in syllables which were unaccented, in prim. Latin (§ 680):

1. to a sound lying between *a* and *i* before labials and *l* in open syllables. *man-cupium* and *man-cipium* beside *capiō capulu-m*. *in-saliō* and *in-sidiō* beside *saliō*: Gr. *ἅλλομαι* 'I spring, leap'. Cp § 49 p 42 The orthography fluctuated greatly, and it is questionable whether this fluctuation is not partly to be attributed to the fact that the sound was a different one, when followed by *i*, cp e. g. *ac-cipiō* beside *oc-cupō*. *sur-ruptus* for *sur-reptus* fr. *rapiō* was certainly formed by analogy (see 3)

2. to *u* before *l* + consonant (except *ll*). *ex-sultō* beside *saltō*, *in-culcāre* beside *calcāre*.

3. to *e* in closed syllables (exceptions under 2), before *r* and finally. *ac-ceptus parti-ceps* beside *capiō man-cupium, cōn-fectus arti-fex* beside *faciō cōnficiō*. *ac-centus corni-cen* beside *canō ac-cinō corni-cin-is*. *obstetrīx* beside *stator cōn-stituō*. *im-pertiō* beside *partiō* Instr. sg. of consonantal stems, as *ped-e, aer-e*, cp. Gr. *πεδ-ά, ἄμ-α* (cp. § 93 p 87); perhaps also *inde* = Gr. *ἔνθα*. *red-dere* beside *dare*.

4. to *i* in open syllables (exceptions under 1. 3 5.) and before *ng*. *ad-igō* beside *agō*. *concinō* beside *canō*. *Juppiter* beside *pater cōn-stituō* beside *statuō*. *sisti-te* = Gr. *ἵστα-τε*. *in-situs* beside *satus*. *serite* fr. **si-sa-te* (§ 33) = Gr. **ἵατε*, the older form of *ἵετε* (§ 109c). *red-ditus* beside *datus*. *at-tingō* beside *tangō*.

5. *-aŭ-* became *-u-*: *ē-luō ē-luăcru-s* beside *lavăcru-m* and (O.Lat.) *lavere*, s § 172, 1. *-ŭa-* probably also became *-u-*: *con-cutiō con-cussus* beside *quatiō quassus*[1]).

Before the christian era tautosyllabic *aĭ* became *ē* in Latin (having passed through the intermediate stage *aę*) This change occurs earliest in the popular language. The various stages of the change cannot be precisely fixed chronologically, since the orthography inconsistently retained *aĭ* and *ae* long after the monophthongic pronunciation was established; *aĭ* is still found on inscriptions under the Empire. *aidīli-s aedēs*: Gr. *αἴθω* (cp. § 93). *caecus Caeculius Caecilius Cēcilius*: O.Ir. *caech* 'blind', Goth. *háihs* 'blind'. *haedus ēdus*: Goth. *gáits* 'goat'. *lēvir* (popularly connected with *vir*, s. § 65): Gr. *δᾱήρ* (§ 96), Skr *dēvár-*, Indg. **daĭuér-* 'husband's brother'.

aĭ became *ī* in prim. Lat secondary accented syllables. *in-quīro* beside *quaerō quaistor quaestor. ex-īstumō* beside *aestumō* Cp. also *mēnsīs* fr. **mensaĭs* (Osc diumpaís 'lumpis, nymphis'), the *-aĭs* of which arose from *-ăĭs* (§ 612). Concerning *ex-quaerō* and the like cp. § 65 rem. 3.

Tautosyllabic *aŭ. aurōr-a* fr. **auz-ōz-ā* (§ 569): Gr. *ἄγχ-αυρο-ς* 'near the morning' *αὔριον* 'morning' from stem **αὐσρο-*, O Icel. *austr* OHG. OS *ōstar* adv. 'eastwards', Lith. *ausz-rà* day-break'. *auri-s*: Goth. *áusō* (Gen. *áusins*) Lith. *ausì-s* 'ear'. This *aŭ* became *aǫ* (cp. *ae* fr. *aĭ*) in the popular language and later *ōǫ* or the pure monophthong *ā*, as the orthography *o* shows, e. g. *oricula* = *auricula* Unaccented *aŭ* before *u* appears, in the time of the Emperors, as *a*, e. g. *Agustus, asculto, augurium.*

To the proportion *in-quirō* : *quaerō* correspond *in-clūdō* : *claudō* and *dē-frūdō* · *fraudor.* Concerning *con-clausu-s* and like forms cp. § 65 rem. 3.

Tautosyllabic *aĭ* and *aŭ* remained diphthongic in Oscan, whilst in Umbrian they became respectively *ē* and *ō*.

1) Cp. Thurneysen Über Herkunft und Bildung der lat Verba auf *-io* p. 51 Otherwise Osthoff Zur Gesch. des Perf. 585 and Bersu Die Guturalen und ihre Verbindung mit *v* im Lat. 132.

Osc. svaí *svae* Umbr. *sve* 'si' (Volsc. *sepis* 'siquis'), probably = Gr. *αἰ*. Osc. Aíifineís (or Aíifneís) gen. 'Aedini', to Lat. *aedēs* (Osc. aídil *'aedilis'* was a borrowed word, as is shown by the *d*).

Osc. *avti*, Umbr. *ote*: Lat. *aut*, Gr. *αὖ*, *αὖτε*. Umbr. *oht.* (abbreviation) uhtretie 'auctoritate': Lat. *auctor*. Cp. also Osc. *ταυρομ* 'taurum', Umbr. *toru* 'tauros': Lat. *taurus*.

§ 98. Old Irish. *anim* 'soul' *anāl* 'breath': Gr. *ἄνε-μο-ς* 'wind', Lat. *ani-mu-s ani-ma*, Skr. *án-ti* 'breathes', Goth. *us-anan* 'to exhale'. *canim* 'I sing': Lat. *canō*, Goth *hana* 'cock' *aile* 'alius': Gr. *ἄλλο-ς*, Lat. *aliu-s*. *alim* 'I nourish, bring up': Lat. *alō*, Goth. *ala* 'I grow up'. Cp. also Cymr *am* = Gr. *ἀμφί*; Gall. *ad- in Ad-magetobriga* and others, O Ir. *ad-* in *ad-glādur* 'I address' and other words = Lat. *ad*

In forms like *aile* 'alius', gen *maicc* fr. **makᵘī* (Ogam inscrip. still *maqui*) 'filii' (nom. *macc* fr. prim. Kelt **makᵘo-s*), the *i* following *a* denotes the palatal timbre of the following consonant In like manner *u* denotes the *u*-timbre of the same consonant, e. g. in 1 sg *ad-gaur* 'I forbid' for **garu *garō* (cp. *gāir* 'call' and Gr. Dor *γᾶρυ-ς* 'speech') and others. S. § 640. Original *a*, so far as it did not entirely disappear (§ 634), appears mostly as *a* in unaccented syllables, e. g. *cúm-ang* 'angustus' (Lat. *angustu-s* Gr *ἄγχω*)[1]), beside the *u* and *i*, caused by the timbre of the following vowel, e. g. *for-cón-gur* 'praecipio' beside *ad-gáur*

Indg. tautosyllabic *aᵢ* became *aᵉ*. *caech* 'blind': Lat. *caecu-s*. *aed* 'fire': Gr. *αἴθω*. Before palatalised consonants *aᵢ*, e. g. *caich* nom. pl. 'caeci' fr. **caicī*.

aᵢ became *ī* in final syllables. *dī* (fem.) 'two': Skr. *dvé*. Indg. **dᵘáᵢ*; the change to *ī* may here have taken place, when the word did not have the chief accent. *ī* in orig. polysyllabic forms is still only recognisable in the palatalisation, as du. *tuaith* (sg. *tuath* 'people' = Goth. *þiuda*) fr. **tōtī*, older **teᵘtaᵢ* (§ 657, 4).

Indg. tautosyllabic *aᵘ* appears, when accented, as *au, ō*: *ō*

1) Concerning the root of this adj. cp Zimmer Kelt. Stud. II 79.

'ear' dat. pl. *aub, au-nasc* 'ear-ring': Lat. *aur-s.* *ōg* 'integer': Lat. *augeō*

§ 99. Germanic Goth. *ahva* OHG.OS. *aha* 'water, river': Lat. *aqua.* Goth. *skaban* OHG *scaban* Ags. *scafan* O.Icel. *skafa* 'to scrape': Gr. σκαπάνη 'spade' σκάπτω 'I dig', O.Lat. *scaprēs* 'shabby, rough' Lat. *scabō* 'I scrape, scratch', rt. *sqap- sqab-* (§ 469, 7) Goth *haban* OHG *habēn* Ags *habban* O.Icel *hafa* 'to have': Lat *habeō*, cpf of the stem **khabhē-* (§ 553) Goth. O Icel OS. *salt* OHG *salz* 'salt' Armen *ałi* Gr ἅλς Lat. pl. *salēs* O.Ir. *salann* O.Bulg *solĭ* 'salt'

Rem Concerning the falling together of Indg *a* and *o* in Germ. see § 83 rem 1. Indg. *a* appears as *o* in other than chief accented syllables, e g. in *ob, of*, the Westgerm proclitic forms of the prep *ab af* 'of' (Gr ἀπό, Lat *ab*), e g OHG *ob-lāzan* 'dimittere' Cp Paul in Paul and Braune's Beitr. VI pp 186, 191

Indg. tautosyllabic *aŗ* Goth *skáudan* OHG *scerdan* OS *scēthan* Ags *scādan* 'separate' Lat *caedō* 'I hew, cut out', rt. *sqhaŗt- sqhaŗd-* (§§ 469, 7 553) OHG *ert* Ags *ād* 'rogus, ignis'. Gr *αἴθω*

Indg. tautosyllabic *aŭ* Goth *áuk* 'for, but', OHG. *auh* OS. *ōk* Ags. *eác* 'also', O Icel. *auk* 'thereto', to Goth *áukan* 'to increase'. Lat *augeō*

The special OHG. treatment of *a, aŗ, aŭ* has been stated in § 83. According to the sound-laws given there, are to be explained e. g. the following forms: *eli-lenti* fr. older *ali-lanti* 'from another land, strange': Goth *aljis*, Lat *alius. erran* fr. **erŗan* · Goth. *arjan* 'to plough', Lat. *arō. ēwīn*: Goth *áiveins* 'eternal', Gr. *αἰών*, Lat *aevo-m auh*, later *ouh*: Goth. *áuk* (see above). *ōra*: Goth *áusō* 'ear', Lat. *auri-s*, Lith. *ausì-s.*

§ 100. Baltic-Slavonic. Indg. *a* became *o* in the Baltic-Slav. unitary period, and fell entirely together with Indg. *o* (§ 84)

Lith. *nas-raĩ* pl. 'throat', O.Bulg. *nos-ŭ* 'nose'. Skr. *nás-* OHG. *nas-a* 'nose'; that the rt. is Indg. **nas-*, not **nos-*, follows from Lat *nār-ēs*, Lith *nós-i-s* (fem.) 'nose' which stand in ablaut relation to the above words. Lith. *arù* O.Bulg. *orją* 'I plough': Armen. *araur* 'plough', Gr. ἀρόω Lat. *arō* 'I plough', O.Ir.

arathar 'plough', Goth. *arja* 'I plough'. Lith. *ãkla-s* 'blind': Lat. *aqulu-s* 'dark'. Lith *algà* 'pay, reward': Skr. *arghá-* m. n. 'worth, value, gift of honour', Gr. *ἀλφή ἄλφημα* 'wage', fr. rt. *algh-*. O.Bulg. *otĭ-cĭ* 'father': Skr. *atti- attā-* 'elder sister', the latter also 'mother', Gr. *ἄττα* 'father', O.Ir. *aite* 'foster-father, trainer'. O.Bulg. instr. sg *ženojǫ* voc. sg *ženo* of *žena* 'wife': Skr. instr. sg. *jihvájā* (nom. *jihvá* 'tongue'), Gr. voc. sg. *νύμφα* (nom. Dor. *νύμφᾱ*).

With regard to the following sound-developments compare the laws given in § 84.

Slav. *ą* before explosives and spirants O.Bulg. *ązŭkŭ* 'narrow', *ą-chati* 'odorari' (s § 219)

Slav. *je* fr. *jo*. Voc. sg. *zmije*, *duše*, to nom. sg. *žmija* 'serpent', *duša* (fr. **dūchjā*, §§ 147 rem. 3. 588, 3) 'soul', cp. *ženo* from *žena*. Instr. sg. *jejǫ*, nom. sg. *ja* 'she', cp. *tojǫ* from *ta* 'the'.

Indg. tautosyllabic *aj* as *e* and *ai* in Lith. and as *ě* in Slav. Lith. *dever-ì-s* O.Bulg. *děver-ĭ* 'brother-in-law': Gr. *δᾱήρ* fr. **δαϝηρ* (§ 96). Nom du. fem. Lith *tẽ-dvi* (*-dvi* = *dvì* 'two') O.Bulg. *tě* from st. **tā-* 'the' Skr *té*, perhaps also Gr. *ταί* Lat *istae* (see Brugmann, Kuhn's Ztschr. XXVII p. 199 ff.), Indg. **tāj*. Lith. *pá-saitis* m. 'a binding thong', *sẽta-s* 'cord' (cp. also *at-saj-à* 'trace of a horse'), O.Bulg *sětĭ* f. 'cord' fr rt *saj-* 'bind'. Lith. *skedà* and *skedrà* 'chip' *skaistù-s* and *skáista-s* 'clear': Lat. *caedō* part. *caesus, caesus* 'clear-eyed', Goth. *skáidan* 'separate'. O.Bulg. *lěvŭ* 'left'. Lat *laevo-s*.

Before this *ě* in Slav. *k* becomes *c*, e. g. *rącě* nom. du. of *rąka* 'hand'.

Rem Concerning the change between *è* and *ai* in Lith. see § 84 rem. 2, concerning final Slav *é* see § 84 rem 3

Slav. *ji* fr. **jej*, **joj*. Nom. du. fem. *zmji* of *zmija* 'serpent', *dušĭ* of *duša* 'soul', cp. *rącě*. Likewise *ji* 'they, they two' = Skr. *yé*, Indg. **jāj*

Indg. tautosyllabic *aw*, as *au* in Lith. and *u* in Slav. Lith. *saũsa-s* O.Bulg. *suchŭ* 'dry'· Skr. *śōša-s* (fr. **sōśa-s*, § 557, 4) 'a drying up', Gr. *αὔω* 'I dry, make dry' fr. **σαυσω* (§ 564), Ags. *seár* 'withered, dry' OHG. *sōrēn* 'to parch' O.Icel. *saurr* 'mud', fr rt. *saus-*. Lith. *augmẽ* (gen. *augmeñs*) 'growth, ex-

crescence': Lat. *augmen-tu-m* O.Bulg. *u-* 'off, away' (*u-myti* 'to wash off', *u-dati* 'to give away, ἐκδοῦναι θυγατέρα'), Pruss. *au-* 'off, away' (*au-mu-sna-n* acc. 'ablution'): Lat. *au-*, *au-ferre*.

Indg. ā

§ 101. Indg. **bhāǧhu-s* 'elbow' · Skr *bāhú-š* 'arm', Gr. Dor. πᾶχυ-ς 'fore-arm, elbow', OHG. *buog* O Icel. *bōgr* 'elbow' Indg. **mā-ter-* 'mother': Skr. *mātár-*, Arm. *mair*, Gr Dor. *μάτηρ*, Lat. *māter*, O.Ir *māthir*, OHG. *muoter* O Icel. *mōðer mōðir*, Lith. *motẽ* ('wife'), O.Bulg. *mati*.

Indg fem. suffixes *-ā-*, *-tā-*, *-i̯ā-* etc.: Skr. *áśvā* 'mare', *sā* 'the', Gr. *χώρᾱ* 'land', Dor *ἃ* 'the', Lat. dat. abl. pl. *dextrā-bus*, O Ir. dat. instr. pl. *mnāib* fr. st *mnā-* fr. **bnā-* (nom. sg. *ben* 'woman, s. § 520) = Skr. *gnā-* 'woman', Goth dat pl. *gibō m* fr. st. *gibō-*, nom. sg. *giba* 'gift', *sō* 'the' f, Lith. instr. pl *rañko-mis* fr. st. *ranko-*, nom sg *rankà* 'hand', O.Bulg. instr pl *rąka-mi* fr. stem *rąka-*, nom sg *rąka* 'hand'. Indg conjunctive suffixes *-ā-*, *-i̯ā-*, etc., stem **bherā-* from *bher-* 'bear': Skr. 2. pl. *bhárātha*, Lat. *ferā-tis*, O Ir. 1. pl. *do-bera-m*, O Bulg. 1. sg. *berą* fr. **bherā-m* (cp Brugmann Morph. Unt. I p. 145, III p. 30 f, Kuhn's Ztschr. XXVII p. 419)[1]) Indg. pres. suffix form *-nā-* · Skr. *mi-nā́-mi* fr. rt. *mei̯-* 'lessen', Gr. Hom. *δά-νη-μι* *-tām* Indg. personal ending of the 3 du. act : Skr *ábhara-tām*, Gr. Dor. *ἐφερέ-τᾱν*, Indg. **ébhere-tām* fr rt. *bher-* 'bear'.

The tautosyllabic diphthongs *āi̯* and *āu̯* were not, as it seems, frequent in prim. Indg *-āi̯* ending of the dat. sg. of *ā*-stems: Skr. *su(v)-apatyāi* (*su(v)-apatyā-* 'having a beautiful posterity'), Gr. *χώρᾳ*, O Lat. *Mātūtā* 'Matutae', Goth. *gibai* 'to a gift'. Skr. *nāúš* 'ship', Gr. *ναῦς* fr **νᾱυ̯ς* (§ 611).

§ 102. Aryan. Skr. *sthāna-* n , Av O Pers *stāna-* n. 'standing, standing-place, place of abode' : Gr. *δύστηνο-ς* fr. **δυς-στᾱνο-ς* 'in evil plight', Lith. *stóna-s* 'position', O.Bulg. *stanŭ* 'position, bed'. Skr. acc. *nāv-am* 'navem', (ved.) *nāv-iyā* f 'a navigable river', Av. *nāv-ya-* 'flowing' : acc. Gr. Hom. *νῆ(ϝ)-α*, Lat *nāv-em*.

1) Gr. *φέρωμεν*, *φερητε* for **φερᾱμεν*, *φερᾱτε* with vowel quality after the analogy of the indic. and conj forms with *o*, *e* as Hom. conj. *ἴομεν*, *ἀλγήσετε*, Att. indic. *φέρομεν*, *φέρετε*.

Skr. *sénā-m* O.Pers. *hainā-m* acc. sg., Av. *haęnā-hu* loc. pl. fr. st. *sénā- hainā- haęnā-* (prim. Ar. **saįnā-*) 'army'. Conj. Skr. *váhā-si* Av. *vazā-hi* 'vehas', O.Pers. *parsā-hy* = Skr. *pṛchā-si* 'poscas'. —

Aryan *ā* corresponds not only to Indg. *ā* but also to Indg. *ē* (§ 70), *ō* (§ 86), and to long sonant nasal (§ 253). Here may be discussed certain changes which prim. Iran *ā*, irrespective of its origin, underwent in Avestic

1. After *y*, *ā* became *ę̄* before *i, ī, ę̄, y, c* or *j* in the following syllable *kārayēmi* : Skr. *kārāyāmi* causat fr. *kar-* 'make', cp *Lat. *moneō*. *ver*zyēiti* 3. sg. act., *ver*zyę̄itē* 3 sg. mid. conj. of *ver*zyēmi* 'I work, do' : cp. Lat *capiat, capiātur*. Cp. *ę* fr. *a* § 94.

2 *ā* became *ō* before *u, ū* or *v* in the following syllable, but the orthography is mostly inexact, since *ā* also occurs. *vī-dāotu-š* 'demon of the dead' beside abl. *vī-dātaoƀ*. Cp. *o* fr. *a* § 94.

3. *ā* became *å* before *əh* (fr *s*, § 558) and before nasal + explosive sounds. *nåəhā-* 'nose' : O.Pers. *nāha-m* acc., Skr. *nāsā-*, cp. Lat *nār-ēs*. *yåəhąm* gen. pl. from *yā-* 'quae' (Gr. *ἥ*) : Skr *yāsām*. *måəha-* 'moon' : Skr. *māsa-*. *ušåəh-em* acc. 'dawn' : Skr. *uṣās-am*, cp. Lat. *aurōr-a*. *vånti* 'they blow' : Skr. *vánti*, Gr. *ἄεισι* fr. **ἀϝη-ντι* (§ 611). *barånti* 3. pl. conj. of *barāmi* 'I bring'. Lat. *ferant*.

§ 103. Armenian. *elbair*, gen. *elbaur*, 'brother' (§ 263): Skr. *bhrátar-*, Gr. *φρᾶτωρ* (member of a *φρᾱτρία*), Lat. *frāter*, O.Ir. *brāthir*, Goth. *brōþar*, Lith. *broter-ėlis* ('little brother'), O.Bulg. *bratr-ŭ*, Indg. **bhrātor-* 'brother'. *nav*, gen. *navu*, 'ship' : Skr. acc. sg. *náv-am*; the Arm. word is, however, not free from the suspicion of having been borrowed from Persian.

§ 104. Greek. Dor. *ἁδύ-ς* : Skr. *svādú-š*, Lat. *suāvis* (*svāvis*) fr. **sᵚād-ᵚ-i-s* (§ 170), OS. *swōti* OHG. *swuazi suozi* (prim. Germ. **sᵚōt-ᵚa-*), Indg. **sᵚād-u-* 'sweet, lovely'. *δέ-δη(ϝ)-ε* 'it burns' *δήιον* (*δᾰϝιον*) *πῦρ* : Skr. *dāvá-s* 'fire-brand'. Dor. *φᾱ-μί* 'I say', fut. *φᾰ́-σω, φᾰ́-μᾱ* 'voice, saying' : Lat. *fā-rī, fā-ma, fā-bula*, O.Bulg. *ba-jati* 'fabulari'. Nominal suffix *-τᾱτ-*, Dor. *νεό-*

-rāς -rāt-os 'youth' : Skr. *dēvá-tāt-* (gen. *dēvá-tāt-as*) 'deity, worship', Lat *novi-tās*, gen. *novi-tāt-is*, 'novelty'

In Ionic-Attic *ā* became *η* : *ἡδύς*, *φημί*, *νεότης*. This was in certain Ionic dialects an open *ē* in comparison with the Indg. *ē* in *θή-σω* (§ 72) This passage to *η* is older than the first appearance of Att. Ion *τᾶς*, *πᾶσα* fr. *τάνς*, *πάνσα* (§§ 205. 618). Forms like *νγιᾶ ἐνδεᾶ* beside *σαφῆ* fr. *-ι(σ)-α* etc. render it more probable that the *ᾱ* in Att. *ἰάσομαι*, *καρδίᾱ*, *γενεᾶ*, *σικυᾶ*, *πρᾶττω*, *χώρᾱ* etc (Ion *ἰήσομαι*, *κραδίη*, *γενεή*, *σικύη*, *πρήσσω*, *χώρη*) goes back to an open *ē* than that it should be an unchanged Indg. and prim Gr. *ā*.

§ 105. Italic. Lat. *māter*, gen. sg. Umbr *matrer* Osc. maatreís : Gr. Dor *μᾱ́τηρ*. Lat *pāc-* 'peace', Umbr *pase* 'pace', Osc. Paakul 'Paculus' (cp *Pācuviu-s*) : Skr. *pā́śa-s* 'knot, cord', Gr. Dor. *πᾱ́γνῡμι* 'I fasten', OHG. *hī-fuoga* 'match-maker (of marriage)' fem., MHH. *vuoge* 'joint'. Lat *Stātiu-s*, Osc. Staatiis 'Statius', fr *stā-* 'stand'. Feminine suffix *-ā-* · Lat. *dextrā-bus, istā-rum*, Gen. *familiās*, Umbr. sestentasia-ru 'sextantariarum' tutas 'civitatis', Osc paa-m 'quam' *eyma-zum* 'rerum' *moltas* gen. 'multae' : Gr st *χωρᾱ-*, *τᾱ-*. Verbal stems in *-ā* · Lat *testā-* in *testā-tu-s testā-mentu-m*, Umbr. katera-mu *cateraha-mo* (*-aha-* = *-ā-*, § 23) 'catervamini', Osc tristaamentud abl 'testamento' : Gr. *πειρᾱ-* 'try' in *πειρᾱ́-σομαι*, *πειρᾱ-τέον*. Lat. *fāgu-s* 'beech' : Gr. Dor. *φᾱγό-ς* 'oak', OHG. *buocha* Ags. *bōc* 'beech', Goth. *bōka* 'letter'. Lat. conjunct. *sistā-tur*, *sternā-tur*, *sistā-mus*, *sternā-mus* : Gr. Arcad. *ἵστᾱ-τοι*, Skr. 3. sg. *sthā́-ti* (*sthā-* 'stand'), 1. pl. *yu-nā́-ma* (*yu-* 'yoke, draw tight'), cp §§ 111 rem and 113.

In Umbrian open *ō* fr. *ā* in the nom sg of *ā*-stems and in the nom. acc pl. neut. of *o*-stems, as the fluctuation between *o* (u) and *a* shows. etantu mutu 'tanta multa' and panta muta 'quanta multa'. vesklu and veskla 'vascula'. triiu-per *trio-per* 'ter' and triia 'tria'. The same *o*-sound in pihaz *pihos* 'piatus', *Casilos* 'Casilas' (dat. Kasilate *Casilate*) In Oscan likewise *ú*, *u*, *o*, *u* for the final *ā* in the nom. sg. of *ā*-stems and in the nom. acc. pl. neut of *o*-stems. Fem. víú víu 'via', *molto*

'multa', *τωϝτο* 'civitas'. Neut. teremennıú 'termina', *comono* 'comitia', *petıru-pert petiru-pert* 'quater'. Cp. § 655, 2.

§ **106.** Old Irish. *āg*, gen *āga*, 'combat' : Skr. *āǰí-ṣ* 'race, pugilistic combat', Lat. *amb-āgēs* 'circuit, way'. *-tau* 'am' : Lit. *pa-stóju* 'I become something', cpf **stā-i̯ō* fr rt. *stā-* 'stand'.

In the following examples the *i* after *a* indicates the *i*-timbre of the followıng consonant. *fāith* 'poet' fr. **u̯ātı-s* : Lat. *vātēs*, cpf of the stem **u̯ātı-*. *tāid* 'thıef': O Bulg. *tatĭ*, cpf. of the stem **tātı-*, Skr. *tāyú-ṣ* 'thief', Gr Dor *ταπάομαι* 'am bereft, in want'. *gāır* 'call, cry' : Gr. Dor. *γᾶρ-υ-ς* 'voice, speech'. Cp. § 640

In unaccented syllables mostly *a* for *ā*. *túatha* nom. pl. of fem. *tuath* (fr **teu̯tā*) 'folk' beside *mná* fr. st *mnā-* 'woman'. Adjectıves ın *-ach* fr. **-āco-s* (cp. Gall *Benācu-s*, *Dumnācu-s* and otheıs), as *cnoc-ach* 'hilly' from *cnocc* 'hill'. Cp §§ 613 657. Concernıng the dat. pl *túathaib* ı e *túathᵉib* s § 640.

§ **107.** Germanic. Goth. *sōkjan* OHG. *sōhhan soahhan suahhan suohhan* OS *sōkıan* 'to seek' : Gr. Dor. *ἄγέομαι* 'I lead or show the way', Lat. *sāgu-s* 'predicting' *sāgīre* 'I track, perceive'. Goth. *stōls* 'throne', OHG. *stuol* OS Ags. *stōl* O.Icel. *stōll* 'stool' : Lıth *pa-stóla-s* 'frame, scaffold'. Goth. *brōþar* OHG. *bruoder* O.Icel *brōðer brōðır* 'brother' : Lat. *frāter*. Verbal stems in *-ō*, e. g. *salbō-* 'anoint' part. pass. Goth. *salbōþs* OHG. *-salbōt* 'anoınted' : Gr. *πειρᾱ- πειρᾱτέον*, Lat *testā- testātu-s*.

Indg *ā* and *ō* fell together ın *ō* already in prim. Germ., s. § 91 What was there said concernıng the treatment of *ō* = Indg. *ō* in Goth. and OHG., also holds good for *ō* = Indg *ā*. For the shortenıng of final *ō* in polysyllabic words cp. e g. Goth. nom sg. *þuda* fr. prım. Germ. **þeu̯dō*, orıg. **teu̯tā*.

§ **108.** Baltic-Slavonic. Lith *ō*, Lett. Pruss. *ā*, O.Bulg. *a* (prim. Slav. *ā*, s. § 615).

Lıth. *broteı-ẽli-s* 'little brother' *bróli-s* 'brother', Lett. *brâli-s* 'brother', Pruss. voc. *brāti*, O.Bulg. *bratı-ŭ* 'brother' : Lat. *frāter*. Lıth. *motė̃* 'wıfe', Lett *mâte* 'mother', Pruss. *po-mātre*

'step-mother', O.Bulg. *mati* 'mother' : Lat. *māter*. Inf. Lith. *stó-ti* Lett. *stá-t* Pruss. *stā-t* O.Bulg. *sta-ti* fr. rt. *stā-* 'stand'. Dat. pl. of *ā*-stems: Lith. *žẽmó-ms* Lett. *ſīmá-m* O.Bulg. *zima-mŭ*, nom. sing. *žemà ſima zima* 'winter' Lith. *nósi-s* f. 'nose' : Lat. pl. *nārēs*, Skr Ved. du. *nás-ā*. O.Bulg. *tajĭ* adv. 'secretly' : Av. *tāya-* 'theft' Skr. *tāyú-ś* 'thief'.

ā is to be inferred for the Baltic unitary period This *ā* remained in Lett and Pruss, whilst it became *ō* in Lithuanian. Lith. *ō* is still pronounced very open in the Memel dialect, whereas elsewhere, probably in most places where Lithuanian is spoken, it has a close articulation. The universal Lith shortening of the broken accented vowel e g. in the nom. sg *žemà* (orig. f **ǵhe̯-mā*) arose at a time when *ā*, or at all events an *ō* differing very little from pure *ā*, was still spoken (§ 664, 3). This short *a* just as *a* = Indg. *o* (§ 84) is pronounced as open *e* in many dialects after *j* and palatalised consonants, e. g *ǵi̯è* = *ǵi̯à* f 'thread', *gìre* = *gìria* 'forest'.

ą arose in Slav in those cases where *ā* with the following nasal became a nasal-vowel. Acc. sg *ženą* 'wife', orig. f. **genā-m*. 1 sg *vezą* 'veho' = Lat. *veham*, cpf **u̯eǵhā-m*. Cp. § 219.

Indg. *ə*

§ 109. This vowel, whose quality cannot be more precisely determined — it may be pronounced as a sound lying between *a* and *e* — appears in many root syllables as the sonant of the secondary accented weak grade (§§ 315—317). We denote it by *ə* following the general practice of writing *ə* for the 'indistinct vowel-sound'.

In Armenian and European it fell together with Indg. *a* (§§ 93—100) (for the representation of it in Greek s. below), but was still separated from this in Aryan: Indg. *a* = Ar. *a*, but Indg. *ə* = Ar. *i*, only before *i*-vowels = *a* (cp. Hübschmann Das idg. Vocalsystem p. 1 ff.).

Indg. **pə-tér-* 'father' : Skr. *pitár-*, Arm. *hair* gen. *haur*, Gr. *πατήρ*, Lat. *pater*, O Ir. *athir*, Goth. *fadar*. Indg *stə-*,

weak form of the rt. *stā-* (Gr. *στᾱ-*, Lat. *stā-*) : Skr. *sthi-tá-s* 'standing' *sthí-ti-š* 'standing, stability', Gr. *στα-τό-ς στά-σι-ς*, Lat. *sta-tu-s sta-tiō*, Goth. *sta-þs* (st. *stadi-*) 'place', Lith. *sta-taũ* 'I place', O.Bulg. *sto-jǫ* 'I stand'. Indg. *də-* weak form of the rt. *dō-* (Gr. *δω-*, Lat *dō-*) : Skr. 3. sg aor mid. *á-di-ta* (act. *á-dā-t*), Arm. *ta-mk̔* 'damus', Gr. *δά-νος* n. 'gift, loan', *ἔ-δο-το δο-τό-ς δό-σι-ς*, Lat *da-mus da-tus da-tor*, Lith. part. pf. act. *dā-vęs*.

a. Aryan. Skr. *pi-tā́* Av. *pi-ta* O.Pers. *pi-tā* 'father' : Gr. *πα-τήρ* Skr. *mi-tá-* Av *mu-ta-* 'measured', Skr. Av. *mi-ti-* f. 'measure', Indg **mə-tó-*, **mə-tí-*, Gr. *μέ-τρο-ν*, fr. rt *mē-* (Lat. *mē-tior*, Skr *mā́-trā-* 'scale') Skr. *sā́-di-ta-s* 'fettered' *á-di-ti-š* 'unbound, boundless' : Gr. *ἀν-δε-το-ς δέ-σι-ς*, fr. rt. *dē-* (Gr. *δί-δη* 'he bound' *υπό-δη-μα* 'sandal', Skr *dā́-man-* 'string').

On the other hand ə became *a* before *i*-vowels. The optative, formed fr. the rts. *stā-*, *dhē-*, *dō-*, was in Indg. 1. sg. act. **stə-i̯ḗ-m*, 2 pl. **stə-i̯-té* (fr. **stə-ī-te* like **bhéroi̯te* = *φέροιτε* fr. **bhero-ī-te*), 3. pl. **stə-i̯-i̯ḗt*, analogously **dhə-i̯ḗ-m* etc.; thence prim. Ar. **staiam* **staita* **staiant*, **dhaiām* etc The *ē* in the Skr. forms act. 1. pl. **sthēma* 2. pl. **sthēta*, 3. sg. mid. **sthēta* (= Gr. *σταῖμεν*, *σταῖτε*, **σταῖτο*) was transferred to the forms with *-ay-* (cp. Skr. 3. pl. *bhárēy-ur* with Av. *baray-en* with *ē* instead of *ā* after *bhárēma* etc.), hence Skr. *sthēyām dhēyām dēyām*, *sthēyur* etc.; *sthēyāma* is formed after the analogy of *sthēyām*, like *s-yā-ma* for **s-ī-ma* (Lat. *sīmus*). Cp. § 116. Further Skr. *-ay-* and *-ē-* = *-əi̯-* in *dhā́yāmi* 'I suck' : Goth. *daddja* 'I suckle' (§ 142) O.Bulg *doją* 'I suckle'; and in *dhē-nú-š* 'milking', fr. rt. *dhē(i̯)-* (cp. Hübschmann as above p. 21 ff. 79).

b. Armenian. *ta-m* 'do' *ta-mk̔* 'damus' fr. rt. form *də-* 'give'. *dail* (*dal*) 'beastings' *dayeak* (gen. *dayeki*) 'wet-nurse' fr *dhəi̯-*, weak grade to rt. *dhē(i̯)-* 'suck' (cp. a.). *ba-n* 'λόγο-ς' (rt. *bhā-*) either from *bhə-* (Gr. *φᾰ-μέν*) or *bhā-* (Gr. *φη-μί*, Lat. *fā-ma*), see § 316.

c. Greek. *ἄ-δην* 'abundantly, enough' : Lat. *sa-tur sa-tis*, O.Ir. *sa-thech* 'satiated', Goth. *sa-þs* 'satiated', Skr. *a-si-nv-á-*

'insatiable', fr. rt. *sā-* (O Ir. *sāith* 'satietas', Goth. *sō-þs* 'satisfying', Lith. *só-ti-s* f. 'satisfying, satiety'). *παλαί-φα-το-ς φά-τι-ς φα-μὲν* fr. rt *bhā-* 'speak'. *λαθεῖν* beside *λήθειν* 'to escape', rt. *λᾱθ-*. *ταπεφός* 'easy to melt' *ταχῆναι* beside *τήκειν*, rt. *τᾱκ-*.

The weak grade forms of *ā*-roots regularly retained *α*. In like manner also the forms which became isolated through their development of meaning: *δά-νος* fr. rt. *dō-* and *λαγ-αφό-ς* 'slack, thin' *λαγ-όνες* 'the flanks, loins' : Lat. *laxu-s*, OHG. *slach* OS. *slac* 'slack' O.Icel. *slakr* 'slack, idle' fr rt. *slēg-* (Gr. *λήγω* 'I leave off' *ἀ-λλητο-ς* 'incessant'); also *δάκτυλο-ς* 'finger', in case it is connected with O.Icel. *taka* 'to take' beside Goth. *tēkan* (pf. *taitōk*) 'to touch' In other cases *ə*, in forms from *ē-* and *ō*-roots, took the timbre *ε* and *ο* after the analogy of forms with *η* and *ω*: *θε-τό-ς* fr. *θη-* 'set', *ἑ-τό ς* = Lat. *sa-tu-s* fr. *ῆ-* 'throw', *σύν-δε-το-ς* cp. Skr *sá-dha-ta-s* fr. *δη-* 'bind', *μέ-τρο-ν* fr. *μη-* 'measure' (Lat. *mē-tior*), *δο-τό-ς* = Lat. *da-tu-s* fr. *δω-* 'give' *πο-τό-ν* 'beverage' fr. *πω-* and others Cp. *οῤ*, *ολ* for regular *ορ*, *αλ* = Indg. *r̥*, *l̥* after the analogy of *οῤ ῥω*, *ολ λω* = Indg. *r̥* *l̥* in *ἐ-πορ-ο-ν* etc. § 306

Rem. Fick's hypothesis (Bezzenberger's Beitr IX 313 ff) that the vowel triad *α, ε ο* in *στα-τό-ς, θε-τό-ς, δο-τό-ς* is a continuation of three different prim. Indg. vowels, is not at all convincing.

d Italic. Lat *pa-ter*, Umbr. Iu-pa-ter 'Juppiter' Iuve pa-tre 'Jovi', Osc. pa-tír · Gr. *πα-τήρ*. Lat. *sta-bulu-m*, Umbr, *sta-flarem* 'stabularem', Osc. Anter-sta-taí dat. '*Inter-stitae', Volsc. *sta-to-m* 'statutum, consecratum', fr. rt. *stā-*. Lat. *da-mus da-tu-s*, Falisc. *da-tu* 'datum', Vest. *da-ta* abl. 'data', fr. rt. *dō-*.

Lat. *sa-tu-s* fr. rt. *sē-* 'sow' in *sē-men*. *spa-tiu-m* 'space' fr. rt. *spē(i̯)-* 'extend' in *spē-s*, Lith. *spė́-ti* 'to be at leisure, to be quick enough', O.Bulg. *spě-ti* 'to progress, have success'. *lassu-s* 'weary, tired' : Goth. *lats* 'weary, idle', fr. rt. *lēd-* in Goth. *lēta* 'I let, leave'. Lat. *ca-tu-s* 'sharp' beside *cōs cōtis* 'whetstone'.

For the treatment of Lat. *a* in syllables which, according to prim. Lat. accentuation, were unaccented, e. g. *Juppiter*, s. § 97.

e. Old Irish. *a-thir* 'father' : Gr. *πα-τήρ*. *sa-thech* 'satiated' : Lat. *sa-tur*, Gr. *ἄ-δην* 'abundantly', Skr. *a-si-nv-á-* 'insatiable'.

The form *-airissid*, 2. pl. of *-airissim* 'I stand, stand still' fr. rt. *stā-*, probably may not be traced back to **(pari-)si-sta-te* and directly be placed equal to Gr. *ἵ-στα-τε*, as can be the case with Lat. *sisti-te* = *ἵστα-τε* (§ 97 p. 91), since the form **-airessid* with the influence of the *a* on the preceding syllable would be expected; cp. also 1 sg. *-airissiur*, which points to **sistiō*.

f. Germanic Goth. *fa-dar* OHG. *fa-ter* O.Icel. *fa-ðer fa-ðir* 'father' : Gr. *πα-τήρ*. Goth. *sta-þs* (st. *stadi-*) OHG. *sta-t* (gen. *steti*) OS. *sta-d* (gen. *stedi*) 'place' : Gr. *στά-σι-ς*, Skr. *sthi-ti-ś*; OHG. *stara-blint* O.Icel. *star-blindr* 'blind with a cataract', Mod.HG. *starr* 'stiff' : Skr *sthi-rá-s* 'fast, immovable', rt. *stā-*. Goth. *ra-þjō* OHG. *re-dia* 'account' : Lat. *ra-tiō*, rt. *rē-* (Lat. *rē-ri*). OHG. *slaf* Low Germ. *slap* 'slack' to Goth. *slēpan* 'to sleep'. Ags. *snear* 'snare, cord, string' O.Icel. *snara* 'cord', rt. *snē-* 'bind, spin'. OHG *blat* OS. *blad* O.Icel. *blað* 'leaf', orig. part. 'blossomed', rt. *bhlē-* 'swell, bloom'.

For the treatment of *a* in OHG. (e. g. gen *steti* to nom. *stat*) s. § 83.

g. Baltic-Slavonic. Lith. *sta-taũ* 'I place', *stā-klės* pl. 'loom', O.Bulg. *sto-jǫ* 'I stand', fr. rt. *stā-*. Lith. part. pf. act. *dā-vęs* to inf. *dů'-ti* 'to give', fr. rt. *dō-*. O.Bulg. *spo-rŭ* 'plentiful' : Skr. *sphi-rá-* 'large, plentiful', to *spějǫ* 'I have success' : Skr. *sphāyāmi* 'I thrive'. O.Bulg. *doją* 'I suckle' : Goth. *daddja*, Skr. *dhāyāmi*, fr. rt. *dhē(ǐ)-* 'suck'.

§ 110. In prim. Indg. *ə* was frequently spoken directly after the root syllable. Some regard this *ə* as forming a fixed part of the root and speak of dissyllabic roots; whether rightly (cp. p. 17), or not is here a matter of indifference.

The forms, which the vowel in this case assumes in Lat. and O.Ir., are explained by the laws which hold good for unaccented syllables in these languages, cp. §§ 97. 98.

In Greek it appears as *α*, *ι*, *ο*. A still closer investigation is needed to determine on what the various timbre in this

case depends. The explanations hitherto attempted are unsatisfactory.

Skr. *duh-i-tár-*, Gr. *θυγ-ά-τηρ* beside Av. *dug°dar-* *duγðar-* Goth *daúhtar* Lith *duktẽ* 'daughter' Cp. Bartholomae Kuhn's Ztschr. XXVII p. 206 f., and von Fierlinger in the same vol. p. 478.

Skr *dam-i-tá-* 'tamed' *dam-i-tár-* 'tamer', Gr. *ἀ-δάμ-α-το-ς* 'unsubdued' *παν-δαμ-ά-τωρ* 'all-subduer', Lat *dom-i-tu-s* *dom-i-tor*. Skr. *vam-i-ta-* Gr *ἐμ-ε-τό-ς* Lat *vom-tu-s* 'vomited'

Skr. *jan-i-tár-* Gr. *γεν-ε-τήρ* *γεν-έ-τωρ* Lat *gen-i-tor* 'begetter', Lat *gen-e-trīx* Lat *mer-i-tōr-iu-s* *mer-e-trīx*, *mol-i-tor* *mol-e-trīna*.

Skr. *bhar-i-tra-m* 'arm, that with which one carries' (fr. *bhar-* 'carry, bear'), Gr. *φέρ-ε-τρο-ν* 'bier, litter', Lat *prae-fer-i-culu-m* 'offering-cup' (as implement, to bear something before one self) Skr *ar-i-tra-s* 'oar' (cp *ar-i-tár-* 'rower', Gr *ἐρ-ί-της* *Ἐρ-ί-τρ-ια*), *khan-i-tra-m* 'shovel' O Ir *cenēl* *cenel* 'sex, race' = O.Cymr. *cenetl* fr **ken-e-tlo-n*; *scēl* 'story, tidings' = Cymr. *chwedl* fr **skṷ-e-tlo-n* (Cymr *chwedl* fr. **sṷetl*, cp §§ 175. 573) fr rt. *seq-* 'say', O.Ir *ē* through compensation lengthening (§ 518), cp. Zimmer Kelt. Stud. II 7. 142 f., Thurneysen Rev. Celt. VI 324 f

Gr *αν-ε-μο-ς* 'wind', Lat. *an-i-mu-s*, cp Skr. 3. sg. *án-i-ti* 'breathes, gapes' Skr. *ján-i-man-* 'birth' *var-i-mán-* 'extent, distance' Gr. *τερ-ά-μων* 'becoming soft by boiling' *ἀ-τέρ-α-μν-ο-ς* 'indigestible, hard', *τελ-α-μών* 'shoulder-belt'. Lat. *reg-i-men*, *mon-u-mentu-m*, *col-u-men*, *col-u-mn-a*. O Ir. *anim*, dat. *anmain*, 'soul' (cp Lat *anima*), *menme* dat. *menmain* 'sense' (prim f. **men-ə-men-*).

Skr. *kravíš-* 'raw meat', Gr *κρέας*, cpf. **qreuəs-*; Skr. *śōcíš-* 'flame', Gr. *γῆρας* 'old age'.

Skr. *tan-i-šyámi* 1. sg. fut act. fr. *tan-* 'stretch, extend', *vēd-i-šyámi* fr. *vid-* 'know', *vart-i-šyé* 1. sg. fut. mid. fr *vart-* 'turn'. *ávēd-i-šam* 1. sg. aor. fr. *vid-* (cp. also *vēd-i-tum* inf., *vēd-i-tar-* 'knower'), *áyās-i-šam* fr. *yā-* 'go'. Gr. fut. *τεν-έ-ω* *τενῶ* (*τείνω* 'I stretch'), *κρεμ-ά-ω* *κρεμῶ* fr. the verbal stem *κρεμα-* 'hang

up' (cp. κρεμ-ά-θρᾱ 'a basket to hang things up in'), Hom. ὀμοῦμαι fr. ὀμ-ό-ομαι fr. the verbal st. ὀμ-ο- 'swear' (cp. ὀμ-ό-της 'swearer'). Plusquampf. ᾔδ-ε-α, opt. pf. εἰδ-ε-ίη-ν, opt. aor δείξ-ε-ιαν. Lat. fut. pf. *vīd-e-rō* (= Gr. εἰδ-έ-ω) *dīx-e-rō*, conj pf. *vīd-e-rīmus* (= Gr εἰδ-ε-ῖμεν) *dix-e-rīmus* Here perhaps belong also the Slav. aor. in *-o-chŭ*, e. g 1 sg. *nes-o-chŭ*, 2 pl. *nes-o-ste* from *nesą* 'I carry'.

Pres. Skr. *vám-i-mi* 'I vomit', *rṓd-i-mi* 'I lament, weep'. Gr. κρέμ-α-μαι 'I hang'; ἐμέω 'I vomit' is probably a transformation of *ϝεμ-ε-μι = Skr *vám-i-mi* Lat *vom-i-s*, *vom-i-t* (cp Skr. *vám-i-ṣi*, *vam-i-ti*) may be forms of this class, which, being associated with *legis legit* and the like, was the cause of their passing into the ō-conjugation; here probably belongs also *vol-u-mus* (*s-u-mus* a new formation, after which 1 sg. *s-u-m*).

It also seems necessary to assume Indg. *ə* in certain flexional syllables. Nom. acc pl neut Skr *bhárant-i* Gr. φέροντ-α = Indg **bhéront-ə*, part. pres fr. rt *bher-* 'bear'; cp. on the other hand voc. Skr. *ámba*, Gr νύμφᾰ, O Bulg. *ženo* with Indg *-ŏ* §§ 93 94 Are the personal endings Skr. *-mahi* and Gr *-μεθα* (1. pl. impf. mid Skr. *ábharā-mahi*, Gr. ἐφερό-μεθα) to be traced back to an Indg **-medhə*[1]

Vowel contraction in the indg. primitive period

§ 111. The Indg. long vowels and *i-* and *u*-diphthongs, whose regular representation in the individual branches of languages has been exhibited in §§ 28—108, were not, as may with probability be assumed from an etymological analysis of word-forms, originally monosyllabic, but first became so by contraction.

Rem. As regards the putting down of pre-historic forms we follow this principle: where by analysis a form can be deduced as being originally dissyllabic, and all languages concurrently exhibit it as monosyllabic, we regard the contraction as having already taken place in the prim Indg period, e g. the pf. stem *ēd-* (rt *ed-* 'eat', Lat *ēd-imus* etc) which, after the analogy of perfect stem forms whose root begins with a consonant, is to be resolved into an older *e-ed-*[1])

1) Since it is here only a question of the formative-type in general, it is immaterial whether this very example belongs to the oldest of its

Observe further: when an isolated form in a single language presents two vowels directly coming in contact with each other (but neither arising from the meeting together of two stems or words, nor due to the elision of a consonantal element which originally stood between the vowels), of which the first is an *a-*, *e-*, or *o-* vowel, it is never, so far as can be seen, the regular continuation of a prim. Indg. form with uncontracted vowels, but always a new formation. Here belong, e g the Homeric conjunctive forms *θήομεν*, *παρστήετον* etc. and Goth. 1. sg pf *aíáuk* (*áukan* 'to add, augment') Cp also § 600

The following are examples of forms which became monosyllabic in the Indg. prim. period. They, of course, all rest upon etymological analyses only and their hypothetical character should not be mistaken

§ 112. I Contraction of *a-*, *e-*, *o*-vowels with *a-*, *e-*, *o*-vowels.

The product of the contraction was everywhere *ā*, *ē*, *or ō*. When the two vowels differed in quality, the product regulated itself after the quality of the first. Cp Osthoff Morph. Unt. II 113 ff., Zur Gesch. d. Perf. 123 ff, Bremer in Paul-Braune's Beitr XI 264 ff

§ 113. I *ā* arose from:

ă + *a* Dat sg fem. **eḱu̯āi* fr. **eḱu̯ā-ai* or **eḱu̯a-ai* (**eḱu̯ā* 'mare': Skr *áśvā*, Lat *equa*): Skr. Ved. *-āi*, Gr *-ᾳ*, O.Lat *-ā*, Goth. *-ái*, O Bulg *-ě* Instr. sg fem **eḱu̯ā* fr. **eḱu̯ā-a* or **eḱu̯a-a*: Skr. Ved *-ā*, Gr. *-ā* (Att. *δημοσίᾳ*, *πῇ*, Ion. *κουφῇ*), Lat. *-a* (*frūstra*)

ā + *e* Nom. pl. fem. **eḱu̯ās* fr. **eḱuā-es*: Skr. *-ās*, Umbr. Osc *-ās*, Goth. *-ōs*, Lith *-ōs* Conjunctive stems in *-ā-* fr. *-ā-e-*, e. g. **stā-* fr. **stā-e-* (rt. *stā-* 'stand'), e. g Skr 3. sg. act. *sthāti*, Gr. Arcad. 3 sg. mid. *ἵστᾶτοι*

ā + *o* Conjunctive stems in *-ā-* fr. *-ā-o-*, e g. Skr. Ved. 1. pl. *yunáma* (1. sg. ind *yu-nā́-mi* 'I bind to'), Gr. Dor. *δύ-νᾱ-μαι* (Att. *δύνᾰμαι* is a new formation).

kind, and accordingly a dissyllabic *e-ed-* as predecessor of *ēd-* was once really spoken, or whether *ēd-* first made its appearance after the termination of the process of contraction and on coming into existence took its *ē* after the analogy of other perfect stems.

Rem. The Indg. nom. acc pl. neut. **jugā́* (Skr. Ved *yugā́*, Lat *juga*) fr. stem **jugo-* presents difficulties If *a* (or *ā*) was the case suffix: why not **jugṓ* or **jugē*? If Osthoff is right (Zur Gesch. d Perf. 123 f) that the product of contraction only assumed the quality of the first vowel, when the second did not contain the chief accent of the word, one might think of an older **jugo-á* or *jugе-á* (respec. *-á*) But it is equally possible that Indg. **jugā* is to be looked upon as **jug-á*, i e the stem forming suffix was dropped before the case ending (tonlose tiefstufe, 'unaccented weak grade' § 311).

§ 114. 2. *ē* arose from:

e + *a*. Perfect stem **ēĝ-* fr. **e-aĝ-* (fr. rt. *aĝ-* 'drive, lead'): 1. pl. Lat. *ēg-imus* Skr. *āj-imá*. Instr. sg. of *-o*-stems, e. g. **qē* fr. stem **qo-* 'who', Gr. Lacon. *πῆ-πoκα* 'usquam' or 'unquam', Goth. *hvē*: Skr. instr. in *-ā* can equally as well be placed here as to the form in Indg. *-ō* fr. *-o-a*. (§ 115)

ĕ + *e*. Perfect stem **ēd-* fr. **e-ed-* (rt. *ed-* 'eat'): Lat. 1. pl. *ēd-imus*, Goth. 1. pl. *ēt-um*, Lith. part. masc. *ėd-ęs* fem. *ėd-us-i*, O.Bulg. part. masc. *jad-ŭ* fem. *jad-ŭši*, Skr. 1 pl *ād-imá*, Gr part. *ἐδ-ηδ-ώς* for older **ἠδ-ώς*. Conjunctive stems in *-ē-* fr. *-ē-e-*, **dhē-* fr **dhē-e-* (rt *dhē-* 'place'), e g. Skr Ved. 3 sg. *dhā́ti*, prim. Gr. **θῆτι*. 1. sg impf. **ēs-ᾱ* 'eram' fr. **é-es-ᾱ* (rt. *es-* 'esse'): Skr *ā́s-am*, Gr Hom. *ἦα*, Att *ἦ*.

ō + *o*. Conjunctive stems in *-ē-* fr *-ē-o-*, **dhē-* fr **dhē-o-*, Gr. Messen. *προ-τίθητι*, Skr. Ved **dhā́nti*

§ 115. 3 *ō* arose from:

o + *a*. Dat sg. masc. **ekᵘōi* fr. **ekᵘo-ai* (**ekᵘo-s* 'horse' = Skr. *áśva-s*, Lat. *equo-s*): Av. *-āi*, Gr. *-ῳ*, Lat. *-ō*, Osc. *-úí*. Instr. sg. of the same class of stems in *-ō* fr. *-o-a*: Lat. *-o* (*modo, cito*), Gr. *-ω* (since a number of adverbs in *-ω -ως* are probably instrumentals, not ablatives), O.Ir. *-u* (*cēliu* fr. *cēle* 'comrade'), OHG. *-u*, Lith. *-ù* (*gerù* fr. **gerŭ*, as *gerŭ-ju* shows, s. § 664, 3); the Skr. instrumentals in *-ā* can equally as well belong here as to the form in Indg. *-ē* fr *-e-a* (§ 114).

ŏ + *e*. Nom. pl. **ekᵘōs* fr. **ekᵘo-es*: Skr. *-ās*, Umbr. Osc. *-ōs*, Goth. *-ōs*, O.Ir. voc. pl. *a fíru* 'o viri' fr. **wirōs* (§ 90). Conjunctive stems in *-ō-* fr. *-ō-e-*, **dō-* fr. **dō-e-* (rt. *dō-* 'give'), e. g. Skr. Ved. 3. sg. *dā́ti*, prim. Gr. **δῶτι*. 3. sg. indic. pf. of roots in

-ō, e. g. Skr Ved *dadá* 'dedit' fr. Indg. **dedó* fr **de-dó-e*, Goth. *saísō* 'sevit' for regular **saísa* (§ 660, 2) fr Indg **sesó* fr. *se-só-e* from rt. *sē-* 'sow'.

o + *o*. Gen. pl. **eḱuōm* fr **eḱuo-om*: Ar. *-ām*, Gr. *-ων*, Lat. *-um*, OHG *-o*, Lith *-ū*

o + a^x (i e. it cannot be determined whether the second vowel was *a*, *e* or *o*) Abl sg **eḱuōd* fr **eḱuo-a'd*: Gr *-ω* (Locr Crot. *ὦ* Locr *ὅπω* 'unde'), Lat *-ōd*[1]) Instr. pl. **eḱuōis* fr. **eḱuo-aˣis* Skr. *-āiš*, Gr *-οις* (§ 611), Lat. *-oes -īs* (§ 612), Lith *-ais* (§ 615) 1 sg pres act **bheroō* (Gr *φέρω*, Lat *ferō*) fr. **bhero-aˣ*. Ar *-ā*, Gr *-ω*, Lat *-ō*, O Ir *-u* (*no ráidiu* 'I speak'), Goth. *-a*, Lith *-u* (*sukù* 'I turn' fr **sukâ'*, cp the refl *sukúo-si* 'I turn myself', § 664, 3) The nom. acc du of *o*-stems in *-ōu* perhaps also belong here (whence *-ō* before consonants in prim. Indg § 645, 1), e g. **duōu* Skr. *dvāú* O Ir. *dau dō* 'two' (§ 85).

§ **116.** II Contraction of *a-*, *e-*, *o*-vowels with *i-* and *u*-vowels.

ei fr *e* + *i*, *oi* fr. *o* + *i*. Loc sg of *o*-stems partly in *-ei*, Gr. *-ι*, Osc *-ei*, partly in *-oi*, Gr *-οι*, OHG *-e* O Bulg *-ě* (compare however § 84 rem 3)

əi, *oi* fr *ə* + *ī*, *o* + *ī* Weak form of the opt of roots in *-ā*, *-ē*, *-ō*. **stəi-* fr **stə-ī-* (rt. *stā-* 'stand') Gr *σταῖμεν*, Skr. **stʰīma*, instead of which *sthīyāma* was formed after analogy of the sg *sthīyām* (for regular **sthayām*) **dʰəi-* fr **dʰə-ī-* (rt. *dʰē-* 'place'): Gr. *θεῖμεν* instead of **θαιμεν* (cp § 109 c), Skr. *dʰīyāma* instead of **dʰīma* after the sg *dʰīyām*. **dəi-* from **də-ī-* (rt *dō-* 'give') . Gr. *δοῖμεν* instead of **δαιμεν* (cp. loc cit.) Skr. *dīyāma* instead of **dīma* after the sg *dīyām* Cp. § 109 a. Opt. tenses with thematic vowel, e. g **bheroi-* fr. **bhero-ī-* (rt. *bher-* 'bear'): Skr. *bhárēš*, Gr *φέροις* etc.

1) Skr *má-d*, *tvá-d*, *asmá-d* permit the assumption that in the abl. sg *-aˣd* and *-d* stood beside each other in the same manner as *-ēs*, *-os* and *-s* in the gen sg Lith *vil̃ko* and Slav. *vlъka* 'wolf's', whose ending is to be traced back to an orig form with *ā* on account of Lith. *ō* (§ 108), can only stand in an indirect relation to Lat. *-ōd* and Gr. *-ω*; they are a problem of a similar nature as Indg **jugá* 'iuga' (§ 113 rem).

For Gr *γνοῑ-* in the Opt *γνοῖμεν* (indic. *ἔγνων ἐγνωμεν*), which goes back to **γνωι̯-*, a prim. Indg. form **ĝnōi̯-* fr. **ĝnō-ī-* must apparently be assumed. In like manner also for Gr. *πλεῖστο-ς* O.Icel *flester* (fr. **fleistr*) *fleire* an Indg. **plēi̯s-* fr **plē-is-* See §§ 611 614.

B. THE VOWELS AS CONSONANTS

§ 117. Of the vowels ascribed to the prim language there were two, *i* and *u*, which were employed both as sonants (*i, u*) and as consonants (*i̯, u̯*)

It is not possible in every case to draw a sharp line between Indg. *i̯, u̯* and the Indg spirants *j, v* (§§ 554 598).

i, u̯ can everywhere be assumed with certainty, where they correspond to an *i* and *u* of other forms of the same form-system, or stand in ablaut relation to *i* and *u*. 3. pl. **i̯-énti* (Skr. *y-ánti*) beside 2. pl. **i-té* (Skr *i-thá*) fr rt *ei̯-* 'go'. 3 pl. **qi-nu̯-énti* (Skr. *ci-nv-ánti*) beside 2 pl **qi-nu-té* (Skr. *ci-nu-thá*) fr rt *qei̯-* 'to set in rows' Nominal suffix *-i̯o-* beside *-i(i̯)o-*, as **medhi̯o-* (Skr *mádhya-s* Gr Hom *μέσσο-ς* fr. **μεθι̯ο-ς* 'medius') beside **pətri(i̯)o-s* (Skr *pítriya-s* Gr *πάτριο-ς* 'patrius'). **du̯ṓ* 'two' (Skr. ved. *dvá*, Gr *δ(ϝ)ώ-δεκα*) beside **du(u̯)ṓ* (Skr. Ved. *duvá*, Gr *δύω*) Nom pl. **trei̯-es* 'tres' (Skr *tráy-as*) beside loc. pl. **tri-su* (Skr. *tri-šú*). Nom. sg. **di̯ēu̯-s* 'sky' (Skr. *dyāú-š*, Gr. *Ζεύς*) and loc. sg. **diu̯-i* (Skr *div-í*, Gr. *Διϝ-ί*) Root form **su̯ep-* or **su̯op-* in Skr. *svap-na-s* 'sleep, dream' beside **sup-* in Skr. part. *sup-tá-s*, Gr. *ὕπ-νο-ς*

Where *i* and *u* were missing from Indg. times in formations which properly should have weak grade, the probability is for *j, v*. E. g. the participles Skr. *tyaktá-s*, Gr. *σεπτό-ς* exhibit the rt. *tjeg-*, not *ti̯eg-* ('step back from something', hence in Gr. 'to be timid, to honour with pious awe'), since from *ti̯eg-* the form **tiqtó-s* would have to be expected. Skr. *śétē* Gr. *κεῖται* 'lies' permits the assumption of the rt. *ḱei̯-*. Rt. *ves-* 'clothe', not *u̯es-*, on account of Skr. pf. mid. *va-vas-ē*, etc. Cp. § 307 ff.

In Greek initial ζ and ' decide whether we have to do with *j-* or *i̯-*, e. g. ζέω 'I seethe' fr. rt. *jes-*, ζυγόν 'yoke' fr.

rt. *jeu̯g-*, but *ἅγιο-ς* 'holy' fr rt. *u̯āğ-*, *ὑμεῖς* 'vos' fr. st. **u̯u-sme-* (Skr. *yu-šma-*).

In every case where the spirantal value of the sound can not be determined with certainty, or with great probability, we write the Indg. orig forms in this work with *ı̯*, *u̯*.

In most Indg languages *ı̯* and *u̯*, in dissyllabic vowel combinations as *ıa*, *ua*, were spoken as glides: *iı̯a*, *uu̯a*. This sound must have existed also in the Indg. unitary period. We assume therefore e. g **patr-ıo-s* and **duu̯ō* as the Indg. orig. forms of Lat. *patrius*, *duō* etc Cp Sievers Phonetik[3] 146, Osthoff Morph. Unt IV 398 ff. Analogously *ı* and *u* also before nasal and liquid sonants, e g. **sıı̯-ǧt* = O.Lat. *sient* (*sint*) fr. rt. *es-* 'be', **é-klıı̯-ǧt* = Skr. *áśrıyan* and **ke-klıı̯-ntái* = Gr. Hom. *κεκλίαται* fr. rt *klei̯-* 'lean against'. *ı̯* and *u* in this case corresponded to the *ı* in **ıs-ıro-* (Skr *iṣirá-s*, Gr. Corc. *ἰαρό-ς*) and to the *u* in **tıu-u-* (Skr. *tanú-š*, Lat. *tenu-ı-s*) etc, s §§ 223, 4. 284, 3

Indg *ı̯*.

Prim. Indg period.

§ 118. Initial *ı̯* only before sonants. Pronominal stem **u̯u-* (**u̯u-sme-*) 'ye, vos'. Skr. nom *yūyám* Abl. *yušmád*, Arm. *je-r* 'your', Gr *ὑμεῖς* 'ye', Goth *ƶus* 'ye', Lith *jūs* 'ye'. Skr. *yá-ti* 'goes', Av *jā-ŋ* n 'year', Gr *ὥρο-ς* 'year' *ὥρα* 'time', Lat. *ianua* 'entrance, door', Goth *ƶēr* 'year', Lith. *jó-ju* 'I ride' O Bulg *jadą* 'I drive, ride', *jarŭ* m. *jara* f. 'spring'. Skr. *yánti* fr. Indg **ı̯-ńti* (3 pl of **éi̯-mi* 'I go').

§ 119 Intersonantal. 1. sg. **ueı̯-ō*: Skr. *váy-ā-mi* 'I weave', Lith *vej-ù* O Bulg *vĭją viją* (§ 68) 'I turn, wind'. Nom. pl in *-ei̯-es* from *ei̯*-stems, e g **tréi̯-es* 'three': Skr. *tráyas*, Gr. *τρεῖς* fr. **τρε(ı̯)ες*, Lat. *trēs* fr. **tre(ı̯)es*, Goth. *þreis* fr. **þriı̯(ı)z* (§§ 67 660, 1), O.Bulg. *trĭje trıje* (§ 68). Causat. in *-éi̯ō*, e. g. Skr. *tarṣáyāmi* 'I let thirst, languish', Lat. *torreō* 'I make dry, parch', etc. Skr *sphāya-tē* 'increases, grows', Lith. *spėju* 'I am at leisure', O.Bulg. *spějǫ* 'I have success'. Lith. *pa-stóju* 'I become something', Lat. *stō*, O.Ir. *-tau* 'am' fr. **stā-ı̯ō*.

Derivative verbs as Skr. *pṛtanā-yá-mi* 'I fight' fr. *pṛ́tanā-* 'fight', *miśra-yá-mi* 'I mix' fr. *miśrá-* 'mixed', Gr. *τῑμῶ* fr. **τῑμᾱ-ι̯ω* fr. (Dor.) *τῑμᾱ* 'esteem', *φιλῶ* fr. **φιλε-ι̯ω* fr. st. *φίλε-* *φίλο-* 'amicus', Lith. *pãsako-ju* 'I narrate' fr. *pãsaka* 'narration', O.Bulg. *ląka-ją* 'I deceive' fr. *ląka* 'craft', etc.

Present stem **mn̥-ι̯e-* fr. rt. *men-*: Skr. *mányatē* 'means', Lith. *minù* O.Bulg. *mĭnją* 'I think'. Derivatives as Skr. *udanyá-ti* 'streams from' fr. prim. Ar. **udn̥-ι̯á-ti*, Gr. *τεκταίνω* fr. **τεκτη̆-ι̯ω*, Goth. *glitmunja* 'I shine' fr. prim. Germ. **ǥlitmn̥-ιō* (§§ 223, 2. 225)

Present stem **mr̥-ι̯e-* fr. rt. *mer-* 'die'. Av. *merᵊyeiti*, Lat. *morior*; Gr. *σπαίρω* 'I struggle convulsively', Lith. *spiriù* 'I push with the foot', cpf. **spr̥-ι̯ō* (§§ 284, 2. 286).

ι̯ as glide after *i* For examples see §§ 117. 120

§ 120. Postconsonantal. Stem forms **dḭ̄ḛu̯-*, **dḭeu̯-*, **dḭu-* 'sky': Skr. nom sg *dyāúš* acc sg. *dyắm* (§ 188) instr. pl. *dyú-bhiš*, Gr. *Ζεύς* fr. **δι̯ευς* **δι̯ηυ̯ς* (§ 611), *Ζῆν* (cp. § 188), Lat. *Jov-* in *Jovis* Osc Iuv-eí Umbr Iuv-e 'Jovi' fr. **dḭeu̯-* (§ 65). Root form *sḭū-* 'sew': Skr part *syū-tá-s*, OHG. *siut* m. 'seam' *siu-la* 'awl', Lith. part. *siú-ta-s*, *siú-la-s* 'linen-thread', O Bulg. part *šitŭ* fr. **sḭy-tŭ*, *šilo* n 'awl' fr. **sḭy-lo*. Stem **medhḭo-* 'medius': Skr. *mádhya-s*, Gr. *μέσσο-ς* *μέσο-ς*, Goth. *midjis*, O.Bulg. fem. *mežda* 'boundary' fr. **medḭā* Presents in *-ḭō*, e. g. **u̯r̥ǧ̄-ḭō* fr. rt. *u̯erǧ̄-* 'work, effect'· Av. *verᵊzyēmi*, Gr. *ἔζω* for regular **ϝάζω* (*ε* for *α* after *ἔῤξω*, *ἔῤδω* etc.) fr. **ϝραγ-ι̯ω*, Goth. *vaúrk-ja* (§ 299).

Postconsonantal *ι̯* often interchanged with *iḭ* in prim. Indg. (in the same manner as *u̯*, *n*, *m*, *r*, *l* with *uu̯*, *u̯n*, *u̯m*, *ru̯*, *lu̯*, §§ 153. 227. 287) A formative element assumed various shapes not only in different words, e. g. suffix form *-iḭo-* in **potr-iḭo-* (Skr. *pítriya-s* Gr. *πάτριο-ς* Lat *patriu-s*) beside *-ι̯o-* in **medh-ι̯o-* (Skr. *mádhya-s* etc., s. above), but also in the same words, e. g. stem forms **dḭḭēu̯-* **dḭeu̯-* (Skr. nom. *diyāú-š* acc. *diyắm*, Lat. *Diov-e* Osc. Diúv-eí *Διουϝει* 'Jovi', Lat. *diem*) beside **dḭḭēu̯-* **dḭeu̯-* (Skr. *dyāú-š* etc.). In this change it is a question of a difference of ablaut-grade, e. g. **gḭu̯-á* (Lith. *gijė* 'thread', Gr.

βιό-ς 'bow' for older **βιᾱ*, s Osthoff Morph. Unt. IV 188) represents the secondary accented (nebentonige) weakgrade form, but **gᵢ̯-á* (Skr *jyá* 'bow-string') the unaccented (tonlose); cp. §§ 307 ff. and 670.

We shall here confine ourselves to cases in which no ablaut (the opposite of weak and strong grade) can be determined. From the investigations hitherto made concerning the origin of the double forms *ı̯* and *u̯* (s especially Sievers in Paul and Braune's Beitr V 129 ff, Hubschmann Kuhn's Ztschr. XXIV 362 ff, Osthoff Morph Unt IV 353 ff, Zur Gesch. d. Perf 421 ff) the following may be given as probable·

After initial consonants the change depended on the nature of the final syllable of the preceding word. In the parent language they may have spoken **só sᵢ̯ēt* = Skr. *sá syāt* 'he may be', but **tód sᵢ̯ēt* = Skr. *tát syāt* 'that may be' (cp. also Goth. 1. sg *s-ıjáu*) Double forms may also here be shown as pres. st. **mᵢ̯-ᵢ̯é-* = Av. *mer'yᵉ-iti* Lat *morıo-r* beside **mr-u̯é-* = Skr *mriyá-tē*, Opt st **bhu-ᵢ̯ē-* = Av 3 sg *bu-yā-ţ*, Gr. Cypr. *φύ-ιη* beside **bhu-u̯ē-* = O Pers. 3 sg. *b-uyā* fr. rt *bheu̯-* 'be, become' (cp Osthoff Zur Gesch d. Perf. 426 ff.). **tód mᵢ̯etaı̯* 'that dies possibly stood originally beside **só mriᵢ̯etaı̯* 'he dies', impf. **é mriᵢ̯eto.*

ı̯ was used medially after short syllables, *u̯* after long, especially after consonant groups. This is seen most clearly by the suffix *-ᵢ̯o-*. Cp on the one hand **medh-ᵢ̯o-* 'medius' (s. above), **al-ᵢ̯o-* alius' = Arm *ayl* Gr. *ἄλλο-ς* O Ir *aile* Goth. *aljı-s*; and on the other **pətr-ıo-* 'patrius' (s above); **ekᵘ-iᵢ̯o-* 'equinus' = Skr. *áśvıya-s* Gr *ἵππιο-ς*, **ghesl-u̯o-* (deriv. of **ghes-lo-* 'thousand') = Skr. *sa-hasrīya-* 'thousand-fold', Gr. Lesb. *χέλλιοι* 'thousand'; **mort-u̯o-* = Skr *á-martiya-* 'immortal', Gr. *ἀ-μβρόσιο-ς* (*βροτός* for *μορτό-ς* through the influence of **βρᾰτό-ς* = Skr. *mṛtá-s* 'mortuus'); **nept-u̯o-s* = Av. *naptıya-* 'relation', Gr. *ἀνεψιό-ς* 'first cousin', O.Bulg *netıjĭ* 'first cousin' (*-ıj-* fr. *-ĭj-* § 36); **nāᵘ̯-u̯o-* = Skr. *nāvíya-* 'navigable', Gr. *νάϝ-ο-ς νᾱ́ϝο-ς* 'belonging to a ship'; also especially the established difference in Goth., e. g.

between gen. sg. *harjis* (*harja-* 'army') and *hairdeis* (*hairdja-* 'shepherd'), cp. § 84 rem 1.

It may be presumed that regular forms occasionally suffered interruption in their development already in prim. Indg. through analogy. This certainly frequently took place in the separate developments of the orig. language, as e. g. Skr. Ved. *gáv-iya-* (beside *gáv-ya-*) 'bovarius' after such forms as *áśviya-*, Gr Dor. *-κάτιοι* Arcad *-κάσιοι* (*διᾱ-κάτιοι* 'two hundred' etc., cp Skr. *-śatya* 'consisting of a hundred') after *χέλλιοι* (*χίλιοι*). But, besides this, *i̯i* fr. ̯*i* arose in Aryan (§ 125) and Lat (§ 135) by regular development.

§ **121.** Antconsonantal. ̯*i* only occurred in this position after *a-*, *e-* and *o*-vowels, with which it formed 'diphthongs', e. g 3. sg. **u̯ói̯d-e* 'knows'. Skr. *véda*, Gr. *Fοῖδε*, Goth. *váit*. For the fate of ̯*i* in these combinations cp §§ 61—108 and § 150

§ **122.** Finally. ̯*i* only occurred finally as the second component of diphthongs, cp. nom. pl **tói* 'the' = Skr. *té* Gr. Hom. *τοί* etc, dat. sg. in *-āi̯* of *ā*-stems (§ 101 extr.). The treatment in the individual languages was generally the same as before consonants, cp. e g. Skr. *té* with *véda* (= Gr *Fοῖδε*).

When conditionally final (in the body of a sentence), ̯*i* also stood after consonants, e g. Indg. **proti̯ ebherom* may be assumed for Skr. *praty-abharam* Gr. *προς-έφερον* 'I brought forward'. Cp § 645 finals 2.

Aryan.

§ **123.** Initially. Pronominal stem Skr. Av. O.Pers. *ya-* 'which' (in Iran. also demonst.), nom. acc neut. Skr. *ya-d* Av. *ya-ϕ*, Skr. *yá-thā* Av. *ya-ϕa* O.Pers. *ya-ϕā* 'how': Gr. *ὅ-ς* 'qui' *ὅ* 'quod', Goth. *jáins* 'that' (either to Lith. *ji-* in *jì-s*, § 84 rem. 1 or according to Lidén Arkiv f. Nord. fil. III 242 from Indg. loc. **i̯oi̯*, formed like Gr. *ἐκεῖ-νο-ς* fr. *ἐκεῖ*), *ja-bái* 'if', acc. sg. fem. Lith. *jã̀* O.Bulg. *ją* 'eam' (= Skr. *yá-m*, Gr. *ἅν*, *ἦν*). Skr. *yájati* Av. *yazaitē* 'honours', Skr. *yájas-* n. 'veneration':

Gr. ἄζομαι 'I honour, stand in pious awe of' fr. *ϰαγϰομαι (§ 131), ἅγος n. 'veneration'.

The difference between initial Indg. ḱ- and ǰ- is still seen in Skr. ptc. *iṣṭá-* fr. *yaj-* 'honour' (Gr. ἅγ-ιο-ς) and *yas-tá* fr. *yas-* 'bubble, seethe' (Gr. ζέω) and similar forms. See §§ 117. 318. 598.

§ 124. Intersonantal. Skr. *ā-vay-a-ti* 'drives on, leads to' *pra-vay-ana-m* 'drover's goad', Av *vay-eiti* 'drives, scares': Lith. *vej-ù* 'I persecute', O.Bulg *voj-ī* 'warrior'. 1 sg. Skr. *dhārāyāmi* Av. *dārayēmi* O.Pers *dārayāmīy* (read *-mi*) 'I hold, keep', Indg. ending of the 1. sg. *-eḭō Nom. pl Skr. *gir-áy-as* Av. *gar-ay-ō* 'mountains' (Nom. sg. Skr. *giri-ṣ* Av. *gairi-š*, cpf. **gṛr-i-s*, § 290)

1 sg impf. Skr *áyam* O Pers *ayam* (read *āyam*) 'I went' = Indg. **ḗḭm(m)*, cp. Gr. ᾖα for *ᾔα (§ 130), fr. rt. *eḭ-* Opt 3. sg. Skr. *hanyát* Av. *janyāþ* 'he may strike dead', prim. f. **ghṇ-ḭē-t*, fr. rt *ghen-* 'strike dead' Opt 3. sg. Skr *gamyát* Av. *jamyāþ* 'he may come', prim. f **gṃ-ḭē-t*, rt. *gem-* 'come'. Av. 3 sg. *mer*yęiti*, to Lat. *morior* (§ 119). Skr. 3 sg. *kuryát* 'he may make' fr **kṛyát*, prim f. **qṛ-ḭē-t* (§ 289)

In Av. for final *-ayē* (= prim. Ar. *-aḭaḭ*) *-ēē* is written and for final *-ayem* (= prim. Ar. *-aḭam*), *-aęm*, e. g. dat. sg. *matēę* = Skr. *matáy-ē* (nom. sg. Av. *maiti-š* Skr. *matí-ṣ* f. 'sense, thought'), 1 sg. impf. *vaęδaęm* 'I let know' = Skr. (*á-*) *vēdayam*, prim. f. **ϰoiδeḭo-m*, rt. *ϰeiδ-* 'know'. See Bartholomae Handb §§ 93 95. 224 290.

§ 125 Postconsonantal Skr. *jyá-* Av. *jyā-* 'bow-string', prim. f. **gḭ-ā-*. Skr. *sat-yá-* Av. *haiþya-* O.Pers. *hašiya-* (read *hašya-*, s. below) 'true'. Skr. *ar-yá-* Av. *airya-* 'faithful, devoted to, Aryan'. 1. sg. Skr. *páś-yā-mi* Av. *spasyēmi* 'conspicio', Indg. **spek-ḭō*. Passive Skr. *śas-yá-tē* 'is valued', O.Pers. *þah-yā-mahy* 'we are called'.

In Vedic ḭ often interchanged with *iḭ*, e. g. *áśv-iya-* 'ἵππιος', *rāj-iyá-m* 'dominion' (cp. Lat *rēgiu-s*), *mitr-íya-* 'friendly' but *sat-yá-*; dat. abl. pl. *prajá-bhiyas* beside *prajá-bhyas* (*prajá-*

'posterity') *pitṛ́-bhyas* (*pitár-* 'father'), etc. Cp. § 120. In the classical language mostly only *ṛ* occurs, e. g. only *-bhyas*, only *rāj-ya-* etc., only opt. *syām* 'sim'. The old grade *iṛ* remained however e. g. in *mr-iya-tē* 'moritur', *kr-iya-tē* 'is made' (*kar-* 'make') and similar presents, in the opt. (precative) *kr-iyā-t* from *kar-* and similar forms; in the aor. *a-śi-śriy-a-t* fr. *śray- śri-* 'lean against'; in the instr. sg. *bhiyā* fr. *bhī-* f. 'fear' (cp. Ved. part. *bhiy-āná-*, Lith. *bij-aũ-s* 'am in fear') *striyā* from *strī-* 'wife' (but *ṛ* in other than initial syllables: *dātryā* fr. *dātrī-* 'donatrix'). In the popular dialects *iṛ* frequently appears for the *ṛ* of the classical language, without the quantity of the preceding syllable being a criterion in the same manner as in Vedic. In this case it is undoubtedly, partly at least, not a question of Indg. *iṛ* or analogy, but of a purely regular evolution fr. consonant + *ṛ* (as in Lat.), e. g. Pāli *mariyādā* = Skr. *maryādā* 'mark, boundary'; *ariya-* = Skr. *arya-* (*-iy-* very frequently after *r*); *kammaniya-* beside *kammañña-* = Skr. *karmanya-* 'operative, active'; Prākr. *cōriam* = Skr. *caurya-m* 'theft'; *uddisia* = Skr *ud-diśya* absolutive 'by pointing to'. With Prākr. *ia* for *iṛa* cp. *nutta-* = Skr. *n-yukta-* 'bound to'.

Prim. Iran. *hṛ* = prim. Ar. *sṛ* became *ŏh* in Av., but *hy* was still retained in the Gāṭhā dialect. *vaŏhō*, Gāṭh. *vahyō* : Skr. *vás-yas* 'melius', neut compar. of *vaŏhu-* · Skr *vásu-* 'bonus'. Cp. § 558, 3.

Final *-ṛa -ṛā*, which was still retained in the Gāṭhā dial. as *-yā* (i. e. *-ya* and *-yā*, § 649, 1), appears after consonants, especially after *h*, (= prim. Ar. *s*, § 558, 3) as *-ṛ*. *yẹhẹ*, Gāṭh. *yẹhya* : Skr. *yá-sya*, gen. sg. fr. *ya-* 'which'.

-ĕm appears for *-yem*. *aiṇm* : Skr. *anyá-m* 'alium' (Gāṭh. also *anyēm*). *haiṭīm* : Skr. *satyá-m* 'verum'. Similarly *yesnīm* : Skr. *yajñíya-m* 'venerandum'. Cp. Bartholomae Handb. § 95.

In Av., as in Vedic, the metre shows that *y* is often to be read as *iy* especially after long syllables, e. g. *bāmya-* 'beaming, shining' as *bāmiya-*, dat. pl. *hitaebyō* = Skr. *sitē-bhyas* 'vinctis' as *hitaebiyō*. This is further shown by the preceding voiceless

explosives not being changed into spirants, e. g *dāutya-* 'legal' was *dāuṭiya-*; because **dāṭ̯a-* would have become **dāiθya-*, as e. g. *haiθya-* = Skr. *satyá-* 'true' shows (§§ 353. 473).

In Old Persian *iy* or *īy* mostly occurs (the latter only graphically different from *iy*, s. § 21). In a number of cases in which these spellings are found, the pronunciation may have been *i* as in Ved and Av But this can only be directly supported in cases where the preceding *t* was not changed to *š* (§§ 353. 473), e g *martiya-* 'homo' = Av *mašiya-* (*š* = *rt* § 260) Ved. *mártiya-* (§ 120 p 112). In most cases, however, *iy* (*īy*) will have to be read as *ɨ*, certainly in *hašiya-* (= Av. *haiθya-* Skr *satyá-*) and others, where *š* was caused by *ṭ̯*, probably in *aniya-* (= Av *anya-*, Skr. *anyá-*), *manuyāhy* (2 sg conj. pres, to Av 1. sg indic pres *manya*, Skr 3 sg pres. indic. *mányatē* fr. Ar. *man-* 'think'), 3 sing. opt *jamīyā* (= Av. *jamyāṭ* Skr *gamyát* 'eat') and others of the same kind

On the other hand O Pers. *tya-* 'which' is to be read as *tiya-* on account of the non-change of the *t*, cp. Ved. *tyá-* beside *tyá-* 'that, the'.

§ 126. Anteconsonantal and finally. The vowel remained *ɨ* after *ā* (*āi*) in Sanskrit, whereas in prim Ar. and prim. Skr *aɨ* became *ē*. Prim. Ar and prim. Iran. *aɨ* appears in Av. as *ae* (i. e *aē*) or *ōi*, finally as *-ōi* and *-ē*, prim. Ar. and prim. Iran. *āɨ* as *ai*; prim. Ar. *aɨ* and *āɨ* remained unchanged in O.Pers (*ai*, written *-aiy -ay* when final, and *āi*).

Prim. Ar 3 sing **aɨ-ti* 'goes' = Indg. **éɨ-ti*, Gr *εἶ-σι* : Skr. *éti*, Av. *aeiti* (fr *aeti* § 638), O.Pers. *aitiy*. Prim Ar. 3. sg. **bharaɨt* 'he may bear' = Indg. **bheroɨt*, Gr. *φέροι* : Skr. *bhárēt*, Av. *bārōiθ*. Prim. Ar. **dūraɨ*, loc sg of **dūra-* 'distant', cp. Gr. *οἴκοι οἴκοι* 'at home' : Skr. *dūrḗ*, Av. *dūrōi dūrē*, O.Pers. *dūraiy dūray*.

3. sg. Skr. *āit*, Av *āiθ* 'went', Indg. **ēɨt* fr. **é eɨt*, fr. rt. *eɨ-*; O.Pers. *atiy-āiš* 'went beyond' (the ending *-š* from the sigmatic aorist). Instr Skr. pl *śatāiś* Av. *satāi-š* from st. Skr. *śata-*

Av. *sata-* 'centum', Gr. *-ος* (§ 611). Av. dat. sg. *mazištāi* fr. st. *mazišta-* 'maximus' : Gr *μεγίστῳ*.

Cp. §§ 62. 78. 94.

§ 127. The transition of ḱ to a palatal spirant.

y was probably everywhere a consonantal vowel in Vedic and classical Sanskrit. Whilst initially and frequently also medially it became a spirant in Prākrit, hence e g. *ja-* 'which' (**ज**) = *ya-*, *kajja-* n 'business, trade' (**कज्ज**) = *kārya-*.

Bartholomae (Handb. pp. 9. 36 f, cp. also Hubschmann Kuhn's Ztschr XXIV 354 f) thinks that it had partly a spirantal function in Iranian. The change of prim Ar tenues into spirants seems to have been caused by this in every case (§ 473)

Armenian.

§ 128 It is here difficult to ascertain the sound-laws owing to the scarcity of reliable etymological material. In any case ḱ probably did not remain unchanged

Initial ḱ seems to have became a spirant *j* in *je-r* 'your', which is generally connected with Skr. *yu-šma-* Lith. *jūs* 'ye'.

ḱ disappeared after consonants. *ču* 'a breaking up', to Skr. *cyu-ti-ś* 'quick motion, departure from something'; it is not however clear whether the prim. Indg rt. is *qieu-* or *qjeu-*. Epenthesis appears in *ail*, gen *ailoy*, 'alius' fr **alio-* (Goth. *alja-* Gr *ἄλλο-* etc.).

For the rest we refer to Hubschmann Armen. Stud. I 78

Greek.

§ 129. Initially uniformly ', which presupposes a voiceless ḱ as intermediate stage *ὅς* 'who' : Skr *yá-s*. *ἧπαρ* 'liver' : Av. *yākarᵉ*, Skr. *yakṛt*, Lat. *jecur* *ἁγνό-ς* 'holy, venerable' : Skr. *yajñá-s* 'offering' *ὑσμίνη* 'battle' : Skr. *yudh-* 'fight'. Lesb. ' fr. ' · *ὔμμες* 'ye' beside Att. *ὑμεῖς*, to Skr. *yu-šma-*, cp Lesb. *ὀ* fr. *ὁ* = Skr. *sá* § 564.

§ 130. Intersonantal. ḱ between vowels, when the first was not *u*, dropped out in prim. Gr. (except when, after *i*, it

served as a glide to the following vowel, s. § 131). δέος 'fear' fr. *δϝεϳ-ος, Hom pf. δείδω i. e. *δέδϝω 'I fear' probably from *δεδϝο(̯)-α, rt. *dʰeiə̯-*. Nom. plur. τρεῖς 'three' fr. *τρε(ϳ)-ες : Skr *tráy-as*. 1. sg. φοβέω 'I frighten, scare away' : Skr. *bhā-jáyāmi* 'I hunt'. The cases, in which ̯i seems to have been retained in this position, are new formations, e. g. Arcad. τείω 'I atone for, pay' not = Skr. *cáy-a-tē*, but a formation from τίω τίω (Skr *cī-yá-tē*) after τείσω ἔτεισα etc., Hom ὀκνείω beside ὀκνέω 'I hesitate, linger' not fr. *ὀκνε-ϳω (cp ὄκνο-ς 'hesitation'), but formed after such presents as τελείω fr. *τελεσ-ϳω 'I finish' (§ 131)

̯i after u̯· Cypr opt. φύ-ϳη = Av *bu-yā-þ*, Indg. **bhu-i̯ē-t*; Lesb. pres. φυίω fr **bhu-i̯ō*, rt *bheu̯-* 'be, become'

When the second vowel arose from Indg. sonantal nasal: 1. sg. ἦα 'went' for regular *ἤα (ἠ-, formed after ἦμεν etc.) fr. Indg. **ĕi-m̥*, 3 pl opt. mid. Hom φερείατο for *φεροατο (-οι- after φεροίμεθα etc.) fr. **bhéroi̯-n̥to*, rt. *bher-* 'bear'

1 sg. τεκταίνω 'I make' fr. *τεκταν̥ϳω, *τεκτη̥-ϳω fr. τέκτων. βαίνω fr *βαν̥ϳω, *βαμ-ϳω, *gm̥-i̯ō (§ 204), rt. *gem-* 'go'. Cp. § 234. σπαίρω 'I struggle convulsively' fr. *σπαρϳω, *spr̥-i̯ō (§ 293) : Lith. *spiriù* 'I push with the foot'. ̯i palatalised nasals and ρ and combined with the preceding α to form αι (§ 639). On the other hand σκάλλω 'I stir up, hoe' fr. *σκαλϳω, *skl̥-i̯ō : Lith. *skilù* (fr. **skil-ni̯u*) 'I strike fire'. Cp. § 131.

§ 131. Postconsonantal.

si̯- became ' : ὑ-μήν (ῡ) 'thin skin' ὕ-μεν-ο-ς 'hymn, song', to Skr. *syū́-man-* 'cord' *syū-tá-s* 'sewed', cp further the compounds with κατ(ά) κάσσῡμα Att κάττῡμα 'anything stitched, leather sole', νεο-κάττῡτο-ς 'new-soled'.

Postvocalic *s* and *u̯* became palatalised by a following ̯i, then the latter combined with the preceding vowel to form a diphthong (§ 639). Gen. sg. *το-σϳο 'of the' = Skr. *tá-sya* became *τοισο, Hom. τοῖο, Att. τοῦ. Hom. τελείω Att. τελῶ 'I complete' fr. *τελεσ-ϳω st. τέλεσ- 'end', cp. Skr. *namas-yá-tī* 'honours' from *námas-* 'honour, respect'. Hom. εἴην 'sim' fr. *ἐσϳην, cp. Skr. *syā́m*; the -ι- in the Att. form εἴην is due to the

influence of *εἶμεν*. **κλαϝ-ι̯ω* 'I weep' (fut. *κλαυ̃-σομαι*) became **κλαιϝω*, hence Hom. Att. *κλαίω*, but **κλαιϝε-* Att. *κλᾶε-* in *κλάεις* etc, like *δᾱ́ήρ* 'brother-in-law' fr. **δαιϝηρ* = Skr. *dēvár-*, s. § 96. The double forms *κλαίω*, and *κλάω*, as well as *καίω* and *κάω* 'I burn, light' (fut *καύσω*) are due to levelling: the forms were originally *κλαίω κλάεις κλάει κλαίομεν* etc.

**κτεν-ι̯ω* 'I kill' became *κτέννω* in Lesb. and *κτείνω* in Att. (by compensation lengthening). **ἀμεν-ι̯ων* 'better' became Att. *ἀμείνων* Bœot. *Ἀμεινοκλεῖος* Arcad. *Ἀμηνίᾱς* Cypr. *Ἀμηνίϊα*. **φθερ-ι̯ω* 'I destroy' became Lesb *φθέρρω*, Att. *φθείρω*, Arcad. *φθήρω*. *Πείρ-(ανθο-ς)* = Lesb. *πέρρ-(ογο-ς)* fr **περι̯-*. These forms show that Hom. *εἰν* and *ὑπείρ*, which arose from **ἐνι̯*, **ὑπερι̯* before words beginning with a vowel, are due to compensation lengthening. *πειρι-* Dor. *πηρι-* (*Πειρί-θοο-ς*, *Πηρί-θοο-ς*) is a mixture of *περὶ* + *πειρ-* (Dor. **πηρ-*), as is also Hom. *εἰνὶ* of *ἐνὶ* + *εἰν*. Cp. § 618

Whereas **στελ-ι̯ω* 'I order' became universally *στέλλω*, **ἀλι̯ο-ς* 'alius' Att etc. *ἄλλος*, but Cypr. *αἴλο-ς*. Cp. §§ 130. 639.

Indg *qu̯*, *ghu̯*, *k̂u̯*, *ĝhu̯*, *tu̯*, *dhu̯* appear as *σσ*, *ττ*, see § 489; Indg *gu̯*, *ĝu̯*, *du̯* as *ζ* (*σδ*), *δδ*, s. § 493.

Indg. *pu̯* became *πτ*. Verbal stem *πτῡ-* in *πτύω* 'I spit' fr. **(σ)πῑ̯ῡ-*: Lith. *spiáu-ju* O.Bulg. *plju-ją* (fr. **(s)pi̯ū-i̯ą*, § 147) 'I spit', Skr. *abhi-šthyū-ta-* 'bespit' (cp. § 327). *χαλέπτω* 'I oppress, depress' fr. **χαλεπ-ι̯ω* fr. *χαλεπό-ς*.

The prim. Indg. duality ̯ and *u̯* was preserved e. g. in *μέσσος μέσος* 'medius' (fr. **μεθ-ι̯ο-ς* = Skr *mádhya-s*) compared with *πάτριος* 'patrius' (= Skr. *pítriya-s*), in *ῥέζω* 'I do, work' (fr. **ϝρεγ-ι̯ω*, cp. § 120) compared with *ἰδ-ίω* 'I sweat'. On the other hand the Lesb forms *μέτερρος*, *ἀλλότερρος* = Att. *μέτριος* 'moderate', *ἀλλότριος* 'alienus' etc. show a sound-change which took place within Greek itself: *μέτριος* became **metrios*, **meterios*, thence *μέτερρος* (§ 626). It seems to me more probable that the *ζ* in Lesb. *ζᾱ́*, *κάρζα*, *Ζόννῡσος*, Cypr. *κόρζα* and others, beside *διᾱ́*, *καρδία*, *Διώνῡσος* (s. Meister Griech. Dial. I p. 127 ff.) is due to a Gr. change of *i* to ̯ than to regard it as an old inherited double form as is the case with *μέσος* and *πάτριος*.

The Cypr. orthography *Παφίια*, *ἰατῆραν*, Pamphyl. *διά*, *Εσ(ϝ)ενδινς* (= *Ἀσπένδιος*) (read *iy*), and other facts show that the antevocalic *ι* was pronounced *-iy-* in words like *πάτριος*. The ending *-ιο-ς* was therefore probably the unchanged form of Indg. *-iyo-s*

§ 132 Anteconsonantal and finally.

The Indg. anteconsonantal *ei̯*, *oi̯*, *ai̯*, *ēi̯*, *ōi̯*, *āi̯* can all be proved to be pure *i̯*-diphthongs up to historical times. E. g *εἶμι* (= Indg. **ei̯mi* 'I go'), *οἶδε* (= Indg. **u̯oi̯de* 'he knows'), *φέρεται* (= Indg **bheretai̯* 3 sig. mid fr rt *bher-* 'bear'), *ἵππωι* *ἵππῳ* (= Indg **ekuōi̯* 'to a horse'), *χώρᾱι* *χωρᾳ* ('to land' with Indg. ending *-āi̯*) were, in Attic, still pronounced with *ei̯*, *oi̯* etc. about 500 B. C

But *ei̯*, *oi̯*, *ai̯* underwent manifold changes even at an early period In certain cases *i̯* became *i̯*, and in others the consonantal vowel coalesced with the first component to form a simple long vowel. S. §§ 64 80 96. In the Middle Ages monophthongs were generally the only forms still met with

The first component of *ēi̯*, *ōi̯*, *āi̯* was shortened before consonants in prim. Gr, e g *ἵπποις* = Skr. *áśvāiṣ* (§ 611) When final, they remained unchanged up to historical times But then final *i̯* became mute at the same time with the new *i̯* in the combinations *ηι*, *ωι*, *ᾱι* (*ῃ*, *ῳ*, *ᾳ*) which in the meantime had often arisen before consonants, as *ἦτε* 'ye went', *ῥᾴδιος* 'easy'. This process however dit not extend itself over the whole language at the same time; it seems everywhere to have taken place with *ηι* earlier than with *ᾱι* and *ωι* Towards the end of the third Cent B. C. they were still only spoken as simple vowels in all or most dialects, e. g *ἵππῳ* as *hippō*, *ἦτε* as *ēte*.

Italic.

§ 133. Initially. Indg. *i̯* and *j* fell completely together in *i̯*, written *j* in Lat words, and *i* in Umbr.-Samnitic. Indg. *i̯* e. g. in Lat. *jecur* 'liver' : Skr. *yakṛt*, Gr. *ἧπαρ*. Cp. Lat. *jugu-m* 'yoke' : Gr. *ζυγό-ν*, with Indg. *j-*. It is frequently uncertain

whether a form represents Indg. *i̯-* or *j-* : Lat. *jocu-s* 'joke', Umbr. iuka 'ioca' : Lith. *jū̃kas* 'joke'; Lat. *juven-i-s juven-cu-s*, Umbr. *ivengar* nom. 'iuvencae' (*i-* fr **i̯u-*) : Skr. *yúvan-* 'young' *yuvaśá-s* 'youthful', Goth *juggs* 'young'.

Several centuries after the beginning of the Christian era Lat. *j-* (*i̯-*) became a spirant which became developed to *dž-*: cp. e g. Ital. *giovane* Fr *jeune* with Lat. *juvenis*.

§ 134. Intersonantal *j* between vowels seems to have disappeared already in prim. Italic[1]), when after *i* it did not serve as glide to the following vowel Lat *eā-* 'she', acc. *eam* : Goth *i̯ō-* 'she', acc. *i̯a*, cpf **ei̯ā-*, Umbr *eam* 'eam' eaf 'eas', Osc. íok 'ea' Nom. pl. Lat *trēs* 'three' fr **tre(i̯)-es* : Skr *tráy-as*; Lat *pontēs*, Umbr puntes 'bridges' : O Bulg. *pǫtĭje pǫtije* 'ways'. Lat. st. *aer-* (gen *aer-is*) 'ore, bronze' *aēnu-s ahēnu-s* 'brazen', Umbr. ahesnes 'aenis' (where *h* only indicates the separation of the vowels in both dial.), fr **ai̯es-*, **ai̯es-no-* (§ 570) Skr. *áyas-* 'iron' Lat. *stō* 'I stand' fr. **stā-(i̯)ō*, *stās* fr **stā-(i̯)e-s*, Pelign. *incubat* 'incubat' Lat *neō* 'I sew', *neunt* fr **nē-(i̯)ō*, **nē-(i̯)o-nt* : OHG. *nāan* 'to sew'. *fleō* 'I weep' : O Bulg. *blĕ-ją* 'I bleat' *sileō* 'I am silent' fr **silē-(i̯)ō*, cp Goth. 3 sg *siláiþ* 'silet' fr **silē-i̯e-ti* (§ 142) O Lat. compar. *pleōres* 'plures' : Skr. *prá-yas-*, cpf **plē-i̯es-*. Causat *moneō* 'I cause to remember' fr. **monei̯ō* · Skr *mānáyāmi*, 2 pl. imper. *monēte* fr **mone(i̯)ete* : Skr *mānayata*. Osc. pútíad 'possit' fr. **pote(i̯)āt*, to Lat *potēns potui* O Lat *cluō* 'I am called, named' · Skr. *śrū-yá-tē* 'is heard' O.Lat. conj *fuat* 'sit' Lesb *φύω*.

Lat. *fīniō* 'I finish' represents an older **fīni-i̯ō*, from *fīni-s*, just as Skr. Ved. *arāti-yá-ti* 'is hostile, bears ill-will' from *árāti-ś* 'hostility'. Notwithstanding the orthography *-iō* we must probably assume that *i̯* was not quite mute. This consonant however disappeared by contraction in *fīnīs*, *fīnīte*, whose original endings were **-i-i̯e-s*, **-i-i̯e-te*. Cp. § 135 concerning *fierī*, *patrius* etc.

1) Some forms, in which *i̯* was only apparently retained, as in Osc. stafet, Umbr. fuia 'fiat' *portaia* 'portet', will be disposed of in the accidence.

Indg. **gm̥-i̯ó* (Gr *βαίνω*) 'I go' became **gueni̯ō* in prim. Italic (§§ 208 239), thence Lat. *veniō*; Indg. pres. st. **mṛ-i̯o-* 'die' (Av 3 sg *mər*-ye-iti*) became prim. Ital. **mori̯o-* (§ 296), thence Lat *morior*, s. §§ 120 135.

§ 135 Postconsonantal. ̯ was only retained as a consonant in this position when a consonant had disappeared before it Lat. *Jov-is*. Umbr Iuv-e Osc. Iuv-eí 'Iovi' · Skr. *dyāú-ṣ*, Gr *Ζεύς* Lat *aiō* 'I say' fr. **ah-i̯ō* or **āh-i̯ō* beside *ad-āgium* : Skr pf 3. sg. *áha* 'said', *mājor* 'greater' beside *māgnu-s* : Skr. *máhīyas-* 'greater', cp. § 510

In other cases ̯ became sonantal, a process which may be compared with the transition of the suffix *-i̯o-* to *-uo-* (§ 170), of *-clo-* to *-culo-* (intermediate stage *-cl̥lo*) etc. (§§ 269 627). E. g. *mediu-s* Skr *madhya-s*; *alius*: Gr *ἄλλο-ς*; *acu-pedius* 'quick-footed' Gr *πεζός*, *cōn-spiciō*: Skr *páśyāmi*; *capiō* Goth. *hafja* In like manner also *veniō*, *morior* directly fr **veni̯ō*, **mori̯ōr* (cp § 134) That *i* was spoken (if only with a weak articulated ̯), is probable in itself, and is vouched for by such spellings as *Fabiius*, *Cornelius* (Seelmann Die Ausspr. des Latein. p. 237)

The form *socius* fr **sokᵘi̯o-s* (it *seq-* in *sequor*, cp. Gr. *ἀ-σσητήρ* 'helper' with *σσ* = *qᵘi̯*, §§ 131. 489) is of interest for the chronology of the change of *-i̯-* to *-ii̯-*, since *i* probably dropped out at a time when *i̯*, not already *ii̯*, was still spoken.

Further such forms as *capis capit* fr. **capi̯es *capi̯et* = Goth *hafjis hafjiþ*, *cape* fr. **capi* (like *mare* fr. **mari*, § 33), the latter fr. **capje*, also point to this old *i̯*, likewise nom. *alis*, *Cornēlis* fr *-i̯is* cp Lith *mẽdis* fr. **medi̯is* (§ 84 rem 1).

Rem It is hardly probable that we have still an older *i̯* for *i(i)* in such quantities as *ūi̯am* (fr *ovi-s*), *prīncipi̯um*, *faci̯ās*, found in Roman poets, these possibly follow the prevalent pronunciation of some dialect. It is quite incredible that a similar one holds good for prim. Romance **medi̯us* (Italian *mezzo*) etc (Diez Gramm. d rom. Spr. 1⁴ p 179 ff., Horning Ztschr. f. rom. Phil. VII 572 f)

On the other hand Indg. *ui̯* seems to have remained unchanged in the following cases Lat. gen. pl. *trium*: Goth.

prij-ē, Lith. *trij-ū*, O.Bulg *trĭj-ĭ trij-ĭ*, Gr. *τριῶν*. *patriu-s*: Skr. *pítriya-*, Gr. *πάτριο-ς*. *rēgiu-s*: Skr *rājiyá-* [1]). *siem* (later *sim*): Skr *siyám*, Goth. *sijáu*. *du-bius* fr. **du-bhu̯-i̯os*, *fierī* fr. Indg. **bhu̯-i̯ō*, *fīs* fr. **bhu̯-i̯e-s*, from rt. *bheu̯-* (cp. § 120 and Osthoff Zur Gesch d. Perf. 430 ff.)

We cannot tell whether the *i* was consonantal or sonantal in Umbr. fa̋ṡia, Volsc. *fa̋ṡia* 'faciat', Umbr. *avie* dat. 'auspicii', Osc. mefiaí 'in media', diuvia- 'Iovia-' and other similar forms in the Umbr.-Samnitic dialects. Whereas *i̯* may be traced in spellings as Umbr. Vuṡiia-per 'pro Vocia', Osc. Iúviia 'Iovíam' (cp Osc. Meelíkiieís *Μελιχίου*), and *j* in such as Umbr. vistiša *vestisa* beside vostiši̋a *vestisia* abl. 'libamento', spinamaǐ beside spiniam-a 'ad spinam' Osc *s* from *ti̯* in *Bansae* 'Bantiae', *z* fr. *di̯* in *zicolom* 'diem' (cp. Lat *diēcula*). *i̯* seems to have sprung from older *u̯* in both forms, the zetacistic process may have been limited to the local dialect of Bantia.

§ **136.** Anteconsonantal and finally.

Indg. *ei̯*, *oi̯*, *ai̯* were still diphthongs in prim. Italic. At the beginning of historic times *ei̯* seems to have become an open *ī* in Lat and Osc., the orthography *ei* was at all events retained for a long time after the diphthong had become monophthong (§ 65). *oi̯* and *ai̯* were certainly still diphthongs at the beginning of historic times. They became in the first instance *oe̯* and *ae̯*. For their further development s §§ 81. 97. Prim Ital. *ei̯*, *oi̯*, *ai̯* are met with only as monophthongs in Umbrian, e. g. etu *eetu* 'ito' fr. prim. Ital. **eitōd*, unu 'unum' fr. prim. Ital. **oi̯no-m*, *sve* 'si' = Osc. svaí *svae*.

The first component of *ei̯*, *ōi̯*, *āi̯* was shortened before consonants in prim. Lat. or prim. Italic, e. g. Lat. *oloes illīs* = Skr. *-āiṡ*, Indg. **-ōi̯s* (§§ 85. 612)

Final **-ōi̯* became *-ō* in Lat., e. g dat. sg. *equō* = Gr. *ἵππῳ*; Marius Victorinus knew *-oi* ex libris antiquis foederum

1) *nōbis*, *vōbīs* probably not fr. **-bhi̯es* = Skr. *-bhiyas* in Ved. *prajā-bhiyas* etc. (cp Stolz Lat. Gramm. § 90), but a transformation of **-bhi* after *istīs*, in the same manner as *tibī* was of **-bhi* after *istī*, cp. Skr *túbhy-am* 'tibi', *yušmá-bhy-am* 'vobis' with particle *-am* (see the accidence).

et legum; perhaps still the old *-ōi̯* *-āi̯* became *-ā*, e g. Dat. *Matūta* 'Matutae' like Gr. *χώρᾳ*; *-āi̯* may still be represented in the oldest inscriptions in such forms as *Menervai*, whilst *-ae* is the locative ending of later times Osc dat. Abellanúí 'Abellano', deívaí 'divae'.

Old Irish

§ 137. Initially In most words which come under consideration it cannot be determined whether the initial sound was Indg. *i̯-* or *j-*, and traces of this Indg difference have not, so far as I know, hitherto been proved in Keltic The consonant was dropped in Irish, but was retained in the Gallo-Britannic branch.

Indg *i̯-* in *Ind-* ('strife, fight') found in many Britann proper names, as O.Cymr. *Ind-nerth* (*nerth* 'strength') Skr. *yúdh-* 'battle, combat', Gr *ἰσμίνη*

Whether the following have Indg *i̯-* or *j-* is doubtful: O Ir. *ōac ōc* Cymr *ieuanc* Corn *iouenc* Bret *iaouank* 'juvenis' Gall. *Iovincilla-s*, prim Kelt **i̯oi̯ŋko-s* Skr. *yuva-śá-s*; O Ir. compar *ōa* (Bret *iaou*), superl *ōam*. Skr *yáv-īyas-*, *yáv-iṣṭha-*. O Ir. *ēt* 'zeal', Gall *Iantu-mārus* (ep Mid Ir *edmur* = O Ir **ētmar* 'jealous, zealous' fr *ēt* + *mār* 'great'). O Ir *aig* 'ice', Cymr *ia* (= **i̯ag*) 'ice', Bret *ien* (= **i̯agin*) 'icy' Other Gall. proper names with *i̯-* as *Iuri*, *Iuvavum* s Zeuss-Ebel p 47.

§ 138. Intersonantal *i̯* had disappeared. *-tau -tō* 'I am', 2. sg. *-tai*: Lith. *stó-ju-s* 'I place myself'. *-caru* 'I love' (2. sg *cari*) fr **cára-i̯ō* or **cárā-i̯ō*, a denominative verb like Gr. *τῑμάω* fr. **τῑμα-i̯ω*, Skr. *pṛtanā-yá-mi*

§ 139. Postconsonantal. Dat (instr.) sg *ailiu* (i. e. *ailḭu*) fr. **alḭō*, stem *alḭo-* 'other'. Compar. *laigiu* (i e. *laigḭu*) 'smaller' fr. **lag-i̯ō(s)*: ep. Gr. *ἐλάσσων* fr. **ἐλαχ-i̯ων*.

-e with palatalisation of the preceding consonant (§ 640) appears for *-i̯o-* in the Indg endings **-i̯o-s*, **-i̯o-m* and for **-i̯ā*, e. g. *aile* 'alius', *aile n-* 'alium'; neutr. *suide n-* 'seat' fr. **sodi̯o-m*: Lat. *soliu-m*; *nūe* 'new': Skr. *návya-s*, Indg. **neu̯-i̯o-s* (ep. §§ 66.

154); fem. *aile* 'alia'. This *-e* also appears in cases where according to § 120 we should expect an original *-i̯o-*, e. g. *orpe n-* n. 'hereditas': Goth *arbi* n. 'inheritance'.

Rem The process, which gave rise to this *-e*, is not clear. We do not know whether in this case we have also to take into consideration the suffix form *-i̯-* (§ 84 rem. 1) for the masc and neut, and for the fem a suffix form as in Lith *žolė̃* 'root, plant'. Thurneysen conjectures that **alios* first of all became **alios* (cp Lat *alius*), thence **alʲeo(s)* (*lʲ* is to be read as palatalised *l*), *aile*, correspondingly in the fem **ali̯ā*, **aliā* **alʲea*, *aile* cp Gall *Aliseo* = *Alisia* and similar forms

§ **140.** Anteconsonantal and finally. In accented syllables *ei̯* became *ē* (*ia*) § 66, *oi̯* became *oe*, finally *ī* § 82, *ai̯* became *ae*, finally *ī* § 98

Rem Cp § 657, 4 for final Indg *-ōi̯*, *āi̯*.

Germanic

§ **141.** Initially. Indg. *i̯-* and *j-* fell together in *j-* in prim. Germ.

Indg. *i̯-* Goth *jēr* OHG. *jār* n 'year'· Av *yārᵉ* n. 'year', Gr *ὥρο-ς* 'year'. Goth *jus* (*ū*?) 'vos' Lith. *jūs*, Gr. *ὑμεῖς*.

Indg. *j-*. Goth. *juk* OHG. *joh* n. 'yoke'. Skr. *yugá-m*, Gr. *ζυγό-ν* 'yoke'.

It is uncertain whether we have Indg. *i̯-* or *j-* . Goth. *juggs* (*jūggs*?) OHG. *jung* 'young', prim. Germ. **i̯uu̯ŋ-ga-s*: Skr. *yuva-śá-s* Lat. *juven-cu-s*.

Goth *j-* was *i̯-*. In OHG. (and OS.) *i̯-* before *e* and *i* became a spirant, which was written *g*, e. g. *genēr* 'yon', *gehan* 'to say, speak', indic. pres. *gihu*, but pret. *iah iāhun*; s. Braune Ahd. Gramm. § 116, Holthausen Die Soester Mundart § 182. Prim. Germ. *i̯-* dropped out in O.Norse: O.Icel. *ār, ok, ungr* = Goth *jēr, juk, juggs*

§ **142.** Intersonantal

Goth. fem. stem *ɨjō-* 'ea' = Lat. *eā-*, cpf. **ei̯ā-*.

Prim. Germ. *-ii̯-* = Indg. *-ei̯-* (§ 67) became *-ī-* before consonants and finally. Goth. *þreis* OHG. *dri* 'three' fr. **þrii̯-(i)z*: Skr. *tráyas*, O.Bulg. *trĭje trije* etc., Indg. **tréi̯-es*; likewise Goth. *gasteis* OHG. *gesti* 'guests' fr. **gastii̯-(i)z* = O.Bulg. *gostĭje*

gostije, cpf. **ghosteı̯-es*. 2. sg. imper. Goth. *nasei* OHG. *neri* 'save, nourish' fr. **nazı-i̯(ı)* (Goth. *s* for *z* after the analogy of *nisan* 'to recover, be healed', s. § 581), Goth. *fra-vardei* 'destroy (something)': Skr. *vartáya* 'let something take its course', Gr. φόβει 'scare' fr. **φοβέ(ı̯)ε*, Indg. **-éi̯e*. Cp §§ 660, 1. 661, 2

Goth. indic. 1. sg. *nasja*, 3 sg. *nasjiþ* (OHG. *neriu nerit*, Mod.HG. *nähre, nährt*) fr. prim. Germ **nazi̯ō *nazi̯ði*, still older **nozéi̯ō *nozéi̯ði*. This *-ei̯e-*, younger *-i̯i-* became *-i̯- -ī-* after long closed syllables: Goth. *fravardeiþ* Cp. Skr. 1. sg. *vartáyā-mi*, 3. sg. *vartáyati* = Indg. prim. f. **u̯ortéi̯ō*, **u̯ortéi̯e-ti*. Goth. *anamahtja* 'I offer violence', 3. sg. *anamahteiþ*, from *anamahti-* f. 'reproach', can be traced back to Indg. **-i-i̯ó*, **-i-i̯é-ti*, cp. Skr. Ved. *arāti-yá-ti* 'is hostile' from *árāti-* 'hostility'. Cp. § 635.

It is questionable whether Goth. 1 sg. opt *bairáu* (indic. *baíra* 'I bear') is regularly developed from **bhero-i̯-u̯i* prim. Germ. **beraı̯u(n)* (§ 244) (Paul in Paul-Braune's Beitr. IV 378, VI 161, Osthoff Morph. Unt. IV 302, Zur Gesch. d. Perf. 626).

Goth *siuja* 'I sew': cp Gr. κασσύω fr. **κατ-σι̯ū-i̯ω*, O.Bulg *šijǫ* fr **si̯y-i̯ǫ* (§§ 60. 147), Lett *schuju*.

Indg. *ēi̯-* appears in Goth. before vowels as *ai-* (*aij-*). *saia* 'I sow', 3 sg. *saiiþ* (also *saijiþ*, *saijands*): Lith. *sėju* O.Bulg. *sějǫ* 'I sow', cpf. **sēi̯ō*. *armaiō* f. (st. *armaiōn-*) 'compassion' (from *arma* 'I pity', 3. sg. *armáiþ*), prim. Germ. **armēi̯ōn-*. In unaccented final syllables as *-ai-* fr. original *-ē-i̯e-*: 3. sg. *armáiþ* fr. **armē-i̯i-đ(ı)*, **-ē-i̯e-ti*; it is here a question of the present-class which is represented in Lat. by *habēre, tacēre, silēre* (Goth. *haban, þahan, silan*). In OHG. we have the forms *sāan* (*sāhan*), *sān, sāian* (*i* = *i̯*), *sāwan* (OS. *sāian*, Ags. *sāwan*, O.Icel. *sā*) as compared with Goth. *saian* and the form *armēt* as compared with Goth. *armáiþ*.

Rem. 1. The much discussed question as to the history of ante-vocalic *ēi̯* in Germanic (recently more fully discussed by Paul in Paul-Braune's Beitr. VII 152 ff., Kogel IX 509 ff, Bremer XI 46 ff) has not yet been completely cleared up. The following seems to me to be the most probable.

**sēi̯ō* existed up to the end of the prim. Germ period. The *ai* in Goth. *saia* was the long vowel of the *aí* in *baíra*, namely an o p e n *ē*,

which vowel is certainly to be assumed also in loan words as *haiрaisis* = Gr. *αἵρεσις* (Gr *αι* was an open *ē* in Ulfila's time); s Braune Got Gramm.[2] p. 11. Cp Goth. *au* before vowels § 179 It is probable that the *j* in *saiɲiþ* was still prim. Germ. *-i̯-*, but it must not be maintained as certain. We may apparently assume for West Germ, where *ē* became *ā* (§ 75), that *i̯* partly (before *a* and guttural vowels) regularly dropped out and that then *w* made its appearance before guttural vowels as glide (1 sg. *sāwu*), after which by form assimilation *i̯* became also used before guttural vowels and *w* before palatal, and at this stage the different dialects took different directions One might also assume that those forms in which *i̯* regularly dropped out were extended by analogy to all other forms and that *i̯* was later generated again as a glide in *sā-is, sā-it* etc.

Original *ēi̯e* in unaccented final syllables was treated somewhat differently. 3 sg **armēi̯ði* became **armei̯ði* (with open *ē*), thence Goth. *armáiþ* and OHG *armet* For Goth 1. sg *arma*, 1 pl *armam*, see the accidence

Prim. Germ **blōi̯ana-n* 'to blossom' (cp. Lat. *flō-s flō-r-is* 'flower'): OHG. *bluoan* (*bluohan*) *bluoian bluowan*, OS. *blōian*, Ags. *blōwan*; cp. OHG. *sāian sāwan* above Prim Germ. 3. sg. **friu̯ō-i̯-ði* 'loves' (= O.Bulg. *prija-je-tĭ* 'takes care of') became **friu̯ōi̯ði, *friu̯ōði*, thence Goth *friɲōþ*, analogously OHG. *salbōt* = Goth. *salbōþ* 'anoints'; cp. Goth. compar. *armōza* 'poorer', superl. *armōsts* 'poorest' fr. **armō-izō, -ista-z*, which first became **armōi̯zō -ōi̯staz.*

Rem. 2 It is remarkable that *ōi̯* and *ei̯* were treated differently before consonants, but I see no plausible means of avoiding this assumption

After short vowels *-i̯-* occasionally appears as *-ddj-* in Goth. Gen. pl. *tvaddjē* 'duorum': Skr. *dvayá-*. *daddja* 'I suckle': Skr. *dhāyā-mi*. *iddja* 'I went'. Skr. *á-yā-m*. To this *-ddj-* corresponded O.Norse *-ggj-*, e. g. O.Icel *tveggja* · Goth *tvaddjē* In Westgerm. the original prim. Germ. 'sound' generated an *i*, which, uniting with the preceding vowel, formed a diphthong, and when the preceding vowel was *i*, an *ī*, e g. OHG. *zweijo*: Goth. *tvaddjē*, *Frīja* · O.Icel. *Frigg*. The conditions for this universal Germ. special treatment of *-i̯-* have not been determined. Cp. § 179 and Kögel in Paul-Braune's Beitr. IX 523.

Rem. 3. The consonant, developed before the prim. Germ. *i̯*-sound in Gothic-Norse, was a palatal *g*. Nothing stands in the way of our assigning this palatal value to O.Icel. *gg* before *j*. This sound moved further

forward in Gothic and became (dorsal?) *d* (*dd*). See Braune in Paul-Braune's Beitr IX 545 f

Indg. Combination *-gu̯i̯-*. Goth. *glitmunja* 'I shine', like Gr. *σπερμαίνω* 'I sow with seed', Indg. *-mn̥-i̯ō* (§ 245). Goth. *kuni*, st. *kunja-*, n. 'sex, race' fr. **ǧu̯n̥-i̯o-*; *sama-kunja-* 'of the same race or family' to Gr *ὁμό-γνιο-ς*, which stand to one another in the same relation as Lat. *morior* to Skr. *mriyé* 'I die' etc. (§ 120 p. 112).

Goth. *-j-* was *-i̯-*. The frequent spelling with *g* in OHG. points to a spirantal pronunciation, e g *pluogentiu* to *bluoran* 'to blossom', *wart-sāgo* 'semimverbius' to *sāian* 'to sow', 3. pl. opt. pres. *salbogēn* beside *salboiēn salboēn* from *salbōn* 'to anoint', cp. § 120 extr.

§ 143 Postconsonantal.

Consonant + i̯ in the initial syllable was not retained unchanged.

Of the Indg. double form of the Opt. **si̯ē̆-m* and **si̯ī̆ē̆-m* 'sim' the latter only survived. Goth. *si̯áu*. Cp. also *us-ki̯ans* 'sprouted forth' (pres 1. sg. *us-kei-na*), originally **gi̯-ono-s* fr. rt. *gei̯-* (Osthoff Morph. Unt. IV 38. 368. 373).

The i̯ of **si̯ŭ-* united with the following *u* to form a diphthong in Goth. *siu̯an* OHG. *siuwan* 'to sew', OHG. *siula* 'awl' (cp. Skr. *syū-tá-s* 'sewn', Lith. *sú-ta-s* 'sewn', *súla-s* 'sewing thread'), likewise in OHG *chiuwan* 'to chew' fr. **ǧi̯ŭ-* (cp. O.Bulg. *žĭvǫ žu̯ją* 'I chew' fr. **ži̯ŭ̆vą *ži̯ū̆i̯ą*, §§ 52. 147).

Rem With *siu̯an*, as compared with *midjun-gards* 'sphere of the earth' (i e **midjum(a)-gards*) etc., compare *þius* 'servant' fr. **þiu̯(a)-z* (gen. *þiu-is*) with *sunjus* 'sons' fr **sunu̯(i)z* (cp § 179).

Medially.

Goth. *midjis midja* 'medius media': Skr. *mádhya-s mádhyā*. *aljis* 'alius': Gr. *ἄλλο-ς*. *bērus-jōs* 'parents', properly partic. 'having brought forth': cp. Lith. gen. sg. partic. pf. *sùkus-io* of *sukù* 'I turn'. Opt. *viljáu* 'velim'[1]) for orig. **u̯el-i̯ē-m* (with this cp.

1) The ending formed after the analogy of *bairáu*, s. the accidence.

sjáu for orig. **s-iə̯ē-m*). *hafja* 'I raise': Lat. *capiō* fr. **capiə̯ō*. Verbs in *-atja* as *káupatja* 'I give a box on the ears', *sōgatja* 'I sigh' like Gr. verbs in *-άζω* fr. **-αδ-jω*. Of the nom. sg. *haírdeis* 'herdsman' fr **χιrδu̯(i)-z* (cp. 3. sg. *fra-vardeiþ* fr. **u̯arδu̯(i)δ(i)*, § 142) as compared with *harjis* 'army' we have already spoken in § 120, we refer also to § 660 rem. 3; pl. *haírdjōs* fr. **χιrδiə̯ōz* like 1. sg. *fra-vardja* fr. **u̯arδiə̯ō*. Goth. *namnja* 'I name' may be regarded as the representative of a prim. Germ. form **namn-iə̯ō*, so that it would stand to *glitmun-ja* 'I shine' (§ 142) in the same relation as Skr. *mr-ɣá-tē* to Av. *mer*-ye-iti* (§ 120 p. 112) and as Gr *πότν-ια* to *τέκταινα* (fr. **τεκταν-jα* § 234).

In OHG *j* had suffered manifold changes the course of which it is to some extent difficult to control, because no difference was made in writing between *j* (*j*) and *i*, and because the fate of *j* was connected with the West Germanic consonant-lengthening which arose before this consonant (§§ 215 277. 529. 532 535. 540)

-rj- after short syllables became by anaptyxis *-riu̯-*, *-riɣ-* (*ɣ* signifies palatal spirant, cp *gener* § 141, *pluogentiu* § 142) Dat *herie herige* cp Goth *harja* 'exercitui'. Nom *ferio ferigo* 'ferry-man': Goth **farja*. Cp § 628

In other respects posteonsonantal *-j-* was still retained in the oldest period, *e*, that is *ę*, was also written instead of *i*, and disappeared in the IX cent *willio willeo* (read *willjo willęo*) *willo* 'will, desire' · Goth. *vilja* m *heff(i)an* · Goth. *hafjan* 'to raise', *bitt(i)an* : Goth *bidjan* 'to beg'

j had already disappeared before *i* prior to the time of our oldest monuments. 2 sg *bitis*: Goth *bidjis* 'thou beggest'. Dat pl. *herim* fr. **her-jum* (and further fr. **-jem*, **-iom*) · Goth. *harjam* 'exercitibus'. More will be found regarding posteonsonantal *j* in OHG. in Braune's Ahd. Gramm p. 83 ff

§ 144. Anteconsonantal and finally

Indg. *eį* became *u̯*, *ī* in prim Germ. 1. sg **stīɣō* (Goth. *steiga*) 'I ascend' : Gr. *στείχω*. Loc. sg. **χaįmī* (OHG. *heimi*

heime) 'at home' : cp. Gr. *οἴκει* 'at home' (Kögel Zeitschr. f. deutsch. Altert. 1884 p. 118 f.). See § 67.

Indg. *oɨ* and *aɨ* fell together and have partly remained ɨ-diphthongs up to the present time. 3. sg. Goth *váit* OHG. *weiz* Mod.HG. *weiss* : Gr. *Fοῖδε*. Nom. pl. Goth. *þái* OHG. *thē dē* 'the' : Gr. *τοί*. OHG *seita* f *seito* m. 'string, cord' : Lat *saeta* 'strong hair, bristle', Lith. *sẽla-s* 'cord', from rt. *saɨ-* 'bind'. See §§ 83. 99.

Goth. dat. sg fem. *gibái* 'to a gift' fr orig. *-āɨ* : Skr. Ved *-āi*, Gr *-ᾳ* See §§ 659, 3 660, 3.

Baltic-Slavonic.

§ 145. Initially Indg *i-* and *j-* fell together in *i-*, which has retained the pronunciation as consonantal vowel in historic times. Acc sg fem Lith *jã̃* O Bulg *ję* 'eam' . Skr *yá-m* Gr. *ἥν ἣν* 'quam', Indg **iā-m*. Lith *jó-ju* 'I ride, drive', O.Bulg. *jadą* 'vehor'[1]) . Skr *yá-mi* 'vehor', Indg **iā-*. Lith dial. *jeknos* pl. 'liver' Lat *jecur*, Gr. *ἧπαρ* Lith *jũs* 'vos' Skr. *yūyám*, Gr. *ὑμεῖς*

In Slavonic initial *ǐ-* became *i-* *i-že* 'qui' fr. **ǐ-že*, beside which *jĭ* (= Lith. *jìs*, cpf **ɨ-s*, § 84 rem 1), which was enclitically attached, remained ; cp especially the 'definite' declension of adjectives, as *dobry-jĭ* and *dobljı-jĭ*, and *bereto ję(ĭ)* = *beretŭ jĭ* with the same change of *ŭ* to *o* as in *domoch(ŭ)* = *domŭchŭ* §§ 52, 665, 5. *igo* 'yoke' fr. **jĭgo*, older still **ǐągo* : Skr. *yugá-m*, Gr. *ζυγό-ν* with Indg initial *j-*

§ 146. Intersonantal Lith *vejù* O Bulg. *vĭję vьją* 'I turn, wind' : Skr *váyāmi* 'I weave', cpf. **ɨéi-ō*. Lith *dvejì* 'by twos' O.Bulg. *dvojĭ* 'twofold' : Skr. *dvayá-* 'twofold' Lith. *sẽju* O Bulg. *sějǫ* 'I sow' Goth. *sa-a*, cpf **sēɨō*. Lith. *lóju* O.Bulg. *lajǫ* 'I bark' : Skr *váyāmi* 'I bark'. Lith. *pãsako-ju* 'I relate', O.Bulg. *ląka-jǫ* 'I deceive' : cp. Skr. *pṛtanā-yá-mi* 'I fight'. Lith *at-saj-à* 'horse traces' fr. rt. *saɨ-* 'bind' O.Bulg. *gostĭje gostije*

1) The orthography *ėdą* beside *jadą* is due to a false representation of the sound-combination *ją*, which was occasioned by the change of orig *ē* to *ją* (§ 76).

'guests' fr. *-eʒ-es : cp. Skr. *ávayas* 'oves'. O.Bulg. instr. sg. *ženojǫ* of *žena* 'wife' : cp. Skr. *jihváyā* fr. *jihvā-* 'tongue'.

Lith. *miniù* O.Bulg. *mĭnjǫ* 'I think', prim. Balt.-Slav. **mįn-ʒō* : Skr. *mányatē* 'he thinks', Indg. pres. st. **mṇ-ʒe-*. O.Bulg. *žĭnjǫ* 'I cut off', orig. **ghṇ-ʒō* from rt. *ghen-* 'strike, hew'. Lith. *spiriù* 'I push with the foot' : Gr. *σπαίρω* 'I struggle convulsively', cpf. **spṛ-ʒō* Lith *skilù* 'I strike fire' · Gr. *σκάλλω* 'I stir up, hoe', cpf. **skl̥-ʒō* Cp §§ 250. 304.

i as glide between *i* and a following vowel. Gen. pl. Lith *triʒ-ũ* O Bulg *trĭj-ĭ trṇ-ĭ* 'trium' · Goth *þriʒ-ē*, Gr. *τριῶν*, Lat. *trium*. O Bulg. *prĭja-znĭ prija-znĭ* 'love' : Goth. st. *frija-*, nom sg *freis* 'free', Skr *priyá-* 'dear', Indg **prii-ó-* O Bulg. *bratrĭja bratrija* fem. collect. 'brothers' Gr *φρᾱτρίᾱ*. Lith *bijaũ-s* 'I am afraid', cp. Ved part mid. *bhiy-āná-s*.

Lith. *j* and Slav. *j* retained the pronunciation *i* between vowels

§ 147. Postconsonantal.

Lithuanian Here a distinction must be made according as a palatal vowel (*e, i*) or another followed.

i dropped out before palatal vowels already in prim. Baltic (J. Schmidt Kuhn's Ztschr XXVI 331 f. and 339). Voc sg. *svetè* fr. **svet-ʒe*, to nom. *svẽczias* 'guest' fr **svet-ʒa-s*. Comparat. *sald-ĩs-n-s* (fr. *saldù-s* 'sweet') fr. **-ʒes-nį-s*, formed with the comparat. suffix *-ʒes-* = Skr *-yas-* Nom. sg. *žẽmė* 'earth', Lett. *zeme*, Pruss. *semmē*, prim. Balt. **žem-ʒē*; see the accidence for the relation of this suffix form to *-ʒā* in *gìria gìre* 'wood, forest' (beside *gìre*), *žinià žinė* 'tidings' (Lett. *zi̯ņa*) and in O Bulg *zemlja*, as well as to *martì* (gen *marcziós*) 'bride' *patì* 'spouse'. *geràs-is* 'definite' form of the adj *gẽras* 'good', beside *jìs*. Nom. sg. *mẽdis* 'tree' (gen *mẽdžio*) fr **med-ʒ-s* (*i* retained after vowels : *mõ-jis*, gen. *mõ-jo*, 'sign, nod'), Indg. *-ʒ-s* (§ 84 rem. 1); whereas *lokỹs* 'bear' (Lett. *lãzis*) with *-ys* fr. **-iʒ-s* like Goth. *haírdeis* fr. **χirđ-ʒ-z*; i. e. we have here a manifestation of double suffixes *-ʒo-* and *-ʒo-*, respectively *-ʒ-* and *-ʒ-* (§ 120), which in Baltic were brought into relation in the nom. sg. with the varying position of the word-accent.

Postconsonantal *i̯* remained longer before other vowels than before *ĕ, ĭ*. It softened the preceding consonants and then mostly disappeared in this palatalisation, so that the *i*, which is now-a-days written between consonants and following vowels, is simply to be regarded as a sign of the softened pronunciation of the consonant. This softening is more intensive in the south-eastern dialects than in Pruss. Lithuania. *spáuju* 'I spit' : cp. Gr. *πτύω* fr. **(σ)πῑ̯ū-i̯ω* (§ 131). *sú-ta-s* 'sewn' Skr *syū-tá-s*. Gen. sg. *pìkio* (*pìki-s* m 'pitch'), st *pikia-*, orig **piq-i̯o-* : cp. Gr. *πίσσα* fr **πιν-i̯α*. *arù* 'I plough' : O.Bulg. *orją*. **tį-*, **dį-* became *czi-*, *dži-* i e. softened *tĭ*, *dž*, e g gen sg. *tĕczio* fr **tetį̄o* (*tĕti-s* 'father'), *mẽdžio* fr **medio* (*mẽdi-s* 'tree'); this affection is not old; *ti*, *di* occur still in the dialect of Memel and are pronounced similarly to softened *k*, *g* etc. Whilst Indg **neu̯-i̯o-s* 'new' (Skr *návya-s* 'new') became *naŭjas naŭjes*, Indg. **qreu̯-i̯o-* (Skr *kravya-m* 'raw meat, carrion') became *kraŭjas kraŭjes* (cp. Pruss. Vocab. *crauyo*).

i̯ remained in Slav. after *p*, *b*, *v*, *m*, but in a part of the Slav. languages (amongst which O.Bulg.) a soft *l* was developed. O.Bulg. *pljuti* 'to spit' fr. prim. Slav. **(s)pi̯ū-tī* : Lith. *spáu-ti*. Indic. pres. 1. sg. *zobljǫ* 2. sg. *zoblješi* etc., inf. *zobati* 'to eat'. Fem. *zemlja* 'earth' : cp. Lith. *žẽmė*.

i̯ palatalised *l*, *r*, *n*, and then disappeared (as in Lith.). *orją* 'I plough' : Lith. *arù* *tūlja* 'ground, pavement' : cp. Lith. pl. *tìlės* 'foot-boards in a small boat' (§ 304). *vonja* 'smell' fr. orig. **anį̄* (§ 666, 1) fr. rt. *an-* 'exhale'. The softened consonants are represented in manuscripts by *r̂*, *l̂*, *n̂* or *rj̑*, *lj̑*, *nj̑* or are simply written *r*, *l*, *n*, e.g. *volų̂*, *voljǫ̂* and *volą* beside *voljǫ* acc. of *volja* f. 'will, wish', *more* beside *morje* 'sea'.

Prim. Slav. *ti*, *di* (— older *ti*, *di* and *tu*, *du*) became *šl*, *žd* in O.Bulg. Pres. 1 sg. *mešlǫ* 2. sg. *mešteši* etc. fr. **metį̄ą* **metį̄ešĭ*, inf. *metati* 'to throw'. *mežda* 'boundary' fr **medį̄ā* : Skr. *mádhyā*. The same sound-combinations arose from *sli̯*, *zdi̯*. *tlŭšta* 'pinguedo' fr. **tlŭstį̄ā* (more correctly **tlŭslį̄ā* § 302) from *tlŭstŭ* 'pinguis'. *za-gvoždų*, 'I nail fast' fr. **za-gvozdį̄ą*, from *gvozdĭ* 'nail'. When an *r* or *v* stood between *t*, *d* and the

following ę, it did not prevent this process of assimilation. *sŭ-moštrjǫ* 'I look, consider' fr. **-motr-ję*, inf. *sŭ-motriti*. Adj. neut. *bŭždrje* 'vigilant' fr. **bŭdr-ję*. *u-mrĭštvljǫ* 'I kill' (part. pret. pass. *u-mrĭštvljenŭ*) fr. **u-mrĭtvję* (for the interpolated *l* s. p. 132), inf *u-mrĭtviti* The form *tlŭšta* corresponded to *oštrjǫ* 'acuo' fr. **ostrję*, inf *ostriti*, derived from *ostrŭ* 'sharp', the *t* of which was excrescent (§ 545).

Rem 1 In the phonetic explanation of this influence of ę on a preceding *t* or *d*, and consonant-groups containing them, we must start from *zdę*, *stę*, *strę* The treatment of these prim Slav combinations in the Slav dialects shows that the whole combination preceding the ę was first of all softened There arose **qvozd'ęą*, **tlŭst'ęa*, **ost'r'ęą* (' indicating the softening), ę after *t*, *d* in the first two forms then became a palatal spirant (*χ'* voiceless, *γ'* voiced) **qvozd'γ'ą*, **tlŭst'χ'a* (pronounce *d'γ'* and *t'χ'* like Russ *Дъ* and *Тъ*) In O Bulg specially **ost'r'ęą* became *oštrjǫ*, and **qvozd'γ'ą*, **tlŭst'χ'a* became first **gvozd'z'ą*, **tlŭst's'a* (pronounce *d'z'* and *t's'* like Polish *dź* and *ć*), then **gvožd'žą*, *tlŭšt'ša*[1]) and lastly *qvožd'ą*, *tlŭšt'a* (cp below for *št'* fr **skę*)

Analogously **medna*, **metją* became in prim Slav. **med'ęā*, **met'ęą*, and then **med'γ'a*, **met'χ'ą* Hence specially in O Bulg through anticipation of the spirant **meγ'd'γ'a*, **mεχ't'χ'ą*, further **mezd'z'ā*, **mest's'ą* — **mežd'žā*, **meštšą* — *mεžd'a*, *mεštą*

The O Bulg forms *sŭ-mošt jǫ*, *u-mrĭštljǫ*, *bŭdr je* were also prepared for already in prim Slav in so far as ę had softened the whole combinations *tr*, *tv*, *dr* But it must here be observed that the *š* and *ž* depending on the anticipation of the palatalism are not always written in the monuments, e g *su-motr( )enije* beside *su-mošr( )enije* n 'consideration' (Miklosich Vergl Gramm I² 220) We do not decide as to how this fluctuating orthography is to be judged

That the O Bulg combinations *žd* and *št* were spoken soft (*dž'*, *št'*) follows from such spellings as *nadeždě* (*e* sign for *ja*) beside *nadežda* 'hope', *sąštju* beside *sąštu* '*ὄντι*' dat sg of the part. sy '*ὤν*' met with in most monuments Cp rem. 4

From prim. Slav. *kę*, *gę* (mostly = Indg. *qę*, *gę*, *ghę*, § 461) arose in prim. Slav. *č* (i. e *tš*), *dž*, the latter was weakened to *ž* in O Bulg. *pri-tŭča* 'comparison' fr. **-tŭkją*. *lŭžĭ* 'mendacious' fr. **lŭgję* · OHG. *lukki* 'mendacious' (prim. Germ. st. **luγja-*); *lŭžą* 'mentior' fr. **lŭgją*, inf. *lŭgati*.

Analogously *skę* became *sč* i. e. *stš*, hence by assimilation

1) *ž́*, *š́* are the softened *ž*, *š*. Cp. Ar. *ž́* and *ś́* §§ 20. 21. 396 and elsewhere.

of the sibilants *štš*, further historic *št* (more correctly *šť*, cp. rem. 1). *ištą išteši* etc. fr **išķą*, inf. *iskatı* 'to seek'.

Rem 2 Cp *mašteti* 'to begin' fr **vъsčęti* = **vьzcęti* Further on account of the O Bulg. change of *štš* to *št*, the loc sg. *člověčistě* beside *člověčisce* from nom. *člověcískъ* 'human' and inf *istěliti* beside *is-cěliti* 'to heal' (*st* fr *stv*) are instructive.

Beside this treatment of prim. Slav. *ķ, ģ* there is also a change of them to *c* (i e. *ts*) and *dz*, the latter was weakened to *z* in O.Bulg. in the beginning of the literary period (Miklosich Vergl. Gramm. 1² 251 ff.). Nom sg m *-ičь* m., *-ice* n, *-ica* f., e g *juničь* 'young bullock' fr **jūnīkī*, *srъdьce* 'heart' fr. **srъdьķe*, *ovьca* 'ovis' fr. **ovьkā* Neut. *lice* (gen *lica*) 'face' fr. **likje*. Fem. *stьza* 'way' fr. **stьgā* The treatment here in question took place at a later period of the prim Slav language than the one above, viz at the same time when the instr. sg **takěmь* (O.Bulg. *takъ* 'talis') became *tacemь* (§§ 84. 462) Therefore a **jūnīkī* was only formed to **jūnъkъ* and an **ovьkā* to **ovьka* after the law, whereby *ķ* became *c*, had already ceased to operate The voc *junice* still belongs to **jūnīkā* (cp *vlače* : *vlъkъ*), so too *junьci* 'taurinus', *ovьci* 'ovinus' are also directly to be referred to **junīkī*, **ovьkī* [1])

Prim Slav *sķ, zģ* = Indg *ĥķ, ĝh, ghģ* (§ 412) became already in prim Slav *š, ž*. O Bulg pres *pišą pišeši* etc (inf *pьsati* 'to write') fr **pīsą *pīseši*, rt *peiķ-* 'to cut, cut straight', *žujǫ* and **zьvǫ* 'I chew' fr **zģū-ą* and **zьvą *zьvǫ* (§ 52), the latter = OHG. *chiuwu* from rt *ĝhu'ģ-* *lizą lьžeši* etc. (inf *lizati* 'to lick') = Lith. *lezù* 'I lick', prim f *'lergh-ģō*.

ļ with a preceding Indg. *s* became *š* in prim Slav *šiti* 'to sew' fr **sįtī*, **sįytī* = Lith. *siúti* 'to sew' (§ 60). Adj. *našь* 'noster', to gen *našu* 'nostri' (fr **nās-sŭ*) Part. neut. *byšęšte-je* '*τὸ μέλλον*', to an obsolete fut. indic **by-šą* : Lith *bú-siu* 'I shall be'. Part. pf gen. sg masc. *nesъša* (indic. pres. *nesą* 'I carry'). Lith. *nẽsz-us-io*, cp Goth. nom pl *bēr-us-jōs* 'parents' ('those who have brought forth')

1) No direct historic connexion, consequently, exists between *junьcь* and Lith. *jaunìkis*, gen *jaunìkio* 'bride-groom' (properly 'juvenculus') in spite of their similar suffix formation

Rem. 3. In those cases where Indg. *s* had passed into *ch* in prim. Slav., *š* is not to be traced back directly to *s̯*, but first of all to *ch̯* (cp. *snušьnu* 'like a daughter-in-law' adj. fr. *snuchьma* from *snŭcha* 'nurus' Skr. *snuṣā*, Indg. **snusa*) Cp. § 588, 2. 3.

These affections of prim. Slav. *s* (= Indg. *k̂*, *s*) and *z* (= Indg. *ĝ*, *ĝh*), caused by *i̯*, took place also when an *l* or *n* stood between them. O.Bulg. *myšljǫ* : inf. *myslitи* 'to think'. *blažnjǫ* : inf. *blaznitи* 'to lead astray'. Here *i̯* first palatalised *l*, *n* and thus extended its influence to *s*, *z*, but disappeared in the softened *l*, *n*, according to the remarks made above under *ri̯*, *li̯*, *ni̯*. Cp. *oštrjǫ* (inf. *ostritи*) fr. **ostrjǫ* above, rem. 1. *myšljǫ* : *pišǫ*, *nesušь* = *oštrjǫ*, *tlušta*.

Rem. 4. That O.Bulg. *ć*, *đ* = orig. *qi̯*, *gi̯*, *ghi̯*, *c*, *dz* = orig. *qi̯*, *gi̯*, *ghi̯*, *š*, *ž* = orig. *ki̯*, *gi̯*, *ghi̯* and *s* = orig. *s̯* were spoken soft, follows from the spellings with a following *ь*, found in most monuments, as *mązьju* beside *mǫ* a dat. sg. of *mąžь* 'man' (st. *mąži̯e-* fr. **mągi̯e-*), *dušьjǫ* beside *dušǫ* acc. sg. of *duša* 'soul'. Cp. rem. 1 extr.

§ 148. Anteconsonantal and finally.

Indg. *ei̯-* = Lith. *ei* and *e*, Slav. *i*. Inf. Lith. *eĩ-ti*, O.Bulg. *i-ti* 'to go' from rt. *ei̯-*. Lith. *ze-mà* : O.Bulg. *zi-ma* f. 'winter' : Gr. *χεῖ-μα*. S. § 68.

Indg. *oi* and *ai* = Lith. *ai* and *e*, Slav. *ě* (initially *i*, finally *ě* and *i*). Lith. *snẽga-s* : O.Bulg. *sněgъ* 'snow' : Goth. *snáivs*, cpf. **snoigho-s*. Lith. *v-ẽna-s* : O.Bulg. *inъ* 'unus'. O.Lat. *oino-s*. Lith. *tẽ* : O.Bulg. *ti* 'the' nom. pl. . Gr. *τοί*. Lith. *ãt-laika-s* : O.Bulg. *otu-lěkъ* 'remnant'. Gr. *λοιπό-ς*. Lith. *pá-saitи-s* m. 'binding thong' *sẽta-s* 'cord', O.Bulg. *sětь* f. 'cord', rt. *sai̯-* 'bind'. Nom. du. fem. Lith. *tẽ-dvi* ('the two') : O.Bulg. *tě* from Indg. st. **tāi̯-* 'the' : Skr. *té*, Indg. **tái̯*. S. §§ 84. 100.

Final Indg. *-ōi̯* retained the *ō* down to the Lith. language period, hence Lith. dat. sg. *vilkui* 'to a wolf', Gr. *λύκῳ* (§ 664, 4). Whilst the instr. pl. *vilkaĩs* = Skr. *vṛ́kāiṣ* presupposes the change of *ōi̯* to *oi̯* in an earlier period; s. § 615.

Loss of ̯ in the primitive Indg. period.

§ 149. *i̯* after an initial consonant has frequently been dropped in the different Indg. languages, without its loss being

able to be explained by the sound-laws of the languages in question. E. g from rt. *seu̯-* 'sew', Skr. *sū-tra-m* 'yarn, string', Lat. *suō sūtu-s*, OIIG. *sou-m* O.Icel. *sau-m-r* m. 'hemmed edge, seam' beside Skr. *syū-tá-* 'sewn', OIIG *suwan* 'to sew', *sut* 'seam'. Upon this Osthoff bases his neat conjecture (Morph Unt. IV 19) that the first ̯ in pres forms like **siH̯-i̯ō* 'I sew' **spi̯H̯-i̯ō* 'I spit' disappeared by dissimilation already in the Indg. period, so that now **sH̯-i̯ō* stood beside **si̯H̯-to-s* (part.). *si̯H̯-* was then transferred by analogy to pres forms also, hence e g. O Bulg. *šiją* i e **siH̯-i̯ą* after forms like inf *šiti* i. e **si̯H̯-tī* (§ 147), and vice versa *sH̯* to non-pres forms, hence e g Skr *sū-tra-m* instead of regular **syū-tra-m*

§ 150. According to Joh Schmidt (Kuhn's Ztschr XXVII 305. 369 ff) and W Schulze (ibid 420 ff.) anteconsonantal ̯ was dropped after long vowels in the Indg prim language Nom sg **rēs* : Skr *rás* 'possessions, treasure' Lat *res* 'possessions, thing' fr **rēi̯-s* cp Skr nom pl *rấy-as*. Indg **pō-* fr **pōi̯-* 'drink' in Skr. inf *pá-tu-m*, Gr *πω̃-μα* 'potion', Lat *pō-tu-s pō-culu-m*, Lith *pǟ̃-ta* 'drinking bout' cp Skr *pay-ana-m* 'watering of cattle' *pi-tá-* 'drunk', Gr *πῑ́-νω* 'I drink' Indg **dhēlu-s* = Skr *dhārá-š* 'sucking' Gr *θῆλυ-ς* 'suckling, female' fr. **dhēi̯-lu-s* cp Skr. *dhēnā* 'milch-cow'. Gr Dor *τᾱτάομαι* 'I am bereft, want', O Ir *tāid* 'thief' (prim f **tati-*), O Bulg. *tatĭ* 'thief' fr. **tāi̯-* : cp Skr *stē-nú-s* beside *stāyú-š tāyu-š* 'thief'

Our assumption of *-ōi̯s* as the ending of the instr pl. of *o*-stems, and of **éi̯s* thou wentest' (Skr. *āíṣ*) etc for the prim. period (§§ 69. 85 101) would not contradict these combinations. In these latter cases we should only have to assign the first appearance of the monosyllabic from an older dissyllabic form (*-ōi̯s* perhaps fr *-o-aⁿi̯s*; **éi̯s* fr. **é ei̯s*) to a later period of the prim. language, in which the sound-law, whereby **rēi̯s* became **rēs*, no longer operated.

Nevertheless the above hypothesis still requires further support before it can be set up in any degree as certain. Cp. also Hubschmann Das idg. Vocalsystem p. 24 and elsewhere.

Indg. u̯.

The prim. Indg. period.

§ 151. Initial u̯ before sonants and consonantal liquids. Pres *u̯éĝh-ō 'veho' : Skr *váhāmi*, Gr Pamph *Ϝέχω* Ion. Att. *ὄχο-ς*, Lat *vehō*, O.Ir *fēn* 'plaustrum' fr. **fegn* (§ 527), Goth. *ga-viga* 'I move', Lith *vežù* O Bulg *vezą* 'veho'. Rt **u̯eq-* 'speak' : Skr *vácas-* n. 'speech', Gr *Ϝέπος*, Lat *vocāre*, O Ir *ad-mi-foig* 'he asks', OHG. *gi-wahanen* 'to remember, mention', Pruss. *en-wackeman* 'we call to'. Rt *u̯eid-* 'see, know' : Skr *véda* 'he knows', Arm *gitem* 'I know', Gr *Ϝοῖδε*, Lat. *videō*, O Ir *ad-fiadat* 'narrant', Goth. *vait* 'he knows', Lith *véida-s* 'face, countenance', O Bulg. *viděti* 'to see' **u̯l̥-nā* 'wool' : Skr *ūrnā* 'wool', Lat. *lāna* fr **u̯lānā*, cp Gr *οὐλο-ς* 'crisp' (§§ 157 204. 306). Partic **u̯rē-to-* 'decided, settled' . Av. **rva-ta-* n 'determining, command' fr **u̯ra-ta-* (§ 157), Gr *Ϝρητό-ς ῥητό-ς* 'specified, settled' *Ϝρήτρα* (El *Ϝρατρᾶ* § 72) *ῥήτρα* 'agreement, saying'.

§ 152. Intersonantal. Pres 3. sg **sréu̯-e-ti* 'flows' : Skr *sráv a-ti* Gr *ῥέ(Ϝ)-ει*, Skr *srāva-s* 'river, efflux', Gr. *ῥοϝά ῥοή* 'river, flood', Lith *srav-à* 'issue of blood' *sravėti* 'to flow gently', O.Bulg *o-strov-ŭ* 'island' (properly 'flown round'). **neu̯o-s* 'new' : Skr. *náva-s*, Gr *νέϜο-ς*, Lat. *novo-s*, O.Bulg. *novŭ*. Loc. sg Skr *div-i*, Gr *Ζεϝ-ί*, Indg **diu̯-i*. Skr. *ávi-š* Gr. *ὄ(Ϝ)ι-ς* Lat. *ovi-s* 'sheep', Goth *avēþi* n 'herd of sheep', Lith. *avì-s* O.Bulg *ovĭ-ca* 'sheep' **gi̯-u̯ó-s* 'quick, alive' : Skr. *jīvá-s*, Lat. *vīvo-s*, Cymr. *byw*, Goth *qiva-* (nom. sg. *qius*), Lith. *gývа-s* O Bulg. *živŭ* Nom pl of *eu̯*-stems in *-eu̯-es* · Skr. *sūnáv-as* O Bulg. *synov-e* 'sons', Gr. *ἡδέ(Ϝ)-ες* 'suaves'. Suffix of the pf part. act. . Skr. *babhū-ván*, Gr. *πεφυ-(Ϝ)ώς*, Lith *bù-vęs* O.Bulg. *by-vŭ* from rt. *bheu̯-* 'become'. Personal ending of the 1. du. : Skr. *váhā-vas*, Lith. *vẽža-va* O.Bulg *veze-vě* from rt. *u̯eĝh-* 'vehere'.

Skr. Ved. pf. part. act. *jaghan-ván* (beside the st. form *jaghn-uš-*) 'having struck' fr. Indg. **ghe-ghn̥-u̯ós* (§§ 225. 229), *cakr-ván* (beside *cakr-uš-*) 'having made' fr. Indg. **qe-qr̥-u̯ós*.

**pr̥-u̯o-s* 'the front, earlier' : Skr. *pūr-va-s*, Gr. Dor *πρᾶν* fr. **πρωϝ-ά-ν* (Ion Att. *πρώην*), s. § 306. **neu̯n* 'nine', **neu̯n-tó-* 'ninth', **neu̯n-ti-* 'the number nine' : Skr *náva navatí-ś*, Gr. *ἐννέ(ϝ)α* (compounded of **ἐν νέϝ α* 'nine in all, fully nine', s Wackernagel Kuhn's Ztschr. XXVIII 132 ff), Lat. *novem* (*-em* for *-en* after *septem*, *decem*), O Ir. *nōi n-* Cymr Corn *naw*, Goth *niun niunda*. Lith *devyñta-s*, O.Bulg *devętú devętī* (Lith Slav. initial *de-* after the numeral for ten *deszimta-s*, *desętù*, the regular form would be Lith **navyñta-s*, O.Bulg **novętù*), cp. §§ 224 233

u as glide after *u* Examples s §§ 117. 153

§ 153. Postconsonantal St **dṷo-* 'two', *²*du-* (in **dṷi-s* 'twice' and in compounds) Skr *dvá dvaú, dvi-*, Gr *δώ-δεκα, δι-*, Lat. *bi-*, O Ir *da*, Goth *tvái*, Lith *dù* (masc, fr **dṷǎ'*, § 184) *dvì* (fem). O Bulg *dva* Nom sg *²suésor(ə)* 'sister' Skr. *svásā*, Lat *soror* (*so* from *²sṷe-* § 172, 3), Cymr *chwaer*, Goth *swistar*, Pruss. *swestro*, Lith. *sesů*, O Bulg *sestra* (for the *-t-* in Germ. Pruss and Slav s §§ 580. 585, 2) **ek-u̯o-s* 'horse', fem **ek-ṷa* Skr *áśva-s áśva*, Gr *ἵππο-ς*, Lat *equo-s*, Gall *epo-* O.Ir. *ech*, Goth *aihva-* (in *aihva-tundi* fem *'βάτος'*), Lith *aszvà* St. **qetuer-* 'four' Skr *catvár-as*, Gr Ion *τέσσερ-ες*, Lat. *quattuor*, O Ir *cethir* O Cymr *petguar* Mod Cymr *pedwar* Corn. *peswar* Bret *pevar*, Goth *fidvor*, Lith *ketverì* 'by fours', O Bulg distrib *četvero* Part pf Skr *vid-vás*, Gr *εἰδ-(ϝ)ώς* from rt *u̯eid-* 'see, know' Suffix *-tuo-*, *-tuā-* Skr *prīya-tvá-m* 'the being loved', Goth *frija-þva* 'love', O Bulg *mrъ-tvu* 'mortuus' *gon-tva* 'persecution' St **per-neu̯-*. Skr *párvan-* n 'knot, node', Gr *ἀ-πείρων* 'boundless' fr *²ἀ-περϝ-ων*, cp *πεῖραρ*, pl. Lesb. *πέρρατα* (§ 166) *²dṷuér-* 'husband's brother' : Skr. *dēvár-*, Arm. *taigr* etc, s § 95; loc pl Skr. *dēvŕ̥su*, Indg **dṷu̯r̥-su*. Gr. *αἰ(ϝ)ών* 'time' *αἰϝεί* 'ever', Lat *aevo-m*, O Ir *aes ois* gen *aesa* (Cymr. *oes*) 'age' fr. **āu̯es-tu-s*, Goth. *áus* 'time'.

**u̯u̯* stood beside *u̯* on the same principles as Indg. *i̯u̯* beside *i̯* (s § 120)

First after initial consonants. **dṷṷó* beside **dṷó* 'two' : Skr. Ved. *duvá*, Gr. *δύ(ϝ)ω*, Lat. *du(v)o* From rt *ghaˣu̯-* 'call' partly *ghṷṷ-*, and partly *ghṷ-* as weak grade form (§ 312):

Skr. Ved. 1. pl opt. *huv-ē-ma* Av. 3. sg. indic. *zuv-ayę-iti*, O Bulg inf. *zŭv-ati* beside 3 sg indic. Skr *hv-áya-ti* Av *zb-aye-iti*, nominal st Skr. *hv-ātar-* Av. *zb-atar-* 'shouter, panegyrist', O.Bulg. *zv-onŭ* 'sound, noise', *zv-atelĭ* 'crier'

After initial *ɻ* or *ɹ* and initial double consonants only *nu̯*. St. **ɻuu̯-en-* or **ɹuu̯-en-* 'young', **ɻuu̯-u̯-ĥó-s* or **ɹuu̯-u̯-ĥó-s* 'juvenile' (cp Comparat Skr *yáv-īyas-*) . Skr *yúv-an-* *yuv-a-śá-s*, Lat *ɹuv-en-i-s* *ɹuv-en-cu-s*, Goth. *ɹuggs* fr. prim. Germ. **ɻuu̯-uu̯-ga-s*. Antesonantal st form **bhruu̯-* 'brow' . Skr gen *bhruv-ás*, Gr gen. *ὀφρύ(ϝ)-ος*, O.Bulg nom. *brŭv-ĭ*

Medial *u̯* after long syllables, especially after double consonants. Prim Indg. is the contrast, e g between Skr 3 pl. *aś-nuv-ánti* (1 sg *aś-nó-mi* 'I attain'), Gr *ἀγ-νύ(ϝ)-σαι* (1. sg *ἄγ-νῡ-μι* 'I break') on the one hand and Skr 3. pl. *su-nv-ánti* (1. sg. *su-nó-mi* 'I press the soma-juice out') 3 sg *ɣ-nv-á-ti* 'puts in motion', Gr Att *φθίνω* 'I waste away, decay' fr. **φθι-νϝ-ω* (cp. *φθι-νύ-θω*), Goth. *rinna* 'I run' fr. **ɹ-nu̯-ō* (§ 180) = Skr. *ri-nv-á-mi* 'I let flow, run' (not found) on the other, cp. § 313.

§ 154. Anteconsonantal medially. Very frequent after *a*-, *e*- and *o*-vowels, with which *u* formed diphthongs, e. g. st. **aug-men-* (rt *aug-* 'grow') Skr. *ójmán-* m. 'strength, power', Lat *augmen*, Lith *augmů* (gen *augmeñs*) 'growth, excrescence'. **dieu̯-s* 'sky' Skr *dyáuś*, Gr *Ζεύς* Cp §§ 61—108.

The treatment of *u* before *ɹ* was often different from that before other consonants Whilst e. g the *eu* in Indg. **neu-ɻo-s*, a further formation of **neu̯o-s* (Skr *náva-s* etc), appears developed in the same manner as before other consonants in Lith. *naũja-s* and Goth. *niuji-s*, Skr. *návya-s* shows the heterosyllabic form of Indg. *eu̯*. Analogously in Gr. e. g. *ἑκατόμβοιο-ς* fr. **-βοϝ-ɻο-ς* (cp Skr. *gávya-s* 'bovarius') in contrast e. g. to *βουσί*. The manner of dividing the syllables before *ɻ* therefore took different ways : Lith. *naũjas* represents a **neu̯|ɻos*, Skr. *návyas* a **ne|uu̯os*. Cp. also Skr *gávya-* with Av. *gaoya-* (§ 160).

A diphthong was frequently not formed before nasals and liquids in cases where it might be expected, e. g Skr. *vavnúś-* beside *mayhón-* (§ 160), Gr *ἐϝράγη* (*ἐρράγη*) beside (Lesb.)

εὐράγη (§ 167). The various modes of syllabic formation were also here the criterion

Anteconsonantal ̯u seldom occurred after ̯i-vowels from the very beginning e. g. Skr. *div-yá-* 'celestial', Skr *pī-vn-* 'fat', weak antevocalic st. form beside *pi-van-*, e g. gen. pl. *pī-vn-ām*; Av *jīvya-* 'belonging to life' Diphthongs were only formed in Germ., e. g. Goth. *ga-qiuan* 'to come to life again' from st. *qiva-*, which, of course, is not an old inherited formation, cp. §§ 179 181.

§ 155 Interconsonantal ̯u was not, at it seems, permitted in prim Indg. E. g. antesonantal **qetur-* ('four') for **qetu̯r-* (Skr acc *catúr-as*) beside anteconsonantal **qetu̯-* (Gr Hom τέτρωσι τέτρατος fr **τετ̯ρα-σι -το-ς*, Lith *ketvir̃ta-s*) Cp also prim Ar **atharun-* ('fire priest') for **atharu̯n-* (Av dat. sg *aϑarun-ē*) beside **atharua-* **atharu̯-* (Skr dat abl. pl. *átharva-bhyas*), Skr instr *áyun-ā* (life') beside Gr αἰ(ϝ)ί̄ν αἰ(ϝ)άν etc (The author Morph Unt II 189 ff)

Rem I, therefore, conjecture that Skr instr sg *devr-a* (fr **daiu̯ér-* 'husband's brother') does not represent an Indg **daiu̯-*, but a special Sanskrit new formation **daiu̯er-*, **daiu̯-* and **daiu̯r-* may have existed side by side of each other in Prim Indg The spondaic form δαερων, Ilias Ω 769, can equally well be read δαυρῶν (fr **δαϝρωι*) as δαιϝρῶν, conjectured by Ebel

§ 156. Finally ̯u only occurred as an absolute final in the second component of diphthongs E. g voc Skr *sūnō* Lith. *sūnaũ* O.Bulg *synu* 'O son', Indg **sūneu̯* or **sūnou̯*; loc. Skr. *sūnaú* O.Bulg. *synu* 'in filio', Umbr. manuv-e 'in manu', Indg **sūnóu̯* (cp § 85). Its treatment in the individual languages was almost entirely the same as that of anteconsonantal diphthongs ̯u, when conditionally final, also stood after consonants, perhaps **médhu̯ esti* = Skr. *mádhv asti* 'mel est'. Cp § 645, 2

Aryan.

§ 157. Initially. Skr. *váyam* Av. *vaęm* O.Pers. *vayam* 'we' : Goth. *veis*. Skr. *víś-* Av. *vīs-* O.Pers. *viϑ-* 'clan': O.Bulg. *vīs-ь* 'vicus'. Skr. Av. O.Pers. *vā* 'or': Lat. *-ve*.

Initial *u̯* was lost before *u* and *ū* in Skr. *urú-š* 'broad' fr. **u̯ur-u-š*, prim. f. **u̯r̥r-u-s* (§ 290). *ūrnā* 'wool' fr. **u̯ūrnā*, Indg. **u̯l̥-nā* (§§ 151. 306).

u̯r- was transposed in Av. with *u*-prothesis. **rvāta-* n. 'decree, command'· Gr. *ϝρητό-ς* 'decreed'. Part. pres. mid **rvāzemna-* 'powerful' (*z* = *d̄*) to Skr *vrādh-* 'to be great, powerful' Cp. §§ 260. 624

§ 158. Intersonantal. 3. sg impf. Skr. *á-bhav-a-t* Av. *bav-a-þ* O Pers *a-bav-a*, Indg **é-bheu̯-e-t* from *bheu̯-* 'become, be'. Nom. pl. Skr. *bāháv-as* Av *bāzav-ō* 'arms': Gr. *πήχε-ες πήχεις* fr. **πηχεϝ-ες*

Part pf. act Skr. *vavan-vā́n* Av *vavan-vå* 'victorious' (antesonantal weak stem form Skr. *vavn-úš-* Av *vaon-uš-*) fr orig. **u̯e-u̯u̯-uós*, Skr. *jagan-vā́n* 'having come' (anteson weak st. *jagm-úš-*) fr. Indg **ge-gu̯-u̯ós*, see §§ 225. 229. Skr. *nr̥-vánt-* 'rich in men'. Skr. Av suffix form *-vat-* fr. Indg. *-u̯n̥t-*, e. g. in loc pl Skr *viśá-vat-su* Av. *vīša-vasū*, loc. pl. from *viśá-vant- vīša-vant-* 'poisonous' (cp. Gr. *ἰόεις* 'rusty') 1. sg. impf Skr. *ákr̥nav-am* O.Pers. *akūnav-am* (read *ū* as *u*, cp § 228) 'I made', fr orig **é-qr̥-neu̯-u̯(m)*.

u̯u̯, with *u̯* as glide. Ved *suvá-* Av. *huva-* (beside *svá-*, *xva-*) 'suus'. Ved *tuvám* Av. Gāþ. *tuvēm* (beside Skr. *tvám*) 'thou'. Gen. sg Skr *bhruv-ás*: Gr. *ὀφρύ-ος* 'of an eye-brow'. 3. pl. *aśnuv-ánti*, like Gr. *ἀγνύ-āσι*. Cp. § 159.

-aom is written in Av. for *-avem* = prim. Ar. *-aṷam*, e. g *ker*naom* = Skr *ákr̥-nav-am* 'I made' In like manner *drūm* for *druvem* = Skr. *dhruvá-m* 'firmum'. Cp. Bartholomae Handb. § 95

§ 159. Postconsonantal. Skr. *svá-* Av. *xva-* 'suus': Gr. *ϝός ὅς*, Indg. **su̯ó-s* Skr. *hv-ātar-* Av. *zb-ātar-* 'crier': O.Bulg. *zv-atelĭ*, from rt. *ĝhau̯-*. Skr. *catvár-as* Av. *caþwār-ō* 'four': Goth. *fidvōr* Skr. *kr̥-nv-ánti* Av. *ker*nvanti* 'they make', orig. **qr̥-nu̯-n̥ti* Skr. *sárva-* Av. *haurva-* O Pers. *harūva-* (read *harva-*, s. below) 'all': Gr. *οὖλος ὅλος* fr. **ολϝο-ς* Skr. *dēvá-s* 'god', Av. *daęva-* 'devil': Pruss. *deiwa-s* 'god', Indg. **deiu̯o-s*.

u̯ often interchanged with *uu̯* in Ved. (cp. §§ 120. 125. 153). In the initial syllable, e g. *dvá* and *duvá* like Gr. *δώ-δεκα* and *δύω*; *śván-* and *śuván-* 'dog', cp. Av. *spun-* Lith. nom *szů̃* fr. **szu̯ů̃* and Gr *κύων κύον* As this interchange dates back to the prim. Indg. language, *uu̯*, after a long syllable in the same word, may perhaps be regarded everywhere as an old inherited form, e. g. *rakšas-tuvá-m* 'damage' beside *dēva-tvá-m* 'divinity', part. pf. *dāś-uván* 'doing homage' beside *vid-ván* 'knowing', 2 pl mid impf. *áyuṇ- dhuvam* (*yu-*) 'yoke, harness') beside *ákṛnu-dhvam* (*kar-* 'make') In the classical language *-u̯-* for the most part only appears, e g only *-tva-*, *-dhvam*. The old stage *uu* remained, e g in gen *bhuv-as* from *bhū-* 'world', *bhruv-as* from *bhrū-* 'brow', and in non-initial syllables in 3 pl in *-uur-anti* after consonants beside *-ur-anti* after sonants, aor *a-su-sruv-a-t* 'flowed' from *srav- sru-* (cp § 313). In the popular dialects *uu* frequently made its appearance again where the classical Skr. only had *u* We may have old forms, e g in Pāli *tuvam* (beside *tam* = Skr. *tvám*) 'thee'; nom. acc *duve* (Prākr written *due* and *duvē*) beside *dvē* 'two'; *suvān-a-* beside nom *sā* 'dog'

Various assimilations took place in Iranian in the combination consonant + *u̯* For O.Pers we must premise that *uv* or *ūv* was written for *u* after consonants, e g *θuvām* for *θvām* = Skr *tvám* 'thee', *haruva-* for *harva-* Skr *sárva-* 'all', cp the orthography *-ry-* and *-ry-* for *-ṛ-* p 116

Indg *ḱu̯* (= Skr *śv*) became Iran *sp* Av O Pers *aspa-*· Skr *áśva-* 'horse', Indg **ḱuo-* Av *spun-*: Skr *śván-* 'hound, dog', Indg **ḱuon-*

In like manner Indg *ĝu̯*, *ĝhu̯* (Skr *jv, hv*) became Av *zb zb-ātar-*· Skr *hv-ātar-* O.Bulg *zv-atelĭ* 'crier'.

Indg. *tu̯* (= Skr *tv*) appears in Av as *θw* (*w* was spirant), and in O.Pers. as *θuv*, that the *uv* in the latter combination was a consonant, follows directly from the change of *t* into *θ* (§ 473). Av. *θwąm* O Pers *θuvām*· Skr *tvám* 'thee'. Gen. sg. Av. *xraθw-ō* : Skr. *krátv-as* from st. *xratu-*· Skr. *krátu-* 'power, understanding'.

Indg. *du̯, dhu̯* (= Skr. *dv, dhv*), which, in prim Iran., fell

together in *du̯* (§ 481), appear in Av. initially as *dv* and *d̰b* (Gāþ. *db*), *b*, medially as *d̰v* and *d̰w* Initially, *dvaęšah-*: Skr. *dvéšas-* n. 'bearing enmity, hatred'; *d̰biš-*, Gāþ. *d̰biš-*: Skr. *dviš-* 'hate'. *bitīm*, Gāþ. *d̰bitīm*: Skr. *dvitíya-m* 'secundum' [1]). Medially, part. pf. *evīd̰vå*: Skr. *á-vidvān* 'not knowing, unwise'. *er[d̰]wa-*. Skr. *ūrdhvá-* 'upright' (cp §§ 288 306) So also side by side of each other Gāþ. *-dūm* (i. e. *-dvem* s. below) and late Av. *-d̰wem* = Skr. *-dhvam*, ending of 2. pl. mid. O.Pers. *dūvītiya-* 'secundus', whose *ū̯* (to be read as consonant) was either *u* or spirant

Indg. *pu* became **fw*, thence *f* in Av Acc. sg *āfentem* 'aquosum' fr. prim Ar. **āp-want-am*

Indg. *su* (Skr. *sv*) became in Av *xw* (init. and med.) and *ŋuh* (medially). *xwa-*. Skr *svá-* 'suus'. *xwanhar-*: Skr *svásar-* 'sister' *haraxwatī- sárasvatī* prop name 2. sg. imper. *baraŋuha*: Skr *bhára-sva*, from Ar *bhar-* 'bear, bring'. The pronunciation of *-ŋuh-*, which is mostly not sonantal, has not been determined For *xw* and *ŋuh* in the Gāþās *hv* also occurs: *hva-* 'suus', 2 sg. imper. *gūša-hvā* 'hear'. In O.Pers. *uv* = prim. Ar *su ura-*· Av *xwa-* Skr *svá-* 'suus'. 2 sg. imper. *patipayauvā* 'protect thyself': cp Skr *bhára-sva* Acc. sg *harauvatīm* - - Skr. *sárasvatīm*. Cp. § 558, 3.

-ĕ̄m is written for *-vem* in Av Acc *pourum* : O.Pers. *parūvam* (read *parvam*) Skr. *pūrva-m* 'priorem'. 2 sg. imper Gāþ *dazdūm* Skr *daddhvám*, from Ar. *dad-* 'give', etc. See Bartholomae Handb § 95a

v in Av. is often to be read as *uv*, especially after long syllables, just as in Ved , e g gen sg read *zantuv-ō* for *zantvō* from *zantu-* 'district', cp Ved. gen *dhṛšnuv-ás* from *dhṛšnú-* 'repose'.

§ 160. Anteconsonantal medially and finally.

1) For an uncertain conjecture concerning the reason of the change *dv-* on the one hand and *db-*, *d̰b-* on the other, see Osthoff Morph. Unt IV 371 ff

The vowel remained in Sanskrit as *ṷ* after *ā* (*āu*), whereas prim. Ar. *aṷ* became *ō*. Prim Ar prim. Iran. *aṷ* appears as *ao* (i. e. *aǫ*) or *ēu* in Av., prim. Ar. prim. Iran *āṷ* remained (*āu*); prim. Ar. *aṷ* and *āu* remained unchanged in O.Pers. (*au*, written *auv* when final, and *āu*) Skr *drógha-* 'insult, grief', Av. *draoya-* O.Pers *drauga* 'untruth' Gen sg Skr *krátōš* Av *xrataoš xratēuš* from st *krátu- xratu-* 'power, understanding', O Pers. *kūrauš* from *kūru-* 'Cyrus'. Nom sg. Skr. *gáú-š* Av. *gāu-š* 'bullock' Loc. sg Skr *vásāu* Av. *vanhāu* from st *vásu-vanhu-* 'good'. O Pers. nom sg *dahyāuš* 'country, district' (cp nom. pl. *dahyāv-a*), formed like Av *bāzauš* 'arm' Cp. §§ 62 78. 94.

In Skr. *v* is also found before consonants, viz before *y*, *r*, *n*, e. g. *div-yá-* 'celestial', *dēvr-á* instr sg from *dēvár-* 'brother-in-law', *pīvn-ām* gen pl. from *pīvan-* 'fat', *rtávn-ām* from *ṛtávan-* 'holy, pious', *va-vn-úš-* weak st. form of the pf. part. act. 'triumphant', but *maghón-ā* instr sg. from *maghávan-* 'distributer' In Av. *v* only before *y* after *ī ṛīvya-* 'belonging to life', but diphthongic in *gaoya-* Skr *gávya-* 'bovinus', *vaorāzaṇa-* n. 'friendliness' for **va-vrāz-aṇa-*, *vaonuš-* Skr *va-vn-úš-*; *ašāun-ąm*: Skr. *ṛtávn-ām* That diphthongisation does not appear in Skr in cases where it was possible (cp *varnúš-* with *maghón-ā*), depends on a different mode of forming syllables, in which other forms of the same system may have to some extent set the type (cp. *va-vam-* beside *ra-vn-*) Cp § 154

§ 161. *u* as spirant

ṷ seems in Skr to have become labiodental and spirantal already in the classical period, s. Whitney Skr. Gramm. § 57 Also forms of the popular language as Pāli *dibba-* = *divya-*, *pabbata-* = *parvata-* presuppose the change of *u* to *v* spirant.

As to whether orig. *ṷ* also in other cases than *ṗṛąm*, *aspa-* etc. (159) had acquired a spirantal pronunciation in Av. (the *p* in *aspa-* was developed from a spirant), we leave undecided, and refer to Hübschmann Kuhn's Ztschr XXIV 354 f. and Bartholomae Handb. 9 36 f.

Armenian.

§ **162.** Indg *u̯* appears partly as *v*, and partly as *g* fr. **gu̯* (cp. Italian *guastare* 'vastare', Cymr. *gweddw* 'vidua'), without the conditions for this difference of treatment being clear.

1 *v vasn* 'on account of': Av *vasna-* m 'wish, intention', Gr. ἑκών 'voluntarily', rt *u̯eḱ- kov*, gen. *kovu*, 'cow'. Skr. *gav-*, Gr *βοϝ-*, Indg **gou̯-*. *vec* 'six': Gr. *Fέξ* ἕξ, Cymr. *chwech*, cp. § 589. 3

2. *g. gorc* 'work': Gr *Fέργο-ν gitem* 'I know': Skr. pf. *véda*. *loganam* 'I bathe myself'· Lat. *lavō taigr*, gen *taiger*, 'brother-in-law'. Skr. *dēvár-*

k(u̯) appears for *g(u̯)* after voiceless explosives and spirants. So *sk-* fr. **su̯-* (= orig. *ḱu̯-*, § 408) in *skesur*, gen. *skesri*, 'mother-in-law'; prim. Arm. **su̯es-* arose form Indg. **su̯eḱ-* (cp Goth. *svaíhrō*, Gr. ἑκυρᾶ) through assimilation of *s-* to the following *ḱ* (§ 562). Indg **su̯-* and **tu̯-* became *K-* : *Koir*, gen. *Keŕ*, 'sister': Skr *svásar-*; *Ko* 'tui' *Kez* 'tibi': Skr. *tva-*; cp §§ 560. 360.

Greek

§ **163.** Indg *u̯* was retained as *ϝ*, which was generally spoken as a vowel, not as a spirant. It was sometimes also incorrectly written *υ* and *β* The sound remained in most dialects until far into historic times, as inscriptions show. *ϝ* first disappeared in Ion.-Att. It generally disappeared earlier medially than finally

§ **164.** Initially Bœot. etc *Fίκατι* Dor. *Fείκατι* Ion Att. εἴκοσι 'twenty': Skr. *vi̯śatí-*, Lat. *vīgintī*, O.Ir. *fiche*. Cret. *ΡίσϜο-ς* Bœot. etc. *Fίσο-ς* Att. ἴσο-ς, probably to Skr. *viśu* adv. 'in both directions' *Fέτος* ἔτος 'year' : Lat *vetus* 'old', Skr. *vats-á-* 'year', O.Bulg *vetŭchŭ* 'old'. *Fέπος* ἔπος 'word' : Skr. *vácas-*. *Fοῖκο-ς* οἶκο-ς : Skr. *vḗśá-s* 'house', Lat *vīcus* Goth. *veihsa-* 'spot', O.Bulg. *vĭsĭ* 'village'. *Fάστυ* ἄστυ 'city : Skr. *vástu* 'seat, place', *vástu* 'place, ground, house'. St. form *Fαρ-ν-* 'ram' in the Bœot. proper name *Fάρνων*, in *ἀρν-ός ἀρν-ί* etc, fr. orig. **u̯r-n-*; beside **Fρ-ην-* in *πολύ-ρρην* 'rich in sheep' *οὖλο-ς* 'fleecy, twined' fr. **u̯l̥no-*

through the intermediate stages *ϝωλνο- *ϝολνο- *ϝολλο- (§ 306): Skr. *ūrnā* 'wool' (§ 157).

Rem The ' of ἕλκω 'I draw', which word can not be separated from *αὖλαξ* 'furrow' and Lith. *velkù* 'I draw', is perhaps to be explained on the ground that an attraction to ἑλκ- ὁλκ- (with ' fr σ-, § 564), corresponding to Lat. *sulcu-s* and Ags. *sulh* 'plough', took place

El. ϝρᾱ́τρᾱ Att. ῥήτρᾱ 'covenant' Av. *"rvāta-* n 'decree, commandment' (§ 157). In Lesb βϱ- fr ϝϱ-. βϱήτωϱ, to El. ϝρᾱ́τρᾱ. On Att. ῥ-, cp § 226

§ 165. Intersonantal Loc sg Διϝ-ί Δί: Skr. *div-i*, Indg. **diu̯-í* 'in the sky'. κλέϝος κλέος 'glory, renown' · Skr. *śráv-as* 'renown', O Bulg *slovo* 'word' Corcyr *ροhϝ-αί* Hom ῥο-αί 'floods': Lith. *srav-à* 'flowing, bleeding' (nouns) Corcyr. στονό-ϝεσαν (read σ as σσ) Hom στονόεσσαν fem. 'lamentabilem': cp. Skr. *bála-vatī* fem 'robusta'. St στεᾱτ- (στεᾱτ-ος) 'stiff fat' fr. *στηᾰτ- (§ 611), *στᾱ-ϝατ-, prim f *stā-u̯-t- (§ 233) Aor ἔχεα 'I poured out' fr *ἐ-χεϝ-μι (§ 233), active to χϝί-το

In Lesb. ϰ combined with a preceding short vowel to form a diphthong, i. e heterosyllabic *aϰ, eϰ*, etc. became tautosyllabic, or still more precisely: *aϰα* became $a^{ϰ}$-^{ϰ}a (cp Sievers Phonetik[3] 146) This also occurs in Hom as an Aeolic peculiarity. σεύω 'I drive, hunt': Skr mid *cyáv-atē* 'moves himself, withdraws', Indg. 1. sg. act. *ϰιέϰ-ō or *ϰjéϰ-ō εἶδον 'I saw': Att. εἶδον, Skr *ávida-m*, Indg *é ϰudóm* αὖηϱ 'air' αὔελλα 'gust of wind' · Ion ἀήϱ ἄελλα, to ἄ(ϝ)ημι, Skr *vā́mi* 'I waft, blow'.

§ 166. Postconsonantal νϝ, ϱϝ, λϝ remained unchanged in some dialects until after the beginning of historic times. In Lesb. and Thess. νν, ϱϱ, λλ arose, in other didects (Ion Bœot. Dor) the double consonants were simplified with 'compensation-lengthening', whilst in Att. ϝ was elided without compensation-lengthening. Fr. *γονϝα 'knees' (cp. Av. *zanv-a*, Lat *genu-a*) Lesb γόννα, Ion. γοῦνα, Att. γόνα-τα Corcyr. πρό-ξενϝος. Lesb. ξέννος Ion. ξεῖνος Att. ξένος 'foreign' Fr. *ϰθα-νϝ-ω 'I come first', *τι-νϝ-ω 'I pay penalty' (cp. Skr. *ϰ-nu-á-ti* 'puts in motion') : Ion. φθάνω, τίνω, Att. φθᾶνω, τῖνω. Fr. Indg. stem *per-u̯en-: pl Lesb πέϱϱα-τα Ion. πείρα-τα 'the ends, furthest point' ἀ-πείρων 'unbounded', Att.

πέρας περαίνω, to Skr. *párvan-* 'node, knot'. Inscrip. (Thessal.?) *κόρϝᾱ* : Ion. *κούρη* Dor. *κώρᾱ* Att. *κόρη* 'girl'. Fr. **ὅλϝο-ς* = Skr. *sárva-s* 'whole, all' : Hom. *οὖλος*, Att *ὅλος* With the forms having compensation-lengthening cp § 618

ḱϰ. ἵππος, dial. *ἴνκος* (handed down by the grammarians; dialect unknown): Skr. *áśva-s*, Indg. **eḱϰo-s* 'horse'. *πᾶς παντός* 'complete, entire': Skr *śá-śvant-* 'complete, entire, each' (§ 557, 4), Indg **ḱϰ-ṇt-* (cp the author's Griech. Gramm. p 120). *κκ* = *ḱϰ* also in *πελεκκάω* 'I hew' *πέλεκκο-ν* 'axe-handle' beside *πέλεκυ-ς* 'axe' . Skr *paraśú-ś* 'axe'

Rem *ππ* beside *κκ* is perhaps so to be explained that the latter process of assimilation belonged to a later period than the former On account of *ἴνκο-*, it would then have to be assumed that also **eku-* existed beside **ekϰo-*, which was not transferred to the *o*-declension until after the first appearance of the form *ἵππο-ς*

tϰ, dϰ, dhϰ. Cret. *τϝί* (in Hesych wrongly written *τρέ*) Dor *τέ* Lesb. Ion-Att *σέ* 'thee' . Skr *tvá-* Bœot *πέτταρες* Att. *τέτταρες* Hom *τέσσαρες* etc 'four' · Skr. *catvár-as.* Cp. § 489 Corinth *Δϝεινίᾱς*. Hom. *ἐδδιεσεν δέδδιμεν θεοδδής* (the spellings *δειδιμεν, θεονδής* are wrong), in case *δϝ* was not still spoken in the time of Hom , Att *δεινός δέδοικα*, from rt *dʰeĝʰ-* 'fear'. *δύ-(δεκα) δί-ς* . Skr *dvá dví-ś ὀρθό-ς* : Skr. *ūrdhvá-s*, Indg **ĝʰdhṷó-s* 'upright' (§ 306)

pϰ, bhϰ νήπιος (beside *νη-πύ-τιο-ς* 'unintelligent, under age') fr **νη-πϝ-ιο-ς ὑπερ-φίαλο-ς* 'overbearing' fr. **ὑπερ-φϝ ιαλο-ς*, just as Lat. *superbia* fr **super-fϰ-iā*, from rt *bheϰ-* (cp. § 312)

Initial *sϰ* became voiceless *ϝ-*, which became *h. ϝοῖ ϝέ, οἷ ἑ* 'sibi se', *ϝε-νός ἑνός* 'apart, separated' : Skr *svá- ϝέξ ἕξ* 'six': Cymr *chwech.* The voicelessness of *ϝ* is indicated in Bœot. inscrip. by *h*, *Fhεκα-δάμοε*, cp *ρh* = voiceless *ρ* § 266. Concerning medial *sϰ*, which probably became *σσ σ*, as in *ἴσσο-ς ἶσο-ς*, and the initial *σ* of *σάλος* and others see § 563, 7

Concerning *ϰ*-epenthesis § 639

i̯ϰ. οἶϝο-ς οἶο-ς 'alone' : Av. *aēva-* 'unus' *αἰϝεί αἰεί* 'ever' : Lat. *aevo-m. λαιός* 'left' : Lat. *laeio-s.* For the *ā* in *ἀεί, δᾱήρ* 'brother-in-law' = Skr. *dēvár-* etc. see §§ 96 131.

Change between *u̯* and *u̯u̯* (cp. §§ 120. 131. 153) *δώδεκα* and *δύω* 'two' *Παν-όψια* and Sam. *Κιαν-οψιών* (cp. *χύαμο-ς* with *m*-suffix) exhibit the double forms *πανο-* and *κυανο-* 'bean' (*πύανο-ς* is a later contamination form) from rt. *ḱa͡u̯-* 'swell'. 3. sg. pret. *ἐ-φύ-η* 'arose', but *ὑπερ-φ(f)-ίαλο-ς* (s. above) and O.Bulg. *bě* 'was' fr. **bu̯-ē-t.* *κύων* 'hound, dog'. Skr. Ved. *śuvá*; fr. **κϝων* = Skr. *śvá* Lith. *szů* probably became **πων* and this form was then given up owing to its formal severance from *κυν-* (in *κυνός* etc) 3 pl *ἀγύ-ασι* like Skr *aśnuv-ánti* (beside *snuv-ánti*) 3. sg *ἐρρύη* like Skr *ásusruv-a-t* from rt. *sreu̯-* 'flow'. Cp. also §§ 312 313

Spellings like Cypr *διϝάνα*, Chalc *Γαρυϝόνης* prove that the *u̯* from *u̯u̯* was not quite mute in Greek

§ 167 Anteconsonantal medially and finally

The Indg. diphthongs *eu̯*, *au̯* remained diphthongic. *πεύθεται* : Skr. *bōdhatē*, Indg **bhéu̯dhetai̯* from *bheu̯dh-* 'wake, mark'. Voc. *Ζεῦ* fr Indg **dieu* *αὖ* *αὖ-τε* 'again' Lat. *au-t au-tem*. S §§ 61 96 Whilst *ou*, e g in loc pl *βουσί* (Skr. *góšu*), passed into *ū* already at an early period, s § 80

The first component of anteconsonantal *ēu*, *ōu*, *āu* underwent shortening in prim Gr, e g. *Ζεύς* fr **dḭēu̯-s* (§ 69), *βοῦς* 'bullock' fr **gōu-s* (§ 85), *ναῦς* 'ship' fr **nāu̯-s* (§ 101), s. § 611 They thus fell together with orig *eu̯*, *ou̯*, *au̯* and became subject to the same changes as these

Ion. Att. *α-ρρητο-ς* 'unspoken' fr **ἀ-ϝρητο-ς*, *πολύ-ρρην* 'rich in sheep' fr. **-ϝρην*, aor *ε-ρρηξα* 'I broke' (trans.) from (Cypr.) *ἔ-ϝρηξα*. Whereas in Lesb. (and in Hom.) *ϝ* before *ρ*, *λ* united with the preceding vowel to form a diphthong. *αὔρηκτος* = *ἀρρηκτος* 'not to be broken', *εὐράγη* = *ἐρράγη* 'he broke' (intr.), *ταλαύρινο-ς* 'shield-bearing' (cp. *ϝρῖνος· δέρμα* Hysych, written *γρῖνος* in the Cod.), *ευληρα* 'reins' (cp *αὐληρον* and *ἄβληρα* in Hesych.).

u̯. *δαίω* 'I kindle' fr. **δαϝ-μι*, *κλαίω* 'I weep' fr. **κλαϝ-μω*. Hom. *πλείω* 'I sail' fr. **πλεϝ-μω*. See § 131 p. 118 and § 639.

Italic.

§ 168. Initially. Lat. *vehō*, Umbr. aṙ-veihtu 'adicito', Osc. *veiatura* 'vectura' (Paulus F.) : Skr. *váhāmi* 'veho', Indg. **u̯éĝhō*. Lat *vertō*, Umbr. ku-vertu *co-vertu* 'convertito', Osc. *ϝερσορει* 'Versori, *Τροπαίῳ*' : Skr. *vártatē* 'turns himself', Indg. **u̯értō* Part. Lat. *vorsu-s*, Umbr. Osc *vorsum* ('quod Graeci *πλέθρον* appellant, Osci et Umbri vorsum', Frontinus de limit. p. 30, 9) : Skr. *vṛttá-s*, Lith. *vir̃sta-s*, Indg **u̯ṛt+tó-* (§ 295). Lat. *vir*, Umbr. *viro veiro* 'viros', Osc. vereias 'iuventutis' : Goth. *vaír* 'man', Skr. *vīrá-s* 'hero'.

Lat. *rādīx* 'root' fr **u̯rād-*, **u̯ṛd-* (§ 306) : Goth. *vaúrts* 'root'. Lat. *lāna* 'wool' fr. **u̯lānā*, **u̯l̥-nā* Skr. *ūrnā* (§ 306). Lat. *rēpō* 'I creep, crawl' probably fr **u̯rēpō* : Gr *ῥέπω* 'I incline' (of the scale of a balance) fr. **ϝρέπω*, cp. *καλα-ῦροψ* 'shepherd's crook' *ἀντί-ῥροπο-ς* 'counterpoising' *lōru-m* 'reins', to Gr. *εἴλῃρα* (§ 167)

§ 169. Intersonantal. Lat. *ovi-s*, Umbr. *ovi* acc. 'oves', Osc. *Ovvis* : Lith. *avì-s* 'sheep'. Lat. *Jov-is*, Umbr. Iuve Osc. Iuveí 'Iovi' : Skr. loc *dyáv-i* 'in the sky', Indg st. form **di̯eu̯-*. Lat. *vīvo-s*, Osc bivus nom. 'vivi' . Skr *jīvá-s* Lat. *juven-cu-s*, Umbr. *uvengar* nom. 'iuvencae' . Skr. *yuva-śá-s* 'youthful', Indg. **i̯u̯n̥-ḱó-s* or **ju̯n̥-ḱó-s* (§ 133). Lat. *novem*, for **noven* (after the analogy of *septem, decem*) : Skr. *náva*, Indg **neu̯n̥*.

The *u̯* of the Indg. combination *u̯u̯* in **duu̯ō* 'two' etc. was not so strongly articulated in Lat. as to be represented; forms like *instituvit, suvo, mortuva* did not make their appearance until after the end of the classical period (Schuchardt Voc. II 520 f.). Whereas Umbr. tuva neut 'duo' tuves 'duobus' beside *duir* 'duobus'; kastruvuf beside *castruo* 'fundos'; Osc. eítiuvam beside *eituam* 'pecuniam'. Cp. § 170.

§ 170. Postconsonantal Such an *u̯* partly remained consonantal in Italic, and partly became sonantal.

Lat. *tenuis* : cp. Skr. *tanv-í* fem. 'long, stretched'. Lat. *genua* : cp. Av. *zanv-a* Gr. Lesb. *γόννα* 'genua'. Lat. *arvo-m*, Umbr. arvam-en 'in arvum' arvia aruvia *arvio* pl. n. 'fruges':

Cymr. *erw* 'piece of land' Bret. *erv* 'furrow'. Lat. *ferveō* : O.Ir. *berbaim* 'I seethe, cook, melt'. Lat. *salvo-s*, probably connected with Skr. *sárva-s* Gr. *οὖλο-ς ὅλο-ς* (Thurneysen Kuhn's Ztschr. XXVIII 160), Umbr. *salvom saluvom, salua saluva*. Lat. *helvo-s* : OHG. *gelo*, inflected *gelawēr*, 'yellow', cpf. **ghelṷo-s*.

Rem Lat. *ll* fr *lṷ*, in illustration of which *pallidu-s* beside Lith. *palia-s* 'pale-yellow' and other are quoted, seems to me very uncertain. See W. Meyer Kuhn's Ztschr. XXVIII p 163.

Lat. *equo s* (Umbr. ekvine loc. 'equini' loan-word?) : Skr. *áśva-s*, Indg. **ekṷo-s* Lat *quetor questus* · Skr. *śvás-i-mi* 'I breathe, wheeze, sigh' Indg. **kṷes-* Lat *quatvor quatuor* (*quattuor*) : *catvár-as* 'four'. Lat *mortuo-s* · O Bulg *mrŭtvŭ* 'mortuus'. Lat. *bi-s, bi-dēns* Skr. *dvi-ś* 'twice' Lat. *bonus bene* fr. **dṷ-ono-s* rt *daᵉṷ-* 'honour, acknowledge' : cp. Skr. Ved. *dúv-as-* n 'mark of respect'. *derbiōsu-s* 'scabby', fr. **derdṷ-* : Skr. *dardrū-* 'eruption on the skin, leprosy'. Lat. *suāvi-s* fr. **sṷādṷ-i-s* (§ 506) : Skr fem *svādv-ī* 'suavis'. Lat. *foru-m* fr prim. Ital **ḫṷoro-* . Lith. *diẽra-s* O Bulg. *dvorŭ* 'court'. Lat. *suf-fiō* from prim. Ital. **ḫṷ-ṷō* : Gr. *θύω* 'I sacrifice'. Lat. *arduo-s* fr. prim. Ital. **arḫṷo-s* : Skr *ūrdhvá-s* 'upright', Indg **ǧdhṷó-s* (§ 306). 2. sg *fīs* fr. **fiṷis, *fṷ-ṷe-s*,* like O.Pers. opt. *b-ṷyā* fr. **bṷ-ṷyā(t)*, rt *bheṷ-* (Osthoff Zur Gesch. d. Perf. 430 f); hence *du-bius* from **du-bhṷ-ṷo-s, -bō -bam* in *calē-bō, -bam* (Osc. fu-fans 'erant') fr. **-bhṷ-ō* **-bhṷ-ā-m* etc.

sṷ- appears variously treated, but the reason of this diversity has not hitherto been discovered. Lat. *suāvis* : Skr. *svādú-* OS *swōti* 'sweet'. Lat. *sī*, Osc. svaí *svae* Umbr. *sve* 'si', Volsc. *se-pis* 'si quis', related to Goth. *sva* 'so' *swē* 'how'. Lat. *sex* : Gr. *ἕξ* Cymr. *chwech* 'six'. Lat. *ser-ēnu-s* : Skr. *svár-* 'splendour, sky'. O.Lat. *sīs* 'suis' : Gr *ἑός ὅς* Skr. *svá-* 'suus'. The elision of the *ṷ* in Lat. *sūdor sūdāre*, fr. **sṷūd-* **sṷoḍ-* according to § 81 p 74 (cp. OHG. *sweiz* OS. *swēt* Skr. *svēda-s* 'sweat'), may be directly due to the following *ū*. By the side of this *so-* fr. **sṷe-* in *soror* etc. § 172. Medial *-sṷ-*: ***Menerva Minerva*** fr. **Menes-ṷā*, to Gr. *μένος* n. 'sense'; cp. § 569.

ṷṷ. Lat. *deivos dīvos*, Umbr. *deuia* 'divina', Osc. deívaí

'divae' : Pruss. *deiua-s* Skr. *dēvá-s* 'god', Indg. **deiu̯o-s*. Lat. *aevo-m* : Gr. *αἰϝί* 'ever' *αἰ(ϝ)ών* 'time'.

Indg. u̯ had become sonantal in such forms as *tenuis mortuos*, like i̯ (§ 135) and *l* (§ 269). Poets occasionally, as it seems, made use of forms not usual in the ordinary language, e. g. *suādent* trisyllabic = *svādent* in Lucret (Christ Metrik[2] 43 f.). When, on the other hand, they employ also *tenuis, genua* etc. (Christ as above p. 32, Kuhner Ausf. Grammat. I 94), this pronunciation may be due to some dial. peculiarity, but it can hardly represent Indg. u̯. This is still less the case in O.Fr. *tenve* 'tenuis', Italian *belva* 'belua', Ital. *morto* Sp *muerto* 'mortuus' (*-to* fr. *-tvo*) etc (Diez Gramm. d rom. Spr. I[4] 187 f, Horning Ztschr. fur roman. Phil. VII 572 f)

On the other hand Indg. *uu̯* seems to occur unchanged e. g. in *duō duis dui-dēns* beside *bi-* (cp Skr. Ved. *duvá duviš* beside *dvá dviš* etc.), O.Lat. *duonōro* 'bonorum' (cp. Skr. Ved. *dúv-as-*); *su-is su-ī su-īnu-s* (cp. Gr. *ὑ-ός ὑ-ί* with e. g. Goth. *sv-ein* 'pig' O.Bulg *su-inŭ* 'suillus') ; *F'ā-tuo-s* 'prophet', *mū-tuo-s* 'changeable' (cp. Skr. Ved *jé-tuva-s* 'to be won'). *suo-s* may have arisen from *sovos* = Indg. **seu̯o-s* (§ 172), but it may also be identical with Skr Ved. *suvá-s* (beside *svá-s*).

Umbr. forms like *saluvom* show the same change of u̯ to *uu̯* as Lat *quatuor* etc.

§ 171. Anteconsonantal medially and finally. Prim. Ital *ou̯* (= Indg *eu̯* and *ou̯*) became *ū* (*ō*) in Lat, *ō* in Umbr., *ov* in Osc : e. g gen. sg Lat. *tribūs*, Umbr. *trifor* 'tribus', Osc. *castrovs* 'fundi', s. §§ 65. 81. Prim. Ital *au̯* became Lat. *au*, Umbr. *ō*, Osc. *av* : e. g *aut, ote, avti* s. § 97. Umbr. manuv-e 'in manu' (*v* was a glide) is traceable to Indg. *-ōu̯*, and perhaps also Lat. *ūsū* used as loc, cp. Skr. *sūnáu* loc. sg. of *sūnú-š* 'son', s. § 85.

Osc. *v*, *f* in avt *avti* 'aut', Avfi 'Aufius', *castrovs* 'fundi', túvtíks 'publicus', *tovto* τωϝτο 'civitas', Lúvkanateís 'Lucanatis', Luvkis 'Lucius', Lúvfreís 'Liberi', Núvlanús 'Nolani', and others, point to a sharper division of the two components than in the usual pronunciation of diphthongs, i. e. an articulation

similar to the Mod. Gr. pronunciation of *αυ* and *ευ* (in *αὐλή, αὔριον, εὔνους, εὐγνώμων* etc.)

§ 172. *v* = Indg. *u̯* was certainly spoken as a vowel, not as spirant in Lat. prior to and during the classical period, probably also in the other Ital. dialects. Lat. *v* did not become a spirant until the second cent. A D.

By the vocalic pronunciation of the Lat. *v* are to be explained the following changes which have not been given above.

1. *-u-* in unaccented syllables (§ 680) fr. *-ou̯-* (§§ 65. 81), *-au̯-* (§ 97) *dē-nuō* fr *dē novō. ind-uō* fr. **ind-ovō* : Umbr. *anovihimu* 'induimino', Lith. *au-nù* (Inf. *aũ-ti*) 'I put on feet-covering'. *impluō* fr. **im-plovō* beside *plovō*, Gr *πλέ(ϝ)ω ab-luō c-luācru-s* beside *lavō lavācru-m*. Cp Osthoff Morph. Unt. IV 80. 158 391 Zur Gesch. d. Perf. 259.

2. *-u-* from *-u̯o-*. *ecus* (class period) from *equo-s* (corresponding to *aecus* fr *aequos* with *qu* = Indg *q*, s. § 341a). *Gnaeus* from *Gnaivo-s. deus* fr. *deivo-s* Cp. also inscrip. *vius* (*ī*) = *vīvos, aeum* = *aevom* etc. The postclass. form *equus* is a new formation made after the analogy of *equī* etc., class *dīvos* (*dīvus*) after *dīvī* etc., vice versa *Gnaeī, deī* after *Gnaeus, deus*. Cp. Bersu Die Gutturalen 53 ff., Thurneysen Kuhn's Ztschr. XXVIII 155 f. In a similar manner probably also *con-cutiō* fr. **con-quatiō* (§ 97).

3. *-o-* fr. *-u̯e-*. *soror* fr **su̯esōr* . Skr. *svásar-* 'sister' *socrus* fr. **su̯ecru-s* : Skr. *śvaśrú-* fr. **su̯aśrú-* (§ 557, 4), Gr. *ἑκυρά* 'mother-in-law'. *somnu-s* fr. **su̯epno-s* : Skr. *svápna-s* 'sleep'. *combr-ētu-m* 'a kind of rush' · Lith. *szveñdrai* pl. 'a kind of reed', cpf. **ku̯endhro-* (§ 370) Correspondingly *coquō* fr. **quequō* etc. with *qu* = Indg. *q*, s. § 431a.

4. Changes with loss of a medial syllable. *au-spex* fr. **avi-spex. claudō* fr. **clāvidō. ō-pliō ū-piliō* fr. **ovi-piliō. noundinae nūndinae* fr. **noven-dinae prūdēns* beside *prō-vidēns. aetās* fr. O.Lat. *aevitās. praedēs* pl. fr. O.Lat. *praevidēs. mālō mālim* beside O.Lat. *māvolō māvelim*, etc. Cp. § 633.

Cp. Umbr. *bue* 'bove' *buo* 'boum', *courtust* beside *covortus* 'converterit'.

Old Irish.

§ 173. Initially *f-* *fēn* 'wain' : rt. *u̯eĝh-* 'vehere' (§ 526). *fedim* 'I bring, lead' : Skr. *vadhú-ṣ* 'bride, young woman', Lith. *vedù* O.Bulg *vedą* 'I lead'. *fer* 'man' : Lat. *vir* *fiss* 'scientia' fr. **u̯issu-s*, **u̯id+tu-* : Skr. *véda* 'he knows', Lat. *videō*. *frass* f. 'shower of rain' : Skr. *varṣá-s* 'rain', Gr. Hom. *ἐέρση* 'dew' (cp. § 274). *flaith*, gen. *flatha*, f. 'dominion, sway'. Goth. *valda* O.Bulg. *vladą* 'I wield, rule' (cp. § 274).

Concerning *ḟ*, when conditionally initial, e. g. *ā ḟir* 'O man', s § 658, 1.

l- fr. **u̯l-* in *lingim* 'I jump', to Skr. *válgāmi* 'I jump, hop' (s. § 285 rem.)? Otherwise Thurneysen Keltor. 85 f.

v- (i e. *u̯* or spirant?) still appears in Gall., and also in Britannic names of the Roman period, later in Brit. *gu̯-* (*gu-* *gw-*). Gall. *vergo-bretus* 'cuius iudicium efficax est', O Cymr. *guerg* 'efficax' : O.Ir. *ferg* *ferc* 'ira', to Gr. *ὀργή* 'impulse, anger'. Cymr. *gweddw* : O.Ir. *fedb* 'widow', Lat. *vidua* (cp. § 174). O.Cymr. *gulat* Mod Cymr. *gwlad*, Bret. *glat* : O.Ir. *flaith*.

Rem. *b* i. e. voiced spirant (cp § 175) for medial *f* after the preposition *com-*, which lost its *m* *co-bsud* 'stabilis' to *fossad* 'quiet, fast' from *foss* 'a remaining, quietness' : Skr *vásāmi* 'I sojourn, dwell', Goth. *visa* 'I remain' *coibnes* 'affinitas fr **co(n)-bines* from *fine* 'relationship' : OHG. OS *wini* 'friend' Cp §§ 212 513 658

§ 174. Interconsonantal *u̯* partly underwent contraction with the preceding vowel and formed a long vowel, and partly entirely disappeared, whilst *u̯* remained in the Britan. branch. *clū* 'fame, renown', Cymr. *clyw* 'hearing' : Gr. *κλέϝος* Skr. *śrávas-* 'renown'. Plural *clōi* 'nails' : Lat *clāvī*. *ōi* 'sheep' : Lat. *ovi-s*. Perf. *bōi* 'fuit' fr. orig. **(bhe-)bhou̯-e* : cp. Av. *ba-vāv-a*, rt *bheu̯-*. Gen. pl. *bō n-* 'boum' : Gr. *βο(ϝ)-ῶν*; *Boind*, a river in the south of Ireland, in Ptolem. still *Βουούινδα* (*Buvinda*). *ōac* *ōc* (compar. *ōa*, superl. *ōam*) Cymr. *ieuanc* 'iuvenis', prim. Kelt. **i̯ou̯n̥ĝko-s* : cp. Skr. *yuvaśá-* comparat. *yávīyas-* (§ 137). *lī* cymr. *lliw* O.Corn. *liu* Mod. Corn. *lyw* 'color, splendor' : Lat. *lūror*. *biu* *beo* (nom. pl. *bī*) Cymr. *byw* 'alive', O.Corn. *biu* Mod. Corn. *bew* 'vita' : Gr. *βίο-ς* 'life', Goth. *qiu-s* Lith. *gývа-s*

Lat. *vīvo-s* 'quick, alive', Indg. **gʷiu̯o-s-*. *nōi n-* Cymr. *naw* Corn. *naw* 'nine' : Skr. *náva*, Indg. **néu̯n̥*.

In *fedb* 'widow' (Skr. *vidhávā*, Lat. *vidua* fr. **vidovā* by § 172, 1, O Bulg *vĭdova*) *-dou̯-* became *-dų-* at an early period (§ 634). from the latter *-db-* (cp § 175).

§ 175. Postconsonantal. *marb* 'dead' *marbaim* 'I kill', Cymr. *marw* Corn. *marow* Bret. *marv marf* 'dead' : OHG. *maro*, inflected *marawēr* 'ripe, mellow, fragile'. *tarb* 'ox', Gall. *tarvo-s* Cymr. *tarw* Corn. *tarow* Bret. *tarv tarf* 'ox' · Gr ταῦρο-ς probably fr. **ταρϝο-ς* (§ 639). *berbaim* Cymr *berwaf* 'I seethe' : Lat *ferveō* Cp. also *delb* 'figure, form' Cymr *delw* and *danb* 'sus' Cymr. *banw* fr. **bandva* This *b* after *r*, *l*, *d* was a voiced spirant like intervocalic *b* (§ 522)

ech 'horse', Gall. *epo-*, prim Kelt **ekʷo-s* : Skr. *áśva-s* (cp. O.Ir. *c* Britt. *p* = Indg *ʲ* § 435) *cethir* 'four', O.Cymr *petguar* Mod. Cymr. *pedwar* Corn. *pesuar* Bret *pevar*, in Ptolem *Πετουαρία*, a town in Britain : Skr *catvár-as*, Goth *fidvōr*. *dā dau* 'two', O Cymr M Bret *dou* : Skr. *dvá dvāú*. *bu* 'I am' like Lat. *fīō* goes back to a prim. Indg. **bhu̯-u̯ō*, rt *bheu̯-* (§ 170)

su̯- appears as *s-* and as *f-*, Cymr. *chw- suur fiur* 'sister', Cymr. *chuaer* : Skr. *svásar-*. *se* 'six' *seser* 'six men', *mōr-feser* 'magnus seviratus' i e. '7', Cymr. *chwech* : Gr. *ϝέξ* ἕξ fr. **σϝεξ*. *do-sennat*, 'they hunt, drive' from a rt. *su̯end-* *f* and *b* = *su̯* appear after vowels; *b* is written before voiced consonants and finally Redupl. pf. 3. sg. *do-sefann* = **sesu̯onde*, 3. pl. *do-sefnatar*, pres. 3. sg. imper *toibned* from **to-fenned*, related to *do-sennat*, given above. Gen. *feibe* dat. acc *feib* 'excellence, suitableness, worthiness' fr. prim. Kelt. gen. **u̯esu̯-iās* dat. *-ī* acc. *-in* beside nom. *fiu* fr. **u̯isu-s *u̯esu-s*. We must accordingly assume that initial *f-* = *su̯-* in *fiur* did not arise in absolute initiality[1]). Cp. § 658, 1. Medial *su̯* after *k̂* probably

1) The form *fiur*, as Thurneysen remarks, does not occur as an absolute initial.

in *dees* 'to the right, southerly' fr. **deḱsṷo-*, O.Cymr. *dehou* : Goth. *taíhsva* 'to the right', cp. Gall. *Dexsiva*.

ṷ. *dia*, gen. *dē* voc. *dē*, 'god' (hereto *diade* 'godly'), O.Cymr. *duu* Mod. Cymr. *duw* 'god', Gall. *Δεουονα Dēvo-gnāta* : Pruss. *deiwa-s* Skr. *dēvá-s* 'god', Indg. **deiṷo-s*.

§ 176. Anteconsonantal medially and finally. Indg. *eṷ* and *oṷ* fell together in *ō* (*ua*) in accented syllables, e. g. *lōche* 'fulmen', *tuath* 'folk', *ruad* 'red'; from *aṷ ō*, e. g. *au ō* 'ear'; s. §§ 66. 82. 98. *dau dō* 'two' · Skr. *dvāú*, Indg. **dṷōṷ*, s. § 85.

Germanic

§ 177. Indg. ṷ was, as it seems, still generally a consonantal *u* in prim. Germ. This pronunciation remained in Goth. (written *v*), likewise in OHG. (written *uu*, *w*); but in the MHG. period ṷ became a spirant, spoken as in Mod. HG.

§ 178. Initially. Goth. *ga-vigan* 'to move', OHG. *wegan* Ags. *weȝan* 'to move oneself', O.Icel. *vega* 'to be in motion' : Skr. *váhāmi* 'veho', Indg. **ṷeǧhō*. Goth. *vatō* n. (gen sg. *vatins*, dat. pl. *vatn-a-m*) OHG. *wazzar* OS *watar* O.Icel. *vatn* n. 'water' : Lith. *vandů̃*, gen. *vandeñs*, O.Bulg. *voda* 'water', cp. Skr. *ud-án-* 'water' with Indg. weak grade form of the root syllable (§ 221). Goth. *vitan* OHG. *wiȝȝan* 'to know' : Gr. *Fιδεῖν ἰδεῖν*, Skr. *vidmá* 'we know'. Goth. *vulfs* OHG. *wolf* prim. Germ. **ṷulfa-z* 'wolf' (concerning *f*, s. § 444), Skr. *vṛ́ka-s* Lith. *vil̃ka-s* O.Bulg. *vlŭkŭ* 'wolf', Indg. **ṷl̥ǫ-s*.

Goth. *vráiqs* 'slant, crooked' : Gr. *ῥαιβό-ς* 'crooked, crook-legged' fr. **Fραιβο-ς*. Goth. *vrits* m. 'line, point', OHG. *riȝ* 'line, stroke, letter', OHG. *rīzan* OS. *urītan* 'to cut, scratch into' (rt. *ṷreid-*, not found except in Germ.). Goth. *vlits* m. 'look, face', OS. *wliti*; represented in OHG. by *ant-lizzi* n. 'countenance' (cp. Ags. *and-wlita* m.), which arose from a contamination with *ant-lutti* n. (Goth. *ludja* fem. 'face') and represented regular **ant-liȝ*. *wr-* occurs in OHG. only a few times in Frank. monuments as *wrehhan* 'exulem', to the verb *rehhan* 'to punish' = Goth. *vrikan* 'to persecute'.

§ 179. Intersonantal. Goth. *avēþi* n. 'herd of sheep', OHG. *au* (nom. pl. *awi*) 'sheep' : Lat. *ovi-s* Lith. *avì-s* 'sheep'. Goth. *sunivē* 'of sons' : cp. O.Bulg *synovŭ*, Gr. *πήχεων* fr. **πηχεϝ-ων*. Prim. Germ **i̯u̯unga-z* (= Skr. *yuvaśá-s*, Lat. *iuvencu-s*) became **i̯ūnga-z* : Goth. *juggs* (still spoken with *ū*? cp. § 614) OHG OS. *jung* O Icel *ungr* 'young'. Correspondingly *u* fr. *i̯u* in Goth. OHG. *niun* 'nine', cp. Skr *náva* etc., Indg. **neu̯n* (cp. § 659, 6).

Indg. *ōu̯-* and *au̯-* = prim Germ. *ōu̯-* (§§ 91. 107) became *au-* in Goth. before vowels *staua* f 'judgment', *staua*, gen. *stauins* 'judge'. O.Bulg. *stavitı* 'to place, stop' *pri-stavĭ* 'an official man', Lith. *stóviu stovėti* 'to stand' *af-dauþs* 'exhausted' : O.Bulg. *davitı* 'to strangle', Lith *dōvyti* 'to put in continual motion'. This *au* was probably an open *ō*, viz. the long of *aú* (*baúrans* 'carried'), like the *au* in loan-words as *Trauadái* '*Τρωάδι*', *praitauria* beside *praitōria* f. 'praetorium' (Braune Got. Gramm.[2] p. 13). Cp the *ai* in *saian* § 142 The questions connected with antevocalic *au* in Goth. and its representation in HG. have not as yet been fully settled, see Paul in Paul-Braune's Beitr. VII 152 ff, VIII 210 ff, Kogel ibid IX 513 ff.

Goth *av* and *iv* before a vowel passed into the diphthongs *áu* and *iu*, when this vowel was elided and *v* consequently became final or stood before a consonant. *snáu*, 3. sg. pret. of *sniwan* 'to hurry', fr **snau̯(i)*, prim. f. **se-snóu̯-e*. *triu* 'stick, stake' (gen. *triwis*) fr **tri̯u̯(am)*, prim. f. **dreu̯-o-m*. *qius* 'vivus' (gen. *qiwis*) fr. **gi̯u̯(a)z*, prim. f. **gi̯uo-s* ; *ga-qiuja* 'I quicken' fr. **qi̯u̯(i)i̯ō*, prim f. **gi̯u̯ei̯ō* (cp. § 142) Such an *-iu-* became *-ju-* in unaccented syllables : nom. pl. *sunjus* 'sons' fr. **sunius *suni̯uz *suneu̯-es* : Skr. *sūnáv-as* 'sons' (cp. § 143 rem.). Here belongs also the change of *-ōu̯-* to Goth. *-ōj-* : the diphthong *ōu* became (close) *ō*. *stōja* 'I judge' fr. **stōu̯i̯ō*, prim Germ. **stōu̯iii̯ō*, pret. *stauida* (see above): O.Bulg. 1 sg. *stavljǫ* (with excrescent *l*, § 147 p. 132) 2. sg. *staviši*, inf. *stavitı* 'to place'.

With this cp. *lēv* n. 'opportunity, occasion' fr. **lēu̯(a-m)*, *lēvja* 'I betray'; nom. *áivs* acc. *áiv* 'time' (Lat. *aevo-m*) fr. **ai̯u̯(a)-z *ai̯u̯(a-m)*.

-ggv- (the first *g* is not to be read *w* as in other cases) fr. *-ŭ-* is parallel to Goth. *-ddj-* fr. *-ĭ-* (§ 142 p. 127). In Norse likewise *-ggv-* (*-gg-*), whilst the orig. prim. Germ. sound generated an *u* in West Germ., which united with the preceding vowel to form a diphthong, or *ū* (when the preceding vowel was *u*). Goth. *triggva* f 'covenant' *triggvs* 'true, faithful', O.Icel. *tryggr* acc *tryggvan* = Goth *triggvana*, OHG *treuwa triuwa* 'loyalty' : cp. Pruss *druwi* f. 'faith, belief', Gr δρυό-ν ἰσχυρόν. Ἀργεῖοι Hesych Goth. *glaggvō* adv 'carefully, exactly', adj. O.Icel *gloggr* OHG. inflected *glauwēr* 'exact, clear' Goth. *skuggva* 'mirror', O Icel. *skugge* OHG. *scūwo* 'shadow'. The conditions for this special Germ treatment of *ŭ* as well as that of the corresponding *ĭ* have not been determined. Cp. Paul in Paul-Braune's Beitr. VII 165 f., Kogel ibid IX 523 ff, J. Schmidt Anz. f. d. Alt VI 125 f

§ 180. Postconsonantal Goth *aihva-tundi* 'βάτος' : Lat. *equo-s*, Indg. **eḳŭo-s* 'horse' *mavi* f 'girl' fr. **ma(ʒ)ŭ-ī* (§ 444 c) to *magu-s* 'boy', like Skr *svādv-ī* f to *svādú-š* 'sweet'. Suffix *-þva*, e. g. *frija-þva* f. 'love' . Skr *priya-tvá-m* n. 'being agreeable, pleasing'. *fidvōr* 'four' : Skr *catvár-as*. Pl. *tvái* 'two' : Skr. du. *dvá dvāú*. *swistar* 'sister' : Skr. *svásar- faúr-valveiþ* 'he rolls before' : Lat. *volvō*.

w remained in OHG. in combinations at the beginning of words. *dwahan* 'to wash' : Goth. *þvahan*. *zwēne* 'two' : Goth. *tvái*. *swester* 'sister' Goth *svistar* Sometimes with anaptyctic vowel after *s-*, *z-*: *souarz* beside *swarz* 'black', Goth. *svarts*; *zoweōn* beside *zweōn* 'to doubt'; in other cases seldom, e. g. *thowahan* beside *thwahan dwahan* *w* remained in medial combinations only when preceded by *r, l, s* in which case a vowel was developed. *marawēr* (inflected form to *maro*) 'mellow', prim. Germ. st. **marŭa-*: O.Ir. *marb* Cymr. *marw* 'dead'. *gelawēr* (inflected form to *gelo*) 'yellow' : Lat. *helvo-s*. *zeswēr zesawēr zesewēr* (infl. form to *zeso*) 'dexter' : Goth. *taihsva*. *w* disappeared after other consonants. *selida* 'shelter' : Goth. *saliþva*. *wahta* 'watch' : Goth. *vahtvō*.

Rem. 1 *scato*, gen. *scatawes*, m. 'shade', to Goth *skadu-s* is generally given as an exception The form, however, seems to go back to a st. **skaðuų̯a-*, cp OHG *u atawa* Goth *viduō*

Rem 2 On the forms containing anaptyctic vowels cp § 628

-mų̯- became *-un-* in prim. Germ. Goth. *minniza* OHG. *minnuro* 'minor' fr. **miny̯-iz-ō* from **minu-* . Gr. *μινύ-θω*, Lat. *minu-ō* Prim. Germ **mann-* 'man' fr. **manų̯-*, dat. (loc.) sg. Goth. *mann* OHG. *man* fr. **mann-i*, gen. pl. Goth. *mann-ē* OHG. *mann-o* etc. Skr. *mánu-ṣ* 'Manu'. Goth OHG. *rinnan* 'to run' from **ri-nų̯-ana-n* · Skr *ri-nv-a-ti* 'he lets flow' (not found in the texts), cp. the close of § 153

ų̯ų̯ Goth *áivs*, gen *áivis*, m 'a long time' *áiveins* 'eternal', OHG. *ēwa* f 'long time, order' *ēwīn* 'eternal' : Lat. *aevo-m*, cpf. **aiy̯o-*. Goth. *hláiw* n 'tumulus', OHG. *hlēo* gen. *hlēwes*, prim. f **hlo̯i-y̯o-s* from rt. *ĥlei̯-* 'lean' cp Lat. *clī-i-o-s*

Postconsonantal *-ų̯u-* became *-u-* in prim Germ. O.Icel. *sund* n Ags *sund* m 'swimming' from prim. Germ **sy̯um-da-* (§ 214), to O.Norse *svima* 'to swim' part. *sumenn*. Goth. *hunsel* Ags. *hūsel* O Icel. *hūsl* n. 'offering, holy service' from prim. Germ. **xy̯unt+tla-m* from Indg **ĥy̯-y̯t-* : cp Av. *spent-a-* O.Bulg. *svętŭ* 'holy'. OHG part. *gi-dungan* (to *dwingan* 'to squeeze, press'), *dūhan* 'to squeeze, press' (weak verb) fr. prim. Germ. **þuŋg-* **þuŋχ-* fr. **þy̯uŋg-* **þy̯uŋχ-* (§ 214), rt. *tų̯eŋq-* : Lith. *tvenkia* 'it is sultry, gives pain'. Cp OHG *koman* 'come' pp. fr. prim. Germ **kumana-*, older **kų̯umana-* etc. with Indg. velar explosive, § 444 b

§ 181. Anteconsonantal medially and finally. *eų̯* : Goth. *þiuda* OHG. *deota diota* 'folk' : O Ir *tuath*, cpf. **teų̯tā*, § 67. *oų̯* . Goth *ráuþs* (st *ráuda-*) OHG. *rōt* 'red' : O.Ir *ruad*, cpf. **roų̯dho-s*, § 83 *aų̯* · Goth. *áuk* 'for, but' *áukan* 'to increase, grow', OHG. *auh* 'also' : Lat. *augeō*, rt *aų̯g-*, § 99. *ōų̯* : Goth. *ahtáu* 'eight' : Skr *aṣṭáú*, cpf **oĥtōų̯*, § 659, 3.

Goth. *iu* and *áu* before *j* are also specially to be noted (§ 154). *niuji-s* 'new' Skr. *návya-s* 'new', Indg. **neų̯-y̯o-s* (cp. on the other hand OHG. *niuwi*, like Goth. part. *ana-niviþs* 'renewed'). *háuis* gen. of *havi* n. 'hay', prim. st. **qoų̯-y̯o-* or

**qaɣ-ɣo-*, to OHG. *houwōn* O.Icel. *hǫggva* 'to hew', O.Bulg. *kovą kovati* 'to hew, strike, slay'. Cp. *iu* in *ga-qiuja* § 179 p. 156.

Rem. The supposition of several scholars, that ō also arose from ōɣ before other consonants than ɣ (cp Goth *stōjan* § 179) in prim Germanic, e. g in Goth *flōdus* OHG. *fluot* 'flood, tide', rt **plōɣ-*, is not sufficiently founded.

Baltic-Slavonic.

§ 182. Initially. Lith. *vežù* O.Bulg. *vezą* 'veho' · Skr. *váhāmi*, Indg. **ɣeǧhō*. Lith. *valdaũ* O.Bulg. *vladą* 'I govern, rule' : Goth. *valda* 'I rule, wield'. Lith. *výj-ti* O.Bulg. *vi-ti* 'to wind, turn' : Lat. *vieō vīti-s*. Lith. *véida-s* 'face', O.Bulg. *vidŭ* 'look' : Lat. *videō*. Lith. *vė́ja-s* 'wind', O.Bulg *vě́ja-ti* 'to blow' : Skr. *vā-ti* 'blows' *vāyú-š* 'wind'. Lith *vilnì-s* f. O.Bulg. *vlŭna* 'wave', prim. f. **ɣl-ni-s *ɣl-nā*, rt. *ɣel-* 'turn, wind, roll' (Gr. *ἑλύω*, Lat. *volvō*). Lith. *virszù-s* O.Bulg. *vrŭchŭ* 'the upper end, point', prim. f. **ɣrs-u-s* Skr. *várš-iṣṭha-* 'the highest, topmost'.

§ 183. Intersonantal Lith. *avì-s* O.Bulg. *ovĭ-ca* 'sheep' : Lat *ovi-s*. Lith *sravà* 'the act of flowing', O.Bulg. *o-strovŭ* 'island' : Gr. *ῥοϝά ῥοή* 'stream', Skr *srāva-s* 'river, efflux' *sráva-ti* 'flows', rt. *sreɣ-* Lith *gýv-va-s* O.Bulg *ži-vŭ* 'alive' : Lat. *vīvo-s*, Indg. **gī-ɣo-s*. Part pf. Lith. *dā-vęs* O.Bulg. *da-vŭ* 'δεδωκώς' (Lith *da-* = Indg. **dɔ-*, O.Bulg. *da-* = Indg. **dō-*) : cp. Skr. *bi-bhī-váṅ* (*bhī-* 'fear') 1. du Lith. *vẽža-va* O.Bulg. *veze-vě* 'we two ride' : Skr *váhā-vas*. O.Bulg. nom pl. *synov-e* 'sons' : Skr. *sūnáv-as*. Lith *devintà-s* Pruss *newīnts* O.Bulg *devętŭ* 'ninth' m. (concerning the transformation of the initial see § 68) : Goth. *niunda*, Indg **neɣɣ-tó-s*

uɣ Lith. *krùv-ina-s* O Bulg. *krŭv-ĭnŭ* 'bloody', O.Bulg. *krŭv-ĭ*, gen. *krŭv-e*, 'blood' : Lat. *cru-entu-s cru-or*, Av. *xruv-iye-m* 'stain, horror' beside Skr. *krav-ya-m* 'raw meat, flesh' Gr. *κρέ(ϝ)-ας*, rt. *qreɣ-*. Lith. *buv-aũ* 'I was' *bùv-us-i* fem. part. pf., O.Bulg. *za-bŭv-enŭ* 'forgotten' : cp. Gr *πεφυνία*, Skr. *bhúv-ana-m* 'being, world'. Lith. *bruv-i-s* m. O.Bulg. *brŭv-ĭ* f. 'brow' : Skr. st. form *bhruv-* in gen. abl. sg. *bhruv-ás* etc. O.Bulg. *zŭv-a-ti* 'to call' : Skr. *huv-á-ti* 'calls'. O.Bulg. *svekrŭv-e* gen. sg of *svekry* 'mother-in-law' : Skr. Ved. loc. sg. *śvaśruv-ám*.

§ 184. Postconsonantal. Lith. *szvitėti* O.Bulg. *svĭtěti* 'to shine brightly' : Skr. *śvit-rá-s* 'shining', rt. *ḱu̯eit-*. Lith. *aszvà* 'mare', Pruss. *asuina-m* 'equinum, horse-milk' : Skr. *áśva-s*, Indg. **eḱu̯o-s*. Suffix *-tu̯o-*, O.Bulg. *mrĭ-tvŭ* 'mortuus' *množĭ-s-tvo* n. 'crowd', Lith. *senã-tvė* f. 'old age'. Lith. *ketverì* O.Bulg. *četvero* 'four' (distrib.), Lith. *ketvirta-s* O Bulg. *četvrĭtŭ* 'fourth' m. prim. f. **ḱetu̯r-to-s*. Lith. *dvì* O.Bulg. *dvě* 'duae' : Skr. *dvé*, cpf. **du̯ái̯*. Lith 1. du. *ėd-va* 'we two eat' : Skr. *ad-vas*. O.Bulg. *bě* 'thou wast' *bě* 'he was' fr. **bu̯-e-s* **bu̯-ė-t* fr. rt *bheu̯-* 'to become' (§ 312); cp. *obiti* 'to wind round' fr. **ob-vitι* etc.

Pruss. *suais* O Bulg. *svojĭ* 'suus' : Skr. *svá-* 'suus'; Lith. *svõtai* 'parents of the bride, related by marriage' from the same Indg. stem has the suspicion of having been borrowed from Slav., O.Bulg. *svatŭ* 'affinis' Lith. *svìlti* 'to take fire, to burn without flame' : Ags. *swelan* 'to glow' OHG. *swilizōn* 'to burn slowly away' O.Bulg. *si-inŭ* 'suillus' : Goth *sv-ein* 'pig'. Lith. *ès-va* O.Bulg. *jes-vě* 'we two are' · Skr. *s-vás*.

u̯ is occasionally elided before initial *s-* (*sz-*), without the reason of its elision being clearly known (cp. Osthoff Zur Gesch. d. Perf. 456). Lith. *sesů* O.Bulg. *sestra*, but Pruss. *swestro* 'sister' : Goth. *swistar* Lith *sāpna-s* 'dream' : Skr. *svápna-s*. Lith. *szeszura-s*, by assimilation from **seszura-s* (§ 587, 2) : O.Bulg. *svekrŭ* Goth. *swaihra* Skr. *śvášura-s* fr. **svašura-s* (§ 557, 4) Gr. ἑκυρό-ς 'father-in-law'.

In Lith. *szů̃* 'dog' fr. **szu̯ů̃* = Skr *śvá* and in *dù* 'two' fr. **dů̃* (§ 664, 3), the latter fr. **du̯ů̃*, the elision of the *u̯* was caused by the following *ů*.

Lith. *kárvė* O Bulg. *krava* fr. **korvā* (§ 281) 'cow', related to Lat. *cervo-s*. O.Bulg *sŭ-dravŭ zdravŭ* (§ 588, 5) 'healthy', *-dravŭ* fr. **-dorvŭ* (§ 281) : Skr. *dhr-uvá-* 'fast' with weak grade form of the root syllable and dissyllabic form of the suffix *-u̯o-*. Lith. *pal̃va-s* (Slav loan-word?) O.Bulg *plavŭ* 'whitish, pale' (§ 281) : OHG. *falo* (inflected *falau-ēr*) 'fallow', cpf. **polu̯o-s*.

Old *-nu̯-* perhaps in Lith. dial. *tenva-s* Lett. *tîws* (*î* regularly fr. *en*) 'thin', to O.Bulg. *tĭn-ĭ-kŭ* 'thin' : Skr. *tanú- tanv-* 'long, stretched'; the Baltic words probably with vowel form of the

comparative in the rt. syllable, as *leñgva-s* beside *lengvù-s* 'light' (cp. comparative Av *renj-yō* neut 'lighter' and Skr. pos. *laghú-*, *laghv-*, Gr. *ἐλαχύ-*) Slav. *-n-* fr. *-nŗ̥-* : compar. *mĭnji-jĭ*, gen. *mĭnjĭša*, 'minor' : cp. Goth. *minniza* fr **minŗ̥-iz-ō*.

ŗ̥ŗ̥ Lith. *dever-l-s* O Bulg. *dĕver-ĭ* 'brother-in-law' : Skr. *dēvár-*, Indg **daŗ̥er-*

The change between *v* and *ŭv* in O Bulg. *dva* beside *dŭva* 'two' (Skr Ved *dvá* and *duvá*), *zvati* beside *zŭvati* 'to call' (Av. *zbayeiti* and *zuvayeiti* 'he calls'), *bě* 'he was' fr. **bŭ̯ě* beside *za-bŭv-enŭ* 'forgotten' (Skr *á-bhv-a-* 'not being, monstrous' and *bhúv-ana-m* 'the being, world') etc , may be regarded as old inherited. Cp the end of § 183

§ 185. Anteconsonantal medially and finally. Indg. *eŗ̥* and *oŗ̥* fell together in *oŗ̥* in the prim Baltic-Slavonic period. Inf Lith. *pláuti* 'rinse, wash' O.Bulg *plusti* 'to flow' : Gr. *ἔπλευ-σα*. Gen sg Lith. *sūnaũs* O.Bulg. *synu* 'son's' : Goth. *sunáus*, Indg. *-ous* Voc Lith *sūnaũ* O Bulg *synu* 'O son' : Skr *súnō*. Cp. §§ 68. 84. Further this prim. Baltic-Slav. *oŗ̥* also fell together with Indg. *aŗ̥*. Lith. *saũsa-s* O.Bulg. *suchŭ* 'dry' : Gr *αὕω* 'I dry, wither', cp § 100

O Bulg loc sg *synu* 'in filio' : Skr *sūnaú*, see § 85

Diphthongs with the first component short before Indg. *i̯*. Lith. *pláuju* 'I rinse, wash', O Bulg *pluja* 'I flow' : Gr Hom. *πλεύω* fr. **πλεϝ-ιω* (§§ 131 639), epf **plev-iō* Lith *naŭja-s* 'new' : Skr *návya-s*, epf **neu-io-s* Lith *kraŭja-s* 'blood' Skr. *kravya-m* 'raw flesh', epf **qreu-io-* O Bulg *šujĭ* 'to the left' fr. **sūi̯ĭ* (§ 147) : Skr *savyá-s* 'to the left'; **ū* for *ū* with the same regular, but still unexplained *ȷ* as in *bljudą* and others (J Schmidt Kuhn's Zeitschr. XXIII 348)

Rem. That O Bulg *jaje* n 'egg' has arisen from **āu̯-i̯e* (Lat *ōvom*, Gr *ᾠόν*), is very uncertain.

§ 186. Indg. *ŗ̥*, where it remained an independent consonant, has now become a spirant, probably throughout the Baltic-Slav languages, certainly in a great part of them. I

leave it undecided as to whether the sound was still *u* consonant in the O.Bulg. period.

Loss of *u̯* in the prim. Indg. period

§ 187. The Indg. parent language had an enclitic case of the pronoun of the 2 person **toi* = Skr *tē* Av *tē* *tōi* O.Pers. *taiy* Gr. *τοί* O Bulg *ti* beside accented **tuói* = Skr *tvé* Av *θwōi* Gr. *σοί* fr. **τϝοι* (cp. also O Bulg *tvojĭ* 'tuus') Perhaps also of the reflexive stem a **soi* = Prākr *sē* Av *hē* *hoi* O Pers *saiy* O Bulg *si* beside **suói* = Gr *ἑοῖ* It is not improbable that the *u̯* in the enclitic forms first disappeared after certain consonants See Wackernagel Kuhn's Ztschr XXIV 592 ff.

§ 188 *u* seems further to have disappeared between long vowels and (antesonantal) *m* Acc sg Skr *dyám* *diyám*, Gr *Ζῆν*, Lat. *diem*, Indg. **diem* **diēm* (cp § 120) beside nom. **dieus* 'clear sky' = Skr *dyáus* etc ; Skr *gám*, Gr *βῶν*, OHG. *chuo* OS. *kō*, Indg **gōm* beside nom **gōus* 'ox' = Skr *gáus* etc, cp §§ 192. 645 OHG *guoma* Ags *gōma* O Icel *gomr* 'palate, Lith. *gomurỹs* 'palate' (beside OHG *caumun* Mod HG *gaumen*) fr. **ghā(u̯)-mo-* or *-men-* (Gr *χήμη*?, *χαῦ-νο-*, *χάος*) Some assume such a loss of *u* before other consonants also See, among others, Osthoff Morph. Unt IV 311, Thurneysen Bezz. Beitr. VIII 285, Schulze Kuhn's Ztschr. XXVII 427 ff Cp also Indg. final *-o* fr. *-ōu*, § 645, 1

NASALS

A THE NASALS AS CONSONANTS

Prim Indg period

§ 189 The Indg. parent language possessed four different kinds of nasals; labial *m*, dental *n*, palatal *n̂* (corresponding to *k̂*), and velar *ŋ* (corresponding to *ĝ*).

§ 190. Initial *m*

Antesonantal. **māter-* 'mother': Skr. *mātá*, Arm. *mair*, Gr. *μήτηρ*, Lat. *māter*, O.Ir. *māthir*, OHG. *muoter*, Lith. *motĕ* ('wife'),

O.Bulg. *mati*. **mn̥-tó-s* part. from rt. *men-* 'think' : Skr. *matá-s*, Gr. *αὐτό-ματο-ς*, Lat. *com-mentu-s*, Goth. *ga-munds*. **mn̥-ti-s* 'dying, death' : Skr. *mr̥ti-ś*, Lat. *mors* gen. *mortis*, Lith. *mirtì-s*, O.Bulg. *sŭ-mrŭtĭ*

Anteconsonantal, probably before *n* and liquids. **mnā-* to *men-* 'think' : Skr part *mnā-ta-s*, Gr. fut *μνή-σω*, Arm. *mna-m* 'I remain, expect' (Hubschmann Arm. Stud. I 43). **mlā-* 'pass away, wither' : Skr pres *mlāya-ti* part. *mlā-ta-s*, Gr *βλά-ξ -κός*, *βλη-χρό-ς* 2 pers sg. imper Skr. *brū-hi* (fr. **mrūhi*) Av. *mrūiδi* 'speak'

§ 191 Medial *m*

Intersonantal. Rt *uem-* 'vomit' Skr. *vámāmi vámmi*, Gr. *ἐμέω*, Lat *vomō*, Lith pl *vemalaĩ* 'that which is vomited'. 1. pl ind pres from rt *bher-* 'carry' : Skr *bhárā-mas*, Gr. *φέρο-μεν*, Lat. *fer-mus*, O Ir *berme* fr **beromi *bero-mes-i*, Goth *baíra-m*, O.Bulg *bere-mŭ*. Formations with the nominal suffix *-mn̥-*, e g Skr. *dhāma* 'place', Gr *ἀνά-θημα* 'that which is set up, votive offering' cpf. **dhē-mn̥*; Gr. *ἧμα* 'throw', Lat. *sēmen* 'seed', cpf **sē-mn̥*

m in the combination *ŋm* as consonantal glide (§ 223, 4) **sŋm-o-* 'any one' : *sam-a-*, Gr *ἁμ-ό-*, Goth *sum-a-*

Postconsonantal *smeɣ-* 'smile, be astonished' . Skr. *smáya-te* 'smiles', Gr *φιλο-μμειδής* 'laughter-loving' *μειδάω* 'I smile', Lat *mīru-s* 'wonderful', Engl *smile*, Lett *smît* 'to laugh', O Bulg. *smejati sę* 'to laugh' **ghor-mo-* Skr *ghar-má-s* 'glowing fire', Lat *formu-s* OHG *warm* 'warm', Pruss *gorme* 'heat', cp also Arm *jerm* Gr *θερμό-ς* 'warm' with a different grade of the root vowel **aug-men-* . Skr *ōjmán-* m 'power, strength', Lat. *augmen augmen-tu-m* 'increase', Lith. *augmů*, gen. *augmeñs*, 'growth' **ĝheɣ-men-* . Skr *hémant-* 'winter', Arm. *jiun* (gen *jean*) 'snow' fr **jim* with *r* = *m* (§ 202), Gr *χεῖμα* 'storm, pouring down of rain' *χειμών* 'winter'; hereto Lith *žemà* O Bulg. *zima* fem 'winter' with *-mā-* for *-men-*. **klеu-men- *kleu-mn̥-to-*, rt *klеu-* 'hear' : Skr. *śrómata-m* 'a hearing', Av. *sraoman-* n. 'hearing', Goth. *hliuma*, gen *hliumins*, 'hearing', OHG. *hliumunt* 'renown'.

Anteconsonantal. **ǧombho-s* : Skr. *jámbha-s* 'tooth', Gr. *γόμφο-ς* 'tooth, bolt', O.Bulg. *zǫbŭ* 'tooth'. **rump-é-ti* 'he breaks' : Skr. *lumpáti*, Lat. *rumpit*. **gemtu-s* 'a going' from rt. *gem-* 'go, come' : Skr. *gántu-š*, Lat. *ad-ventu-s*. Nominal suffix *-mn-*. Skr. *nā-mn-ā* instr. to *náma* 'name', Gr. *νάνυ-μν-ο-ς* 'nameless', Goth pl *na-mn-a* 'nomina' **dem-s* 'of a house'. Skr Ved *dán* (§ 198), Gr δεσ- in *δε-πότης* (§ 204)

§ 192. Final *m* Acc sg in *-m*, e. g **to-m* 'the' : Skr. *tá-m*, Gr. *τό-ν*, Lat *ista-m*, Goth *þan-a*, Lith *tą̃*, O.Bulg. *tŭ*; O.Ir. *fer n-* 'virum' *-m* probably occurred after consonants only when the following word began with a sonant, e g acc sg. **bhrátorm a-* beside **bhrátorm̥ t-*, the former represented by Goth. *brōþar* (§ 659, 5), the latter by Gr. *φράτορα* (§ 233) **dǧém* 'serene sky' and **góm* 'bovem' have probably also arisen in this manner from antecconsonantal **dǧem*, **gṓm* (§ 188).

§ 193. Initial *n* **neuo-s* **neuǫ-s* 'new' · Skr *náva-s náv̥a-s*, Arm *nor* (with *i*-suffix), Gr. *νέ-ος*, Lat. *nouo-s*, O.Ir. *nūe*, Goth. *niuja-s*, Lith *naũja-s*, O Bulg *novŭ* Loc pl **nr̥-su* from *ner-* 'man'. Skr *nṛ́-su*, Gr *ἀνδρά-σι*. Perhaps antecconsonantal in the combination *n-*. cp. Skr *nr-asthi-* 'human bone' from *nar-* (dat *nár-ē* Av. *nāire* were new formations after the st. form *nar-* in the acc sg etc), Gr. *δρ-ώπ* *ἀνθρωπο-* Hesych., *ἀνδρ-ός* gen, *ἀνδρ-άγρια* 'the spoils of a slain enemy'.

§ 194. Medial *n*.

Intersonantal **seno-s* 'old'. Skr *sána-s*, Arm *hin* (gen. *hnoy*), Gr *ἑνη*, Lat *senex*, O.Ir *sen*, Goth superl *sinista*, Lith. *sẽna-s* Nominal suffix *-men-* : Skr Ved dat (inf) *vid-mán-ē* 'get to know', Gr *ἴδ-μεν-αι*, Lat. *no-min-ī*, Goth gen. *na-min-s* 'nominis' (§ 660, 1), gen Lith *ak-meñ-s* (§ 664, 2) O Bulg. *kamen-e* 'lapidis' **pl̥-no-s* **pl̥-no-s* 'full' (§§ 285, 306): Skr. *pūrná-s* (*l̥*), Av. *pərəna-* (*l̥*), Gr *πολλοί* (*l̥*), O Ir *lān* (*l̥*), Goth *fulls* (*l̥*), Lith. *pìlna-s* O Bulg *plŭnŭ* (*l̥*). 3. sg mid **tn̥-nu-tái*, rt *ten-* 'stretch, extend' (§ 224) : Skr *ta-nu-té*, Gr. *τά-νυ-ται*

n in the combination *γn* as consonantal glide (§ 223, 4). **tγn-u-* 'stretched, thin' · Skr *tan-ú-š*, Gr. *ταν-ύ-* *ταν-αό-ς*, Lat. *ten-u-i-s*, O.Ir. *tan-a* Corn. *tan-ow*.

Postconsonantal Rt. *sneigh-* 'snow' : Av. *snaēžaiti* 'it snows', Gr Hom. *ἀγά-νιφος* 'much snown upon' Hes. *νίφα* 'nivem', Lat. *ninguit nix*, O.Ir. *snechta* 'snow', Goth. *snáivs* Lith *snẽga-s* O.Bulg. *sněgŭ* 'snow' **ĝno-* 'know' : Skr part *jñā-tá-s*, Gr. part *γνω-τό-ς*, Lat. *gnoscō noscō*, O Ir *gnāth* 'solitus', OHG. *becnuodelen* 'to give a countersign', O Bulg inf. *zna-ti*. **sup-no- *sŋep-no- *sŋop-no-* 'sleep, dream' : Skr. *svápna-s*, Arm. *K'un*, Gr *ὕπνο-ς*, Lat. *somnu-s*, O.Ir *suan* O Cymr. *hun*, O.Icel. *svefn*, Lith *sãpna-s*, O.Bulg. *sŭnŭ* **qoi-nā-* 'requital' (rt *qei-*) : Av *kaēna-* 'penalty', Gr *ποινή* 'requital, penalty, reward', O Bulg. *cěna* 'pretium'.

Anteconsonantal. Rt. *bhendh-* 'bind' : Skr *bándhana-m* 'a binding' *bándhu-s* 'relation', *πενθερό-ς* 'father-in-law', Lat. *of-fendimentu-m* 'chin-cloth', Goth. *bindan* 'to bind'. Participial suffix *-nt-*: acc sg Skr. *bhárantam* 'ferentem', Gr. *φέροντα*, Lat. *euntem*, Goth. *giband* 'datorem', Lith *vẽžantį* 'vehentem' **ĝhans-* goose' . Skr *haṃsá-s*, Gr *χήν χην-ός*, Lat *ānser*, OHG. *gans*, Lith. *žąsì-s*, concerning O Bulg. *gąsь* s § 467, 2 Present st. suffix *-nu-* : Skr 3 pl. *ā-nv-ánti* 'they string together' 3 sg. *ŗ-nv-á-ti* 'brings, sends', Gr Hom *τίνω* Att *τίνω* 'I atone for' fr **τι-νϝ-ω*, Goth *runna* 'I run' fr **ru-nu-o*

§ 195. Final *n* Voc of *n*-stems : Skr *takšan* Gr *τέκτον* 'carpenter', Skr. *śvan* Gr *κύον* 'dog'. Loc sg of the same st. class. Skr *kár-man* ('business') *udán* ('water'), Gr. *δό-μεν* (inf 'to give'), *αἰέν* ('ever' to *αἰών*) Ending *-ēn -ōn* in the nom. and acc of neuter *n*-stems : Av *nāmąn* 'names', prim. Ar. **-an*, Goth *namō* (sg) prim Germ **-on*, O Bulg *imę* (sg) prim. Slav **-ēn* **en* 'in' : Gr *ἐν*, Ital *en*, Germ. *in*, Pruss *en* Lett. *i*, perhaps also O Bulg *-e* in the loc sg *kamen-e* (§ 219).

§ 196. In the primitive period *ṉ* and *ṃ* only occurred before *k-* and *ĝ*-sounds. Skr pf *ānáśa* 'he attained', *áśa-s* 'share, lot', Gr. *ἤνεγκο-ν* 'I brought', Lat. *nanc-īscor*, O.Ir. *con-icc* 'he can'. Rt. *aṅĝh-* 'tie together, straiten' : *áhas-* Av. *ązah-* n. 'distress, need', Arm. *anjuk* (*ancuk*) 'narrow', Gr. *ἄγχω* 'I tie, strangle', Lat. *angō angor*, O.Ir. *cum-ung* 'narrow', Goth. *aggvu-s* 'narrow' (with *v* from the other cases), O.Bulg. *ąza* 'string,

fetter'. **penqe* 'five' : Skr, *páñca*, Arm. *hing*, Gr. *πέντε*, Lat. *quīnque*, O Ir. *cōic* O.Cymr. *pimp*, Goth. *fimf*, Lith. *penkì* (-*ì* a Lith. new formation). Skr. *áñjas-* 'salve', *añj-ánti* 'they smear, anoint', Lat. *unguō*, O.Ir. *imm* (gen. *imme*, stem **imben-*) 'butter', OHG. *ancho* 'butter'.

The numerous deviations of the *k̂-* and *q* sounds from their original place of articulation and the dependence of the nasals upon the particular organ producing the following explosives and spirants were accompanied, in the later individual developments, by frequent changes in the method of production of original *n̂* and *ŋ*.

Aryan.

§ 197. Skr. Av. O.Pers prohibitive particle *mā* : Gr. *μή*. Skr Av. O Pers *ni-* 'down' · OHG *ni-dar*. Skr *náma* Av *nąma* O Pers *nāma* 'name' : Lat *nomen*. Skr *jáṅghā-* f Av. *zaŋga-* m. 'heel-bone' . Goth *gagga* 'I go', Lith *žengiù* 'I stride' Skr *páñca* Av. *panca* 'five' : Gr *πέντε*, Indg **penqe*

Rem. Nasals before explosives and final *n* remained unwritten in O Pers e g *Kabujiya* for *Kamb- Καμβύσης*, 3 pl *barataiy* for *barantiy* = Skr *bháranti* 'ferunt', *abara* for *abaran* = Skr *abharan* 'ferebant'

§ 198. Prim Ar. *-nt-* fr Indg. *-mt-* 3. sg imper Skr. *gántu* Av Gāp. *jantū*, prim Ar **jantu* (Skr. *g-* for *j-* after *gahí* etc , § 451 rem) fr. Indg **gem-t-u*, rt. *gem-* 'go'. Probably also prim Ar. *-ns-* fr *-ms-*. **ansa-* 'shoulder' (Skr. *áṃsa-s*) fr. **amsa-*, Indg. **omso-* : Goth. *ams* (st *amsa-*). Skr. gen. sg. *dán* 'of a house' — Gr. *δεσ-* in *δεσπότης* (§ 204), Indg **dem-s*. Skr. *ágan* 2. sg. pret from *gam-* 'go', fr. orig. **é-gem-s*

In like manner it may be conjectured that *n* in the combination *ānt* was dropped already in prim. Ar. in the syllable before the chief accent, e. g. gen sg. *yāt-ás* beside acc sg *yánt-am*, part. of *yā-mi* 'I go'. The accent had here a similar influence as in *sat-ás* fr. **s-n̥t-ás* beside *sánt-am* fr. **s-n̥t-m(m)* (§§ 228. 230), part. of *ás-mi* 'I am' (Hübschmann Das idg Vocalsyst. 86).

§ 199. Sanskrit.

Sonant + nasal became nasalised sonant before prim. Ar. spirants, and those specially developed in Skr. *dą́sas-* n. 'noble deed' fr. prim. Ar. **dansas-*. Av. superl. *daŋhušta-* = Skr. *dą́sišṭha-*, Gr. *δῆνος* 'resolution, counsel' (§ 565). *ą́has-* n. 'distress, need' fr. prim Ar. **añ̊has-* : Av. *ązō* 'distress', Lat *angor*, rt. *añ̊gh-*. *dṇ̊hati* (beside *dṛ́hati*) 'he fastens' fr. prim Ar **dhṛñ̊háti*, rt. *dherĝh-*, a present form like *kṛntáti* 'severs, splits' rt *qert-*, *pṛšáti* 'cuts straight, trims', rt *perḱ-* (cp. § 221) *raṇ̊hayati* 'he hastens' fr. prim. Ar **raṇhayati*. Av *renjayeiti* 'he quickens, hastens'

Rem 1 The nasal vowel both in Skr and Iran is generally considered as prim Ar But it is in itself very improbable that the *ą* in Skr *raṇ̊hayati* and Av *maŋra-* (§ 200), which cannot be prim Ar, is historically to be separated from the *ą* in Skr *dą́sišṭha-*, Av *daŋhušta-* etc The question is decided by the fact that Skr *dā́n* and *áyan* (§ 198) can only be explained fr prim Skr **dans* and **agans* (not fr. **dąs* and **agąs*) The dropping of the *s* in *dā́n*, *áyan* was specially Skr, and older than the first appearance of nasalised vowels, s § 647, 7. Forms like *pṛšánti* 'they bruise', *-ṝs -ą̄s* endings of the nom acc pl (*haṝ́s*, *aṇ̊ą̄́s*) cannot, by taking into consideration the change of *s* to *s* in the prim Ar period, be considered as a proof that *n* was, already at this period, absorbed in the preceding vowel (cp § 556, 1)

n became *ñ* after *j*, *c*. *yajñá-s* 'veneration' Gr. *ἁγνό-ς* 'holy', Indg **jag̑-no-s*. *yā́cati* 'he desires, begs' fr. *yācná* 'desire, begging', a Skr. new formation to *yā́cati* 'he desires, begs'

The same nasal became cerebral nasal (*ṇ*) after the cerebral sounds *ṛ*, *r*, *š* *mṛ-ná-mi* 'I bruise, beat in pieces' : Gr. *μάρ-να-μαι* 'I fight', Indg **mṛ-na-mi* *kṛšná-s* 'black' · Pruss. *kirsna-* O.Bulg *črĭnŭ* 'black', Indg. **qṛsno-s*. This assimilation occurred also, under certain conditions (Whitney Skr. Gramm. § 189 ff.), when the two sounds were more widely separated e. g part. mid. *bhára-māna-s* Gr. *φερό-μενο-ς*. In this case the tongue, which had been brought into the cerebral position by *ṛ*, *r*, *š*, retained this position until the production of the nasal.

Initial *mr* became *br*. *brū-* 'speak' : Av. *mrū-*. Cp. Gr. *βροτό-ς* fr. **μροτό-ς* etc. § 204. For exceptions like *mriyátē*

'moritur' cp. Osthoff Morph. Unt. IV 55. *-mbl-* from *-ml-* in *ambla-s* beside older *amlá-s* 'sour, sourness' : cp. Lat. *amāru-s*.

Rem. 2. Is the change of *mn̥* to *nn̥* specially Skr ? The question must be raised on account of the 1 du mid injunct *gánvahi*, part perf. act *jaganvấn* from *gam-* 'go', *ranvá-* 'delightful' from *ram-* 'to be delighted' The process might eventually have to be referred to prim Aryan — corresponding examples from Iranian have not been handed down to us —, and since Indg *n̥n̥* is the basis of the forms in question (§ 225), we must further ask whether the dental articulation was not already in existence before the consonantal nasal arose from *n̥*

§ 200. Iranian.

Sonant + nasal became nasalised sonant before prim. Ar. spirants and those which were specially developed in Iran. (§§ 473 475). We have already mentioned Av. *dąhišta-* and *ązo* in § 199. Other examples · Av *mąθra-* 'saying' prim Ar and Skr. *mántra-*; *ąxnā-* 'reins' : Skr. *aṅkháyati* 'he clings to something'; *tąšyå* 'stronger' fr. prim. Ar. **tańcyās*, compar. to *tanciš̌ta-* 'strongest'. Concerning the treatment of *r* + *n* before spirants I may refer the reader to Bartholomae's Handb. pp 14. 21

It is a mere conjecture that a nasalised vowel was also spoken in these cases in O.Pers The written language was not in a position to represent nasalised vowels as such.

Rem We have seen in § 199, rem 1 why the *ą* in *dąhišta* etc is to be regarded as a special Iran and not a prim Ar. development Compare also Av *prąfda-* satisfied' = prim. Ar Skr. **tŋ̥mpłá-* (§ 475) with *niʿrązdya* int 'stripe, strip off' = prim Ar **nŋ̥ždhyaį* (pres Av *marᵉzaiti*); in both instances *ną* is the representative of *ŋ̥*

Av. *n* before palatal explosives = Skr prim. Iran *ñ*. *panca* 'five' Skr. prim. Ar. *panca*. *renjayeiti* 'he hastens' : prim. Ar. **rañjhayati* (Skr. *raṅháyati*, § 199). Cp Av *-sc-* = Skr. *-śc-*, e. g. *manas ca* = Skr. *mánaś ca* (Gr *μένος τε*) 'and mind', § 556, 2.

n became palatalised in Av before *y* and *i*, *ī* This modification is however only exhibited in a few Mss. *añya-* : Skr. *anyá-* O.Pers. *anya-* 'other'. Verbal prefix *ñi-* : Skr. *ni-* 'down'.

Prim. Iran. final *-ān*, *-ām* became in Av. *-ą̄*, written *-ą* and *-ąn* *-ąm*. 3. pl. conj. *barą* (*barąn*, *barąm*) : Skr. prim. Ar.

bhárān 'ferant', prim. f. **bherānt* Acc. *þwą* (*þwąm*) : Skr. prim. Ar. *tvắm* O.Pers. *þuvām* 'thee'. Spellings like "*rvąn-ō* beside "*rvān-ō* (nom. pl. of "*rvan-* m. 'soul'), *dąma* beside *dāma* 'creature' (= Skr. *dhắma* 'effect, stead, place'), where *ą* is likewise to be read as *ą̄*, show that *-ān, -ām* were the previous stages. Cp. Bartholomae Handb. §§ 14. 78, 4. 79, 3.

Armenian.

§ **201.** *mi* 'less' · Skr. *má* Gr. *μή*. *armukn*, gen. *armkan*, 'elbow, bow' . Lat *armu-s*, Goth *arms*.

nist 'seat' *nsti-m* 'I sit' . Skr *nīdá-s* 'place of rest', Lat. *nīdu-s*, OHG *nest* 'nest', Indg **ni-zd-o-* from **ni-sed-* 'sit down' *nu* 'daughter-in-law' Skr. *snušá* OHG *snur* O.Bulg. *snŭcha* etc *knn* 'sleep' fr **knvn*, **knm* (*k-* fr. *sn̥-*, § 162) : Skr. *svápna-s* Lat *somnu-s*. *ar-nu-m* 'I take' : Gr. *ἄρ-νυ-μαι*.

anjuk (*anjuk*) 'narrow' · Skr. *aṃhú-š* etc., rt. *añĝh- hing* 'five' . Skr. *páñca* etc., Indg **penge*. Cp. § 196

§ **202** The change of *m* to *i* (*u*). *anun* (gen. *anuan*) 'name' fr **anvan*, **anman* (cp § 232). *jun* (gen *jean*) 'snow' fr. **jiun* . Skr. *himan-*, Gr. *χεῖμα χειμών* See Hubschmann Arm. St. I 75

m and *n* disappeared before *s* *us*, gen. *usoy*, 'shoulder' : Goth. *ams* m , Skr *áṃsa-s*, Umbr. *onse* 'in umero' *mis*, gen. *misoy*, 'flesh' Goth. *mimza-* n , O Bulg. *męso*. *amis*, gen. *amsoy*, 'month' . Lat. *mens-i-s*, O Ir. gen. *mīs* (prim. Kelt. st **mēns-*). Acc. pl. *eris* 'tres' : Goth *þri-ns*, Gr. Dor *τρῖς* fr **τρι-νς*; concerning the initial element of *eris* s § 263. Acc. pl. *z mards* 'homines' fr. **mn̥to-ns* · cp Goth. *vulfa-ns* 'lupos', Gr. Cret *νόμο-νς* 'leges'.

Final postvocalic *-m* disappeared. *z mard* 'hominem' Skr. *mr̥tá-m*, Lat. *equo-m*, Gr. *βροτό-ν*. Cp § 651, 2.

Greek.

§ **203.** *μὲ* 'me' : Goth. *mi-k*, Skr. *mắm*, Lat. *mē*. *ἡμι-* 'half' : Skr. *sāmi-*, Lat. *sēmi-*. *ἄκμων* 'anvil' : Skr. *áśman-* 'stone, thunderbolt'. *ἀμφί* 'about' : Lat. *amb-*.

νέφος 'cloud' : Skr. *nábhas* 'cloud, atmosphere', O.Bulg. *nebo* 'atmosphere sky'. *πότνια* 'mistress' : Skr. *pátnī*. Dor. *φέρονσι* (Att. *φέρουσι*) 'they bear' : Skr. *bháranti*.

ἐνεγκεῖν 'to bring' : Skr. pf. *ānáśa*. *ὄγγο-ς* 'hook' : Skr. *aṅká-s*. *πέντε* 'five' : Skr. *páñca*; *πέμπτο-ς* 'fifth' : Lith. *peñkta-s*.

Rem The guttural nasal was, as it seems, originally represented in writing by *ν*. Thus inscrip. e g. *ἀνχυρα*, *ἐνγύς* The representation of it by *γ* first made its appearance, after the *ṛ* in *gn*, *gm* (*στυγνό-ς*, *ἀγμό-ς*) had become *ṛ* (§ 492).

§ 204. Prim. Greek changes

-ντ- from *-nt-*. *γέντο* 'he grasped' to *ὔγ-γεμος* · *συλλαβή* Hesych. *ἄν-τλο-ν* 'bilge-water', to *ἀμάω* 'I gather in' Probably also *-νς* from *-ns*. *ἔνς* (Cret, thence Att *εἷς*) fr **sem-s* : cp. *μῶνυξ* fr. **σμ-ωνυξ*, *ὁμ-ό-ς*, Lat. *sem-el*

-νξ- from *-mj-*. *κοινό-ς* 'common' fr. **κοιγο-ς* **κομ-γο-ς* . Lat. *cum*. Cp. *βαίνω* 'I go' fr. **βανγω*, Indg. **gm̥-jṓ* . Lat *veniō*. On the *ι*-epenthesis s §§ 131. 639

-μβρ-, *-μβλ-*, *-νδρ-* fr *-μρ-*, *-μλ-*, *-νρ-* The initial nasal disappeared with the development of the explosive *ἀ-μβροτο-ς* 'immortal', *βροτό-ς* 'mortal' [1]); **μροτό-ς* was a contamination form of *μορτύ-ς* Hesych (Skr. *mṛ́ta-s*, Indg. **mórto-s*) and **μρατύ-ς* (Skr *mṛtá-s*), and *μορτό-ς* itself was also such a form with regard to its accent. *μέμβλωκα*, *βλώσκω* ('I come') with **μλω-* = orig. **mḷ-* (§ 306), aor. *ἔμολο-ν*. *βλίττω* 'I cut out the comb of bees' to *μέλι μέλιτος* 'honey'. *ἀνδρ-ός -ῶν* (nom *ἀνήρ* 'man'), *ἀρ-ωήν* · *ἄνθρωπος* Hesych., *ἀρο-τῆτα* acc. 'manhood' (thus with Clemm probably to be read for *ἀνδροτῆτα* in Hom. II 857, X 363): cp. Skr. *nr-asthi-* 'human-bone'

-λν- became *-λλ-* When the preceding vowel was short, so called compensation lengthening took place later (cp. § 618). Prim. Gr. **γʷολνεται* (prim. f. **gḷ-né-tai*, § 306) became Lesb. *βόλλεται*, Att. *βούλεται* and prim Gr **γʷελνεται* (prim. f. **gél-ne-tai*) Thess. *βέλλεττι* (concerning *β-* cp § 428 rem) Dor. *δήλεται*, Locr.

1) *ἄ-βροτο-ς* beside *ἄ-μβροτο-ς* was a new formation from *βροτό-ς*. Cp. Prākr. *a-riṇa-* 'guiltless' as a later compound beside *an-iriṇa-* = Skr. *an-ṛṇa-*

Delph. *δείλεται* 'he wishes', rt. *gel-*. Hom. *οὖλο-ς* 'crisp, fleecy' fr. **ϝολνο-ς*, prim. f. **μ̥ln̥o-s* : Skr. *ūrṇā* fr. **μ̥l̥-nā* (§§ 151. 157. 306). Lesb. *ἀπ-έλλω* Dor. *ϝήλω* Hom. *εἴλω* 'I press tight' fr. **ϝελ-νω*. Later, but also probably already prim. Gr., was the assimilation of *-λν-* to *-λλ-* in *ὄλλῡμι* 'I destroy' fr. **ὀλ-νῡ-μι*, *ἐλλό-ς* 'a young deer' fr. **ἐλ-ν-ο-ς*, cp. *ἔλα-φο-ς* fr. **elн-bho-s*, Lith. *éln-i-s* m. 'stag', O.Bulg. *jelen-ĭ*, gen. *jelen-e*, 'stag'; *ὠλλόν· τὴν τοῦ βραχίονος καμπήν* (Hesych.) fr. **ὠλ-ν ο-ν*, to *ὠλήν -ένος* (cp. the author Morph Unt. II 173)

Rem. 1 If, as we conjecture, the *-λλ-* in the three last named words was likewise already prim. Greek, the *-λλ-* in *βάλλομαι* etc, before 'compensation lengthening' took place, was pronounced somewhat differently from that in *ὄλλῡμι* etc The forms *πίλναμαι* (to *πέλας*) and *πιλό-ν φαιόν* Hesych (to *πελό-, πελω-*) may have only come into existence after the law, whereby **ὀλ-νῡμι* became *ὄλλῡμι*, had ceased to operate

ν disappeared before *σ* + consonant without 'compensation lengthening' *κεστό-ς* 'pierced, embroidered' fr **γενστο-ς*, to *γεντέω*. *δες-* in *δεσ-πότης* fr. **δενς*, Indg. **dem-s* 'of a house' : Skr *dáṃ*. 3 pl imper. mid *φερόσθων* fr **φερονσθων*. *Ἀθήνᾰζε* 'towards Athens' fr. **Ἀθανᾰ-δε* *δικασπόλο-ς* 'law-giver', fr. **δικανς-πολος*, an irregular compound with acc. pl ; likewise *μογοστόκος* 'causing pains' fr **μογονς-τοκος* Here belong also the various dialectical forms of the acc. pl. of *-o-* and *-ā-* stems, as *τός, θεός, τάς ναλάς* (beside *τόνς τάνς, τοὺς τᾱ́ς*) and *ἐς* from *ἐνς* 'into', which arose before initial consonants: the regular forms were *τὸς παῖδας* beside *τὸνς* (*τοὺς*) *ἀνδρας*, *ἐς τοῦτο* beside *ἐνς* (*εἰς*) *αὐτό*. Lastly *πτίσσω* 'I pound' fr. **πτινσ-γω* : Lat. *pīnsō*, and Hom. *νίσσομαι* 'I come' fr. **ν-νσ-γο-μαι* (redupl. pres), beside *νέομαι* fr **νεσ-ο-μαι*, cp *νάσ-το-ς*, rt *nes-* (§ 563, 4).

Rem 2 Where in the course of the individual dialects *νσ* + cons came into existence again, those dialects, in which *ν* disappeared before *σ* with 'compensation lengthening' (cp. §§ 205 618), show this lengthening Thus Att *ἔσπεσμαι ἔσπεσται* (from *σπενδω* 'I deal out') was a new formation after *ἔσπεισα* (Cret. still *ἔσπενσα*) and *σπείσω*, Ion *πείσμα* 'rope' fr **πει(θ)-σμα*, a new formation for prim Gr. **πει θ-μα* (cp Lat *offendimentu-m*), like *ζῶσμα* for older *ζῶμα* etc.

-m became *-ν*. Acc. sg. *τόν* 'the' : Skr. *tá-m*, Lat. *is-tu-m*; *ὄϊν* 'sheep' : cp. Skr. *ávi-m*. Gen. pl. *ἵππων* 'equorum' : cp. Skr.

Ved. *dēvā́m* 'deorum', Lat. *virum*. 1. sg. impf. ἔφερον 'I carried': Skr. *ábhara-m*. ἕν 'unum' fr. **sem*; concerning ἑνς in this §, cp. p. 170. χθών 'earth', χιών 'snow fr. *χθωμ, *χιωμ : cp. χθαμαλό-ς, Skr. *kšám-* and Lat. *hiem-* Gr. δύς-χιμο-ς. The *ν* in ἕν (and ἑνς), χθών, χιών was transferred to the other cases also : ἑν-ός, χθον-ός, χιον-ός for the regular forms *ἑμ-ος, *χθομ-ος, χιμο-ς.

Concerning prothesis before initial nasals as in ἀμέλγω 'I milk' : Lith. *mélžu* s. § 626.

§ 205. Individual dialectical peculiarities.

The uniform omission in writing of the nasal before consonants in Cypr. and Pamphyl, permits the conclusion that a nasal vowel was spoken in these dialects. Cypr *o-ka-to-se* = Ὄ(γ)κα(ν)τος, *a-ti* = ἀ(ν)τί, *pe-pa-me-ro-ne* = πε(μ)φαμένων; thus also *to-ko-ro-ne* = τὸ(γ) χῶρον, *ma-o-to-te* = ναὸ(ν) τό(ν)δε etc (§ 653, 3) Pamph *πίδε* = Att. *πέντε* (§ 487)

Prim. Gr. *-πμ-* became *-ππ-* in Lesb., elsewhere *-μμ-*. Lesb. ὄππατα pl., Hom. etc ὄμμα 'eye', to *οπ-ωπ-α* ὄψομαι. Lesb. ἄλιππα beside Att ἄλιμμα 'salve', to *λίπ-α* ἀλείφω

ν only remained in Cret. and Argive before *-ς* and the voiceless *-σ-* which arose from assimilation (§§ 489. 490) τό-νς 'the' · Goth. *þa-ns*, Indg. **to-ns* θέν̄ς fr θεντ-ς, part. to θεῖναι 'to place' *πρέπονσα* fr. **πρεποντ-ια*, fem to *πρέπων* 'becoming, fitting'. ἔσπενσα fr. **ἐσπεντσα*, aor of *σπένδω* 'I pour out' *πρέπονσι* fr. **πρεποντ-σι* loc. pl. to *πρέπων μηνσί* fr **μηνο-σι* loc. pl to gen. sg. Lesb. *μεῆν-ος* 'of a month' Elsewhere *ν* disappeared, since in most dialects it became with the preceding vowel a long nasal vowel (i e short vow + *ν* became long nasal vowel) and then the nasal sound disappeared Dor *τώς, πρέπωσα, θής, ής* (ἕνς); Ion Att. *τούς, πρέπουσα, θείς, εἷς*, Dor. Att. *μησί, τάς* (*τάνς*), *πᾶσα* (*πάνσα*); Att. 3 pl. *ἄγουσι, ἄγωσι* (Dor. and prim Gr. *ἀγοντι, ἄγωντι*). *i*-diphthongs arose in Lesb.: *τοίς, πρέποισα, θείς, εἷς, ταίς, παῖσα, ἄγοισι, ἄγῳσι;* here the *s*-sound must have been the chief factor in the generation of the *ι*. In Elean, *i*-diphthongs arose in the endings *-ονς*, *-ανς*, prim. El. *-ονz, -ανz* (cp. Osthoff Zur Gesch. d. Perf. 26 ff.): *τοίρ, καταξίαρ*, but *διδῶσσα, πᾶσα.*

Rem. 1. The stage of nasalisation of the vowel which preceded entire loss of *ν* is perhaps represented by the Cretan and Argive of the historical period. For we are justified in supposing that the pronunciation was nasal vowel (no longer vowel + nasal), but that the spelling with *ν* was retained from an older period. Cp. French *tonsure, mensonge.*

Rem. 2. Arcadian preserved the *να* which arose by transition of *-τι* to *-σι* (e. g. conj *κελεύωνσι*), but had alongside it e. g. acc. pl. *δαϝχμάς* 'drachmas'. Consequently the activity of the law which produced *δαϝχμάς* was already extinct at the time *-νσι* arose from *-ντι* in this dialect. Cp. in Attic the new forms *θέρμαναις, ὑφάνσις* etc. which originated after the completion of 'compensation lengthening' (*πᾶσα* from *πάνσα*).

Rem. 3. *ει* and *ου*, produced by 'compensation lengthening', never were diphthongs. The *ει* in Ionic-Attic and Boeot *εἶς θεῖσα* is only graphically like the *ει* in Lesb. *εἰς θεῖσα*; the latter was a diphthong. Cp. the other phenomena of compensation lengthening § 618.

Italic.

§ 206. Lat. *magis*, Umbr. mestru 'maior', Osc. *mais* 'magis'. Skr. *mahán* 'magnus'. Lat. *homō*, Umbr. *homonus* 'hominibus', Osc. humuns nom. 'homines'. Goth. *guma* 'homo'. Lat. *termō termen*, Umbr. *terminom-e* 'ad terminum', Osc. teremnattens 'terminaverunt'. Skr. *tár man-* n. 'point of the sacrificial rod', Gr. *τέρμων* 'boundary' *τέρμα* 'goal'. Acc. sg. Umbr. *tota-m*, Osc. *torta-m* 'civitatem', Lat. *equa-m* : Skr. *áśvā-m* 'equam'.

Lat. *ne nē*, Umbr. Osc. *nei-p* 'neque, neve, non' : Skr. *nú* Goth. *ni* Lith. *nè* 'non'. Lat. *dō-nu-m*, Umbr. ṛunu Osc. dúnúm 'donum'. Skr. *dá-na-m* 'gift'. Lat. *cor-n-ū-x*, Umbr. *cur-n-ac-o* 'cornicem' cp. Gr. *κορών-η* 'crow' 3 pl. Lat. *feru-nt*, Umbr. *furfa-nt* 'februant', Osc. kara-nter 'vescuntur' : Skr. *bhára-nti* 'ferunt'. Lat. *mēns-i-s*, Umbr. menzne 'mense' : Gr. Lesb. *μεμν-* Att. *μεμ-* fr. **mēns-*.

Lat. *angō angor*. Gr. *ἄγχω* 'I press tight, strangle', Av. *aŋhah-* 'distress', rt. *aŋ̊h-*. Lat. *quīnque*, Umbr. pumpeřias Osc. pumperias 'quintiliae', Osc. *Πομπτιες* 'Quinctius', prim. Ital. **kuenkue* fr. **penkue* (§ 336). Skr. *páñca*, Indg. **penge.*

Rem. The guttural nasal is represented in the Ital. languages by the letter *n.*

§ 207. Prim. Italic changes.

Prim. Ital. *-mt-*, the *m* of which goes back partly to Indg. *ṃ* (§§ 237. 238), became in the prim. Ital. period *-nt-*, and in like manner *-md-* became *-nd-*. This change seems also to hold good for the *-mt-* which arose later in the course of individual dialects. Lat. *con-trā contrō-versu-s*, Osc. *con-trud* (prep. with loc.) 'contra', to Lat *cum* Osc. *com* Lat. *ad-ventu-s* Skr. *gántu-š* 'a going', Indg. **gém-tu-s*; Lat. *in-ventu-s* : Skr. *gatá-s*, Gr. *βατό-ς*, Indg. **gm̥-tó-s*, rt *gem-* 'go'. Lat *centum* : Lith. *szim̃ta-s* 'hundred', Indg. **ḱm̥tó-m*. O.Lat *quan-de* 'quam', Umbr. pane 'quam', Osc. *pan* 'quam', to *quam* Lat. *quon-dam*, Umbr. *ponne pone* pune Osc. pún *pon* 'quom', to *quom* Further Lat *fren-dō* beside *frem-ō* (cp. § 349), *septen-triōn-ēs septen-decim (septem), vēnu tamen (vērum), eun-dem (eum), vēnun-dō (vēnum), quan-diū (quam)*, Umbr. *hon-dra* 'infra' *hon-domu* 'infimo', Osc. hu[n]-truis 'inferis' to Lat *hun-u-s* Gr. *χαμ-αί* (Danielsson Pauli's Altit Stud III 143), Umbr. *desen-duf* 'duodecim' Cp also Osc. Púntiis beside *pomtis* 'quinquies' and *Πομπτιες* (latinised *Pontius Pomptius*) Lat *Quinctu-s*.

Many exceptions to this law were created through analogy and new formations E g Lat. *quamde, quamdiu, vērumtamen* after the simple forms *quam, vērum* Of later origin are also Lat. *ēm-p-tu-s*, Umbr *emps* 'emptus' (cp *de-etom* 'demptum'), Lat. *sūm-p-tu-s* with excrescent *p* (§ 208).

Further **huom hue* probably also became **huom-hue* already in prim. Ital. (Lat. *quonque cunque*, Umbr. *pumpe*) etc. Cp. also Lat. *singulu-s* fr. **sem-clo-s*, *prīnceps* fr **prīm(i)-ceps* (§ 633). Lat. *quomque cumque* was formed in the same manner as *quamde*

Analogously *-ns-* probably became *-ss-*. Cp. § 568 rem., § 570 concerning *tenebrae*.

§ 208. Latin.

-n̥- became *-u-*. *quoniam* fr. **quom-n̥am*. *con-jectu-s*, *con-jungō*, *con-jūrō* fr. **com-n̥-* *venō* fr **(g)uem-n̥ō*, Indg. **gm̥-n̥ó*, from rt. *gem-* (§ 239).

-p- as glide in *-mpt-* (§ 207), *-mps-*, *-mpl-* : *ēm-p-tus, sūm-p-si, ex-em-p-lum.* Cp. Umbr. *emps* 'emptus'.

-ln- became *-ll-*. *colli-s* fr. **col-n-is* : Lith. *kál-n-a-s* 'mountain', Gr. *κολων-ό-ς* 'hill', orig. st. form **qolen-*. *pollen* (beside *polen-ta*), developed fr. **polen*, gen. **poln-os* (see W. Meyer Kuhn's Ztschr. XXVIII 162) : Gr. *πάλη* 'finest meal' or 'flour'. *pullu-s* 'young animal, young' fr. **pol n-o-s* : Goth *fula*, gen. *fuln-s* 'foal', from a stem **pl̥l-en*. *vellus* 'fleece' : Lith. *vìlna* 'a single hair of wool' etc. The reason is not clear why assimilation did not take place in *volnus, ulna, pōpulnus* and others.

-nl- became *-ll-* in diminutives : *asellu-s* fr. **asen-lo-s*, to *asinu-s; homullu-s* fr. **homōn-lo-s*, cp. *homun-culu-s*

Rem. These affections may partly or entirely be ascribed to the prim. Ital period The Umbr.-Samn. dialects do not furnish sufficient material for the determination of the chronology

Prim. Lat *-ns-*. The nasal was often unwritten already in the oldest inscriptions, e. g. *mesibus, cesor, cosol, cosentiont*; further also in writers *vicesimus* and *vicensimus*, *quoties* and *quotiens, pisare* and *pinsare* etc. Combining this with the clearly ascertained fact that short vowels were spoken long before *-ns-* (§ 619), it follows that a long nasal vowel was spoken, perhaps leaving the sound of a reduced consonantal element. It is not possible to gain an insight into the course of the process and its extent, owing to the inconsequence and inaccuracy in the representation of the sounds, and the possibility that *n* as full consonantal nasal was restored from other forms of the form-system (cp. e. g. *sānsum, dēfēnsor defenstrix*) [1]). In two cases the nasal was apparently entirely lost already at the beginning of historic records.

1. In the case of final *-ns*, when *-s* had not arisen from an older *-ts* (cp. § 501) Acc. pl *equōs, ovīs, fructūs* fr. **-o-ns*, **-i-ns*, **-u-ns*, *pedēs* fr. **-ens* = Indg. **-n̥s* (§§ 224. 238). Nom. *sanguīs* fr. **sangunis*, a new formation for older neut. *sanguen.*

2. In forms with prim. Lat *-nsl-*. *pīlu-m* 'pestle' fr. **pinslo-m. prēlu-m* 'press' fr **prenslo-m*, older **premslo-m* (cp *cōnsequor*

1) Cp. among others Seelmann Die Aussprache des Latein p. 273 ff.

fr. **com-sequor*, inscrip. *quansei* and § 207 extr.). *ālu-m* 'wild garlic' (hereto *hālāre*, *an-hēlāre* with inorganic *h-*, s. Osthoff Zur Gesch. d. Perf. 491) from rt. *an-* 'breathe', fr. **an-slo-* or **ans-lo* (cp. O.Bulg. *ǫch-ati* 'to exhale' fr. **on-s-ātī*, §§ 219. 588 rem. 2). *scāla* 'ladder' fr **scan(t)slā*, to *scandō*. *an-hēlō* fr **an-(h)enslō*, like *scandō* · *cōn-scendō* (Osthoff loc. cit. 115), shows that the dropping of the nasal in the combination *-nsl-* is younger than the weakening of *a* to *e* in the second member of compounds. Here probably also belongs *īlicō* fr. **in slocō*, § 570.

Prim Lat. final *-m* (partly coming from Indg. *-ṃ* § 238). The orthography fluctuated already in the oldest inscriptions, e. g. *pocolo* beside *pocolom poculum* The sound was greatly reduced before words beginning with a vowel After the close of the vowel in the last syllable there only followed a very imperfect lip-closure Hence the vowel elision in poets, as Verg. Aen VIII 386 *férru(m) acuánt*. Cp. Danielsson Zur Altital. Wortforschung (a separate reprint from Pauli's Altital. Stud. III and IV) p. 14, Seelmann Die Aussprache d. Lat. 356 ff.

§ 209. Umbrian and Oscan

Prim Umbr.-Osc. *-ns-* became *-nts-* (cp. *-mps-* in Umbr. *emps* 'emptus') This sound-combination was expressed in the native alphabet by -nz- (or -nzs-) Umbr. menzne 'mense' anzeriatu (beside *anseriato*) 'observatum', cp Lat *am-pūtāre an-qūrere*. uze (beside *ouse*, on the omission of the *u* in uze see below) loc 'in umero' Goth *ams* m 'shoulder', Indg. **omso-*: cp however also § 568, 3 for the Ital form of this word. Osc kenzsur keenzstur (beside *censtur*, *censaum*) 'censor'.

-mbr- fr. *-mr-* is probably to be assumed in Umbr *ambr-* beside Osc. amfr-, to Lat *amb-* Gr *ἀμφί*. Either **amfei*, a new formation after *andei* 'inter' etc, first became **amer-* (cp umen fr. **umben*, § 432a) by assimilation, then **amr-*, *ambr-*, or else **amer-* was an Umbr new formation from *am-*, which then led to *ambr-*.

Prim. Ital. *-ns* became Umbr. *-f*, Osc. *-ss*. Umbr. acc. pl. *abrof* 'apros' eaf 'eas' avif 'aves', *trahaf traf* 'trans'; Osc. acc. pl. feíhúss (st. feího-) 'fines', víass 'vias'. Likewise Umbr. zeřef 'sedens' fr. **-ens* = **-ents*. Cp Danielsson Pauli's Altit. Stud. III 146 ff. Umbr. Ikuvins 'Igovinus', Osc. Púmpaiians 'Pompeianus' etc. show that these changes are older than the dropping of short vowels before the *-s* of the nom sg Regarding Umbr *f*, which goes back in the first instance to *þ*, cp *trahvorfi* 'transverse' (§ 501).

That *n m ṇ* were reduced in Umbr. before explosives and spirants, follows from their being frequently omitted in writing. us-tetu beside ustentu 'ostendito'. Stem azeriato- *aseriato-* beside anzeriato- *anseriato-* 'observatus' hutra beside *hondra* 'infra' *dersas* beside *dersans* 'dent' Sa'se beside *Sanśie* voc 'Sanci' apr-etu beside ampr-ehtu 'circumito' *ombr-eturent* 'circumierint' iveka beside *venga* iuvencas'

In like manner prim Ital final *-m* and *-n* must have been greatly reduced in Umbr, perhaps only a nasalised vowel was spoken For they often also here remained unwritten and the letter *m* stepped into the place of *n*: *-e* beside *-en* 'in', *nome* 'nomen', puplu *poplo* beside puplum *poplom* populum'; *-em* 'in', numem 'nomen'

In Osc, *-n* is uniformly written and *-m* only seldom omitted, mostly in later monuments, e g vía (beside víam) 'viam', ísídu (beside ísídum) in 'idem', íní (beside ínim *man*) 'et'. If fíísnim (Zvetaieff Syll. n 17, 8) contains *-im* = *-in* 'in', the same sound-development is to be assumed as in Umbr.

For the development of anaptyctic vowels from nasals in Oscan see § 627

Old Irish

§ 210. *menme*, gen *menman*, 'mind' (prim f **men-ə-men-* § 110). cp. Skr. *mán-man-* n. 'mind', Gr. *μέν-ος* 'mind', rt *men-*. *nem* (gen. *nime*) n 'sky', *nemed* n. 'sanctuary' (Gall *nemeto-n*) : Skr. *námati* 'he bows, bends', rt. *nem-*.

Particle *nu no* : Skr. *nú*, Gr. *νύ*, Indg. **nú* 'now'. *canim* 'I sing' : Lat. *canō*, Goth. *hana* m. 'cock'. Redupl. pf. *ro-se-scaind* 'he leapt' : Skr. *skándāmi* 'I jerk, leap', Lat. *scandō*. *snām* inf. 'swim' : Skr. *snā-ti* 'he bathes himself'.

cum-ung 'narrow' : Av. *ązah-* 'distress', rt. *aṅgh-* *com-boing* 'confringit' : Skr. pf. *babhāñja* 'fregit' *pra-bhaṃgá-s* 'breaker, pounder', rt *bha^{x}ṃg-*.

Rem The letter *n* is employed to represent *ṃ* in Keltic as in Latin

§ 211. It may be concluded that *-mt-* became *-nt-* in prim. Keltic from Cymr. Bret. *cant* O Ir *cēt* 'hundred' Lith *szimta-s*, Indg. **ḱṃtó-m*, cp § 212

Indg. *-m* became *-n* in prim. Kelt Gall nom acc. sg. neut. *νεμητο-ν nemeto-n* 'sanctuary' (Zeuss-Ebel p 225). The nasal was often retained in Irish before vowels and mediae at the beginning of the following word, when the preceding vowel had disappeared Acc sg *fer n-aile* 'virum alium' fr **ϝιρο-ν* Under the same conditions the *-n* from prim Kelt. *-en* = Indg. *-m* and *-ṇ* was also retained M Ir *deich m-bai* 'ten cows' fr. **deken* · Skr *dáśa*, Lat. *decem*, Indg **dekṃ* M Ir *nōi n-ubla* 'nine apples' fr **noṇen* · Skr *náva*, Indg **neṇ* Cp § 658, 2

§ 212. Prim Kelt *n* (partly going back to Indg. *ṇ, ṇ*, § 243) disappeared in Irish — with 'compensation lengthening' when the preceding vowel was short — before *t, c, s* (*f*). The vowel was then shortened in unaccented syllables, afterwards became irrational and entirely disappeared under certain conditions (§§ 613 634)

sēt Cymr. *hynt* Bret *hent* 'way' · Goth *sinþs* 'a going, a time' *tēt* Cymr *tant* 'string' : Skr. *tántu-ś* 'thread, string', rt *ten-*. *cēt* Cymr Bret *cant* 'hundred' : Lat. *centu-m*, Lith. *szimta-s*, Indg **ḱṃtó-m* (§ 211). *ēc* 'death' Bret *ancou*; according to Windisch to Skr. *naś-*, Gr. *νέκυ-ς*. *brēc* 'lie, deceit' : Skr. *bhraṃśa-s* 'fall, loss'. *ēcath* 'hamus' · Skr. *aṅká-s* 'hook', Gr. *ἀγκών* 'bow' *ὄγκο-ς* 'bow, crook, bend', Lat. *ancu-s uncu-s*, OHG. *angul* 'angle'. *ēcen* 'necessity, constraint' : Gr. *ἀν-άγκη*. *gēis* (gen. du. M.Ir. *gēsi*) 'swan' : Skr. *haṃs-á-s* OHG. *gans* 'goose'. Fut. st. *sēs-* fr.

**sṷen(t)s-* i. e. **sṷend+s-* (*sṷend-* 'drive, hunt'), 1. sg. *cu-du-sē[s]-sa*, fut. sec. 1. sg. *du-sēsainn* (Thurneysen Kuhn's Ztschr. XXVIII 148). Gen. sg. *mīs* (nom. *mī*) 'mensis', st. **mēns-* : Gr. Lesb. gen. sg. *μῆνν-ος*.

Shortening and disappearance. 3 pl *bérit* 'ferunt' fr. **bé-ront(i)*, prim. f. **bhéronti*. Skr *bháranti*, Gr. Dor. *φέροντι*. *ér-mitiu* 'honor' (gen. *ér-miten*) fr. **-mētin*, **-mentiō*, *fóimtiu* 'a remarking' fr **fó-mētin* etc : Lat. *mentiō*; a further formation with *n* from Indg **mn̥-tí-*, Skr *matí-ś*, Goth. *ga-munds* (st *ga-mundi-*), rt *men-*. *dér-met*, gen. *dér-mait*, 'a forgetting', *fór-mat*, dat. *fór-mut*, 'envy' from stem **-mēto-*, **-mento-* : Lat. *com-mentu-s*, Gr *αὐτό-ματο-ς*, Skr *matú-s*, from the same rt *men-* *ōac óc* 'young' fr. **ókʷo*, Cymr *ieuanc*, prim Kelt **ioṇgho-s* : Skr *yuvaśá-s*, Lat *juvenc-s*, Indg **-n̥-kó-s* (§§ 137. 174) Acc pl *firu* 'viros', *fáthi* 'prophetas' fr **fíro(s)*, **fáthi(s)*, prim Kelt **uiro-ns*, **uati-ns* cp Goth *vaíra-ns*, *gasti-ns*

Rem Zimmer Kuhn's Ztschr XXVII 449 ff shows that first an assimilation of the explosive to the nasal took place in the prim Ir combinations *nt*, *nc* in such a manner that the former became voiced Zimmer, p 467, says that the new sound probably did not become a pure media in the first instance, but *nd*, *ng* This change was generally not expressed in the writing of O Irish, while in Mod Ir orthography it is expressed, e. g *enaig* 'death' = O Ir *ec*, *cend* 'hundred' — O Ir *cet* Cp §§ 513 658, 2.

Where *m* came together with a following *r*, *l*, an excrescent *-l-* was developed, and then initial *m* became absorbed *brechtrad*, older *mrechtrad* 'varietas' · to Lith. *márga-s* 'variegated'. *blicht*, older *mblicht mlicht* 'milk', *blegim*, older *mblegim* 'I milk', to *melg* 'milk', Gr. *ἀμέλ,ω* Lat *mulgeō* O Bulg. *mlūzą* 'I milk', rt *melg̑-* Cp § 298 *blāith*, older *mlāith* 'tender, soft' (st. **mlati-*), to *melim* inf. *bleith* 'molo'; cp. § 306.

Original intervocalic *m*, written *mh*, is in Mid. and Mod Irish a nasalised labial spirant, e. g. *nemh* 'sky'. That this affection already took place in the O Ir. period, follows from the fact that *mh* appears in the Modern language in words, where the nasal already in O.Ir. no longer stood directly after vowels, O.Ir. *amprom* fr. Lat. *improbus* also speaks for the great antiquity of this change, since *m* must here have represented a

spirant. The change of *m* to a spirant is probably likewise to be also assumed in O.Ir. *mebuir* fr. Lat. *memoria*, in this case, however, it may be a question of dissimilation as in Mid.Ir. perf. *mebaid* = O.Ir. *memaid* 'he broke'.

Germanic.

§ 213. Goth. *midjis* OHG *mitti* 'medius' : Skr *mádhya-s*. Goth. *qiman* OHG *queman* 'to come' . Skr. *gámana-m* 'a going', fr. rt. *gem-*. Goth *hilms* OHG *helm* 'helmet', Ags *helm* 'protector, helmet' : Skr. *śárman-* n. 'protection'. OHG *camb* 'toothed tool, comb' : Skr. *jambha-s* 'tooth, bit', Gr. *γόμφο-ς* 'plug, bolt, nail', O.Bulg. *zǫbъ̃* 'tooth'.

Goth *nahts* OHG. *naht* 'night' : Lat *noc*, Lith. *naktì-s*. Goth *mana* fr. **manṇ-ō* OHG *man* 'man' . Skr. *mánu-š* 'man'. Goth. *áins* OHG. *ein* 'one' : Lat. *oino-s ūnu-s*, prim. f **oino-s* Goth. *snáivs* OHG. *snēo* 'snow : Lith. *sniẽga-s* O Ir. *snechta* 'snow', rt. *sneigh-* Goth. *bindan* OHG *bintan* 'to bind' Skr *bándhana-m* 'a binding', rt. *bhendh-*.

OHG. *zanga* Ags *tonge* O Icel *tong* 'tongs', OHG *zangar* 'biting, sharp' : Skr. *dáśana-m* 'a biting, bite'. Goth *aggvu-s* OHG. *angi engi* 'narrow' . O Bulg *ǫzъ̃kъ̃* 'narrow', rt. *anĝh-*. Goth. *stiggan* 'to push' : Lat. *stinguere* Goth. *gaggan* OHG *gangan* 'to go' : Skr *jaṅghā-* 'heel-bone'.

Rem *ṃ* is generally represented in Goth by *q*, s § 25, in West Germ and Norse by *u* as in Lat

§ 214. Prim. Germ changes

-md- (*m* partly going back to Indg *m*, § 244) became *-nd-*. OHG. *rant* m. O.Icel. *rǫnd* f. 'edge', to rt. *rem-* 'cease, rest', Goth *rimis* n 'rest' Goth *skanda* OHG *scanta* 'shame', to Goth. *skaman* (w. verb) OHG. *scamēn* 'to be ashamed'. O Icel *sund* n. 'swimming' fr prim Germ **s(u)um-da-* (§ 180 p. 158). Goth *hund* OHG. *hunt* 'hundred' : Lith *szim̃ta-s*, Indg **ḱṃtó-m*. Whereas *m* remained before *þ* down to the literary period. Goth. *ga-qumþi-* 'synagogue', OHG. *cumft cunft* with early excrescent *f*, to Goth *qiman* OHG *coman* 'to come'. OHG *numft nunft* 'a taking', to Goth. *niman* OHG. *neman* 'to take'. OHG. *ramft*,

bye-form of *rant* 'edge', therefore goes back to a **rám-þa-* (§ 529)[1]. For OHG. *nft* from *mþ* see § 529. *m* also remained before *s*, e. g Goth. *ams* 'shoulder' . Skr. *áṃsa-s*, Indg. **omso̯-s*.

-ln- (*l* partly goes back to Indg. *l̥*, § 299) became *-ll-*. OHG. *wella* 'wave' : Lith. *vilnì-s* O.Bulg *vlŭna* 'wave'. Goth. *fulls* OHG inflec. *follēr* 'full' · Lith *pìlna-s* O Bulg. *plŭnŭ* 'full', Indg. **pl̥-nó-s*.

Further *n*, as the initial sound of chief-accented *n*-suffixes, seems to have been assimilated to the descendants of Indg. root-final explosives. The prim. Germ. gemination may be thus explained. E. g. OHG *lecchōn* 'to lick', prim Germ **likkó-* fr previous Germ. **liǥh-nó-*, cp Gr *λιχνεύω*, rt. *leiǥh-* Cp Osthoff Paul-Braune's Beitr. VIII 297, Kluge ibid IX 169 On the relations of sound-shifting s §§ 530 534 538 541. 5

ṉ disappeared before *χ* (§ 527—529), whereby short vowels became long[2]). Goth. *fāhan* 'to seize' fr. **faṉχana-n* : Lat *pangō pāx*, Skr. *páśa-s* 'noose, cord', rt. *paĥ-*, with nasal-infix *paṉĥ-* (§ 221) Goth *þāhta* OHG *dāhta* 'I thought', pret. of *þagkjan*, *denchen* 'to think' O Lat *tongēre* 'to know'. Goth. *þāhta* OHG *dāhta* 'appeared', pret of *þagkjan*, *dunchen* 'to seem, appear', from the same root Goth *bi-āhts* 'accustomed' : Lith. *ỹ-ànkta-s* 'accustomed' (§ 666, 1) Goth *þeihan* OHG. *dīhan* 'to thrive' fr **þiṉχana-n*, older **þeṉχana-n* : Lith. *tenkù* 'I have enough', cp Ags pret. pl *dungon* part *dungen* and the OS. causat *thengian* 'to complete', the *e* of the present in the Goth and HG forms was the occasion of their passing into the analogy of verbs like Goth *steiga* 'I ascend' = Gr. *στείχω* : pret. Goth *þáih* OHG *dēh* (cp. § 67 rem. 2).

Rem This disappearance of the nasal before *χ* took place later than the passing of *χ* into *ɣ* (Verner's law, §§ 530 541, 4), as is seen by such forms as Ags *dungon* beside Goth *þeihan* (s above), Goth *juggs* 'young' beside compar *juhiza*

---

1) Goth *anda-numti-* 'a receiving, taking up' was a new formation after forms like *fralusti-* 'loss'

1) It seems to me not to be absolutely necessary to conclude with Sievers Ags Gramm. p. 15 that the *āχ* which arose from *aṉχ* must still have had nasalised *ā* down to the period of the separate dialects.

Indg. *-m* became *-n*. Acc. sg. **ɥulfa-n* 'wolf' : Skr. *vṛ́ka-m*; **kɥēni-n* 'woman' : Skr. *-jáni-m*; **sunu-n* 'son' : Skr. *sūnú-m*; gen. pl **ǯebōn* 'donorum' : cp Av. *vanąm* (*vanā-* 'tree') When protected by a particle (after the change of *-m* to *-n* had taken place) this *n* was preserved in Goth. *þan-a* OHG. *den* Ags *đon-e* 'the' : Skr. *tá-m* Gr. *τό-ν* Where no such protection was at hand, *-n* was dropped in the prim Germ. period at the same time with the Indg. *-n* after short vowels, whereas it only became reduced after long vowels, and first fully died out in the course of the individual dialects. From **ɥulfa-n*, **kɥēnu-n*, **sunu-n* : **ɥulfa*, **kɥēnu*, **sunu* = Goth. *vulf*, *qēn*, *sunu*. Cp. prim. Norse (runic inscrip.) *stainа* = Goth. *stáin* 'stone', *sunu* = Goth. *sunu*. But fr **ǯebōn* gen. pl. and fr. nom **χanōn* 'cock' **tuəgōn* 'tongue' (with Indg. *-n*, cp gen. Goth. *hanins tuggōns* and the nom formation Gr. *αἰών* etc) : **ǯebō^{n}*, **χanō^{n}*, **tuəgō^{n}* = Goth *gibō*, OHG *hano*, Goth *tuggō* (hence the nom. Goth. *raþjō* 'account' and Lat *ratiō* are not exactly the same, since *n* had not been dropped in Lat) With Goth. *tuggō* cp. prim Norse (runic inscrip) *Fino* = O Icel. *Finna*

§ 215. Gothic and West Germanic changes.

In Goth., *m* in the combination *-mn-*, passed into a spirant, which was now written *f*, now *b*, e. g. *vunda-fn-i* f. 'wound, plague', *vitu-bn-i* n. 'knowledge' with weak form of the suffix *-men-*, the latter to Skr. *vid-mán-* 'wisdom' (cp. the author Morph. Unt. II 201. 209) Cp. O Icel. *-fn-* from *-mn-*, e. g. *nafn* 'name' *safna* 'to collect'

Rem. 1 In Goth *namn-ē* 'nominum' and *namn-jan* 'nominare' the *-mn-* was re-introduced through analogy (after *namo*, *namins* etc), just as in O.Icel dat. sg *gamne* beside regular *gafne* from *gaman*. n 'joy'.

In the final syllable of nouns with *n-* and *m*-suffixes, if the nasals followed explosives or spirants, there arose in West Germ. through the loss of the short vowel following the nasal (§ 635. 661, 2), *ƀ* and *ƞ*, from which a vowel was then developed. Nom. acc. OHG. *eban* OS. *ēban* Ags *efen* 'even' = Goth. nom. *ibns* acc. *ibn*, prim. Germ. **ebna-z* **ebna(-n)*. OS. *mēthom* Ags. *mađum* 'present, jewel' = Goth. *miþms miþm*.

(It is possible that a sonantal nasal was also spoken in Goth., *ibns, ibn, máiþns máiþn*). In OHG., the vowel, thus developed, penetrated from the final into the medial syllable of these nouns and their derivatives, at first after short syllables, and later after long also, e. g. *ebano* adv., *ebani* 'a plain', *ebanōn* 'to level'; such forms were chiefly due to analogy (cp. Sievers Paul-Braune's Beitr. V 90 ff.). Anaptyctic vowels were also often generated from nasals in OHG. under other circumstances, e. g. *wahsamo* beside *wahsmo* m. 'growth' to *wahsan* 'to grow', *brosama* beside *brosma* f 'crumb', *knoto* beside *chnodo* 'knot, thong'. An assimilation to the quality of the surrounding vowels may occasionally be observed in the development of OHG. vowels, e. g *ebono, ebonōn, ebini* = *ebano, ebanōn, ebani.*

Rem 2 Cp. anaptyxis in the case of *r*, § 180, and liquids, § 277

Nasals, like other consonants (§§ 143 277 529. 532. 536 540), were geminated before *j* in West Germanic. OHG *frummian frummman* OS *frummian frummean* 'to further, promote', to OHG. *frum* 'apt, fit' OHG. OS. *fruma* 'advantage'. OHG. *wenn(i)an* OS *wennian* Ags. *wennan* 'to accustom' : Goth. *vanjan* O.Icel. *venja*, to Skr. *van-* 'like, love'

In OHG. *-m*, which had become final, passed into *-n* in the ninth cent, a repetition of the prim Germ. change (§ 214) Dat. pl. *tagun*, older *tagum* : Goth. *daga-m* 'diebus'. 1. pl. *geban*, older *gebam* · Goth *giba-m* 'damus'. 1 sg *biben*, older *bibē-m* 'I tremble at' : Skr. *bi-bhē-mi* 'I am in fear'.

Baltic-Slavonic.

§ 216. Lith *mirtì-s* O.Bulg. *su-mrŭtĭ* f. 'death' : Skr. *mṛ-ti-ṣ*, Lat *mors mortis*. Lith. pl. *dúmai* O.Bulg. *dymŭ* 'smoke' : Skr. *dhū-má-s*, Lat. *fū-mu-s*. 1. pl. Lith. *vẽžame* O.Bulg. *vezemŭ* 'vehimus' : Skr. *váhā-mas*, Lat *vehi-mus*. Lith. *esmì* O.Bulg. *jesmĭ* 'I am' : Skr. *ás-mi*. Lith. *limpù* 'I remain clinging' : Skr. *limpámi*

Lith. *núga-s* O.Bulg. *nagŭ* 'naked' : Skr. *nagná-s*, Goth. *naqaþs*. Lith. *añs anà* O.Bulg. *onŭ ona* 'that' : Skr. *aná-* 'this'.

Lith. *sė-men-ìnis* O.Bulg. *sě-men-ĭnŭ* 'belonging to seed' : Lat. gen. *sē-min-is*. Lith. *pìlna-s* O.Bulg. *plŭnŭ* 'full' : Goth. *fulls*, Indg. **pl̥-no-s* (§§ 302. 303). Pruss. *kirsna-n* acc., O.Bulg. *črĭnŭ* 'black' · Skr. *kr̥šná-*, Indg **qr̥sno-s* (§§ 302 303) Lith *mentùre* fem. 'twirling-stick', O.Bulg *mątiti* 'to bring into tumult, confusion' : Skr. *mánthāmi* 'I stir, turn'.

Lith. *slanka slañkù-s* 'creeper, slow man, O.Bulg *sląkŭ* 'crooked' . OHG. *slango* O.Icel. *slange slangi* m. 'snake', rt. *sleng-*. Lith. *ungurỹs* (Pruss. vocab. *angurgis*, the ending of the word is wrongly written) O Bulg *ągorĭstĭ* 'eel' . Lat *anguilla*. Lith. *sniñga* 'it snows' · Lat *ningit*.

Rem. *m̥* is represented by *n* in Baltic.

§ 217. *-m* seems to have become *-n* in prim. Baltic-Slav. Acc. sg. **to-n* 'the' from Indg **to-m* (Skr *tá-m*) : Lith. dial. *tan tõn*, generally *tą̃* (218), Pruss. *s-tan*, O.Bulg *tŭ*.

That for the Slav. form *tŭ* first of all **tŭn *ton* is to be presupposed, is shown by *sŭn-*, in *sŭn-ĕsti* 'comedere' and other secondary forms of *sŭ* = Pruss. *san* (*san-insle* 'girdle') . Skr. *sám*, Indg **som*. Prim. Balt.-Slav. final *-n* did not entirely die out after *ā* in Slav., e. g. acc. sg. fem. *tą* 'the' = Skr. *tám*, Gr. *τήν*; cp. § 219.

§ 218. Baltic.

Indg. *-mt-* remained (while in other Indg. languages it became *-nt-*) Lith. inf. *vémti* 'to spit, vomit', supine *vémtu*, Lett. inf. *wemt* cp. Skr. part. pf. *vāntá-* beside *vamitá-* Lith. *remtì* 'to support : cp. Skr. inf. *rántum*, to *rámati* 'he brings to a standstill, makes fast'. Cp. also the *m* from Indg. *m̥* (249) in Lith. *szimta-s* Lett. *simts* 'hundred' Lat. *centu-m*; Lith. *desziñta-s* Lett. *desmits* Pruss. *dessīmts dessympts* 'decimus' : Gr. *δέκατο-ς* Goth. *taihunda*, beside Lith. *deviñta-s* Lett. *dewits* Pruss. *newīnts* 'nonus', Indg. **neun̥-to-s*.

Nasal + *s* or *sz*, *š* (= Indg. *k̂*, *ĝ ĝh*, § 412) In words like *žąsì-s* 'goose' (OHG. *gans*, Skr. *hąsá-s*), *grę̃žiù* 'I turn, bore' inf. *grę̃sz-ti*, *at-grąžà-s* 'return' (O.Icel. *kringr* 'round', Mod.

HG. *kring kringel*, rt. *greñgh-*) a nasal-vowel verging into a more or less distinct *ṇ* is at present heard in a portion of the Lith. dialects, whilst in the greater part the nasal-vowel has entirely died out and a pure long vowel is only spoken (*žãsis, grẽžiù*). The nasal hook has therefore only an etymological signification in the literature of the latter dialects. No complete consistency, however, exists in the use of it.

Rem When in those dialects, in which the pronunciation *ã* for *ą* etc is the universal rule, a g in that with Godlewa, fut *pìsiu* (*pį̀siu*) and *pìnsiu* ('I shall twist') is spoken side by side of inf *pìnti* and *pìti* (*pį̀ti*), it is due to a levelling between the form of the fut stem and that of the inf etc *pìnsiu* is a new formation after *pìnti*, but *pìti* after *pisiu* Cp the Author Lit Volksl und March. p 288[1])

Prim. Balt.-Slav *-n* after vowels (§ 217) has entirely disappeared in one part of the language, and a pure unnasalised vowel prevails The written language, which represents this state and in which the nasal hook has only an etymological value, is also here inconsistent. It has, e. g acc. sg *dẽvą, aną̃ anà, sz̃ĩ*, but gen. pl. *dẽvũ* ('deorum') for *devų̃*; the latter from **-ūn*, older **-ōm* (cp Ved. *dēvā́m*) Elsewhere, as before sibilants, a nasal vowel, ending in a more or less strongly articulated *ṇ*, is spoken, e g *tą̃ṇ, devą̃ṇ*, or *-n* remained intact: *tan, anan, szin* There are dialects in which all three stages (pure vowel, nasal vowel + *ṇ*, vowel + *n*) occur side by side. It is clear that in addition to differences of accentuation and quantity (s Bezzenb Beitr X 307 ff) also various relations of sandhi (position in absolute and conditional finality, various initiality of the following word) brought about the state of fluctuation Unfortunately so little account is taken of word-combination in the writing down of the forms in question (s. especially Bezzenb Beitr VII 163 ff) that it is at present impossible to obtain a knowledge of the historical state of things.

§ 219. Slavonic.

Before all consonants except *j*, nasals became, with the preceding vowel, nasalised vowels in prim. Slavonic (cp. § 281

1) The above is unaffected by Bezzenberger's opposite view (Beitr. VII 167).

rem. 3). The *ę* and *ų*, thus formed, became then further *ī* (O.Bulg. *i*) and *ū* (*y*, § 60). O.Bulg. remained at this stage. Examples:

1. *v-onja* 'vapour, smell' from rt *an-* 'breathe' (§ 666, 1): Skr. pres. 3. sg. *ánti*. *zemlja* 'earth' : Lith *žẽmė*, Lat. *humu-s*, Gr. *χαμαί*; concerning the excrescent *l* s. § 147 p. 132.

2. *ę* = prim Indg. prim. Slav *e* + nasal. *svętŭ* 'holy' : Lith. *szveñta-s*, Av *spenta-*, cpf. **kųento-s* *ząbą* 'dilacero, frigeo' : Skr. *jámbha-tē* 'snatches at something', causat *jambháya-ti* 'bruises, pounds'. Cp. § 68 *ę* = Indg *on* in the acc. pl. *konję* 'equos' fr. **konṇs*, older **konṇ-ns* (§ 84 p. 80).

ę was at the same time the representative of the Indg. sonantal nasals = prim. Sl *in, im* (§§ 248 249). *pa-mętĭ* f. 'remembrance' : Lith *at-mintì-s* 'memory', Goth *ga-munđi-* 'remembrance', Skr. *mati-ś* 'thought, mind', Lat. *mens*, Indg. **mn̥-ti-s*. *desętĭ* 'ten' : Lith *dẽszimti-s*, Skr. *daśati-ś*, Indg **dekṃti-s*.

3 *ą* = Indg. *o, a* (prim Slav *o*) + nasal.

berątĭ 'ferunt' : Gr. Dor. *φέρο-ντι*. *zǫbŭ* 'tooth' : Gr. *γόμφο-ς* 'bolt'. Cp § 84.

ązŭkŭ 'narrow': Gr *ἄγχω*, Lat. *angus-tu-s*. *ąchati* 'to smell' fr. orig. **an-s-* : Lat. *anima*, *alu-m hālare* fr. **anslo-* (§ 208), Gr. *ἄνεμο-ς*, rt. *an-*. Cp. § 100

4. *i, y* = previous Balt.-Slav. *i, u* + nasal.

Suffix *-ikŭ* (*-ĭn-ikŭ*) = Lith. *-inka-s* (*-in-inka-s*), e. g *dvorĭnikŭ* 'comes palatii' : Lith. *dvārininka-s* 'courtier'[1]). *isto*, gen. *istes-e*, 'testiculus', pl. *istes-a* 'reins' : Lith. *inksta-s* 'kidney, testiculus', Pruss. *inxcze* 'kidney', Lat. *inguen*. Acc. pl. *gosti* 'guests' : Goth. *gasti-ns*. Cp. also *plita* (beside *plinŭta*) 'brick' fr. Gr. *πλίνθος*.

lyko n. 'bast' : Lith. *lùnka-s* Pruss. *lunka-n*. *v-ykną* 'I learn' : Lith. *j-ùnkstu* 'I become accustomed' (§ 666, 1). Acc. pl. *syny* 'sons' : Goth. *sunu-ns*.

1) If this suffix belongs to OHG. *-inc* O.Icel. *-ingr*, it is easy to conjecture that it is borrowed from Germ. For Germ. *-inga-* beside *-un-ga-* (the author Morph. Unt. II 238, Kluge Nominale Stammbild. 13. 26) rather contains Indg. *-en-* than *-in-*.

y was further the continuation of older *-on-* in the acc. pl. masc. *vlŭky* 'lupos' : Goth. *vulfa-ns* Gr. Cret. *νόμο-νς* (§ 84); acc. pl. fem. *rąky* 'manus' : cp. Pruss. *gennans* 'feminas' (§ 615).

-n alone occurred as final in the prim. Slav. period (§ 217), and **-ān, *-ēn* became *-ą, -ę*, **-ūn* = Indg. **-ōn* (§ 92) became *-y*; **-en* and **-in* became *-ě*; **-un* (= Indg. **-um* and **-om*, § 84 p. 80) became *-ŭ*. O.Bulg. remained at this stage. Examples:

1. *-ą, -ę* Acc. sg. f. *ženą* 'wife' : Skr. *áśvām* 'equam', Gr. *χώρᾱν*, Indg *-ā-m*. 1 sg. *vezą* 'veho' . Lat. *veham*, cpf. **ǵeǵhā-m*. Nom acc neut *imę* 'name' fr. **i-mēn*: cp. the long vowel in Goth. *namō* fr. **na-mon* (§§ 195. 214).

2. *-y*. Nom *kamy* 'stone' (st. *kamen-*), formed like Gr. *ἄκμων*, OHG *hano*, Lith dial *szuõ* 'dog' (beside *szů*, Skr. *śvá*, § 92 rem).

3. *-e*. Nom. acc neutr *polje* 'field' fr **-ǫen, *-ǫon*, Indg. **-ǫo-m* (§ 84 p. 80) J. Schmidt Kuhn's Ztschr XXVII 307 perhaps rightly (doubts however remain, s. W Schulze ibid 546) traces the *-e* of the loc. sg *kamen-e* back to **-en* = Pruss. *en* Gr. *ἐν* 'in' (**kamen* loc like Skr Ved. *kárman*, Gr. *δόμεν*). The *-e* of the acc sg , e. g *mater-e* 'matrem', fr **-m* = Gr. *-α*, Indg. *-m̥* (§§ 224 249)

4. *-ě*. Acc *gostĭ* 'guest' : cp. Skr *áti-m*, Gr *ὄτι-ν*.

5. *-ŭ* Acc *synŭ* 'son' : Skr *sūnú-m*. Acc. *vlŭkŭ* 'wolf' . Skr. *vṛ́ka-m*, Gr. *λύκο-ν*.

Rem. 1. Acc sg *je* 'eum' *konje* 'equum' are accordingly not fr. **ǫo-n, konǫo-n*, but fr. **ǫ-n* (Lith. *jį*), **konǫ-n* S § 84 rem. 1

Assimilation took place when nasals of different organs came together This process was also prim Slav. *kamĭnŭ* 'made of stone' fr. **kamn-ĭnŭ*, to *kamen-* 'stone'. To the nom. pl. *gražđan-e* 'town-inhabitants' (fr. **grādi̯ān-e(s)* § 147 p. 132 f.; from *gradŭ* 'town', cp. Gr *οὐρανίον-ες* 'celestial inhabitants') belonged as dat. *gražđanŭ* and as instr. *gražđanmi* (Miklosich Vergl. Gramm. III² 15 f.), fr **-ān-mŭ, *-ān-mi*.

Rem. 2. Cp. the assimilation of *-nm-* to *-m-* in *imę* 'name' (= **i̯ĭmę*) and *imą* 'I grasp, take' (= **i̯nmą*, cp. *vuz-imą, sun-imą*, § 666, 1), the

former fr **ŋ-mēn* (cp. O.Ir. *ainm*, Gr. ὄνομα etc.), the latter fr **nm-ā-m* (Goth *nima*, Gr. νέμω, rt *nem-*) with *m* = Indg. *ŋ-* (§ 248). On account of Pruss *emn-a-* 'name' and Lith. *mù* = Slav. *mę* we must assume that the assimilation here took place in the prim. Balt.-Slav. period **ŋ-men-*, **ŋm-ó* (1 sg) had probably already at this period become **ŋmen-*, **ŋmó*. Cp Lat. *emo* § 238.

Nasal changes in the prim. Indg. period

§ 220. J. Schmidt (Kuhn's Ztschr. XXVI 337 ff) assumes that *n*, in the final combination long vowel + nasal + *s*, disappeared in the Indg prim language E g. Indg *-ās* in the acc. pl. of *ā*-stems (Skr *áśvās* 'mares', Goth *gibōs* 'gifts', Lith. *rankos-nà* 'into the hands') fr *-ā-ns*, cp. *-o-ns* in the masc. (Gr. Cret. *νόμο-ν*ς etc). Indg nom sg. **mēs* 'month' fr. **mēns* (cp Lat gen. pl *mēns-um* etc), hence the Skr form *más*. The ending of the nom sg masc part pf. act *-ŋōs* (Gr. εἰδώς, Av. *vīdvå* 'knowing', § 649, 7) fr *-ŋōns* (cp Skr acc. sg. masc. *vidvā́ṃs-am* etc).

This hypothesis seems to me worth mentioning in this place as being a possibility which ought to be noticed At present however it requires a still firmer foundation. We shall come to speak below of some of the forms and form-categories which Schmidt has brought forward in support of his theory.

§ 221. In all Indg languages we meet with forms having a nasal in the root-syllable, when this ends in an explosive or a spirant, where we have good reason to suppose that the nasal once stood behind the root-syllable as nasal suffix Forms also often occur with nasal suffix beside those with nasal infix It is probably here a question of a sound-change which dates back to the Indg prim period But it still remains to be established on the one hand, by what law the nasal-anticipation (or the affection preparing the way for it) at that time now appeared, now not; and on the other hand it must be determined whether the same process or similar processes have not also happened at a later time in the individual languages, e. g. in Italic (cp. Thurneysen Kuhn's Ztschr. XXVI 301 ff.) and thus cause the whole mass of examples to have to be estimated from various points of view. In any case it is no mere accident that the

prim. Indg. change of the voiceless explosives into the voiced at the end of roots (§ 467, 7), so frequently appears in connection with present formations having a nasal infix (Osthoff Morph. Unt. IV 328, Zur Gesch. d Perf. 548), and that the syllable, which had absorbed the vowel into itself, was generally unaccented (the strong forms of the Skr. seventh present-class as *chinád-mi* do not come into account here)

The nasal anticipation appears most frequently in the present tense, especially in the formation with suffix *-é- -ó-* (Skr. sixth class), with which the Skr. seventh present-class is closely related (s the author's article in Morph. Unt. III 148 ff.). Skr. *limpámi*, Lith *limpù* · O Bulg *pri-lī(p)nǫ*, fr. rt. *leip-* 'smear, stick'. Skr. *chindāmi chinádmi*, Lat. *scindō*, OHG. *scintan* (cp also Av. causat *scindayeiti*, Gr *σχιδαλμό-ς*), from rt *skhait-skhaid-* 'split, tear' Gr *πεσθάνομαι*, Lith *pa-bundù* : O Bulg. *vъz-bǫnǫ* fr *-*bǫdnǫ*, fr rt *bheudh-* 'watch, mark'. Skr. *yuñjátē yunájmi*, Lat *jungō*, Lith. *jùngiu* : Gr. *ζεύγνῡμι*, from rt. *jeug-* 'harness, yoke' Lat. *pangō*, OHG OS inf *fāhan* (fr. prim. Germ. **fanχana-n*, § 214) part *fangan* : Gr. *πήγνῡμι*, from rt. *pāk-* *pāg-* 'bind, make fast'. Lat *pandō* . Gr. *πίτνημι* 'I spread out'. Gr *λυγγανομαι* 'I have the hiccup' (*λύγξ* 'hiccup') : Mid. HG *slucken* fr prim Germanic **slugnōna-n* (§ 534). Lith. *smunkù* 'I slide, glide' : Mid HG *smucken* 'to dress, adorn' O.Icel *smokkr* 'under dress' from prim Germ **smuʒ-n-* (§ 530).

Noun formations Lat. *fundu-s* 'ground, bottom', O.Ir. *bond bonn* 'solea', Gr *πίνδαξ* 'bottom' : Skr *budhná-s* 'bottom'. Lat. *unda*, Pruss. *unda-* m 'water', Lett *úde'ns* 'water' fr. **undens*, Lith. *vandù -enìs* 'water' (the Lett. and the Lith. words seem to be due to a contamination of the stems **unda-* and **uaden-*), to these Skr. *unádmi undámi* 'I wet, bathe' . Skr *udán- udn-* 'water, wave', Gr. *ὕδωρ-* from *udṛ-t-* (§ 233) *Ἄλσο-ύδνη* (?). Goth *vatn-*, dat. pl. *vatn-a-m*, 'water' [1]) Here come perhaps also Lat *mēns-*

1) OHG *undea* 'wave' can only be compared on the supposition that the root originally ended in *t*, so that the *d* in Lat *unda* Skr *udán-* etc would stand on the same level with the *ǫ* in *pangō πήγνῡμι* (beside Lat *pac-*, Skr *paš-*) See above

'month', Gr. Lesb *μηνν-*, O.Ir. *mīs-* fr. **mēns-* (§ 212) : O.Bulg. *měsę-cĭ*, cp. Umbr. menzne 'mense', Mars. *mesene* 'mense', Skr. *más- másа-*.

Rem. Further examples in J. Schmidt's Voc. I 29 ff (where however Skr *mánthāmi* and similar forms are to be omitted) The author Morph. Unt III 148 ff., Osthoff ibid IV 325 ff, Paul-Braune's Beitr VIII 268 ff.

B THE NASALS AS SONANTS[1])

§ 222. The Indg parent language had all four nasals both in a consonantal and sonantal function. *n̥* and *ŋ̥* only occurred before the corresponding explosives.

We cannot ascertain whether the *-n̥-*, which frequently forms the close of a nominal *n*-stem, was or was not already in the Indg. prim period assimilated to the organ of a following non-dental explosive E. g for Skr. *yuvaśa-s*, Lat *juvencu-s*, Cymr *ieuanc* O Ir. *ōac o* (the Keltic word has been transformed in the first syllable perhaps after the form of the comparative, see § 137), Goth *juggs* (*jūggs*?) are we to regard the primitive form as **ɥunŋ̥-kó-s* or **ɥunŋ-kó-s* (or with initial *j-*, § 133)? Skr. instr. pl *vṛ́ša-bhis* (stem *vṛ́šan-* 'male') fr **ɥṛsn̥- bhis* or **ɥṛsŋ̥-bhis*?

The sonantal nasals occurred both as short and long, but mostly short When long, they corresponded morphologically to *r̄* and *l̄* see § 312.

1. The short sonantal nasals

§ 223. The mode of treating the short *m̥*, *n̥*, *n̥̂*, *ŋ̥* in the separate languages renders it advisable to divide them into four categories.

1) Concerning the sonantal nasals and liquids see the author's essay in Curtius' Stud IX 285 ff 385, Kuhn's Ztschr XXIII 587 ff XXIV 255 ff., Morph. Unt II 151 ff ; J Schmidt Jen Literat-Zeit 1877 Art 691, Kuhn's Ztschr XXIV 321 f , Osthoff Kuhn's Ztschr XXIV 415 ff., Morph. Unt. I 98 ff II 14 ff IV p. IV ff , Bezzenberger in his Beitr III 133 ff ; Fick ibid III 157 ff, IV 167 ff , de Saussure Mémoire sur le système primitif etc 6 ff 18 ff 239 ff ; G Meyer Griech Gramm p. 9 ff.; Paul in Paul-Braune's Beitr VI 108 ff. 408 ff ; Kogel ibid. VIII 102 ff., Kluge Beitr zur Gesch. d germ Conjug 17 ff , J v. Fierlinger Kuhn's Ztschr XXVII 437 ff ; Zimmer ibid 450

1. Unaccented[1]) before explosives, spirants, nasals and liquids, and finally, e. g. **tn̥tó-s* part. pass. from rt. *ten-* 'stretch, extend' : Skr. *tatá-s*; **sḗmn̥* nom. acc. sg. of the neut. stem **sē-men-* 'a throw, seed' : Lat. *sēmen*.

2. $m̥$, $n̥$ unaccented before $i̯$, e. g. **mn̥i̯ó* 1. sg. pres. from rt. *men-* 'think' : Lith. *minù*. Here are probably also to be placed the combinations $n̥u̯$, $n̥u̯$, s. § 225.

3 With principal accent before consonants, e. g. **s-n̥ti* 3. pl. of **és-mi* 'I am' : Skr. *s-ánti*

4. $m̥$, $n̥$ before sonants, in which case *m*, *n* were spoken as glides, e g **tn̥-ú-* (rt. *ten-*) 'stretched, thin' · Skr. *tan-ú-*. The glide consonant corresponded to $u̯$, $i̯$ in such Indg combinations as *uṇa*, *ina*, e g. **dun̥ó* = Skr Ved. *dvá* O.Bulg. *dŭva* S § 117 p 110.

The following is an abctract of the usual representation of $n̥$ in the Indg separate developments from these four points of view ($m̥$ $n̥̂$ $ŋ̥$ were similarly treated) ·

	Ar	Armen	Gr	Ital	pr Ir	Germ	Balt	Slav.
1	*a*	*an*	*α*	*en*	**en*	*un*	*in*	*ę*
2	*an*	*an*?	*αν*	*en*	**en*?	*un*	*in*	*ĭn*
3	*an*	*an*?	*αν*	*en*	**en*	*un*	*in*	*ę*
4	*an*	*an*	*αν*	*en*	**an*	*un*	*in*	*ŭn*

Primitive Indg. period.

§ 224. 1. Unaccented before explosives, spirants, nasals and liquids, and finally.

**ḱn̥tó-m* 'hundred' : Skr *śatá-m*, Gr. *ἑ-κατό-ν*, Lat. *centu-m*, O.Ir. *cēt*, Goth *hund*, Lith. *szimta-s* **gn̥-tó-* 'gone', **gn̥-tí-* 'a going' fr. rt. *gem-* : Skr. *gatá-s gáti-ś*, Gr. *βατό-ς βάσι-ς*, Lat. *in-ventu-s in-ventiō*, Goth. *ga-qumþi-*. **sn̥-* weak stem of **sem-*

1) Here and in the following §§ the prim. Indg. accentuation is always meant, from which the individual languages deviated in many instances. See § 669.

'unus', as prefix 'with', together' : Skr. *sa-* (*sa-kṛt* 'once'), Gr. *ά-* (*άπλόο-ς* 'simple'), Lat. *sim-* (*sim-plex*). **dékṃ* 'ten' : Skr. *dáśa*, Lat. *decem*, O.Ir. *deich n-*; Gr. *δέκα* also here or fr. **δεκαr* (§ 652, 5) = Goth. *taíhun*. Suffix of the acc. sg. *-m* · Gr. *-α*, Lat. *-em*, Goth. *-u*, Lith *-į*, O.Bulg *-e*.

**mn-tó-* part. pass. fr. rt. *men-* 'think' : Skr. *matá-*, Gr. *αὐτό-ματο-ς*, Lat. *com-mentu-s*, O Ir. *dér-met* (n 'a forgetting'), Goth. *munda-*, Lith *mñta-s* O Bulg. *mętŭ*. **me-mn-* anteconsonantal weak pf. st. of the same rt : Gr. *μέμα-μεν μεμά-τω*, Lat. *memen-tō*, Goth. 1. pl. *mun-um* (*-um* as in *vit-um* : Skr. *vidmá* Gr. Hom *ἴδμεν* 'we know'); cp. Skr mid. *mamn-é*. Pres. st. **tn-néu-* **tn-nu-* from rt *ten-* 'extend, stretch' : 3. sg. mid. Skr. *ta-nu-té*, Gr. *τά-νυ-ται*. *-nu-* antecousonantal weak form of the nominal suffix *-men-* · Skr *śró-ma-ta-* n '(the act of) hearing' (= OHG. *hlumunt* 'renown'), Gr. *σπέρ-μα-τα* 'germs', Lat. *cōgnō-men-tu-m*, Goth *snuu-mun-dō* adv 'in haste'. **pīn-ró-s* 'fat' (cp. Skr. *pívan-*, Gr *πίων*) : Skr. *pīvan-á-s*, Gr. *πιαρό-ς*. *-ns* postconsonantal suffix of the acc pl · Skr *-as*, Gr. *-ας*, Lat *-ēs* fr **-ens* (§§ 208. 619), Goth *-uns -ntái*, *-ntó* endings of the 3 pl. mid : Skr *-atē -ata*, Gr *-ατα -ατο* *-nu* in the nom. acc. sg. neut. of *-men*-stems Skr *ná-ma* Gr. *ονο-μα* Lat *nō-men* O.Ir *ain-m n-* 'name'.

Rt. form *dn̂k-* 'bite' . Skr. *dáśati* (for **daśáti* like *gáchati* for **gachátι*, § 672), *δάκνω ἔδακον*; cp. Skr *dáṃśa-s* 'bite', OHG *zangar* 'biting, sharp', *zanga* 'tongs' (*δήξομαι δῆγμα* etc. were later new formations after forms without nasals in the roots).

**lnghú-* **lnghró-* 'quick, small' · Skr. *laghú-ś*, Gr. *ἐλαχύ-ς ἐλαφρό-ς*, OHG. *lungar*.

§ 225. 2. *m n* unaccented before *i*. **gm-tó* 'I go' from rt. *gem-* : Gr *βαίνω* from **βανjω* **βαμjω* (§§ 204 639), Lat. *veniō* (§ 208) Pres st **mn-né-* rt. *men-* 'think' : Skr. *mán-ya-tē*, Gr *μαίνται* (on the meaning see Curtius Grundz.[5] 103. 312), Lith *minù* O Bulg *mĭnją* Pres st **ghn-né-* from rt. *ghen-* 'hew' . Skr *han-yá-tē* pass (for regular **ghan-yá-tē*, § 454 rem.), O Bulg. *žĭn-ją* 'I cut off, reap'. Formation of the present from noun stems in *-en- -men-*, Indg. ending of 1. sg.

-n̥-ǵʰ- : Skr. *ukṣan-yá-mi* to *ukṣán-* 'bull, ox', *brahman-yá-mi* to *bráhman-* n. 'prayer', Gr *τεκταίνω* to *τέκτων* 'carpenter', *σπερμαίνω* to *σπέρμα* 'seed, germ', Goth. *glut-mun-ja* to **glutmin-* 'splendour'.

It is probable that the treatment of *ŋm̥, ŋn̥* in Ar. Gr. and Slav. was analogous to that of *ŋi̯, ŋu̯*. Skr. Ved *jaganván* Indg. **ge-gm̥-u̯ós* and *jaghanván* Indg. **ghe-ghm̥-u̯ós*, part. pf. act. from the roots *gem-* 'go' and *ghen-* 'hew' (cp. § 199 rem.). Skr. *tanv-ī́* fem. to *tanú-ś* 'stretched' fr. **tn̥-u̯-ī*, cp. OHG. *dunni* 'thin' fr **þun-u̯-ia-*. Gr. part *βεβα-(ϝ)ώς, γεγα-(ϝ)ώς* were formed anew after forms with *βα-, γα-*. O Bulg part. pf *pĭnŭ* (*pę-ti* 'to hang, strain') may have arisen fr. **pĭn-vŭ* (cp. *da-vŭ* from *da-ti* 'to give') cp. *mĭnĭjĭ* 'minor' to Goth. *munniza* fr. **mi-nŋ-iz-ō* (§ 184 p. 161) Cp the author Morph. Unt. II 211 f. 214, Osthoff Zur Gesch. d. Perf. 404. 436

§ 226. 3 Accented before consonants Personal ending of 3 pl. *-n̥ti, -n̥t*, e g pres indic **s-n̥ti*, opt **si̯-n̥t *si̯ŋ-n̥t*, imperf. **é s-n̥t* from rt *es-* 'be' Skr. *s-ánti* 'are' *ás-an* 'were'. Gr Ion *ἐᾶσι* 'are' fr. **ἐα-αντι* (§ 205), El *ἦαν* 'sint' fr. **ἐσ-μ-αν*[1]) Bœot. *εἶαν* 'were' (*ει* fr *η*, § 72). Umbr. *s-ent* 'sunt', O.Lat. *s-i-ent* 'sint' O Ir *it* 'sunt', s § 243, 3 O.Icel *eru* 'are' prim. Germ. **iz-unþi*, O Icel *vissu* OHG. *wissun* 'they knew' with *-un* = Gr. *-αν*, Indg *-n̥t* O Bulg *jad-ętŭ* 'they eat': cp Skr. *ad-ánti*; *s*-aorist *bas-* from *bodą* 'I sting': cp. Gr *ἐδεξ-αν*

§ 227. 4. *ŋm, ŋn* (*m, n* glides) before sonants.

sŋm-ó- 'any one' (rt *sem-*) . Skr. *sama-*, Gr. *ἁμό-*, Goth. *suma-*; by the side of this cp. Indg. **sm-* in Gr. *μ-ᾶνυξ* 'having one claw', fem *μ-ία* 'una' (§ 563, 6) **gŋm-ó* present form from rt. *gem-* 'go' : Skr. ved. *gam-á-mi*, OHG *koman* Ags. *cuman* O.Icel. *koma*; Skr *gamáma* : Av *ā g°m-a-þ* = *hur-á-mi* : *á-hva-t* etc.

**tŋn-ú-* 'stretched, thin' : Skr *tan-ú-ś*, Gr. *ταν-ύ-γλωσσο-ς*, Lat. *ten-u-i-s*, O.Ir. *tan-a* Corresponding to the double suffix form *-ŋo-* and *-ŋo-* (§ 120), *-ro-* and *-ŗro-* (§ 287), there existed a

1) The *α* in El *ἦαν* can, of course, by § 64 also regularly represent an older *ε*. In that case the form would not belong here as a new formation

-n̥no- -no- beside. Hence e. g. Skr. Ved. *yaj-aná-s* beside *yaj-ñá-s* 'veneration of the gods', Gr. *στεγ-ανό-ς* beside *στεγ-νό-ς* 'covering', *ἐδ-ανό-ν* 'food' beside Skr. *ánna-m* 'food' fr. **ad-na-m*. Ved. *ganá-* Bœot. *βανά* O.Icel. *kona* = Indg. **gn̥n-á-*, beside Ved. *gná-* Gr. **μνᾱ-* fr. **βνᾱ-* (in *μνάομαι* 'I seek a wife for myself', § 492) O.Ir. *mnā* (gen. sg.) = Indg. **gn-á-* 'wife'; cp. Gr. *βιό-ς* 'bow' Lith. *gijà* 'thread' beside Skr. *jyá-* 'bow-string'. Pres. Arm. *lk-anem* 'I leave' Gr. *λιμπ-άνω* beside Gr. *δάκ-νω* etc. (Osthoff Zur Gesch. d. Perf. 407). **n̥n-* 'un-' : Skr. *an-udrá-s* Gr. *ἄν-υδρο-ς* 'waterless', beside **n̥-* before explosives etc., e. g. Skr. *a-pád-* Gr. *ἄ-πους* 'footless'; in the other languages we have the same form in both cases, Arm *an-*, Lat *in-*, Goth. *un-*.

On the prim. Indg. interchange between *n̥m, n̥n* and *m, n* after consonants cp. §§ 120. 153.

Aryan.

§ 228. 1. Skr. *yáchati* Av *yasaiti* 3. sg pres., Skr. *yatá-* Av. *yata-* part pass from Ar. *yam-* 'to restrain, curb', prim. f. **jn̥-ské-ti*, **jn̥-tó-* Skr *yahí* Av (Gāþ) *gaidī* 2. sg. imper form rt. *gem-* 'go', prim. f. **gn̥-dhí* Skr. *śatá-m* Av. *sate-m* 'hundred' : Lith. *szimta-s*, Indg. **ḱm̥tó-m* Skr *stabh-* fr. **stm̥bh-* in *stabh-nā-mi* 1. sg. pres., *tastabh-úr* 3 pl. pf. (3. sg *tastámbha*) from rt. *stembh-* (prim Ar. *sthambh-*[9]) 'strengthen, prop up'.

Skr. *baddhá-* Av. O. Pers. *basta-* 'bound', Indg. **bhn̥dh + tó-* from rt *bhendh-* 'bind'; so also *bhn̥dh-* in Skr. *badhnāti* 'he binds' *badhyátē* 'he is bound' and others. Skr. *śastá-* Av. *sasta-* 'spoken, valued', prim f. **ḱn̥s-tó-* : Lat. *cēnsu-s* a new formation for **censtu-s*. Skr. *hatá-* Av. *jata-* 'struck' (regarding the initial s. § 454 rem.): Gr. *φατό-ς*, Indg. **ghn̥-tó-*, rt *ghen-* 'hew, strike, kill'. Skr. *ta-nō-mi* Av. *ta-nao-mi* 'I stretch out' . Gr. *τά-νυ-ται*, rt. *ten-* 'stretch out, extend'. Skr. Av *-ma-, -va-* as anteconsonantal weak form of the Indg suffixes *-men-, -u̯en-*: loc. pl. Skr. *dhāma-su*, dat. pl Skr. *dhāma-bhyas* Av. *dāma-byō* (Skr. *dhā-man-* 'effect, law etc.' Av. *dā-man- dą-man-* 'creature') : cp. Gr. *ἀνα-θήμα-σι*; Skr. *párvata-s* 'range of mountains' Av. *paurvatā-*

f. 'mountain', to Skr. *párvan-* n. 'node, knot' : Gr. *πείραρ* Lesb. *πέρραρ*, Indg. **per-ɣ̥n-to-*. Skr. *s-at-* Av. *h-at-* weak st. form of the part. of *ásmi ahmi* 'I am', e. g. in the fem. *satī́, haiti*: cp. Gr. Dor. *ἐασσα*, Indg. **s-ɣ̥t-ī́*. Skr. Av. *-ma* = **-mɣ̥* in the nom. acc. sg. of *-men*-stems: Skr. *dhā́-ma*, Av. *dā-ma dąm-a*: cp. Gr. *ἀνά-θη-μα*, Lat. *nō-men*.

Skr. *aśnóti* Av. *ašnaoiti* (§ 398) 'he reaches', prim. f. **ɳ̊k-néɣ̥-ti* : cp. Skr. perf. *ānáśa*, Gr. *ἐνεγκεῖν*. Skr. *bahú-ś* 'dense, much' fr. **bhɳ̊gh-ú-s* : cp. superl. *bā́hiṣṭha-* and Av. *bązah-* n. 'greatness, strength'.

Skr. Av. *-ac-* 'bent in a certain direction, turned', e. g. in Skr. loc. pl. *praty-áḱ-šu* instr. pl. *-ág-bhiš*, fr. **-ɣ̥g-*, weak st. form to Skr. *-añc-* Av. *-anc-* . Gr. *ποδ-ακ-ό-ς*, Lat. *prop-inqu-o-s* (cp. Osthoff Morph Unt. IV 249 ff.).

Concerning the qualitative changes of *a* in Av. see § 94.

§ 229. 2. Skr. *gamyā́t* Av. *jamyāp* O.Pers. *jamīya* 3. sg. opt. from rt. *gem-* 'go', prim f. **gɣ̥-ɣ̥́-t* [1]); Sievers (Paul-Braune's Beitr. VIII 81 ff.) places here Ags. opt. *cyme* pl. *cymen* = Goth. **kumjáu* pl. **kumema* Skr. *mányatē* Av. *manyętē* 'he thinks', O.Pers. 2. sg. conj. pres. act. *manyāhy*: Lith. *minù*, Indg pres. st. **mɣ̥-ɣ́é-*, corresponding to Skr. *manyú-š* 'courage, zeal, anger' Av. *mainyu-š* 'spirit', from rt. *men-*. Skr. *hanyátē* Av. *janyętē* 'he is struck' . O Bulg. *žьn-jǫ* 'I cut off, reap', Skr. *hanyā́t* Av. *janyāp* 3. sg opt. 'he may strike', from rt. *ghen-* 'strike'. Denominative verbs· 3. sg. Skr. *udan-yá-ti* 'streams' *brahman-yá-ti* 'prays', Av *vyāxman-ye-iti* 'deliberates'.

Rem On the O Pers forms cp § 125 p 116.

Part. pf. Skr. *va-vān-vā́n* Av. *va-vān-vå* from Ar. *van-* 'obtain'· cp. the weak st. form Skr. *vavn-úš-* Av. *vaon-uš-*. Skr. 1. du. *gánvas* (for **ganvás*, accented after the analogy of the sg) from *gam-* 'go': cp. 2. pl. *gathá*. Skr. *udan-vánt-* 'rich in water' *ātman-vánt-* 'animated'.

Concerning the qualitative changes of *a* in Av. see § 94.

1) Skr *gam-yát* to *gm-iyá* (1 sg mid.) as *jagan-vā́n* to *jagm-úṣī* (part pf act. masc and fem) On Iran. initial *j-* cp § 451 rem.

§ **230.** 3. Skr. *s-ánti* Av. *h-enti* O.Pers. *h-atiy* (read *hanti*, § 197 rem.) 'they are', Indg. **s-n̥ti*; with secondary ending Skr. *ás-an s-án* Av. *h-en* O.Pers. *ah-a* (read *āh-an*, § 197 rem.). Skr. *y-ánti* Av. *y-einti* 'they go', Indg. **i-n̥ti* : cp. Gr. *ἴασι*; with secondary ending Skr. *áy-an* O.Pers. *ay-a* (r. *āy-an*). Skr. *sī-mánta-* 'boundary, parting' : Gr. *ἱ-μάντ-* 'thong', Indg. **sī-mn̥-to-*, to Skr. *sī-mán-* Gr. *ἱ-μαν-τά*, rt. *sai̯-* 'limit, bind'.

On Av. *e* from *a* see § 94.

§ **231.** 4. *saptam-á-s* 'seventh' Lat *septimu-s*, Indg. **septṃm-ó-s*, to which probably also belong O.Ir. *sechtmad* Mid. Cymr. *seithuet* (§ 634); but O Bulg *sedmy-jĭ* Pruss. *septma-s* Lith. *sẽkma-s* fr. **septmó-s*. Skr *vanáti* 'he gains, loves' *sanáti* 'he attains' fr. **u̯ṇn-é-ti* **sṇn-é-ti* (Av. *vanaiti hanaiti* either identical with these Skr. forms or like Skr. *vánati sánati* after class I): Goth *un-vunands* 'not rejoicing' Instr. sg Skr *bráhman-ā* (*bráhman-* n. 'prayer') Av. *bar*^{e}*sman-a* (*bar*^{e}*sman-* m. 'sacrificial rod') fr. prim. Ar **-mṇn-ā*, with these cp. Skr. *námn-ā* (*náman-* n. 'name'). Antesonantal Skr. Av O.Pers *an-* 'un-' : Gr. *ἀν-*, Indg. **n̥n-*.

ghan-á- 'killing' beside *-ghn-á-* (*go-ghná-* 'ox-killing') is similar to *gir-a-* beside *-gr-á-* 'swallowing, devouring' (§ 290).

On the qualitative changes of the *a* in Av. s § 94.

Rem. The Ar. ending of 1 sg. *-am* e g in Skr. *ás-am* 'I was' (cp. Gr. *ἦα ἦ* — **es-m̥*) and that of the acc. sg e g in Skr *pád-am* 'foot' (cp Gr. *πόδ-α* = **pod-m̥*) point to *-m̥m* Three explanations are possible. 1 There existed in prim Indg beside *-m* and *-m̥* a form *-m̥m* (and *-m̄*) after the manner of the phenomena discussed in §§ 312 313 In that case Cypr *-αν* in *ἀ(ι)δρια(ι)τ-αν* (Att *ἀνδριάντ-α*) etc could be directly connected with the Ar. form 2. *-m̥* became *-m̥m*, by a special Ar development, when the following word began with a sonant, i e generated an *m* as glide, under the same conditions as *i̯* and *u̯* often made their appearance after *-i* and *-u* in various languages 3 *-m̥* became *-a* in prim Ar (cp. Skr. *dáśa*) and this became transformed to *-am* after the analogy of forms like Skr *ábhara-m*, *áśva-m* The second possibility seems to deserve the preference, and the first type in consideration of *ábharam* and *áśvam* may have been generalised through the side by side existence of *áśam a-* and **áśa t-*, *pádam a-* and **pada t-* (cp J. Schmidt Kuhn's Ztschr. XXVII 282 f). Cp. *sthātár* § 285

Armenian.

§ 232. *ksan* 'twenty' according to Hübschmann fr. **gisan* (concerning *g-* § 162, and *-s-* § 408): Skr. *viśati-*, Gr. Dor. Bœot. *Fίκατι*, Lat. *vīgintī*, Indg. **u̯ī̆kn̥ti-* or **u̯ī̆kn̥t-* (first syllable uncertain). *tasn* 'ten' probably fr. Indg. **dek̆n̥t* : Goth. *taihun* (cp. § 651, 2). *inn* 'nine', pl. *inun-k* or *innun-k*: connected most closely with Gr. **ἐνϝα* (*ἐννα-, ἐνα-, ἐνα-*, § 166), beside Skr. *náva* O.Ir. *nōi n-* Indg **néu̯n̥. anun* 'name' fr **anu̯an *an-man* (§ 202): Skr. *nā́-ma*, Gr. *ὄνο-μα*, Lat. *nō-men*, O.Ir. *ainm n-*, Indg. *-mn̥. an-* 'un-' = Indg. **n̥-* and **n̥n-* (Skr. *a- an-*, Gr. *ἀ- ἀν-*, Lat. *in-*, Goth. *un-*), e. g. *an-ban* 'carens ratione et verbo' : cp. Gr. *ἄ-φωνος*; *an-anun* 'nameless' . cp. Gr. *ἀν-ώνυμος. kan-ai-* in pl. *kanai-k* 'women' : Bœot *βανά* O.Icel. *kona* 'woman', prim. f. **gu̯n̥-ā-*. Present formative suffix *-ane-*, e. g. *lk-ane-m* 'I leave' *gt-ane-m* 'I find' : Gr. *-ανω, λιμπάνω*, prim. f. *-n̥ne- -n̥no-*[1]) : by the side of this cp. *-ne-*, e. g. *ar-ne-m* 'I make', like Gr. *δάκ-νω. amarn*, gen *amar-an*, 'summer' (cp also *amar-ayin* 'aestivus' *amar-aini* 'messis') OHG. O.Icel *sumar* 'summer'.

In the forms *tasn, inn, anun* the *a* in the final syllable *-an* had disappeared by the law of finals (§ 651, 1).

Greek.

§ 233. 1. *βάσκω* 'I go' : Skr. *gáchāmi* 'I go', Indg. **gu̯n̥-skṓ*, from rt. *gem-* *ἐρατό-ς* 'lovely' : Skr. *ratá-s* 'rejoicing, loved', Indg. **rn̥-tó-s*, rt. *rem-* (Skr. *rám-a-tē*). *-α*, ending of the 1. sg. in *ἦ-α* 'I was', *ἐχε(ϝ)-α* 'poured out', *ἔδεικ-σ-α* 'showed', *ᾔδει-α* 'knew' etc., Indg. *-n̥*.

ἔχαδον from *χενδ-* 'seize' (fut. *χείσομαι*, § 205) : Lat. *pre-hend-ō*. *ἔπαθον πεπαθυῖα* from *πενθ-* 'suffer', *πένθος*. *ἄ-νῡμι ἀ-νύω ἀ-νύω* 'I come to the goal' : Skr. *sa-nṓ-mi*, Indg. **sn̥-néu̯-mi*, rt. *sen-*[2]).

1) Only traces found in Ar, as in Skr Ved *iš-ana-t*, Av *peš-anaiti mer*nc-aiiš* See the accidence, and Bartholomae Ar Forsch II 94 f.

2) For a conjecture concerning the strange spiritus lenis in *ἄνῡμι ἀνύω* see Osthoff Zur Gesch. d. Perf. 479 f.

τα- 'stretch, span' in *τά-νυ-ται τέ-τα-ται τα-τό-ς* etc.: Skr. *ta-, ta-nu-tē*, Lat *ten-, ten-tu-s*, rt. *ten-*. *φα-* 'kill' in *πέ-φα-ται φα-τό-ς*, Indg. **gh n̥-* : Skr. *ha-tá-s* 'struck'. *γέ-γα-μεν* 1. pl. pf. to *γεν-* 'gignere', *γέν-ος*. *ἔ-κτα-μεν, ἔ-κτα-το* = Skr. *á-kṣa-ta*, aor. to *κτεν-* Skr. *kṣan-* 'kill'. Lesb. *ἄμμες* Att. *ἡμεῖς* 'we', prim. Gr. **ἀ-σμε-* (§ 565): Skr. *a-sma-* (dat. *asmá-bhyam* 'nobis'), Goth. *un-s*, Indg. **n̥-sme-*. *-α-, -μα-*, weak form of the nominal suffixes *-en-, -men-*: *φρα-σί*, to *φρεν-* 'midriff, mind'; *ὕδ-α-τ-*, to Skr. *ud-án- ud-n-* 'water'; *ὀνό-μα-σι* Skr. *ná-ma-su*, to *ná-man- nā́-mn-* 'name'; *ὀνό-ματα* like Lat. *cōgnō-menta*. Suffix of the acc. pl. *-ας* : Skr. *-as*, Lat. *-ēs* (fr. **-ens*, § 208) etc., Indg. *-n̥s*, e. g. *νῆας* 'ships' : Skr. *nāv-as* Lat. *nāv-ēs*; *ὀφρύας* 'eye-brows' : Skr. *bhrúv-as* Ending of the 3 pl. mid. *-αται -ατο* : Skr *-atē, -ata*, Indg. *-n̥tái, -n̥tó* : *ἧται, ἧτο* 'they sit, sat'. Skr. *ásatē, ásata*, perf *κεκλίαται τετρά φαται*, opt *γενοίατο* etc. *ἐν-νέ(ϝ)α* 'nine' (orig. 'nine in all', *ἐν-* 'in') : Skr. *náva*, Arm. *inn* (§ 232), O.Ir. *nōi n-* (Lat *novem* after the analogy of *septem, decem*), cp § 152.

ἔλαχο-ν from *λεγχ-*, cp. pf. *λέλογχα*.

Rem *o* in *εἴκοσι* beside *πέντε* 'twenty' etc does not really represent Indg sonant nasal. See the author's Griech Gramm p 68 f.

§ **234.** 2. *βαίνω* 'I go' : Lat. *veniō*, Indg **gm̥-jō*, § 204 So also *καίνω* 'I kill', prim f. **kṃ-jō*, to *καμ-ό-ντες* 'the dead': Skr. *śamayāmi* 'I put to death, destroy'; *ν* crept into *ἔκανον, κέκονα* from *καίνω*. Lesb. *κταίνω* 'I kill' fr. **κτη-jω*, rt. *κτεν-*. *μαίνεται* : Skr. *mányatē*, Lith. *minù*, rt. *men-* (s. § 225). Analogously *τιταίνω* 'I stretch out', *τεκταίνω* 'I build', *σπερμαίνω* 'I fructify' (cp. Goth. *glitmunja* 'I shine') etc *τέκταινα* fem to *τέκτων* 'carpenter', gen. sg *τεκταίνης* like Goth *laúhmunjōs* (nom. *laúhmun-i* 'lightning'); cp the author Morph. Unt. II 195 ff., Osthoff Zur Gesch. d. Perf. 452 f. On the *i*-epenthesis see §§ 131. 639.

§ **235.** 3. 3. pl. *-αντι*, Att *-āσι* fr. *-ń̥ti* : *ἴ-āσι* 'they go' : Skr. *y-ánti*; *ἀγ-νύ-āσι* 'they break in pieces, crush' : cp Skr. *śak-nuv-ánti*, Indg. **-nu-ń̥ti*. Participial suffix *-αντ-* = Indg. *-ń̥t-* in *δείξ-αντ-, ὑπερ-κύδ-αντ, ἀ-κάμ-αντ-, π-άντ-* (§ 166 p. 147).

Rem. Some hold *ər*, and others *a* to be the regular representation of accented sonant nasal. The facts seem to us to agree best with the hypothesis given above.

§ 236. 4. *ἅ-μα* 'at once' *ἀμ-ό-* 'any one'; Skr. *sam-a-* Goth. *sum-a-* 'any one', Indg. *sṃm-* (weak stem form beside *sm- sṃ-*) 'one'. Bœot. *βανά* 'wife' : Armen. pl *kan-ai-k'* O.Icel. *kona*, Indg. **gṃn-á-*. Aor *ταμεῖν, κτανεῖν, θανεῖν* from *τεμ-* 'cut', *κτεν-* 'kill', *θεν-* (*θείνω*) 'strike, kill'. Weak st. *δαμ-* 'house' (beside *δεμ-* in *δεσπότης*, § 204 p. 171) in *δάμ-αρτ-* 'spouse', properly 'managing the house', to *ἀρτύω ἐπ-αρτής* (W. Schulze Kuhn's Ztschr. XXVIII 281).

Italic

§ 237. The Indg sonant nasals became in the prim. Ital. period *en, em, en*, and thus fell together with Indg. *e* + nasal In the same manner as in the latter combination *e* passed into *i* in Latin, e g *sin-gulī* (Indg **sṃ-*) like *tinguō*: Gr. *τέγγω*, s. § 65 p 53.

§ 238. 1 Lat *sim-plex sin-gulī* : Gr. *ἅ-παξ*, Indg. **sṃ-* one' *centu-m* . Lith *szim̃ta-s* 'hundred', Indg. **ḱṃtó-m vīgintī·* Gr. *ϝίκατι* (cp. § 232), *vīcēsimu-s* fr **vīcent+timo-* (§ 208): Gr. Bœot. *ϝῑκασιό-ς*. *decem*, Umbr. *desen-duf* 'duodecim': Skr. *dáśa*.

cēnsu-s (for regular **censtu-s*), Osc. *an-censto* nom. sg. fem. 'incensa' *censtom-en* 'in censum' *śastá-* 'spoken, valued', Indg. **ḱṃs-tó- ēnsi-s*: Skr. *así-ś* 'sword'. Lat *emō*, Umbr. emantur 'accipiantur', Osc. *pert-emest* 'perimet', fr. **ṃm-ó* = Lith. *imù* O Bulg. *imą* 'I seize, take' (§ 219 rem. 2) from rt. *nem-* 'allot' (Gr. *νέμω* 'I deal out, possess', Goth *nima* 'I take'); **ṃmó* first became **ṃnó*, thence *emō tentiō* Skr. *tati-ś* 'row', Gr. *τάσι-ς* 'a stretching'. Suffix *-men-to-* = Skr *-ma-ta-*, Gr. *-μα-το-* Germ. *-mun-da-*: *testā-mentu-m* (fr. **terstā-mentu-m*), Osc. abl tristaa-mentud. *juven-ta*: Goth. *junda* (*jūnda*?) 'youth', cpf. **juṷṇ-tá* or **juṷṇ-tá triēns* to Gr. *τριάς*, like Skr. *daśát-* 'decade' to Gr. *δεκάς* [1]). Lat. *-ōnsu-s*

1) Either the nom. sg and loc. pl. of these Gr. substantival numerals in *-άς* were the occasion of their passing into the analogy of *ā*-stems (cp.

-ōsu-s e. g. in *vīrōsus* (*n* preserved in *formōnsus* etc.) explained by Osthoff[1]) as fr. **-oṛensso-*, **-o-ṛnt+to-*, orig. the weak form of the suffix *-ṛent-* (Skr. *-vant-*, Gr. *-ϝεντ-*), *-to-* participial suffix as in *ūbertu-s*, *vetustu-s*, *aegrōtu-s* etc. Participial st. *rudent-* : Skr. *rudat-* (Indg. **rudṇt-*; beside the strong form **rudónt-* : Skr. *rudánt-*), from *rudō* : Skr. *rudámi* 'howl, moan'. Acc. pl. *ped-ēs*, Umbr. *ner-f* 'nerones, proceres' fr prim. Ital. **-ens* (§§ 208. 209), Indg. **-n̥s* : Skr. *-as*, Gr. *-ας*. *nō-men*, Umbr. nu-mem *no-me* 'nomen', Indg **-mṇ* : Skr. *nā́-ma*, Gr. *ὄνο-μα*, O.Ir. *ainm n-* 'name'; analogously *ungu-en*, Umbr. um-en 'unguen' : O Ir. *imb n-* n. 'butter', cp Gr. *ἄλειφ-α*, *κάρᾰ* fr. **καρασ-α*, concerning the Umbr. endings *-em*, *-e*, *-en* s. § 209.

dingua lingua (§ 369) · Goth *tuggō* OHG. *zunga* 'tongue'; if O Bulg. *j-ęzyk̄ъ* Pruss *insuwis* 'tongue' also belong here, it follows that the prim. f. is **dn̥ĝh-ṇā*, and that *d-* has been dropped in Baltic-Slavonic; s. Bezzenberger in his Beitr III 134 f., Bersu Die Guttur. 148 f *juvencu-s*, Umbr *uvengar* 'iuvencae' : Skr. *yuvaśá-s*

§ **239.** 2. *veniō* *veniunt* (transferred into the analogy of verbs in *-īre*) Gr. *βαίνω*, Indg **gṃ-ió*, rt *gem-* 'go' (cp § 208).

§ **240.** 3 Umbr. *s-ent* 'sunt', O Lat *s-i-ent* 'sint', s. § 226. The participial st *s-ent-* 'being' (Lat. *prae-sēns*, Osc *prae-sentid* 'praesente') corresponds both to the accented form Skr *s-ánt-* Indg. **s-n̥t-* and to the unaccented form Skr. *s-at-*, Gr. *ἐσ-* Indg **s-ṇt-*.

§ **241.** 4. *tenu-i-s* fr Indg **tṇ-ú-*, § 227. *hemō* (*nēmō* fr. **ne-hemō*) acc O.Lat *hemōn-em* · Goth. *guma*, gen. *gumins*, 'man'; these forms stand to Pruss *smoy* Lith *žmẽ* 'man' (pl. *žmónes*) in the same relation as Indg **gṇnā-* to **gnā-* 'wife' (§ 227).

septimus, *decimus*, *nōnus* (in the first instance fr. **noṇeno-s*, O.Lat. inscrip. *noine*) fr. **septṃm-o-s*, **dekm̥m-o-s*, **neṇṇ-o-s*,

νέποδες for regular **ϝεποτες*, § 327), or there existed a prim. Indg. interchange of tenuis and media (§ 469, 7).

1) communicated by letter.

s. § 231. Superlative suffix *-timo-* (*op-timu-s*) : Skr. *-tamá-* (*ya-tamá-s* 'which of many', relat.), Goth. *-tuma-* *-duma-* (*af-tuman-* 'latter', *hlei-duman-* 'left'), Indg. **-tm̥mó-*. There exists a doubt regarding *terminus*, to *termen* (cp. Umbr. *term-nom-e* 'ad terminum', Osc. teremnattens 'terminaverunt'), as to whether we have here prev. Ital *n̥n*, or whether old *n* first became vocalic in Ital. itself, since gen sg. *termin-is* could exactly correspond to Skr *tármaṇ-as* (cp. *bráhman-ā*, § 231) The same doubt exists with regard to *fēmina*, *dominu-s* beside *domnu-s*, *lāmina* beside *lāmna* and many other similar forms. Furthermore *-in-* could here also be Indg. *-en-*[1])

O Irish.

§ 242. Indg nasalis sonans and Indg *e* + nasalis consonans had fallen together in Irish before consonants, as in Ital But they still existed apart in prim Keltic, as is shown by the different treatment in the Britt. branch (see Zimmer Kuhn's Ztschr. XXVII 450). Antesonantal *-n̥n-* (according to Thurneysen) became *-an-* already in prim. Kelt.; cp § 298, 3.

§ 243. 1. *cēt* 'hundred' · Cymr. Bret. *cant* Corn. *cans*, Lith. *szim̃ta-s*, Indg. **ḱm̥tó-m.* *fiche*, gen. *fichet*, 'twenty' : Mid. Cymr. *ugeint* Corn *ugans* Skr *vi̯śatí-*, Lat. *vīgintī*. *cēt*, unaccented form *cēta-*, 'with' . Cymr *cant* Corn. *cans*, Gr *κατά*. *dēt* 'tooth' . Cymr. *dant* Corn. *dans* Goth. *tunþ-u-s* (cp. § 244), Skr *dat-* (weak st. form in instr. sg. *dat-á* etc. beside the strong *dánt-* = Gr. *ὀδόντ-* OHG. *zand* OS *tand* Lith. *dant-ì-s*), Indg. **d-n̥t-* (strong **d-ó-nt-*), participle from rt *ed-* 'eat'; the indic. would be **d-é-ti* *ér-mitiu* 'honor' · Lat *mentiō*, Skr. *mati-š*, Indg. **mn̥-tí-s* from rt. *men-* 'think'. *óac óc* 'young' : Cymr. *ieuanc* O.Corn. *iouenc* Bret. *iaouank*, Lat. *juvencu-s*, Skr. *yuvašá-s*.

deich n- 'ten' : Skr. *dáša*, Lat. *decem*. *nōi n-* 'nine' : Skr. *náva*, Indg. **neu̯n̥*. *ainm n-* 'name' : Gr. *ὄνο-μα*, Indg *-mn̥*.

1) Cp. the conjectures of Thurneysen Kuhn's Ztschr XXVI 308 and of Stolz Lat. Gramm. p. 166 f.

On the treatment of the prim. Ir. combination *-en-* in these words cp. §§ 211. 212.

2. Examples for Indg. *-ŋ̑ɣ-*, *-ŋ̑i-* are unknown to us.

3. *it* 'sunt' (proclitic) with Cymr. *ynt* goes back to **enti*. This was an analogical transformation of **senti* = **s-ŋ̑ti* (§ 226), s. Zimmer Kelt. Stud. II 133.

5 *tana* · Corn. *tanow* Bret *tanav* 'thin', Skr. *tanú-š*, Indg. **tɣn-ú-*. *samail* 'likeness, picture' · Cymr. *hafal* 'similis', Gr. *ἅμ-α*, Indg. **sɣm-*. *sechtmad* 'septimus' fr. **sechtamad*, s. § 231.

Germanic

§ 244. 1. Goth. OS *hund* OHG. *hunt* O.Icel. *hund-rað* 'hundred' : Lith. *szimta-s*, Indg. **ḱɣntó-m*. Goth. *taíhun* 'ten' : cp. Lith. *dẽszimt*, pl *dẽszimt-s* (the *-t* in *dẽszimt* cannot of course be a final *-t* which has remained from the Indg. period), *taíhunda* 'tenth' : Lith. *deszimta-s*, Gr. *δέκατο-ς*, prim. f. **dekɣt* and **dekɣto-s*. The Goth. stem *tigu-* 'decade', originated in the dat. pl., *tigum* fr. **tezum-m(i)* . cp. Skr. *daśábhiš* fr. **dekɣ-bhis*; *tigum*, associated with *sunu-m*, occasioned the passage into the *u*-declension. Goth *ga-qumþi-* 'a meeting, synagogue' (*q* for regular *k* §§ 180. 444 b), OHG *cumft cunft* 'a coming' (for the *f* s. §§ 214 529) · Skr *gáti-š*, Gr. *βάσι-ς*, Lat *in-ventiō*, Indg **gɣ-ti-* from rt. *gem-* 'go' Prim. Germ. final *-un* = Indg. *-ɣ* became by § 214 Goth *-u*, acc sg *tunþ-u* 'dentem' *fōt-u* 'pedem' : Gr. *-α*, Lat *-em*

Goth *bundum* OHG. *buntun* O Icel. *bundom* 'we bound', to *band bant batt* 'I bound' (rt. *bhendh-*) . cp Skr. *tastabhimá* to *tastámbha* (rt. *stembh-* 'fasten') and Gr. *πεπαθυῖα* to *πέπονθα* (*πενθ-* 'suffer'). Goth. *wunds* OHG. *wunt* 'wound' · Gr **ϝατά-* in *ϝατάλαι οὐλαί* Hesych. (cod. *γατάλαι*), from rt. *ɣen-* (Goth. *vinnan* 'to suffer, feel pain'). OHG *wuntar* OS *wundar* 'wonder' : Gr. *ἀθρέω* 'I gaze at, observe' fr. **ϝαθρέω*. Goth. *undar* OHG. *untar* 'under' : Skr. *adhás* 'below' *ádhara-s* 'the lower' *adhamá-s* 'lowest' (concerning Lat. *inferu-s īnfimus* cp. § 389 rem.). Goth. *t-unþ-u-s* 'tooth' : Skr. *d-at-* etc., s. § 243; *tunþ-* was due to a levelling of the prim. Germ. st. form **tánþ-* (OHG. *zan*, § 527)

and **tund-*, Indg. **dónt-* and **dn̥t-*, s. § 530. The same participial suffix *-nt-* in Goth. *hulundi* f. 'cave' (cp. § 301). Suffix *-munda-* = Skr. *-mata-*, Gr. *-ματο-*, Lat. *-mento-*, Indg. **-mn̥-tó-* : Goth. *sniu-mundō* adv. 'hastily', OHG. *hlu-munt* 'renown'. Ending of the acc. pl. Goth. *-uns* = Skr. *-as*, Gr. *-ας*, Lat. *-ēs*, Indg. **-ns* : Goth. *tunþ-uns* 'teeth' *fōt-uns* 'feet' *brōþr-uns* 'brothers' *aúhsn-uns* 'oxen' [1])

Goth. *þugkjan* OHG. *dunchan* 'to seem, appear', prim. f. 1. sg. **tn̥g-i̯ó* or **tṇg-i̯ó* · O.Lat *tongēre* 'to know', from rt. *teñg-* or *teṇg-*. Part. pass. OHG. *slungan* 'wound' O.Icel. *slungenn* 'slung', inf. OHG. *slingan* O Icel. *slyngva* : Lith. *sliñkti* 'to creep, sneak', rt. *sleṇg-*.

§ 245. 2. Goth *kunja-* (nom. acc. *kuni*) OHG. *cunni* O Icel. *kyn* 'race, generation' fr. **ǧn̥-i̯o-* rt. *ǧen-* 'gignere'; with these Gr. *ὁμό-γνιο-ς* 'of the same race' (Goth. *sama-kunja-*), which represented a secondary form **ǧn-i̯o-* (§ 142 p. 128); *kunja-* probably corresponds to Lat. *genu-s ingenu-m*. Goth. *munjáu* opt. to *munan* 'to think' rt *men-*, prim. f. of the strong opt. stem **mn̥-i̯ḗ-*. Stem form Goth. *laúhmunjō-*, e. g. gen. sg. *laúhmunjōs* (nom. *laúhmuni* f. 'lightning'), fr. **-mn̥-i̯ā-*, s. § 234. Goth. *glit-munja* 'I shine' fr **-mn̥-i̯ō* · cp. Gr *σπερμαίνω* 'I fructify', Skr *brahmanyami* 'I pray'. O.Icel. *symja* 'to swim', pres. st. prim. Germ **s(u̯)um-i̯a-* (on the loss of the *u̯* s. § 180 p. 158), prim. f. **sun̥-i̯o-* (Sievers Paul-Braune's Beitr. VIII 86).

-nn- fr. *-n̥-* in West Germ., e. g. OHG. gen. sg. *cunnies cunnes* dat pl. *cunnum cunnum* (Ags. *cynnes cynnum*) = Goth. *kunjis kunjam*. Cp § 215.

§ 246. 3. Ending of 3. pl. *-n̥ti*, *-n̥t* in O.Icel. *eru* 'are', O.Icel. *vissu* OHG. *wissun* 'knew', s. § 226.

§ 247. 4. Goth. *sums* O Icel. *sumr* 'any one'. Skr. *sam-a-*, Gr. *ἁμ-ό-*, Indg. **sn̥m-ó-* from rt. *sem-*. Goth. *un-vunands* 'not rejoicing' : Skr. *vanáti* 'he gains, loves', Indg. 3. sg. **u̯n̥-é-ti*. In like manner Goth. *munan* 'to think' (rt. *men-*) and OHG.

1) To be read thus I. Cor. IX. 9 instead of Ms. form *auhsunns* s. Kogel Paul-Braune's Beitr. VIII 115.

koman OS Ags. *cuman* O.Icel. *koma* 'to come' the latter to Skr. *gamáti* (rt. *gem-*). Superlative suffix *-duman-*, to Skr. *-tamá-* Lat. *-timo-*, Indg. *-tŋmó-*, see § 241.

On the change of *u* to *o* before *o* or *a* in the following syllable in West Germ and Norse cp § 51. This change did not take place before nasal + consonant, hence OHG. part. *buntan* (§ 244) beside *koman* etc.

Baltic-Slavonic

§ 248. The Indg sonant nasals became *ı* + nasal in the prim. Balt.-Slav. period This *i* was open and still separate from Indg *ı*, as follows from the fact that Indg. *m* is represented in Slav. by *ī* before explosives and spirants, whereas Indg. ϱ in the same combinations is represented by *ę* See § 219. We denote the prim Baltic-Slav and prim Slav equivalents of η, ϱ by *ım ın* Throughout the whole Baltic branch *ım*, *ın* arose from *ŋm ŋn*, so that all distinction between these and Indg *im*, *in* was lost.

§ 249. 1. Lith. *deszı̃ma-s* O Bulg *desętŭ* 'tenth' : Gr. *δέκατο-ς*, Goth *taíhunda*, Indg **dekŋtó-s*. Lith *kı̃mszta-s* 'stuffed, stopped', O Bulg. *ǫstŭ* 'dense', to Lith pres. *kemszù* 'I stuff, stop'. Lith *gı̃mti* 'to be born' (pres. *gemù*), *prı̃-gimtı̃-s* 'inborn peculiarity', probably from rt *gem-* 'come' (Osthoff Zur Gesch. d. Perf. 103) : cp Skr. *gáti-š*, Gr. *βάσι-ς*, Goth. *ga-qumþi-*, Indg **gŋ-ti-* Lith *rı̃mti* 'to become composed in mind' *rimta-s* 'fast' : Skr. *rátı-š* 'rest, repose, ease' *ratá-* 'tarrying with something, devoted to a thing, being pleased with something', Gr *ἐρατό-ς* 'lovely' (§ 233), rt. *rem-*. Acc sg. Lith *dùkter-ı̨* O.Bulg. *dŭšter-e* 'daughter', prim. Baltic-Slav. **dukter-ın* : Gr. *θυγατέρ-α*; Lith. *vẽžant-ı̨* 'vehentem' : Gr. *φέροντ-α*, Lat. *vehent-em*.

Lith. *at-mintı̃-s* 'memory', O.Bulg *pa-mętĭ* 'remembrance' : Skr. *matí-š*, Lat *mentiō*, Goth. *ga-mundi-*, Indg. **mŋ-ti-* from rt. *men-*. Lith. *gı̃ntı* 'to drive (cattle)' *ap-ginti-s* 'defence', O.Bulg. *žęti* 'to hew, mow' : Skr. *hatı-š* 'a blow', Indg. **ghŋ-*

ti-s; Lith. *ginczià* and *giñczia-s*[1]) 'combat, quarrel' : Skr. *hatyā* 'a killing', OHG. *gundea* (Hildebr. 60 *gūdea*) 'fight, combat', Indg. **ghn̥-tiá-*, from rt. *ghen-*. Pruss. *newīnts* Lith. *deviñta-s* O.Bulg. *devętŭ* 'ninth' (concerning the first syllable of the word s. § 68 rem. 1) : Goth. *niunda*, Gr. ἔνατος fr. **ἐνϝατο-ς* (§ 166), prim. f. **neun̥-tó-s*; cp. also O.Bulg. *devętī* 'nine' : Av *navaiti-* 'ninety'; Skr. *navatí-* 'ninety'. Lith *tįsti* 'to stretch one's self out, extend' (beside *tęsiù* 'I stretch') : Skr. *ví-tasti-ṣ* 'a span' (causat. *tāsáyati* 'he draws to and fro'), cpf. **tn̥s-ti-s*, from rt. *tens-*, cp. also Germ *þuns-* in the OHG. part *gi-dunsan* 'swollen', to pres. *dunsan*.

Concerning Lith *imù* O.Bulg. *imą* fr. **ǫm-ó* and O.Bulg. *imę* fr. **ę-mēn* see § 219 rem. 2.

Pruss. *insuwi-s* O Bulg. *j-ęzyků* 'tongue', perhaps to Lat. *dingua lingua* Goth. *tuggō* s § 238; Lith. *leżùvi-s* for **ęžuvi-s* through a popular confusion with *leżiù* 'I lick'. O Bulg. *pęstī* f. 'fist' : OHG *fūst* 'fist' (prim Germ **fuⁿχsti-z*, s. § 214 p. 181, and § 527 extr), cpf. **pn̥̄ksti-s*, possibly to Goth. *figgrs* 'finger'. Lith. *liñkti* 'to bend one's self' *liñkęs* 'inclined, bent', beside *lenkiù* 'I bend' *lankà* 'valley' (O Bulg. *lęšti* 'to bend' can be both Lith. *liñkti* and *leñkti* 'to bend', cp. Leskien Arch. f. slav. Phil. V 507. 527).

§ 250. 2. Lith. *minù* 'I think of', O Bulg. *mĭnją* 'I think' : Skr. *mányatē* 'thinks', Indg. pres st **mn̥-ié-* from rt. *men-*. O.Bulg. *žĭnją* 'I cut off, reap' : Skr. *hanyátē* 'is struck', Indg. pres. stem **ghn̥-ié-* it. *ghen-* Here probably also belong part. perf. act. *pĭnŭ* (pres. *pĭną* 'I stretch out, hang') from **pĭnvŭ* and *tĭnĭkŭ* 'thin' (compar. *tĭnĕjì*) fr. **tĭnv-ĭ-kŭ*, like Skr. *tanví* fr. **tn̥-u-i* (§ 225)

§ 251. 3. *-n̥ti* in O.Bulg. *jad-ętĭ* 'they eat', *-n̥t* in O.Bulg. aor. *bas-ę* from *bodą* 'I sting, stab', see § 226. It is possible on account of Skr. *dádati* that the *-ętĭ* in *dad-ętĭ* 'they give' (*dad-* = Lith. *důd-*) arose from *-n̥ti* (with unaccented *n̥*).

§ 252. 4. Lith. *pinù* 'I bend' O.Bulg. *pĭną* 'I stretch out,

1) Thus spoken in the dialect of Godlewa and probably also elsewhere. Kurschat (Gramm. p. 28) writes *gińczas*.

hang', Lith. *minù* 'I tread on' O.Bulg. *mĭnǫ* 'comprimo', Lith. *gimù* 'I check, keep off', Russ. *ĭnu* 'I cut off, reap' (on the loss of the *ĭ* s. § 36), like Skr. *vanámi* (§ 231). Part. pf. act. fem. Lith. *mìnusi* (*mñti* 'to think of') O.Bulg. *pĭnŭši* (*pęti* 'to stretch out'), cp. Skr. Ved. *jajan-úr* (beside *jajñ-úr*) 3. pl. pf. act. from *jan-* 'beget', *tatan-é* (beside *tatn-é*) 1. sg. pf. mid. from *tan-* 'stretch, extend'.

Rem. The Zographos gospel has occasionally *u* for *ĭ* before non-palatal vowels, e. g. *tŭma* 'darkness' (prim f **tm̥m-ā*) beside *tmĭnŭ* 'dark'. Cp. § 36 rem.

2. Long sonant nasals.

§ 253. The question, first discussed by de Saussure, as to which sounds and sound-combinations have arisen in the Indg. languages from long nasalis sonans (Mémoire sur la système primitif des voyelles 1879 p 239 ff.; cp besides especially Osthoff Morph. Unt. IV p. IV and p 280, Zur Gesch d Perf. 30. 55. 331. 367. 373 ff.), has not hitherto, in many respects, been satisfactorily solved, just as in the case of the Indg. long sonant liquids (§ 306). The probable results of the investigations hitherto made, are as follow. — In Ar. *ā* = *n̥̄*, *m̥̄*, corresponding to *a* = *n̥*, *m̥*. In Gr. between consonants *ā* (Ion. Att. *η*) = *n̥̄*, *m̥̄*, initially *νā-* (Ion Att. *νη-*) = *n̥̄-*. In Lat. *nā* and *an-* from *n̥̄*, corresponding to Gr. *ā* and *νā-*. In Arm. initially *an-* from *n̥̄-*. Nothing in any degree certain has, as yet, been determined for the other languages. Examples:

2. pl. pret Skr. *ágāta* Gr. Dor. *ἔβᾱτε* Ion. Att. *ἔβητε*, cpf. **é gm̥̄té* rt. *gem-* 'go'. The stem form **gm̥̄-* forced its way into the sg. act. also, hence Skr. *ágām ágās ágāt* Gr. *ἔβην ἔβης ἔβη* beside Skr. *ágaman ágan ágan*

Skr. *jātá-s* 'born, son' Av. *zāta-*, Skr. *jāti-š* f. 'birth', Lat. *gnātu-s nātu-s*, *nātiō* (cp. also Gall. *Cintu-gnātu-s* 'first-born' according to Thurneysen Keltorom 2), from rt. *ĝen-* 'gignere'. Analogously Skr. *sātá-* from *san-* 'reach', *vātá-* from *van-* 'to like', *ghā-ta-s* 'killing; blow, a putting to death' *ghā-ti-* 'blow, a wounding' from *han-* 'strike, kill' etc.

Skr. *jānámi* 'I recognise, know', O.Pers. 3. sg. pret. *adānā* (= Skr. *ájānāt*), prim. f. **ǧn̥-nā-mi*, Lat. *gnāru-s*, prim. f. **ǧn̥-ró-s* (formed like *dū-ru-s*), rt. *ǧen-* 'noscere'.

Skr. *átā-* f. 'rim, door-frame', Arm. *-and* in *dr-and* 'door-post, threshold', Lat. *anta* 'four-cornered door-pillar, pilaster' [1]).

Skr. *āti-š* f. 'a water-fowl', Gr. *νῆσσα* 'duck' fr. **νᾱτ-ια*, (with these also Lat. *anas anitēs*, OHG. *anut*, Lith. *ántı-s* 'duck' we venture to make no assertion as to their phonetic-relations).

Skr. *yátar-* 'wife of the husband's brother'; that the *ā* arose from *n̥* is probable on account of Gr. *εἰνάτερες*, Lat. *janitrīcēs*, O.Bulg. *jętry*.

Further *ā* = *n̥* in the Skr. nouns *já-s* (loc. pl. *já-su*) 'born, creature, being' (here orig. also *pra-já-* 'progenies', which, going out from forms like loc. pl. *pra-jásu*, passed into the *ā*-declension), *vāja-sá-s* 'lending power' (cp. *vā́ja-sāti-š* f. 'a reaching of power', Skr. *san-* 'reach, attain' and 'distribute, administer'). With *ā* = *m̥* *samāna-gá-s* 'going to the place of assembly'. These nouns are on the same footing as *gír* 'commending; praise', *pūr* 'citadel', s. §§ 306. 312.

Skr. Ved. *nā-mā* 'nomina' probably fr. **-mn̥*, hence *nā-mā* : *nā-ma* = *purā* : *purá*.

Greek *νᾱ-* *νη-* 'un-' in Dor. *νᾱ-ποινος* Hom. *νη-νεμδής* etc., Umbr.-Samnit. *an-* 'un-' in Umbr *an-hostatu* 'inhastatos' Osc. *an-censto* nom. sg. 'incensa' etc. fr. **n̥-* (W Schulze Kuhn's Ztschr. XXVII 606)

LIQUIDS.

A LIQUIDS AS CONSONANTS

Indg. primitive period.

§ 254. One of the most difficult questions of Indg. phonology is to determine how many liquids the Indg. prim language possessed and what their nature was (cp. Sievers Phonetik [3] p. 104ff.).

1) If the Av *ąpaŋ̄ hγąmenąm ąiθyą-* should mean 'door-post' and be connected with Skr. *átā-* (Zimmer Altind. Leben 154), its first syllable

That there were at least two liquids, is seen by the circumstance that the European languages and Armenian agree in presenting *r* in many cases and *l* in others. *r* e. g. in Arm *berem* Gr. *φέρω* Lat. *ferō* O.Ir. *berim* Goth. *baíra* 'I bear' O.Bulg *berą* 'I take'. *l* e. g. in Arm *li* (gen. *lioy*) Gr. *πλή-ρης* Lat. *plē-nu-s* 'full' O Ir. *līnaim* 'I fill', O.Icel. *fleire* 'more' *flestr* 'most', Lith. *pìlna-s* O.Bulg. *plŭnŭ* 'full'.

A fixed law of representation has not yet been gained for the Skr. liquids

The Skr. equivalents of Europ.-Arm *r* are 1) mostly *r*. *bhárāmi* · Gr. *φέρω* 2) *l*. *lúñcati* 'he picks, plucks, plucks out' : Gr. *ὀρύσσω* 'I dig', Lat. *runcāre* 'to weed out', Lith. *runkù* 'I become wrinkled' *raŭka-s* 'wrinkle' 3) *r*, later *l*. *rup- lup-* 'tear, break' . Lat. *rumpō*, Ags. *reófan* O Icel *rýūfa* 'to break, tear in pieces'.

Corresponding to europ.-Arm *l* we have 1) in most cases *r* *prātá-s* 'filled' · Lat *plētus* (according to O Weise Bezzenb. Beitr. VI 115 Skr. *r* always corresponds to Gr *λ* after *k̂*-sounds, e. g. Skr. *śrávas* · Gr *κλέϝος*). 2) *l*. *tulá* 'balance' : Gr. *τάλαντον* 'balance', Lat *tollō*, O Ir. *tallaim* 'I take away', Goth. *þulan* 'to endure, suffer'. 3) *r*, later *l*. *rip- lip-* 'smear' : Gr. *λίπος* n 'fat', Lat. *lippu-s* 'blear-eyed', Goth. *bi-leiban* 'to remain' (cp. Gr. *λιπαρέω* 'I persist in a thing'), Lith. *limpù* O.Bulg *prilĭ(p)ną* 'I stick, glue'

The laws for these differences still remain to be investigated It does not seem to be a mere accident that Skr. *l* = Arm.-Europ *l* occurs much more frequently than Skr. *l* = Armen.-Europ. *r* [1])

must in that case be strong-grade The interpretation of the passage in question is however doubtful

1) "There is hardly a root containing an *l* which does not show also forms with *r*; words written with the one letter are found in other texts, or in other parts of the same texts, written with the other In the later periods of the language they are more separated, and the *l* becomes decidedly more frequent, though always much rarer than the *r* (only as 1 to 7 or 8 or 10)". Whitney Sanskrit grammar § 53.

Old Iranian had only *r* as opposed to Arm.-Europ. *r* and *l* and Skr. *r* and *l*. O.Pers. *l* only in loan-words. It still remains to be investigated whether, and how far the *l*-sounds in the younger Iran. dialects are to be taken into account for fixing the development of liquids in pre-historic times

With this state of things[1]) it seems to be most suitable to put down the Indg. primitive forms after the standpoint of the Europ. languages and Armenian, thus e. g. **bhérō* 'I bear', **plētó-s* 'filled'.

Rem. W Heymann 'Das *l* der idg Sprachen gehort der idg Grundsprache an', Weimar 1873, p. 1 ff, and D Pezzi Glottologia aria recentissima, Torino 1877, p 17 ff, give a summary of the older views, which have been put forth, regarding the previous history of the *r*- and *l*-sounds met with in the Indg languages in historic times

§ 255. Indg. *r*. Rt *reudh-* 'to be red' Gr. *ἐρυθρό-ς* Lat. *ruber* (gen *rubrī*) Umbr *rofu* 'rubos' O Ir. *ruad* Goth. *ráuþs* 'red', O.Icel. *rodi a* f. 'blood', O Bulg. *rŭdrŭ* Skr. *rudhirá-s* 'red'. Stem **dhuer-* 'door, gate' (with gradation) · Arm *durn* gen. *dran*, Gr. Aread *θύρ-δα* 'out' Att. *θύρᾱ*, Lat. pl *forēs*, O Ir *dorus*, Goth. *daúr*, Lith pl *dùrys*, O Bulg *dvorŭ* ('yard'), Skr. *dvár- dúr-* (*d* for *dh* § 480) Stem **qetuer-* 'four' (with gradation) · Arm. *čor-k'*, Gr. Delph *τέτορες*, Lat *quattuor*, O Ir. *cethir*, Goth. *fidvōr*, Lith. *ketverì* 'by fours' O Bulg *četvero* (distrib), Skr. *catváras*. Rt *uerĝ-* 'effect' Arm *gorc* Gr *Fέρ-γον ἔρ-γον* OHG. *werah werc* 'work', Av *vaŋ'za-* 'a working'. Rt. *sreu-* 'flow' · Gr. *ῥεῦμα* 'river', O Ir *sruaim* 'stream', OHG. *stroum* 'stream', Lith. *sravėti* 'to flow tricklingly' O Bulg *o-strovŭ* 'island', Skr. *sravati* 'flows'.

Nominal suffix *-ter-*, e g. **mā-ter-* **mā-tr-* 'mother' : acc. sg Arm *mair*, Gr *μητέρα*, Lat *mātrem*, O.Ir. *māthir n-*, OHG. *muoter*, Lith *móterį* ('wife') O Bulg. *matere*, Skr *mātáram*;

1) Indg *l* beside *r* could be held as definitely proved if Fortunatov's rule had a firmer basis viz · that, where in Skr a cerebral consonant appears as representative of an original liquid + dental, this liquid is the regular correspondent of Europ.-Arm. *l* (Bezzenberger's Beitr VI 215 ff.). F's examples, to which a few others have been added by Windisch Kuhn's Ztschr. XXVII 168, are for the most part etymologically very uncertain, nor are unexplained exceptions wanting Cp § 259

voc. Gr. *μᾶτερ*, Skr. *mátar*. *r* as element of the ending of the 3. pl. mid. : Lat. *sequontu-r* O.Ir. *sechiti-r* 'they follow', Skr. *riric-ré* perf. from *ric-* 'to let loose, leave'.

r as consonantal glide after *ŗ*, e. g. **gŗr-ú-* 'heavy', see §§ 284. 287

§ 256. Indg. *l*. Rt. *leiq-* 'leave' : Armen. *lk'-ane-m* Gr. *λείπω* Lat. *linquō* O Ir. *lēcim* 'I leave', Goth *leihva* 'I lend', Lith *lekù* 'I leave' O.Bulg. *otŭ-lĕkŭ* 'remnant', Skr. *rnákti* 'lets loose, leaves'. Rt. *gel-* 'fall, drop' : Gr *βολή* 'a throw', OHG *quellan* 'to spring, gush', Lith. *gãla-s* 'end', Skr. *gála-ti* 'trickles down'. Rt. *ǵelq-* 'drag, tear, draw' : Gr. *ἕλκω* 'I drag, draw', *ἕλκος* 'wound, sore', Lith. *velkù* O Bulg. *vlĕką* 'I drag. draw', to the same root Skr. *vṛ́ka-s* 'wolf' Rt *ḱlei-* 'lean'. Gr. *κλίνω* 'I lean, bow', Lat *clīvo-s* 'hill', O Ir *cloen* 'slant, unjust, wicked', Goth *hláins* 'hill', Lith *szlaĩta-s* 'mountain-slope', Skr *śráya-ti* 'leans against, puts to'

Nominal suffixes *-lo- -lā- -lu-* Arm *dai-l dա-l* 'beestings', Gr. *θη-λή* 'teat, nipple' *θῆ-λυ-ς* 'nourishing, suckling, of female sex', Lat. *fē-lāre* 'to suck', O Ir *de-l* 'teat, dug', OHG *ti-la* 'a woman's breast', Lith *pirm-delė̃* 'she who has given birth for the first time', cp Skr. *dhā-rú-ṣ* 'sucking', Kurd *dē l* 'little woman'

l as consonantal glide after *ļ*, e. g. root form *tļļ-*, s §§ 284. 287.

Aryan.

§ 257. Indg. *r*. Skr. *rádha-ti* 'brings about, prepares, satisfies' Av. *rāδaiti* 'prepares, gives' O.Pers. *avahya-rādīy* 'on that account, therefore' : Goth. *ga-rēdan* 'to provide' O.S *rādan* 'to advise, help', O.Bulg. *raditi* 'to provide, take care of'. Skr. *pári* Av. *pairi* O.Pers *pariy* 'about, over, against' : Gr. *πέρι*, Lat. *per-* in *permāgnus*. Perf. Skr. *da-dárś-a* Av *dā-dar*s-a* 'I saw' : Arm. *tes-ane-m* 'I see' (§ 263), Gr *δέρκομαι δέδορκα*, O.Ir. perf. *ad-chon-darc* 'I saw', Goth. *ga-tarhjan* 'to mark out', rt. *derḱ-*. Skr. *pra-* Av. O Pers. *fra-* 'before' : Gr. *πρό*, Lat. *prōd prō*, O.Ir. *ro*, Lith. *pra-* O.Bulg. *pro-*, Indg. **pro*

'before'. Skr. *ud-rá-* Av. *ud-ra-* a water-animal : Gr. *ὕδ-ρο-ς ὕδ-ρᾱ* 'water-serpent', O.Icel. *otr* OHG. *ottar* 'otter', Lith. *ùd-ra* O.Bulg. *vyd-ra* 'otter'.

Skr. *rikh- likh-* 'scratch, tear', *rēkhā- lēkhā-* 'scratched streak, stroke, line' : Gr. *ἐρείκω* 'I tear open, up', Lith. *rėkiù* 'I cut, plough'.

§ 258. Indg. *l*. Skr. *rēcáya-ti* Av *raęcayęiti* 'leaves, abandons' : Arm. *lk'-ane-m* Gr. *λείπω* etc., see § 256. Skr. *śráv-as-* n. 'renown', Av. *srav-ah-* n. 'word, prayer', Skr. *śru-tá-* Av. *srū-ta-* 'heard, renowned' . Arm *lu* 'audible' (?), Gr. *κλέϝος κλέος* n. 'renown' *κλυτό-ς* 'renowned', Lat. *in-clutu-s*, O.Ir *clū* 'renown' *cloth* 'renowned', Goth *hliuma* m 'ear, hearing', OHG. *Ludo-wīg* 'Κλυτόμαχος', O.Bulg. *slovo* n word'

Skr *róca-te* 'lights' *rōká-s* light' *lōká-s* a lighting, open space', Av *raocah-* n splendour' O.Pers *raucah-* n. 'day' . Arm. *lois*, gen. *lusoy*, 'a light, Gr. *λευκό-ς* 'white', Lat. *lūx lūc-is*, O.Ir. *lōche* 'lightning', Goth *liuhaþ* 'light', Lith. *laũka-s* 'palish' O Bulg. *luča* beam, ray', root forms *leuq-* and *leuk̂-* (cp. § 467) Skr *uda-prú-t-* 'swimming in water' *pláv-a-tē* 'swims', Av *fra-fravaiti* 'wavers to and fro' . Arm *lua-na-m* 'I wash', Gr *πλέω* 'I sail, swim' *πλυτό-ς* 'washed', Lat. *pluit*, O Ir *luath* 'quick', OHG. *fleuwen flouwan* 'to rinse, wash', Lith *pláuti* 'to rinse'.

Skr. *lúbhya-ti* 'feels a strong desire' : Lat. *lubet libet*, Goth. *lufs* O Bulg *ljubŭ* 'dear' Skr *nabhī-la-m* 'private parts' : Gr. *ὀμφα-λό-ς* 'navel, umbo', Lat *umbi-l-īcu-s*, O Ir *imb-l-iu* 'navel', OHG *nabolo* 'navel'.

§ 259. Skr *r* was spoken cerebral (hence the change of prim. Ar. *n* to *n* in its vicinity, § 199), *l* dental

r became *h* in absolute finality. Voc. *mātah* 'O mother' : Gr *μῆτερ antáh* 'in the inside' : Lat *inter*. Cp § 647, 3.

From a liquid with a following dental explosive or nasal often arose a cerebral explosive, or a nasal. *katú-š kátuka-s* 'sharp, biting' : Lith. *kartù-s* 'bitter'. *ganá-s* 'band, crowd' : Gr. *ἀγείρω ἀγορά*. *jaṭhára-* 'belly, womb' : Goth. *kilþei* 'womb'. *ānί-* 'the part of the leg just above the knee, axle peg' : Gr. *ὠλένη ὠλλό-ν* fr. **ὠλ-ν-ο-ν*, Lat *ulna*. *paṇa-s* 'wager, stipulation,

promised reward' : Lith. *pelna-s* 'profit'. In like manner probably *láš-āmi* 'I long, desire' fr. **la-ls-*, cp. *lā-las-a-s* 'eager for, desirous', Lat. *lascīvo-s*. It is still unexplained from what point of view such forms, as opposed to others in which the liquid apparently under similar conditions remained, are to be judged. It is not improbable that intermixture of dialects has taken place. Cp. p. 209 foot-note and in addition to the literature quoted there Frohde Bezzenberger's Beitr. III 130 ff.

Nasal from liquid through dissimilation. *cañ-cūryatē* fr. older Ved. *car-cūryátē* 'moves quickly', intens. fr. *car-*. *cañ-cala-s* 'moving to and fro', from *cal-*. *pam-phulyatē*, intens. to *phálati* 'springs assunder'. Cp. § 282.

r underwent transposition before certain consonant combinations, e. g. from *darś-* 'see' fut. *drakšyámi* (cp. Gr. δέρξομαι) perf. 2. sg. *dadráštha* inf. *dráštum*; from *tarp-* 'to satiate one's self' perf. 2. sg. *tatráptha* beside *tatárptha*; from *sarp-* 'crawl' fut. *srapsyámi* beside *sarpsyámi* aor *ásrapsam* beside *ásarpsam*.

§ 260. Avestic. Before *i-* and *u*-vowels an anaptyctic *i* or *u* was prefixed to initial *r-*. *'rista-* part. fr. *raēp-* 'to be connected with' *'rusta-* part fr. *raod-* 'to grow forth'. An anaptyctic vowel arose from medial *r* before and after consonants, which, when *r* preceded, was generally represented by *e*. Perf. *dādar'sa* : Skr. *dadárša*, Gr δέδορκα, from rt. *derś-* 'see'. *e* also after *er* = Indg. *ṛ*, *ḷ*, e g. part. *ker'ta-* : Skr. *kṛtá-* 'made', prim f. **qṛto-* (§ 288). Other vowels more seldom, e g. pres. *s'ru-nao-mi* from *sru-* : Skr *śru-* 'hear' *s'ri-nao-mi* (*ni s'rnaomi* 'I hand down') from *sri-* : Skr *śri-* 'direct towards, direct to'. Further *e* was suffixed to final *r*, e. g. *antar'* 'between' O Pers. *atar* Skr. *antár*. Cp. §§ 624. 649, 4

r became spirant before *k*, *p*, *t*, when the next preceding sonant had the chief accent This pronunciation of the *r* was represented by *hr* before *k*, *p*, but *hrt* became *š*. This law also obtained for *er* = Skr. *ṛ* (§ 288) *mahr-ka-* m. 'death, destruction' fr. **már-ka-* beside *mar'ka-* (with the same meaning) = Skr. *markā* m. 'an injuring of the sun, a darkening'. *vehrka-* :

Skr. *vṛka-* 'wolf', Indg. **u̯l̥qo-*. *kehrp-* 'form, body' : Skr. *kṛp-* 'form, appearance'. *mašya- (mašiya-)* : Skr. Ved. *mártiya-* O.Pers. *martiya-* 'mortal being, man'. *a-meša-* : Skr. *a-mṛta-* 'immortal' beside *merᵉta-* : Skr. *mṛtá-*. Cp. Bartholomae Ar. Forsch. II 35 ff. and § 674

Rem. Prim Ar final *-ɨt, -ṛt* always appear as *-rᵉl̥, -erᵉl̥*, e. g. *hakerᵉl̥* = Skr *sa-kṛt* 'once'. The law, whereby *-t* became *-l̥* (§ 649, 6), was therefore older than the change of *rt* to *š*.

u̯r- was transposed with *u*-prefix, e. g. **rvāta-* n. 'a determining' : Gr. *ῥητό-ς* 'determined, settled'. See § 157.

§ 261. Old Persian. *š*, whose exact pronunciation cannot be closely defined, appears for prim. Ar. *tr* = prim Iran. *θr*. *šɨ-* : Av. *θrɨ-* Skr. *trɨ-* 'three'. *puša-* : Av *puθra-* Skr. *putrá-* 'son'. Gen. *puša*: Av. *piθro* Gr. *πατρός* 'of a father'. See §§ 353. 473, 2.

Armenian.

§ 262. Indg. *r*. *erek* 'evening' : Gr. *ἐρεβος* n. Goth. *riqiz-a-* n. Skr. *rájas-* n 'darkness', Indg. **regos*. *e-re-k* 'three' (*e*-prothetic, § 263)· Gr. *ῥεῖς*, Lat *trēs*, O.Ir. *trī*, Goth. *þreis*, O.Bulg. *trьje*, Skr. *tráyas*, Indg. **tréi̯-es* 'three'. *cer* 'old man' : Gr. *γέροντ-* Skr *járant-* 'old man'. *skesur*, gen. *skesri*, 'mother-in-law': Gr. *ἑκυρᾶ* Lat. *socru-s* Corn. *hweger* Goth. *svaihrō* O.Bulg. *svekry* Skr. *śvaśrú-* 'mother-in-law'. *tu-r* 'gift': Gr. *δῶ-ρο-ν*, O.Bulg. *da-rŭ*. *dustr*, gen. *dster*, 'daughter': Gr *θυγάτηρ*.

Indg. *l*. *liz-u-m* 'I lick'. Gr. *λείχω* Lat. *lingō* O.Ir. *ligim* 'I lick', Goth. *bi-láigō* 'I lick', Lith. *leižù* Skr. *réhmi lḗhmi* 'I lick', rt. *leiĝh-*. *aɫ*, gen. *aloy*, 'alius'· Gr. *ἄλλο-ς* Lat. *aliu-s* O.Ir. *aile* Goth. *aljis* 'other'.

§ 263. *r* became *ṙ* before *n* (occasionally also in other cases without any clear reason). *durn*, gen. *dran*, 'door', an extension of the Indg. st. **dhur-* with the suffix *-en-*: Gr. Arcad. *θύρ-δα* 'out'. *jeṙn-u-m* 'I warm myself', beside *jer* 'warmth' *jerm* 'warm': Gr. *θέρος θερμό-ς*, Lat. *formu-s*. Thus also when *r* goes back to Indg. *ṛ*, e. g. *garn* 'lamb' : Skr. *úr-aṇ-a-s* (*ur-* fr. **u̯ṛ-*, § 157), Gr. gen. *ἀρ-ν-ός*, Indg. **u̯ṛ+en-* (§ 291).

λ appears in some words for Indg. *r* and *l*, without the special cause being known. *astλ*, gen. *astelj*, 'star, constellation': Gr *ἀστήρ ἄστρο-ν* Lat. *stella* fr. **ster-lā* Bret. *sterenn* Goth. *stairnō* Skr. *stár-* 'star'. *elն*, gen. *elin*, 'hart': Gr. *ἔλλός* 'a young hart' fr. **ἐλ-ν-ο-ς*, *ἔλαφο-ς* 'hart' fr. **el-n̥-bho-s*, Cymr. *elain* 'hind', O.Bulg. *jel-en-ĭ* 'hart'

br, *tr*, *hλ* were transposed to *rb*, *rt*, *λh*. *surb*, gen. *srboy*, 'clean': Skr. *śubh-rá-s* 'bright, pretty' *kʻrtn*, gen. *kʻrtan*, 'sweat': Gr. *ἱδρώς*. *e-λbair* 'brother' (*e-* prothetic, *s* below) Lat. *frāter*, Skr. *bhrátar-*.

Initial liquid developed a prothetic vowel which appears as *e*, *a*:

Original initial liquid *e-rek* 'evening': Skr *rájas-*. *alucs* 'fox': Skr *lōpáśa-*

Secondary initial liquid *e-re-kʻ* 'three' Skr. *tráy-as* *e-λbair* brother' Lat. *frāter* *a-λbeur* 'a spring' fr. **bλeu̯*, older **bλeu̯(a)r*: Gr. *φρέαρ* 'a well' fr. **gʷr̥-Ja̯r*.

Rem *o*-prothesis perhaps in *orc-a-m* 'I break open' and *olb-a-m* 'I bewail' See Hubschmann Armen Stud I 46 47.

Indg *r* was dropped in *tes-ane-m* 'I see': Gr. *δέρκομαι*. The reason of its dropping out is unknown.

Greek

§ 264. Indg. *r* *ὀρέγω* 'I stretch out'. Lat *regō*, O.Ir. imper. *ē-rig* 'erect thyself', Goth. *uf-rakja* 'I lift up'. *πέρᾱ* 'beyond, further' *περάω* 'I pass through' *πόρο-ς* 'passage, ford, way': Arm. *herի* 'far, distant', Lat. *per-egre* 'in a foreign land', O.Ir. *ire* 'ulterior', Goth *farjan* 'to sail, drive', O.Bulg. *perą* 'I traverse', Skr. *pára-s* 'more distant, farther'. *ὑπὲρ ὑπείρ* (fr. **ὑπερι*, §§ 131. 645 final 2) 'over' *ὕπερο-ς* 'pestle': Lat. *s-uper*, Goth. *ufar* 'over' *ufarō* 'thereon': Skr. *upárі* 'above'. *πέρδομαι* 'I break wind': OHG. *ferzan* 'to break wind, Lith. *pérdžiu* 'I break wind', Skr. *párdatē* 'breaks wind'. *τέρσομαι* 'I become dry': Lat. *torreō* fr. **tors-eį̄ō*, Goth. *ga-þairsa* 'I wither', Skr. *tarša-s* 'thirst'.

τρέω (aor. Hom. τρέσ-σαι) 'I flee, tremble' τρέμω 'I tremble': Lat. *tremō*, Lith. *trimù* 'I tremble (with cold)' O.Bulg. *tręsą* 'I shake', Skr. *trásāmi* 'I tremble at, quake'. ἀγ-ρό-ς 'field': Lat. *ager*, Goth. *akrs* 'field', Skr. *ájra-s* 'a plain'. πῦρ πῡρ-ός 'fire': Arm. *hur*, gen. *hroy*, 'fire', Umbr. pure 'igne', OHG. *fair fiur* 'fire'. ἄ-κῡ-ρο-ς 'powerless, without authority' κῦ-ρος 'power': Skr *śū-ra-* Av *sū-ra-* 'strong, sublime'.

§ 265. Indg *l* λέχος n. 'bed' ἄ-λοχο-ς 'bed-mate' (ἀ- fr. ἀ-, § 564). Lat. *lectu-s*, O.Ir. *lige* 'bed', Goth. *liga* 'I lie', O.Bulg. *sq-logŭ* adj 'consors tori'. κολ-ων-ό-ς 'hill'. Lat. *colli-s* fr. **col-n-i-s*, *ex-cellō*, Ags. *hyll* 'hill', Lith *kíl-n-a-s* 'mountain' *kelù* 'I raise'. μέλδω 'I melt, make liquid' OHG *smelzan* 'to melt, dissolve'. κλέπ-τω 'I steal': Lat *clepo*, Goth. *hlifa* 'I steal', Pruss. *au-klipts* 'concealed' καυ-λό-ς 'stalk' · Lat *cau-li-s* 'stalk' *cau-lae* 'holes, openings', Lith *kau-la-s* 'bone'.

§ 266 Affections of Gr ρ and λ (partly proceeding from Indg *r, l*, § 292)

The one liquid was sometimes put in the place of the other by dissimilation, e g κεφαλ-αργία beside κεφαλ-αλγίᾱ 'head-ache', to ἄλγος, μορμολύττω 'I frighten' beside μόρ-μορο-ς 'fear', θηλητήρ (Hesych) beside θηρητήρ 'hunter'; or one of the two liquids was dropped, e. g. φατρία beside φρᾱτρίᾱ 'brotherhood, clan', δρύ-φακτο-ς fr. δρύ-φρακτο-ς 'fence', ἐν-παγλος 'frightful' fr. *ἐκ-πλαγ-λο-ς, to ἐκ-πλαγῆναι; or the first liquid was changed to a nasal, e. g. γαγγαλίζω 'I tickle' fr *γαλγαλιζω (beside γαργαλίζω). Cp. § 282. Probably also by dissimilation Cret (Gortyn.) μάτυρες fr. μάρτυρες 'witnesses'; palatal *l* was the intermediate stage between ρ and ι.

Initial ρ, λ underwent vowel-prothesis. ἐ-ρυθρό-ς 'red': Lat. *ruber*, Skr. *rudhirá-s* ὀρύσσω 'I dig': Lat. *runcō*. ἐ-λαφρό-ς 'nimble': OHG. *lungar*. ἀ-λῖναι 'to spread over, besmear': Lat. *li-nō*, O.Ir. *le-nim* 'I cling to'. Cp. § 626. Ibid. also concerning medial anaptyxis.

The combinations *sr-* and *ur-* became ῥ- i. e. voiceless *r*, the former in prim. Gr., the latter in the course of the individual dialects, e. g. ῥέω 'I flow' fr. Indg. **sreu̯-ō*, Skr. *srávāmi*, to which

also Corcyr. *ῥοFαί* Hom. *ῥοαί* 'streams'; Att. *ῥήτρᾱ* 'a saying' = El. *Fρᾱ́τρᾱ*. Cp. §§ 164. 565.

Anteconsonantal λ was pronounced *l* in Cret. (Russ. *лō*), and as such passed into *ψ*, e. g. *αὐκᾱ́*: Ion. *ἀλκή* 'strength', *θύγω*: Hom. *θέλγω* 'I enchant, cheat' (cp Lith. § 280).

λ before τ, θ became ν in certain Doric districts, e. g. *φίντατος* 'dearest', *ἦνθον* 'I came'.

Italic.

§ 267. Indg. *r.* Lat. *rē-s*, Umbr *re-per* 'pro re': Skr. *rā́-s* (instr. *rāy-ā́*) 'wealth' Lat. *rēx rēgis*, Osc regatureí dat. 'rectori', Marruc *regen|a* dat. 'reginae'. Gall *-rīx* 'king' in *Dumnorīx* etc, O.Ir. *rī* gen *rīg*, Skr. *rā́j-an-* 'king' Lat. *ferō*, Umbr. *ferar* 'feratur', Volsc. *ferom* 'ferre', Marruc. *ferenter* 'ferentur': Gr. *φέρω*, Skr *bhárāmi* Lat. *vertō*, Umbr. *co-vertu* 'convertito', Osc. *Ϝερσορει* 'Versori, *Τροπαίῳ*': Goth. *vaírþan* 'to become', Lith. *vẽrsti* and *vartýti* 'to turn, direct to' O.Bulg. *vratiti* 'to turn, direct to', Skr. *vártatē* 'revolves, rolls'. Lat. *serpō*: Gr. *ἕρπω*, Skr. *sárpāmi*, Indg **sérpō* 'I creep, crawl'. Lat. *termō termen*, Umbr *termnom-e* 'ad terminum', Osc teremnattens 'terminaverunt': Gr. *τέρμων* 'boundary' *τέρμα* 'goal', Skr. *tárman-* n. 'point of the offering rod'. Lat *frīgus*, Umbr. frehtef 'refrigerans, frigefaciens': Gr *ῥῖγος* 'frost', prim. f. **srīgos* (§ 570). Lat. *caper capra*, Umbr. *cabrıner* gen 'caprini': Gr. *κάπρο-ς* 'boar', O Icel. *hafr* 'he-goat'. Lat. *ācer ācris*, Osc. a krid abl. 'acri': Gr. *ἄκ-ρο-ς* 'point', Lith *asztrù-s* O.Bulg. *ostrŭ* 'sharp', Skr. *catur-aśra-* 'four-cornered'.

§ 268. Indg *l*. Lat. *lūx lūcis*, Osc. Luvkis 'Lucius': Gr. *λευκό-ς* 'white'. Lat. *luō re-luō so-lūto-s*: Gr. *λύω* 'I loose', O.Icel. *lýja* 'to crush, shatter', Goth. *láus* 'loose', Skr. *lu-nā́-mi* 'I cut, cut down, annihilate'. Lat *gelu*, Osc *γελαν* 'pruinam': O.Icel. *kala* 'to freeze' Goth. *kalds* 'cold', O Bulg. *zlědica* 'snow-rain'. Lat. *sōl*: Gr. *ἠέλιο-ς ἥλιο-ς* Mid. Cymr. *heul* Corn. *houl* Goth. *sauil* O.Icel. *sōl* Lith. *sáulė*, Skr. Ved. *suvar* (gen. *sūr-as*) Av. *hvarᵉ* 'sun'. Lat. *flōs flōris*, Osc. Fluusaí dat. 'Florae', Sabin. *Flusare* abl. 'Florali': O.Ir. *blāth* 'blossom' Cymr. *blodau*

'flos', Goth. *blōma* m. 'flower' OHG. *bluot* 'blossom'. Lat. *clūni-s*: Cymr. *clun* 'hip', O.Icel. *hlaun* 'buttock', Lith. *szlaunì-s* 'hip, upper part of the thigh', Skr. *śrṓni-š* Av. *sraoṇ-š* 'buttock, hip' [1]). Lat. *āla* fr. **acslā* (cp §§ 503. 570) · OHG. *ahsla* Ags. *eaxl* O.Icel *ǫxl* 'axle', prim. Germ **aχslō*

§ 269. Latin. Affections of prim. Lat. *r*, *l* (partly arising from Indg. *ŗ*, *ļ* § 295).

The one liquid was often put in the place of the other by dissimilation: *r* for *l*, e g. in *caerulcu-s* 'azure' fr. *caelu-m*, suffix *-cro-* in *luci u-m simulācru-m lavācru-m* etc from *-clo-* (*saeclu-m*), which arose from **-tlo-* (§ 367), suffix *-āri-* from *-āli-* in *exemplāri-s mīlitāri-s lūnāri-s* etc (cp. *aequāli-s nāvāli-s* etc); *l* for *r*, e. g. in vulgar Latin *pelegrīnu-s* (Italian *pellegrino*) fr. *per-egrīnu-s*. *r* was dropped by dissimilation in *prae-stīgiae* beside *prae-strigiae*, *frāgāre* beside *frāgrāre* etc. For a like reason nasal from liquid in *cancer cancrī* fr. **carcro-* : Gr. *καρκίνο-ς* Skr. *karkaṭa-s* 'crab'. Cp. § 282.

r disappeared before *s* + consonant. *com-pescō* 'I constrain' fr. **-per(c)-scō* **par(c)-scō*, to Skr *parc-* 'to put in connexion'. *poscō* fr. **por(c)-scō* : Skr *pṛchámi* 'I ask', Indg. **pṛ̆k-skṓ* from rt. *preḱ-*. *tostu-s* fr **tors-tu-s*, to *torreō*. *Māspiter* beside older *Mārspiter*. *Tuscu-s* beside Umbr *Tursco- Tusco-*.

ll fr. *rl*. *stella* from **ster-lā*: cp. Gr. *ἀστήρ* Bret. *sterenn* Goth. *stairnō* 'star' *agellu-s* fr **ager-lo-s*, older **agŗ-lo-s* (§ 633). *paullu-s* fr. **paur-lo-s*: Gr. *παῦρο-ς*.

ss, *s* from *rs* (from *rss*) in *prōssum prōsa quōssum sūsum* etc. = *prōrsum* etc. It is uncertain whether the preceding long vowel was here a co-operating factor This is not proved by *vorsus morsus* etc , since *r* may here have been restored by levelling (cp. *vortō mordeō*).

1) Gr. *κλόνις* 'coccyx' will also belong to this category, notwithstanding its problematical vocalism Cp. the author Zum heut. Stand der Sprachwiss. 70 f.

ri, *ro* became *er* through the intermediate stage *ɾ* in *certus-s* = Gr. *κρατύ-ς*, *ager* = Gr. *ἀγρό-ς* etc. See §§ 33. 623 rem. 1. 633.

Just as *medius* arose from **medio-s*, and *mortuo-s* from **mortuo-s* (§§ 135. 170), so also postconsonantal *l* became sonantal, and thus arose *-ol-*, *-ul-*, *-il-*. This process seems first to have been effectuated in the archaic period

pō-culu-m, older *pō-colo-m*, *sae-culu-m*, *piā-culu-m* (Umbr. p i h a - k l u 'piaculorum') etc beside which also *pō-clu-m*, *sae-clu-m* etc Analogously *-bolo-*, *-bulo-*, *-bli-* fr *-blo-* (Gr. *-θλο-*), *-bli-*, as *tabola tabula* fr. '*tabla* (Umbr t a f l e 'in tabula'). *angulu-s* (Umbr. *anglom-e* 'in angulum') fr. **anclo-s* (§ 499), to *ancu-s uncu-s* and OHG *angul populus poplu-s* (Umbr. *poplom* 'populum') *nomen culātor* fr *nōmen-clātor* Concerning *coculu-m* and *torculu-s* cp also § 431 c

Rem A similar origin of *er* from *r* seems to me very doubtful in pl *generī* (cp Gr *γαμβρού*), *umeru-s* (cp Umbr *onse* 'in umero' Goth *ams* 'shoulder'), *numeru-s* (cp Osc N u m s t e í s 'Numerii') See § 568, 3

§ 270. Umbrian *r* often remains unwritten before *s*, e g. fasiu *fasio* beside *farsio* 'farrea', pesnimu beside persnimu 'precamino'. In like manner the orthography fluctuates with final *r*, e g emantu beside emantur 'emantur', -pe beside *-per* 'per, pro' In these cases *r* must have experienced a weakening.

§ 271. Oscan. *r* and *l* became sonantal before and after consonants, and then arose an anaptyctic vowel This took the quality of the preceding vowel when the liquid came first in the consonant combination, and that of the following vowel when it did not come first. 1) aragetud 'argento', *amiricatud* 'immercato, non mercato', *Μαμερκιες* 'Mamercius', teremníss 'terminibus', Alafaternum 'Alfaternorum' to Lat. *albu-s* 2) sakarater 'sacratur' beside *σακορο* 'sacrum' or 'sacra', pútúrúspíd nom. 'utrique' beside pútereí-píd loc. 'in utroque', Vestirikiúí dat. 'Vestricio', *zicolom* 'diem' beside loc. *zikel[ei]* abl. *ziculud*. Beside these however without anaptyxis *altrei* dat. 'alteri', alttram 'alteram', ehtrad 'extra' etc., see § 627.

Cp. also Peligu. *Alafis* 'Alfius', *Salavatur* 'Salvator', *pristafalacirix* (Lat. **prae-stabulātrīx*) 'antistita', *sacaracirix* (Lat. **sacrātrīx*) 'sacrificans' (*-cr-* fr. *-tr-*, § 367).

Old Irish.

§ **272.** Indg *r*. *roth* 'wheel', Gall. *petor-rītum* 'four-wheeled chariot' : Lat. *rota*, OHG *rad* n 'wheel', Lith. *rãta-s* 'wheel', Skr. *rátha-s* 'vehicle, war-chariot'. *daur* (gen. *daro*) Cymr. *derwen* 'oak' (to which O.Ir. *druid* Gall *Druidae* 'druids'?) : Gr. δόρυ 'wood, shaft, spear' δρῦ-ς 'tree, oak', Goth *triu* 'tree', Lith. *dervà* 'resinous wood' O Bulg *drĕvo* 'wood, tree', Skr. *dáru drú-* Av. *dāuru* n 'wood' *orc* 'pig' Gr πόρκο-ς Lat. *porcu-s* OHG. *farh farah* Lith *paršza-s* O Bulg. *prasę*, prim. f **porko-s* 'pig, sucking-pig'. *brai* Mid Ir 'eye-brows' : Gr. ὀφρῦ-ς OHG. *brāwa* O.Bulg *brŭv-ĭ* Skr *bhrū-s* 'eye-brow' *fe-r* 'man' · Lat. *vir* Goth. *vair* Lith. *výra-s* Skr *vīrá-s*, Indg **μι-ró-s* and **μĭ-ró-s* 'man'. Comparative suffix Indg *-tero- ar-ther* 'East' (to *ar* 'before, ante') *lērithir* 'more diligent' Gr πό-τερο-ς 'uter' ἀμό-τερο-ς 'rawer', Lat. *i-teru-m*, Skr *ka-tará-s* 'uter'. *e-ter e-tir* 'between' : Lat. *in-ter*, Skr *an-tár*.

§ **273.** Indg *l*. *lothur* Mid. Bret *louazr* 'alveus, 'canalis' Gall. *lautro* 'balneo' : Arm *log-ana-m* 'I bathe myself', Gr. λούω 'I wash' λουτρό-ν 'bath', Lat *lavō lautu-s*. *gel* 'white' : Lat. *helus (holus, olus)*, *helvo-s*, OHG. *gelo* (infl *gelawēr*) 'yellow', Lith. *želù* 'I grow green' O.Bulg. *zelije* n. 'greens, vegetables' *zelenŭ* 'green', Skr. *hári-š* Av *zairi-š* 'yellowish'. *salann* Cymr. *halan* 'salt' : Arm. *al* (gen. *ali*) Gr. ἅλς Lat *sāl salis* Goth. *salt* O Bulg. *solĭ* 'salt' *mely* 'milk'. Gr. ἀμέλγω 'I milk', OHG. *melchan* 'to milk', Goth. *miluks* 'milk' (§ 628), Lith. *mélžu* 'I milk', O.Bulg. *mlĕsti* 'to milk'. *lār* Cymr. *llawr* 'pavement, floor' : Ags. *flōr* 'house-floor' MHG. *vluor* 'corn-field, ground, soil'.

§ **274.** A transposition of vowel + liquid is assumed in *flaith* 'dominion' (Goth. *valdan* 'to rule'), *frass* 'shower of rain' fr. **μrastā* (Skr. *varšá-s* 'rain') and in many other words (Zeuss-Ebel G. C. 168, J. Schmidt Voc. II 370 ff., Windisch Ir. Gramm. § 79). It is unknown to us within what limits this sound-

process is to be acknowledged and by what it has been occasioned.

Rem A great number of the examples brought forward are to be separated viz all those cases in which *r̥ r̥e*, *l̥ le* depend upon Indg. *r̥*, *l̥* (§ 298), and those in which the liquid with the accompanying vowel was the continuation of *r̥*, *l̥* specially developed in Ir. through *samprasārana*, as *du-fu-tharcair* 'voluit' fr **du-fu-thr̥cair* from *-thracair* (§ 634)

Germanic

§ 275. Indg *r*. Goth. *raþjō* 'account', OHG *redia reda* 'account, a talking over, speech' · Lat. *ratiō* OHG. *rōzan* Ags. *reótan* 'to complain, weep', OHG. *rōz* 'a weeping, complaining': Lat. *rudō* 'I bray', Lith *randà* 'plaint' O Bulg. *rędja* 'plaint', Skr. *rudámi* 'I lament, weep' Goth *ga-tairan* 'to destroy, demolish', OHG. *fir-zeran* Ags. *teran* 'to loosen, destroy' : Gr. δέρω 'I skin, flay', Lett. *nū-daras* f. pl. 'chips of bark' O.Bulg *derą* 'I skin', Skr. perf. *dadára* 'he burst'. Goth. *ga-dars* OHG. *gi-tar* perf. 'I dare, venture' : Gr. Aeol. θέρσος 'courage', Θερσίτης Θέρσιππος (θέρσος : θάρσος = πένθος : πάθος), Skr. *dháršami* 'I dare, venture'. Goth. *fraíhnan* Ags. *frignan* O.Icel. *fregna* 'to ask' : Lat *precor procu-s*, Lith. *praszýti* O.Bulg *prositi* 'to demand, ask for', Skr. *praś-ná-s* 'a questioning'. Goth. *tag-r* n. OHG. *zahar* m. 'tear' : Gr. δάκ-ρυ Lat. *dacruma lacrima* O Bret. *dacr* O.Ir *dēr* 'tear'. Nominal suffix Indg *-tro-* : Goth *maúr-þr* Ags. *mor-þor* n. 'murder', OHG. *ruo-dar* n. 'oar': cp. Arm *araur*, gen *arauroy*, 'plough' (*-ur-* = *-tr-*, § 360), Gr. ἄρο-τρο-ν 'plough', Lat. *claus-tru-m* 'inclosure, bolt', Skr. *śrō-tra-m* 'ear'.

§ 276. *l* Goth. *láu-n* OHG. *lōn* O.Icel *laun* 'pay, reward' : Gr. ἀπο-λαύω 'I enjoy' λῆϊς 'booty', Lat. *lucru-m*, *Laverna* 'goddess of thieves', O.Ir. *lō-g luag luach* n. 'pay, reward' (?), O.Bulg. *lov-ŭ* 'hunt, capture'. Goth *lisan* OHG *lesan* O.Icel. *lesa* 'gather, collect' : Lith. *lèsti* 'to pick up with the beak'. Goth. *viljáu* opt. 'velim' pl. *vileima* 'velimus', inf. *viljan* OHG. *wellan*, OHG. *wala* f. O.Icel. *val* n. 'choice' : Lat. *velim velle*, Lith. *vēlyti* 'to wish, grant, advise' O.Bulg. *voliti* 'to be willing', Skr. *va-vára* perf. 'chose himself, preferred' *vára-s* 'a wish'. Goth. *valdan* OHG. *waltan* 'to rule,

govern' : Lat. *valeō*, O.Ir. *flaith* f. 'dominion'. Goth. *hlutrs* (*ū*?) OHG. *hlūtar* 'clear, pure' : Gr. *κλύζω* 'I wash out, clean' fr. **κλυδ-ιω*, *κλύδων* 'a wave'. OHG. *slingan* 'to entwine, wind, to creep like a serpent', O.Icel. *slyngva slyngja* 'to sling' : Lith. *slenkù* 'I crawl' *slankà* 'creeper', O.Bulg. *sląkŭ* 'crooked', rt. *sleŋq-*. OHG. *nebul* 'fog', O.Iccl. *nifl-* in compounds 'darkness' : Gr. *νεφέλη*, Lat. *nebula*, O.Ir. *nēl*.

§ 277. West Germanic

Examples of dissimilation. In OHG. *l* from *r*, e. g. in *murmulōn murmulunga* beside *murmurōn* 'to murmur' *murmurunga* 'a murmuring' . Lat. *murmurāre* 'to murmur, grumble', Gr. *μυρμύρειν μορμύρειν* 'to murmur, roar, ripple'; in the loanwords *turtul-tūba* fr. Lat. *turtur*, *martela* beside *martera martra* 'torture, rack' *martolōn* beside *martorōn martrōn* 'to torture, rack' fr Greek-Lat. *martyr martyrium* Cp. § 282. Dropping of *r, l*. OHG *criskimmōn* beside *criscrimmōn cristcrimmōn* 'to gnash the teeth with rage', cp OS *gristgrimmo* 'a gnashing of teeth' It is not so certain that OHG. *bior* Ags. *beór* O.Icel. *bjōrr* 'beer' are related to OHG. *briuwan* 'to brew', Greek-Thrac. *βρῦτο-ν* a kind of beer, Lat *dē-frŭtu-m*; in case they do, the dropping of the root *r* must be ascribed to the prim. Germ. period (**b(r)eu̯-ra-*). Many bring Goth. *fugls* OHG *fogal* 'bird' together with OHG. *fliogan* 'to fly'; the dissimilatoric disappearance of the *l* would also here be prim. Germ. (**f(l)uɣ-la-*).

In the final syllable of nouns with *r*- and *l*- suffixes, when *r* and *l* followed a spirant or explosive, through the disappearance of the short vowel (§ 635) after the liquid, there arose in West Germ. *ɣ* and *ɣ* out of which a new vowel was developed, in OHG OS *a*, Ags *e*, *o* Nom acc. OHG. *accher* OS. *accar* Ags *æcer* 'field' = Goth nom *akrs* acc. *akr*, Gr. *ἀγρό-ς ἀγρό-ν*; OHG. *fogal* OS *fugal* Ags. *fuɣol* 'bird' = Goth. nom. *fugls* acc *fugl* (It is possible that liquids were also spoken syllabic in Goth., *akrs akr, fugls fugl* [1]). The anaptyctic vowel in

1) The contrast between *vair stiur* fr. **vaiz* **stiurz* and *akrs* speaks for *akrs* (§ 660, 6) But monosyllabic *akrs* may then have arisen from dissyllabic *akrs*

OHG. forced its way from the final into the medial syllable of these nouns and their derivatives, at first after short syllables, and then later after long also, e. g. *acchares* 'of a field', *fugalōn* 'to catch birds' (cp. Sievers in Paul-Braune's Beitr. V 90 ff.). Here must further be mentioned the development of a vowel between liquids and *h* which spreads throughout the whole extent of OHG, and in which OS. also to a certain extent shared, e. g. OHG OS *ferah* 'soul, life' : Goth. *faírhvu-s* 'world'; OHG. OS *bi-felahan* 'to hide, bury' : Goth. *filhan*. Anaptyxis is also found between *r* and guttural and labial consonants especially in Oberdeutsch (Upper German), e. g. *puraq puruc* beside *burg* 'citadel, city' Goth *baúrgs*, *peragan* beside *bergan* 'to conceal' : Goth. *baírgan*, *arapeit* beside *arbeit* 'work, toil' · Goth *arbáiþs*; *aram* beside *arm* 'arm' · Goth *arms* The vowels thus developed frequently become assimilated to some vowel in their vicinity, e. g *hungirig* 'hungered' to *hungar* 'hunger'; *fingirīn* 'finger-ring' to *fingar* 'finger'; *wuntorōn* beside *wuntarōn* 'to wonder at'; *puruc* beside *puruq* 'city'; *purcha* = *purcha bircha* 'birch-tree' : Lith. *béržа-s*

Rem 1 In these cases it is partly a question of a prim Germ *r* and *l*, which depended upon Indg *r*, *l*, e g the orig f of OHG *burg* Goth. *baúrgs* must be put down as **bhr̥gh-*, s § 299

Rem 2 Cp the anaptyxis with *w* § 180, and nasals § 215

l became geminated in West Germ. before *i*, e. g OHG. *willio willo* OS *willio* Ags *willa* 'wish, desire · Goth *vilja*, rt. *uel-* See § 143 p. 129. Cp. the similar gemination of nasals § 216 and spirants and explosives (§§ 529 531. 535 540).

Baltic-Slavonic.

§ 278. Indg *r*. Lith. *rúgu ráugėjau* O.Bulg. *rygaja* 'I have eructation, belch' . ἐρεύγομαι 'I disgorge', Lat. *ē-rūgō* 'I vomit forth', OHG. *it-ruchen* 'to chew over' Ags *roccettan* 'to spit out'. Lith. *pūrai* pl 'winter-wheat', O.Bulg. *pyro* n. 'spelt' : Gr. *πῦρό-ς* 'wheat'. Lith. *kertù* 'I hew', O.Bulg. *črěsti* 'to cut' : Skr. *kártana-m* 'a cutting' Lith. *barzdà* O.Bulg. *brada* 'beard' :

Lat. *barba* OHG. *bart* 'beard'. Lith. *kraŭja-s* 'blood' *krùvina-s* 'bloody', O.Bulg. *krŭv-ĭ* 'blood' *krŭvĭnŭ* 'bloody' : Gr. *κρέας* 'flesh', Lat. *cruor*, O.Ir. *crū* 'blood', OHG. *rō* (infl. *rawēr*) O.Icel. *hrār* 'raw, uncooked', Gr. *kravya-m kraviś-* 'raw meat'. Lith. *bẽbru-s* and *bẽbru-s* O Bulg. *bebrŭ* 'beaver' : Lat. *fiber* O.Corn. *befer* (to which Gall *Bibr-ax*) OHG *bibar* 'beaver', Skr. *babhrú-ś* adj. 'brown', as subst. a kind of great ichneumon, Indg. **bhebhru-s*.

§ 279. Indg. *l* Lith. *lóju* 'I bark', O.Bulg. *laję* 'I bark, scold' : Gr *λῆ-ρο-ς* 'idle talk', Lat. *la-trāre* 'to bark', Goth. *lailōun* 'they reviled' Skr *rāya ti* 'barks, barks at'. Lith. *pelė* 'mouse' *pálsza-s* 'faded', O Bulg *plavŭ* 'whitish' *pelesŭ* 'gray' · Gr. *πελιό-ς πελιδνό-ς πελλό-ς* 'colourless, gray, pale', *πολιό-ς* 'gray, hoary', OHG *falo* (infl *falawēr*) 'pale, faded', Skr. *palitá-s* 'gray' Pruss *dalpta-n* a smith's tool for drilling holes, O Bulg *dlato* n. 'chisel' . OHG. *delban* Ags *delfan* 'to dig'. Lith *blendžú-s* 'I darken myself' (of the sun) *pý-blinde* 'evening twilight', O Bulg *blędą* 'I err' · Goth *blinds* 'blind' *blandan sik* 'to intermingle'. Lith *mig-là* and *myg-là* (also *mygla* and *mygłė*) O Bulg. *mŭg la* 'fog' Gr. Hom *ὀμίχ-λη* (Skr *mihirá-* 'cloud', s. § 287).

§ 280. Lithuanian.

The difference between *l* (hard) and *l* (soft) is sharper than elsewhere in the south-eastern districts bording on those where Slav. is spoken; in some parts of the former territory, e. g. in Godlewa (Govern. Suwalki), anteconsonantal *al* sounds almost like the diphthong *au*, e g in *málka* 'fire-wood', cp. Cret. *αὐκά* = *ἀλκά* § 266 [1]). Following palatal vowels then also occasion a softened pronunciation of the liquid, when they are separated from it by one or more consonants (the separating consonants are also thus softened); hence e. g. nom. sg. *tìlta-s* ('bridge'), but loc. *tìlte*.

Rem The East Lith dialect of Szyrwid († 1631) not only shows *l* before *a*, *o*, *u*, but also before *e* and *e*, e. g *slepnu* 'I conceal', *saulc* 'sun'. Garbe, Lit. u lett. Drucke des 16 u. 17 Jahrh IV p XXXIV sqq

1) Cp. also Polab. *vâuk* 'wolf', *vâuno* 'wool' = Slov. *volk*, *volna*; French *haut* = Lat. *altus*, Du *woud* = Mod.HG. *wald*, Swiss-Alem. (Bero-

Dissimilation. *katruĩ* 'in what direction? whither?' fr. **katruř*, cp. *kuř*, *kituř*. The ending of the so-called verba punctiva *-eriu* (1. sg. pres.) became in East Lith. (also in Lett.) *-eliu* when preceded by *r*, e. g. *bárkszteliu* fr. *bárkszteriu* 'I knock a little' (then by analogy also *stùktelìu* 'I beat a little' for *stùkterìu* etc.). *purpulìnis* 'purple' from and beside *purpurìnis*. Analogously Lett. *skrõdelis* 'tailor' fr. *skrõderis*. Cp. § 282.

§ 281. Slavonic.

-tel-ĭ, the suffix of nomina agentis, opposed to *-ter- -tor-* etc. of other languages (e. g. *da-tel-ĭ* 'giver' : Gr. voc. σῶ-τερ nom. δμή-τωρ acc. δώ-τορ-α, Lat *da-tor*, Skr. *dā-tar-*) seems to have come by its *l* through dissimilation, and to have arisen regularly in forms like *žrĭ-telĭ* 'sacrificer' *ora-telĭ* 'arator' *ori-telĭ* 'destroyer' Cp § 282.

Rem 1 It seems to me improbable that the Lith fem *-klė* belongs directly here, i. e. to feminines like Gr. ψάλ-τρια Lat *ver-tri-x* Skr *dā-tri* (J Schmidt Kuhn's Ztschr XXV 29). I connect it with *-kla-* = Lat *-clo-* from **-tlo-*

Prim Slav interconsonantal *-or- -ol-* and *-er- -el-* appear in O.Bulg. as *-ra- -la-* and *-re- -le-*. *prasę* 'sucking-pig' : Lith. *paršza-s*, Lat. *porcu-s*. *brada* 'beard' Lith *barzdà*, Lat *barba*, OHG *bart*. *vlaků* 'draught' in *oblaku* 'cloud' from **ob-vlaku* (properly 'a veiling cover') : Lith *už-valka-s* 'a cover', Gr ὀλκό-ς. *brěza* 'birch-tree' : Lith. *bérža-s*, OHG. *pircha*. *vlěką* 'I draw' : Lith. *velkù*, Gr ἕλκω Corresponding to this mode of treatment, initially, e g *ralo* 'plough' fr. **or-dlo* (*-dlo-* = Gr. *-θλο-*) : cp. Lith. *ár-kla-s* 'plough' (*-kla-* = Lat *-clo-* from **-tlo-*); *ra-tajĭ* 'husbandman' : Lith. *ar-tója-s*; but *alkatı* beside *lakatı* 'to hunger' : Lith *álkti* 'to hunger'

Rem 2 In the treatment of *o, e* + liquid between consonants the Slav. languages took various directions O.Bulg *prasę* Serv *prâse* Czech *prase* — Polish *prosię* Upper Sorab *proso* Lower Sorab *prose* - Russ *porosjá*. Perfect agreement only exists in a few words initially, e g O Bulg *ralo* = Serv Slov Russ *ralo* Czech *rádlo* Pol Upper Sorab Low. Sorab *radło*. The investigations hitherto made concerning these phenomena

Munster, s. Brandstetter Die Ztschl. der Mundart von B.-M 1883 p 12) *fergaušlere* = *vergalsteru*.

(cp. especially J. Schmidt Vocal. II 66 ff., Leskien Declin. p. XVI ff, Arch. f. slav Phil. III 86 ff.) have not yet led to a solution of the question, what the change was, which the pre-Slavonic forms first underwent in prim Slav. and what formed the last previous stage for all the individual dialectical formations. For the position between consonants it seems to me most probable that *or ol, er el* first of all became *ŗo ļo, ŗe ļe*, e g **porsę* became **pŗosę* It is highly probable that the initial differences, which cannot be here brought forward in detail, represent sentence-doublets

Rem. 3 The abandoning of the forms **porsę *volkŭ* is connected with a characteristic of the whole prim Slav history of sounds, which may here be disposed of[1]) The Slav sought to restore everywhere an open syllable (ending in a sonant). Compare besides the sound-change here in question, which in the first instance is supported by the change of **zĭno* to **zrĭno* etc (§ 302), the development of nasal vowels from vow + nas before consonants, e g *sręti* 'holy' fr. **srentĭ*, § 219, the simplifying of consonant groups, as e g *netŗi* 'nephew' fr **neptŗi*, *sunu* 'sleep' fr **supnŭ*, § 545, the dropping of final consonants, as *nebo* 'sky' fr **nebos*, § 665, 4 A similar phenomenon exists in French The tendency prevails also here to make all syllables open, the reason of which is here due to the weak expiratory accentuation (Ph Kaufmann Die Gesch des consonantischen Auslauts im Franz, Lahr 1886). Nothing prevents our accepting a like reason for Slavonic

Changes of liquids in the prim. Indg. period

§ 282. The beginning of the processes of dissimilation, referred to in §§ 259. 266. 269 277 280 281, probably goes back to the prim Indg period

Already at this period e g. an original *ger-ger-* (or with other vowel-grade, e. g *ger-gr-*) 'to gargle, swallow, gulp down' may have become *ger-gel-* by dissimilation or an orig. *gel-gel-* (*gel-gl-*) have become *ger-gel-* (cp. Lat *gurgulio*, OHG *querechela* 'gullet, windpipe', Lith. *gargalŭ'ju* 'I gargle, rattle in the throat'; the latter may of course be a loan-word from German, Mod HG. *gurgel* is borrowed from Lat.[2]). A satis-

1) My attention was drawn to it many years ago by Rob Scholvin, but I do not know whether it has been observed elsewhere.

2) Forms like Gr *γέργερος· βρόγχος* (Hesych.), *γαργαρεών* 'uvula' do not stand in the way of this theory For firstly dissimilation need not have been extended to all the derivatives of reduplicated roots, and secondly, the original equality may have been restored again partly by assimilation and partly by form-association

factory explanation is thus arrived at for a number of roots ending in a liquid, and often having full reduplication, which also show now *r*, now *l* unreduplicated finally (cp. e. g. Lat. *vorāre* and *gula*) It would be worth while to investigate more fully whether the nominal suffixes *-tro-* and *-tlo-*, beside *-dhro-* and *-dhlo-* are due to dissimilation.

In like manner the substitution of a nasal for a liquid by dissimilation might have had its beginning in the prim. Indg. period, cp e. g Skr *bam-bhara-s* 'bee', Gr. *πεμ-φρηδών* a kind of wasp, cp the author Curtius' Stud. VII 329 357 f.

B LIQUIDS AS SONANTS.[1])

§ 283 The question, how many different, and what liquids were spoken in the Indg prim period (§ 254), equally concerns both sonant and consonant liquids. As sonants we represent them by *l̥* and *r̥*, and as consonants by *l* and *r*

Sonantal liquids like syllabic nasals were spoken both long and short in the Indg prim period (§ 222), but mostly short, and from a morphological point of view they corresponded, when long, just as long sonantal nasals, to *ī* and *ū*, see § 312.

1 Short sonant liquids.

§ 284. Owing to the treatment in the developments of the individual languages we distinguish three cases

1 Before explosives, spirants, nasals, *u* and finally, e. g **mr̥-tó-s* part fr root *mer-* 'die', Skr. *mr̥-tá-s*; **oudhr̥* nom. acc. neut 'udder', Gr. *οὖθαρ*.

2. Before *i*, e g. **mr̥-i̯é-* pres st. from root *mer-* 'die', Lat *mor-ior*.

3. Before sonants in which case *r* and *l* were spoken as glides, e. g **gr̥-ú-s* 'heavy', Skr. *gurú-ś*. Cp. § 223, 4.

1) Cp. the literature quoted in the foot note to p 190 To the proofs that sonant liquids were spoken in the Indg. prim period, we add § 285 rem a new, and as it seems to us, indisputable one.

The follōwing is a survey of the usual representation of *r̥* in the individual languages arranged from these three points of view. (The treatment of *l̥* is analogous).

	Skr.	Av.	Arm.	Greek.	Ital.	Kelt.	Germ.	Balt	Slav.
1	*r̥*	*er*	*ar*	*ϱα, αϱ* (initially and absolutely finally only *αϱ*)	*or*	*ri*	*ru, ur*	*ir*	*rĭ*
2	*ur, ir*	*er*	*ar?*	*αϱ*	*or*	?	*ur*	*ir*	*ĭr*
3	*ur, n*	*ar*	*ar*	*αϱ*	*or*	*ar*	*ur*	*ir*	*ĭr*

Prim Indg period

§ 285. 1 Before explosives, spirants, nasals, *u̯* and finally.

**mr̥-ti-s* 'dying, death' from rt. *mer-* : Lat. *mors mortis*, Lith. *mirtì-s* O.Bulg. *sŭ-mrĭtĭ*, Skr. *mr̥ti-ś*; **mr̥-tó-* part. from the same root (neut as abstract noun) · OHG. *mord* Ags. O.Icel. *morð* n. 'murder', Skr *mr̥tá-s* 'dead' *mr̥tá-m* 'death' **bhr̥-ti-s* 'a bearing, bringing' : Lat. *fors forte*, O Ir. *brith* 'a bearing', Goth. *ga-baúrþs* OHG. *gi-burt* 'birth', Skr. *bhr̥tí-ṣ* 'a bearing, nursing, maintenance' Tense stem **dr̥k-é-* from rt *derk-* 'see' : Gr. ἔδρακε δρακών, Skr. *ádr̥ša-t dr̥śá-nt-*. **u̯r̥t+tó-* part. from root *u̯ert-* 'turn, direct to' . Lat. *vorsu-s*, O.Bulg. *vrĭsta* f. 'state, condition', Skr. *vr̥ttá-s* part , *vr̥ttá-m* subst. 'state, situation'. **qetu̯r̥-to-s* 'fourth', to **qetu̯er-* 'four' : Gr. *τέτρατο-ς τέταρτο-ς*, Lith. *ketvirta-s* O.Bulg. *četvrĭtŭ*. **p-tr̥-* **bhrā-tr̥-* anteconsonantal weak forms of the stems **pətér-* 'father' **bhrā́-tor-* 'brother' : Gr. dat. plur. *πατρά-σι*, Goth. dat. pl *fadru-m*, Skr. loc. pl. *pitr̥-ṣu*; Skr. *bhrātr̥-putra-* 'brother's son', Goth. *brōþru-lubō* 'brotherly love' (the latter may also like the nom. pl. *brōþrjus* be a new formation).

**u̯l̥qo-s* 'wolf' from rt *u̯elq-* 'drag, tear along'. Arm *gail*, Goth. *vulfs*, Lith. *vil̃ka-s* O.Bulg. *vlŭkŭ*, Skr. *vr̥ka-s*. Weak

present st. form **pi-pḷ-* from rt. *pel-* 'fill' : Gr. *ἐμ-πίπλα-μεν*, Skr. *pipṛ-más*, part. **pḷ-nó-s* 'filled, full' from the same root : Goth. *fulls* (fr. prim. Germ. **ful-na-z*, § 214 p. 181), Lith. *pìlna-s* O.Bulg. *plŭnŭ*, Av. *per^{e}na-*.

Rem In the same manner as suffix nasals forced their way into the interior of the root syllable, when this contained an *i* or *u*, e g **junǥ-* (Skr *yuñjáti*, Lat *jungō*, Lith *jùngiu*) fr. **jug-n-* (s § 221), so also when the root contained *r* or *l* as sonant E g Skr *kṛntáti* 'I cut' *kṛntá-tra-m* 'chip, refuse', Lith *krintù* 'I fall off' (of leaves, fruit etc.), rt *qert-* Lith *drįsù* in *drįsù-ti* 'to become courageous, venture' fr *dhṛṣ-* (cp Skr *dhṛṣṇú-š* 'courageous'), rt. *dhers-* O.Bulg *krętǫ* in *krętaję* 'flecto' *krętą* 'deflecto (fr. **krętnǫ*, § 345) fr **qṛnt-* (cp. Skr *kṛnáti* 'twists thread, spins'), rt. *qert-* Goth *vraggo* f 'snare' fr **ṷṛñǥh-* from root *ṷerǥh-* (OHG *wrangen* 'to strangle' MHG *er-wergen* 'to strangle', Lith *veržù* 'I string together, straiten') O Ir *lingim* 'I leap' (cp pert 3 sg. *le-blaing* for **fe-blaing* after the initial sound of the pres form) fr **ḷiǥ-*, to Skr *válgāmi* 'I leap' (§ 173), is uncertain And in a similar manner, as e g in Lat the nasal extended itself from the pres *jungō* to other forms belonging to the same root (*junctus*, *con-junx* etc.), there was formed in Lith after *drįsù-* a pres *drįsnù* (cp *mẹžù* 'I make water' for *minžu* in Bezzenberger's Beitr zur Gesch. der lit Spr 41, after the ratio of *renkù* *rinkaũ* etc) and a fem subst *drąsà* 'boldness', in Slav after *krętǫ* an adj *krątŭ* 'tortus', in Germ after *wrungan* a pres **ṷrunǥo* (Ags *wringan* 'to turn, press' OHG *ringan* MHG. *ringen* 'to move to and fro, wind with exertion') and an adj **ṷranǥa-z* (O Icel *rangr* 'crooked, wrong' M Eng *wrang* Mod Eng. *wrong*); in Ir after **ḷiǥ-* the pert *le-blaing* (s above), whereas Lith *krintù*, placed on a line with *limpù* etc, gave the impetus for the formation of *kintaũ* *krįstu* etc These nasalised forms of roots in liquid + consonant in the European languages furnish the best proof of the existence of sonant liquids in prehistoric times For the suffix nasal can only have been forced over by a root form like *dhṛs-*, not by one like *dhers-* and *dhors-*, since forms like *dherns-* or *dhorns-* are unheard of (just as beside *junǥ-* there appears no *jeunǥ-* or *jounǥ-*)

Final *ṛ*, *ḷ* Skr. nom acc. neut. *sthā-tṛ́* 'standing', beside which *sthā-túr* (Lanman Noun-inflection p 422) as representative of original **stā-tṛr* i. e. of a form originally only used before initial sonants, see § 287; *sthātṛ́* : *sthātúr* = *dáśa* 'ten' : *pádam* 'pedem' (§ 231 rem). Gr. *οὐθ-αρ* 'udder' *ἦπ-αρ* 'liver' fr. **-ṛ*, beside which *ὕδ-ωρ* 'water' probably fr. **-ṝ*. Lat. *jec-ur* *fem-ur* fr. **-or* = **-ṛ*, beside which *ūb-er*, whose *-er* can be explained from **-ar* **-ṝ*. *-ṛ* : *ṝ* = *-u* : *-ū* (in Skr. *purú* Gr. *πολύ* : Skr. *purú* Lat. *cornū*). Armen. *albeur* (gen *alber*) 'source, spring'

fr. **αλβεϱ(α)ϱ* (§§ 263. 651), Gr. *φρέαρ* 'a well' fr. **φρηϝαρ*. Cp. § 306 and the accidence.

Gr. particle *ἄρ* indicating a natural sequence etc., Lith. *ir* 'and, also' fr. **ṛ*. The form *ῥά* was probably developed before forms beginning with a consonant. *ἄρα* and Cypr. *ἔρ(α)* fr. *ῥά* by prothesis (§ 266)? Cp the author Ber. d. sächs. Ges. d. Wissensch. 1883 p. 37 ff

§ 286. 2. Before *i̯* **mṛ-i̯é-* pres. stem from rt. *mer-* 'die' : Lat *mor-ior*, Av *mer*-yēmi* **sṛṛ-i̯é-* pres. fr root *sper-* : Gr. *σπαίρω ἀσπαίρω* 'I struggle convulsively', Lith. *spiriù* 'I push with the foot'. **sqḷ-i̯é-* pres from rt. *sqel-* : Gr *σκάλλω* 'I stir up, hoe', Lith. *skilù* 'I strike fire'

§ 287. 3 Before sonants with a following *r, l* as glide **gṛ-ú-s* 'heavy' Gr. *βαϱ-ύ-ς*, Goth *kaúr-u-s*, Skr. *gur-ú-ṣ*. **gṛr-é-* pres st. from *ger-* 'devour' : O.Bulg. *žĭr-ą*, Skr *gir-ámi gil-ámi*, with change of accent *gírāmi* (Atharvaveda VI 135,·3). Nominal suffix *-ṛro-* beside *-ro-*, like *-i̯o* beside *-i̯o-* (§ 120) and *-ṇno-* beside *-no-* (§ 227), e. g. **is-ṛró-s* : Gr. Corcyr. *ἰαϱό-ς* Bœot etc *ἰαϱός* (Hom. Att *ἱερό-ς*, formed after the analogy of *διε-ρό-ς φοβε-ρό-ς* etc.) 'active, fresh, strong, holy', Skr. *iš-irá-s* 'hastily, active, fresh' beside Hom *ἶϱό-ς* Lesb. *ἴϱο-ς* fr. **ἰσ-ϱο-ς* (cp. Osthoff Morph. Unt. IV 149 ff., Zur Gesch. d Perf. 439); Skr. *rudh-irá-s* 'red' beside Gr *ἐρυθ-ρό-ς*, Gr *ἰθ-αϱό-ς* 'clear, serene' beside Skr *ūdh-r-iya-* 'belonging to the clear sky'; Gr. *ὑδ-αρό-ς* 'watery' beside *ἄν-υδ-ρο-ς* 'waterless'; *σιν-αρό-ς* beside *σινδ-ρό-ς* (for the -δ- see § 204 p. 170) 'injurious'; cp. also Skr. *mih-irá-* 'cloud' beside Hom. *ὀμίχ-λη* O Bulg. *mĭg-la* 'fog' (§ 279). Root form *tḷḷ-* beside *tel-* Gr *τάλ-ᾱς* 'enduring', O.Lat. *tulō* 'I endure', Goth *þulúþ* 'endures', O.Bulg. *tĭl-o* 'bottom' (properly 'surface', cp. Skr. *tal-a-s* 'surface, bottom'), Skr. *tul-á-* 'balance' *tul-aya-ti* 'he raises up'.

Aryan.

§ 288. 1. Indg. *ṛ* (*ḷ*) = Skr. *ṛ*, Av. *er* (*ehr* before *k* and *p*, and *eš* fr. **ert* in chief accented syllables, in other cases

before consonants *er*, see § 260), O.Pers. *ar*; the pronunciation of this O.Pers. *ar* must still have been different from that of *ar* = prim. Ar. *ar* (e. g. inf. *cartanaiy* 'to make'); it was perhaps *ṛ* (cp. Hübschmann Kuhn's Zeitschr. XXVII 108 ff.).

Skr. *pṛchâmi* Av. *per*sāmi* 'I ask', O.Pers. *aparsam* 'I asked' (= Skr. *ápṛcham*) : Lat. *poscō* fr. **por(c)-scō*, Indg. **pṛ̆k-skṓ*; Skr. *pṛchā-* 'question, inquiry' : OHG. *forsca* 'investigation, question', Indg. **pṛ̆k-skā-* f., from rt. *preḱ-*. Skr *kṛ-tá-* Av. *ker*-ta-* O.Pers. *kar-ta-* 'made', part. from rt. *qer-* Skr *dhṛṣ-nó-mi* Av. *der*š-nao-mi* 'I dare, venture', O.Pers. *a-darš-nau-š* 'he dared'; Skr. *dhṛṣ-á-nt-* part. 'courageous' · Goth. *ga-daúrsan* 'to dare, venture', Gr. *θρασύ-ς θαρσύ-ς* 'courageous', from rt. *dhers-*. Skr *mṛ-tá-* 'dead' Av. *mer*ta-*, Skr. *a-mṛ́ta-* 'immortal' Av. *a-meša-* : OHG. *mord* 'murder', Indg *mṛ-tó-*, from rt. *mer-*. Skr. *bṛh-ánt-* Av. *ber*z-ant-* 'great, high' from rt. *bherĝh-*; the same root-form *bhṛĝh-* in Gall. *briga-* (in *Brigiani, Are-brigum* etc) O.Ir. *brí* gen. *breg* 'mountain' Skr. *kṛ́p-* 'form, appearance', Av. *kehrp-* 'form, body' : Lat. *corp-us*. Skr *ṛ́kša-s* Av *er'xšō* 'bear' : Arm. *arj*, Gr. *ἄρκτο-ς*, Lat. *ursus* fr. **orcso-s*. Dat. pl. Skr. *pitṛ́-bhyas* Av. *pter*-byō* 'patribus' . cp. Gr *πατρά-σι*, Goth. *fadru-m*.

Skr. *pṛthú-š* Av *per*θu-š* 'broad', Gr. *πλατύ-ς* : O.Ir. *lethan* O.Cymr. *litan*, probably also OS. *folda* O.Icel. *fold* 'earth' (cp. Skr *pṛthvî́ pṛthivî* 'earth') [1]). Skr. *vṛ́ka-s* 'wolf' Av *vehrkō* 'wolf' : Goth. *vulfs*, Lith. *vil̃ka-s*.

For Skr. *kḷp-tá-* Av. *ker*p-ta-* 'put in order, fixed', there is no certain corresponding form in the other languages.

On Skr. final *-ṛ* = Indg. *-r*, see § 285.

From pre-Aryan gen. sg. **bhrā́-tṛ-s* 'brother's' arose *-tṛš* (§ 556, 1), Skr. *-tṛ* before voiced sounds (cp. *-ir -ur* fr. *-iš -uš*, § 647, 6), hence by § 290 *-tur, bhrátur*. The same formation is shown by Av. *ner*š* from *nar-* 'man'. See the accidence.

Owing to the limited extent of the monuments, it is impossible to arrive at anything definite regarding O.Pers. *u*

1) Lith. *platù-s* 'broad' does not belong here, it has the same vowel-grade as *brangùs* 'dear', *baugùs* 'dreadful' etc

(written *ū*) = *r* in *a-kū-nav-am* = Skr. *á-kṛ-ṇav-am* 'I made' etc. (beside *kar-ta-* = Skr. *kṛ-tá-* 'made'). Cp. Bartholomae Ar. Forsch. II 67 f.

§ 289. 2. Indg. *r* before *l̥* seems to have been represented in Av. from the oldest period onwards, in the same manner as before other consonants: *mer^{e}yeiti* like Lat. *morior*, Indg. **mṛ-l̥é-ta-i* 'dies', *ker^{e}yetē* 'is made, effected' The Skr. forms *mriyátē kriyátē* are, as we have seen § 120 p. 112, of a different nature. O.Pers. *amariyatā* 'he died' may be *amaryatā* (s. § 125 p. 116), and would then correspond to Av. *mer^{e}yeiti*, but it may also, according to the O.Pers. mode of writing, be read *amriyatā*, in which case it would be equal to Skr *ámriyata*

r̥y does not seem to occur in initial syllables in Sanskrit. Optative (precative) forms as *kriyát kriyāsma* from *kar-* 'make', as well as *jāgriyāt* (Āit Brāhm) opt of *jāgarmi* 'I watch' are to be judged of in the same manner as *mriyátē* Forms like *jūryati* 'becomes feeble' from rt *ǰer-*, *tūryati* (*ava-tūryati* 'descends') from rt. *ter-* go back to original *r̥i* (s. § 306), and are on a level with *mí-ya-te* 'disappears' from rt. *mei-* 'lessen', *śrū-ya-tē* 'is heard' from rt. *kleu-* etc As regular representatives of Indg *r̥i*, there can only be taken into account on the one hand *jāgr̥yāt* (beside *jāgriyāt*) — how many such forms are extant? — and on the other, forms like opt *kuryát* from *kar-* 'make', *turyát tuturyāt* from *tar-* 'to press through', *a-juryás-* 'not becoming old' from rt *ǰer-* (the author Kuhn's Ztschr. XXIV 282 ff) I am inclined to think that the latter category exhibits the regular development (except that *ur* took the place of *ir*, s. § 290) and that forms like *jāgr̥yāt* were later new formations (after *jāgr̥hí* etc.)

Rem This view might be put forth with greater certainty, if the possibility did not exist that the *u* of *kurya-* was taken over from the weak stem of the opt **kur-* (3 sg mid **kur-tá-*) = Indg. **qr̥-i-* (§ 290)

§ 290. 3. Skr. *ur ir*, Av. O.Pers. *ar* (concerning Av. *or* fr. *ar* see § 94).

Skr. *purú-* Av. *parao- pouru-* O.Pers. *paru-* 'much', prim f. **pl̥lú-* from rt. *pel-* 'fill'. Skr. *giri-ś* Av. *gairi-š* 'moun-

tain' : cp. Lith. *gìria gìre* f. 'forest'. Skr. *gurú-* 'heavy, vehement, hard', Av. *gouru-* 'contrary, peevish' : Gr. *βαρύ-ς*, Goth. *kaúru-s*. Gen. abl. sg. Skr *gir-ás* Av. *gar-ō* 'of a song' (instr. pl. Skr. *gīrbhíṣ* fr. **gṝ-bhis*, § 306). Skr. *tirás* Av. *tarō* 'through, over', from root *ter-* 'press through, overstep'. Skr. *girámi* 'I swallow' : O.Bulg *žьrą*, from rt. *ger-*; in like manner Skr. *tirámi* 'I press through', *kirámi* 'I pour out', *sphurámi* 'I push away' etc.; *tirámi* : *tárāmi* = *vanámi* · *vánāmi* (§ 231) = *huvátē* : *hávatē* 'invokes'. It cannot be decided whether Av. *sparāmi* 'I push, jerk' is the same as Skr. *sphurámi* or a new formation after Skr. class I.

Finally. Skr. *-úr* Av. *-ar*^{e}, the ending of the 3. pl. pf. act., e. g. Skr. *ās-úr* Av. *ånh-ar*^{e} from rt. *es-* 'be'. These forms are on a level with the nom acc. neut. *sthū-túr* § 285 p. 228.

The change between *ur* and *ir* in Skr was very probably originally evoked by the varying timbre of the neighbouring sounds. Preceding or following labials developed the form *ur*; cp. *sphurátu*; Skr. *úrana-s* 'ram' fr **ṷṛr-an-a-s* (§ 157), **ṷṛr-an-* (cp. Arm. *garn*, gen *garin*, § 291) beside Gr. *ϝαρ-ν-* fr **ṷṛ-n-* (§§ 164. 292); *gur-ú-* (opposed to *gi-í-*) etc. The orig phonetic state became obscured through a great number of new formations made by analogy

Rem. The present of *kar-* plays a principal part in the question as to how Skr *ur* and *ir* are to be explained It may be remarked that I trace the Ved imperat *kuru-* back to **qṛ-tu*, *-tu* was an appended particle like *-dhi* in *i-dhi* Gr *ι-θι* 'go' (Thurneysen Kuhn's Ztschr XXVII 180) After the relation of *bhara* · *bharata*, there was formed to *kuru* the 2 pl *kurута*, in the indic. *kurutha* For the rest see the accidence

The side by side existence of Skr *gurú-* Av. *gouru-* and Skr. *á-gru-* Av *a-yru-* 'maidenish' (cp. Skr *gurvi* 'gravida') [1]), of Skr. *gir-a-* *-gil-a-* 'swallowing' and *turi-grá-* 'swallowing much' etc., corresponds to that of *ghan-á-* and *-ghn-ú-* 'killing' (§ 231)

Armenian

§ 291. 1. *barjr*, gen. *barju*, 'high' fr. **bhṛĝh-u-* : Skr. *bṛhánt-*, O.Ir. *bri* (§§ 288 298) *harç*, gen *harci*, 'question',

1) Here come probably also Lat *gravi-s* as *gr-av-i-s*, cp Gr *ταν-α(ϝ)-ύ-ς* beside *ταν-ύ-* 'stretched' and Skr *pṛth-vi-* beside *pṛth-ú-* (p. 230)

harcane-m 'I ask' with *c* fr. *(ḱ)sḱ* : Skr. *pṛchā*, OHG. *forsca* (§ 288). *mard* 'man' : Skr. *mṛtá-s*. *arj*, gen. *arjoy* or *arju*, 'a bear' : Skr. *ṛkša-s*. *ard-ar* 'just, upright' : Skr. *ṛ-tá-s* 'suitable, right'. *arciv* and *arcui* 'eagle' (*v* fr. *p*, §§ 330. 483) : Skr. *ṛṣipyá-* 'stretching oneself, taking up in flight' (of birds of prey), Av. *er^{e}zifya-* 'stretching oneself; falcon' *ẖar-* 'four' (*ẖar-a-sun* 'forty') fr. **(ǧ)tuṛ-* (§ 360) = Gr *τρα-* in *τρά-πεζα* 'table' (properly 'fourfeet')

Finally : *allbeur* 'source' fr. **albeu̯(a)r* § 285.

gail, gen. *gaiłoy*, 'wolf', firstly by epenthesis fr. **gaḷo-s* = Skr. *vṛka-s* etc.? Cp. § 455.

2 Examples for *ṛi*, *ḷi* are not to hand.

3. *gaṙn*, gen. *gaṙin*, 'lamb', Indg st **ṷṛr-en-* · Skr. *úr-an-a-s* fr **ṷṛ-* (§§ 263 290). *sar*, gen *saroy*, 'height, summit, declivity' : Skr *śíras-* Av *sarah-* n. 'head', rt *ḳer-* (Lat. *cerebru-m cerno-s*, O.Icel. *hyrse* 'crown of the head') *kałin*, gen. *kałnoy*, 'acorn' Gr *βάλ-ανο-ς*, Lith. *gìl-ė* (Lat *glāns* seems to stand in a similar relation to these words as Gr *πολύ-ρρην* 'rich in sheep' fr. **-ϝρ-ην* to Arm *garn* Skr. *úran-a-s*).

Greek.

§ 292. 1 *δρατό-ς δαρτό-ς* 'skinned' : Av *der^{e}ta-* 'cut, mown', Lith. *ne-dirta-s* 'skinned'; *δέρμα-ς* 'excoriation'. Skr *dṛti-ḥ* 'leather-bag' (cp. Gr *δέρμα* 'hide'), Goth *ga-taúrs* 'a destroying', from rt. *der-*. Hom *ταρπώμεθα τετάρπετο* from *τέρπω* 'I delight' : Skr. *tṛpáṃi* (not found), *tṛ́pyāmi*, *tṛpṓmi* 'I satiate myself, become satisfied', rt. *terp-* Aor *ἔπαρδο-ν* to *πέρδω* 'pedo'; the same root form in OHG. *furz* 'crepitus ventris', Lith *pir̃dù-s* m. 'crepitus ventris' *pirdà* 'qui pedit' Russ. *perdĕť* 'pedere' (prim. Slav. **pĭrdĕti*). *μάρναμαι* 'I fight' and Corcyr *βαρνάμενος* fr. **βραναμενος* (§ 204) : Skr. *mṛ-ṇā́-mi* 'I bruise, beat in pieces' Analogously *βαρδῆν · τὸ βιάζεσθαι γυναῖκας · Ἰμπρακιῶται*, fr. **βραδῆν* : Skr *mṛd-ṇā́-ti* 'presses vehemently' (cf. Lat. *comprimere feminam*) *τετράφαμεν* to *τέτροφα* (*τρέπω* 'I turn'), like Skr. *dadṛśimá* to *dadárśa* (*darś-* 'see') *τρασιά ταρσιά* 'a drying-kiln' to *τέρσομαι* 'I become dry' : Skr. *tṛ́ṣyā-* 'thirst' *tṛ́ṣyāmi* 'I am thirsty', rt. *ters-*. *πραανόν · μίλανα*

Hesych.: Skr. *pr̥ś-ni-ś* 'spotted'; beside which, with other vowel-grade *περκνό-ς*. *κραδ-ίη καρδ-ίᾱ* 'heart': Lat. *cor cord-is*, O.Ir. *cride*, Lith. *szirdì-s* O.Bul. *sr̥dĭ-ce*.

τέτλα-μεν 1. pl. pf. from *tel-* 'bear', like *γέγα-μεν* to *γεν-* 'gignere' (§ 233). *ἐσταλται* 3. sg. pf. mid. to *στελ-* 'order', like *τέτα-ται* to *τεν-* 'stretch' (233) *πλατύ-ς* 'flat, broad': Skr. *pr̥thú-ś* (§ 288).

It has not been definitely determined on what the varying position of the liquid depends (*ρα λα* and *αρ αλ*). Form association can only be assumed for certain cases, e. g. *δαρτό-ς*: *δέρω δορᾰ́*; *ἐνλάπην γλίπτω κέλομαι*. Cp. the author Kuhn's Ztschr. XXIV 258, Osthoff Morph Unt II 144 f

α always came first initially. *ἄρκτο-ς* 'bear' · Skr. *ŕkṣa-s* *ἄρσην ἄρρην* 'masculine': Skr. *ŕṣabhá-s* 'bull' fr. **ŕṣ̥-bho-s*. *ἀρ-νυ-μαι* 'I attain, gain' *μίσθ-αρνο-ς μισθ-άρνη-ς* 'hired servant': Skr *ŕ-nó-mi* 'I attain, gain'

Likewise *-αρ* fr. *-ŕ* finally, see § 285.

In Aeol. *ρο ορ* from *ρα αρ*, as Lesb *στρότος μ'μορθαι*, Bœot. *στροτό-ς*.

§ 293. 2. *σπαίρω ἀσπαίρω* 'I struggle convulsively' fr. **σπαρ-ι̯ω* (§ 130): Lith. *spiriù* 'I push with the foot', cpf *[4]spŕ-i̯ó*, rt. *sper-*. *σκάλλω* 'I stir up, hoe' fr *[1]σκαλ-ι̯ω* (§ 130) Lith. *skilù* 'I strike fire', cpf. *[4]skl̥-i̯ó*, from rt *skel-* Analogously *φθαίρω* Dor. (Att. *φθείρω*) 'I destroy', *πταίρω* 'I sneeze' from rt. *pster-* (*πτόρο-ς* 'a sneezing', Lat *ster-nu-ō*), *βάλλω* 'I throw' from rt. *gel-* etc. *ἐχθαίρω* 'I hate' from **ἐχθŕ-ι̯ω* to *ἐχθρό-ς* 'hated', like *ἀγγέλλω* to *ἄγγελο-ς*. On the *ι*-epenthesis see § 639.

§ 294. 3. *βαρύ-ς* 'heavy' Skr *gurú-ś* Corcyr. *ἰαρό-ς* 'holy': *iṣirá-s* (§ 287) *πάρος* 'in front, before, sooner': Skr. *purás* before. in front' The preterites *ἔπταρον* 'I sneezed' *ἔβαλον* 'I threw' go with Skr. *girámi*, O.Bulg. *žrą*, Lat. *tulō* (§ 287); *ἔ-βαλ-ε* · *ἔ-πλ-ε*, *ε-πλ-ε-το* 'versabatur' Skr *á-hav-a-t* : *á-hv-a-t* 'he called to' (cp. §§ 153 159) Here belong also passive aor. like *ἐδάρην ἐβάλην*; *ἐ-βάλ-η-ν* : *ἔ-βλ-η-ν* = *ἐ-φύ-ην*: O.Bul. *bĕ* from **bn̥-ĕ* (§ 184)

General Greek *ορ*, *ολ* in *ἔ-πορ-ο-ν πολ-ύ-ς* etc., concerning which see § 306.

Italic.

§ 295. 1. Lat. *porca* 'the ridge between two furrows', Umbr. Mars. pl. *porculeta* 'porcae' (Pliny) : O.Bret. *rec* 'sulco' Cymr. *rhych* 'furrow' (cp Thurneysen Keltorom. p. 74 f.), OHG. *furuh* Ags. *furh* f. 'furrow' Lat. *vorsu-s*, Umbr. Osc. *vorsum* ('quod Graeci πλέθρον appellant, Osci et Umbri vorsum', Frontinus de limit p. 30, 9), Umbr. *trah-vorfi* 'transverse' . Skr. *vṛt-tá-*, from rt *u̯ert-* 'turn' (§ 285) Lat. *fors forte*, Osc. *fortis* 'forte', Pelign. *forte* gen. 'fortunae' · Skr *bhṛ-tí-š* (§ 285). Lat. *or-tu-s* part., Umbr. *ortom orto* 'ortum' · Skr *ṛ-tá-s* part. 'raised'. Lat. *portu-s porta* . Av. *pešu-š* 'ford' *hu-per'θwo-i* f. 'having a good ford' (§§ 260. 288), Gall. *-ritum* 'passage' in *Augusto-ritum* (with Latinised ending), OHG *furt* m. 'ford'. *sporta sportula* : Gr σπάρ-τo-ν 'rope, cable' *cornu-s cornu-m* · Gr. κράνο-ς κράνο-ν 'cornel-tree' *porru-m* fr **porso-m* (§ 571) . Gr. πράσο-ν 'a leek'. *forcti-s fortis* : Skr part. *dṛḷhá-s* 'fast, strong' (to *darh-*), prim. f. **dhṝgh+tó-*, rt *dher̄gh-*. *tostu-s* from **tors-to-s* Skr. *tṛṣ-ṭá-s* 'rough, hoarse' *mo-mord-imus* · Skr *ma-mṛd-imá* 'we crushed, pounded', rt. *merd-*, cp also *vort-imus* Skr *va-vṛt-imá*. *ursu-s* . Skr *ṛkša-* 'bear' (§ 288)

On the dropping of *ṛ* in Lat. forms as *tostu-s*, *poscō* (§ 288) see § 269

Lat. *mulsu-s* part , *multa multa* 'a fine, penalty', Umbr. *motar* gen 'multae', Osc. *moltam* 'multam' fr. prim Ital. **molh-tā-* : Skr. *mṛṣṭá-* part, indic *mṛ́ṣāmi* 'I touch, feel'. Lat *mulctu-s* Lith. *mìlszta-s* 'milked', O Ir. *mlicht blicht* 'milk', from rt. *melḡ-*. Analogously the Lat participial forms *oc-cultu-s* from rt *ḱel-* 'cover, conceal' . OHG. *helan* 'to hide' (concerning the apparently contradictory *oquoltōd* of the S. C. de Bacch. 15 see Bersu Die Gutturalen und ihre Verbindung mit *v* im Lat. p. 41); *pulsu-s* to *pellō* : Gr παλτό-ς 'brandished, hurled' etc., *tollō* fr. **tl̥-nō*, from rt. *tel-*.

Rom *o* before *l* + cons (except *ll*) uniformly became *u* in Latin, whereas the vowel fluctuated before *r*, cp *curtu-s* . Gr κερτό-ς 'shorn, cut', *fornu-s*, later *furnu-s* . Skr. *ghṛ-nd-s* 'heat, glow' A law for this irregularity has not been discovered.

Finally, *-ur* fr. *-ṛ*, *jec-ur*, see § 285.

§ 296. 2. Lat. *morior* : Av. *merᵉyeiti* 'dies' (§ 289). *horior* O.Lat. = *hortor*, probably to Umbr. *heriest* 'volet' Osc. *herest* 'volet' and identical with Gr. *χαίρω* 'I rejoice', to which it was the causat. form ('I make pleasure, joy'); *hortor* would accordingly be from a **horto-* = *χαρτό-ς* 'wished for'. *orior oriuntur* fr. **ṛ-i̯ó-*, to *ortu-s* : Skr *ṛtá-s* (§ 295)

§ 297. 3. O.Lat. *tulō*, rt *tel-* *oc-culō* either fr. **k̂l̥-ō* or **-celō* (= O.Ir *celim* OHG. *hilu*) through the influence of the *l.* *gul-* in *gula gulō* rather from **gl̥-* (cp. Skr. *gira-* *-gila-* 'swallowing', *gili-š* f. *gilana-m* 'a swallowing', § 290) than from **gel-* prim. Ital. **gᵘel-*, since in the latter root form **vel-* would be expected (cp. *veniō*, *veru* § 432 *b*), hence *gula* · OHG. *chela* 'throat' = Gr. Boeot *βανά* : Goth. *qinō* 'wife; *gulō* was formed like Goth. *skula* 'debtor' (§ 301)

Old Irish.

§ 298. 1 General Keltic *ri* (*re*), *li* (*le*)

O Ir. *bri* gen. *breg* (from **brix* **brigos*) 'rising ground', Gall *brigi-* (in *Brigiani* an Alpine race, *Are-brigu-m* etc.), Cymr. Bret. *bre* Skr. *bṛh-ánt-* (§ 288) O.Cymr. *rit* 'ford', Gall. *Augusto-ritu-m* : Av *pəšu-š*, Lat *portus*, OHG. *furt* (§ 295). O.Ir *drech* 'face' fr. **drica* prim f **dṛ̂kā* : Skr. *dṛ́ś-* 'look', Gr. *ἐδρακον* 'I saw', rt *derk̂-* O Ir. *brissim* 'I break', *brisc* Bret. *bresk* 'fragile, apt to break', according to Stokes' conjecture (Mém. de la soc. de lingu. V 420) from rt *bherdh-* : Gr *περθω* 'I lay waste, destroy' aor *ἔπραθο-ν*, on *brisc* cp § 516. O.Ir. *lethan* O Cymr. *litan* 'broad' : Skr *pṛthú-ś* (§ 288).

O.Ir. *re-nim* 'I give up, sell, grant' : Gr *πέρνημι* 'I sell, export', which represented an older **παρ-νᾱ-μι* (this form seems to be represented in Hesych. by *πορνάμεν* · *πωλεῖν* with *o* = *α*, § 292 extr.), originally **pṛ-ná-mi* from rt *per-*. *ara-chrinim* 'difficiscor' (perf. *do-ro-chai*) : Skr. *śṛ-ná-mi* 'I separate, break in pieces'. Mid.Ir *do-breth* 'datum est' : Skr. *bhṛ-tá-* 'carried'; *brith* 'a carrying' : Skr. *bhṛ-ti-ś* 'a carrying', from rt. *bher-*. *sreth* 'row' : Lat. *sors sortis* beside *serō*. Here belong further, from such

roots as *bher-*, the part. perf. pass. in *-te*, *brithe brethe* 'brought', and the part. necessitatis in *-ti*, *brithi brethi* 'ferendus'. *cride* 'heart' : Gr. *κραδ-ίη* (§ 292).

bligim 'I milk' from **mligim* (§ 212) : O.Bulg. *mlŭzą*, Indg. prim. f. **mḷǧ-ō* from rt. *melǧ-*; to which *mlicht blicht* 'milk' : Lat. *mulctu-s*. *clethi* 'celandum' to *celim* 'celo' : Lat. *oc-cultu-s* Inf. *blith* to *melim* 'molo'

When such syllables with *rn*, *li* = Indg *ṛ*, *ḷ* became voiceless in composition in Irish, *ṛ*, *ḷ* arose anew through vowel reduction when another syllable followed (samprasārana). From these a vowel was then again developed. Thus e. g *eperthe* part. pass 'oblatus' from **ēd-brithe* through the intermediate stage **-bṛthe*. See § 634 and Thurneysen Rev. Celt. VI 315.

2. Examples for the representation of *ṛi*, *ḷi* are unknown to me

3. As *ṇn* became *an*, so also *ṛr*, *ḷl* became *ar*, *al* *maraim* 'I remain' : cp. Lat. *morā*, rt. (*s*)*mer-* (§ 589, 3); *morā* may just as well represent **(s)mṛrā* as **(s)morā*. *scaraim* 'I separate, divide' Cymr. *ysgar* 'separatio', to O.Ir *scorim scuirim* 'I unharness' *scor* 'an enclosure for unyoked animals' Cymr. *ysgor* f. 'rampart, bulwark' : cp Lith. *skirù* 'I separate, divide' *-al-* perhaps in *samail* 'likeness, picture' fr **sṃm-ḷi-* (cp § 243, 4) Cymr *malu* 'I grind, grind to powder' is more certain : cp. O Ir. *melim* [1])

Germanic

§ 299. 1. Prim. Germ. *ur*, *ru*.

Goth *þaúrs-u-s* OHG *durri* O.Icel. *þurr* 'dry, withered' : Skr. *tṛš-ú-š* 'covetous, gaping from dryness'; Goth. *þaúrsteı* f OHG. *durst* m. Ags. *ðyrst* m 'thirst' : Skr *tṛš-ṭá-* 'hoarse, rough' : Goth *þaúrsjan* 'to thirst' (originally a strong verb like *vaúkjan* s. below) : Skr. *tṛš-yami* 'I am thirsty'; Goth. part. *ga-þaúrsans* : Skr. Ved. part. *tṛš-āná-s* and *ta-tṛš-āná-s*, from rt. *ters-*. Inf. Goth. *ga-daúrsan* OHG. *turran* Ags. *durran* 'to dare, venture' :

1) My attention was drawn to these examples for the representation of *ṛr*, *ḷl* in Keltic by Thurneysen.

Skr. *dhṛš-á-nt-* part. 'bold'; 1 pl. Goth. *ga-daúrs-um* 'we dare': Skr. *dadhṛš-imá* (cp. also *vaúrþum* 'we became' : Skr. *vavṛtimá*, Lat. *vortimus*); opt. Goth *ga-daúrs-jáu* : Skr. *dadhṛš-yám*; OHG. *ga-turst* f. 'boldness' : Skr. *dhṛš-ti-š* f. 'boldness', from rt. *dhers-*. Goth. *vaúrkjan* OHG. *wurchen* 'to work, effect' : Av. *verᵊzyeiti* 'effects', Gr. ῥέζω 'I do' for regular *ῥάζω from *Ϝραγ-ιω (ε after the analogy of ἐρξω, ἔρδω etc), Indg. *u̯rg̑-i̯ó*, from rt. *u̯erg̑-*. Goth. *þaúr-nu-s* OHG. *dorn* 'thorn' · O.Bulg. *trĭnŭ* 'thorn', Skr. *tṛṇa-m* 'grassblade'. OHG. *zoraht* OS. *toraht torht* 'bright, clear' (for the anaptyctic vowel s. § 277). Skr. *dṛš-ṭá-* 'seen, appearing, revealing', Indg **dṛk̂-tó-s*, from rt. *derk̂-*. Goth. *haúrn* OHG *horn* 'horn' : Gr κάρνος 'horned cattle' (Hesych.) and Lat. *cornu*, in case the latter had not Indg *o*.

Goth. *brōþru-m* dat. pl. of *brōþar* brother' : cp Skr. loc. pl. *bhrātṛ-šu* Part. OHG. *rohhan* 'revenged, avenged' (beside inf. Goth. *vrikan* OHG. *rehhan*) Skr part *vavṛjānά-* pres. *várjati* 'turns off', *pari-vargá-s* 'a laying aside'. So also part. Goth. *þruskans* OHG. *droshan* 'thrashed', beside inf. *þriskan dreshan*, Goth. *brukans* OHG. *brohhan* 'broken' beside inf. *brikan brehhan*, OHG. *sprohhan* 'spoken' beside inf. *sprehhan* etc. Goth. *trudan* O.Icel. *troða* 'to tread', OHG. *trotta* f. 'a press' beside OHG inf. *tretan*; Goth. *trudan* : OHG. *tretan* = OHG *loman* Goth *gaman* (§ 247).

Goth. *vulfs*, OHG *wolf* 'wolf' : Skr. *vṛka-s*. Goth. *fulls* OHG. *fol* (infl. *follēr*) 'full' : Lith *pìlna-s*, Av *perᵊna-*. Goth. *skulds* part. 'obliged', OHG. *sculda* 'debt', to indic. Goth. *skal* OHG. *scal* 'I shall' (related to Lat *scelus*?) Goth. pf. pl *fra-guldum* part. *-guldans* to inf. *fra-gildan* 'to repay'. Goth part. **hlufans* to *hlifan* 'to steal' (cp Gr. κλέπτω, ἐκλάπην) like *brukans* to *brikan*? Goth *lustu-s* 'desire', probably to Lat *lascīvo-s*, Skr *lā-las-a-s* 'desirous, eager for' *lášāmi* 'I desire' fr. **la-ls-ā-mi* (§ 259)

The diversity of the position of the liquid (*ur* and *ru*) was in part undoubtedly due to other forms of the same form-system, cp. e. g. Goth. *þruskans* : *þriskan* with *þaúrsans* : *þaírsan*. The independent forms have not yet been satisfactorily settled;

cp. the author Kuhn's Ztschr. XXIV 258 ff., Osthoff Morph. Unt. II 49. 145. It however seems to me probable (cp. Kluge Kuhn's Ztschr. XXVI 90) that these forms are *ur, ul.*

On the change of *u* to *aú* (before *r*) in Goth. and *u* to *o* in West Germ. and Norse see § 51.

§ 300. 2. Goth. opt. *skuljáu* to *skal* 'I shall', as *munjáu* to *man* 'I think' (§ 245). OHG. *hulla* MHG. *hülle* f 'veil, cover' fr. prim. Germ. **χulu̯ō*, to OHG. *helan* 'to conceal', rt *ḱel-*.

§ 301 3. Part pret pass. Goth. *baúr-ans* (*baíran* 'to bear'), *ga-taúr-ans* (*ga-taíran* 'to tear in pieces'), *stulans* (*stilan* 'to steal'), OHG. *boran, zoran, stolan* : cp O.Bulg. part. pret. pass. *tŭr-enŭ* to *tĭrą* 'I rub' fr. rt. *ter-* (§ 305) and Skr *ta-stir-āná-s* part pf. mid from rt *ster-* 'strew' Goth. *skulan* OHG. *scolan* 'to be obliged', part Goth *skulands* 'obliged', probably also Goth. *vulands* 'seething' (to OHG. *walm* 'heat') . cp pres. Skr *girâmi* O.Bulg. *žĭrą* from rt. *ger-* 'swallow' (§ 287). Goth. *skula* OHG. *scolo* 'debtor', like Ags. *cuma* 'advena' OHG. *willi-como* 'welcome' from rt *gem-* (cp. § 247) OHG *hol* O Icel. *holr* 'hollow', Goth *hulundi* f. 'a hollow' (cp § 244), to OHG *helan* 'to conceal' · cp Gr. *καλ-ιά* 'hut, barn'. On Goth. *aú*, West Germ Norse *o* see § 51.

Baltic-Slavonic

§ 302. Indg *r̥*, *l̥* uniformly became *ir*, *il* in the prim Baltic-Slav. period Though it cannot be strictly proved, it is nevertheless probable, that the *i* in these combinations differed from Indg. *i* in the same manner as the *i* in *in* = Indg. *n̥*. See § 248. We accordingly put the prim Baltic-Slav. forms down as *ir, il.*

Thence in Lith. *ir, il*

In prim. Slav *ĭr, ĭl.* *r* and *l* retained this position in O.Bulg before *i* and sonants, in other cases they were transposed (*rĭ, lĭ*). The labial timbre of the *l* caused the neighbouring *ĭ* to pass into *ŭ*. But the orthography is very inconsistent, and it would be difficult to decide how far the regular state has

been disturbed in the living language by form-association. Cp. § 305 rem.

Rem 1 That *ĭr*, not *rĭ* or *ŗ* was also spoken in prim Slav before consonants in such cases as *črĭnŭ* 'black' (= Pruss. *kirsna-*, Skr *kṛṣṇá-* 'black', Indg **qṛsno-*) is proved on the one hand by the transition of a preceding *k* to *č* (§ 461), in which all Slav dialects took part (Serv *c*), and on the other by the dropping of the *s* in *črĭna*, which is only conceivable on the assumption of an older form **črsnà* (s §§ 585, 2 588, 6).

Rem. 2 The treatment of prim. Slav *ĭr*, *ĭl* varied greatly in the different Slav dialects Suffice it here to remark that Serv Slov. and Czech went back again to Indg liquida sonans, e g. O Bulg *črĭnŭ* = Serv *crn*, Slov. *čŕn*, O Czech *černý* (the latter the def form of the adj = O Bulg. *črny-jĭ*)

§ 303. 1. Lith *žìrnis* m 'pea', O.Bulg *zrĭno* 'corn' : Goth. *kaúrn* 'corn' Lith *szirszŭ*, gen *szirszenìs*, O Bulg. *srĭšenĭ* 'hornet, gad-fly' · OHG *hornaz* 'hornet' fr prim Germ **χurzn-ata-z*, cpf **ḱŗs-en- *ḱŗs-n-* (ep Lat *cornū-bō* § 306). Lith. *kirmis* m 'worm', O.Bulg. *črĭmĭnŭ* 'red' (*čr-vĭ* 'worm' with a diff suffix) : Skr *kṛ́mi-š* 'worm'. Lith *kir̃sta-s* 'hewn', O.Bulg. *črętą* 'I cut' . Skr. *kṛttá-s* 'cut off', from rt *qert-* Lith *vir̃žỹs* 'cord' *vir̃žéti* 'to bind with cord', O Bulg *vrĭzą* 'I bind, close' : OS. *wurgil* 'a strangling cord' OHG *wurgan* 'to strangle', from rt. *u̯erĝh-* Lith *tir̃p-ti* 'to grow stiff, to become feelingless', Russ. *terpnut'* 'to grow stiff (prim. Slav. **tĭrpnąti*) · Lat. *torpeō* (Lat. *torp-* = Indg. **tṛp-* or *torp-*?)

O.Bulg. 2 sg opt (imper) *rĭci* 'say' orig. f. **ṛgoi̯-s*, 1 sg pres. *reką*, ep. the accidence.

Lith *vìlna* 'a single hair of wool', O.Bulg *vlŭna* 'wool' : Goth. *vulla* 'wool' fr. **vulna* (§ 214 p 181). Lith. *vilkù* 'I am clad in, with', Lith. *vil̃kęs* O.Bulg *vlŭkŭ* part. pret. act to *velkù vlěką* 'I drag' : Gr. *aὖλαξ* 'furrow' (**ϝλαϝ-*) beside *ἕλκω*, rt. *uelq-* Lith. *vil̃gau* 'I moisten', O Bulg *vlŭgŭkŭ* 'moist' OHG. *wolchan* n. *wolcha* f. 'cloud', from rt *u̯elg-*. O.Bulg *dlŭgŭ* 'duty' : O Ir. *dligid* 'lex, officium' O Ir. *dligim* 'I deserve, am entitled to', Goth. *dulgs* 'debt', rt. form *dhl̥gh-*. O.Bulg. *zlŭva* 'husband's sister' : Gr *γαλόως γάλως*

§ **304.** 2. Lith. *spìrù* : Gr. *σπαίρω*, *skìlù* : Gr. *σκάλλω*, s. § 293. Analogously *dìrù* 'I skin' (Szyrwid's *dirru* is probably to be read thus) rt. *der-*, *giriù* 'I praise' rt. *ger-*. O.Bulg. *vĭrją* 'I boil up, seethe' 2. sg. *vĭriši* (inf. *vĭrĕti*) might be put here under the supposition that the original inflection of the present was **vĭrješi* etc., like *žĭnją žĭnješi* (§ 250); cp. Czech *vru* (in O.Bulg. form **vĭrą*) like *tĭrą mĭrą* etc. (§ 305). Lith. pl. *tìles*, gen. *tìlų*, 'board in the bottom of a boat', O Bulg. *tĭlja* 'bottom' : cp. Skr *túlya-* 'equal, straight', rt. *tel-*.

§ **305.** 3 Lith *mìrusi* O.Bulg. *mĭrŭši* part. pf fem. 'mortua', O Bulg. *mĭrą* 'morior', rt. *mer-* Analogously pres. Lith. *pìlù* 'I cast, shed' from rt. *pel-* 'fill', O Bulg *žĭrą* 'I swallow' = Skr *girámi gilámi*, rt *ger-*, *tĭrą* 'tero' and others.

Rem. *ŭ* occasionally occurs for *ĭ* before non-palatal vowels in the Zographos gospel, e g *dŭlati* for *dĭlati* 'to split, tear in pieces', and vice versa, *zli* loc beside *zŭlú* nom 'bad' etc Cp § 36 rem

2. Long Sonant Liquids

§ **306.** Regarding the representation of Indg *r̥̄*, *l̥̄* in the individual languages there still remains much that is doubtful just as in the case of Indg *i̯ē*, *u̯ē*. We hold the following developments as certain · Skr *īr*, *ūr* (cp *ir*, *ur* = Indg. *r̥r* or *l̥l* § 290), Av O Pers *ā*; Gr *ᾱρ ωλ* and *ρω λω*, finally *ωρ*; Lat. *ā (al)* and *rā lā*, Kelt *lā*, Germ. *ar*, *al*.

Indg *r̥̄*.

**r̥̄dhu̯ó-s* 'upright' Skr. *ūrdhvá-s*, Gr. *ὀρθό-ς*, Lat. *arduo-s* from prim Ital **arfuo-s* (§ 170 p 150, § 370)

* *r̥̄-mó-s* 'arm, bow' . Skr *īrmá-s* Av *ar'ma-*, Armen. *armukn*, Lat *armu-s*, Goth *arms*, O Bulg. *ramę* fr. **ormę* (§ 281).

**r̥̄-ti-s* · Lat *ars artis*, OHG. *art* 'manner'. From the same root Skr *r̥-tá-m* 'propriety, right manner'

str̥̄- from rt *ster-* 'spread' part perf pass. Skr. *stīr-ná-s* Av. *star'-ta-* Gr. *στρω-τό-ς* Lat. *strā-tu-s*, Gr *στρω̄-μα* ' Lat. *strā-men* 'straw', Gr. *ἔστρω-τα στόρ-νῡμι* and others

ǧr̥̄- from rt. *ger-* 'grind' : Skr *jīr-ná-* 'ground to pieces, wasted away', Lat. *grā-nu-m* 'grain'.

pr̥- (cp. Skr. *purás* Gr. *πάρος* § 294) : Skr. *pūr-va-s* 'the one in front', Gr *πρῶτο-ς* Dor. *πρᾶτο-ς* 'the first' from **πρώ-ϝ-ατο-ς* (cp. *τρίτ-ατο-ς* 'the third'), Dor. *πρᾶν* 'formerly' fr. **πρωϝᾶν*, Att. *πρώην* 'lately' fr. **πρωϝιᾶν* (O.Bulg. *prŭv-vy-jĭ* 'the first' : Skr. *pūr-va-s* = *plŭ-nŭ* 'full' : *pūr-ná-s* etc., s. below)

kr̥s- : Skr. *śīrš-á-m* 'head' Gr *κόρσ-η* 'head, temples'.

gr̥- from rt. *ger-* swallow' : Skr. *gīr-ṇá-* part. pass., *gīr-ya-* gerund, *gīr-ti-ṣ* 'a swallowing', Gr. *βιβρώ-σκω* 'I eat, devour'. *βρω-τήρ* 'eater, devourer' *βρῶ-μα* 'food'

pr̥- 'to share in' : Gr. *πέ-πρω-ται*, Lat *pars partis* (beside *portiō* fr. **pr̥-ti-*) If *parvō* also belongs to this root, as is assumed by Curtius Grundz ⁵ 282, it must be traced back to **pr̥-l̥ō*, cp Skr. *jūryāmi* from rt *ǰer-* 'fall away, become fragile'.

Skr. *śūr-tá-* 'destroyed', Av *a-sar'-ta-* unhurt', root form *kr̥-*

Gr. *πρωΐξ -κος* 'a drop' cp *πραυνό-ν* (§ 292 p 233), *περκνό-ς* 'sprinkled', Skr *pr̥śni-ś* 'speckled, variegated'

Lat *rādīx* fr. **wrād-* (§ 168) **wr̥d-* . cp Gr. *ῥάδ-αμνο-ς* 'shoot, sprout Goth *waúrts* root' fr **wr̥d-*.

Lat. *crātēs* pl fr **gr̥t-* : cp. Gr *κάρτ-αλο-ς* basket' Goth *haúrds* 'door' OHG. *hurt* 'hurdle-work, hurdle' fr. **gr̥t-*.

Lat *crābrō* 'hornet' fr. **crās-rō* (§ 570) **kr̥s-*, beside which Lith *szirszŭ* etc. fr. **kr̥s-*, § 303.

Lat. *quartus* fr. **qetwr̥to-s*, Indg **qtur̥-to-* (beside Indg **qetur̥-to-* § 285).

Gr *ὕδ-ωρ* water' from **-r̥*, perhaps corresponding to Lat. *ūb-er* fr **-ar*, **-r̄* Cp. § 285 p 228

Indg *l̥*

pl̥- from rt *pel-* (*plē-*) 'fill' Skr. *pūr-ná-s* 'filled' imper. *pūr-dhí* 'fill', Gr. *πολλοί* 'many' fr. **πολ-νό-* (or *πολ-ϝό-*?), O.Ir. *lān* O.Cymr *laun* 'full'.

**wl̥-nā* f. 'wool' : Skr. *ūrnā*, Lat. *lāna* (cp. §§ 151 157. 168), Gr *οὖλο-ς* 'fleecy' fr. **ϝολνο-ς* (§ 204).

**ml̥dh-* : Skr. *mūrdh-án-* 'height, highest part, head', Gr. *βλωθ-ρό-ς* 'high-grown'.

**dl̥gho-* 'long' : Skr. *dīrghá-s* Av. *dar°ya-* O.Pers. *darga-*, Gr. *δολιχό-ς* (with enigmatical *ι*).

**u̯l̥-mi-s* 'ebullition' : Skr. *ūr-mí-ś* 'wave' (§ 157), Ags. *wielm wylm* 'ebullition, wave' prim. Germ **u̯alʒni-z*. To which OHG. OS. *wallan* 'to be agitated, boil up' prim. Germ. **u̯alnana-n* (§ 214), cp *wellan* 'to roll, move'.

Skr. *sthúnā-* 'post, stake' fr **sthūlnā-*, orig **stl̥-nā-*

Gr. Lesb *βόλλο-μαι* Att *βούλο-μαι* (beside Dor *δήλο-μαι*) 'I will, wish, desire' fr **gu̯l̥-no-*, rt *gel-* (§ 204)

Lat *lātu-s* 'carried' probably fr. **tl̥-to-s*, rt *tel-*

Lat. *clād-ēs* . to *per-cellō* fr. **-celdō*, part *-culsu-s* from **kl̥d + to-*, Gr Hom *ἔκλασσα* 'broke' *κλαδ-άσαι σεῖσαι* Hesych. Cp § 369

O Ir *blāith* 'tender, soft' fr **mlā-ti-s* prim. f **ml̥-ti-*, to *melim* 'I pound'; Cymr *blawd* 'meal' fr **ml̥-to-* On *bl-* fr *ml-* see § 212

The side by side existence of *ρω* and *ορ* in Gr and *rā* and *ar* in Lat may be compared with that of Gr *ρα* and *αρ*, Germ *ru* and *ur* fr Indg *ṛ* (§§ 292 299) Gr *ορ*, Lat *ar* fr. **ωρ*, **ār* were possibly shortened after the same principle as that which gave rise to Gr. part *ιεντ-* 'blowing' (indic *ἄημι*) and Lat *vent-u-s* fr **u̯ē-nt-* (§§ 611 612). *ὕδωρ* especially speaks in favour of this theory, for *ὕδωρ στόρνῡμι* = *ἀην· ἄϊντ-* and *λίκμ λιγνύς* (§§ 85 611).

Skr *gír* 'praise' fr **gīr-ś* **gṝ-s* loc pl. *gīršú* fr. **gṝ-su* and *púr* 'fixed place' fr **pār-ś* **pṝ-s* loc pl. *pūršú* fr. **pṝ-su* correspond to nouns like *jā-s* fr **gṝ̄-s* § 253 p 207. But between the nom sg *gír púr* and instr sg. *girá purá* nom. pl *gíras púras* (*gir- pur-* fr **gṛr-* **pṛl-*, § 290) there exists precisely the same relation as between nom sg. *dhíš* ('thought') *bhúš* ('earth') and instr. sg *dhiyá bhuvá* nom. pl. *dhíyas bhúvas*. This parallelism was inherited from the Indg. prim period (p 250).

It is remarkable that in Greek antesonantal *ορ*, *ολ* and anteconsonantal *ρω ορ*, *λω ολ* frequently stand to each other in the same relation as Skr *ir ur* and *īr ūr*, since one would expect *αρ αλ* as the representative of Indg. antesonantal *ṛr*,

$\underline{l}$ (§ 294). ἔ-πορ-ο-ν 'gave, brought' : πέ-πρω-ται. ἔ-τορ-ο-ν 'pierced' : τι-τρώ-σκω 'I master, injure, wound' (cp. Skr. *tur-á-* 'advancing; injured, wound' : *tūryāmi* 'I overpower' *prá-tūrti-ṣ* 'a mastering, combat'). ἔ-θορ-ο-ν 'leapt, sprang' : θρώ-σκω θόρ-νυμαι. ἔ-μολ-ο-ν 'went, came' : βλώ-σκω. βόλομαι 'I will, wish' : Lesb. βόλλομαι. πολ-ύ-ς 'much' (Skr. *purú-ṣ*) . πολλοί[1]). It may be inferred that the development of the vowel from short sonant liquid was influenced by the quality of the long vowel developed from $\bar{r}$, $\bar{l}$. Compare the transition of *θα-τό-ς and *δα-τό-ς to θε-τό-ς and δο-τό-ς through the influence of θη- and δω- (§ 109 c.). If this inference is right, there must once have stood beside πόλ-ι-ς 'city' (Skr. *purī purí-ṣ*, Lith *pìl-s*) an anteconsonantal πολ- or πλω- = Skr. *pūr-* (*pūr-bhíṣ* etc).

ABLAUT (VOWEL GRADATION)[2]).

§ 307. By ablaut or vowel gradation we understand such quantitative, qualitative and accentual differences of the sonantal element of a root- or suffix-syllable, as were not called forth by sound-laws which were in operation at the time of the individual development of the Indg languages, but had their origin either directly or indirectly in prim. Indg. differences. With them are further often also connected consonantal differences in the syllable containing the sonantal element The following, e g., stand in ablaut relation to one another: Lat. *da-tus* : *dō-num*; *s-iē-s* (O.Lat for *sīs*) · *s-ī-mus*; Gr. ἄγ-ω . στρατ-ᾱγ-ός (Ion. Att στρατ-ηγ-ός); λείπ-ειν : λοιπ-ός : λιπ-εῖν; ἄγ-ε-τε · ἄγ-ο-μεν, μη-τέρ-ες : μη-τρ-ός . μη-τρά-σι; Goth. *aúhs-in* : *aúhs-an-s* · *aúhs-n-ē* (loc sg., nom. pl, gen. pl. of *aúhsa* 'ox') : Skr. *pác-āmi* 'I cook' · *pak-tás* 'cooked' (difference of accentuation).

1) Hom. πουλύ-ς is probably to be explained from a supposed stem form *πολ̄- = Skr *pūrv-* (fem instr pl *pūrv-í-bhiṣ*) Indg *$p\underline{l}$-μ-, which regularly gave πουλ- just as οὖλο-ς 'whole' from *ὅλ$^{\text{F}}$ο-ος (§ 166) πουλ- and πολυ- became contaminated to πουλυ-.

2) The most important literature has been mentioned on p 31—32 footnote 2. To this may further be added Leskien Der Ablaut der Wurzelsilben im Litauischen, Leipzig 1884.

Rem. 1. Accordingly the difference, e g, between Gr. ἔ-γνω-ν ἔ-γνω-μεν and ἔ-γνο-ν γνό-ντες has nothing to do with ablaut; since γνω- became γνο- by a special Greek shortening, s. § 611; nor the contrast between Goth. þagkja 'I think' and þāhta 'I thought' (s. § 214 p. 181), nor that between OHG. ird-īn 'earthen' and erd-a 'earth' (s. § 67 p. 57) etc.

Rem. 2. Indg. long vowels, which from etymological considerations are shown to be the product arising from the contraction of two vowels (§§ 111—115), are rightly not put under ablaut as separate members. Cp. e g abl sg. *ekṷōd (Lat. equō) fr *ekṷo-a^d nom pl. *ekṷōs (Skr áśvās) fr *ekṷo-es (§ 115) beside nom. sg *ekṷo-s (Lat. equos) voc. sg. *ekṷe (Lat. eque) etc. Cp § 314

§ 308. ḷ and ṷ with a preceding or following vowel (aḷ, ḷa) stand, so far as relations of ablaut are concerned, on a level with consonant nasals and liquids The following root-syllables, e. g., correspond to each other:

bheiḍh-, bhoiḍh- (Gr *πειθ-ει, πι-ποιθε*) } { *bhendh-, bhondh-* (Goth *bind-iþ, band*)
bheuḍh-, bhouḍh- (Goth *biud-iþ, bauþ*) } { *derḱ-, dorḱ-* (Gr *δερκ-εται, δέ-δορκ-ε*)
sṷep-, sṷop- (O.Icel *sverf-n*, Lith *sãp-ua-s*) · *preḱ-, proḱ-* (Lat. *prec-or, proc-us*).

The sonants *i* and *u* appear in the place of ḷ and ṷ in the ablaut-grade, which is deprived of the vowels *e o*, just as sonant nasals and liquids in the place of the consonant.

bhidh- (Gr *ἔ-πιθ-ε*)	} {	*bhndh-* (Goth *bund-ans*)
bhudh- (Goth *bud-ans*)	} {	*dṛḱ-* (Gr *ἔ-δρακ-ε*)
sup- (Gr *ὑπ-νο-*)		*pṛḱ-* (Lat. *posco* fr. **pṛ(ḱ)skō*, § 288)

To the ablaut *bheiḍh- : bhoiḍh- . bhidh-, bhendh- : bhondh- : bhṷdh-, derḱ- : doiḱ- : dṛḱ-* corresponds the ablaut *pet- : pot- : pt-* (Gr. *πέτ-εται : ποτ-ᾶται : ἐ-πτ-ετο*) The only difference is that in the latter case the last grade does not form a syllable in itself. The last grade, in the case of roots like *bheṷ- ĝen-*, whose ablaut is exhibited as *bheṷ- : bhoṷ . bhu- bhṷ* and *ĝen- : ĝon- . ĝṇ- ĝn-*, may be both syllabic and non-syllabic, cp. Gr. *φύ-σις* beside *ὑπερφίαλος* fr. **ὑπερ-φϳ-ιαλος* (§ 166 p. 147), *γέ-γα-μεν* beside *γί-γν-εται*.

§ 309. We distinguish six ablaut-series. They all have one grade in which the vowel of the syllable has entirely disappeared. Representing this by 0, we have the following vowel-series:

1. *e*-series: 0, *e*, *o*, *ē*, *ō*
2. *ē*-series: 0, *ə*, *ē*, *ō*.
3. *ā*-series: 0, *ə*, *ā*, *ō*.
4. *ō*-series: 0, *ə*, *ō*.
5. *a*-series: 0, *a*, (*o*?), *ā*, *ō*
6 *o*-series: 0, *o*, *ō*

Many attempts have already been made (the most recent by Hubschmann Das idg Vocalsystem, 1885) to systematise these series morphologically, i. e to place together those phases of the different series, which belong to a definite morphological category, e g the root-syllable of participles formed with *-to-* or of the present indic. formed with the so-called thematic vowel A parallelism clearly exists in many cases E g part **d+tó-s* 'given' (Skr. *dēvá-tta-s* 'god-given') to **é-dō-m* 'I gave' (Skr *á-dā-m*) from rt *dō-*, as **i-tó-s* 'gone' (Skr *itá-s*) to **é-ei̯-m*, contracted **éi̯-m* 'I went' (Skr *áy-am*) from rt *ei̯-*. Or **ḱr̥-n-ú̯ti* 3 pl 'they sever, break' (Skr *śr̥-n-áti*) to *ḱr̥-né-mi* 1 sg (Skr *śr̥-ná-mi*) with present suffix *-ne-*, as **qi-neu̯-ú̯ti* 3 pl. 'they pile up' (Skr. *ci-no-áti*) to **qi-néu̯-mi* 1 sg (Skr *ci-nó-mi*) with present suffix *-neu̯-* On this principle, the three first series e. g have been parallelised in the following manner:

	Weak grade		Medium gr	Strong gr
e-series:	0	(*e*)	*e*	*o*
ē-series:	0	*ə*	*ē*	*ō*
ā-series:	0	*ə*	*ā*	*ō*,

from which the members *e* and *ō* of the *e*-series were excluded because parallels were not found to them (they appear e g. in Gr. *πα-τήρ* and *δώ-τωρ*, Dor *πώς* 'foot') in both the other series

The investigations instituted in this direction have not yet gone far enough to let us give a system of gradation-series completely worked out on this principle. And it is questionable whether we have a right to aim at the attainment of such a system at all, in the sense in which it is usual to do so. Several strata of formations, distinct in their time of origin, seem to overlie each other. In those which arose earlier, much

may have been obliterated by transference of forms before the new cause of gradation came into activity, and the later phonetic law which called new distinctions into being did not act in the same manner as the older law or laws. In this case it is from the outset impossible to expect that parallels can be found everywhere

§ 310. Clearness prevails most of all in the case of the weak grade, which is recognisable in each ablaut-series and assumes in most series a distinct twofold shape. It is due to a reduction of the vowel, which was caused through the chief accent lying on the following syllable. Cp. e. g. the participles, **d*+*tó-s* from rt. *dō-* and **i-tó-s* from rt. *ei̯-*, quoted in § 309. This connexion between accentuation and the phase of ablaut is best recognisable in Skr, since this language had most faithfully preserved the prim. Indg accentuation (§§ 669. 672).

What we denote as the 'weak' stem-form in the accidence, has weak grade vocalism

Rem Many phenomena of younger phases are instructive for the relation of *dr̥k-* to *pt-* etc. (§ 308) E g by the West Germ law of syncope OHG **horta* 'heard', **brannta* 'burnt' appear as *hōrta, branta,* whereas **zimbrta* 'built' (= Goth *timrida*) became **zimbr̥ta*, whence historic *zimbarta*, prim Germ **wal̥faz* 'wolf' became OHG *wolf*, whereas prim Germ **akraz* became **akr̥z*, whence OHG *ackar* (§§ 623 rem 1. 635)

Opposed to the weak grade we call the other phases of each series the strong grades and distinguish strong grade 1 2. etc. It is not known whether the strong grades, having the same number in the various series, always came into existence under the same conditions of accentuation etc.

What we denote as the 'strong' stem-form in the accidence, has strong grade vocalism.

1. *e*-series

§ 311. The scheme is:

Weak grade		Strong grade			
a. unaccented	b. secondary accented	1	2	3	4
0	(*e*)	*é*	*o*	*ḗ*	*ō*

This series appears most completely carried through in the nominal suffixes *-(t)er-* (*-[t]or-*), *-en-*, *-men-* and in the stem *ped-* 'foot':

-(t)r- *-(t)ṛ-*	*-(t)ṛr-*	*-(t)ér-*	*-(t)or-*	*-(t)ḗr-*	*-(t)ōr-*
-n- *-ṇ-*	*-ṇn-*	*-én-*	*-on-*	*-ḗn-*	*-ōn-*
pd-	*ped-*	*ped-*	*pod-*	*pēd-*	*pōd-*

Wg. a *-tr-*: Gr. gen sg. *πα-τρ-ός*, Skr. instr. sg. *pi-tr-á*, Goth. gen. sg. *fa-dr-s*. *-tṛ-*: loc pl. Gr *πα-τρά-σι*, Skr. *pi-tṛ́-ṣu*, Goth. dat. pl. *fa-dru-m* — Wg. b. *-ṛr-* : perhaps Skr. nom acc. *sthā-tár* (§ 285). — Str g 1. *-tér-* acc sg. Gr. *πα-τέρ-α*, Skr. *pi-tár-am*, Lith. *dùk-ter-į* O.Bulg. *dŭš-ter-e*. — Str.g. 2. *-tor-*: acc. sg. Gr. *φρᾰ́-τορ-α*, Skr. *svás-ār-am*, O Ir. *suar*, Goth *brō-þar svist-ar*. — Str g. 3 *-tēr-* nom sg. Gr *πα-τήρ δο-τήρ*, Skr. *pi-tā́ dā-tā́*, Lat *pa-ter* (§ 655, 4), O.Icel *faðer fadr*, Lith *duktẽ* O.Bulg *dŭšti* — Str g 4 *-tōr-* nom sg. Gr *φρᾱ́-τωρ δώ-τωρ*, Skr *bhrā́-tā dā́-tā*, Lat *da-tor* (§ 655, 4), O Ir. *suer* Lith. *ses-ů̃*.

Wg. a *-n-* Gr. gen sg. *ἀρ-ν-ός*, adj *νώνυ-μν-ο-ς*, Skr. gen. sg. *ukṣ-n-ás nā́-mn-as*, Lat. *car-n-is*, Goth gen. pl. *auhs-n-ē na-mn-ē*. *-ṇ-* Gr. loc pl *φρα-σί* (from *φρήν*), fem *πρό-φρα-σσα* (to *πρό-φρων*), neut. *ὀνύ-μα-τα*, Skr. loc. pl. *ukṣ-á-su nā́-ma-su*, Lat. *cōgnō-men-tu-m*, OIIG *hlin-mun-t* — Wg. b. *-ṇn-*: Skr. gen. sg. *bṛ́h-maṇ-as* (§ 231) — Str g 1 *-én-* acc. sg. Gr. *αὐχ-έν-α φρ-έν-α ποι μέν-α*, Skr *ukṣ-án-am arya-mán-am*, Goth loc. sg. *auhs-in*, Lith. acc sg *pẽ-men-į* — Str.g. 2. *-on-*: acc. sg Gr. *τέκτ-ον-α φρό-φρ-ον-α ἄκ-μον-α*, Skr *tákṣ-ān-am áś-mān-am*, Goth. *ah-man*. — Str g. 3 *-ēn-*: nom. sg. Gr. *αὐχ-ήν φρ-ήν ποι-μήν*, Skr *ukṣ-á*, *arya-má* O Icel *ux-e*. — Str.g. 4. *-ōn-*: nom. sg Armen *šun*, Gr. *τέκτ-ων πρό-φρ-ων ἄκ-μων*, Skr *tákṣ-ā áś-mā*, Lith *ak-mẽ̃*, O.Bulg *ka-my*; Gr acc. sg. *Κρονί-ων-α* nom. pl. *οὐρανί-ων-ες*, acc. sg Lat. *rati-ōn-em* Goth *raþj-ōn*, O.Bulg nom. pl. *gražd-ān-e* (§ 219 p. 187).

The change between *e* and *o* and between *ē* and *ō* seems

here (cp. the material collected together by Collitz in Bezzenberger's Beitr. X 34 ff.), as also frequently in other circumstances, to have been so regulated that *e* and *ē* originally stood in chief-accented syllables, *o* and *ō* in the next following syllable.[1])

Wg. a. *pd-*: Av. *fra-bd-a-* (*-bd-* fr. **-pd-* § 469, 2) 'the instep of the foot' — Wg. b *ped-* Gr. Lesb. Bœot. *πεδ-ά* (instr.) 'after, with' (cp Osthoff Zur Gesch. d. Perf. 574), *πεζό-ς*, gen. sg. Lat. *ped-is* Skr. *pad-ás* — Str.g. 1. *ped-* (whether it occurs, is uncertain). — Str g 2. *pod-* acc. sg Gr. *πόδ-α* Skr. *pád-am*, nom. pl Arm *ot-k'* (§ 330 rem), to which Lat. *tri-pod-āre* — Str g. 3. *pēd-* Lat nom. sg. *pēs*, perhaps also Lith. *ped-à* 'foot-print' — Str. g 4. *pōd-* Gr Dor *πώς*, Goth. *fōt-u-s*. — Umbr. *du-purs-us* 'bipedibus' either Str.g. 2 or 4, according as *u* is to be understood as *ŏ* or *ō*. Skr. nom. sg. *pāt* either Str.g. 3 or 4

Rem In the Indg prim language the simple form perhaps had in the nom sg **ped-*, acc sg **pēd-* (Lat *ped-em*), whereas the compounds (cp. Skr *aśtá-pāt*, Gr *ὀκτά-πους*, etc), and also the simple form, when in accent it entered into a close connexion with preceding words, had **-pōd-* and **-pod-* Then levellings in various directions took place[2])

For further information regarding these declensions with gradation see the accidence

§ 312. The weak grade

In formative syllables ending in an explosive or a spirant, the weak grade has only two forms, while four appear in those ending in *i̯*, *u̯*, nasal, liquid, since the unaccented as well as the secondary accented phase assumes two forms according as a sonant or a consonant follows:

1) Cp G Meyer in Kuhn's Ztschr XXIV 248, Mahlow Die langen Voc. 161, Fick Gott gel Anz. 1880 p. 421 ff, Moller Paul-Braune's Beitr VII 492 ff.

2) By this it is not implied that this change in the vowel quality is to be maintained for all monosyllabic gradating nouns. These nouns were not all created in the same period

	a unaccented	b secondary accented.
rt. *ped-*:	*pd-* (Av. *fra-bd-a-*)	*ped-* (Skr. gen *pad-ás*)
rt *ed-*	*d-* (Gr. *ἄρι-σ-το-ν* 'breakfast')	*ed-* (Skr 2 pl. imper. *at-tá*)
rt *sneygh-*	*snigh-* (Gr. *νιφα*)	*snigh-* (Gr. *νίφ-ει*)
rt. *leuq-*	*luq-* (Goth *lukans*)	*luq-* (Goth. *lūkan*)

	before sonants	before cons	before son.	before cons.
rt *bheu̯-*	*bhu̯-*	*bhu-*	*bhou̯-*	*bhū-*
rt. *gem-*	*gm-*	*gm̥-*	*gṃm-*	*gm̥-*
rt *ster-*:	*str-*	*st̥r-*	*st̥r̥r-*	*st̥r-*.

Examples for the three last named roots are:

Rt. *bheu̯-* 'become'. *bhu̯-*. Skt. *á-bhv-a-*, Gr. *ἐπιρϙίαλο-ς* fr. **ἐπι-ρ-ψί-αλο-ς* (§ 166), O.Bulg. *bě* fr **bu̯-ĕ* (§ 184). *bhu-*: Gr. *φύ-σι-ς*, Lat. *fu-tūru-s*. *bhou̯-*: Skr gen. sg *bhuv-ás*, Gr. *ἐφύην*. *bhū-*: Skr. *bhū-ti-* *bhū-man-*, Gr. *φῦ-μι*

Rt. *gem-* 'go'. *gm-*. Av 3. sg act. *ɣm-a-þ*, O Pers. 3. sg. mid. *a-gm-a-tá*. *gm̥-*: Skr *ga-tá-s*, Gr. *βα-τό-ς*, Lat. *in-uen-tu-s*. *gṃm-*: Skr. *gam-á-mi*, OHG. *kom-an* *gm̥-* Skr *á-gā-ta*, Gr. *ἐ-βᾱ-τε*.

Rt. *ster-* 'spread, strew' *str-*: Lat. *str-uere* *st̥r-*: Skr. *st̥r-tá-s*, Gr *στρα-τό-ς* *st̥r̥-*: Skr. pf. mid *ti-stir-é* *ti-stir-āná-s*, O.Bulg. 1. sg. pres *stĭr-ą* *st̥r̥-*. Skr *stīr-ná-s*, Gr. *στρω-τό-ς στόρνῡ-μι* (§ 611), Lat. *strātu-s*.

The parallelism between *-ī-*, *-ū-*, *-r̥̄-*, *-l̥̄-* etc. on the one hand and *-i̯*, *-u̯-*, *-m̥-*, *-r̥-* on the other is clearly seen e g. in such forms as Skr *bhū-š* 'world' gen. *bhuv-ás*, *bhrū-š* gen *bhruv-ás* Gr. *ὁ φρῡ-ς* gen. *ὀφρύ(ϝ)-ος* and Skr. *pū́r* fr **pūrš* (Indg **pl̥̄-s*) gen. *pur-ás* (Indg **pl̥̄-ós* or **pl̥̄-és*). *gō-šá-s* 'oxen gaining' (Indg **-sn̥̄-s*) gen *gō-šan-as* (Indg **-sn̥-ós* or **-sn̥-és*) etc. See §§ 253 306. Gr. *χρώς* also seems to be a noun of this kind, whose gen *χροός* in that case has taken the place of **χορ-ός* **χαρ-ός* (s. §§ 294. 306), further *(ὠμο-)βρώς* ('swallowing raw') = Skr. *(madhur-)gír* ('swallowing suddenly'), Indg. **gu̯r̥-s*; *-βρωτ-ος* a new formation like *χρωτ-ός*.

§ 313. That both phases of the weak grade — here as in all other ablaut-series — originated in the different degree of the stress-accent (§ 667, 3), is a probable result of Osthoff's investigation (Morph. Unt. IV).

The sound-form to which we have given the name of weak grade b., shows a less degree of weakening and regularly appears wherever a secondary stress remained upon the syllable. The phase a. originated whenever through any circumstances, connected with position in the sentence, the syllable lost its secondary accent and became accentless. Such circumstances are priority of another member of a compound, the prefixing or suffixing of a formative syllable etc

That position of a syllable at the beginning of a sentence or member of a sentence occasioned secondary accent, may be concluded from the numerous double forms as Av. *fra-bd-a-* and Skr. *pad-ás*, Av *haurva-fš-u-* 'the whole beast' (*-fš-* from **-ps-*, § 473) and *pasu-* Skr. *paš-ú-* 'beast' (Indg. **peḱ-ú-*); Skr. *á-bhv-a-* 'contrary to all existence, monstrous' and gen. *bhuv-ás*, *su-bhru-š* 'having a beautiful brow' and *bhrú-š* 'brow'; *gō-ghn-á-s* 'cow killer' and *ghan-á-s* 'destroyer'. *á-gr-u-š* and *gurú-š* (§ 290); Gr *πολύ-τλᾱς* and *τύλας* We may probably assume also that forms like **gua-* (Ved *gná-*, O.Ir gen sg. *mnā*), **k̑lutó-s* (Skr *śrutá-s*, Gr. *κλυτο-ς* etc), **stṛtó-s* (Skr. *stṛtá-s*, Gr *στρατό-ς*) beside **gᵘnᵘá-* (Ved *ganá-*, Boeot. *βανά*, O Icel. *kona*), **k̑lūtó-s* (OHG *hlūt*),[1] *stṛtó-s* (Gr *στρατο-ς*, Lat. *strātu-s*) originally had their position regularly in such combinations as **sá gná* 'this wife', **tóm k̑lutóm* 'this renowned man' (= *τὸν κλυτόν*) Naturally as soon as accentless and secondary accented forms were firmly established levelling took place, e. g Skr *prá-pada-m* 'point of the foot' *ánašta-paśu-š* 'he who loses nothing from his herd' *a-guru-š* 'not heavy' beside the more archaic Av *fra-bda- haurva-fšu-* Skr. *á-gru-š*

It is worth noticing how double forms have been often called into use for euphonic reasons and through the striving after etymological clearness. In forms like **peqtó-s* 'cooked' **peqtí-s* 'cooking' (Skr *paktá-s paktí-š*, Gr *πεπτό-ς πέψι-ς*, Lat. *coctu-s coctiō* from **quecto-s *quectiō* §§ 172 431 *a*), **speḱtó-s* 'spied' (Skr. *spaṣtá-s*, Lat *spertu-s*), a generalisation of the secondary accented form took place in the system of verbal forms belonging to one unity, since **pqtó-s *spḱtó-s* etc. had become obscure

by their modification; **pr̥tó-s* is however perhaps still represented by Gr. *ὁ-πτό-ς* with prothetic vowel. Of the double forms prim Ar. **z-dhí* and **az-dhí* 'be' (rt *es-*) Skr. generalised the second form in spite of *s-más s-thá s-tá* etc., since **dhí* from **zdhí* was too indistinct; from **azdhí* came regularly *ēdhí* (§ 591); the first form was retained by Iranian, Av. *z-dī*. If a combination of consonants preceded formative syllables ending in *i̯, u̯*, nasal or liquid, the antesonantal secondary accented form was often generalised. Thus we have **bhru-* beside **bhrū-* 'brow', but no **bhrṷ-* beside **bhruṷ-*, only **sruṷ-* not **srṷ-* beside **sru-* ('flow') (Skr *á-susruv-a-t*, Gr *ἐρρύη*), only **klu̯-*, not **kl̥u̯-* beside **kli-* ('lean') (Skr. *śi-śrīy-é*, Gr. Hom *κε-κλί-αται*). Compare further postconsonantal **-nṷ-n̥ti* in Skr *śak-nuv-ánti* Gr. *ἀγ-νύ-ασι* with Skr. *śak-nu-más* Gr. *ἀγ-νυ-μεν* and with Skr. *ci-nv-ánti*, the Skr gen sg *várt-man-as* (prim. f. **u̯ert-mṇ-os* or *-es*) with the loc. pl *várt-ma-su* (prim f. **u̯ert-mṇ-su*) and the gen. sg. *ná-mn-as* Cf. §§ 117. 120 153. 159.

Rem The question as to how the two phases of the weak grade developed phonetically from the forms of the strong grade, has received different answers and is even now not ripe for settlement We may refer to the latest discussions by Hubschmann loc cit p 181 ff and Bremer Paul-Braune's Beitr XI 264 267

Specially deserving of attention is the circumstance that we may very often be in doubt as to whether we should refer a secondary accented form of the weak grade of a root to the *e-* or *e*-series, e g *pl̥-* 'fill' (§ 306) *gu-* 'live' (§ 37) to *pel- gel-*, or to *plē-* (Lat *ple-tu-s*, Skr. *pra-tá-s*) *gu̯ē-* (Gr *ζῆ* from **ϝιήτι*, Av *jyā-tu-š* 'life') just as the optative suffix *-i-* stands to the strong form *-i̯e-* Cp Hubschmann loc. cit

§ 314. The strong grade

On the grades *e* and *o* there is nothing to add here to the observations in § 311

The phases *ē* and *ō* present difficulties in so far as in the case of many forms with *ē* and *ō* in the separate languages the question arises whether they first obtained their long vowel in the period after the Indg. prim. period had broken up, or whether the long vowel was inherited with the rest of the ablaut.

Forms with such an old *ē ō* were cited in § 311. Others are nom. Gr. *Ζεύς* from **di̯ēu̯s* (§ 611) Skr. *dyāúš* 'sky'; Lat.

vōx 'voice' Skr. *vāk* 'speech'; Gr. *δυς-μενής* 'evil disposed' Skr. *dur-manās* 'downcast'; part. perf. act. Gr. *εἰδ-ώς* from **εἰδ-ϝώς* Av. (Gāþ.) *vīd-vå*. Also old inherited forms or at any rate modelled on old inherited types were Gr. *φώρ κλώψ σκώψ*, Lat. *fūr*; with these go as denominatives the Gr. verbs *κλωπάομαι τρωπάω πωτάομαι* etc.

Rem Observe that the *ē* of forms of the weak perf. stem as Lat *sēdimus* Goth. *sētum* from rt. *sed-* 'sit' have nothing to do with the *ē* of the strong grade. *ē* arose here from *ĕ* by lengthening, *sēd-* from **se-zd-* = orig **se-s(e)d-* See §§ 590. 591. 594 and the accidence. The same reduplicated root-form was apparently at the basis of many non-perfect verbal forms and noun formations which for the most part were formed later from the perfect Thus Lith *sėdmi sėdžiu* O Bulg *sěžda* 'I sit' Lat. *sēd-ēs sēd-āre* to perf Lat *sed-imus*, Armen *mit* 'sense' Gr *μηδομαι* 'I devise' OHG *māza* 'a measure' to perf Goth *mēt-um* O.Ir *ro mēd-ar* 'judicavi' from rt *med-* (Gr *μεδω* Goth *mitu* Lat. *modu-s* etc.), Lat. *tēgula* Lith. *stėgiu* 'I thatch a roof', rt *steg-*; Goth *anda-nēms* 'pleasant', rt *nem-*; etc How far the assumption of such origin for the *ē* should extend, is certainly still doubtful Cp the author, Morph Unt. IV 414, Osthoff Zur Gesch d Perf 82 f 110 f

We have further to distinguish according to § 307 rem 2 the *ē* and *ō* which have arisen by contraction Especially to be mentioned here is the *ē* in the forms of roots beginning with a vowel, as *ed-* 'eat' *es* 'be' etc In the perf stem *ed-* (Lat *ēd-imus* Skr *ād-imá* etc) *ē* arose by contraction of the *e* of the root with the *e* of the reduplication, in the imperf stem *ed-* (Skr. *ád-am* by contraction of the *e* of the root with the augment *e* (§ 114). From this now originated to some extent a new root-form *ēd-*, from which came Lat *ēs-t ēs-u-s*, Lith *ėd-mi čėd-i-s*, Goth *iz-ēta* etc, and which called into being Gr. *ἐδ-ωδ-ή* after the analogy of the ablaut *ē*-series Cp author loc cit, Osthoff loc cit 122 ff 148 ff

On the other hand it must remain quite undecided if many other *ē* and *ō* forms were proper ablaut vowels of the *ē*-series i e. whether directly inherited or introduced by analogy. Besides sporadic forms as Gr *ἧπαρ* Av *yakarᵉ* (beside Lat *jecur* Skr *yakṛt*) 'liver' the Skr Vṛddhi-vowels come especially into consideration It is quite conceivable that e g the *s*-aorists *á-bhāut-sam* (rt *bheudh-*) *á-drāk-šam* from **a-dārk-šam* § 259 (rt. *derḱ-*) *á-jāi-šam* (rt *gei-*) *á-bhār-šam* (rt *bher-*) represent an Indg. aorist formation with long root-vowel; cp. Lat *i ēxī tēxī*, O Bulg *nėsŭ rėchŭ basŭ* and observe that in Gr *ἔνεικα ἔτεμα ἔτειμα ἔχεαι* the *s* of the root syllable may have been shortened from *ē* (§ 611) Cp. the accidence

2. ē-series.

§ 315. The scheme is:

Weak grade			Strong grade	
a unaccented		b. secondary accented	1.	2
0		ə	ē	ō,

e. g. from rt *dhē-* 'put, place'·

dh-	*dhə-*	*dhē*	*dhō-*

Wg. a. *dh-* · Skr 1. pl. *da-dh-más*, O.Bulg 1 sg. *dežda* from **de-d-ą* (§ 147), Lith 3 sg. *dėsti* i e **de-d+ti* (§§ 544. 552). — Wg b *dhə-* : Skr. part *-dhi-ta-s hi-tá-s*, 3. sg aor. *á-dhi-ta*, Gr. *θε-τό-ς ἐ-θε-το*, Lat. *crēde-tu-s* from **crēda-tu-s* § 109 d (Skr *śrád-dhita-m* neut 'trusted, believed'). — Str g 1 *dhē-* : Gr. *τί-θη-μι ἀνά-θη-μα*, Skr *dá-dhā-mi dhá-man-* neut 'seat, place', Goth. *ga-dē-þs* OHG *tā-t* OHG part *gi-tān*, inf Lith. *dė-ti* O.Bulg. *dě-ti*, Lith fut *dė-siu*, O.Bulg. aor *dě-chŭ* · Str.g. 2 *dhō-* : Gr *θω-μό-ς* 'heap', Goth *dōms* 'judgment', OHG. *tuot* 'does' orig **dhō-ję-ti*

From root *sē-* 'throw, sow' — Wg. a *sə-* · Skr. *s-trí* 'woman'? (cp. Lat *sa-tor* 'begetter'). — Wg b *sə-* Lat. *sa-tu-s*, Gr. *ἑ-τό-ς*, *ἀγ-έ-τητ ἑ-σαν* — Str g. 1. *sē-* Gr. *ἵ-η-μι η-μα*, Lat. *sē-men*, O Ir. *sī-l* 'seed', Goth. *mana-sē-þs* 'mankind, world' OHG *sāt* 'sowing', inf Goth *saian* OHG. *sāan* (§ 142), pres Lith *sėju* O.Bulg. *sějǫ*, Lith. pl. *sė-men-s* O.Bulg. *sě-mę* 'seed, sowing' — Str g 2 *sō-* : perf. Gr Dor. *ἀγ-έ-ω-κα ἀν-ἑ-ω-σθαι* Goth *saí-sō*

From rt. *lēd-* 'let' . -- Wg b *ləd-* Lat *lassu-s*, Goth. *lats* OHG. *laz* 'weary, lazy' — Str g 1 *lēd-* : Goth *lētan* 'let' — Str.g. 2. *lōd-* . Goth. perf *laí-lōt*

The Gr ε (Wg. b.) in *θε-τό-ς*, *ἑ-τό-ς* etc. had taken the place of regular *α*, see § 109 c.

Skr. *da-dh-más* bears the same relation to *dhi-švá* (imper., cp. Gr. *θέ-ο*) as Av *haurva-fš-u-* does to *pas-u-* Skr *paś-ú-* (§ 313 p. 251), that is, the unaccented weak grade phase in *da-dh-más* was occasioned by the prefixing of the reduplicated syllable Greek *τί-θε-μεν* was a new formation for **τι-θ-μεν*.

Other examples of this ablaut-series in Hübschmann loc. cit. 71 ff.

3. ā-series

§ 316. The scheme is:

Weak grade			Strong grade	
a unaccented	b secondary accented		1	2
0	ə		ā	ō.

From rt *bhā-* 'speak': — Wg. b. Gr. *φα-μέν*, Lat. *fa-teor*. — Str.g. 1 Gr. *φᾱ-μί*, Lat. *fā-ma fā-bula* (Armen. *ba-n* 'λόγος' here or to wg b ?) — Str.g. 2. Gr *φω-νή*

From rt *stā-* 'stand': — Wg a *st-* : Skr weak stem of the part. perf. act *ta-sth-úš-* (e g. fem *tasthúšī*), *savyē-šthar-* '(the warrior) who stands on the left (of the charioteer)' Av. *raϑaē-štar-* 'standing on the war-chariot, warrior' from **-sth+tar-*. — Wg. b *stə-* : Skr. 3 sg aor. *á-sthi-ta*, part *sthi-tá-s*, *sthí-ti-š* 'a standing', Gr *στα-τό-ς στά-σι-ς στα-τήρ*, Lat *sta-tu-s sta-tiō*, Goth. *staþs* 'stead, place', Lith. *sta-taũ* 'I place', pl. *stā-klės* 'loom', O.Bulg. *sto-jǫ* 'I stand'. — Str. g. 1. *stā-* : Skr aor. *á-sthā-m*, *sthā́-man-* 'standing-place, strength', Gr. *ἵ-στη-μι ἔ-στη-ν στή-μων*, Lat *stā-men Stā-tor*, O.Ir *-tan* 'am' from **stā-n̥ō*, Goth. *stō-ma* 'basis, substance' *stōls* 'stool, seat', Lith. *pa-stó-ju* 'I become something' *sto-mů̃* 'stature', O.Bulg. *sta-jǫ* 'I stand'. — Str.g. 2. *stō-* cannot be established with certainty, it may be represented by Skr. perf. 3. sg. *ta-sthāú*

Skr. *savyē-šthar-* Gr. *στα-τήρ* = Av *haurva-fš-u-* : Skr. *paš-ú-* (§ 313 p. 251)

Other examples of this ablaut-series in Hübschmann loc cit. 91 ff.

4. ō-series.

§ 317. The scheme is·

Weak grade		Strong grade
a. unaccented	b. secondary accented	
0	ə	ō.

From rt. *dō-* 'give' : — Wg. a. *d-* : Skr. *dēvá-t-ta-* 'god-given' *bhága-t-ti-ṣ* 'gift of fortune' part *da-t-tá-s* 1. pl. pres. *da-d-más* 3. pl. perf. *da-d-úr*, Lat. *de-d-ī* probably = Skr. *da-d-ĕ*, 2. pl. Lith. *dŭste* from **dŭ-d+te* O.Bulg. *da-s-te* from **dā-d+te* 3. pl. *da-d-ęti*. Wg. b. *də-* · Skr *dí-ti-š* 'possession' 3. sg. aor. *á-di-ta*, Armen. *ta-mĕ* 'damus', Gr *δά-νος*, *δο-τό-ς* *δό-σι-ς* *δο-τήρ* *ἔ-δο-το*, Lat. *da-tu-s da-tor da-mus*, Lith part perf. act. *dā-vęs*. — Str.g *dō-* : Skr. *dá-dā-mi á-dā-m da-dāú*, Armen. *e-tu* 'I gave' *tu-r* 'gift', Gr. *δί-δω-μι δώ-σω δω̃-ρο-ν δω̃-τι-ς*, Lat. *dō-nu-m dōs*, inf. Lith. *dů-ti* O.Bulg. *da-ti*, O.Bulg. *da-rŭ* 'gift'

From rt *pō-* 'drink' : — Wg b. *pə-* Gr. *πο-το-ν πό-σι-ς πο-τήριο-ν* — Str.g. *pō-* . Skr. *pā-tár-* 'drinker', Gr *πω̃-μα πέ-πω-κα*, Lat. *pō-tor pō-culu-m*

Gr *o* (wg b.) in *δο-τό-ς πο-τό-ν* etc had taken the place of regular *a*, the latter is preserved in *δά-νος* See § 109 c

Skr. *dēvá-tta- bhága-tti- da-dmás* to Gr. *δο-τό-ς* Lat. *da-tu-s* Skr *dí-ti-š* like Av *haurva-fš-u-* to Skr *paš-ú-* (§ 313 p 251).

Other examples of this ablaut-series in Hübschmann loc. cit. 99 ff.

5 *a*-series

§ 318. The scheme is:

Weak grade		Strong grade	
a. unaccented	b. secondary accented	1.	2.
0	(*a*)	*á*	*ā*

From rt. *aĝ-* 'drive, lead' — Wg a. *ĝ-* : Skr. *pári-j-man-* 'wandering about' *j-mán-* 'path'; here also Gr *ὀ-γ-μο-ς* 'path' with prothetic *ὀ-* (as in *ὀ-πτό-ς*, see p. 252)? — Wg b. *aĝ-* : Skr. *aj-á-s* 'driver' = Gr. *ἀγ-ό-ς*, Skr *aj-irá-s* 'quick' = Lat. *ag-ili-s* (with transition into the *i*-declension), Skr. pass. *aj-yá-tĕ*, Gr. part. *ἐπ-ακ-τό-ς*, — Str.g. 1. *aĝ-* : Skr. *ájām*, Armen. *ac-em*, Gr. *ἄγ-ω*, Lat. *ag-ō*, O.Ir *ag-aim*, O.Icel. inf. *ak-a*. — Str.g. 2. Skr. *ājí-ṣ* 'a race', Gr. *στρατ-ηγό-ς*, Lat. *amb-āg-ēs*

From rt. *bhag-* 'allot, enjoy, eat' : — Wg a. *bhg-* : Skr. perf. mid *bhēj-é*, an irregular transformation (see the accidence) of

original **bhe-bhg-*. — Wg. b. *bhag-* : Skr. *bhak-tá-m* 'portion, food', Gr. *φαγ-εῖν* 'to eat' — Str.g. 1. *bhag-* : Skr. *bháj-āmi* 'I allot, enjoy' (in case this had not taken the place of **bhajāmi*, if so, it had wg. b.) *bhága-s* 'distributer, giver of blessings', Av. *baya-* 'god', O.Bulg. *bogŭ* 'god'. — Str.g. 2. *bhāg-* : Skr. perf. *ba-bháj-a, bhāg-á-s* 'share, lot'.

From rt. *g̑aĝ-* 'honour' : — Wg a. *iĝ-* : Skr. part. *iš-ṭá-s, ǰtv-íj-* 'sacrificing at the regular time' — Str g. 1. *g̑aĝ-* : Skr. *yáj-āmi*, Gr. *ἄζομαι ἅγος*; here doubtless also, notwithstanding the suffixal accentuation, Skr. *yaj-ñá-s* Gr. *ἁγ-νό-ς* (since we should rather expect *īĝ-* as wg. b.). — Str g 2. *g̑āĝ-* : Skr *atι-yājá-s* 'honouring exceedingly' causat *yājáyāmi*.

From rt *daų-* 'burn'. — Wg. a. *du-* (*dų-*) : Skr. *du-nó-ti* 'burns, puts to grief'. — Wg. b *dū-* *duų-* : Skr *dū-ná-s* 'burnt, tortured', Gr *δύ(Ϝ)-η* 'woe, pain' — Str.g. 1. *daų-* : Skr. *dav-a-s* 'fire-brand', Gr. *δαίω* (from **δαϝ-γω*) 'I light up' *δᾳός* 'fire-brand, torch' — Str g 2. *daų-* · Skr *dav-á-s* 'fire-brand', Gr perf. *δέ-δη-ε, δέδᾰϝ-το-ν δήϊο-ν* (*πνῳ*)

From rt. *aidh-* 'burn' : — Wg. a. *idh-* : Skr. part *iddhá-s* 'kindled, pure' *idh-má-s* 'fire-wood', Gr *ἰθ-αρό-ς* 'serene, pure'. — Wg b *īdh-* : Skr. *īdh-r-íya-* 'belonging to the serene sky', Lat. pl *id-ūs* scil. *noctēs* 'the clear nights', OHG. *īt-al* 'pure, clear'. — Str.g 1 *aidh-* : Skr *édhas-* 'fire wood', Gr. *αἴθω* 'I kindle', Lat *aestus aestas*, O Ir *aed* 'fire', OHG *eit* 'rogus, ignis'.

Skr instr sg. fem *nas-á* nom du fem *nás-ā* Ags. *næs-dyrlu* ('nostrils') OHG *nasa* Lat *nār-ēs* Lith *nós-ι-s* etc., proves the existence of an Indg. noun nom sg. **nás(-s)* acc. sg. **nás-m* (str.g. 2), gen sg **nas-ós -és* (wg. b.) 'nose'.

Other examples in Hubschmann loc. cit 114 ff.

An unmistakable parallelism exists with the *e*-series. Observe especially also the forms of the nominal suffixes *-ā-* : *-a-* = *-o-* : *-e-*, e. g. acc sg **eḱų̄ā-m* (Skr. *áśvām*, Lat. *equam*) : voc. **eḱų̄a* (Skr. *ámba*, Gr. *κύμᾳ*, O Bulg *ženo*) = acc. sg. **eḱų̄o-m* (Skr. *áśva-m*, Lat. *equo-m*) : voc. **eḱ ų̄e* (Lat *eque*, Gr. *ἵππε*).

It still of course remains questionable, how the *o* is to be explained which frequently occurs in this ablaut-series, e. g.

Gr. *κόσμο-ς* 'ornament' beside *κέ-κασ-ται* 'is excellent' (Skr. 3. pl. perf. *śā-śad-úr*). See Osthoff in Hübschmann loc. cit. 190 f.

Rem It seems to me hardly possible to carry out the hypothesis, indicated by Osthoff loc. cit 191. Cp e. g. the feminine suffix *-ā-* . *-ā-*.

6. *o*-series.

§ 319. The scheme is:

Weak grade		Strong grade	
a. unaccented	b. secondary accented	1.	2.
0?	(*o*)	*ó*	*ō*.

From rt. *oq-* 'see': — Wg. b. and str.g 1 *oq-*: Gr. *ὀπτέο-ν ὄψι-ς ὄψομαι ὄμμα*, Lat. *oc-ulu-s*, Lith. *akì-s* O Bulg. *oko* 'eye'. — Str.g. 2: *ōq-*: Gr. *ὄπ-ωπ-ε ὠψ*

From root *od-* 'smell': — Wg. b. and str.g. 1. *od-*: Gr. *ὄζει ὀδμή*, Lat. *od-or ol-ō ol-eō*. — Str.g. 2. *ōd-*: *ὄδ-ωδ-ε εὐ-ώδης*, Lith. *ǘdžiu* 'I smell (something)'.

From rt. *bhod-* or *bhodh-* 'sting, prick, dig': — Wg. b. *bhod(h)-*: Lat. *fossu-s fossa* — Wg b. or str g. 1 *bhod(h)-*· Lat *fodiō*, O.Bulg. *bodą* 'I sting', Lith *badaũ* 'I prick'; to which also Gr. *βόθ-ρο-ς βόθ-ῡνο-ς* 'ditch', in case we may assume that *β* had taken the place of *π* after the analogy of *βαθύ-ς βένθος* (the root would then certainly be *bhodh-*) — Str g. 2 *bhōd(h)-*: Lat. *fōdī*, O.Bulg. *basŭ* aor. (cp § 314 rem p 253), *badają* 'I sting'.

Wg a. would exist in Gr. *ἀντι-χρύ* 'right opposite, straight on', wg b. in the form *ἀντι-χρύ*, if this adverb is really related to *ἀντι-χρούω* 'I push back, stop' and this latter belongs to the *o*-series (cp. Osthoff Morph Unt IV 267 f 345).

Other examples in Osthoff loc cit. 343 ff. and in Hubschmann loc. cit. 167 ff.

EXPLOSIVES

§ 320. The so-called stop-consonants are in reality glides, implosive and explosive The transition does not take place between two sounding elements, but between a sound and a

moment of absence of sound; it is of secondary importance that the mediae are mostly pronounced 'voiced'. If we regard language as a genetic product, the moment of the absence of sound is the material part in explosives which corresponds to the nucleus of the other elements of language. But it can of course only be heard by observing the implosive and explosive glides, and these are of paramount importance for the comprehension of language as an acoustic phenomenon. At all events the names stop-sound and explosive-sound only imperfectly indicate the nature of these elements of language. Cp. Flodström Bezzenberger's Beitr. VIII 1 ff.[1]).

§ 321. We consider the history of the Indg. explosives from two points of view, in as much as we ask ourselves the questions: what has been their fate as regards their place of articulation and what as regards their form of articulation?

According to the place of articulation we have to distinguish four classes of Indg explosives:

1 Labials, more accurately bilabial or labio-labial (*p*-sounds). stop between the upper and lower lip;

2 Dentals (*t*-sounds): stop through articulation of the fore part of the tongue against the inner wall of the upper teeth or against their sockets;

3 Palatals (*ḱ*-sounds). stop through articulation of the middle part of the back of the tongue against the back part of the hard palate, cp. say the *k* in English *kid*;

4. Velars (*q*-sounds) stop through articulation of the hind part of the back of the tongue against the soft palate (velum palatinum), cp. say the *k* in Mod.HG. *kunst*.

Rem 1. Some use the term gutturals instead of velars We avoid this name because it is apt to give rise to a confusion of this class of consonants with the palatals (3), since these are likewise often called gutturals Many call classes 2 and 3 the two guttural series' of the Indg primitive language

Rem 2. In writing the Indg prim forms we employ *ḱ*, *ḱh*, *q*, *gh* only when we leave it undecided whether the explosive had a palatal or velar articulation, e. g. rt *kneigh-* § 423.

1) See now also Sievers Phonet.[5] 33 ff.

These prim. Indg. sounds often left their old place of articulation in the development of the separate languages. The sphere of articulation, into which the sound was transferred, was either one which had already from of old been taken up with the production of explosives, e g Lat. *quīnque* O.Ir. *cōic* 'five' fr. Indg **penqe* (transition of *p-* to a velar, see §§ 336 339), or was a new one. To these new places of articulation belong:

the labio-dental position. articulation of the lower lip against the upper teeth, e. g. OHG. labio-dental *f* from bilabial *f* from Indg. *p* (§ 342);

the interdental: the edge of the tongue stops up the fissure between the two rows of teeth, e g Gr. spirant *θ* (*p̄*) from Indg. *dh* (§§ 365 495);

the cerebral or cacuminal: the tip of the tongue is turned up and drawn back and articulates against the highest part of the dome of the palate, e. g. Skr. *ṭ ḍ ḍh* from Indg. *t d dh* (§§ 352. 355 358)

Rem 3 Some finer distinctions, e g between postdental and supradental sounds (Sievers Phonet [5] 54 ff), need not be considered here

§ 322. According to the form of articulation we must likewise distinguish four classes.

First of all comes into consideration the difference which calls for the division into tenues and mediae Its characteristic feature is the greater or less tension to which the parts of the mouth are put in the formation of explosives, e g. a more energetic closing and opening of the lips takes place with *p* than with *b*. Hence the names fortis and lenis are also used instead of tenuis and media.

The mediae may be produced with or without voice (§ 16). In the prim Indg period they were probably voiced throughout and remained so almost everywhere, where they did not pass into fortes.

The Indg. tenues and mediae were pronounced both with and without aspiration. The aspiration is indicated by placing an *h* after the respective sound: *th, bh* etc.

In the Indg. primitive period there accordingly existed:

1. unaspirated tenues, e. g. *t*;
2. unaspirated voiced mediae, e. g. *d*;
3. aspirated tenues, e. g. *th*;
4. aspirated voiced mediae, e. g. *dh*.

In the developments of the separate languages the form of articulation suffered numerous changes, to which the name sound-shifting has been given. These changes partly happened in such a manner that the result of the change represents another of the forms of articulation belonging to this class which had been handed down from the Indg. prim. language, e. g. Indg. *dh* became *d* in Iranian, Keltic and Baltic-Slavonic, and *th* in Greek (§§ 481. 495. 524. 542. 549). But in the various stages of the separate developments we also meet with other kinds of sounds in the place of the Indg. explosives, viz.:

affricatae i. e. explosives with a following homorganic spirant, e. g. Arm. *c* from Indg. *ĝ* (§§ 409. 484), HG. *pf*, *z* (i. e. *ts*), *ch* (i. e. *hχ*) from Indg. *b*, *d*, *ĝ* *g* (§ 533);

spirants (fricatives), e. g. Germanic *f* from Indg. *p* (§ 527 ff);

h i e. voiceless vowel (§ 16), e. g. HG. *h* from Indg. *k̂*, *q* (§ 529);

consonantal vowels, e. g. Armen. *-aur-* from *-atr-* (§§ 360. 483), M Cymr. *seith* = Ir. *secht* 'septem' (§ 339);

long vowels as representatives of original short vowel + explosive, e. g. O.Ir *ēn* 'bird' from (O Bret.) *etn* (§ 518);

nasals e. g. Lat. *mn* from Indg. *pn* (§ 500);

liquids, e. g Lat. *l* from *d* (§ 369)

The Indg. sound also often entirely disappeared, e. g. *p* in Keltic (§ 339)

Lastly it may be pointed out that the explosive, after it had become a sound of another kind, not rarely became again an explosive later, e. g. Indg. **rudhró-* 'red' (Gr. *ἐρυθρό-ς*) became Lat. *rubro-*, the combination *-dhr-* having passed through the stages *-thr-*, *-þr-*, *-fr-*, *-br-* (§ 509). It thus happened

sometimes that the prim. Indg. form and place of articulation were reached again, e. g. in OHG. *fater* 'father', whose *t* represents Indg. *t* (Skr. *pitá* Gr. *πατήρ* etc.), which had become *t* after having passed through the various stages *þ, đ, d* (§ 528 ff.).

§ 323. The system of the Indg. explosives was accordingly the following:

forms of articulation	Places of articulation			
		linguo-palatals		
	labial	dental	palatal	velar
ten	*p*	*t*	*k̂*	*q*
voic. med.	*b*	*d*	*ĝ*	*g*
ten. asp.	*ph*	*th*	*k̂h*	*qh*
voic. med asp	*bh*	*dh*	*ĝh*	*gh*

We now consider the history of these explosive sounds singly, beginning first of all with their places of articulation. We shall not treat the tenues aspiratae until section 2. (B, §§ 475. 553). These sounds seem to have been comparatively rare in the prim. Indg period and present no special peculiarities in their place of articulation as compared with the other explosives.

A. THE EXPLOSIVES ACCORDING TO THEIR PLACE OF ARTICULATION.

1. Labial explosives.

Indg. primitive period.

§ 324. Tenuis *p*. **pə-tér-* 'father' : Skr *pitár-* Armen *hair* Gr. *πατήρ* Lat. *pater* O.Ir. *athir* Goth. *fadar*. **pro* 'fore, before' : Skr. *pra-* Gr. *πρό* Lat. *prōd prō* O.Ir. *ro* Lith. *pra-* O.Bulg. *pro-* Rt. *sṷep-* 'sleep' : Skr. *svápiti* 'sleeps' *svápna-s* 'sleep, dream', Armen. *k̄un* (gen. *k̄noy*) 'sleep' (*k̄-* from *sṷ-*, see

§ 162), Gr. *ὕπνο-ς* 'sleep', Lat. *sopor somnu-s*, O.Ir. *suan* 'sleep' (§ 339 rem.), Ags. *swefan* 'to sleep' O.Icel. *svefn* 'sleep', Lith. *sãpna-s* 'dream' O.Bulg. *sŭpati* 'to sleep' *sŭnŭ* 'sleep'. **sérpō* 'I creep, crawl' : Skr. *sárpāmi* Gr. *ἕρπω* Lat. *serpō*. Rt. *spek-* 'spy': Skr. *spáś-* 'spy, watchman', Lat. *cōn-spicio au-spex*, OHG. *spehōn* 'to spy'.

Suffixal elements with *p* seem not to have existed in the prim. Indg. period, if we must not put *p* here in certain cases where it is usually regarded as 'root-determinative', e. g. *sthāp-áyāmi* 'I cause to stand, erect' OHG. *stabēn* 'to be stiff' *stab* 'staff', from the root *stā-*.

§ 325. Media *b*. This sound occurred more rarely in the Indg prim. period than any of the other explosives. **pib-* or perhaps **bib-* 'drink'. Skr *píbāmi* O Ir *ebaim* (prim Kelt. **pibō*, § 339) Lat. *bibō* 'I drink', possibly a reduplicated form; its relation to the root *pō-* with the same meaning (§ 317) is not clear (for an uncertain conjecture see Osthoff Morph. Unt. IV 43). Rt. *lāb-*: Skr. *rámbatē lámbatē* 'hangs down loosely, sinks down', Lat. *lābitur* Rt *bar- bal-* (cp. § 282 on *ger- gel-*). Skr. *balbalā-karōmi* 'I stammer', Gr. *βάρβαρο-ς*, Lat. *balbus balbūtire*. **-bd-*, unaccented weak grade form to *ped-* 'foot' (§§ 311. 469, 2): Skr. *upa-bd-á-* 'a stamping, trampling', Gr. *ἐπί-βδ-αι* 'day after the festival' (cp. *πέδα* 'on foot, next afterwards, after', Armen. *het yet* 'behind, after, with'). Root-form *dheubh-*. O.Ir. *fu-domain* (compar. *fu-dumnu*) Cymr *dwfn* 'deep' (prim. Kelt *-bn-*, § 520), Goth. *diups* 'deep' MHG *tumpfel* 'pool', Lith. *dubùs* 'deep, hollow' *dumburỹs* 'a hole in the ground filled with water' *daubà* 'ravine, defile' O Bulg. *dŭbrī* 'dale, ravine'; beside which *dheup-* in Ags. *dyfan* 'to dive' OHG *tobal* 'a hollow in a forest', O.Bulg. *duplĭ* 'hollow' (§ 221 p. 188 f § 469, 7). Cp. §§ 328. 331. 334. 337. 340. 343. 346

b seems not to exist in suffixal elements.

§ 326. Media asp *bh*. **bhérō* 'I bear, carry' : Skr. *bhárāmi* Armen. *berem* Gr. *φέρω* Lat *ferō* O.Ir. *berim* Goth. *baira* O.Bulg. *berą*. **bhrū- *bhruu-* 'eye brow' (§ 312) : Skr. *bhrú-ś* Gr. *ὀφρῦ-ς* Mid.Ir. gen. du. *brūad* OHG. *brāwa* Lith. *bruv-i-s*

O.Bulg. *brŭv-ĭ*. **nébhos* n. 'cloud, atmosphere' : Skr. *nábhas* Gr. *νέφος* Lith. *debes-ì-s* (with unexplained *d-* for *n-*) O.Bulg. *nebo*, cp. also Gr *νεφέλη* Lat. *nebula* O.Ir. *nēl* (fr. **neblo-*) OHG. *nebul* 'cloud, fog'. **ǧombho-s* : Skr. *jámbha-s* 'tooth', Gr. *γόμφος* 'tooth', OHG. *chamb* 'comb', Lith. *žamba* 'mouth' O.Bulg. *zǫbŭ* 'tooth'.

Formative suffix of noun stems *-bho-* : Skr. *vṛṣa-bhá-s ṛṣa-bhá-s* 'bull' Gr. *ἔλα-φο-ς* 'stag' *ἔρι-φο-ς* 'buck'. *-bh-* in case suffixes: Skr. instr. pl. *-bhiš* etc., Armen instr sg. *-b* instr. pl. *-bk̆*, Gr. *-φι(ν)*, Lat. *-bus*, *ti-bī nō-bīs*, O.Ir. dat. pl. *-b*, O.Bulg. *te-bě* 'tibi'.

Aryan.

§ 327. Indg. *p*. Skr. *pṛchámi* Av *pərəsāmi* 'I ask' O.Pers. 2. sg. imper. *parsā* : Lat *poscō* from **por(ə)-scō* (§ 269), OHG. *forsca* 'question', rt. *preḱ-* (*pṛḱ-*). Skr. *nápāt* Av. *napā* O.Pers. *napā* 'descendant, grandchild' Gr. pl. *νέποδες* 'children' (with *δ* instead of *τ* after the analogy of *πόδες* through the resemblance of the nom. sg. **νεπως* to *πούς* 'foot'), Lat *nepōs*, Mid-Ir. *niæ* (gen. *niath*) 'sister's son', OHG. *nefo* 'nephew, relation'. Skr. *spáš-* Av *spas-* 'spy'. Lat *au-spex*.

The change of organ remains unclear in Skr. *ṣṭhīv- ṣṭhyū-* 'spit' (pres. *ṣṭhīvāmi* part. *ṣṭhyūtá-*) · Gr *πτύω* from *(σ)πῑ̆ῡ-μω* (§ 131 p. 119), Lat. *spuō*, Goth. *speiwa*, Lith. *spáu-ju*.

In Iranian *p* became *f* before consonants, and was probably pronounced as a labio-dental, e. g. Av. O Pers. *fra-* = Skr. *pra-* 'before', see § 473, 1.

§ 328. Indg. *b* Skr *buk-kāra-s* the roaring of a lion : Gr. *βύκτης* 'howling', Lat. *būcina* 'a crooked horn' or 'trumpet', O.Bulg. *bučati* 'to bellow' Skr. *sabar-* 'nectar' : OHG. *saf* Ags. *sæp* 'juice'; rt. *sab-* was perhaps a secondary form of *sap-* in Lat. *sapiō* (§ 469, 7). Skr. *upa-bd-á-* 'a stamping, trampling', Av. *upa-bd-a-* 'foot', see § 325. Upon **ab-bhyas*, dat abl. pl. from *ap-* 'water', rests Av. *aiwyō*, on Skr. *adbhyás adbhíš* see rem. 2. Cp. § 325.

Rem. 1. Prim. Ar *b* in the combination *bdh* = *bh*+*t*, as Skr. *dṛbdhá-* 'wound, twisted', Av *dərəᶜwda-* m. 'a twist, plait' (for *w* from *b* see § 478),

from rt. *derbh-*. It has not been determined how this combination was pronounced in the Indg. prim. period, see § 552.

Rem. 2. The *d* in Ved. *adbhíš*, instr pl. from *ap-* 'water', and in *sa-sṕdbhiš*, instr. pl. from *sa-sṛp-*, appellation of ten divinities and the offerings dedicated to them, cannot phonetically have taken the place of *b* It was probably caused by the analogy of *nábhiš* from **nabd-bhiš* (stem *napt-* 'descendant') See Osthoff Zur Gesch d. Perf. 600 f.

§ **329.** Indg *bh.* Skr. *bhúv-ati* Av. *bavaiti* 'becomes, is' O.Pers. 3. sg. conj. *bavātiy*, Skr. *bhū-mi-* Av. *bū-mi-* O.Pers. *bu-mi-*, 'earth' : Gr. *φύ-σι-ς* 'nature', Lat. *fuam futūru-s*, O.Ir. *buith* 'existence', OHG. *būan* 'to dwell, build', Lith. *bú-ti* O.Bulg. *by-ti* 'to be', rt. *bheu̯-*. Skr. *bhrātā* Av. *brāta* O.Pers. *brātā* 'brother' : Arm *elbair* (§§ 263. 360) Gr *φρᾱτωρ* Lat. *frāter* O.Ir. *brāthir* Goth. *brōþar* Lith *broter-ėli-s* (demin.) O.Bulg. *bratrŭ* 'brother'. Skr. *abhí* Av. *aiwi* (Gāþ *aibī*) O.Pers. *abiy* 'hither' : to Goth. *bi* OHG. *bī* 'by'. 3. pl. perf Skr. *babhr-úr* Av. *bawr-ar*^{e}, Indg. **bhe-bhr-*, from rt. *bher-* 'bear, carry'.

Armenian.

§ **330.** Indg. *p.* Initially mostly *h-* before vowels. *hing* 'five' · Skr. *páñca* Gr *πέντε* Lith. *penkì*. *heŕi* 'distant' : Skr. *pára-s* 'more distant, on the other side', Gr *πέρᾱν* 'on the other side', O.Ir *ire* 'ulterior', Goth. *fairra* 'distant'

Rem For this *h* we sometimes find *ø*, e g *yauay* beside *hauru* 'step-father', to Gr. *πατρως* 'uncle'; *ø-sun* 'fifty' beside *hing* 'five' (Hubschmann Ztschr d deutsch morg Ges XXXV 656, Arm Stud I 45 74). The phonetic relation is not clear With loss of *h-*, *otn* 'foot' pl. *ot-k̔* Gr *πόδ-ες*

ev 'and, also' : Skr *ápi* 'also', Gr. *ἔπι* 'on, to'. *evθn* 'seven' : Skr. *saptá* Gr *ἑπτά* Lat. *septem* O.Ir. *secht n-* Lith. *septynì* 'seven'

ep'em 'I cook' probably to Greek *ἕψω* *p'oiẗ* (gen *p'uẗoy*) '*σπουδή*', to *σπουδή* (Hubschmann Ztschr. d d. m. Ges XXXVI 117).

§ **331.** Indg. *b* Here belongs perhaps *bu* and *bu-ēč* 'owl' : Gr. *βύᾱ-ς βύζα* (*βῦζα*?) 'horn-owl', Lat. *būbō*; probably an onomatopoetic formation; in this case *b* would not have been shifted to a tenuis like the other Indg. mediae (§ 484).

§ 332. Indg. *bh.* *ba-n* (gen. *bani*) 'λόγο-ς' : Gr. *φη-μί* 'I say' *φω-νή* 'voice', Lat. *fa-teor fā-ma.* *albeur* 'source, spring' (§ 263) : Gr. *φρέαρ* 'well, fountain'. *arbi* 'I drank' *arb* 'a drinking-bout' : Gr. *ῥοφέω* 'I sip', Lat *sorbeō*, Lith. *srebiù* 'I sip', rt. *srebh-*; Armen. *arb-* and Lat. *sorb-* from Indg. *sṛbh-* (§§ 291. 295). *surb* 'clean, pure' · Skr. *śubh-rá-s* 'bright, smart', cpf. **k̂ubh-ró-s* (§ 263).

Suffix *-a-vor* e. g. *lus-a-vor* 'clear' : Gr. λευκο-φόρο-ς. Instr. sg. *mardo-v* pl *mardo-vĕ* (from *mard* 'man') beside *dster-b dster-bĕ* (from *dustr* 'daughter'), cp § 326.

Greek.

§ 333. Indg. *p.* *πέ-ο-μαι* 'I fly' aor. *ἐ-πτ-ό-μην* : Skr. *pátāmi* 'I fly' aor. *ápapta-m*, Lat. *petō*, O Bret *etn* O.Ir. *ēn* (§ 518) 'bird', OHG *fedara* 'feather'. *πλέ(ϝ)-ω* 'I swim' : Skr. *plávatē* 'swims', Armen. *luana-m* 'I wash', Lat. *pluit*, O.Ir *luath* 'quick', OHG. *flewen flouwen* 'to rinse, wash', Lith. *pláuju* 'I rinse' O.Bulg. *plovą* 'I sail' *ὑπείρ ὑπέρ* 'over' Skr. *upári* 'above', Lat. *s-uper*, Goth. *ufar* 'over'. *τέρπ-ω* 'I refresh, delight' : Skr. *tarpáyāmi* 'I satiate, satisfy', Lith. *tarpà* 'a thriving' Pruss. *en-terpo* 'it is of use'.

πτ became *ττ* in Thessalian and Cretan, e g. Thess. *Λεττί-ναιος*, to Att. *Λεπτίνης*; *ἀττᾶς* from *ἀπ τᾶς*, cp Thess. *Ἰτθόνειτος* = *Ἰφθόνητος*, Cret. *ἔγραττται* = Att *γέγραπται*, to *γράφω* 'I write'.

§ 334. Indg. *b.* *βαβάζω* 'I chatter' *βαμβαίνω* 'I stammer' *βαμβαλύζω* 'I chatter with the teeth' : Lat. *babulu-s* 'chatterer', Mod.HG. *babbeln pappeln.* *βδέω* 'I break wind' represents Indg. *bzd-*, weak grade form to *pezd-*. Sloven. *pezdẽti* 'to break wind' Pruss. *peisda* 'buttock', Lat. *pēdō* from **pezdō* (§ 594), cp. *bd-* weak grade form to *ped-* § 328. Cp. §§ 325. 328. 331.

§ 335. Indg. *bh.* *φαγεῖν* 'to eat' : Skr *bhájāmi* 'I allot, enjoy' *bhaktá-m* 'portion, food' *bhága-s* 'sharer out' Av. *baya-* 'god' O.Bulg. *bogŭ* 'god', rt. *bhag-*. *ὀμφαλό-ς* 'navel' : Skr. *nábhi-ṣ* 'navel' *nābhīla-m* 'private parts', Lat. *umbō umbilīcu-s*, O.Ir. *imm-lind* 'umbilicum' (§ 525), OHG. *naba* 'wheel-nave' *nabolo* 'navel',

Pruss. *nabi-s* 'navel, wheel-nave' Lett. *naba* 'navel'. *ὀρφανό-ς* 'orphan' : Armen. *orb* 'orphan', Lat. *orbu-s*, O.Ir. *orbe* 'hereditas', Goth. *arbi* 'inheritance'.

The *f*, which arose from prim. Greek *ph* (*φ*) (§ 495), was first of all bilabial. Since the letter *φ* was employed to represent the *f* which had arisen from *þ* (*θ*) in Bœot. and Epirot., *f* = *ph* seems here also to have been labio-dental (see loc. cit.).

Italic.

§ 336. Indg. *p*. Lat *pāx pangō*, Umbr. *pase* 'pace', Osc. Paakul 'Paculus' . Skr. *páśa-s* 'string, cord', Gr. *πήγνῡμι* 'I fasten', MHG. *vuoge* 'joint' Goth. *fāhan* 'to seize', rt. *pāk-* *pāg-*. Lat. *opus*, Umbr. *osatu* 'operato, facito', Osc. úpsannam 'operandam, faciundam' : Skr. *ápas- ápas-* n. 'work, religious deed', OHG. *uoba* 'holyday' *uobo* 'cultivator of the land'. Lat. *op-* in *op-tineō ostendō* from **ops-tendō*, *ob*, Umbr. *ostendu* 'ostendito, adhibeto', Osc. úp eísúd 'apud id' : Gr. *ἐπι*, Skr. *ápi*, Indg. ablaut *e* : *o*. Lat *caper capra*, Umbr *cabrinar* gen. 'caprini' : Gr. *κάπρο-ς* 'boar', O.Icel. *hafr* 'buck'

Lat. *quīnque*, Umbr. pumpeřias Osc. pumperias '*quintiliae', Osc. *Πομπτιες* 'Quinctius', prim Ital **kᵘenkᵘe*, which arose from **penkᵘe* (Skr. *páñca* etc) by assimilation. Lat *coquō* from **quequō* (§ 172, 3 431 *a*), *popīna* is probably borrowed from Osc. (pure Lat form *coquīna*), prim. It **kᵘekᵘō* from **pekᵘō* (Skr. *pácāmi*, Gr. *πέσσω*). On the Umbr.-Samn. *p* from *kᵘ* cp. § 431 *a*. The similar assimilation of initial *p* exists also in Keltic in the same two words (§ 339), Germanic has it perhaps also in the numeral *five* (§ 444 *a*). This change is possibly older than the separate history of these languages.

Prim. Ital. *pt* became *ft* in Umbr.-Samn., as *kt* became *χt* (§ 502); Umbr. *ht* from *ft*. Osc *scriftas* pl. 'scriptae' Umbr. *screihtor* pl. 'scripti' *screihto* 'scriptum'. Cp. Osthoff Zur Gesch. d. Perf. 183.

§ 337. Indg. *b*. Lat. *lūbricu-s* : Goth. *sliupan* 'to slip'. Lat. *lambō* : OHG. *laffan* 'to lick' pret. *luof;* rt. *lab-* would be a secondary form to *lap-* (§ 469, 7), if we may assume

old *p* for Gr. *λάπτω* Armen. *lapem* 'I lick'. Lat. *labium* procably to Ags. *lippa* m. OHG. *lefs* m. 'lip'; Kluge explains the difference in the root-vowel by assuming that *labium* arose for **lebium* through association with *lambō*. Cp. §§ 325. 328. 331. 334. 346.

§ 338. Indg. *bh*. Lat. *ferō*, Umbr. *ferar* 'feratur', Marruc. *feret* 'feret' : Skr. *bhárāmi* 'I bear'. Lat. *flōs*, Sabin. *Flusare* abl. 'Florali', Osc. Fluusaí dat 'Florae' : O.Ir. *blāth* 'bloom', Goth. *blōma* m. 'flower' Lat. *ti-bī si-bī*, Umbr. te-fe 'tibi', Osc. t(i)-fei 'tibi' sí-feí 'sibi' : cp. Skr. *tú-bhy-am* 'tibi', O.Bulg. *te-bě* 'tibi'. Lat. *albu-s*, Umbr. alfu 'alba', Osc. Alafaternum 'Alfaternorum' : Gr. *ἀλφό-ς* 'white leprosy'. Lat. *amb-itu-s*, Osc. amfr-et 'ambiunt' (for Umbr. *ambr-* see § 209) : Gr *ἀμφί* Gall. *ambi-* 'circum'.

Rem. How is Lat. *barba*, for which we should expect **jarba* (OHG *bart* O Bulg. *brada*), to be explained? All the attempted explanations known to us, are unsatisfactory.

According to Seelmann (Ausspr. d Lat 294 f.) Lat. *f* was, up to the middle of the imperial period, "a hybrid sound, which might equally well be described as an interdental dorsal spirant with bilabial increase of narrowing, as a bilabial spirant with dorso-bidental increase of narrowing", then *f* became labiodental It seems to follow from the *m* in *amfr-* that *f* was bilabial in Oscan.

Old Irish

§ 339. Indg. *p* Apparently nowhere retained as *p* in Keltic.

It was dropped initially in the prim. Kelt. period. O.Ir. *ēn* O.Bret. *etn* 'bird', rt. *pet-* 'fly', see § 333. O Ir *il* 'much, manifold', compar. *lia* Mid Cymr. *lleu* · Skr. *purú-š* compar. neut *práyas*, Gr *πολύ-ς πλείων*, Lat. *plūs*, Goth *filu* 'multum' compar. O.Icel. *fleire fleiri*. O.Ir. *lār* O Cymr. *laur* Corn. *lor leur* 'pavement' : Ags. *flōr* 'house floor' MHG. *vluor* 'cornfield, ground'. *athir* 'father' : Gr. *πατήρ*. O.Ir. *orc* 'pig' : Gr. *πόρκο-ς* Lat *porcu-s* OHG. *farh farah* Lith. *paršza-s* 'pig'. O.Cymr. *rit* 'ford', Gall. in *Augusto-ritum* : Av *peϑu-š* 'ford', Lat. *portu-s*, OHG. *furt* (§§ 295. 298).

Intervocalic *p* disappeared at the same period. Mid.Ir. *niæ* (gen. *niath*) 'sister's son', Mid.Cymr. *ney nei* (pl. *neyeynt nyeint*) 'brother's or sister's son' : Skr. *nápāt* Lat. *nepōs* (§ 327). O.Ir. *tē* (pl. *tēit*) 'hot' from **te(p)ent-* (cp. § 212) : Skr. *tápati* 'warms, burns', Lat. *tepeō*, O Bulg. *toplti* 'to warm'.

-pt- probably became *ft—cht* already in prim. Kelt. (cp. Low German *nicht*, *lucht* = OHG. *nift*, *luft*) and thus fell together with Indg. *k̂t* and *gt* (§§ 436. 517) : O.Ir. *-cht-*, Britann. *-it-*. O.Ir. *secht* Mid.Cymr *seith* Corn *seyth* Bret. *seiz* 'seven' : Skr. *saptá*, Lat *septem* etc O.Ir. *necht* O Corn *noit* 'neptis' : Skr. Ved. *naptí-ś* 'daughter, granddaughter', Gr. *ἀνεψιό-ς* 'first cousin' (from **ἀνεπτιο-ς*, § 489), Lat *nepti-s*, OHG. *nift* 'neptis, privigna', O.Bulg *netiji* 'nephew, cousin' from **neptīji* (§ 545).

Rem. How was *-pn-* treated? O.Ir *suan* Cymr *hun* 'sleep', which undoubtedly belong to Skr *svápna-s* etc. (see § 324), point to **sūno-*, this latter may have arisen from **sopno-* through the intermediate stages **sofno- *sohno-* (cp § 518), but **sopno-* may represent Indg. **supno-* (cp. O Ir. *bond bonn* 'solea' Cymr. *bon* 'stem, base' from **bundo-s*, Lat. *fundu-s*, § 50) The historical forms however might also have arisen from **sopno-* through the intermediate stages **sovno- *soṷno*

Prim. Kelt. **kṷenǝkṷe* 'five' = Indg. **penqe*, **kṷekṷ-* 'cook' = Indg. **peq-*. O.Ir. *cōic* (§ 212) O.Cymr. *pimp* Corn. *pymp* Bret. *pemp* 'five'. Mid. Cymr. *popuryes* 'pistrix', O.Corn. *peber* 'pistor' *popei* 'pistrinum' See § 336

§ 340. Indg. *b* = prim. Kelt *b*. O.Ir *ebann* 'bibo', Corn. *evaf* 'bibam' from **ebam* : Skr *píbāmi* (§ 325). *-mm-* from *-bn-* in O.Ir. *fu-domman* 'deep', see §§ 325. 520.

§ 341. Indg *bh* = prim. Kelt. *b* O.Ir. *bri* gen. *breg* 'mountain', Gall *brigi-* (in *Brigiam*, *Are-brigium* etc.) : Skr. *bṛh-ánt-* 'great, high', Armen. *barjr* 'high', root form *bhṝgh-* (§§ 288. 291) O.Ir. *biu* 'sum', M Cymr. *bydaf* 'ero', like Lat. *fīō fīs* etc from Indg. **bhṷ-iṷō*, rt *bheṷ-* (§§ 170 175). O.Ir. *com-boing* 'confringit' : Skr. *pra-bhaṅgá-s* 'breaker, bruiser'. O.Ir. *braigim* 'pedo' Gaelic *braigh-* 'to give a crackling sound, to burst, explode' : Lat. *fragor frangō*, Goth. *brikan* 'to break'. Corn. *befer* 'beaver', Gall. *Bibr-ax* : Skr. *babhrú-ś* adj. 'brown', subst. a kind of great ichneumon, Lat. *fiber* OHG. *bibar* Lith. *bẽbru-s* (and *bẽbru-s*) O.Bulg. *bebrŭ* 'beaver', Indg. **bhe-bhru-s.*

O.Ir. *imb imm* 'around, about', Gall. *ambi-* : Gr. *ἀμφί* Lat. *amb-* Osc. *amf-r-* (§ 338). Cp. § 525.

Dat. *tri-b* 'tribus' : cp. instr. Skr. *tri-bhiš* dat. abl. *tri-bhyás*, to which also Gall. *ματρε-βο ναμαυσικα-βο* 'matribus Nemausicis'. Cp. § 526.

Germanic.

§ **342.** Indg. *p*. Goth *speiwan* OHG. *spīwan* 'to spit' : Gr. *πτύω* 'I spit' fr. **(σ)πῑ̆-γω* (§ 131), Lat. *spuō*, Lith. *spiáu-ju* O.Bulg. *plju-jǫ* (fr. prim. Slav. **(s)pū-jǫ* § 147) 'I spit'. OHG. *spehōn* : Skr. *spáś-* 'spy, watchman', Lat *cōn-spiciō*, rt. *spek̑-*.

Goth. *faihu* OHG. *fihu* 'cattle' Skr *páśu* Lat. *pecu* 'cattle', Indg. **péḱu* n. Goth. *fraihnan* (pret *frah*) OHG. *frāgēn* 'to ask' : Skr. *praś-ná-* 'a questioning', Lat. *precēs* pl., *procu-s*, Lith. *praszýti* O.Bulg *prositi* 'to demand, request', rt *prek̑-*. Goth. *hlifan* 'to steal' *hliftu-s* 'thief' : Gr *κλοπή* 'theft' *κλέπτη-ς* 'thief', Lat. *clepō*, rt. *qlep-*. OHG *nefo* Ags. *nefa* 'nephew' . Skr. *nápāt* etc., see § 327 Goth *af* (*ab-u*, with interrogative particle *u*) OHG *aba* 'away' off' : Skr. *ápa* Gr. *ἄπο* 'away off'. Goth. *bi-leiba* OHG. *bi-līhu* Ags *be-līfe* 'I remain' : Skr *ripta-* *liptá-* 'besmeared' *limpámi* 'I smear, fasten to', Gr. *λίπος* n. 'grease' *λιπαρέω* 'I persist in', Lat *lippu-s* 'blear-eyed', Lith. *limpù* (pret. *lipaũ*) O.Bulg *pri-lĭplją* (inf. *-lĭpĕti*) 'I remain sticking, cling'.

Goth. *f* was bilabial. So, too, was OHG *f* in the period of the oldest monuments. In the course of the OHG. period however *f* became labio-dental, as is shown by *nf* from older *mf* (see Kogel Ub. d. Keron. Glossar 58 f)

The initial *f* in Goth. *fimf* OHG. *fimf fuf* 'five' is perhaps not to be traced directly back to Indg *p* (Indg. **penqe*), but to *ku̯* (**ku̯enkue*). See §§ 336 444 rem 1.

§ **343.** Indg. *b* Goth. *slēpan* OHG. *slāfan* 'to sleep' (orig. 'to be slack'), OHG. *slaf* Low G. *slap* 'slack' : O.Bulg. *slabŭ* 'slack, weak', rt. *slēb-*. Goth *ráupjan* OHG. *roufen* 'to pluck', rt. *reu̯b-*, a secondary form of *reu̯p-* in Ags. *reófan* O.Icel. *rjūfa* 'to break, rend', Skr *rup-* *lup-* 'tear, shatter', Lat *rumpō* (§ 469, 7). Cp §§ 325. 328. 334. 337. 346.

§ 344. Indg. *bh*. Goth. *beitan* OHG. *bīzzan* bīzan 'to bite' : Skr. *bhédāmi* 'I split, break down', Lat *findō*, rt. *bheid-*. Goth. *bōka* f. 'letter' (of the alphabet) OHG. *buocha* : Gr. φηγός a kind of oak bearing an esculent acorn, Lat. *fāgu-s* 'beech'. Goth. *blēsan* OHG. *blāsan* 'to blow' OHG. *blāen* 'to swell, blow' : Lat. *flāre*. Goth. *liuba-* (nom. *liufs*) OHG. *liob* 'dear' : Skr. *lúbhyāmi* 'I feel a strong desire', Lat. *lubet libet*, O.Bulg *ljubŭ* 'dear', rt. *leubh-*. Goth. *kalbō* OHG. *kalba* 'a female calf' : Skr. *gárbha-s* 'embryo, the young', Gr δολφός δελφύς 'matrix', δέλφαξ 'pig', rt. *gelbh-*.

For the pronunciation of Goth. *f* (nom. *liufs* acc. *liuf* see § 539) cp § 342.

Baltic-Slavonic.

§ 345 Indg. *p*. Lith. *pelė* 'mouse' *pálsza-s* 'sallow, pale', O.Bulg. *plavŭ* 'whitish' *pelesŭ* 'gray' : Skr. *palitá-s* 'gray', Gr. πελιός πολιός 'gray', OHG *falo* (infl. *falawēr*) 'sallow, pale'. Lith. *plakù* 'I strike, scourge', O.Bulg. *plačą* 'I weep' : Gr. πλήσσω 'I strike' πληγή 'a blow', Lat. *plangō plāga*, Goth. *flōkan* 'to bewail', rt. *plāq- plāg-* (§ 469,7). Lith. *tir̃pti* 'to grow stiff, become numb' (pret. *tirpaũ*), Russ. *terpnuť* 'to grow stiff, become numb' : Lat *torpeō*.

k in Lith. *sèkma-s* 'septimus' from *p* (cp. Pruss. *sepma-s* beside *septma-s*) or from *t*? Cp. § 377.

§ 346. Indg. *b* Lith. *skabù-s* 'cutting' *skabėti* 'to cut', O.Bulg. *skoblĭ* 'radula' : Lat *scabō*, from rt *sqab-*, secondary form of *sqap-* in Gr σκαπάνη 'spade, hoe', O.Lat. *scaprēs* 'scabby, rough', Goth. *skabu* 'I shave' (§ 469, 7). Cp. §§ 325. 328. 343.

Lith. *g* for *b* (regularly?) in *dùgna-s* 'ground', to O.Bulg. *dŭno* 'ground' fr. **dŭb-no* (§ 548), rt. *dheub-*, see § 325.

§ 347. Indg. *bh* = prim. Baltic-Slav. *b*. Lith. *bijó-ti-s* 'to be in fear' *baj-ù-s* 'fearful', O.Bulg. *boj-a-ti sę* 'to be afraid' : Skr. *bháy-a-tē* 'is in fear' Lith. *blendžiù-s* 'I obscure myself' (of the sun), O.Bulg. *blędą* 'I err' : Goth. *blandan sik* 'to have intercourse with', rt. *bhlendh-*. Lith. *žėmbu* 'I shoot, bud'

(properly 'I split myself, burst'), O.Bulg. *zębą* 'I tear in pieces': Skr. *jambháya-ti* 'he pounds, destroys' Av. *zəmbayeitē* 'he destroys'.

2. Dental Explosives.

Indg. primitive period.

§ 348. Tenuis *t*. Rt. *ten-* 'stretch, extend': Skr. *ta-nó-mi* 'I stretch out, extend' *tan-ú-ś* 'thin, small', Gr. *τείνω* 'I stretch', Lat. *ten-tu-s* part., *ten-u-i-s*, O Ir *tana* Cymr *teneu* 'thin', Goth. *þanja* 'I stretch' OHG *dunni* 'thin', Lith. dial. *tenva-s* O.Bulg. *tĭnŭkŭ* 'thin'. Stem **treȷ-* **tri-* 'three': nom. pl. Skr. *tráy-as* Arm. *e-re-k̔* Gr *τρεῖς* Lat. *trēs* O.Ir. *trī* Goth. *þreis* Lith. *trỹs* O.Bulg. *trĭje trije*. Rt *pet-* 'to move quickly through the air, fly, fall': Skr. *pátāmi* 'I fly, fall', Gr. *πέτομαι* 'I fly', Lat. *petō* 'I reach after something, desire' *im-petu-s* 'a falling against, attack', O.Bret. *etn* O.Ir *ēn* 'bird', OHG *fedara* 'feather'. Rt. *ȷert-* 'roll, turn, direct to'. Skr *vártatē* 'turns itself, rolls, Lat. *vertō*, Goth. *vaírþan* 'to become', Lith *vĕrsti vartýti* O Bulg. *vratiti* 'to turn'. Rt. *ster-* 'spread, strew': Skr *stṛ-nó-mi* Gr. *στόρ-νυ-μι* 'I spread, strew', Lat. *ster-nō*, O.Bret. *strouis* 'stravi', Goth. *stráuja* O Bulg. *stĭrą* 'I spread'.

Frequently in suffixes. Participial suffix *-to-*, as **k̑lu-tó-s* 'heard, renowned': Skr. *śru-tá-s* Gr. *κλυ-τό-ς* Lat *in-clu-tu-s* O.Ir. *clo-th* OHG. *Hlot-harı* Lothar (**Κλυτό-στρατος*, as it were). Ending of the 3. sg. *-ti -t*, of the 3 pl *-nti -nt*, as **bhére-ti* 'bears' **bhére-nti* 'they bear'. Skr. *bhára-ti bhára-nti*, Gr. Dor. pl. *φέρο-ντι*, Lat. *vehi-t vehu-nt*, O.Ir. pl *beri-t*, Goth. *bairi-þ bairu-nd*, O Bulg. *bere-tĭ berątĭ*.

§ 349. Media *d*. **dekm̥ *dek̑mt* 'ten': Skr. *dáśa* Arm. *tasn* Gr. *δέκα* Lat *decem* O.Ir. *deich n-* Goth *taíhun* Lith *dẽszimt dẽszimti-s* Stem **dṷi-* 'two', nom acc du masc **dṷō* **duṷō* 'two': Skr *dvi-*, Ved. *dvá duvá*, Gr *δι-*, *δώ-δεκα δύω*, Lat. *bi-*, *duō*, O Ir *dā*, Goth *tvái* (pl), Lith. *dù* masc. (fr. **duă̆*) *dvì* fem., O.Bulg. *dva dŭva* Rt. *ȷeid-* 'see, know': Skr. *véda* Arm. *git-e-m* Gr *οἶδα* 'I know', Lat. *videō*, O.Ir. *ad-fiadaim* 'I announce, relate', Goth. *váit* 'I know', Lith. *véida-s* 'face, coun-

tenance', O.Bulg. *vědĕti* 'to know'. Rt. *perd-* 'to break wind': Skr. *párdatē* Gr. *πέρδεται* 'breaks wind', Ags. *feortan* OHG. *ferzan* 'to broak wind', Lith. *pir̃dı-s* m. 'crepitus ventris'.

Rarely in suffixes. Gr. *χρόμαδο-ς* 'a gnashing' *χρεμίζω* 'I bellow, neigh' fr. **χρεμιδ-jω* (§§ 131. 493), Lat. *frendō* fr. **frem-dō* (§ 207), Ags *grimettan* OHG. *gramizzōn* 'to murmur, gnash'. Suffixal *d* (e. g. Gr. *-δων -δνο-ς -δαινω* : *μελεδών μελεδαίνω*, Lat. *-dın-* : *frīgēdō*, see Leo Meyer Vergl. Gramm. II[1] 363 ff, the auth. Morph. Unt II 170. 203. 206, Thurneysen Kuhn's Ztschr. XXVI 305 ff) may have arisen from *t* in the Indg prim. period just as root-final *d* (§ 469, 7).

§ 350. Media asp. *dh*. Rt *dhē-* 'set, place, do': Skr. *dhā-ma* 'law, manner, dwelling-place', Arm. *d-ne-ın* 'I set', Gr. *ἀνά-θη-μα* 'that which is set up, an offering', Lat. *fa-c-* in *artı-fex facıō, con-dere* (§ 370), Goth. *ga-dē-ps* (st. *ga-dēdı-*) 'deed', Lith. *dė̃-tı* O Bulg *dě-tı* 'to lay' Rt. *reudh-* 'to be red': Skr. *rudhirá-s* Gr. *ἐρυθρό-ς* Lat. *ruber* O Ir *ruad* Goth *ráuþs* (st. *ráuda-*) O.Bulg *rŭdrŭ* 'red'. Rt *bhendh-* 'bind': Skr. *bándhana-m* 'a binding', Gr *πενθερό-ς* 'father-in-law' (cp. Skr. *bándh-u-š* 'a relation'), Lat *of-fendımentu-m* 'chin-cloth', Goth *bından* 'to bind'.

More rarely as *t*, oftener as *d* in suffixes Nominal suffix *-dhlo* : Gr *θέμεθλα* pl. 'foundation', Lat. *trī-bulu-m* 'a thrashing sledge' Czech *rá-dlo* (O.Bulg *ra-lo* fr **rā-dlo*, §§ 548. 551) 'plough'. Ending of the 2. sg imper *-dhı* : Skr *śru-dhí* Gr. *κλῦ-θι* from rt *ḱleu-* 'hear', O Lith *veizdı veizd* O.Bulg. *viždĕ* 'see' from rt. *ueid-* (see § 547) Ending of the 2. pl. mid. Skr. *-dhvē -dhvam*, Gr *-θε*

Aryan.

§ 351. Indg. *t* Pronominal stem Skr. Iran. *ta-* 'the, this', e. g. in acc Skr. *tá-m* Av. *te-m*, O Pers. in *ai-ta-* 'this' : Gr. *τό-*, Lat. *tam*, Goth *þa-*, Lith. *ta-* O.Bulg. *to-*, Indg. **to-* 'the, this'. Skr. *átı* Av. *aıtı* O.Pers. *atıy* 'over' : Gr. *ἔτι* 'moreover, still', Lat. *et etıam*, Indg. **éti*. Skr. *ástı* Av. *astı* O.Pers. *astiy* 'is' : Gr. *ἔστι*, Lat. *est*, Goth. *ıst*, Indg. **és-ti* 'is'.

§ 352. *t* became *t* after *š* (= Indg. *k̂* or *s*) in Sanskrit. *aṣṭá* = Av. *ašta* 'eight' : Gr. *ὀκτώ* etc., see § 360. *uṣṭá-* 'burnt' = Av. *ušta-* 'roasted' : Lat. *ustu-s*, Indg. **us-tó-s* from rt. *eus-*. See §§ 399. 556, 1.

-tc- became *-cc-*. *ucca-* 'high' from prim Ar. **utca-* (*ut-* = *ud-* 'on high').

-tš- became *-cch-* (*-ch*). *pacchás* 'in the manner of pāda, in hemistichs' from **pat-šas* (*pat-* = *pad-* 'foot')

Rem. In certain manuscripts of the Vājasaneyi-saṁhitā *-thn-*, *-thm-* are written for *-tn-*, *-tm-*, e. g. *pathnī* 'mistress', *pathmán-* n 'flight' *h* apparently here represents the glide arising from the sudden raising of the uvula (see Sievers Phonet.[3] 63. 160 f.)

§ 353. In Iranian, *t* was partly changed into a spirant with a different position of articulation

Av O Pers *þ*, Av *d* were interdental, as in Av *þwąm* O Pers *þuvam* (read *þam*) = Skr *tvám* 'thee', Av acc. pl *f"ðr-ō* 'patres' fr. **ptṛ-as*, see § 473, 2

Av *þk* from *th*, as *aþka-* = Skr *átha-* 'dress', see § 473, 2

Av *š* fr *ṛt*, as *mašya-* (*mašyə-*) 'a mortal being, man' = Skr. *mártya-* O Pers *martiya-*, see §§ 260. 288. 474

O Pers *šc* from *tc* (Skr *cc*), as *aniyašciy* = Skr *anyáccid* 'any other'. *šy* (written *siy*, § 125 p. 116) from *þy* = prim. Ar *ti*, as *hašiya-* = Av *haiþya-* Skr *satyá-* 'true'. *š* fr *þr* = prim Ar *tr*, as *ši-* = Av *þri-* Skr *tri-* 'three' See §§ 261. 473, 2

§ 354. Indg *d* Skr *dū-rá-* Av O Pers *dū-ra-* 'far, distant'. Gr Hom *δά-ο-μαι* 'I am at a loss for', rt *deu-* Skr Av. *dru-* 'wood'. *δρυ-τόμο-ς* 'felling timber', Goth *triu* n 'tree'. Skr *sád-as-* Av *had-as-* O Pers *had-iš-* n 'seat', weak pf stem Skr *sed-* Av. *hazd-* prim Ar. **sa-zd-* (§ 591) Gr *ἕδ-ος* n 'seat', Lat *sedeō sēdī*, O Ir *suide* 'seat', Goth *sitan* 'to sit', Lith. *sedėti* O Bulg *sědĕti* 'to sit'. Skr *chand-ánti* 'they cut off, tear', Av *scind-áyeiti* 'he breaks' · Gr *σχιδ-αλμό-ς* 'a splinter', Lat *scind-ō*

§ 355. *d* became *d* after *ž* (= Indg. *z*) in Sanskrit; *ž* was then dropped. *nīdá-s* 'nest' : Arm *nist* 'seat, possession',

Lat. *nīdu-s*, OHG. *nest* 'nest', Indg. **ni-zd-o-* 'sitting down, abode' from *ni* 'down' and rt. *sed-* 'sit'. See § 591.

-dy- became *-yy-*. *újjiti-š* 'victory' from **ud-yiti-š*. Analogously *ujjhitá-* 'forsaken, given up' fr. **ud-yhita-*, see § 406.

§ 356. *d* partly became an interdental spirant *đ* in Av., as *dađāiti* = Skr. *dádā-ti* 'gives' from rt. *dō-*, see § 478.

Prim. Ar. *dy-* appears as (*dv-* and) *đb-* (Gāþ. *db-*), *b-*. *đbiš-* (Gāþ *dᵃbiš-*) = Skr *dviš-* 'hate'. *bitīm* (Gāþ *dᵃbitīm*) = Skr *dvitíya-m* 'secundum' See § 159 p. 143

§ 357. Indg. *dh* Skr. *dhárš-āmi* 'I dare', Av. *darš-i-š* 'vehement' O Pers. *a-darš-nau-š* 'he dared' : Gr *θρασ-ύ-ς* 'bold' *Θερσ-ίτη-ς* 'the insolent one', Goth *ga-dars* 'I dare', Lith *drįs-ti* 'to dare' (§ 285 rem.), rt. *dhers-* Skr *mádhu* Av. *mađu* n. 'sweetness, honey' · Gr *μέθυ* 'wine', O Ir *mid* OHG *metu meto* 'mead', Lith *medù-s* O Bulg *medŭ* 'honey', Indg. n. **médhu*. 2. sg imper. Skr. *śru-dhí* 'hear', Av. *i-đi* O Pers. *i-dīy* 'go' : Gr *ἴ-θι* 'go' Skr. *mádhya-* Av *mađya-* 'medius' : Gr. *μέσο-ς* 'medius', Lat. *mediu-s*, O Ir *medōn* 'medium', Goth *midja-s* 'medius', O.Bulg *mežda* 'boundary', Indg **medh-yo-* 'medius'

§ 358. *dh* became *dh* after *ž* (from old *ǧ* or *z*) in Sanskrit; *ž* was then dropped *lúdhi* 'licks' from **lōžd hi*, **leiǧdhi* i. e. **leiǧh-ti*. *mādhá-* 'battle prize, combat' : Av *mīžda-* 'wages, pay', Gr *μισθό-ς* Goth *mizdō* O Bulg *mĭzda* 'wages, pay', Indg **mizdhó-*. See §§ 396 404 591.

§ 359 In Iranian, where the Indg. and prim Ar mediae asp fell together with the mediae, the former underwent the same changes as the latter, e g Av *mađu* (§ 357) as *dađāiti*. See § 356.

Armenian.

§ 360. Indg *t*. *tarʼam-i-m taršam-i-m* 'I fade, wither' : Skr. *tarša-s* 'thirst', Gr *τέρσομαι* 'I become dry', Lat *torreō tostu-s*, O.Ir. *tart* 'thirst', Goth. *þaúrsu-s* 'withered'. *tanyr* 'dense' : Av. superl. *tancišta-* 'strongest', Goth. *þeihan* 'to thrive' fr. prim. Germ. **þeŋχana-n*, MHG. *ge-dīhte* adv. 'frequently' O.Icel *þēttr* 'close, tight' fr prim. Germ. **þeŋχto-* (§ 67

rem. 2), Lith. *tenkù* 'I have sufficient' *tánku-s* 'close'. *uť* 'eight' : Skr. Ved. *aṣṭá* (§ 352) Gr. *ὀκτώ* Lat. *octō* O.Ir. *ocht n-* Goth. *ahtáu* Lith. *asztůnì* 'eight'.

t after *s*. *astl* (gen. *astel*) 'star, constellation' : Skr. *stár-* Gr. *ἀστήρ* Lat. *stella* Bret. *sterenn* Goth. *staírnō*. *sast* (gen. *sasti*) 'a reviling, reproach' : Skr. *śās-tí-ṣ* 'a punishment, command' *śās-tár* 'chastiser, commander'.

d after *r, n*. *mard* 'homo' : Skr. *mṛtá-s* (§ 291). *-and* in *dr-and dr-andi* 'door-post, threshold' : Skr. *átā*, Lat. pl. *antae*, see § 253 p. 207.

ĕ fr. *tu̯*. *ĕo* 'tuus' *ĕez* 'to thee' : Skr. *tvám* 'thou', Gr. Cret. *τϝέ* Att. *σέ* 'thee' (§ 166 p 147), O Bulg. *tvoję* 'thy'. *ĕar-* 'four' (*ĕaŕ-a-sun* 'forty') fr. **(q)tu̯r-* = Gr *τρα-*, in *τρά-πεζα* 'table' (orig. 'four-foot'). Cp § 162

Intervocalic *t* became *ɛ* and then disappeared. *haır* (pl. *har-ĕ*) 'father', *maır* (pl *mar-ĕ*) 'mother' : Gr. *πατήρ, μήτηρ*. *heru* adv. 'last year' · Gr. Dor. *πέρυτι*, O.Ir *urid* MHG. *vert* 'last year'.

-atr- became *-aur-* Gen *haur* 'of a father', *maur* 'of a mother' : Gr. *θατρ-ός, μητρ-ός*. *araur* 'plough' : Gr. *ἀροτρο-ν*.

-rh-, later *-h-*, from *-ṭr-* or *-tr-*. *marh mah* (gen *marhu mahu*) 'death', to Skr *mṛtyú-ś* 'death' or to Goth. *maúrþr* 'murder'; concerning *ar* from Indg *ṛ* see § 291

§ **361.** Indg. *d*. *tiv* 'day' : Skr. instr. *div-ā* 'by day', Gr. gen. *Δι(ϝ)-ός*, Lat. *diē-s*, Cymr *dyw* 'day', Lith. *dĕva-s* 'god' *ta-m* 'I give' : Skr *dá-dā-mi* Gr. *δί-δω-μι* Lat *dō* 'I give', Lith. *dů'-ti* O.Bulg. *da-ti* 'to give' *het* (gen *hetoy*) 'foot-print', *het yet* 'behind, after' (§ 330 rem.) : Skr *pad-á-m* 'foot-step, foot-print', Gr. *πεδ-ά* 'after, with' gen *ποδ-ός* 'of a foot', Lat. gen. *ped-is*, Goth *fōt-u-s* 'foot', Lith *ped-à* 'foot-print'. *ĕirtn* 'sweat' (*rt* fr. *tr*, § 263) : Skr *svéda-s* Gr *ἱδρώς* Lat. *sūdor* Cymr. *chwys* OS. *swēt* OHG *sweiz* 'sweat', rt *sṷeid-*.

§ **362.** Indg *dh* *diem* 'I suck' · Skr *dhúyāmi* 'I suck, drink', Gr. *θή-σατο* 'he sucked', Lat. *fē-lāre* 'to suck', Mid.Ir. *dī-th* 'he sucked', Goth. *daddja* 'I suckle', O Bulg. *doją* 'lacto'. *dustr* (gen. *dster*) 'daughter' : Skr. *duhitár-* (*d-* fr *dh-*, § 480) Gr. *θυγάτηρ* Goth. *daúhtar* Lith. *duk-tē* O Bulg *dŭšti* 'daughter'.

Greek.

§ **363.** Indg. *t.* *τελαμών* 'a strap for bearing anything' *τάλαντο-ν* 'a balance' : Skr. *tulá* 'balance', Lat. *tollō*, Goth. *þuláiþ* 'suffers, endures'. *Fέτος ἔτος* n. 'year' : Skr. *vats-á-s* 'year', Lat. *vetus-tu-s* 'aged, old', O.Bulg. *vetŭchŭ* 'old'. *στίζω* 'I prick' *στιγμή* 'a prick, mark' : Skr *tig-má-s* 'pointed, sharp' (for *t-* fr. *st-* see § 589, 3), Lat. *īn-stīgāre*, Goth. *stiks* 'moment of time' OHG. *stih* 'a prick'. Participial suffix *-nt-*, acc. sg. *φέρο-ντ-α* 'ferentem' : Skr. *bhára-nt-am* 'ferentem', Lat. *cu-nt-em*, Goth. *giba-nd* 'datorem', Lith. *vẽža-nt-ị* 'vehentem'.

ππ from *τπ*. Hom. *κάππεσε*, aor. to *κατα-πίπτω* 'I fall down'. Hom. Lesb. *ὅππως* 'how' fr. **ὁτπως* i. e. **σFόδ* (Goth. *sva* 'so') + indef. *πως*; the simplification of the double consonant in *ὅπως* ensued from the model of the uncompounded *πῶς*; cp. *ὅττι* (*ὅτι*) fr. **σFόδ+τι*.

§ **364.** Indg. *d.* Nominal prefix *δυς-* 'mis-, bad, ill' e. g. in *δυς-μενής* 'ill disposed' : Skr. *duš-*, Armen. *t-* ('un-' e. g. *t-gēt* 'unknowing', *t-mardi* 'inhumanus', see Hubschmann Ztschr. d. deutsch. morg. Ges XXXVI 120 f.), O.Ir. *du-* *do-*, Goth. *tuz-* OHG. *zur-*, Indg. **dus-* 'mis-, ill, bad, hard, un-'. *ἡδ-ύ-ς* 'sweet, pleasant' : Skr. *svād-ú-š* 'sweet, well-tasted', Lat. *suādeō* (properly 'I exhibit something agreeable'), Goth. *sūts* (*sŭts?*) 'sweet'. *ὕδ-ωρ* 'water' *ἄν-υδρο-ς* 'waterless' : Skr. *ud-án-* 'water' *an-udrá-s* 'waterless', Armen. *get* (gen. *getoy*) 'river' (*g-* fr. *ụ-*, § 162), Lat. *unda*, Goth. *vatō* n. 'water', Lith. *vandů̃* O Bulg *voda* 'water' (cp. footnote to p. 189). *μέλδομαι* 'melt, grow liquid' : OHG. *smilzu* 'I melt, grow liquid', rt *smeld-*.

δ became *đ* in El. at an early period (later also elsewhere), which was written *ζ* on the oldest El. inscriptions, e. g. *ζίκαια*, *Fειζώς*. See § 491.

λλ fr. *δl* in Lacon. *ἕλλᾰ* 'seat', to *ἕδος*, perhaps also in *ἴλλο-ς* 'ichneumon' (Curtius Grundz [5] 248).

§ **365.** Indg. *dh.* *θύ-νω* 'I rush or dart along' *θύ-ος* 'frankincense' *θῡ-μό-ς* 'courage, passion' : Skr. *dhū-má-s* Lat. *fū-mu-s* 'smoke', OHG. *tūmalōn* 'to revolve, reel', Lith. pl. *dú-*

mai O.Bulg. *dy-mŭ* 'smoke'. *αἴθ-ω* 'I burn' : Skr. *édh-a-s* 'fire-wood', Lat. *aedēs* orig. 'burning-place, hearth', O Ir. *aed* 'fire', OHG. *eit* 'funeral-pile'. *ἄνθος* n. 'germ, blossom, flower' : Skr. *ándhas* n. 'vegetable'.

In several dialects prim Gr. *θ* i. e. *th* became at an early period the interdental spirant *þ*, which partly moved forwards to *f*. S § 495

Italic

§ 366. Indg *t* Lat *termō termen*, Umbr *termnom-e* ad terminum', Osc. teremnattens 'terminarunt' · Skr. *tárman-* n point of the sacrificial rod', Gr. *τέρμων* 'boundary', *τέρμα* 'end, goal'. Lat. *tovo-s tuo-s*, Umbr. *tover* gen. 'tui' Osc tuvai dat 'tuae' · Skr. *táva* 'tui', Gr *τε(ϝ)ός* 'tuus', Lith *tavàs-is* 'thine'. Lat. *quatuor quattuor*, Umbr *petur-* 'quadru-' Osc. *petiro-pert* 'quater' : Skr *catvár-as* Gr Ion. *τέσσερ-ες* O.Ir. *cethir* Goth *fidvōr* 'four', Lith *ketver'i* 'by fours', O Bulg distrib. *četvero* Comparative suffix *-tero- -tro-*, Lat *u-ter*, Umbr. *po-druh-pei* 'utroque' Osc. pú-túrús-píd pl 'utrique' : Skr. *ka-tará-s* Gr. *πό-τερο-ς* Goth. *hva-þar* Lith *ka-trà-s* 'which of the two', O.Bulg *ko-tory-jĭ* 'which'.

§ 367. In the prim. Ital. period *tl* became *kl* except, as it seems, initially and in the combination *stl* (cp. Umbr. gen. sg *Tlatie* to Lat. *lātu-s* fr **tlāto-s*, Indg. **tl̥-to-s*, Lat. *stlīs stlocu-s*). Nominal suffix *-klo-* fr. *-tlo-* (Gr. *-τλο-* e. g. *ἄν-τλο-ς* 'bilge-water') : Lat. *sae-clu-m sae-culu-m, pū-clu-m pū-culu-m* (*-culo-* fr. *-clo-*, § 269), Umbr piha-klu 'piaculorum', Osc. sakara-klúm 'sacrum' pu-klo- 'son' = Skr. *pu-trá-s* 'son'; for the change of this *-klo-* to *-kro-* by dissimilation as in Lat. *lavā-cru-m*, see § 269.

This change, which was caused by the lateral articulation (instead of the coronal) of the *t* anticipating the *l*, repeated itself in the course of the individual dialects. Here belong e. g. Lat. *ex-anclāre* fr. Gr. *ἐξ-αντλεῖν* 'to draw out', Vulgar Latin *veclu-s* (Italian *vecchio*) from *vet(u)lu-s*. In the Lat. historic period it extended itself also to the combination *stl*, hence such

spellings as *sclis sclataris* beside *stlis stlataris*. In like manner Umbr. *pers-clu pes-clu* 'supplicatione' beside Osc. pes-tlúm 'sacellum, templum'.

Rem The same phenomenon in Lith., see § 377 Cp. also Mod.Gr. ξαγκλίζω = O Gr. ἐξ-αντλέω, σεῦκλο 'beet' = O Gr. σεῦτλο-ν (Foy Lautsystem der gr Vulgarspr 7), Gipsy lang *kaekli* 'scissors' = *katlin* Skr *kartrī*, *schuklo* fr *schatlo* 'sour' (Bugge Kuhn-Schleicher's Beitr I 154), Czech dial *klustej* = *tlustý* O Bulg *tlustyjı* 'thick' *klouci* = *tlouci* O Bulg. *tlŭšti* (beside *tlešti*) 'to strike' (Miklosich Vergl Gramm. I² 506, Burda Kuhn-Schleicher's Beitr VI 245)

-tr- seems to have become *-cr-* in Pelignian : *sacaracirix* 'sacrificans' = Lat **sacrā-trī-x*, cp. § 271.

Lat *-cc-* from *-tc-*. *succu-s* (to *sūti-s*) : O.Ir. *sesc* Cymr. *hysp* 'dry, withered, barren', cpf. **sutqo-s* (§§ 419 516). *peccō* fr. **petcō* i. e. **pcd-cō*, to *pēs impedīō* etc *floccu-s* probably fr. **flotco-s* i e **flod-co-s*, to Gr *φλαδεῖν* 'to rend' Analogously *accipiō*, *acquīrō* fr. **atc*, **atqu* i e. *ad+c*, *qu*, *quicquam* fr. **quidquam* i. e. *quid+quam* (*quidquam* is the etymological spelling). Cp further *appellō* fr **atp* i e *ad+p*, *topper* 'forthwith' fr. **totper* i e. **tod* (cp *is-tud*, Skr *tád* 'the' neut.) + *per*, cp. *sem-per parum-per*

§ 368. Indg. *d* Lat *dīcō*, Umbr. *deitu* 'dicito' Osc. deíkum 'dicere'. Skr *diśámi* 'I show, point out', Gr. *δείκνῡμι* 'I show', Goth. *ga-teiha* 'I announce, proclaim' Lat. *dīvo-s deu-s* (cp § 172, 2), Umbr *dequia* 'divina' Osc deívaí dat 'divae' : Skr *dēvá-s* O.Ir. *dia* Lith. *dēva-s* 'god' Lat *ed-ō*, Osc. edum 'edere' Skr. *ád-mi* Arm. *ut-em* Gr. *ἔδ-ω* Goth. *it-a* 'I eat', Lith. *ėd-u* 'I eat' O Bulg *jad-ĭ* f. 'food'. Lat. *mod-es-tu-s mod-u-s*, Umbr. meř-s *mers* 'ius' fr. **medos* : Arm. *mit* (gen *mt-i*) 'thought', Gr. *μέδ-ο-μαι μήδ-ο-μαι* 'I consider, plan', O Ir. *midim* 'puto', Goth *mita* 'I measure'. Lat. *pēdō* fr. **pezdō* (§ 594) : Gr. *βδέω* 'I break wind' etc., see § 334

§ 369. *l* appears for *d* (initially before vowels, medially between vowels) in about twelve Lat. words E. g. *lēvir* : Skr. *dēvár-* Arm. *taigr* Gr. *δᾱήρ* Lith. *dever-ì-s* 'husband's brother'; *lympa* : Osc. Diumpaís 'Nymphis' (§ 49 p. 42); *lacruma*, older *dacruma* : Gr. *δάκρυ* O.Bret. *dacr* Goth. *tagr* 'a

tear'; *olō oleō* beside *odor* : Gr. *ὀδμή* 'smell', Lith. *ữ dẽiu* 'I smell something'; *soliu-m* beside *sedeō* : Gr. *ἕδ-ος* 'seat'; *solum solea* : Gr. *ὁδό-ς* 'way' *ἔδαφο-ς* 'bottom, ground', O.Bulg. *choditi* 'to go'; *ūlīgō* beside *ūdu-s ūvidu-s* with suffixal *d*; *mālu-s* probably from **mazdo-s* : OHG. *mast* 'mast' (§ 596). This change, due to the dorsal articulation of the *d*, was possibly not occasioned by any special phonetic conditions whereby *d* stood in the words in question opposed to other Lat. words containing *d*, but had its origin in some local dialect.

Rem. 1. I decidedly hold the forms with *r* = *d* as *ar* = *ad* (*arbiter ar-vorsus*), *apor* = *apud* for non-Latin, s. Corssen Ausspr I² 238 ff., Jordan Krit Beitr. 92 ff, Stolz Lat Gramm § 51 These words were imported from one of the Umbr.-Samn dialects. Cp. this § lower down.

dų became *b*, e. g. *bi-s* : Skr. *dvi-ś* 'twice'. See § 170 p. 150.

dl became *ll*. *sella* fr. **sed-lā* : Gr Lacon. *ἑλλᾶ* 'seat' § 364, Goth. *sitls* 'seat'. *rāllu-m* 'ploughshare', to *rādō* Skr. *rádāmi* 'I scratch'. Cp. also *grallae* 'stilts', to *gradior*, with *d* = Indg. *dh* : Goth. *grīps* (st. *grīdi-*) 'step, grade', O.Bulg *grędą* 'I come' (§§ 370. 511).

ld became *ll*. *sallō* (*salsu-s*) : Goth. *saltan* 'to salt'. *percellō*, to *clād-ēs* fr. **kl̥d-* (§ 306 p. 243) : Gr. Hom. *κλάσσαι* 'to break', *κλαδάσαι* · *σεῖσαι* Hesych. (*per-culsu-s* = *κλαστό-ς*, cpf. **kl̥t*to-s* i. e. **kl̥d+to-*) The *d* in **saldō* and **per-celdō* did not belong to the root. *mollī-s* fr. **moldų-i-s* : Skr. *mṛd-ú-ś* 'soft, tender', fem. *mṛd-v-ī*.

Rem 2 Observe the limited period of the operation of this sound-law. *valdē* fr *valide*, *caldus* fr. *calidus* did not suffer this assimilation.

dg became *gg* : *agger* fr **ad-ger*.

In Umbrian intervocalic and final *d* passed into a sound (ř and *rs*), which we conjecturally denoted in § 23 as a strongly spirant *r*. te-ře *de-rsa* 'det' te-řust *di-rsust* 'dederit' : Lat. *de-dī*, Skr. pres. *dá-dā-mi* perf. Ved. *da-dá*, Gr. *δί-δω-μι δέ-δο-μαι*, rt. *dō-* 'give'. peř-i *pers-i* 'pede' *du-purs-us* 'bipedibus' : Lat. *ped-*, Gr. *ποδ-* 'foot'. asam-ař 'ad aram' *ars-veitu* 'advehito' : Lat. *ad* O.Ir. *ad-* Goth. *at*. In a few instances simply *r* or *s* is written instead of *rs*, as *ar-* beside *ars-*, *a-tropusatu* beside *aha-tripursatu* '(abs)tripodato'.

Rem. 3. The forms řeře 'dedit' and řunu 'donum' arose from association of the initial *d* to the medial ř of the forms teřa teřust etc.

A similar change of the *d* is shown in Volsc. *ar-patitu*, with *ar* = Lat. *ad* (how the verbal form itself is to be understood is doubtful), and in Mars. *apur finem* 'apud finem' The Þ in Pelign. VIÞAD ('videt' or 'viderat') may denote a similar *r*-sound.

§ 370. Indg. *dh* became *f* in the prim. Ital. period, and it may be assumed that this spirant in the same period was shifted to *f* uniformly initially, medially before and after *r*, before *l* and after *u* (*u̯*), perhaps also after *m*. Medial *f* then became *b* in Lat. Lat. *fēlāre fīlu-s*, Umbr. feliuf *filiu* acc. 'lactantes' : Skr *dhāyāmi* etc, see § 362 Lat. *foru-m* Umbr. *furo* 'forum', prim. Ital. **fu̯oro-m* : Skr. *dvār-* 'door' (for regular **dhvār-*, § 480), Lith. *dvāra-s* O Bulg *dvorŭ* 'yard'. Lat. *forti-s* O.Lat. *forcti-s* : Skr *dṛdhá-s* 'firm, strong' fr. **dhṛ̆dha-s* i. e. Indg. **dhṛ̆gh+to-* (§§ 482 552). Lat. *rubro-*, Umbr. rufru 'rubros' : Gr. *ἐρυθρό-s* O.Bulg. *rŭdrŭ* 'red', O.Icel. *roðra* f. 'blood', Indg. **rudh-ró-s*. Lat. *combr-ētu-m* a kind of rush : Lith. *szveñdrai* pl. a kind of sedge or reed, cpf. **k̑u̯endhro-* (Lat. *co-* fr. **cu̯e-*, § 172, 3). Italic suffix *-fro-* = Gr. *-θρο-*, Lat. *crībru-m* [1]), *verte-bra*, Osc. *Vena-fru-m* name of a town ('hunting place, hunting ground' according to Corssen's probable conjecture) Lat. *barba* (on the initial *b* see § 338 rem.) : OHG. *bart* O.Bulg. *brada* 'beard'. Italic suffix *-flo-* = Gr *-θλο-*, Lat *sta-bulu-m* (*-bulo-* fr. *-blo-*, § 269). Umbr. *sta-flarem* 'stabularem', Pelign. *pri-sta-falacirix* 'antistita' fr. **-sta-flā-crīx* (§ 271) = Lat. **prae-stabulātrīx*. Lat. *rōbu-s*, Umbr. *rofu* 'rubos', prim. Ital. **ro̯u̯fo-* : O.Ir. *ruad* Goth. *ráuþs* (st. *ráuda-*) 'red', cpf. **ro̯u̯dho-s*; Lat. *rūfu-s* was a loan-word from an Umbrian-Samn. dialect. Lat. *ūber* n. : Skr. *údhar*, Gr. *οὖθαρ* OHG. *ūtar* 'udder'. Lat. *jubeō* O.Lat. *joubeō* beside *jussī jussus*; *ss* proves the origin of the

1) The suffix-form *-dhrā-* might be maintained for OHG. *rī-ttara* Ags. *hrī-dder* 'sieve', but they also admit of being traced back to *-trā-*. Cp. Kluge Nominale Stammbildungslehre der altgerm Dial. p. 46.

b from *dh*, see § 552. If Lat. *lumbu-s* belongs to OHG. *lenti* 'loins' O.Bulg. *lędvija* 'loins, kidneys', it must be traced back to a **lomdho-s*; the origin of *b* fr *dh* would then be older than the change of *m* to *n* before dentals (§ 207). Cp. Osthoff Zur Gesch d Perf. 533 f.

In other cases Lat *d* and Osc. *f* stand opposite to each other medially Lat. *mediu-s*, Osc. mefiaí loc. 'in media' : Skr. *mádhya-s* etc, see § 357 Lat. *aedēs aedīli-s*, possibly Osc. gen. sg Aiiufineís (Osc. aídil was a Lat. loan-word). Skr. *ēdha-s* etc., see § 365. *vidua* : Skr. *vidhávā* O.Ir. *fedb* Goth. *viduvō* O.Bulg *vĭdova* 'widow'. *con-dō con-dūtu-s* beside *fa-c-iō*, from rt *dhē-* 'place, lay, do' (§ 350). Lat *d* points to *b* as the direct previous stage, and thus the Osc *f* cannot be prim. Ital. *f*

That *d*, not *b*, appears after *r* in Lat *arduo-s* fr. prim. Ital. **arǰuo-s* (: Skr *ūrdhvá-s* Gr. *ὀρθό-ς*, § 170 p. 150, § 306), was due to the combination *ǰu*

Rem Concerning the *f* in Lat *infera-s infimu-s* which are generally connected with Skr *adhamá-s* 'undermost', Goth. *undar* 'under' (cp § 244), cp the conjecture given in § 389 rem

Old Irish.

§ 371. Indg *t* = prim Kelt. *t*. *temen* 'dark, gray' *temel* 'darkness' : Skr. *támas-* n 'darkness', Lat *tenebrae*, OHG. *demar* 'twilight', Lith. *tamsà* 'darkness' *tarathar* 'borer' : Gr *τερέω* 'I bore, pierce' *τέρετρο-ν* 'borer, gimlet', Lat. *terō terebra*. *ocht n-* 'eight' : Gr. *ὀκτώ* etc., see § 360. *alt t*-preterite to *alim* 'I foster, bring up'. *tuagaim* 'I stride, go' with loss of initial *s-* (§ 575) : Gr *στείχω* 'I go', Goth *steiga* 'I ascend', O.Bulg *stigną* 'I come', rt. *steigh-*.

cēt (read *cēd*) Cymr. *cant* 'hundred' : Skr. *śatá-m* Gr *ἑ-κατό-ν* Lat. *centu-m* Goth. *hund* Lith. *szimta-s*. See §§ 212. 513

Spirantal *th*, *d* after vowels. *mā-thir* 'mother' : Skr. *mātá* Gr. *μήτηρ* Lat. *māter* Gen. *be-thad* dat. *be-thid* (nom. *beo-thu* 'life'), suffix *-tūt-* : Lat. *-tūt-*. See § 514.

§ 372. Indg. *d* = prim. Kelt. *d*. *derc* 'eye' *air-dirc* 'conspicuus, renowned' : Skr. *dadárśa* 'I saw', Arm. *tes-ane-m*,

Gr. *δέρκομαι* 'I see', Goth. *ga-tarhjan* 'to mark out'. *dēt* 'tooth' : Skr *dánt-* Gr. *ὀδούς* Lat. *dēns* Goth. *tunþ-u-s* Lith. *dant-ì-s* 'tooth'.

d was spirantal e. g. in *cride* 'heart' : Arm. *sirt* (gen. *srti*) Gr. *καρδίᾱ καρδίη* Lat. *cor* (gen. *cordis*) Goth. *haírtō* Lith. *szirdì-s* O.Bulg. *srĭdĭce* 'heart'. See § 522.

nn from *nd* e. g. in *ro se-scaind* redupl. pf. 'he leapt' : Skr. *skánd-āmi* 'I jerk, leap', Lat. *scand-ō*. See § 520.

Assimilation of the *d* in the prep. *ad-* = Lat. *ad* to a following *g* and *b*, when *ad-* had the chief accent. *áccaldam ácaldam* 'address, conversation' beside *ad-gládur* 'I address'. *ápēlugud* 'adulation' fr. **ád-bēlugud*. *cc, c* is to be read as *gg*, and *p* as *bb*. See § 519.

§ 373. Indg. *dh* = prim. Kelt. *d* *fu-domam* 'deep', Cymr. *dwfn* 'deep', to which probably also *domun* 'world' Gall. *Dubno-rīx Dumno-rīx* ('world-king') : Goth *diups* 'deep' etc., see § 325. Mid.Ir.' *dī-th* 'he sucked' : Skr. *dhāyāmi* etc., see § 362. *ard* 'high' (to which probably *Arduenna silva*): Skr. *ūrdhvá-s* Gr. *ὀρθό-ς* 'upright' Lat. *arduo-s* (§§ 306. 370). *meld-ach* 'acceptus, gratus' . OHG *milti* OS. *mildi* 'mild, kind'.

d was spirantal e. g. in *riad* 'a driving' : Gall. *rēda* 'vehicle', OHG. *rītan* 'to move on, drive, ride' O.Icel. *rīða* 'to travel, ride', rt. *reidh-* See §§ 522. 526

Compare further *ind-* 'combat' in Brit proper names as O.Cymr. *Ind-nerth* (*nerth* 'power, strength') *Ind-ri* (*ri* 'king') : Skr. *yúdh-* 'fight, combat'.

Germanic.

§ 374. Indg. *t*. Goth. OHG. *ist* 'is' . Skr. *ás-ti* etc. Goth. *raíhts* OHG. *reht* 'right' . O.Pers. *rāsta-* 'straight, right', Gr. *ὀρεκτό-ς* 'stretched out', Lat. *rectu-s*, prim. f. **rĕk-to-s*. Cp § 528.

Goth. *þaúrnu-s* OHG. *dorn* Ags. *ðorn* O.Icel. *þorn* 'thorn' : Skr. *tṛ-na-m* 'blade of grass', O.Bulg. *trĭnŭ* 'thorn'. Goth. *anþar* OHG. *andar* Ags. *ōðer* 'other' : Skr. *an-tará-s* Lith. *añ-tra-s* 'other'. Goth. *vaírþan* OHG. *werdan* Ags. *weorðan* 'to become' : Skr. *várt-a-tē* etc., see § 348.

Goth. *háid-u-s* 'manner', OHG. *heit* Ags. *hād* 'state, condition, property' : Skr. *kēt-ú-ṣ* 'luminous phenomenon, appearance, picture, form'. Goth. OS. *hund* O.Icel. *hund-rað* OHG. *hunt* 'hundred' : Skr. *śatá-m* etc., see § 371.

With the exception of *-tk-*, which became *-sk-*, in all combinations in which Indg. *t* underwent a shifting in prim. Germ., there arose first of all the interdental spirant *þ*, which partly became *đ*. In Goth. *þ* remained everywhere, *đ* partly remained, and partly became *d*. In HG. *þ* and *đ* became explosives again. For details see § 527 ff.

Prim. Germ. initial *þl-* from pre-Germ. *tl-* became *fl-* in West Germ. and Norse. OHG. *fliohan* Ags. *fleón* O.Icel. *flýja* 'to flee' : Goth. *þliuhan*. OHG. *flīhan* 'to caress, flatter, ask urgently', Ags. *flāh* O.Icel. *flār* 'deceitful, false' : Goth. *ga-þláihan* 'to caress, console, speak friendly to'. Etymological equivalents for these words are wanting in the other Indg. languages.

In Middle German dialects *tw-* = prim. Germ. *þw-* passed into *kw-* (*qu-*). Mod.HG. *quangen quangeln* (beside *zwängen*) : MHG *twengen* 'to put under constraint' (cp the orthography *tquang* for *twanc* in Grimm's D Gramm. 1 [2] 355 rem. of the new reprint), O.Icel *þvinga* 'to compel'. MHG. *querch* Mod.HG. *quer* (beside Mod.HG *zwerch*) : MHG. *twerch twer* 'cross, oblique', Goth. *þvairhs* 'angry'. Cp. OHG *quīfalōn* § 375.

§ 375. Indg. *d*. Goth. *tuhan* OHG. *ziohan* Ags. *teón* 'to draw' : Gr. δαι-δύσσεσθαι · ἕλκεσθαι Hesych., Lat *doucō dūcō*, rt. *deuk̑-*. Goth. *triggva* f. 'covenant' OHG. *truwa* 'fidelity' (§ 179 p. 157) : Pruss. *druwi* f. 'faith', Gr. δροόν · ἰσχυρόν. Ἀργεῖοι (Hesych.) Goth. *háirtō* OHG *herza* Ags. *heorte* O.Icel. *hjarta* 'heart' : Gr. καρδ-ίᾱ etc., see § 372. Goth. *vitan* OHG. *wizzan* 'to know', Indic. *váit weiz* 'I know' : Skr. *véda* etc., see § 349.

OHG. *z* was the affricata *ts*, whereas *zz* (the oldest Mss. have *zz* after both long and short vowels, finally *z*) was a voiceless spirant, whose position of articulation seems to have been

somewhat different from that of *s* (Paul in Paul-Braune's Beitr. I 168 f.).

Prim. Germ. *tu̯-* = Indg. *du̯-* appears in Alemanic in the OHG. period as *qu-*, *quîfalōn* 'to doubt' beside *zuīfalōn* : Goth. *tveifls* 'doubt', to prim. Germ. **tu̯i-* OHG. *zwi-* = Indg. **du̯i-* 'two', see § 349. Cp. the younger *qu-* = prim. Germ. *þu̯-* in Middle German § 374.

§ 376. Indg. *dh.* Goth *dags* OHG. *tag* Ags. *dæg* O.Icel. *dagr* 'day' : Skr. *ni-dāghá-s* 'heat, hot time, summer', Lith. *dāga-s dagà* 'harvest' (properly 'hot time'), cpf **dhogho-s*, from rt. *dhegh-* 'burn'. Goth. *bindan* Ags. *bindan* OHG. *bintan* O.Icel. *binda* 'to bind' : Skr. *bándhanam* etc, rt. *bhendh-*, see § 350.

Goth. *ana-biudan* 'to command, order' Ags. *beódan* OHG. *biotan* O Icel. *bjōða* 'to offer' : Skr. *bódhāmi* 'I awake, mark, perceive', Gr. *πεύθομαι πυνθάνομαι* 'I inquire, ask', Lith. *bùdinti* 'to awake' O.Bulg. *bŭděti* 'to wake, watch over', rt. *bheu̯dh-*.

đ arose first of all in every combination in prim Germ. This returned to an explosive in West Germ. throughout, and partly in Goth. For details see § 537 ff.

Baltic-Slavonic.

§ 377. Indg *t* Lith *taszýti* O Bulg. *tesati* 'to chop' : Skr. *tákšāmi* 'I make, fashion', Gr. *τέκτων* 'carpenter', Lat. *texō*, O Ir. *tāl* 'carpenter's axe' Lith. *szvit-ėti* O.Bulg *svĭt-ěti* 'to shine brightly' Skr. *śvit-rá-s śvēt-á-s* 'brilliant, bright', rt. *ḱu̯eit-* Lith. *kert-ù* 'I hew, strike' O.Bulg. *črĭt-ą* 'I cut' : Skr. *kṛnt-ámi* 'I cut, split', rt *qert-*. Lith. *at-min-tì-s* 'memory' O.Bulg. *pa-mę-tī* 'remembrance' Skr. *ma-tí-ṣ* etc., Indg. **mn̥-tí-s* 'a thinking of, meditating' (rt. *men-*).

tl became *kl* (cp. *gl* fr. *dl*, § 378) in Lith. and Lett, as in Italic (§ 367). Suffix *-klu-* = Lat. *-clo- -culo-* : Lith. *ìr-kla-s* Lett. *-ir-kl-s* 'oar', Lith *sė-klà* Lett. *sê-kla* 'seed' (cp. Lat. *sae-clu-m sae-culu-m*), Lith. *gany-klà* Lett. *gani-kla* 'pasture, cattle-range'. The previous stage *tl* was preserved in Prussian : *eb-sentliuns* 'having marked' opposed to Lith. *žėn-kla-s*

'mark' (Burda Kuhn-Schleicher's Beitr. VI 245). Cp. also the loan-word Lith. *turklẽlis* 'turtle-dove' (from which *kurklẽlis*), which is still *turtlelis* in Bretken.

k for *t* in East Lith. (Godlewa) *rykmetỹs* fr. *ryt-metỹs* 'the early morning' and in West Lith. *tìknaga-s* from *tìtnaga-s* 'fire-stone, flint', to which also *sèkma-s* 'septimus' (cp. § 345)?

§ 378. Indg *d* Lith. *dirtì* 'to skin', O.Bulg. *derą* 'I skin, tear' : Skr. *dṛ-ná-mi* 'I burst, tear', Gr *δέρω* 'I skin', Cymr Corn *darn* 'bit, portion', Goth *ga-taíra* 'I tear, destroy', rt *der-*. Lith. *raudà* 'lamentation', O.Bulg *rydają* 'I lament' : Skr. *rudámi* 'I mourn, weep', Lat. *rudō* 'I bray, roar', Ags. *reótan* OHG. *rozan* 'to mourn, weep'. Lith *grúda-s* 'corn' *graudù-s* 'brittle, fragile', O.Bulg *gruda* 'clod' · O Icel. *grautr* OHG *grazzi* 'grit' Lith *pĩrdi-s* 'crepitus ventris' Skr *párdatē* Gr *πέρδεται* 'breaks wind', OHG *ferzan* 'to break wind', rt *perd-*.

gl from *dl* (cp *kl* from *tl*, § 377) in Lith. and Lett. Lith. *ẽglė* 'fir' beside Pruss *addle* Polish *jodła*, *d* = Indg. *d* or *dh*? Lett. *segli* pl 'saddle' fr *sedlì*, rt *sed-* Cp Kašub. *žągło* = Polish *żądło* 'edge, point' with suffix *-dlo-* — Indg. *-dhlo-*.

§ 379 Indg *dh* = prim Balto-Slav *d* Lith. *de-dẽ* 'uncle' *dẽ-da-s* 'old man', O.Bulg *dĕ-dŭ* 'grandfather' : Gr *τή-θη* 'grandmother', *τη-θί-ς* 'aunt' (τ- fr *θ-*, § 496), *θεῖο-ς* 'uncle' Lith. *dabinù* 'I adorn, clean', O Bulg *doba* 'opportunitas' *dobrŭ* 'good' : Goth *ga-dabiþ* 'it is fit, becoming' *ga-dōfs* (st. *ga-dōba-*) 'becoming, proper', Lat *faber* 'skilful, workman'. Lith *vedù* O Bulg. *vedą* 'I lead, lead home' · Skr *vadhú-ś* 'bride, maiden', O.Ir. *fedim* 'I bring, lead'.

Rem. O Bulg *zeǫą* 'I burn' cannot be separated from Lith *degù* Skr *dáhami* etc, rt *dhegh-* (§ 376) *dʰeǫ-* must have become *geǫ-* (whence *dzeǫ-* *žeg-*, see § 463) by assimilation in prim Slavonic This is shown by Russ *iz-gaga* 'heart burn' (Leskien Handbuch[2] p 12)

3. Palatal Explosives[1]).

§ 380. Indg. *ḱ*, (*ḱh*,) *ǵ*, *ǵh* usually appear in Greek, Ital., Keltic, and Germanic as explosives or as such sounds, for which

1) On the palatal and velar explosives in the Indg languages see Ascoli Fonologia comparata del sanscrito del greco e del latino, Torino

explosives are to be presupposed as the immediately previous stage, whereas in Ar, Armen., Baltic-Slav, and Albanian they usually appear as spirants (in Armen. at the same time as affricatae) or their continuations.

It is possible and not improbable, that this diversity reflects a prim. Indg difference of articulation, that the original explosives were spoken with a spirantal colouring (as affricatae?) in one portion of the Indg. parent language, whilst they remained pure in the other. This dialectical difference was then transmitted to the individual developments Cp. § 417

We classify the individual languages in the following §§ in accordance with this difference and give below an abstract of the usual representation of the palatals in the various languages.

Idg	Gr	Ital	O Ir	Germ	Skr	Av	Arm	Alb	Lith	Slav.
k	κ	c	c	h, $\chi(h)$, q 3	$ç$, $ś$	s, $š$	s	s	sz	s
g	γ	g	g	k	j, (z)	z, $ž$	c	d	$ž$	z
gh	χ	h, g	g	g 3	h	z	j, z	d	$ž$	z

e Firenze 1870 (translated by Bazzigher and Schweizer-Sidler under the title 'Vorlesungen über die vergleich Lautlehre des Sanskrit etc', Halle 1872) p 107 ff, Studj critici II (1877) p 25 ff, Havet Revue critique 23 Nov 1872, 7 Mai 1874, Mém de la soc de lingu II 261 ff, Fick Die ehemalige Sprachenheit der Indogerm Europa's 1873 p 1 ff, J. Schmidt Jen Lit-Zeit 1874 Art 14 1875 Art 588 1877 Art 247, Kuhn's Ztschr XXV 64 ff, H Möller Die Palatalreihe der idg Grundspr im Germ, Leipz 1875, Kuhn's Ztschr XXIV 427 ff, Windisch Kuhn-Schleicher's Beitr. VIII 25 ff, Hübschmann Kuhn's Ztschr XXIII 21 ff. 384 ff, Benfey Gott Nachr 1876 p 297 ff, Leskien Declin im Slav-Lit und Germ 1876 p XXIV f, G Curtius Stud VII 267 ff, Bezzenberger in his Beitr II 151 ff VI 236, K Verner in Morph Unt. I 116 ff, F Müller Sitzungsber d Wiener Ak 1878 p 3 ff, Kluge Beitr zur Gesch d germ Conj 1879 p 42 ff, Frodhe Bezzenb Beitr. III 12 ff, Collitz ibid 177 ff, d'Arbois de Jubainville Mém. de la soc. de lingu IV 422 ff; Osthoff Paul-Braune's Beitr VIII 256 ff, the Auth Kuhn's Ztschr XXV 306 f, Morph. Unt IV 407 ff, Bersu Die Gutturalen und ihre Verbindung mit v im Lateinischen, Berlin 1885.

Indo-Germanic prim. period.

§ 381. Tenuis *k̂*. ***k̂ṃtó-m** 'hundred' : Gr. *ἑ-κατό-ν* Lat. *centu-m* O.Ir. *cēt* Goth. *hund* + Skr. *śatá-m* Lith. *szim̃ta-s*. ***sm̥é̆kuro-** 'father-in-law', ***sueĕkrú-** 'mother-in-law' : Gr. *ἑκυρό-ς, ἑκυρᾶ*, Lat. *socer, socrus*, O.Corn. *hwigeren, hweger*, Goth. *svaíhra* m., OHG. *swigar* f. + Skr. *śvāśura-s, śvaśrū-š*, Arm. *skesur* f. Lith. *szeszura-s* m.[1]); on the initial Skr. *ś-* Arm. *sk-* Lith. *sz-* see §§ 557, 4. 562. 587, 2. Rt. **ue̯ĭ̯k̂-** 'enter in' : Gr. *Fοῖκο-ς οἶκο-ς* 'house', Lat. *vīcu-s*, Goth *veihs* (gen. *veihsis*) n. 'district' + Skr. *viśā́m* 'I enter, come', Alb *rise* pl. 'places', Lith *vèszėti* 'to be a guest, tarry', O.Bulg. *vĭsĭ* 'village'. ***ok̂tṓu̯ *oĭ̂tṓ** 'eight' (cp. § 645 final 1) : Gr. *ὀκτώ* Lat *octō* O.Ir *ocht n-*. Goth. *ahtáu* + Skr. *aṣṭáu aṣṭá* Lith. *asztùnì* O.Bulg. *osmĭ*.

Seldom in suffixal elements. ***i̯u̯u̯-k̂ó-s** or ***i̯u̯u̯-k̂ó-s** 'youthful' : Lat. *juvencu-s* O.Ir. *ōac ōc* (§§ 137 174) Goth *juggs* (*jūggs*?) + Skr. *yuvaśá-s*

§ 382. Media *ĝ ĝen- ĝnō-* 'get to know, know' : Gr. *γι-γνώ-σκω* 'I perceive', Lat *gnō-scō nō-sc-ō*, O.Ir *ad-gēn-sa* perf. 'cognovi', Goth *kann* 'I know' + Skr *jā-ná-mi* 'I perceive, know' (§ 253) Av. *ā-zaṇti-* 'knowledge, explanation', Arm *can-eay* aor. 'I knew', Lith *žin-óti* 'to know' O.Bulg *zna-ti* 'to know'. Rt. **melĝ-** 'strip off, milk' : Gr. *ἀμέλγω* Lat. *mulgeō* O Ir. *bligim* OHG *milchu* 'I milk' + Skr. *mr̥játi* 'wipes, rubs, cleans', part pass. *mr̥ṣṭá-* Av. *marəzaiti* 'strips', Lith. *mélžu* O.Bulg. *mlŭzą* 'I milk'.

Prim Indg. suffixes with *ĝ* seem not to occur.

§ 383. Media asp *ĝh* Gr *χιών* 'snow' *χειμών* 'winter', Lat. *hiems*, O.Ir *gam* O Cymr. *gaem* O Corn *goyf* 'winter' (cp. § 392) + Skr. *himá-* 'frost, snow' Av *zima-* 'winter', Arm. *jiun* 'snow', Alb. *dimṇm* 'winter', Lith. *žemà* O.Bulg. *zima* 'winter' Rt. **ue̯ĝh-** 'vehere' : Gr *ὄχο-ς* 'carriage', Lat *vehō*, O Ir. *fēn* 'carriage' (§ 526), Goth. *ga-vigan* 'to move' + Skr. *váhati* Av.

1) Kurschat writes *szeszùras*. The palatal pronunciation of the second *sz* is probably due to assimilation with the initial *sz-* which had been palatalised by the following *e*.

vazaiti 'leads, goes', Alb. *viéθ* 'I steal' (orig. 'I lead away'), Lith. *vežù* O.Bulg. *vezą* 'veho'.

Prim. Indg. suffixes with *ĝh* seem not to occur.

a. The language-group with explosives.

Greek.

§ 384. Indg *ḱ*. *καρδ-ίᾱ*, Ion. *κραδίη* 'heart' : Lat. *cor* O.Ir. *cride* Goth *haírtō* 'heart' + Skr. *śraddhá-* f. 'confidence' (§ 282), Arm. *sirt* Lith. *szirdìs* O.Bulg *sr̆dьce* 'heart' *κλυ-τό-ς* 'renowned' : Lat. *in-clutu-s* O.Ir. *cloth* 'renowned', OHG. *Hlot-hari* Lothar = **Κλυτό-στρατο-ς* + Skr. *śru-tá-s* 'heard, renowned', Arm *lu* 'audible' fr. **slu-*? (s Hubschmann, Armen. Stud. I 33), O.Bulg. *slov-o* 'word', rt. *ḱleu-* *κίνομι*, Bœot. etc. *Fίκατι* 'twenty' : Lat. *vicēsimu-s*, O Ir *fiche* 'twenty' + Skr. *viśati-š* 'the number twenty', Arm. *ksan* 'twenty' fr. **gsan* **gisan* (*g-* fr. *u-*, § 162). *πόρκο-ς* 'pig' : Lat. *porcu-s* O Ir. *orc* OHG. *farh farah* + Lith. *paršza-s* O Bulg. *prasę* 'pig'

From *ḱu* arose *πτ*, which was simplified to *π* initially. *ἵππο-ς* 'horse' : Skr *áśva-s* *πάντ-* 'all' : Skr. *-śvant-*. See § 166 p. 147.

ḱį became *σσ*, *ττ* *μάσσων* 'longer' : Av. *masyå* 'greater'. See § 489.

Prim Gr. *κτ* = Indg *ḱt* and *qt* became *ττ* in Cret. *ἐργο-διώττᾱ-ς* — Att. *ἐργο-διώκτη-ς* 'taskmaster' *νυττί* loc. sg. = Att. *νυκτί* (with *qt*, § 427 *c*).

§ 385. Indg. *ĝ* *γεύω* 'I let taste' · Lat. *gus-tu-s*, O.Ir. *to-gu* 'choice', Goth. *kusa* 'I test, choose' + Skr. *jóš-a-* Av. *zaoš-a-* m. 'favour, kindness', rt. *ĝeus-*. *ὀρέγω* 'I reach' : Lat *regō*, O.Ir. imper. *ē-rig* 'stand up', Goth. *uf-rakja* 'I reach up' + Skr. *ráj-ištha-* Av. *raz-išta-* 'straightest, most just', Lith *rāžyti-s* 'to keep on stretching oneself'. *ἔργο-ν* 'work': Goth *vaúrkja* 'I work, effect' + Av. *ver*zyeiti* 'effects, completes', Arm. *gorc* 'work', rt. *ųerĝ-*.

ĝį became *ζ* (*σδ*), *δδ*. *ἄζομαι* 'I stand in awe of', to *ἅγ-ιο-ς*, rt *ịaĝ-* See § 493.

§ 386. Indg. *ĝh* = prim. Gr. *kh*. *χαμαί* 'on the ground': Lat. *humu-s, homō* (= *ὁ ἐπιχθόνιος*), Goth. *guma* 'man' + Skr. *jm-ás* (§§ 469, 8. 554 rem. 1) Av. *zᵉm-ō* (§ 407) gen. 'of the earth', Alb. *dè* 'earth', Lith. *žẽme* O.Bulg. *zemlja* 'earth'. *χείρ* 'hand': Arm. *jeṙn* 'hand' pl. *jer-ḳ*. *ἔχω* 'I have, hold' fut. *σχή-σω*: Goth. *sigis* 'victory' + Skr *sáhas-* Av. *hazah-* n. 'strength, power, victory'. *σπέρχω* 'I hurry on, drive' : + Skr. *spṛhayati* 'eagerly longs for' Av. *sperᵉzaitē* 'strives'.

ĝhi became *σσ, ττ*. *ἄσσον* 'nearer' to *ἄγχι*, rt. *añĝh-*. See § 497.

Italic.

§ 387. Indg. *ḱ*. Lat. *cēnseō*, Osc *censamur* 'censetor': + Skr. *śáṃs-a-ti* 'recites, praises' Lat. *ci-s ci-ter*, Umbr. si-mu *si-mo* 'ad citima, retro' sive 'citra' : perhaps Gr. neut nom. acc. *-κι(δ)* in *οὐ-κί ναί-γι πολλά-κι* (Osthoff Morph. Unt. IV 241 f.), O.Ir. *ce* 'on this side', Goth. *hi-mma* 'to this' + Arm. *-s* 'this' (suffixed pronoun), Alb. *si-vjét* 'in this year', Lith. *szì-s* O.Bulg. *sĭ* 'this'. Lat. *clī-nō clī-tellae*, Umbr. kletram 'lectīcam' : Gr. *κλίνω* 'I lean, bend', O Ir. *cloen* 'slant, unjust, bad', Goth. *hláins* 'hill' + Skr. *śráy-a-ti* 'leans against, lays on', Lith. *szlaĩta-s* 'mountain-slope', rt. *ḱlei̯-*. Lat. *decem*, Umbr *desen-duf* 'duodecim' tekuries *dequrier* 'decurus' Osc. dekmannıúís 'decumanis' · Gr *δέκα* O.Ir. *deich n-* Goth. *taíhun* + Skr *dáśa* Arm *tasn* Lith. *dẽszimt* O.Bulg. *desętĭ* 'ten'. Lat *equo-s*, Umbr tra ekvine 'trans equinum' (cp. § 431 *a*): Gr. *ἵππο-ς* O.Ir *ech* 'horse', Goth. *aíhva-tundi* '*βάτος*' + Skr. *áśva-s* 'horse', Lith. *aszva* 'mare', Indg. **eḱu̯o-s *eḱuā*. Lat. *queror questu-s* · + Skr *śvás-i-mi* 'I breathe, snort, sigh', rt. *ḱu̯es-*.

-cf- became *-ff-* in Lat. : *efferō effectō*; the *c* in *ec- ex* was probably *ḱ*.

Prim. Ital. *ḱ* (partly = Indg. *ǫ*, § 430) became a sibilant in Umbrian before *e-* and *i*-vowels, which cannot be more closely defined: *š, ś s* (§ 23). Besides *šimu* etc already named cp. further: *tišit* 'decet', to Lat. *decet decus*, Skr *daśas-yá-ti* 'does honour, is gracious'; *curnaśe* 'cornice' beside *curnaco* 'cor-

nicem'; faàia 'faciat' beside fakust 'fecerit'. With this may be compared the treatment of Lat. *c* before palatal vowels in the Romance developments, as Italian *cento* Fr. *cent* from *centum*.

Rem. Lat. *c* had the pronunciation *k* also before *e*- and *i*-vowels down to the Middle Ages, thus *kentum, kito*. Cp. Seelmann Die Ausspr. d. Lat. 332 ff.

§ 388. Indg. *ĝ*. Lat. *gī-gn-ō malī-gn-u-s* (§ 619) *genu-s*, Osc. Genetaí 'Genetrici' : Gr. *γί-γν-ο-μαι* 'I become' *γέν-ος* 'race', O.Ir. *ro gēnair* 'natus est' *gem* 'birth', Goth. *kuni* 'race' + Skr. *ján-as-* n. 'race' Av. *zī-zan-anti* 'they beget, bring forth', Arm. *cin* 'birth', rt *ĝen-*. Lat. *rēg-is* gen. sg., Osc regatureí 'rectori', Marruc. *regen|a* dat. 'reginae' · O Ir. *rīg* gen. 'of a king' Gall *Bitu-rīges* + Skr. *rāj-* (nom. sg. *rāṭ*, § 401 rem. 2) *rāj-an-* 'king' *rāšṭi* 'shines forth, distinguishes himself'. Lat. *argentu-m*, Osc. aragetud abl. 'argento' : Gr. *ἀργής* 'bright, white', *un-airkns* 'impure' OHG. *erchan* 'certus, egregius, right, pure' + Skr. *árjuna-s* 'bright, white, silver-coloured' Av. *ar^{e}zah-* n. 'the clear day, day-light', Arm. *arcat'* 'silver'. Lat *glōs*: Gr. *γαλόως* + O Bulg. *zlŭva* 'husband's sister'.

§ 389. Indg *ĝh* = prim. Ital. *χ*. Lat. *humu-s homō*, Umbr. *hondra* 'infra' *hondomu* 'infimo' Osc huntru 'infra' (s. § 207), Umbr. *homonus* 'hominibus' Osc. humuns nom. 'homines': Gr. *χαμαί* etc., see § 386 Lat. *hor-tu-s co-hors*, Osc. húrtúm 'hortum' : Gr. *χόρτο-ς* 'grass, hay, fodder, feeding-place, court-yard', O Ir. *gort* 'seges' *lub-gort* 'vegetable-garden' + Lith *žarī-dis* m. 'pasture for horses, pasture-ground' Pruss *sardi-s* 'a place enclosed by a hedge'[1]) Lat *vehō*, Osc. *vehia* 'plaustrum' (Paulus F.) : Gr. *ὄχο-ς* etc., see § 383. Lat. *mihī* and Skr. *máhyam* 'mihi' probably contained Indg *ĝh*, the same sound as in Skr. nom. *ahám*.

Concerning the dropping of Lat. *h* = *ĝh* see § 510.

f also occurs instead of Lat initial *h*, e. g. *folus* beside *holus helus* : O Ir *gel* 'white', OHG. *gelo* 'yellow' + Skr. *hári-š* Av.

1) It is uncertain whether Goth *garda* 'yard, house, family' and OHG *garto* also belong here. Lith. *gařda-s* and O Bulg. *gradŭ* seem to have been borrowed from Germ See § 467, 2 and Kluge Etym. Wtb der d Sprache under *Garten*

zairi-š 'yellowish', Lith. *želù* 'I grow green' O.Bulg. *zelije* n. 'greens, vegetables'; *fariolu-s* beside *hariolu-s haru-spex*: Gr. *χορδή* 'a string of gut', O.Icel. *garner garnir* pl. 'entrails' + Lith. *žarnà* 'gut'. Along with Osthoff (Morph. Unt. IV 99, cp. Danielsson in Pauli's Altital. Stud. III 144, Bersu Die Gutturalen im Lat. 131) we do not hold these forms with *f* as also *fosti-s* beside *hosti-s* (§ 430) for Lat., but for Sabine.

Rem. I am in doubt about the *f* in Lat *fundō*, to Goth *giutan* 'to pour', Gr *χέω* 'I pour' *χύ-τρα* 'holy water', Av *zao-θrā-* 'libation'. One might regard the *f* as having regularly arisen in *īn-fundō cōn-fundō*, and then carried over to the uncompounded form, if the assumption had a firmer basis, *infumu-s īnfimu-s* may have come from an older *'in fumō* = *in humō* (cp Umbr *hon-dra* above), which, being regarded as a superlative, was followed by the forms *infero-s infero-* The *f* in the Lat words cannot be regularly connected with the dental in Skr *adhás* 'below' Goth. *undar* 'under'

Lat *ng* fr. prim. Ital. *ŋχ*. *angō*· Gr *ἄγχω* 'I press tight, strangle', O.Ir. *cum-ung* 'narrow', Goth *aggvu-s* 'narrow' (with *v* from the oblique cases) + Skr. *áṃhas-* Av. *ązah-* n. 'distress, need', Arm. *anjuk* (*aneuk*) 'narrow', O Bulg. *ąza* 'bond, fetter'. *mingō* (beside *mējō*, probably fr **meihō*, § 510) . Gr. *ὀμείχω* 'I make water', Ags. *mīʒan* O.Icel. *mīga* 'to make water' + Skr. *méhati* Av *maęzaiti* 'makes water', Arm *mēz* (gen. *mzi, mizoy*) 'urine', Lith. *mĩžalaĩ* pl 'urine'.

O.Irish.

§ 390. Indg. $\hat{k}$ = prim. Kelt. *k*. O Ir. *clū* 'renown' *cluas* 'ear', Mid.Cymr *clusteu* pl. 'ears': Gr. *κλυ-τό-ς* etc, see § 384. O.Ir. *imm-chom-arc* 'question, an asking', O.Cymr *di-erchim* 'ad poscendum' (for the loss of the *p*- see § 339) : Lat. *prec-ēs* pl., Goth. *fraihnan* 'to ask' + Skr. *praś-ná-* Av. *fraš-na-* (§ 398) 'question, an asking', Arm. *harsn* (gen *harsin*) 'bride', Lith. *praszýti* O.Bulg. *prositi* 'to beg, request'. O.Ir. *derc* 'eye', Mid.Bret. *derch* 'aspectus' : Gr. *δέρκομαι* 'I see', Goth. *ga-tarhjan* 'to mark out' + Skr. *dadárśa* perf. 'I saw', Arm. *tesane-m* 'I see'.

O.Ir. *brēc* (read *brēg*) 'lie, deceit' with loss of *n* before *c*: + Skr. *bhraṃśa-s* 'downfall, loss, a perishing'. See §§ 212. 513.

O.Ir. *fiche* Mid.Cymr. *ugeint* 'twenty' : Gr. *Fίκατι εἴκοσι* etc., § 384. See § 514.

O.Ir. *ocht* 'eight' probably with prim. Kelt. *cht* : Gr. *ὀκτώ* etc., § 381. See § 517.

O.Ir. *dess* Cymr. *deheu* 'dexter, australis', as regards the suffix to Goth. *taihsva* 'dexter', further Gr. *δεξιό-ς* Lat. *dexter* + Skr. *dákṣina-* Av *dašina-* 'dexter', Lith *deszinė̃* 'dextera' O.Bulg. *desĭnŭ* 'dexter', Indg. **deḱs-*. See § 517.

In Irish *k̂* and *q* fell together in *c*. Whereas in the Britt. branch and in Gall. they can still mostly be distinguished, since in the latter *q* had become *p* (§§ 435 436). *p* arose from Indg. *k̂u* in Cymr. *ebol* 'foal' = O.Cymr. **epaul*, Gall. *epo-* (*Epo-rēdia*) 'horse' beside O Ir. *ech*.

§ 391. Indg. *ĝ* = prim Kelt. *g*. O.Ir *gein* 'birth', Cymr. *geni* 'nasci' : Gr. *γένος* etc, see § 388. O.Ir *gnāth* 'known, accustomed, usual', Cymr. *gnawt* 'habitus'. Gr. *γνω-* etc., see § 382.

O Ir. *ato-m-aig* 'me adigit' *agat* 'agant' : Gr. *ἄγω* 'I drive, lead', Lat *agō*, O.Icel. *aka* 'to drive' + Skr. *ájati* Av. *azaiti* 'drives', Arm. *acem* 'I bring, lead', rt *aĝ-*. See § 522.

§ 392 Indg. *ĝh* = prim. Kelt. *g* O.Ir. *gam* (from **gi̯am-*, older **gi̯(i̯)am-*) [1]) O Cymr. *gaem* = (fr. **geam-*, older **gi̯(i̯)am-*) 'winter' : Gr. *χιών χειμών* etc., see § 383. *cum-ung* 'narrow' Gr. *ἄγχω ἄγχι* etc, see § 389.

O.Ir. *ligim* 'I lick' *ligur* 'tongue' : Gr. *λείχω* 'I lick', Lat. *lingō*, Goth. *bi-láigō* 'I lick' + Skr. *lĕh-mi* 'I lick' 3. sg. *lédhi*, Arm. *liz-u-m* Lith. *ležiù* 'I lick' O.Bulg. *lizati* 'to lick'. O.Ir. *brí* gen. *breg* 'rising ground' Gall. *brigi-* in *Brigiani Are-brigium* etc. : Goth. *baírgahei* 'chain of mountains' + Skr. *bṛhánt-* Av. *berᵉzant-* 'great, high', rt. *bherĝh-*. See § 526.

Germanic.

§ 393. Indg *k̂*. Goth. *skei-nan* OHG. Ags. *scīnan* O Icel. *skīna* 'to shine' OS. *sci-mo* MHG. *scheme* 'shadow' : Gr. *σκιά*

1) Thurneyson conjectures, that the form *gam* was formed through the influence of *sam* 'summer'.

'shadow' *σκίϙο-ν* 'parasol' + Skr. *chāyā-* 'shadow, glimmer' (cp. Mod.Pers. *sāyah*). Suffix *-sḱo- -skā-* OHG. *forsca* 'inquiry, question' prim. Germ **fur(χ)-skō-* f. : Lat. *poscō* fr. **por(c)-scō* + Skr. *pṛchámi* Av. *per^{e}sāmi* 'I ask', Skr. *pṛchā-* 'question, inquiry', rt. *preḱ-*, weak grade form *pṛḱ-*.

Goth. *hund-s* OHG. *hunt* Ags. *hund* O.Icel. *hundr* 'hound, dog' : Gr. *κύων* (gen. *κυν-ος*) O.Ir. *cū* (pl. *coin*) Cymr. *ci* (pl. *cwn*) + Skr. *śvan- śun-* Av. *span- sūn-* Arm. *šun* (gen. *šan*) 'dog'. Goth. *ga-teihan* 'to announce, tell, relate' OHG. *zīhan* 'to accuse of' : Gr. *δείκνῡμι* 'I show' *δίκη* 'order, law', Lat. *jū-dicdīcō* + Skr. *dēśáyāmi* Av. *daęsayẽmi* 'I show, teach', rt. *deiḱ-*. Goth. OHG. *fāhan* O.Icel. *fā* 'to seize' fr. prim. Germ. **fanχana-n* (§ 214 p. 181) : Gr. *πάσσαλο-ς* fr. **παχμαλο-ς* (§ 489), Lat. *pāx paciscor* + Skr. *páśa-s* 'snare, cord', rt. *pāḱ-*.

Goth. *fagrs* 'befitting' OHG *fagar* 'beautiful' OHG. *fuogen* 'to unite' *fang* 'capture' from the same rt. *pāḱ-*. OHG. *swigar* Ags. *swe3er* 'mother-in-law' : Gr. *ἑκυρᾶ* etc., see § 381.

§ 394. Indg. *ĝ*. Goth. *knuu* (gen. *knivis*) OHG. *chniu kniu* Ags. *cneó* 'knee' : Gr *γνυ-πετεῖν* 'to fall on the knees, to become helpless' *γόνυ* 'knee', Lat *genu* + Skr. *jñu-bádh-* 'bending the knees' *jánu* 'knee' Av. *fra-šnu* 'knee bent forward' (§ 403) *zanva* pl. 'knees', Arm. *cunr* 'knee'. Goth. *uf-rakjan* 'to stretch on high' OHG *recchen* MHG. *recken* 'to stretch' : Gr. *ὀρέγω* etc., s. § 385 OHG. *boch boc* Ags. *bucca* O.Icel. *bokkr bukkr* 'buck' were from a weak stem-form **bhuĝ-n-* (§ 534) : + Av. *būz-a-* 'he-goat', Arm *buc* 'lamb'.

§ 395. Indg. *ĝh* Goth. **gans* 'goose' (hence Spanish *ganso*), OHG. *gans* O.Icel. *gās* 'goose' : Gr *χήν* Lat *anser* = *hanser* + Skr. *haṃsá-s* Lith *žąsìs* goose' (on O.Bulg. *gąsĭ* s. § 467, 2). Goth. *gaggs* 'street, way' OHG. OS *gang* O.Icel. *gangr* 'way, passage' : + Skr. *jáṅghā-* Av. *zaṅga-* 'heel-bone', Lith. *žengiù* 'I stride', Indg. *ĝheṅgh-*.

Goth. *deigan* 'to form of clay, mould', OHG. *teig* O.Icel. *deig* 'dough' : Gr. *τεῖχος* 'a wall', Lat. *fingō* + Skr. *dēhí* 'earth thrown out, rampart' *saṃ-dēhá-s* 'a cementing' Av. *uz-daęza-* 'accumulation', Arm. *dēz* 'heap', rt. *dheiĝh-*.

b. The language-group with spirants or affricatae.

Aryan.

§ 396. Indg. *ḱ, ǵ, ǵh* were generally represented by *ś, ź, źh* i. e. by palatal *š-(sh-)*sounds in the prim. Aryan period. *ś* and *ź* have the same sound as the 'softened' *š (sz)* and *ž* (caused by the following of *i-* or *e*-vowels) of the Slavonic and Lithuanian languages.

Prim. Ar. *śt, śk* and *źd źdh, źbh* became developed to *št, šk* and *žd ždh, žbh* probably already in prim. Aryan. See §§ 399. 404.

The value of Indg. *sḱ* and *ḱs* cannot be precisely defined for the prim. Ar period. See §§ 400. 401.

§ 397. Indg. *ḱ*. Prim. Ar. *ś* (§ 396) mostly remained unchanged in Sanskrit. It became *s* in Iranian. For this *s* there appears in O.Pers. mostly (initially before and medially between vowels), and in Av occasionally *þ*, which, according to Bartholomae, is only a graphical variety of *s*.

Skr. *śáṃs-a-ti* 'praises, recites' Av. *saŋh-aitē* 'names himself O Pers. *a-þah-a* 'he spoke, said, announced' . Lat. *cēnseō*. Skr. *śūra-* Av. *sūra-* 'strong', Av. *aiwi-þūra-* 'over strong, over powerful' : Gr. *ἄ-κῡρο-ς* 'without authority, invalid'. Acc. sg. Skr. *víś-am* Av. *vīs-em* O.Pers *viþ-am* 'clan, village community' : Alb. *vise* etc., see § 381. Skr. *váś-a-s* 'will, pleasure', Av. *vas-ō* acc. sg. n. (st. *vasah-*) adv. 'at pleasure' O.Pers. *vasaŋ* loc. sg. (st. *vasa-*) adv 'very, much' (orig. 'at pleasure') : Armen. *vasn* 'on account of' + Gr. *ἑκών* 'voluntary', rt. *ϝεϝκ-*. Skr. *áś-man-* Av. O.Pers. *as-man-* 'stone, sky' : + Gr. *ἄκ-μων* 'anvil, thunder-bolt' Skr *śvētá-* Av. *spaeta-* 'white' : Lith. *szvaitýti szvaitìnti* 'to make bright' O.Bulg. *světŭ* 'light' + Goth. *hveits* 'white', rt. *ḱu̯eit-* *ḱu̯eid-*.

§ 398. Prim Ar. *śn* and *pś* became *šn* and *fš* in Iranian (on *f* from *p* see § 473.)

Prim. Ar *śn*. Av. *frašna-* = Skr. *praśná-* 'question' : Arm. *harsn* etc., rt. *preḱ-*, s. § 390. Av. gen. sg. *aš-n-ō* = Skr. *á-śn-as,*

beside the strong stem-form *as-an-* = Skr. *áś-an-* 'stone' : Arm. *yes-an* 'whetstone' + Gr. *ἀκόν-η* 'whetstone'. O.Pers. *vašna-* 'will, favour', to *vasaiy* etc., see § 397.

Prim. Ar. *pś.* Av. *haurva-fš-u-* 'the whole cattle' beside *pas-u-* = Skr. *paś-ú-* : Lat. *pecu,* Goth. *faihu* 'cattle', cp. § 313 p. 251.

§ 399. Prim. Ar. *št* = Indg. *k̂t* (§ 396) remained in Iranian, but became *śt* in Sanskrit (cp. §§ 404. 556). Skr. *diśṭi-ś* 'indication, prescription', Av. *a-dišti-š* 'direction, instruction' beside Skr. *dēśáyāmi* Av. *daesayēmi* 'I show, teach' : Lat. *dictiō,* OHG. *in-ziht* 'accusation', cp. also Gr. *δεῖξι-ς* 'a showing', Indg. **dik̂-ti-s,* rt. *deiḱ-,* see § 393. 3 sg. Skr. *váśṭi* Av. *vašti* 'he wishes, desires' beside 1. sg. Skr. *váśmi* Av. *vasᵉmi,* from rt. *u̯eḱ-,* see §§ 397. 398. Skr. *práśṭu-m* inf 'to interrogate', O Pers. *ahi-frašti-* 'punishment by the sword', beside Skr *praśná-* etc., see § 398.

Prim. Ar. *šk* = Indg. *k̂q* is found in Av. 3. pl. aor. act. *a-šk-arᵉ* 'they run off, go away' beside 3. pl. pres mid. *sac-intē* from rt. Ar. *šak- šac-.* Cp Bartholomae Ar. Forsch. II 51 ff.

§ 400. Indg. *sḱ* became in Skr *ch* (*cch*), Av. O.Pers. *s* (or *þ,* see § 397). Present suffix Skr *-cha-* Av O Pers. *-sa-* = Gr. *-σκο-* Lat. *-sco-* : e. g Skr. *gá-cha-mi* Av *ja-sā-mi* fr. Indg. **gm̥-sḱó,* Gr. *βά-σκω,* from rt. *gem-* 'go' (§ 228); Skr. *pr̥chámi* Av. *perᵉsāmi* O Pers. *parsāmīy* fr. Indg **pr̥ḱ-sḱó,* Lat. *poscō* (**por(c)-scō*), from rt. *preḱ-* 'demand, beg, ask' (§ 288); O.Pers. *xšnā-sā-tiy* = Lat. *gnō-sca-t* (cp § 403) Cp. § 557,2.

Rem Other examples in Bartholomae's Handb. d altiran. Dial § 146 and Kuhn's Ztschr XXVII 366 ff., where (*s*)*k̂h,* and not Indg *sḱ,* is regarded as the original form. This theory seems to us not to have sufficient foundation. Cp. §§ 475. 553.

§ 401. Indg. *l̂s* became in Skr. *kṣ,* and in Av. O.Pers. *š.* Skr. *vákṣi* Av. *vaši,* 2. sg. to Skr. *váśmi* Av. *vasᵉmi,* s. §§ 397. 398. 399. Skr. *dákṣṇa-* Av. *dašina-* 'dexter' : Lith. *deszinė̃* etc., see § 390. Skr. *á-dr̥kṣ-ata* 3 pl. indic. mid., Av. *darᵉš-a-þ* 3. sg. conj. act. of the *s*-aorist from rt. *derk̂-* 'see', cp.

Gr. (late) fut. *δέρξομαι*. O.Pers. *niy-apišam* 'I wrote' *s*-aorist from rt. *peiḱ-*: Av. *zaranyō-pīs-* 'adorned with gold' *paęsa-* *paęsah-* 'ornament, decoration', Skr. *piśámi* 'I adorn, form', O.Bulg. *pĭsati* 'to write' + Gr. *ποικίλο-ς* 'many-coloured', Lat. *pīctūra*.

The prim. Ar. form might have been *šš*, since in Sanskrit Indg. *ḱs* fell together with Indg. *ss* (preceded by *i*, *u*) = prim. Ar. *šš*, cp. Skr. 2. sg. *dvéḱṣi* (1. sg. *dvéṣ-mi* 'I hate'). Cp. § 556, 1.

Rem 1. Observe that Indg *ḱs* and *qs* fell together in *kš* in Sanskrit, whereas in Iranian (as in Balt-Slav, § 414) they remained separate: *ḱs* = Iran. *š*, *qs* = Iran *xš* Cp § 556, 1.

Rem 2 Skr. final *ḱs* became *k* by § 647, 7, as nom sg. *dík* 'heavenly direction' (st. *diś-*), *ŗtv-ík* 'sacrificator' (st *ŗtv-íj-*, rt. *yaǧ-*). Forms as nom. sg *spát* 'spy' (st *spáś-*), *vít* 'clan' (st *víś-*), *rā́t* 'king' (st. *rā́j-* Indg. **rēǧ-*) were new formations after the analogy of the cases with *bh*-suffixes, see § 404 rem 3 In Av the regular continuation of Indg *-ḱs* was not altered by the law of finals e g *spaš* = Skr *spát* Lat. (*haru-*)*spex*; *aγā-var^{e}š* 'causing sins' to *ver^{e}z-γeiti* 'works' rt. *ųerǧ-*

Rem 3 *xt* (not *ṣ*) occurs in a number of Gr. words, opposite to Skr *kš* = Iran. *š* = Lat *x*, e. g Skr *tákṣā* 'carpenter': Gr *τέκτων*. On this correspondence cp § 554 extr

No trace of the first *ḱ* in the Indg. combination *ḱsḱ* has remained in Aryan, it became assimilated to the following *s* at an early period. Cp. Skr. *pṛchámi* Av *per^{e}sāmi* = Indg. **pṛḱ-skṓ* with Skr. *gáchāmi* Av. *jasāmi* = Indg. **ǧm-skṓ* (§ 400).

§ 402. Indg. *ǧ*. Prim. Ar. *ž* (§ 396) mostly became *j* in Sanskrit, and *z* in Iranian. *d* i. e. *đ* is often written for *z* in O.Pers., cp. *þ* beside *s* § 397.

Skr. *ján-as* n. 'race' *ján-a-s* 'man, people', Av. *zī-zan-anti* 'they beget, bring forth' O Pers. *parāv-zana-* 'populous': Lat. *genus* etc., s. § 388 Skr. *vájra-s* 'thunder-bolt of Indra' Av. *vazra-* 'club' O.Pers. *vazra-ka-* 'great, powerful', Skr. *vája-* Av. *vāza-* m. 'strength': Gr. *ὑγιής* 'healthy', Lat. *vegeō*, Goth. *us-vakjan* 'to wake up', rt. *ųeǧ-* 'be active, strong'. Skr. *jóšа-* Av. *zaoša-* m. 'favour, kindness', Skr. *jōṣṭár-* 'loving' O.Pers. *dauštar-* 'friend': Gr. *γεύω* etc., see § 385. Skr. *jráy-as-* n. 'surface, extent', Av. *zrayah-* n. O.Pers. *drayah-* *draya-* n. 'sea': + Lat. *gli-scō*. (ĭ ?).

§ 403. Prim. Ar. *źn* became *šn* in Iranian. Av. *fra-šnu-* 'knee bent forwards' beside *zanva* pl. 'knees' etc., s. § 394. Av. *duž-varšnah-* 'evil doer' beside *ver°z-yeiti* 'works, effects, carries out' etc., s. § 385.

xšn appears for *šn* in O.Pers. *xšnā-sā-tiy* = Lat. *gnō-sca-t* (*s* = Indg. *sḱ*, § 400) from Indg. *ĝnō-* 'get to know' (s. § 382), as also in Av. *ā-xšnu-* beside *ā-šnu-* *fra-šnu-* and others. Cp. Bartholomae Handb. § 100 rem. 3.

Rem. *yasna-* 'offering' instead of **yašna-* (Skr *yajñá-* 'offering', rt. *yağ-*) received the dental sibilant from analogy with such forms as 3 sg. pres. *yazaitē*

Prim. Iran. *zm* = prim. Ar *źm* became *sm* in Av. *rasman-* 'column of an army' besides *rāzayeiti* 'puts in order' : Gr. ὀρέγω etc., see § 385

The transition of *žn* to *šn* and of *zm* to *sm* points to a voicelessness of the nasal.

§ 404. Prim Ar. *žd ždh*, *žbh* (§ 396) became *žd*, *žb* in Iranian (§ 481); in Sanskrit they first became *ž̧d* *ž̧dh*, *ž̧bh* (cp §§ 399 591), then *ž̧* was dropped before *d dh* with ('compensation lengthening'), while before *bh* it passed into *d*.

1. *žd*. Here will come Skr. *mṛdá-ti* 'is gracious, pardons, spares', *mṛdīká-* n. 'grace, pardon, mercy' Av. *mer°ždika-* n. 'grace, pardon, mercy', in case they belong to the rt. *merĝ-* 'wipe off' (Skr. *mṛj-á-ti* 'wipes off, cleanses from guilt', Av. *mar°z-aiti* 'wipes, cleanses'); the original form would then be an old syntactical combination **mṛĝ dō-* 'grant a purity from sins'. Skr. *mṛ́ṣ-ya-tē* 'forgets' *marṣáyatē* 'bears patiently, excuses, pardons' Lith. *miršz-ti* 'to forget' can equally well be regarded as being from an old **mṛs dō-* (by assimilation **mṛz dō-*) 'grant a forgetting, excuse' (§ 591).

2. *ždh* Av. *važdri-š* 'promoter, accomplisher', to *vazaiti* = Skr. *váhati* 'vehit', fr. **ueĝh+tri-*. Av. (Gāþ.) *ger°ždā* 3. sg. pret. mid. to *ger°zaiti* 'complains, implores' = Skr. mid. *gárhatē* 'complains, blames', fr. prim. Ar. **gržd̥ha* or **ghržd̥ha* i. e. **gṛĝh-(ghṛĝh-)+to*. Skr. *lḗḍhi* 'licks' (1. sg. *léhmi*) fr.

prim. Ar. **laẓ̌dhi* i. e. **leẓ̄gh+ti*, part. pass. *līdhá-* 'licked' from prim. Ar. **liž̌dhá-* i. e. **liḡh+to-*. Skr. *ūḍha-* to *váhāmi* 'veho', fr. prim. Ar. **už̌dha-* i. e. **uḡh+to-*. Skr. *dṛ́dhá-* to *dṛ́hyāmi* 'I fasten; stand firm', fr. prim. Ar. **dhṛž̌dha-* (§ 480) i. e. **dhṛḡh+to-*, cp. Lat. *forcti-s forti-s*. Skr. *sādhá-* to *sáhatē* 'masters', fr. prim. Ar. **sāž̌dha-*. Skr *bādhá-* 'fast, firm, strong' beside *báḥ-iṣṭha-* 'firmest' Av. *bązah-* 'strength, greatness', fr. prim. Ar. **bhāž̌dha-* (§ 480) i. e. **bhn̥̄ḡh+to-* (*ā* = *n̥̄*, § 253).

Prim Ar. *a* + *ž̌* became Skr. *ō*. *vṓdhu-m* inf. 'vectum' (from rt. *ẓeḡh-*) fr. prim. Ar. **važ̌dhu-m* i. e. **ẓeḡh+tu-m*. *sṓdhu-m* inf. 'to master, overpower' (from rt. *seḡh-*) fr. prim Ar. **saž̌dhu-m* i. e. **seḡh+tu-m*. 3. sg. *tṛnḗdhi* 'he dashes to pieces' (pf. *tatárha*) for regular **tṛnṓdhi* (fr **tṛnaẓ̌-dhi*) arose from analogy to forms in *-nēdhi* fr **-nazdhi* (§ 476 rem.)

Rem. 1. It has not been ascertained for certain what was the pronunciation of the etymologically presupposable combination *gh+t* at the close of the Indg prim period. See § 552

Rem. 2 Forms like Skr 2 sg impet *didṛ́ddhi* for **dṛdīdhi* (prim. f. **dṛ-dṛḡ-dhi*), to *dídeš̑-mi* 'I show', were new formations The *š̑*-sound (**dṛdiž̌dhi*) was re-introduced in **dṛdīdhi* after the analogy of *didíšṭa didēšṭu* and others (*št* = *k̂t*, § 399), then thus — change of period, change of sound-laws — passed into *d* Cp § 591 rem. 1 on *dviddhí* and § 476 rem. 1 on *daddhí* for *dēhí*

3. *žbh*. Av. (Gāþ.) *vīžbyō* Skr *vidbhyás* dat abl. pl to Av. *vīs-* Skr. *viš̑-* 'clan, village community', rt. *ẓeḵ-*. Skr. *padbhíš* instr. pl. to *paš̑-* 'a look', rt. *speḵ-*. We assume that in such cases *ĝ* for *ḵ* goes back to the Indg. prim. period, see § 469, 2. Skr. *žbh* probably became *dbh* in the same period in which the newly formed **dudiž̌dhi* (for **dudīdhi*) became *dudídḍhi* (rem. 2).

Rem. 3 In Sanskrit the cerebral explosive was carried over to the nom from the cases with *bh*-suffixes, hence *spát vít rát* instead of the regular **spák *vík *rák* fr **spakš* etc, see § 401 rem. 2

§ 405. Indg. *ĝh*. Prim. Ar. *ž̌h* (§ 396) became *h* in Sanskrit through the intermediate stage *jh*, in Iranian it fell together with prim. Ar. *ž̑* in *z* (O.Pers. *d*, see § 402).

Skr. *háv-ana-* Av. *zav-ana-* 'call, cry', Skr. *hv-ātar-* Av. *zb-ātar-* 'caller, crier' : O.Bulg. *zov-ą* 'I call' *zv-atelĭ* 'caller, crier' + OHG. *gaunōn* 'to complain'. Skr. *bāhú-ṣ* Av. *bāzu-š*

'arm' : Gr. *πῆχυ-ς* 'fore-arm', OHG. *buog* O.Icel. *bōgr* 'bow', Indg. **bhāĝh-u-s.* Skr. *dēh-í* 'earth thrown out, rampart' Av. *uz-daęz-a-* 'accumulation' O.Pers. *dīd-ā* 'rampart, fortification' : Goth. *deigan* etc., see § 395. Skr. *gúhati* 'hides, conceals' Av. *gaozaiti* 'hides, keeps' O.Pers. *gaudaya* imper. 'hide' : Lith. »*gužietojis*« 'protector' *gūsztà* 'brooding nest', rt. in weak grade form *ghŭĝh-*.

§ 406. In Sanskrit *jh*, the previous stage of *h*, was retained in *ujjhitá-* 'forsaken, given up' fr. **ud-jhi-ta-*, to Skr. *hā-* Av. *zā-* 'leave, forsake, lose'.

j appears where prim. Ar. *ʒh* came under the law of the dissimilation of aspirates (§ 480), e. g. pres. *já-hā-ti* = Av. *za-zā-iti*, prim. Ar. **ʒha-ʒhā-ti*, pf. *ju-hāv-a* 'he called to' from *hu-*. This law of dissimilation consequently came into operation before the time that *jh* became *h*.

§ 407. Prim Ar. *ʒhn* became *šn* in Iranian (cp. § 403). Av. *barᵉš-nu-š* 'height, summit' beside *barᵉz-ā-* 'height' *barᵉz-išta-* 'very high' Skr. *bárh-iṣṭha-* 'very elevated' O.Ir. *brí* (gen. *breg*) 'rising ground' etc, see § 392.

Prim. Ar. *ʒhm* became *sm* in Av (cp. § 403). *maęs-man-* 'urine' beside *gao-maęza-* 'cow-urine' Skr. *mēha-* 'urine'. Lat. *mingō* etc, see § 389. *xraožđu-sma-* 'hard, firm ground' beside nom. *zå* acc. *ząm* 'earth' : Gr. *χαμ-αί* etc, see § 386, gen *zᵉmō* instr. *zᵉmā* abl. *zᵉmaƀ* had *z* for *s* after the analogy of *zå ząm*; in O.Pers. with *zm uvāra-zmī-* 'Chorasmien'.

Armenian.

§ 408. Indg. *ḱ. sar* (gen. *saroy*) 'height, summit, slope'. Skr. *śíras-* Av. *sarah-* n. 'head' + Gr. *κάρᾱ* 'head', Lat. *cerebru-m* fr. **ceres-ro-* (§ 570). *surb* (gen. *srboy*) 'pure' with *-rb-* from *-br-* (§ 263): Skr. *śubh-rá-s* 'bright, ornamental'. *srun-k* pl. 'shin-bones, calves (of the leg)' : + Lat. *crūs crūris. aselн* (gen. *aslan*) 'needle' : Skr. *aś-ri-ś* 'the sharp side of a thing, corner, edge, border', Alb. *ušt* 'ear of corn' fr. **ust*, Lith. *asz-t-rù-s* O.Bulg. *os-t-rŭ* 'sharp' O.Bulg. *osŭtŭ* 'τρίβολος, genus spinae' + Gr. *ἄκ-ρο-ς* 'at the end', Lat. *ac-u-s*, O.Cymr. *ocet* 'raster' Goth.

ahs (gen. *ahsis*) 'ear of corn' OHG. *ahil* 'chaff, beard of grain'. *harsn* (gen. *harsin*) 'bride' from the root-form *pṛḱ-*, see § 390.

The *š* = *ḱ* in *šun* (gen. *šan*) 'dog' is unexplained : Skr. *śvan- śun-* etc., see § 393.

c fr. Indg. *(ḱ)sḱ. harc* (gen. *harçi*) 'question' : Skr. *pṛchá-*, Indg. **pṛḱ-sḱ-*, see §§ 393. 400. 401.

ç fr. Indg. *(s)sḱ. aic* 'investigation': OHG. *eisca* 'demand', Indg. **aiṣs-sḱ-*, cp. Skr. *ichá-* 'wish, desire' i. e. **ıs-skā-* beside *éš-a-s* 'a seeking out, wish'.

c fr *ḱs. vec* 'six' : Lith. *szeszì* + Gr. *ἑ-ξ* ἕξ Lat. *sex* O.Ir. *se* Cymr. *chwech*, cpf. **sụeḱs* (cp. § 589, 3).

ḱ probably disappeared as *s* before *t* in *ut* 'eight' : Skr. *aṣṭá* etc., see § 381. Perhaps also before *l* in *lu* 'audible' *lur* 'a hearing, tidings, news', since these words seem to be related to Skr. *śru-* Gr. *κλυ-* etc (§ 384) See Hubschmann Arm Stud. I 33.

§ 409. Indg. *ĝ cer* (gen. *ceroy*) 'old man' : Skr. *járati* 'rubs, makes fragile' Av *zaurvā-* f. 'age, a growing old' + Gr *γέρων* 'old man'. *calr* (gen. *calu*) 'laughter' : + *γελάω* 'I laugh'. *aic* (gen. *aici*) 'goat'. + Gr. *αἰγ-* (gen. *αἰγός*) 'goat'. *arciv* 'eagle' (*ar* fr. *ṛ* § 291, *v* fr. *p* § 330) : Skr. *ṛjipyá-* 'stretching oneself, seizing on the wing' Av. *erᵉzifya-* 'stretching oneself, falcon'.

§ 410. Indg. *ĝh.* Initially and after *n, r* as *j. jaune-m* 'I consecrate, sacrifice' : Skr. *hótar-* Av *zaotar-* 'the high priest' + Gr. *χέω* 'I pour'. *jukn* (gen. *jkan*) 'fish' : Pruss. acc. *suckans* (read *zukans*, § 412) 'fishes' Lith. *žùk-mistra-s* 'master of a fishery' *žuv-ì-s* 'fish'. *ji* (gen. *jioy*) 'horse' : Skr. *háya-s* 'steed'. *anjuk* (*ancuk*) 'narrow' : Lat. *angō* etc., see § 389. *inj* (*inc*), gen. *ençu* (*encu*), 'panther, leopard' : Skr *siṃhá-s* 'lion'. *mi-orj-i* '*μόνορχις*' *orj-i* 'not castrated' : Av. *erᵉzi-* Alb. *herde* for **erde* + Gr. *ὄρχι-ς* 'testicle'. *barjr* (gen. *barju*) 'high' : Skr. *bṛhánt-* etc., see § 392. *barj* (gen. *barji*) '*προσγειφάλαιον*' : Skr. *barhíš-* n. 'the offering-litter' Av. *barᵉziš-* 'cover, mat'.

z after vowels *lizu-m* 'I lick' : Skr. *léh-mi* etc., § 392. *ozni* 'hedge-hog' : Lith. *ežỹs* O.Bulg. *ježĭ* fr. **jez-ĝĭ* (§ 147 p. 134) + Gr. *ἐχῖνο-ς* OHG. *igil* 'hedge-hog'.

Albanian.

§ 411. According to G. Meyer (Bezzenberger's Beitr VIII 186 f., Alban. Stud. II 15 ff.) Indg. *ḱ, ǵ, ǵh* are represented in Albanian in the following manner:

ḱ = *s*. *si-viét* 'in this year' : Lith. *szì-s* 'this' Lat. *ci-ter* etc., see § 387. *vise* pl. 'places' : Skr. *viś-ám* Gr. *Fοῖκο-ς* etc., see § 381. *ušt* 'ear of corn' fr. **ust* : Skr. *aś-ri-ś* Gr. *ἄκ-ρο-ς* etc., see § 408. G. Meyer conjectures *θ* fr. *s* in *djaθtę* (*diaθętę*) 'to the right', the first part of which *djaθ-* represents Indg. **deḱs-* (Skr. *dákṣina-* etc., see §§ 390. 401).

ǵ = *δ*. *δęmp* (with def. article *δęmb-i*) 'tooth' : Skr. *jámbha-s* 'bite, tooth', Lith. *žamba* 'mouth', O Bulg. *zǫbŭ* 'tooth' + Gr. *γόμφο-ς* 'tooth', OHG. *chamb* 'comb'. *δi* 'goat' : Skr. *ajá-s* 'buck', Lith. *ožỹs* 'he-goat' + O.Ir. *ag allaid* 'cervus' (wild buck). *barθ* (with article *barδ-i*) 'white' : Skr. *bhrājatē* Av. *brāzaiti* 'beams, radiates. *l'iθ* 'I bind' (*l'iδ-*) : + Lat. *ligāre*.

ǵh = *δ*. The Indg. mediae and mediae aspiratae had fallen together in Alban. as in Iran. Kelt. and Balt.-Slav. *δies* 'caco' : Skr. *hád-a-ti* 'cacat' Av. *zaδ-ah-* 'nates', Arm. *jet* 'tail' + Gr. *χέζω* 'caco' perf. *κέχοδα, χόδαιο-ς* 'nates'. *viéθ* 'I steal' (*vieδ-*) : Skr. *váhāmi* etc. s. § 383. *herδe* 'testicle' : Armen *mior-i* etc. s § 410.

d- for *δ-* in *dimęn* 'winter' (Gr. *χειμών* etc., s § 383) and in *dié* 'yesterday' (Skr. *hyás* 'yesterday' + Gr. *χθές* 'yesterday', Lat *herī hes-terno-s*, Goth. *gistra-dagis* 'to-morrow')

Baltic-Slavonic.

§ 412. Indg. *ḱ, ǵ, ǵh* were *š*-(*sh*-)sounds in the Baltic-Slavonic parent language, whose place of articulation cannot be defined more precisely. They retained their character as *š*-sounds in Lithuanian: *ḱ* = *sz, ǵ ǵh* = *ž*. In Prussian and Lettic as well as in the Slavonic branch they passed into *s*-sounds: *ḱ* = *s, ǵ ǵh* = *z*. In Pruss the letter *s* denotes both *s* and *z*, in Lett. *s* is the voiceless, and *ſ* the voiced sound.

The fact that the successor to Indg. *ḱ* did not take part in the Slav. change of *s* to *ch* (§ 588), shows that Indg. *ḱ* and

Indg. *s* were still distinguished not only in the Baltic parent language but also in the Slavonic.

§ 413. Indg. *ḱ*. Lith. *szálta-s* Lett. *sa'lts* Pruss. *salta-* 'cold', Lith. *szalnà* O.Bulg. *slana* 'hoar frost' : Skr. *śi-śira-* Av. *sar'ta-* 'cold, cool'. Lith. *szirsz-ů̃* (gen. *szirsz-eñs*) Lett. *sirs-i-s* Pruss. *sirs-ili-s* O.Bulg. *sr̥š-en-ĭ* 'hornet', prim. Balt.-Slav. **šir̥s-en-* : + OHG. *hornaz* from prim. Germ. **hurz-nata-z*, Lat. *crābrō* fr. **crās-rō*, cp. § 303. 306. Lith. *szveñta-s* Lett. *swéts* Pruss. *swints* O.Bulg. *svętŭ* 'holy' : Av. *spenta-* 'holy' + Goth. *hunsl* 'offering' fr. prim. Germ. **χunt-sla-n* (§ 180). Lith. *dešimta-s* Lett. *desmitá-s* Pruss. *dessimts* (*ss* indicates that the *e* is short), O.Bulg. *desętŭ* 'decimus' : Skr. *dáśa* etc., see § 387. Lith. *szakà* O.Bulg. *sękŭ* 'branch, twig' : Skr. *śákha-* 'branch, twig' *šanəkú-š* 'plug, bolt'. Lith. *nèszti* Lett. *nest* O.Bulg. *nesti* 'to carry' : Skr. *náśāmi* 'I attain, reach' + Gr. *ποδ-ηνεκής* 'reaching down to the feet'. Lith. *szlaunì-s* 'hip, upper part of the thigh', Lett. *slauna* 'hip' Pruss. *slauni-s* 'shaft, bar' : Skr. *śrṓṇi-š* 'buttock, hip' + Lat. *clūni-s*, O.Icel. *hlaun* 'buttock'.

§ 414. Indg. *ḱs* = Lith. *sz* Lett. Pruss. *s*, Slav *s*, cp. § 544. Lith *aszì-s* Lett. *as-s* Pruss. *assi-s* (*ss* as in *dessimts*, § 413) O.Bulg. *osĭ* 'axle' : Skr. *ákša-s* + Gr. *ἄξων* Lat. *axi-s* OHG. *ahsa* 'axle'. Lith. *s*-fut. *nèszu* 'I shall carry' prim. f. **neḱ-sy̯ō* (*neszù* = O.Bulg. *nesą* 'I carry', § 413), *mìlszu* 'I shall milk' prim f. **ml̥ḱ-sy̯ō* (*mìlžu* = Gr. *ἀμέλγω*, rt. *melǧ-*, s. § 382), opposed to *lìksmi* 'I shall leave' prim f. **liq-sy̯ō* (*lekù* = Gr. *λείπω*, rt. *leiq-*, s § 427 *a*). O Bulg. *s*-aorist 3. pl *nĕsę* 'carried' prim. f. **nēḱ-s-n̥t* (to *nesą*), as opposed to *rĕšę* fr. **rēchę* 'they said' prim. f. **rēq-s-n̥t* (to *reką*, rt. *req-*, cp. § 462). Indg *ḱs* accordingly remained apart from *qs* in Baltic-Slav., as in Iran. (§ 401).

Rem It is not quite clear what the regular treatment of the Indg. group *sḱ* was in Balt.-Slav.

After the analogy of Iran (§ 400) we should expect *sz* in Lith and *s* in Slav. Thus Lith *száuju* 'I shoot' O.Bulg *sujǫ* 'I send forth, shoot' · OHG. *sciozan* OS. *skeotan* 'to shoot' (prim. Germ **skeu-t-*, like Goth. *giutan* OHG. *giozan* beside Gr. *χέ(F)-ω*). Correspondingly Osthoff Zur Gesch d. Perf. 493 630 (cp also J Schmidt Kuhn's Ztschr. XXVII 332) traces the *sz* in Lith. *aũszta* 'it dawns' pret. *aũszo*, *auszrà* 'dawn' (rt. *aus-*,

Lat. *aur-ōr-a* Skr. *uš-*) and that in Lith. *gaisztù gaiszaũ gaĩszti* 'to linger, loiter' (rt *ghaiṣ-*, Lat *haer-eō*) back to (*s*)*sk̑*, according to which one might regard the *sz* in Lith. *maiszýti* and the *s* in O.Bulg. *měsiti* 'to mingle, mix' (to Skr. *miś-rá-s* 'mixed') as the representatives of Indg. (*k̑*)*sk̑* (cp. Lat. *miscēō* = **mic-sceō*), just as Indg *sk̑* *ssk̑*, *ksk̑* had fallen together in *s* in Iranian

But on the other hand we have · Russ. *ščury* Czech *čirý* Pol. *szczery* 'pure, clean, upright' = O.Bulg. **štiry-jь* (cp § 147 p. 134 and Miklosich Vergl. Gramm I² 288) Goth *skeirs* 'clear' Ags *scīr* 'pure, bright', Skr. *chāy-ā-* 'shade, glimmer' etc, see §§ 393 400; Lith *jeszkóti* O Bulg. *iskati* 'to seek', Lith. dial pret *su-jìszkau* 'I began to seek' · OHG *eiscōn* 'to seek, ask', Skr *ichắmi* 'I seek' (perf *iy-éš-a*), Suffix *-sḱo-*, see § 400

Moreover we must bear in mind firstly that a **k̑eu-ɣō* might be present in *száuju sujǫ* as not unfrequently roots, which begin with *s* + tenuis, have old forms without *s-* (§ 589, 3), secondly that *jeszkóti iskati* and **štiryjь* might be Germanic loan-words (cp § 587 rem 2) The balance as it seems to me, inclines in favour of *sk̑* - Lith *sz*, Slav *s*

Slav. *sɣ* = Indg. *k̑ɣ* became *š*, e g. *pišǫ* from **pīs-ɣǫ*. See § 147 p 134

§ 415. Indg. *ĝ*. Lith. *žìrni-s* Lett. *firni-s* 'pea' Pruss *syrne* 'corn', O.Bulg *zrŭno* 'corn' . Skr. *jr-ná-* 'fallen to pieces, pounded' + Lat. *grā-nu-m*, Goth. *kaúrn* 'corn' (cp. §§ 303. 306), rt. *ĝer-* 'to grind'. Lith. *žinóti* Lett. *fināt* Pruss. *smnāt* (*nn* like *ss* in *dessimts*, § 413) 'to know, recognise', O.Bulg. *znati* 'to know' : + Gr. *γι-γνώ-σκω* etc , s § 382 Lith. *bérža-s* Lett. *be'rſ-s* Pruss. *berse* O Bulg *bréza* 'birch' : Skr. *bhūrja-s* a kind of birch + O.Icel. *bjǫrk* OHG. *pircha* 'birch' Lith. *ožỹ-s* Lett. *áfi-s* Pruss. *wosee* 'goat' · Alban *dh* etc , s. § 411

Slav. *zɣ* = Indg. *ĝɣ* became *ž*, e. g. *žuję* fr. **zĝū-ɣǫ*. See § 147 p. 134.

§ 416. Indg. *ĝh* fell together with *ĝ* in the prim. Balt-. Slav. period. Lith. *žemà* Lett. *fima* Pruss. *semo* O.Bulg. *zima* 'winter' : + Gr. *χειμών* etc., s. § 383 Lith *žãla-s žãle-s* Lett. *fa'l-sch* Pruss. acc. *salīga-n* (*g* = *j*) 'green', Lith. *žolė̃* Lett. *fâle* Pruss. acc. *sāli-n* 'grass, herb', O.Bulg. *zelenŭ* 'green' *zelije* 'greens, vegetables' : Skr. *hári-ṣ* etc., s. § 389. Lith. *vežù* 'I drive' *važi-s* 'a small sledge' Pruss. *vessi-s* (*ss* as in *dessimts* § 413) 'a sledging', O Bulg *vezą* 'I drive' : Skr. *váhāmi* etc., s.

§ 383. Lith. *žióju* O.Bulg. *zijajǫ* 'I open my mouth wide': + Lat. *hiāre,* OHG. *gīēn* 'to gape'.

Slav. *zi̯* = Indg. *ĝhi̯* became *ž*, e. g. *ležǫ* from **lēz-i̯ǫ*. See § 147. p. 134.

4. The velar explosives.

§ 417. With regard to the development of *q, g, gh* the Indg. languages arrange themselves into the same two groups, as they did in the history of the palatals

In the group, in which *k, ĝ, ĝh* appear as explosives, *q, g, gh* frequently appear as *k*-sounds with following labialisation (*u̯*), as Lat. *quis* = Indg **qu̯i-s*, or as sounds, which presuppose this articulation, as Umbr. Osc. *pis* 'quis'. These labialised sounds were originally everywhere, as it seems, simple sounds and in Greek and probably also in Italic had not fallen together with prim. Indg. palatal + *u* (as in **ekṷo-s* 'horse'). But the languages of this group do not all uniformly show this affection in each of the words in question. In numerous cases this affection appeared in one language, but not in another.

In the other group, Ar., Armen., Alban and Balt.-Slav., the *u̯*-element is entirely wanting as an old inherited affection.

Here, as in the case of the palatals (§ 380), possibly exists a dialectical difference within the Indg parent language [1]).

In §§ 424 and 466 we shall have occasion to discuss the question of the historical relations between words with and words without labialisation in the *u̯*-languages, and whether the group which had no *u* was without this accessory element from the very beginning or had lost it in prehistoric times.

1) The maintenance of the existence of two dialects in the bosom of the Indg prim language on the basis of the differences of development of the palatal and velar explosives, does not imply that we ought to expect also the same boundary for other dialectical differences which we might feel inclined to ascribe to the Indg. prim language The limit, within which one dialectical peculiarity is confined, cannot without any further consideration be taken as typical for others See Paul's Principien der Sprachgeschichte p 237 f

The following is the representation of the velar series in the separate Indo-Germanic languages: —

a Languages with labialisation

Indg		Greek	Latin	Irish	Brit.	Germanic
q	with l	*π*, *τ* (*σ*), *κ*	*qu*, *c*	*c*	*p*	*χu*, *u* / *ʒ*, *f b*
	without l.	*κ*	*c*	*c*	*c*	*h*, *χ*, *ʒ g*
g	with l	*β*, *δ* (*ζ*), *γ*	*v*, *qu*, *g*	*b*, *g*	*b*, *g*	*kw*, *k*, *p*
	without l	*γ*	*g*	*g*	*g*	*k*
gh	with l	*g*, *θ*, *χ*	*f*, *b*, *qu*, *v*	*b*, *g*	*b*, *g*	*u*, *ʒ*, (*b*)
	without l	*χ*	*h*, *g*	*g*	*g*	*ʒ g*

b Languages without labialisation

Indg.	Ar	Armen	Alban	Lith	Slav
q	*k*, *c*	*k* (*č*), *c*, *g*	*k*	*k*	*k*, *č*, *c*
g	*g*, *j*	*k*	*g*	*g*	*g*, *dž*, *dz*
gh	*gh*, *h*	*g*, *j* *z*	*g*	*g*	*g*, *dž*, *dz*

Prim indg period.

§ 418. a Tenuis *q* without labialisation in the *u*-languages Rt *qert-* 'plait, knit': Gr *κάρταλο-ς* 'basket', Lat. *crātēs* (§ 306). Goth *haúrds* 'door' OHG *hurt* plait-work, hurdle' + Skr. *cṛtámi* 'I tie together' fut *cartišyámi*, *kárṭa-s* 'hurdle-work, mat' (§ 259), Pruss *korto* 'hedge, enclosure', it. *qreu-*: Gr *κρέας* 'flesh', Lat. *cruor*, O Ir. *crū* 'blood', O.Icel. *hrār* OHG. *rō* 'raw, uncooked' + Skr. *kravíš-* 'raw meat', Lith. *kraŭja-s* O.Bulg. *krŭv-ĭ* 'blood'. **qarq* . . 'crab' Gr *καρκίνο-ς* Lat. *cancer* gen. *cancrī* fr. **carcro-* (§ 269) + Skr. *karkaṭa-s*.

Forms with *-qt- -qs-* from rt. *jeu̯g-* 'to harness, yoke' : Gr. *ζευκτό-ς ζεῦξις* from **ζευκτι-ς* (§ 489) *ζευκτήρ, ἔζευξα σύ-ζυξ*, Lat. *jūnctu-s jūnctiō, jūnxī con-jux* + Skr. part. *yuktá-s* nom. agentis *yóktar-* 3. sg. pres. *yuna̯ktḗ*, 3. sg. fut. *yōkšyátē* nom. sg. *sa̯-yuk* from **-yukš* (§ 647, 7), Lith. part. *jùnkta-s* inf. *jùnkti*, fut. *yùnksiu*.

Suffix *-qo-* see § 419.

§ 419. b. Tenuis *q* with labialisation in the *u̯*-languages. Pronominal stem masc. neut **qo- *qe-* 'who, which' (interrogative and indefinite), fem **qā-* : Gr. *πό-θεν* 'whence?' Hom. *τέο* 'whose?' *πῇ πῇ* 'in what direction?' (Dor. *πᾶ πᾷ*), Lat. *quo-d cottī-diē* fr **quettī, qua-m*, O.Ir. *cia* (fr. **cē*) Cymr. *pwy* 'who, what?' prim. Kelt. **ku̯eḭ̯*, Goth *hva-s* 'who?' *hvē* 'by what?' fem. *hvō* + Skr. *ká-s* 'who?' Av. dat. *ca-hmāi* 'to whom?', Alban. *ki̯ę* 'which', Lith. *kà-s* 'who?' O.Bulg. *kŭ-to* 'who?'. **qetu̯er-* 'four' : Gr. Ion. *τέσσερ-ες* Lat. *quattuor* O.Ir. *cethir* O.Cymr. *petguar* Goth. *fidvōr* + Skr. *catvár-as* Arm. *č̣or-k̑* Lith. *keturì* O.Bulg. *četyrije*. Rt *seq-* : Gr. *ἑπ-ο-μαι* 'I accompany, follow', Lat. *sequ-or*, O.Ir *sech-em* 'a following', Goth. *saihv-a* 'I see' (follow with my eyes)? + Skr. *sí-šak-ti sác-a-tē* 'conducts, escorts', Lith. *sek-ù* 'I follow'. **pena̯qe* 'five' : Gr. *πέντε* Lat. *quīnque* O.Ir *cōic* O.Cymr *pimp* Goth. *fimf* + Skr. *páñca* Arm. *hing* Lith *penkì*, **pena̯qto-s* 'the fifth' **pena̯qti-s* 'the number five' : Gr. *πέμπτο-ς* Lat. *quīntu-s Quīnctiu-s* Osc. *Πομπτιε-ς* 'Quinctius' Goth *fimfta-* (in *fimfta-taihunda* 'the fifteenth') + Skr. *pana̯kti-š* Alban. *pe-sę* fr. **pe(na̯k)-ti-* (in the Gegic dial. of Alban. *pẽ-sę* perhaps still has the nasal of the original form in the nasalised *e*) Lith. *peñkta-s* O.Bulg. *pętŭ pętĭ* from **pękt̆ŭ *pękt̆ī* (§ 545).

The suffix *-qo-* occurs, partly with, and partly without labialisation. OHG. *zwī zwīes* beside *zwīg* fr prim. Germ. **tu̯ī-(ʒ)u̯á-* (§ 444 *c*) . Skr. *dvi-ka-* 'consisting of two, a pair'. O.Icel. *lǫskr* 'soft, slack, loose' prim. Germ. **laskʷa-z*, Indg. **lat-qo-s*, see § 527. Lat. *tesquo-s* probably from **ters-quo-*, to *torreō* rt. *ters-*, cp. Skr *śúš-ka- šuš-ká-* 'dry' from rt. *saus-*. O.Ir. *sesc* 'unfruitful' Cymr. *hysp* 'arid' prim. Kelt. **sis-kʷo-s*, Lat. *siccu-s*, cpf. **sit-qo-s* (§§ 436. 516). Gr. *θή-κη* 'case, box' : Skr. *dhā-ká-s* 'receptacle'. Lat. *musculu-s* (cp. § 431 *c*), Skr.

muš-ká- 'testicle' *mūša-ka-s mūši-kā* 'rat, mouse', Armen. *mukn* (gen. *mkan*) 'mouse, muscle', O.Bulg. *myši-ca* 'arm'. Cp. also Skr. *aja-kā- aji-kā-* 'kid', Lith. *osz-kà* 'goat'; Armen. *ju-k-n* 'fish', Pruss. acc. pl. *su-cka-ns* 'fishes' (§ 410).

§ 420. a. Media *g* without labialisation in the *ḳ*-languages. Gr. *γέρανο-ς* Lat. *grū-s* Cymr. *garan* (Gall. *trigaranus*, s. Curtius Grundz.[5] 176) Ags. *cran* OHG. *cranuh* + Armen. *krunk* Lith. *gérve* O.Bulg. *žeravĭ* 'crane'. Rt. *gar-*: Gr. *γηρύω* 'I speak, utter', Lat *garrīō* 'I chatter', O.Ir. *gāir* 'call' Cymr. *gawr* 'clamor', OHG. *cherran* 'to scream, neigh, squeak' + Skr. *gṛ nā-mi* 'I call, call to' *gir-* 'an invocation, speech, words'. Rt. *steg- teg-* 'cover' : Gr. *στέγω* 'I cover' *στέγος τέγος* 'roof', Lat. *tegō*, O.Ir. *tech teg* 'house' O.Bret. *bou-tig* 'stabulum', OHG. *dah* O.Icel *þak* 'roof' + Skr. *sthágāmi* 'I cover, hide', Lith. *stóga-s* 'roof'. **jugó-m* 'yoke' (rt. *jeug-*) : Gr. *ζυγό-ν* Lat. *jugu-m* Goth *juk* + Skr. *yugá-m* Lith. *jùnga-s* (with *n* taken over from *jùngiu* 'I yoke'), O.Bulg *igo* (§ 145)

§ 421. b. Media *g* with labialisation in the *ḳ*-languages. **gĭ̯uo-s* : Gr *βίο-ς* 'life', Lat. *vīvo-s* O.Ir. *biu beo* Cymr. *byw* Goth. *qiu-s* + Skr. *jīvá-s* 'alive', Armen. *kea-m* 'I live', Lith. *gývа-s* O.Bulg *živŭ* 'alive' Rt *gem-* : Gr. *βά-σκω βαίνω* 'I go' (§§ 204. 233. 234), Lat *veniō* (§§ 208 239), Goth. *qim-an* OHG *quem-an* 'to come' + Skr. *gá-chāmi* 'I go' (§ 228), Arm *e-kn* 'he came', Lith *gem-ù* 'I am born' (§ 249). **regos* n : Gr. *ἐρεβος* Goth *riqiz-a-* n. 'darkness' + Skr. *rájas* 'duskiness', Armen. *erek* 'evening' Root-form *a"ŋg-* 'smear, anoint, smooth' · Gr. *ἁβρό-ς* 'delicate, luxurious', Lat. *unguō*, O Ir. *imb imm* (gen *imme*, st. *imben-*) 'butter', OHG. *ancho* 'butter' (Goth. **aggа*) + Skr. *añjí-š* 'salve, ornament, splendour' 2. pl. *aŋktha* 'ye anoint'.

Indg. suffixes with *g* cannot be established with certainty.

§ 422. a. Media asp. *gh* without labialisation in the *ḳ*-languages. Lat. *hosti-s* 'foreigner, enemy', Goth. *gasts* OHG. *gast* 'stranger, guest' + O.Bulg. *gostĭ* 'guest, companion, friend', cpf. **ghos-ti-s* 'stranger'. Rt. *steigh-* · Gr. *στείχω* O.Ir. *tiagaim* 'I stride, go', Goth. *steiga* 'I mount' + Skr. *stigh-nu-tē*

'leaps up, ascends' (not found), Alban. *štek* (definite form *štег-u*) 'entrance' Lith. *staigýti-s* 'to make haste' Lett. *staigát* 'to go, travel' O.Bulg. *stigną* 'I come'.

§ 423. b. Media asp. *gh* with labialisation in the *ų*-languages. Rt. *gher-* : Gr. *θερμό-ς* Lat. *formu-s* OHG. *warm* 'warm' from prim. Germ. **(ʒ)ųarma-z* + Skr. *gharmá-s* 'glowing fire', Armen. *jerm* 'warm' Pruss. *gorme* 'heat', Indg. **ghor-mo-* (Gr. Armen. with *e* in the root syllable). Rt. *sneiĝh-* 'to snow' : Gr. *νίφ-α* acc. 'snow', Lat. *ninguit,* acc. *niv-em,* Goth. *snáivs* 'snow' + Av. *snaęžaiti* 'it snows', Lith. *snĕga-s* O.Bulg. *sněgŭ* 'snow'. Gr. *νεφρό-ς* 'kidney, testicle', Praenest. *nefrōn-es* Lanuv. *nebrundin-es* 'kidneys, testicles', OHG. *niero* 'kidney, testicle' O.Icel. *nȳra* 'kidney' fr prim. Germ. **ne(ʒ)ųr-en-*. Rt. *kneiĝh-*: Lat. *cō-nīveō* (perf. *cō-nīxī*), Goth. *hneivan* OHG. *(h)nīgan* 'to bow'.

Indg. suffixes with *gh* cannot be established with certainty.

a. The language-group with labialisation.

§ 424. Many kindred words, which are found in all or several *ų*-languages, appear in one language with labialisation, in another without it or in the same language show labialisation in one set of forms, but not in the others.

Manifold difficulties stand in the way of our being able to form a judgment of their history, especially in as much as we do not know how old the labial affection of the velar explosives is, or whether in the group of *ų*-languages it belonged from the beginning to all forms of a form-system irrespective of the quality of the neighbouring sounds, or was connected with some definite vicinity of sounds, and whether, later, but still in prehistoric times, a new *ų*-afterclap, caused by fresh sound-laws, did not here and there make its appearance quite independent of the first *ų*-development.

The chief question is, to what extent can the disappearance of the old inherited *ų*-affection be established or made probable within the circle of the *ų*-languages? It is seldom that its

disappearance is to any extent carried out before our eyes, as in Lat. *secuntur* from *sequontur*. We may conclude that it was probably dropped in the following cases:

1. When other forms of the same kindred class of words have *ų* and the sound-laws of the respective languages permit our assuming that the labialisation has been lost. We thus assume in regard to Goth. *qiman* OHG. *queman* 'to come' (§ 421) and prim. Germ. **sun-da-* fr **sųum-da-* etc. (§ 180 p. 158) that prim. Germ **kumana-z* 'come' pp. (OHG. *koman*) arose from **kųum-ana-z* (§ 444*b*).

2. When closely related dialects (of the same language-branch) have *ų* and the native sound-laws are not in the way. Thus the *-pt-* in Osc. *Πομπτιες* 'Quinctius' shows that the *-ct-* in Lat *quīn(c)tu-s* goes back to prim. Italic *-kʷt-*. O Cymr. *petguar* 'four' permits our assuming an older *kų-* for Ir. *cethir*.

3. When other languages have *u* and the native sound-laws are not in the way. We thus conjecture prim. Germ **kųuru-* for Goth. *kaúru-s* 'heavy' and prim Lat. (or prim. Ital.) **gʷraųu-s* for Lat. *grauis* (§ 432*d*) on account of Gr. *βαρύ-ς*, Indg. **gṛr-u-* **gr-u-*.

Several proofs may often be united together. Thus we may appeal 1 to *quīnque*, 2 to Osc *Πομπτιες*, 3 to *πέμπτο-ς* and Goth. *fimfta-* for Lat. *quīn(c)tu-s* from **kʷenkʷto-s*.

Opposed to these cases there are many in which, by virtue of other forms of the same dialect or of the connected forms of a closely related dialect or of those of another *u*-language, one is inclined to maintain the loss of *ų*, but is prevented from doing so by the sound-laws hitherto discovered Thus Ion. *κό-θεν κῶς* etc. beside Att. etc. *πό-θεν* Lat. *quo-d* Goth. *hva-s* as opposed to Ionic *ποινή* fr. Indg. **qoi-nā* (§ 427 *a*); Gr. *λακεῖν* 'to scream, speak' beside Lat. *loquī* as opposed to Gr. *λιπεῖν ἕπεσθαι* etc. with *π* = Indg. *q*, Lat. gen. *vōc-is vocāre* beside Gr. *ὄψ* 'voice' *ἔπος* 'word', as opposed to Lat. *coquis* etc. with *qu* = Indg. *q*. With our present state of knowledge we can, in such cases, only make uncertain conjectures, as e. g. that in forms connected with

Lat. *voc-* the *c* for *qu* had been extended by analogy from the nom. *vōx,* which can be regularly traced back to **ɣ̑ōk̑*s* (§ 431 *c*).

For words and groups of words, which do not appear in any language with labialised velar-sound, it must for the present be left undecided, as to whether they ever had the *ɣ̑*-afterclap. In each language we give first the examples for this form-category apart from the other.

Greek.

1. Indg *q, g, gh* without labialisation.

§ **425.** Indg *q* *καρπ-ός* 'fruit' *κρώπ-ιο-ν* 'sickle' : Lat. *carpō,* OHG *herbist* autumn' + Skr. *kṛpāna-s* 'sword', Lith. *kerpù* 'I shear' *κολων-ός* 'hill' Lat *ex-cellō collī-s,* Goth. *hallu-s* 'rock' O Icel *hallr* 'hill, declivity' OS *holm* 'hill' + Lith. *kél-ti* 'to raise' *kál-n-a-s* 'a local elevation, mountain'. *κλῄ-ς* 'key' : Lat. *clāvi-s clavo-s,* O.Ir. *clōi* Mid. Cymr *cloeu* pl. 'nails', OHG. *sliozan* 'to shut' (prim Germ **sleut-* from **skleut-*, § 528 rem 1) + O Bulg. *klju-čĭ* 'hook, key', cp § 589, 3. *ἀγκών* 'bow' *ὄγκο-ς* 'bow, hook, circuit' Lat *uncu-s unco-s,* O Ir. *ō ath* 'hamus', Goth *hals-agga* 'neck' OHG *angul* 'angle' + Skr *aṅká-s* 'hook'.

Indg *g* *ἀγείρω* 'I collect' *ἀγορά* 'assembly' *γώρ-γαρα* 'heap' : Lat *gre-x gre-g-is,* O Ir. *graig* 'herd of horses' (the Lat. and the Kelt word with 'reflected reduplication') + Skr *grāma-s* 'crowd, army, village' *ἐρεύγομαι* 'I spit out' · *ĕ-rūgō,* OHG. *ita-ruchian* 'to chew again' + Lith. *rúgiu* 'I belch' O Bulg. *rygajǫ sę* 'I belch, vomit'

Indg *gh* *χανδάνω* 'I lay hold of' fut. *χείσομαι* fr **χενσομαι* : Lat. *pre-hendō praeda* from **prae-hedā,* Goth. *bi-gitan* 'find, get' O Icel. *geta* 'to get, divine, guess' + Alban. *gjendem* 'I am found', Pruss *sen-gydi* 'he may receive, attain' O.Bulg. *gadajǫ* 'I guess, divine', rt. *ghed-* [1]). *λέχος* 'bed' : O Ir. *lige* 'bed', Goth. *ligan* 'to lie' + O.Bulg. *lęgą* 'I lie down' *lože* 'place of rest'.

1) The nasalisation of this root in the present **ghendō* is explained in the same manner as the Skr present formation *limpāmi* etc. (p 189).

κ̯ χ̯, γ̯ = g̑ gh̑, g̑ became *σσ ττ, ζ(σδ) δδ*, as in the case of the corresponding palatal sounds + *i̯*, see §§ 384—386. 489. 493. 497. *ὀρύσσω* 'I dig' fr. **ὀρυκ-ι̯ω* : Lat. *runcāre* + Skr. *luñcámi* 'I pull out, pluck'. *φύζα* 'fright' fr. **φυγ-ι̯α*, to *φεύγω* 'I flee' : Lat. *fugiō*, Goth. *bugan* 'to bend' + Skr. *bhugná-s* 'bent', Lith. *baugù-s* 'fearful', rt. *bheu̯g- bheu̯g-*.

2. Indg. *q, g, gh* = prim. Gr. k^u, g^u, kh^u.

§ 426. The prim. Greek sounds partly became developed to *π, β, φ*, partly to *τ σ, δ ζ, θ*, and partly to *κ, γ, χ*. The conditions, under which these differences of the place of articulation were formed, were mostly the same for the three forms of articulation

That the *u̯* following the explosive sound in prim. Greek was not a full *u̯*, can be concluded from the contrast between *ἵππος* 'horse' (fr Indg. **ekuo-s*, § 166 p 147) and e. g *ἔλιπον* 'I left' (fr Indg. **e-liq-o-m*) Cp. p. 305 f

§ 427. Prim Greek k^u became

a) *π* before *o*-vowels, before sonant and consonant nasals and liquids, and before *t, th, s*. Stem *πο-* 'who' : Lat *quo-*, Skr. *ka-* etc, see § 419 *ποινή* 'expiation, atonement, fine' : Av. *kaena* 'fine', O.Bulg *cěna* 'price', Indg **qoi̯-nā* from rt. *qei̯-*, to which also Gr. *τί-σι-ς* 'atonement' : Skr. *ápa-ci-ti-* 'requital' (under *b*) *λείπω* 'I leave' · Lat *linquō*, O Ir. *lēcim* 'I leave', Goth. *leihwa* 'I lend' + Skr. *rināk-ti* 'leaves', Arm. aor. *e-lik'* 'he left', Lith *lekù* 'I leave', rt. *leiq-*. *ἧπα-τ-* 'liver', orig. form **i̯ēqu-t-* : Lat gen. sg *jecin-or-is* (§ 131 *c*) + Skr gen sg. *yakn-ás*, Lith nom. pl. *jekn-os* *πεμπάς* 'the number five' = Skr. *pañcát* (§ 448 rem), cpf. **penqu̯t-s*; Gr *α* Skr. *a* in the last syllable instead of the expected *αν ατ* (s. §§ 230. 235) are explained by the original accentuation of the weak cases, gen. sg. **penqu̯t-ós* etc., concerning the *δ* of the stem *πεντακ-* see footnote 1 pp. 199—200. *ὄμμα* 'eye' fr. prim. Gr. **ὀπ-μα* (§ 488): Lith. *akì-s* O.Bulg *oko* 'eye'. In like manner also *πέμμα* 'any kind of dressed food'. Lat. *coquo* + Skr. *pácāmi* O.Bulg. *pekǫ* 'I cook'. *ἐ-πρι-άμην* 'I bought' : O.Ir. *cre-nim* 'I buy' *crīthid* 'desirous of buying' O.Corn. *prinid* 'emptus' + Skr.

krī-ṇá-mi 'I buy, purchase'. *ἔ-πλ-ε-το* 'versatus est' (*περι-πλ-ό-μενο-ς*) *πόλο-ς* 'the axis on which something turns, land turned up with the plough' : Lat. *colō* fr. **quelō* (§ 431 *a*), *in-quilīnu-s* + Skr. *cárāmi* 'I move myself, wander', rt. *qel-*. *πέμπτο-ς* 'the fifth' : + Lith. *peñkta-s* etc., see § 419. *πεπτό-ς* 'cooked' : Lat. *coctu-s* from **quecto-s* + Skr *paktá-s*; fut *πέψω* aor. *ἔπεψα* : Lat. *coxī* from **quexī* + Skr. fut. *pakšyá-ti* aor Ved. *pákṣa-t* *νίπ-τρο-ν* 'water for washing' fut *νίψω* 'I shall wash' nom. sg *χέρ-νιψ* 'water for the hands' + Skr. *niktá-s* 'washed off' fut. *nēkšyá-ti* 'he will wash off', rt. *neiǥ-* (acc. *χέρ-νιβ-α*, Skr. *ava-néǰ-ana-m* 'washing-water')

πτ became *ττ* in Cret. *πέντο-ς* from **πεντττο-ς* = *πέμπτο-ς* 'quintus'. Cp. § 333

b) *τ* before *e-* and (sonantal) *ι*-vowels. *τέ* 'and' : Lat *-que*, O.Ir. *-ch* Cymr. *-p* | Skr. *ca*, Indg. **qe*, related to *πό-θεν* etc. Hom. *τέο* 'whose', Cret (Gortyn) fem *ὁ-τεία*, as opposed to Att. *ὁ-ποία* 'qualis' from the stem **qe-* (§ 419) *τέλλειν* 'to rise' to *πόλο-ς*, rt *qel-* see above under *a* *πέντε* 'five' : Lat. *quīnque* etc., see § 419. *τί* what?' Lat. *quid* + Skr *-cid* Av *-ciƀ* (indef.), Indg **qi-d* *τί-σι-ς* 'atonement', rt *qei-*, see above under *a*.

That this *τ* arose from prim Gr. *k*^{u}, not *k* (as § 425), and that no direct historical connexion existed between the palatal articulation which is to be postulated as the previous stage for *τ* and the Aryan palatal *ć* = Indg *q* (§ 445) (as is maintained by some scholars e g J. Schmidt), follows from the fact, that *τ* only occurs in such kindred classes of words as have *π* = prim. Gr. *k*^{u} beside *τ* (*τέο* beside *πό-θεν*) and, so far as they are at the same time represented in other *u*-languages, have a labialised sound opposite to the Gr. *τ* (*τίς* = Lat. *quis*). If *τ* had had no *u* from the most ancient times, this sound would also have to appear as representative of Indg *q* in the words belonging to § 418, as e g. *κέλης* 'runner' (Lat. *celer*, Skr. *cal-*, rt. *qel-*), where however it does not occur. The following palatal vowel, notwithstanding the *u*-afterclap, caused palatalisation of the *k*-sound (*kᵘ* from *kʷ*), just as in the change of prim. Slav.

**kṷīstī* to O.Bulg, *cvisti* ('to blossom') *ṷ* did not prevent the *i* from exercising its influence on the *k* (§ 462).

Thess. *κίς* probably stands to Att. *τίς* in the same relation as Mod HG *quangen* to MHG. *tuengen* (§ 374), that is, before the disappearance of the *ṷ* of the prim. Gr. form **kṷ'is* this caused the change of the explosive sound back again to *k*. Also Cypr *σί-ς* = *τί-ς* (cp Arcad *ζ'λλω*, § 428 *b*) supports the assumption that k^{u} = Indg *q* before palatal vowels and Indg *t* had not yet fallen together in prim. Greek.

Rem 1 Through new formations *τ* and *τ* came to stand in sound-combinations, in which they had not regularly arisen E g Dor loc. *πεῖ* 'where?' instead of **τεῖ*, Ion Att *λιμπτει, λείπτει λειπτει* instead of **λιπτει*, etc, conversely *ἀια-τολη* 'rising' instead of **-τολη* (to *ἀια-τέλλω*, Skr *car-*) Cp §§ 428 rem 429 rem 1 and 448 rem

c) *ν*, when *ṷ* preceded or followed; in some cases this *ṷ* seems first to have been called into existence by the *ṷ* in *kṷ*, a point, which still requires closer investigation *λύκο-ς* 'wolf' : Goth. *vulfs* + Skr *vṛ́ka-s* wolf'. Gen *νυκτός* 'noctis'? . + Skr. *nákti-ś* Lith *naktì-s* night' Nom sg *οἰνό-ϙλοξ* 'drunk with wine' (gen *-ϕλυγ-ος*) *ϕλυκτί-ς* bladder' beside *ϕλέψ ϕλεβ-ός* 'blood-vessel'. *κύκλο-ς* 'circle' Ags *hweol hweowol* 'wheel' + Skr *cakrá-s* 'circle, wheel' Cp §§ 428 *c* 429 *c*

Rem 2 Also *κκ* in *ὀκκο-ι* ace 'eye' in Hesych (cp *ὀπ-* in *ὀπή* 'a peephole, hole' etc) for k^{u} *ṷ*? Cp *πεπεγκαω* § 166 with rem Doubts remain on account of Boeot *ὄκταλλο-ς* 'eye', whose *κτ* must be taken into consideration in connexion with the *ϕθ* in *ὀϕθαλμό-ς* and the *kš* in Skr *akšan-*

d) With following *ι*, there arose *σσ*, *ττ*. Hence prim. Gr $k^{u}\iota$ thus fell together with $k\iota$ — Indg $\hat{k}\iota$ (§ 384) Since Indg. *qi* and Indg *ti* remained apart in Greek, we may assume that $k^{u}\iota$ did not first become *ti-* — as one might expect according to *τίς* from **k^{u}i-s-* —, but that the 'zetacistic' influence of the *ι* already began, when the explosive sound belonged to the sphere of the back articulation. *πέσσω πέττω* 'I cook' beside fut. *πέψω* etc., rt. *peg-*. Further under § 489

§ 428. Prim. Greek g^{u} became

a) *β* before *o*-vowels and sonant and consonant nasals and

liquids. *βοῦ-ς* 'ox' : Umbr. *bue* 'bove', O.Ir. *bō* OHG. *chuo* 'cow' + Skr. *gāú-š* 'ox', Armen. *kov* (gen. *kovu*) 'cow' O.Bulg. *gov-ędo* 'ox'. *βολή* 'a throw, cast' : OHG. *quellan* 'to spring' (of water) + Skr. *gálati* 'trickles down', rt *gel-*. *βορᾱ́* 'food' : Lat. *-voru-s vorāre* + Skr. *girā́mi gilā́mi* 'I swallow up', Armen. *ker* (gen. *keroy*) 'nourishment, food', Lith *geriù* 'I drink' O Bulg *žьrą* 'I swallow', rt. *ger-*. *σέβ-ομαι* 'I feel awe, respect' (orig 'start back before something') : Skr. *tyáj-a-ti* 'forsakes, forgoes' part *tyaktá-*, rt. *tjeg-*. *ἔρεβ-ος* n. 'darkness' : Goth. *riqiz-a-* etc., see § 421. *βά-σκω βα-τό-ς βά-σι-ς* = Skr. *gá-chāmi ga-tá-s gá-ti-š*, *βαίνω* = Lat *veniō*, from rt form *gm̥-* 'go', see § 421 *μνάομαι* 'I woo to wife' from **μν-ᾱ-* from **βν-ᾱ-* 'wife' (this denominativum was treated as a primitive verb, hence the σ in *μνηστό-ς*) . O.Ir. *mnā* gen. sg. 'of a wife' out of **bnās* (§ 520) + Skr. *gnā́-* 'the wife of a god', Indg. **gn-ā-*, beside these Bœot. *βανά* O Icel. *kona* 'woman' + Armen. pl. *kanai-k'* 'women', Indg **gn̥n-ā-*. *σεμνό-ς* fr. **σεβνο-ς*, part. to *σέβ-ο-μαι*, see above *ἀμνό-ς* 'lamb' fr. **ἀβ-νο-ς* : Lat *avilla āgnu-s*, O.Ir. *uan* 'lamb' + O Bulg *jagnę* 'lamb'. *βαρύ-ς* 'heavy' : Goth *kaúru-s* + Skr *gurú-š* 'heavy', Indg. **gr̥r-u-s*. *βι-βρώ-σκω* 'I devour' *βρω-τήρ* 'devourer' : + Skr *gīr-ṇá-* 'swallowed up', Indg. rt form *gr̥-*, see § 306 p 242 *βρύχω* 'I gnash' *βρύκω* 'I bite' (cp. Osthoff zur Gesch d Perf. 313 f) + Lith. *gráužu* 'I gnaw, bite off' O Bulg *grъzą* 'I bite', rt. *gra*ug̑h-*. *ἁβ-ρό-ς* 'pretty' from orig form **ϱ̥g-ro-s* . Lat *unguō* etc, see § 421. *βάλλω* 'I throw' from orig form **gl̥-ιό*, aor. *βαλ-εῖν βαλ-ῆναι* fr. **gl̥l-*, aor. *βλ-ῆναι* fr **gl-*, beside *βολ-ή*, rt. *gel-*, see above. Aeolic *βλῆρ* beside Att *δέλεαρ* (*b*) 'bait' either to *βάλλω* (the author Morph. Unt. II 225) or to OHG. *querdar* 'bait' (J. Schmidt Kuhn's Ztschr. XXV 153).

β before *ι* is remarkable. *βίο-ς* 'life' : Lat *vīvo-s* etc., see § 421. *βιό-ς* 'bow' : + Skr *jyā́-* Av *jyā-* 'bow-string', Lith. *gijà gijė* 'thread' (cp. § 120 p. 111 f.). *βίᾱ* 'force' *βῑ-νέω* 'I ravish' : + Skr. *jyā́-* 'supreme power' *ji-ná-mi* 'I overpower, subdue' *jáyāmi* 'I overcome' perf. *ji-gā́y-a*. Cp. J Schmidt Kuhn's Ztschr. XXV 159. 161, the author Morph. Unt. IV 410 f.

b) *δ* before *e*-vowels. Arcad. *δέλλω*, Delph. Gortyn *ὀδελό-ς*,

to *βολ-ή ὀβολ-ό-ς βάλλω*, rt. *gel-*, see *a*. Arcad. *δέρεθρο-ν* beside Att. *βάραθρο-ν* 'gulf, cleft', to *βορ-ά̃ βι-βρώ-σκω*, rt. *ger-*, see *a*. Locr. Delph. *διίλεται* Dor. *δήλεται* 'wills, wishes' from orig. form **gél-ne-tai̯*, beside Lesb. *βόλλεται* Att. *βούλεται* 'wills, wishes' fr. orig. form **gl̥-né-tai̯* (§ 204 p. 170 f. § 306 p. 243), rt. *gel-*[1]).

In Arcad. this *δ* must have been different from the *δ* = Indg. *d*. For it was also represented by *ζ* : *ζέλλω*, *ζέρεθρον*, cp. Cypr. *σίς* = *τίς* § 427 *b*. Hence Indg. *ge-* and *de-* had not yet fallen together in prim. Greek.

Rem Through new formations, *β* and *δ* came to stand in sound-combinations, in which they would not have regularly arisen E g *βέλος* 'shot' instead of **δέλος* to *βάλλω*, *ὀβελό-ς* beside *ὀδελό-ς* and *ὀβολό-ς*, *δολφό-ς· ἡ μήτρα* Hesych , beside *δελφυ-ς ἀ-δελφεό-ς δελφίς* Skr. *gárbha-s* 'womb'. Cp § 427 rem. 1, § 429 rem 1 and § 451 rem

Does Bœot *βελετη* Thess *βελλετει* beside Locr. *δείλεται* Lesb *βόλλεται* also belong here? The idea is not entirely to be rejected, since prim. Gr *gʷ* may regularly have become *β* before *e* in Aeol Cp. *β* before *ι* in *βίος* etc

c) *γ* in the vicinity of *v*, corresponding to the *ϰ* in § 427 *c* and to the *χ* in § 429 *c*. Gen. *οἰνό-φλυγ-os*, see § 427 *c*. *ἐγ-γύη* 'consent, surety, betrothal' . Lat. *vovēō* from **gu̯ou̯-eō*, rt. *geu̯-*. *γογ-γύ-ζω* 'grumble, am unwilling' beside *βοή* 'call' from **βοϝ-ᾱ̃* : Skr. *jŏ́-guv-ē* 'I proclaim aloud'; the *γ* in *γόο-ς* 'plaint' was transferred from *γυ-* *γυνή* beside Bœot. *βανᾶ̃* and Hom *μνάο-μαι* see *d*.

The side by side existence of *πρέσβυ-ς* and *πρέσγυ-ς* is probably due to a double stem form *πρεσ-γυ-* and *πρεσ-βεϝ-* (to Lith. *ĕmo-gù-s* 'man'?). It is not clear whether *-βε-* was regular after *σ* (cp. *σβ-έννῡμι σβ-ῆναι* to Lat. *sēgni-s*, rt. *seg-*, § 432 *d*, beside *ζείναμεν · σβέννυμεν* in Hesych), or whether *β* was borrowed from *πρέσ-βιστο-ς πρέσβι-ς πρέσβος* etc. It must be observed that *gʷ* before *u* lost its labialisation earlier than *gʷ* which led to *β* and *δ*. The last two sounds stood for a time in a closer relation to each other as compared with *gu*. Association

1) Concerning this root cp. the author in de Saussure's Mém. sur le syst. pr. 256, Fick Bezzenberger's Beitr. VI 211 f., Blass Rhein. Mus. XXXVI 610.

with the form of the superlative etc. would have taken place at that period.

d) With following *i̯*, there arose *ζ* (*σδ*), *δδ*. Prim. Gr. *gʷi̯* thus fell together with *gi̯* = Indg. *ĝi̯* (§ 385). *gʷi̯* did not first become *di̯*, any more than *kʷi̯* first became *ti̯* (427 *d*) [1]). *ζῆ* 'lives' fr. **ζη-(i̯)ει*, fut. *ζή-σομαι* : + Av. *jyāiti-jyātu-* 'life'. *νίζω* 'I wash off' beside *νίπτρο-ν* etc., see § 427 *a*. For the rest see § 493.

§ 429. Prim. Greek *khʷ* became

a) *φ* before *o*-vowels and sonant and consonant nasals and liquids. *φόν-ο-ς* 'murder' part. *φα-τό-ς* perf. *πέ-φα-ται* pret. *ἔ-πε-φν-ο-ν* . + Skr. *hán-ti* 'strikes, slays' 3. pl. *ghn-ánti*, Armen. *gan* 'blows', O.Bulg. *žĭn-jǫ* 'I cut down, reap', rt *ghen-*. *ἤλφ-ο-ν* 'I acquired' pres. *ἀλφ-άνω* from **-φnō* : + Skr. *árhāmi* 'I earn, deserve' *arghá-s* 'worth, price', Lith. *algà* 'pay, reward', rt. *algh-*. *στέρφος τέρφος* n. 'leather, hide', esp. 'the hard hide on the back of animals' : Lat. *tergus* 'thick hide' esp. 'the hide on the back of animals', then 'back'. *νεφρό-ς* 'kidney' : OHG. *nioro* etc., see § 423. *ἐλαφρό-ς* 'quick, dextrous, nimble' OHG. *lungar*, cpf. **lʰngh-ró-s*; to *ἐλαχύ-ς*, see *c*.

b) *θ* before *e*-vowels. *θείνω* pres. to *ἔπεφνον* etc., see *a*. *θερμό-ς* warm' = Armen *jerm* 'warm', *θέρος* 'summer' = Skr. *háras* 'glowing heat', rt. *gher-*, see § 423 *θέσσασθαι* 'to obtain by entreaties' fr. **θετ-σ-* · Av. *jaiδyēmi*, O.Pers. *jadīyāmīy* 'I beg, ask', rt. *gheidh-*; to which probably also *πόθο-ς* 'desire, a longing for', from **φοθο-ς* (§ 496), according to *a*. *θήρ* 'animal' : Lat. *feru-s* + O.Bulg. *(d)zvěrĭ* 'wild beast' from prim. Slav. **gu̯ěrī* (§ 464); it remains uncertain whether the *u̯* of the Slav. form was an old inherited *u̯* (J. Schmidt Kuhn's Ztschr. XXV 178).

Rem. 1. Through new formations *φ* and *θ* came to stand in sound-combinations, in which they would not have regularly arisen. E g. *ἴφ-ει ἰέφ-ει* 'it snows' after *νίφο-* (in *νιφόμενος* and others) *νίφ-α* etc , rt *sneigh-*, see § 423. *ἤλφ-ε* after *ἤλφ-ον* etc *ἔ-θαν-ε* 'he died', 3 pl perf *τε-θν-ᾶσι* (for **τε-φν-αντι*) after *θείνω* (s above), see Osthoff Zur Gesch. d Perf 366 f. Cp § 427 rem 1. § 428 rem. and 454 rem.

1) Hence we have also no right to maintain, that *ζῆ* proves, that *βίος* stands for regular **δῐο-ς*.

$\varphi = \theta$ in Aeol $\varphi\acute{\eta}\rho$ (Thess. $\Phi\iota\lambda\acute{o}$-$\varphi\epsilon\iota\rho o$-$\varsigma$) seems to be due to a change of *p* to *f*, cp. §§ 365. 495.

Rem 2. If $\beta\epsilon$ = Indg. *ge* should have arisen regularly in Aeol. (§ 428 *b*. rem), we might similarly trace $\varphi\acute{\eta}\varrho$ directly back to **kh*^{u}*ēr*

c) χ corresponding to the $\varkappa$ in § 427 *c* and to the γ in § 428 *c*. $\acute{o}\rho\nu\chi$- 'nail, claw' in the gen $\acute{o}\nu\nu\chi$-$o\varsigma$ etc : Lat *ungui-s*; it is here of course a question of prim. Gr. *kh*^{u} = Indg. *qh* (§ 553) $\grave{\epsilon}\lambda\alpha\chi\acute{\upsilon}$-$\varsigma$ 'small, little' — Skr. *raghú-š laghú-š* 'quick, small' beside $\grave{\epsilon}\lambda\alpha\varphi\varrho\acute{o}$-$\varsigma$ 'quick' see *a*; the θ in $\grave{\epsilon}\lambda\alpha\theta\varrho\acute{o}$-$\varsigma$ (Hesych.) was perhaps transferred from the once existing forms $^{1}\grave{\epsilon}\lambda\alpha\theta\epsilon\digamma$- (beside $\grave{\epsilon}\lambda\alpha\chi\upsilon$-) and $^{*}\grave{\epsilon}\lambda\alpha\theta\iota\sigma\tau o$-$\varsigma$

d) with following ι, there arose $\sigma\sigma$, $\tau\tau$. $\grave{\epsilon}\lambda\acute{\alpha}\sigma\sigma\omega\nu$ $\grave{\epsilon}\lambda\acute{\alpha}\tau\tau\omega\nu$ 'smaller, less' compar to $\grave{\epsilon}\lambda\alpha\chi\acute{\upsilon}$-$\varsigma$ (*c*). Cp. §§ 427 *d* 428 *d*. 497.

Italic.

1 Indg *q*, *g*, *gh* without labialisation

§ 430. Indg *q* Lat. *capiō*, *caput -itis*, Umbr. kapiř-e 'capide', Osc. *καπιδιτομ*, i. e *kapid-ī-to-m* 'ollarium' : Gr. *κάπη* 'manger' *κώπη* 'handle', O Ir. *cacht* O.Corn *caeth* 'servus', Goth. *hafja* 'I raise' OHG *haft* 'caught' + Armen *kap* 'bond, fetter'? (Hubschmann Armen. St I 12), Alban *kap* 'I seize', Lett *kampu* 'I seize, take hold of'. Lat. *canō*, Umbr kanetu 'canito' : Gr. *καναχέω* 'I tune, sound', O.Ir *canaim* 'I sing' O Corn *chenat* 'cantor', Goth. *hana* cock' + Skr *kaṃ-kaṇ-ī* 'an ornament with bells', Lith. *kañ-klas* and *kaṇ-klės* pl 'harp, guitar' (or is the Lith. word to be connected with *kinkýti* 'to stretch'?). Lat. *coxa* : O.Ir. *coss* 'foot' Cymr *coes* 'femur', OHG *hahsa* 'knuckle of the hind leg' + Skr *kákša-s* 'arm-pit' Av. *kaša-* m 'shoulder'. Lat *cūpa* : Gr *κύπη* 'a hole, hollow' *κύπελλο-ν* 'capacious drinking vessel, goblet' + Skr *kū́pa-s* 'ditch, hole' Lat *secō*, Umbr. pru-sekatu -sektu 'prosecato' *pro-sĕctur* 'prosectis' : OHG. *sega saga* O.Icel. *sǫg* 'a saw' O.Icel *sigðr* 'sickle' + O.Bulg. *sěką* 'I hew' *sěkų* 'I cut'. Lat *auctu-s auctiō auctor*, Umbr. uhtur 'auctor : + Pruss. *auckta-* Lith. *áukszta-s* 'high' Lith. *áukti* 'to grow', rt. *aug-*, s. below under Indg. *g*. Lat. *scandō* :

Gr. *σκάνδαλο-ν* 'stumbling-block', O.Ir. *ro se-scaind* perf. 'he leapt' + Skr. *skándāmi* 'I hasten, leap'.

Concerning Umbr. *s* from *k* before *e*- and *i*-vowels see §§ 387. 502

Indg. *g*. Lat. *gelu*, Osc. *γελαν* 'pruinam' : Goth *kalds* 'cold' O.Icel. *kala* 'to freeze' + O.Bulg. *zlědica* 'sleet'. Lat. *augeō augmentu-m* (cf *auctor* Umbr. uhtur under Indg. *q*) : O.Ir *ōg* 'uninjured, whole', Goth *áukan* 'to increase' + Skr *ójas*- Av. *aojah*- n. 'power, might', Lith. *áugu* 'I grow'. Lat *tegō* (cp. *tēctu-s*, Umbr. tehteři-m 'tegimentum' with *gt*) . Gr. *τέγος* etc., see § 420.

Indg. *gh* Lat. *hosti-s*: Goth *gasts* etc, see § 422 *prehendō* Gr *χανδάνω* etc, see § 425 *gradior*: O.Ir *m-grennim* 'I pursue', Goth. *grīþs* (st *grīdi*-) f. 'step, stride' + O Bulg. *grędą* 'I come'. Cp. also *congiu-s* : Gr. *κόγχο-ς* + Skr *śaṅkhá-s* 'muscle' with Indg *gh*, § 553

fostis beside *hostis* like *folus* beside *holus*. See § 389.

2 Indg *q*, *g*, *gh* = prim Ital. k^u, g^u, χ^u.

§ 431. Prim Ital. k^u became

a) Lat *qu* before all vowel qualities except *u*[1]), corresponding to *p* in Umbr.-Samn Lat *qui-s*, Umbr. Osc. *pi-s* 'quis' Gr *τίς* etc , see § 427 *b* Lat *-que*, Umbr. *-pe* Osc *-p* : Gr. *τέ* etc., see § 427 *b*. Umbr *petur*- 'quadru-' Osc *petiro-pert* 'quater' . Gr *τέσσαρ-ες* etc., see § 419. Lat. *quīnque*, Umbr. pumpèřias Osc. pumperias '*quintiliae' (cp. § 336) : Gr *πέντε* etc , see § 419. Lat. *quo-m quom-que*, Umbr. *pon-ne* Osc pún 'quom' fr *'k^uom-de* (§ 207), Umbr. *pum-pe* 'quomque' Gr *πό-θεν* etc., see § 419. Lat. *coquō* fr. **quequō*, probably Osc *popīna* 'coquina' (§ 336) : Gr *πέπων* 'ripe' *πόπανο-ν* 'sacrificial cake', Mid. Cymr. *popuryes* 'pistrix' (O.Ir. *cucann* pistrinum' was a Lat loan-word) + Skr. *pácāmi* O.Bulg. *peką* 'I cook', it *peq*-. Lat. *quā qua-m*, Umbr. *paf-e* 'quas' Osc.

1) There is no satisfactory foundation for Bersu's assumption (Die Gutturalen p 134 ff) that the labial affection had disappeared before *o* in prehistoric Latin and had been restored again in *quod linquō* etc. by form-association.

paa-m acc. quam' : Goth. *hvō* fem. 'quae', s. § 419. Lat. *quoquo-s* 'cook', prim. Ital. **k"ok"o-s* fr. **pok"o-s* (s. above); the form *coquo-s* (*cocu-s*) had its *co-* through analogy to *coquō*.

That *k"* = Indg. *q* was still distinguished from Indg. *ḱu̯* in prim. Ital, follows from Umbr ekvine loc. 'equini' (Skr. *áśva-s* etc.), in case this word was not borrowed from Lat. The Ital. form *epo-* is of Gallic origin Cp. § 426.

Anteconsonantal *que-* became *co-* in Latin. *coquō* from **quequō*, s. above *colō* fr. **quelō*, *incola* fr *-quelā* beside *inqui-līnu-s* : Gr. *πέλλω πόλο-ς* etc, see § 427 *a. b. cottī-diē* fr. **quettī-*, s. § 419. This sound-change took place at the same time as **seuesōr* etc. became *soror*, see § 172, 3. *inquilīnu-s* shows that this change is younger than the weakening of *e* to *i* in unaccented syllables (§ 65 p 53), and thus also forms like *linquis linquitis* (cp Gr *λιπες λίπετε*), in like manner probably also *sequere* fr **sequeso* (Gr *ἑπου*), regularly came by their *qu*.

Rem 1 The *qu* in *quercus* remains unclear See Windisch in Kuhn-Schleicher's Beitr VIII 39, W Meyer Literaturbl f germ u. rom. Phil 1885 p 154

In the eighth century U C. *quo-* became *cu-*. *sequuntur*: *secuntur*, *-loquos -locus*, *aequos · aecus*, *quom · cum*, *quomque*: *cunque*, **quinqu-ones quinc-unx* (cp O.Lat. *oncia*) etc See Bersu Die Gutturalen p 53 ff Correspondingly *ecus* fr. *equos*, see § 172, 2. *sequuntur*, *-loquus*, *equus* etc were later new formations after forms with *qu+ĭ, ĕ* etc. as *sequitur*, *-loquī*

qu passed into *c*, when it became final. *ne-c* from *ne-que* ac fr. **at-c* (cp *quicquam* § 367) from *atque*

Rem 2 It seems to me very doubtful whether the *r* in Lat *vermi-s*, *verrere*, *vellere*, *in-vītus-s*, *vapor*, is a regular continuation of *qu-* (*ḱu-*) (cp. Bersu in the above named work 114 f 151 f., Stolz Lat Gramm § 48).

b) Lat. *c* before prim. Lat. *u* Stem *arcu-* beside *arquitenēns*: Goth. *arhvazna* f. 'arrow, dart'. *quinqu-plex* a new formation after *quadru-plex secūtu-s locūtu-s*, to *sequor loquor*, new formations after *solūtu-s*, *volūtu-s*.

c) Lat. *c* before consonants, especially before *t, s*. *coctu-s* fr. **quecto-s* (*a*) : Gr *πεπτό-ς*, in like manner *coxī* : *ἔπεψα*.

īn-sectīon-ēs 'narrationes' *īn-sexit* 'dixerit' beside *īn-seque* (see Bersu p. 125) *in-quam* (fr. **in-squā-m*) : Gr. *ἔν-σπ-ε-ν* 'I said' fut. *ἐνι-σπήσω*, O.Ir. *in-sce* 'speech' O.Bret. *hepp* 'inquit' + Lith. *sakýti* 'to say' O.Bulg. *sokŭ* 'informer, accuser'. *ūnctu-s ūnxī* beside *unguō*, see § 421. *quīn(c)tu-s* : Gr. *πέμπτο-ς*, Goth. *fimfta-*; the Osc. form *Πομπτιες* shows, as was already remarked in § 424, that the labialisation before *t* had not yet disappeared in prim. Ital. Lat. *jecur jecin-oris*, beside Gr. *ἦπαρ-*, seems to have developed *c* regularly in the stem-form **jek*^{u}*n-* (Skr. *yakn-*, Lith. *jekn-*, see § 427 *a*), after **jecn-* then also *jecin-*. The *c* in *socius* beside *sequor* (Gr. *ἀ-οσσητῆρ* 'helper' with *σσ* fr. *k*^{u}*i̯* § 427 *d*, Skr. *sácya-* 'meet to be assisted, valued', rt *sęq-*) and in *col-liciae* beside *liqueō* is easily understood from the older sound-combination *k*^{u}*l*, see § 135, and likewise the *c* in *coculu-m* beside *coquō* and in *torculu-s* beside *torqueō*, is to be explained from older *k*^{u}*l* (s. § 269); *musculu-s* may also have arisen from an older **musk*^{u}*lo-s* (§ 419).

Rem 3. The relation of Lat *u-ter u-bi nē-cubi* etc to Umbr. *po-druh-pei* 'utroque' p u-f e 'ubi' Osc p ú t ú r ú s-p í d 'utrique' p u-f 'ubi', still remains for the present enigmatical, see Corssen Krit. Nachtr 26 ff, Bersu p 138 May we perhaps assume that the three stems *u-*, *qu-* (Skr. *kú-tra*) and *qo-* had become mixed? Cp also § 604 rem 2

Rem 4 The view, that Indg *q* occasionally appears as *p* in pure Lat. words, is to be rejected See Bersu p 143, Stolz Lat. Gramm § 48.

§ 432. Prim Ital. *gu̯* became

a) Lat. *gu̯*, Umbr *b* after *n* Lat. *unguō unguen*, Umbr. umen 'unguen' fr. **umben* (§ 506) : Skr. *añj-i-š* 'salve', see § 421. Lat. *stinguō* : + Skr. *tigmá-s* 'sharp, violent' Av. *tiγ-ra-* 'pointed'. Lat. *inguen*: O Icel. *økkr* 'tumor' *økkvenn* 'swollen'.

Lat. *stingunt* fr. *stinguont*, like *secuntur*, see § 431 *a* p. 320.

b) Lat. *v*, Umbr-Samn *b* initially before sonantal vowels (except *u*). Lat. *veniō*, Umbr. *benust* 'venerit' Osc. kúm-bened perf. 'convenit' : Gr. *βαίνω* etc, rt. *gem-*, see § 421. Lat. *vīvo-s*, Osc. bivus pl. 'vivi' : + Skr. *jīvá-s* etc., see § 421. Lat. *veru*, Umbr. berus 'verubus' : O.Ir. *bir* 'sting, spit, spear' Cymr. *ber* Corn. *ber* 'veru'. Lat. *-volu-s volāre* : Gr. *βολή βάλλω* etc., rt.

gel-, see § 428. *-voru-s vorāre*: Gr. *βορᾶ* etc., see § 428 *a*. Lat. *valēre*: + Lith. *galėti* 'to be able'.

Rem 1. Lat *b-* = *g-* is probably to be denied. *bōs* can be explained as an Oscan loan-word, likewise *bactere*, in case it belonged to a root beginning with *g-* (some compare Osc baíteís, to which they give the meaning 'baetis', and Umbr *e-bu-raf-e* with the supposed meaning 'in exitus')

c) Lat. *v* between sonantal vowels. *avilla* beside *āgnu-s*: Gr. *ἀυνό-ς* etc, see § 428 *a* *nūdu-s* fr **no(g)uedo-s*: Goth. *naqaþs* 'naked' |- Skr *nag-ná-* Lith. *nãga-s* O Bulg. *nagŭ* 'naked'.

That *-rg^{u}-* has become *-rv-* in Lat., does not seem to me to be proved with certainty The bringing together of *torvo-s* with Gr. *τάρβος* n. 'fright, terror' Skr *tárjāmi* 'I threaten, abuse, frighten', is not free from objection, the other conjectures hitherto made, are quite doubtful.

d) Lat *g* before consonants. *āgnu-s* beside *avilla*, see *c*. *sēgni-s*: Gr. *σβ-ῆναι* 'to cease, become still, go out' *gr-avi-s*: Skr. *á-gr-u-š* 'young womanish' (s § 290 p 232) *mugrāre* · Gr *ἀμείβω* 'I change, rt *meig-* *gluns*. Gr *βάλανο-ς* 'acorn' |- Armen *kalin* (gen *kalnoy*) Lith. *gìle* O Bulg *želądĭ* 'acorn', ablaut *gl-gl̥-* *gel-*, cp. § 291, 3

Rem 2 If *g* in *gula gulo gurgulio gurges*, which represent the rt form *gl̥-* *gr-* (§ 297), had arisen from *g^{u}-* which however may be doubted on account of Gr *γαργαρεών* *γέργερος*, and O Ir *gelim* 'I consume, devour' (on the interchange *r* *l* cp § 282), on its account and at the same time in consideration of *gurdu-s* 'stupid, silly' (*βραδύ-ς* 'slow, lazy') it must be assumed that orig *g^{u}r-* *g^{u}l̥-* was differently treated from orig *g^{u}o-* *g^{u}ol-* in the former case the labialisation would have been dropped, before *r*, *l̥* became *or*, *ol* Then *culta-s* beside *colo* fr **quelo* (cp *pulsu-s* *pellō*) would probably also have to be traced back first of all to **kl̥ta-s*, the latter to **k^{u}l̥to-s*

§ 433. Prim. Italic *χ^{u}* became

a) Lat. *gu* after *n*. *ninguit* Gr *νίφει* + Lith. *sniñga* 'it snows', rt. *sneigh-*, s § 423 *anguis anguilla*: O.Ir. *esc-ung* 'eel' (*esc* 'swamp') + Skr *áhi-š* 'snake' Av. *ažì-š* 'dragon', Lith. *angìs* 'snake'. Beside these Umbr. *nunctu* 'inunguito', with which fiktu 'figito' (O.Lat. *fivere* beside *fīgere*) is parallel.

b) Lat. **gu*, further *v* between sonantal vowels. Acc. *niv-em*

= Gr. *νίφ-α*, beside *ninguit* (*ninguem* a new formation to *nivem* like *con-junx* beside *con-jux*) and nom. *nix* (§§ 431*c*. 552). In like manner *cō-nīveō* beside *cō-nīxī nīctāre*: Goth. *hneiwan* 'to bow', rt. *kneiĝh-*. *g* occurs in Umbr. in *co-negos* ku-nikaz 'conixus'.

c) Lat. *f* both initially and medially before *r*; in the latter case *f* passed into *b* (§ 509).

formu-s: Goth. *varmjan* 'to warm' + Skr. *gharmá-s* 'glowing heat', *fornu-s*, later *furnu-s*: + Skr *ghṛ-ná-s* 'glowing heat', rt. *gher-*, see § 423. *feru-s fera*: Gr. *θήρ* etc, see § 429*b*. *frō*: Gr. *χρίω* 'I rub over'. *fremō*, *frendō* (§§ 207. 349): Gr. *χρεμίζω* 'I neigh' *χρόμο-ς* 'noise, a lowing, neighing' Goth. *gramjan* 'to make furious' OHG *gram* 'fierce, angry' + O.Bulg. *gromŭ* 'thunder' In the case of the two last words the assumption of labialised prim Ital *χ* has, it is true, no support outside Italic

Praenest. *nefrōn-es* Lanuv. *nebrundin-es*. Gr. *νεφρό-ς* etc., see § 423.

Rem That initial and medial χ^{w} passed into *f* before *r* (whence *b* medially), but otherwise medially into *gu*, brings to mind the relation *fūmu-s*. *rubrī medin-s* (§ 370)

Old Irish

1 Indg *q*, *g*, *gh* without labialisation.

§ 434. Indg. *q*. O Ir *cara* Cymr. *car* 'friend' : Lat. *cāru-s*, Goth. *hōrs* fornicator' + Lett. *kârs* 'covetous, lascivious' *kâr-dināt* 'to lead into temptation' O Ir *canaim* 'I sing', O.Corn. *chenuat* 'cantor' : Lat *canō* etc., see § 430 O Ir. *crū* Cymr. *crau* Corn. *crow* 'blood' Gr. *κρέας* etc, see § 418

ēcath (pronounce *ēγaþ*) 'hamus' : + Skr. *aṅká-s* etc, see §§ 212 513.

O Ir. *cuach* Cymr. *cog* 'cuckoo' · Gr. *κόκκυξ* Lat. *cucūlu-s* MHG *kuckuk* + Skr. *kōkilá-s* 'cuckoo', Lith. *kukúti* 'to call cuckoo' O Bulg. *kukavica* cuckoo'. See § 514.

O.Ir. *ōs uas* 'above, over', Cymr. *uch* 'above', Gall *Uxellodūnu-m* 'Hightown' : Gr. *αὔξω* 'I increase', Lat. *auxiliu-m* 'increase, reinforcement' + Lith. *áukszta-s* 'high'. See § 517.

Indg. *g*. O.Ir. *gāir* 'call', Cymr. *gawr* 'clamor' : Gr. *γηρύω* etc., see § 420.

O.Ir. *tech teg* 'house', O.Bret. *bou-tig* 'stabulum' : Gr. *στέγω* etc., see § 420. O Ir. *ōg* 'uninjured, whole' : Lat. *augeō* etc., see 430. See § 522

Indg *gh* = prim. Kelt. *g*. O.Ir *in-grennim* 'I pursue' : Lat. *gradior* etc., see § 430.

O Ir. *lige* 'bed' : Gr. *λέχος* etc., see § 425. See § 526.

2. Indg. *q, g, gh* with labialisation.

§ 435. *kᵘ* and *gᵘ* (latter = *g* and *gh*), with full developed *ᵘ*, may be put down as prim. Kelt Since there is no trace of a difference between these and Indg. palatal sound + *ᵘ* : cp Gall *epo-* prim But **epo-* (Cymr. *ebol* 'foal', § 390 p 293) O.Ir. *ech* 'horse' = Indg **ekᵘo-*

The treatment of the various forms of articulation was just as little uniform as in Italic

§ 436. Prim. Kelt *kᵘ* appears in Irish as *c*, in Brit. and Gall as *p* [1]) O Ir. *cethir* 'four', O Brit. *Πετουαρία* a town (Ptol.), O Cymr *petguar* Corn. *peswar* Bret *pevar* 'four', Gall. *petor-ritum* 'a four-wheeled chariot' . Gr *τέσσαρες* etc , see § 419. O.Ir. *cōic* O Cymr *pimp* Corn *pymp* Bret. *pemp* 'five', Gall. *πεμπε-δουλα 'πεντάφυλλον'* (Dioscor.) from prim. Kelt. **kᵘenkᵘe* (§ 339), Indg. **penqe*, see § 419. O.Ir. *cruim* Cymr. *pryf* 'worm' (prim Kelt **kurimi-*) + Skr. *kṛmi-ś* Alban. *krimb-i* Lith. *kirmėlė* 'worm'. O Ir. *co-sc* 'a setting right, punishment' Cymr. *co-sp* . Gr. *ἐνι-σπ-ε-ν* 'I said', it. *seq-*. O.Ir. *sesc* 'unfertile', Cymr. *hysp* 'dry, withered', prim. Kelt. **siskᵘo-s* : Lat. *siccu-s*, cpf. **sit-qo-s* (§§ 419 516).

O Ir. *cōic* (pronounce *cōig*) 'five' fr prim. Kelt. **kᵘenkᵘe* (cp. above). See §§ 212. 513.

O.Ir. *ain-ech en-ech* 'face' Cymr. Corn Bret. *en-ep* : Gr. *ἐν-ωπή* 'countenance', Lat. *oculu-s* + Lith. *akì-s* O.Bulg. *oko* (gen. *očese*) 'eye'. See § 514.

1) In Gall. probably dialectically also still *kᵘ*, in *Sequana*.

kᵘt probably became *kt* in prim. Kelt., then further *cht*, so that this combination fell together with *pt* and *k̂t* (§§ 515. 517). In Prim. Kelt. *kt* from *kᵘt* stood beside *kᵘ*, as in Lat. *coctus lictus* beside *coquō linquō*. O.Ir. *nocht* Cymr. *noeth*, Corn. *noyth* 'naked' : Goth. *naqaþs* etc., see § 432 *c*. O.Ir. *snechta* 'snow' from rt. *sneᵘgh-* (cp. § 552). Perhaps also here O.Ir. *in-nocht* 'hac nocte', Cymr *peu-noeth* 'quavis nocte', since the *v* in G. *νύξ* seems to point to labialised *q* (§ 427 *c*).

Rem From the form *maqa-* (gen *maqi*) 'son' (Cymr *map*), found on the Ogam inscriptions (p 9), it cannot be concluded with certainty that *kᵘ* was still generally spoken in Irish for intervocalic *c* at the time these inscriptions were written In the first place it is a question how the 'status durus' in O Ir *mac macc* beside *en-ech* 'facies' and *ech* 'horse' is to be regareded (cp § 514) A satisfactory explanation of the non-aspiration of the *c* in this word, as also in the forms *mucc* 'pig' (Cymr. *moch* · Gr *ἀπομύσσω* 'I blow my nose' *μυκτήρ* 'nose', Lat *mūcu-s* 'mucus of the nose' + Skr *muñcáti* 'lets loose, lets out' also used of bodily secretions, Lett. *muk'* 'to flee' Lith *maũkti* 'to strip let glide'), *icc* 'excrement' (Skr. *śákan-* 'stercus', Lith *szikà* 'caco'), *leicim* 'I leave', that is, **leᵘkᵘ-iō* (Gr. *λείπω* etc , see § 427 *a*), has, so far as I know, not yet been given

§ 437. Prim. Kelt *qᵘ* = Indg. *g* became

a) Ir Brit *b* initially. O Ir *bin beo* Cymr. *byw* 'alive' · Lat. *vīvo-s* etc., see § 421 O.Ir *bō* Mid Cymr *buch* 'cow' Gr *βοῦς* etc., see § 428 *a* O Ir. *ben* 'woman', O Corn *benen* 'sponsa' : Goth. *qinō* + Armen. *kin* Pruss. *genna* (i. e. *gĕna*) O.Bulg. *žena* 'woman'; O.Ir. gen. *mná* fr. **bnās* . Gr. *μνάομαι* etc., see § 428 *a*. O.Ir. *at-bail* 'perit' 3. pl. *at-balat* : OHG. *quelan* 'to have a violent pain' Ags *cwelan* 'to die' + Lith. *gélti* 'to feel great pain' *giltinẽ* the goddess of death, O.Bulg. *žalĭ* 'pain, grief' fr. **gēlĭ* (§ 76), rt. *gel-*. O Ir. *broo brō* (gen. *broon*) Cymr. *breuan* 'mill-stone' : + Skr. *grávan-* 'stone for pressing out the soma-juice'. O.Ir. *brāge* (gen. *brāgat*) 'neck' : Gr. *βρόχθος βρόγχος* 'throat', MHG *krage* 'neck, gullet' (rt. *ger-* 'swallow' ?).

b) Ir. *g* before *u*. O.Ir. *guth* 'voice, word' fr. **gu-tu-s*, to Gr. *γυ-* beside *βο(ϝ)-ή*, see § 428 *c*.

c) Ir. Brit. *g* medially before *n*. O.Ir. *uan* Cymr. *oen* 'lamb' : Gr. *ἀμνό-ς* etc., see § 428 *a*. On the transformation of *-gn-* cp. § 523.

§ 438. From prim. Kelt. *gu̯* = Indg. *gh* we may a priori assume that it was treated like *gu̯* = Indg. *g*.

a) Initially. Words with *b-* are unknown to us. O.Ir. *gonim* 'I wound, kill' perf. 3 sg. *geguin* is remarkable, since this word seems to belong to Gr. *φόνο-ς* rt. *ghen-* (§ 429 *a. b.*).

b) Medially. With *b* after a nasal O Ir. *imb imm* (gen. *imme*) 'butter', Cymr. *ymen-yn*, stem **imben-* = Lat *unguen*, OHG *ancho*, see § 421. Beside these Mid Ir *esc-ung* 'eel' : Lat. *anqui-s* etc., see § 433 *a*. Cp. also Mid Ir. *inga* O.Cymr. *eguin* 'nail' : Lat *ungu-s* etc with Indg *gh* (§§ 429 *c*. 553). On what this difference of treatment depends, I cannot say.

O.Ir *snigid* 'it drops' Gr *νίφα* etc, see § 423 O.Ir *laigiu* Mid.Cymr. *llei* 'minor' : Gr. *ἐλαφρό-ς ἐλαχύ-ς* etc., see § 429 *a c*

Germanic

1 Indg *q*, *g*, *gh* without labialisation.

§ 439. Indg *q* Goth. *us-skava-* 'cautious, sober', OHG. *scouwōn* 'to look', O.Icel *skyn* 'insight' Gr. *ὀνο-σκόο-ς* 'sacrificing priest' *κοέω* 'I mark', Lat *caveō* + Skr. *kaví-ś* 'seer' *ā-kuvatē* 'intends'.

Goth. *háils* 'healthy, wholesome', OHG *heil* 'healthy, whole, rescued', Ags *hāl* O.Icel. *heill* n 'good fortune, favourable token' : O.Ir. *cēl* O.Cymr. *coil* 'augurium' + Pruss. *kail-ūstıska-n* acc. 'health' O.Bulg *cělŭ* 'sound, whole' Goth *háidu-s* 'manner', OHG. *heit* Ags *hād* 'state, condition, peculiarity' + Skr. *kētú-ś* 'luminous phenomenon, picture, form'. OHG. *houwan* O.Icel. *hǫggva* 'to hew' : Lat. *cū-dō* + Lith. *káu-ju* O.Bulg. *ku-jǫ* 'I strike, forge'. Goth. *hlifa* 'I steal' : Gr *κλοπεύς* 'thief', Lat. *clepō* + Pruss. *an-klipts* 'hidden' O.Bulg. *po-klopŭ* 'a covering'. Goth. *veiha* 'I fight' : Lat *vincō* + Lith. *vekà* 'power, strength' *ap-veikù* 'I compel', rt. *u̯eiq-*.

Goth. *hals-agga* 'curve of the neck', OHG. *angul* 'angle' : Gr. *ἀγκών* etc, see § 425.

OHG. *wīgant* 'warrior', O.Icel. *vīg* 'battle' *veig* 'strength', fr. the same rt. *u̯eiq-*, whence Goth. *veiha* s. above. Goth.

hugs O.S. *hugi* O.Icel. *hugr* 'mind, heart, courage' : + Skr. *śuc-* 'ardour, care, trouble', Armen. *sug* (gen. *sgoy*) 'grief'.

Indg. *g*. Goth. *kalds* OHG. *kalt* O.Icel. *kaldr* 'cold' : Lat. *gelu* etc., see § 430. Goth *áukan* 'to add, augment', OHG. *auhhōn ouhhōn* O.Icel. *auka* 'to increase' : Lat. *augeō* etc., see § 430.

Indg *gh* Goth. *fra-gildan* 'to requite', OHG. *geltan* 'to repay, compensate' · + O Bulg *žlědą* 'I pay as a fine' Goth. *gaggan* OHG OS *gangan* O Icel. *ganga* 'to go' : + Skr. *jaṅghā-* 'heel-bone', Lith. *žengiù* 'I stride', rt. *ĝheṅgh-*.

Goth. *dags* OHG *tag* O Icel. *dagr* 'day' · + Skr. *ni-dāghá-s* 'hot season', Alban *diek* (*dieg-*) 'I burn', Lith. *dagà* 'harvest time', Pruss *daga-gaydis* 'summer-wheat' O.Bulg. *žegą* 'I burn' (§ 379 rem), rt *dhegh-*. Goth. *steigan* OHG. *stīgan* O Icel. *stīga* 'to climb' · Gr *στείχω* etc., see § 422 Goth *þragja* 'I run' OHG. *drigil* 'servant' (runner) . Gr *τρέχω* 'I run' fut. *θρέξομαι* + Armen *durgn* (gen. *drgan*) 'a potter's wheel' (cp. Gr. *τροχό-ς*), rt probably *thregh-* (§ 553).

2 Indg. *q, g, gh* with labialisation.

§ 440. Pre-Germanic *q, g, gh* became through the sound-shifting in prim. Germ. *χᵘ* (*ʒᵘ*), *hᵘ*, *ʒᵘ*. The labialisation may be put down as a full *u*, since no trace of a difference exists beside the combination palatal sound + *ᵘ*. Cp. e g. on the one hand Goth *leihva* 'I lend' = Gr. *λείπω* rt. *leiq-*, Goth. *hva* OHG *waz* 'what' = Lat. *quo-d* st **qo-* and on the other hand Goth. *aíhva-* 'horse' (in *aíhva-tundi* '*βάτος*') = Skr. *áśva-* Indg **ekᵘo-*, Goth *hveits* OHG. *wīz* 'white' fr. rt. *k̂ueid-* (§ 397); further prim. Germ. **snī(ʒ)ᵘiþi* 'it snows' = Indg. **sneiqheti* or **snīghéti* with the same dropping of the *ʒ* as in **ma(ʒ)-ᵘ-ī* (Goth *mavi*) 'girl', fem. to Goth. *mag-u-s* 'boy' (see §§ 443. 444 *c*)

§ 441. Prim. Germ. *χᵘ*, *ʒᵘ* = Indg. *q*.

Interrog pronoun Goth. nom. m. *hva-s* fem. *hvō* n. *hva*, gen. m. n. *hvi-s*, OHG. nom. m. *hver wer* n. *hwaz waz*, O.Icel.

nom. n. *hvat* gen. m. n. *hvess* : Gr. *πο- τε-* etc., see § 419. Ags. *hwōsta* OHG. *huosto* (fr. **hwuosto*) 'cough': + Skr. *kās-a-tē* 'he coughs', Lith. *kós-iu* 'I cough'. Goth. *leihvan* (pret. *láihv*) OHG. *līhan* (pret. *lēh*) 'to lend' : Gr. *λείπω* etc. see § 427 *a*. Goth. *saihvan* OHG. *sehan* 'to see' : Gr. *ἕπομαι* etc., see § 419. Goth. *ahva* OHG. *aha* 'water' : Lat. *aqua*. Goth. *þeihvō* f. 'thunder' from prim. Germ. **þeŋχu̯ōn* (§ 67, 1 § 214): + O.Bulg. *tǫča* fr. **tonk-u̯ā* 'thunder-shower'. Goth. *arhvazna* 'dart' : Lat. *arcu-tenēns*, see § 431 *b*.

Goth. *siuns* OS. *siun* O.Icel. *sjōn* 'a seeing, face', prim. Germ. **se(ʒ)u̯-ni-s*, to Goth. *saihvan*. Other examples of this nature § 444 *c*.

On the cases, in which *f* or *b* appear for *χu̯*, *ʒu̯* and in which *u̯* has disappeared after *χ*, *ʒ*, see § 444.

§ 442. Prim. Germ. *ku̯* = Indg *g* Goth. *qius* (st. *qiva-*) OHG. *quec* O.Icel. *kvikr* 'alive' · Gr. *βίο-ς* etc, see § 421. Goth. *qiman* (pret *qam*) 'to come', OHG. *queman* (pret. *quam*) O Icel. pret. *kvam* : Skr. *gám-a-ti* etc., see § 421. Goth. *qinō* OHG. *quena* 'wife' O.Icel. gen. pl. *kvenna* (concerning the nom. sg. *kona* see § 444 *b*) : O Ir. *ben* + Armen. *kin* O Bulg. *žena*, see § 437 *a*. Goth *asilu-quairnu-s* '*μύλος ὀνικός*, 'mill-stone', OHG. *chwirna* 'mill-stone, mill', O Icel. *kvern* 'mill' : + Lith *gìrnos* pl. 'mill-stones, mill' O Bulg. *žrŭny* 'mill'. Goth. *riqis* (st. *riqiz-a-*) 'darkness' : Gr. *ἐρεβος* etc., see § 421. Goth *naqaþs* 'naked' : Lat. *nūdu-s* etc., see § 432 *c*. Goth. *siggan* OHG. *sinchan* O.Icel. *sekkva* 'to sink' : Gr. *εἴβω* 'I let fall in drops, pour down' (for **ἔῑβω*, cp. § 564), rt. *seu̯g-*, a secondary form of *seu̯q-* (Skr. *siñcáti* 'pours forth', OHG. *sīhan* 'to filter'); the pret. Goth *sagq* OHG. *sanch* O.Icel. *sǫkk* arose through passing into the analogy of *bindan* : *band* (rt. *bhendh-*) etc. (cp. § 67 rem. 1).

On *p* for *ku̯* and the cases in which *u̯* had disappeared after *k*, see § 444.

§ 443. Prim. Germ. *ʒu̯* = Indg. *gh*. Goth. *varmjan* 'to warm', OHG. *warm* O Icel. *varmr* 'warm' : Lat. *formu-s* etc., see § 423. Goth. *snáivs* OHG. *snēo* (gen. *snēwes*) O.Icel. *snær*

(gen. *snēvar*) 'snow', prim. Germ. **snaiǯ(ǯ)ᵘ̯-a-z*, OHG. *snīwit* Ags. *snīweð* 'it snows', infin. MHG *snīwen* 'to snow', part. O.Icel. *snivenn* 'covered with snow' : Gr. *νίφ-α* etc., see § 423. Goth. *hneivan* 'to bow' : Lat. *cō-nīveō*, root *kneiǵh-*, see § 433 *b*. OHG. *nioro* m. O.Icel. *nȳra* n. 'kidney', prim Germ. **ne(ǯ)ᵘ̯-rōn* : Gr. *νεφρό-ς* etc., see §§ 423. 433 *c*.

On prim. Germ. ǯ fr. ǯᵘ̯ see § 444 *b*.

§ 444. The following changes, which concerned the labialised sounds, as such, took place in the period of the prim. Germ. community.

a) *p*-sounds for the *kᵘ̯*-sounds.

f for *χᵘ̯* = Indg. *q* **ᵘ̯ulfa-z* 'wolf', Goth. *vulfs* OHG. *wolf* O.Icel. *ulfr* : Gr. *λύκο-ς* (§ 427 *c*) + Skr. *vṛ́ka-s*, Indg. **ᵘ̯l̥̂qo-s* 'wolf' Goth. *fidvōr* OHG *fior* Ags. *fyðer-* O.Icel. *fjōrer* 'four' : Gr *τέσσαρ-ες*, Indg **qetᵘ̯er-*, see § 419 **fimfi* 'five', Goth *fimf* OHG. *fimf finf* Ags. *fīf* O.Icel. *fimm* : Gr. *πέντε*, Indg. **penqe*, see § 419. Less certain is OHG. *forha* 'pine' *vereh-eih* Lango-Bard. *fereha* 'aesculus' . Lat. *quercu-s querqueu-s*, see § 431 rem 1.

b for *ǯᵘ̯* = Indg. *q* By the side of **ᵘ̯úlfa-z* stood a fem. **ᵘ̯ulbī́* 'she-wolf', by § 530 fr. Indg. **ᵘ̯l̥̂qī́* (Skr *vṛkī́*), hence OHG. *wulpa* MHG. *wulpe*, cp § 532. Beside this O.Icel. *ýlgr* 'she-wolf', the *g* of which arose regularly in the cases with suffix-form *-i̯ō-*, e. g gen **ᵘ̯ulǯᵘ̯-i̯ós*, *ᵘ̯* was here forced out.

p for *kᵘ̯* = Indg. *g*. Goth. *vairpan* OHG. *werfan* O.Icel. *verpa* 'to throw': + Skr. *vṛnákti* 'throws to the ground' perf. *vavárja*, O.Bulg. *vrĭgą* 'I throw'. OHG. *sweifan* 'to set in revolving motion, swing, meander' Ags. *swāpan* 'to swing': + Lith. *svaikstù* 'I become dizzy' pret. *svaigaũ*, *svaigulỹ-s* 'dizziness' *svaiginėju* 'I stagger with dizziness'.

This transition to *p*-sounds seems to have been occasioned by an *ᵘ̯* in the preceding or following syllable (dissimilation).

Rem 1. So far as I can see, the only difficulty lies with *fimf*. It is possible that the orig form was **kᵘ̯enkᵘ̯e* as in Ital. and Kelt. (§§ 336. 339). Hence **kᵘ̯empe* like **sᵘ̯eǯp-* fr. **sᵘ̯eiǩᵘ̯-*, further **pempe* through assimilation of the initial sound to the medial *p* or to the initial sound of the word for four? Or did Indg. **penqe* become **pempe* in Germ. direct-

ly by assimilation? On these *p*-sounds for *q*-sounds, see now also Kluge in Paul-Braune's Beitr. XI 560 ff

b) Loss of the labialisation before *u* (cp. § 180).

ǯ(u) = Indg *q* (§ 530). 1. pl pret **sēǯ(u̯)umi* 'saw' (Goth. *saihvan*), **liǯ(u̯)umi* 'lent' (Goth *leihvan*) etc : Ags. *sāwon* O.Frs. *sāyen*. Goth. *sēhvum* OHG *sāhun* Ags *sāwon* (beside *sāwon*) were new formations.

k(u̯) = Indg. *g*. Part. **k(u)umana-* 'come' OHG. *koman* Ags *cumen* O Icel. *komenn*, OHG. *quoman* Goth *qumans* were new formations. **k(u)mu-z* 'heavy' Goth *kaúru-s* · Gr. *βαρύ-ς* Skr. *gurú-š*, see § 428 *a* **k(u)unō* 'wife' O Icel *kona* Bœot. *βανά*, see § 428 *a* **sunk(u)umi* 'we sunk' OHG. *sunchun*; Goth. *suggum* was a new formation.

ǯ(u̯) = Indg *gh* **ǯ(u)únḫ̯o* 'battle' O Low Germ *gūđea* O.Icel. *gunnr* = Skr *hatjā-* 'a killing' Lith *giñczià* 'strife' (cp. § 249): to these Gr *φα-ρά-ς φόν-ο-ς* etc., rt *ghen-*, see § 429 *a* § 438 rem. **χnuǯ(u)umi* 'we bowed' · OHG *nugun* Ags. *hnīgon* O.Icel. *hnigum* Goth. *hneivum* was a new formation

c) *ǯu* became *u*, a change, which befell every *ǯu̯* that still remained over after the action of the sound-law, named under *b*.

(ǯ)u̯ = Indg *q* **se(ǯ)u̯-ní-s* 'face' Goth *sunis* etc., see § 441. **lē(ǯ)u̯-ó* f. 'arrangement' Goth. *tēva*, to OHG *gi-zehōn* 'to arrange, regulate', Gr *δεῖπνο-ν* 'meal, meal-time' (fr **δεπνϙο-ν*, § 639), rt. *deq-*. **a(ǯ)u̯-jó* 'marshy country, island' (adj formation, properly 'the watery', to Goth *ahva* OHG *aha* 'water', § 441); OHG *ouwa owwa* O Icel *ey* pl. *eyjar*. Part. **li(ǯ)u̯-aná-s* 'lent' (Skr. *ri-ric-āná-s*, to Goth. *leihvan*) OHG. *-lihan*. Optative stem **sē(ǯ)u̯-ī-* (to Goth. *saihvan* 'to see') OS *gi-sāwi* pl. *-sāwin*.

(ǯ)u̯ = Indg. *gh* **(ǯ)u̯ar-ma-* 'warm' and other examples see § 443.

Rem 2. Therefore towards the close of the prim Germ period there stood side by side pres **līχu̯ō* (Goth *leihva*) · pret indic pl **liǯumi* pret opt. **liu̯i-* part **liu̯ina-*, **χniu̯ō* (Goth *hneiva*) : **χniǯumi* : **χniu̯i-* **χniu̯ana-*. The paradigms of the separate Germanic dialects were brought about by manifold levellings The prim. Germ phonetic position was nowhere purely retained

Rem. 3. If Goth *augō* OHG *ouga* O.Icel *auga* n. 'eye' belongs to Gr. *ὄπ-ωπ-α*. Lith *akì-s* etc, the form must be explained from an old stem-change **aǯ(u̯)-un-* (Indg **oq-u̯-*) and **a(ǯ)u̯-n- *a(ǯ)u̯-én-* : **aǯ-* and **au̯-* became amalgamated to *au̯ǯ-* in prim Germ.

d) *ǯu̯* became *gu̯* after a nasal, and then this remained (§§ 530. 538). Hence prim. Germ **sniǝqu̯iđa* 'sings' Goth. *siggvi̯þ*. This verb however has not been etymologically satisfactorily explained, the root was probably *seiǝgh-* or *seiǝq-*.

e) *χu̯t* became *χt*. **seχtι-* 'sight, face' (to Goth *saihvan*) OHG *siht* OS. *gi-siht* **leiǝχta-* **līχta-* 'light, easy' (§ 214) Goth *leihts* OHG *līht* O.Icel. *lēttr*, to Gr. *ἐλαφρό-ς ἐλαχύ-ς* etc., s. § 429 *a c* ; *χt* was here = Indg *gh+t*, concerning which s. § 552 *fimfta-* = Indg. **peiǝqto-* has possibly preserved a trace of the labialisation once present, see above *a* with rem. 1.

The phonetic position, which was called into existence by these prim Germ changes, was on the whole preserved free from new shiftings in Goth.

Rem 4 The form *ni-h* 'neque' fr *ni-hr(ι)* suggests the conjecture that the *hv* in *láihv* 'he lent' (*leihvan*) *sáhi* 'he saw' (*saihvan*) was brought about by levelling.

Initial *hw-* became *u-* in OHG (*hwer wer*), while medial *kw, hw gw* lost the *w* by § 180 (*sinchit* 'sinks', *lihit* 'lends', *singit* 'sings').

b The language-group without labialisation.

Aryan.

§ **445.** Indg. *q, g, gh* were first of all universally *k, g, gh* in prim. Aryan. Then before original *e-* and *i*-vowels and before Ar. *i* = Indg *ə*, they became the palatal explosives *c, ǰ, ǰh*; after the completion of the palatalisation *e, ē* passed into *a, ā* (§§ 62. 70). All further sound-changes, which made their appearance in regard to the place of articulation, belong to the individual development of the Ar. dialects.

§ **446.** Prim. Ar. *k, c* = Indg. *q*. The sounds remained unchanged in Sanskrit. In Iranian *k* became the spirant *x* be-

fore consonants, and *c* became an *š*-sound (Av. *š* O.Pers. *š*) before *i̯*

§ 447. Prim. Ar *k*. Skr *ká-s* 'who?' Av. *kas-ciƀ* 'whoever, each' O.Pers. *kaš-ciy* 'whoever' : Lith *kà-s* etc , see § 419. Skr. *kakṣa-s* 'axilla', Av. *kaša-* m. 'shoulder' : + Lat. *coxa* etc., Indg. **qo̯kso-* **qo̯ksā-*, see § 430. Skr. *kṛ-tá-* (*sạ-kṛta-* 'prepared') Av. *ker*ta-* O.Pers. *kar-ta-* 'made' : + Gr. *κραίνω* 'I accomplish', Lat. *ceru s creāre*. Skr. *kās-a-tē* 'he coughs' : Lith. *kós-u* etc , see § 441. Skr. *vṛ́k-a-* Av. *vehrk-a-* 'wolf' : Lith. *vil̃ka-s* etc., see § 427*c* § 444*a* Skr *śúṣ-ka-* (fr. **suṣ-ka-*, § 557, 4) Av *huš-ka-* O Pers. *uš-ka-* 'dry', suffix *-qo-*, see § 419

In like manner Skr *k* also regularly before *ir* = Indg *ṛr* and before *īr* = Indg *ṝ* (§§ 257. 290 306), as *kir-á-ti* 'pours out' *kīr ná-* 'covered over', to perf. *ca-kár-a* Cp *gir- gīr-* § 450.

Iranian *x* = prim Ar. *k* (§ 446). Part Skr *uktá-* Av *uxta-* 'spoken' fut Skr. *vakṣyati* Av *vaxšyeiti* 'he will speak'. Armen. *goč-e-m* 'I scream, roar' (?), Pruss *en-wackē* 'he calls' + Gr. *ἔπος* 'speech, word', Lat. *vōx*, O.Ir. *ar-faigid* 'inquisitio', OHG. *gi-wahannen* 'to mention' perf *gi-wuog*, rt *u̯eq-*. Skr *śukrá-* 'luminous, white', Av *suxra-* 'red' O Pers *θuxra-* (*θ-* = *s-*, § 397) proper noun: to Skr. *śuc-* Goth. *hugs* etc., s. § 439. Skr. *rā́knas-* 'kingdom', Av. *raꝫxnah-*. Av O.Pers. *taxma-* 'quick, strong', Av. *taka-* 'course', Skr. *tákti* 'runs, hastens' · Alban. *ndiek* 'I pursue, drive away, hunt', Lith *tekù* O.Bulg *teką* 'I run' + O Ir. *techim* 'I flee'.

§ 448. Prim. Ar. *c* Skr. Av. *ca* O.Pers. *cā* 'and' : + Gr. *τὲ* etc., see § 427*b* Skr. *catvár-as* Av. *caθwār-ō* 'four' : Lith. *keturì* etc., see § 419. Skr. *páñca* Av. *panca* : Lith. *penkì* etc., see § 419. Skr. *sácatē* Av. *hacaitē* 'accompanies', Indg. **seqetai̯*: Lith. *sekù* etc , see § 419 Gen. Skr. *vácas-as* Av. *vacaŋh-ō* 'of a word', Indg. st. **u̯eqes-*, to Skr. *uktá-* etc., see § 447. Skr. *ci-d* Av. *ci-ƀ* O.Pers. *ciy* 'any, some' (generalising particle) : + Gr. *τι* 'anything whatever' Lat. *qui-d*, Indg. **qi-d*, see § 427*b*. Skr. *ápa-citi-* 'atonement, punishment' : Gr. *τί-σι-ς*, see

§ 427 *a*. Skr. *śuc-i-ś* 'luminous, bright', Av. *saoci-š* 'burning, splendour', to *śukrá- suxra-* § 447.

Av. *šy* O.Pers *šy* (written *šiy*, see § 125 p. 116) = prim. Ar. Skr. *cy*. Skr. *cyáv-a-tē* 'is active, stirs', Av. *šyao-θna-* m. 'deed, work' (cp. Skr. *cyāu-tná-m* 'preparation, undertaking') O.Pers. *a-šiyav-am* 'I went, walked' : Armen. *ču* 'a breaking up' + Gr. Hom. *ἐ-σσευε σεῦε* 'he drove, hunted', see § 427 *d*. § 489. Av. compar. *taŋšyah-* 'quicker' beside superl. *tancišta-*.

Rem. Through new formations *k* and *c* came to stand in the Ar. dialects in sound-combinations, in which they would not have regularly arisen. Cp. § 451 rem § 454 rem and § 427 rem.

c instead of *k* Nom acc. sg Skr. *vácas* Av. *vacō* 'word' for **vakas* = Indg **ϒeϒos* (Gr. *ἔπος*) after *vácas-* = Indg **ϒeϒes-* (cp. Gr *ἔπε-ος*) in the other cases Skr 3 sg perf *ci-cáy-a* for *ci-káy-a* 'disposed into strata' = Indg **ϒe-qᵘi̯-e*, to pres *ci-nṓ-mi* Skr *vácmi* 'I speak' for **vakmi*, cp Ved regular *vívakmi* Skr *pañcat-* 'the number five' for **pankat-* = Indg **penqᵘt-* (§ 427 *a*) after *páñca*

k instead of *c* Gen Skr *ká-sya* Av Gāθ. *ka-hyā* beside regular *ca-hyā* 'whose' (Indg **qe-sio*, Gr *τέο τοῦ*) after *ka-* = Indg **qo-* in *ká-s* etc Skr *na-ki-š* 'nobody' beside Av. *ci-š* Skr *upa-vak-íya-s* beside *upa-vác-ya-s* 'he who is to be addressed', cp *upa-vāká-s* 'address'

§ 449. Prim Ar *g, ǰ* = Indg *g* The sounds remained unchanged in Sanskrit In later Av. *ǰ* became *γ* initially before consonants except *r* and medially everywhere except after *ə, z, ž*, the same sound was dropped before *v*, and medial *ǰ* became *ž* except after *n* and *z*.

§ 450. Prim. Ar *g* Skr. *ga-tá-* Av. *ga-ta-* 'gone' Indg. **gm̥-tó-*, Skr *gā-tú-š* 'step, gait, place, place of sojourn' Av. *gā-tu-š* O.Pers *gā-θu-š* 'place, chair, throne' prim f **gm̥-tu-s* : + Gr. *βα-τό-ς* etc., rt. *gem-*, see § 421. Skr. *gáuš* Av. *gāu-š* 'ox' : + Gr. *βοῦς* etc., see § 428 *a*. Skr. *grīvá-* Av. *grīva-* 'neck' : O.Bulg. *griva* 'mane' Skr *ugrá-* Av. Gāθ. *ugra-* 'strong, powerful' beside Skr *ójas-* Av. *aojah-* (§ 451) : + Lat. *augeō* etc., see § 430. Skr. *bhága-s* 'blessing, dispenser of blessings' *bhāgá-s* 'blessing, share, lot', Av. Gāθ. *bāga-* 'distribution, portion' O.Pers. *baga-* 'god' : O.Bulg. *bogo-* (nom. *bogŭ*) 'god' *u-bogŭ* 'not rich, poor' + Gr. *-φάγο-ς* 'enjoying, eating', rt. *bhag-* 'to distribute'. Skr. *yugá-m* 'yoke' : O.Bulg. *igo* etc., see § 420.

Skr. *aṅgúli-š aṅguṣṭha-s* 'thumb, toe', Av. *aṅgušta-* m. 'toe': Alban. *ǵišt* 'finger'. Av. *mazga-* 'marrow' beside Skr. *majján-* (§ 590. 591) : cp. O Bulg. *mozgŭ* + OHG. *marg* n. O.Icel. *mergr* m. 'marrow'; the Skr. form points to *g*, the Germ. to *gh* (cp. Bartholomae Kuhn's Ztschr. XXVII 352).

In like manner Skr *g* regularly also before *ir* = Indg. *ṛr* and before *īr* = Indg. *ṝ* (cp. § 147). *giri-š* = Av *gairi-š* 'mountain', Indg. **gṛr-i-s*. Gen *gir-ás* = Av *gar-ō* 'hymn's', instr. pl. *gīr bhíš* (**gṝ-bhis*) *-gira-* = Av *-gara-* 'swallowing', Skr. *girátu gilátu* 'swallows', part *girṇá-* 'swallowed'.

Late Av. *γ* = Gāp O.Pers. Skr. *g*, as *baγa-* = O Pers *baga-* 'god', see § 478.

Late Av *v* = Gāp. *gv hrova* = Gāp *hrogva-* a proper family name, cp. Bartholomae Bezzenb Beitr VII 188

§ 451. Prim. Ar. *ɟ*. Skr. *jīvá-* Av *jivya-* 'alive', O.Pers 2. sg imper. *jīvā* 'live' : ǀ Gr *βίο-ς* etc, see § 421. Skr *jyá-* Av. *jyā-* 'bow-string'. ǀ Gr *βιά-ς* etc, see § 128 *a* Gen Skr *ójas-as* Av. *aojaŋh-ō* (i. e *aožaŋh-o*, see § 478 rem 1) 'of strength', orig stem-form **anges-*, beside Skr. *ugrá-* Av. Gāp *ugra-*, § 450. Skr 3 sg perf *ja-gáma* Indg. **ge-góme*, Av. pres 3. sg. conj *jam-aitī* imper. *jan-tu* orig form **gem-e-ti* **gem-tu*. ǀ Gr. *βαίνω* etc, rt. *gem-*, see § 450.

Late Av. *ž*. *naẹ-nž-aitī* intens. 'washes off, removes' beside Skr. mid. *nē-nik-té* 'washes off' + Gr. *νίϙ-νῐβ-α* etc., see §§ 427 *a*. 428 *d*. Cp. § 478.

Rem Through new formations Ar *ɟ* for *g* and vice versa Cp. §§ 448 rem 454 rem. and 428 rem

ɟ for *g*. Nom. acc Skr. *ójas* Av. *aojō* 'strength' for Ar **aŋgas*, Indg. **angos* (cp Lat *augus-tu-s*) after the stem-form **aŋjas-* = Indg. **anges-* in the other cases, see above Opt Av. *jamyaẖ* O Pers. *jamīyā*, indic. Av. *jasaiti* (beside regular Skr *gamyát gáchati*, cp §§ 228 229 450; Gāp. 2. sg imper *gaidi* = Skr *gahí* was also regular) after the analogy of *jamaiti* etc Skr *yunajmi* 'I yoke' for **yunagmi*, cp. the conj. *yunáj-a-t* pass *yujyatē* and *yugá-m* which are regular

g for *ɟ*. Skr indic *gam-a-ti* imper. *gantu* (beside regular Av *jamaitī* *jantu*) after *gam-á-ti* i. e **gṃ-é-ti* etc Skr perf mid. *ji-gy-é* for **ji-jy-ē* after the act. *ji-gáy-a* from *ji-* 'conquer, win', rt *gei-*.

§ 452. Prim. Ar. *gh, jh* = Indg. *gh*. *gh* remained in Skr., *jh* partly became *h*, and partly *j* (§ 480). In Iran. the two sounds fell entirely together with *g, j* = Indg. *g* (§ 449).

§ 453. Prim Ar. *gh*. Skr. *gharmá-* Av. *garᵉma-* 'glowing heat' : + Lat. *formu-s* etc, see § 423. Skr. *dīrghá-* Av. Gāþ. *darᵉga-* O Pers *darga-* 'long' : + Gr *δολιχό-ς* 'long' (§ 306 p. 243) Skr *drōgha-s* 'a crafty damaging', O.Pers. *drauga-* 'untruth, lie' : + O.Icel *draugr* 'ghost' OHG. *triogan* OS. *bidriogan* 'to deceive', rt. *dhreugh-* Skr. *jaṅghá-* Av. *zaṅga-* 'instep'. Lith *pra-žanga* 'transgression' + Goth *gagga-* (nom. *gaggs*) 'path, way'. Skr. *ghn-ánti* 'they strike' *ghan-á-* 'striking (orig f **ghṇ-ó-*, § 231) *ghā-ti-ś* 'a blow' (orig. f. **ghṇ̄-ti-s*). + Gr *ε-πε-φν-ο-ν* etc, see § 429 *a b*

Late Av *γ* = Gāþ O Pers *g*, as *drāoγa-* = O Pers *draugа-* 'lie, untruth', see § 481

Late Av *v* = Gāþ *gv* *drvant-* (read *drvant-*, see Bartholomae Handb § 91 *a*) = Gāþ *drug-vant-* 'deceitful, cunning, bad', rt *dhreugh-*, cp Bartholomae Bezzenb. Beitr. VII 187 f.

§ 454. Prim Ar *jh* Skr *hán-ti* Av *jainti* 'strikes', conj Skr *hán-a-ti* Av *jan-aiti*, orig f **ghen-ti*, **ghen-e-ti*, O.Pers *a-jan-am* 'I struck' orig. f. **e-ghen-ṃm* (Skr. perf *jaghán a* 'he struck' orig f **ghe-ghón-e*, § 480), rt *ghen-*, see § 453 Skr *rahāyati* Av *renjayeiti* 'he hastens' orig f. **lonɡh-éi̯eti* Gr. *ἐλαφρό-ς* etc, see §§ 429 *a c*. 444 *e*. Skr. *drúh-as*, Av. Gāþ *druj-ō* pl 'fiends' orig. f **dhrugh-es*, part Skr. *drúhyant-* Av. Gāþ. *druiiant-* 'injuring craftily', O.Pers. indic. *dūrūjiyāmīy* (read *druujiyāmi*; on the orthog. cp. pp 25. 116), orig. f. 3. sg. pres **dhrugh-i̯e-ti*

Late Av. *ž* *snaežaiti* 'it snows' = Gr. *νείφει*, rt. *sneigh-*, see § 423 Cp §§ 478 481

Rem. Through new formations Ar *jh* for *gh* and vice versa. Cp §§ 448 rem 451 rem and 429 rem 1

jh for *gh* Skr *hatá-* Av O Pers *jata-* 'struck' for Skr **ghatá-* Iran. **gata-* = Gr. *φατό-*, Indg **ghṇ-to-*, likewise Skr *hanyátē* Av. *janyetē* 'is struck' for Skr **ghanyate* Av **ganyetē*, Indg **ghṇ-i̯e-tai̯*, cp. O.Bulg. *žinją* (§ 229). Skr nom sg *drúha-s* beside regular *drógha-s*

'craft, malevolence', Indg. **dhroughо-s*; Av. 3. pl. *druženti* for regular **druyenti* (orig. f. **dhrugh-o-nti*) after forms like *družaiti* (orig. f. **dhrughe-ti*).

gh for *jh*. Skr. superl *drāghiṣṭha-* beside regular Av. *drājišta-*, to positive Skr. *dīrghá-s* 'long', see § 453.

Armenian.

§ 455. Indg. *q*.

k, ĕ. *akn* (gen. *akan*) 'eye, hole, louver' : Lith. *akìs* 'eye' + Gr. ὄμμα 'eye' ὀπή 'louver', see § 427*a* *ju-k-n* 'fish' with suffix *-qo-*, § 419. *lĕ-ane-m* 'I leave' . Gr λιπάνω λείπω etc., see § 427*a*.

g after a nasal or liquid *hing* (gen. *hng-i-c*) 'five' : Skr *páñca* etc., see § 419. *argel* 'hindrance' *argel-u-m* 'I check, keep off' . + Gr. ἀρκέω 'I ward off', Lat. *arceō*. *gail* (gen. *gailoy*) 'wolf' probably from **galio-* and this from **galgo-* = Skr. *vṛka-s* O.Bulg. *vlŭkŭ*; *g-* = *u-* § 162, *-al-* = *-l̥-* § 291. 1.

č fr. *k* before original *e-* and *i*-vowels (Hubschmann Ztschr. d. deutsch. morgenl. Ges. XXXV 172 f. Armen St I 66 79) *ač-ĕ* pl. (*i*-stem) 'eyes', cp. Gr. ὄσσε du (§ 427*d*. § 489), Lith. *akìs* 'eye'. *čor-ĕ* (gen. *čor-i-c*) 'four' fr **qetu̯ŏr-* or **qetŭr-* (cp. §§ 483 602) · Skr *catvár-as* etc., see § 419 *ču* 'a breaking up' : Skr *cyáv-a-tē* etc , see § 448.

§ 456. Indg *g*. *kin* (gen *kn-oj*) 'woman' : O.Bulg. *žena* etc , see § 437*a*. *ker* (gen *keroy*) 'food, meat', aor. *ker-i* 'I ate' : Skr. *girámi* etc , see § 428*a* *kov* (gen *kovu*) 'cow' : Skr. *gāú-š* etc , see § 428*a*. Aor *e-kn* 'he came' orig f **e-gem-t* . Skr. *á-gan* etc , see § 421 *erek* 'evening' . Skr. *rájas-* etc , see § 621.

§ 457. Indg. *gh*. *gan* (gen *gani*) 'a beating, flogging', rt. *ghen-* 'to strike' (§ 429*a*), probably to the rt form *ghṇ-*, like Skr. *ghan-á-* 'killing' (§§ 232. 454). *mēg* (gen. *migi*) 'fog' : Skr. *mēghá-s* 'cloud', Alban. *miégulę* 'fog', O Bulg. *mĭgla* 'fog'. *durgn* (gen. *drgan*) 'potter's wheel' · Gr. τροχό-ς etc , see § 439.

j initially and *ž* medially from *g* before original *e-* and *i*-vowels (Hubschmann Ztschr. d. deutsch. morgenl. Ges. XXXV 173, Armen. Stud. I 66. 71. 79). *jerm* 'warm' *jer* 'warmth,

good weather': Gr. *θερμό-ς θέρος* etc., see §§ 423. 429 *b*. *iš* (gen. *iži*) 'viper' : Skr. *áhi-š* Av. *aži-š* 'snake, dragon'.

Albanian.

§ 458. Indg. *q*. *krmb-i krụm* 'worm' : Skr. *kṛmi-ṣ* etc, see § 436. *pék* 'I roast, bake' . Skr. *pácāmi* etc., see §§ 427 *a*. 431 *a*. *gak* 'blood' Lith. *sakaĩ* pl. 'resin' O.Bulg. *sokŭ* 'juice'. *pik* 'I make bitter, salt' : Lith *pìkta-s* 'angry, bad', Pruss. *po-paikā* 'he deceives' + Gr. *πικρό-ς* 'sharp, keen, piercing, passionate, harsh' O.Ir *oech* 'enemy', Goth. *fáih* 'a wronging, deception' OHG. *gi-fēh* 'hostile'.

§ 459. Indg *g*. *gur* 'rock, stone' : Skr. *giri-ṣ* 'mountain', Lith *gìria gìre* 'forest' O.Bulg. *gora* 'mountain'. *gišt* 'finger' : Skr *anguṣṭha-s*, see § 450. *lig-u* 'bad, lean' . Lith. *ligà* 'illness' + Gr. *ὀλίγο-ς* little'.

§ 460. Indg. *gh*. *ǵendem* 'am found' . O.Bulg *gadajǫ* etc, see § 425 *steg-u* 'entrance' : Skr. *stigh-nu-tē* etc., see § 422. *dieh* (*dheg-*) 'I burn' : Lith *degù* 'I burn' etc, see § 439.

Baltic-Slavonic

§ 461. Indg *q*, *g*, *gh* were *k* and *g* (the latter = *g* and *gh*) in the period of the Balt-Slav. primitive community.

These sounds remained in general unchanged in Lith.

In prim Slavonic *k*, *g* became *č*, *dž* before the prim Indg. sonantal *e*- and *i*-vowels as well as before *i* + nas. and *ĭ* + liq as continuation of Indg nas and liqu. sonans (§§ 248. 302) and *kị*, *gị* likewise became *č*, *dž* After the completion of this process, but still in prim. Slavonic, *oị* (= Indg *oi*, *ai*) became *č*, and this new palatal vowel now changed preceding *k*, *g* into *c*, *dz*; contemporaneous with the latter change was the transition of the then newly arisen *kị*, *gị* into *c*, *dz* Cp. § 84 pp 81 f., § 147 p. 133. Further *kt* became *tχ'* and *ks* *χ* (*ch*) in prim. Slav.

§ 462. Prim. Balt.-Slav *k* = Indg. *q*.

Lith. *kà-s* 'who?' *katrà-s* 'which of two?', O.Bulg. *kŭ-to* 'who?' *ko-toryjĭ* 'which' : Skr. *ká-s* etc, see § 419 Lith. *kārta-s*

O.Bulg. *kratŭ* (fr. **kortŭ*, see § 281) 'time' : Skr. *sa-kŕt* 'once" Lith. *ãt-lẽka-s* O.Bulg. *otŭ-lĕkŭ* 'remnant, rest' : + Gr. *λοιπό-ς* etc., see § 427*a*. Lith. *velkù* O.Bulg. *vlĕką* 'I draw, drag' : Gr. *ἕλκω* 'I draw' (cp. § 164 rem.). Lith.' *kraũja-s* O.Bulg. *krŭv-ĭ* 'blood'. Skr. *kravíš-* etc., see § 418.

Prim. Slav. *č* = *k* (§ 461). O.Bulg. *četyrije* Lith. *keturì* 'four' : Skr *catvár-as* etc, see § 419. Voc. sg. O.Bulg. *vlŭče* Lith. *vilkè* to nom. *vlŭkŭ vĭlka-s* 'wolf' : Skr. *vŕka-s* etc., see §§ 427*c*. 444*a*. 455. O.Bulg. *pečete* 'cooks' (1 sg *peką*) = Skr. *pácati* Lat. *coquit*, Indg. **peqeti čara* 'incantatio' fr. **kĕrā* (§ 76) : to Lith *kerėti* 'to enchant'. *čapĭ* 'bee' fr **kĕpĭ* (§ 76), probably to Gr *κηφήν* 'a drone' *čĭ-to* 'what?' : Skr. *ci-d* etc., see § 427*b*. *črĭnŭ* Pruss. *kursna-* 'black' Skr *kṛšná-* 'black', Indg. **gṛsno-* (cp. § 302 rem. 1) Prim Slav. *č* = *kṛ*. *pri-tŭča* 'likeness' fr. **-tŭk-jā*. Cp § 147 p 133.

Prim. Slav *c* = *k* (§ 461) *cĕna* 'price, honour' (Lith. *kaina* according to Mikuckij) · Av *kaēnā-* etc, see § 427*a*. Loc. pl. *vlŭcĕchŭ* (*vlŭkŭ* 'wolf') -- Skr *vŕkēšu*, cpf **u̯l̥qo-su*, cp Gr. Hom. *λύκοι-σι* Prim Slav. *c* = *kʲ* *junĭcĭ* 'young bullock' fr **jūnŭkʲĭ*. Cp. § 84 p 81 f, § 147 p 134

This same change of *k* to *c* was repeated in the combination *kʲ* before palatal vowels in the course of the individual dialects (cp § 427 *b*). O Bulg. indic. *cvetą* inf *cvisti* 'to blossom, O.Croatian *cvasti* (— **cvisti*, a new formation after the indic. *cvètēm*), Little Russ. *cvysty* Great Russ *cvĕstí* (*ĕ* transferred from *cvĕtŭ*?) beside Low Sorabian *kwiś* Czech *kvísti* O Pol. *kwiść* 'to blossom', prim. Slav **kvīstī* Cp *(d)zvĕzda* § 464.

Prim. Slav. *tʲ* - *kt* through the intermediate stage *χ't* This sound-group thus fell together with Indg. *tt* and had the same further development as the latter *χ't* became *št* in the Bulgarian branch. O Bulg. *noštĭ*. Lith. *naktìs* 'night', Skr. *náktiš*. *vlĕšti* 'to draw' sup. *vlĕštŭ*, to indic. *vlĕką*, cp. Lith. inf. *vil̃kti*. *tešti* 'to run', to indic. *tekų*. *vrĕšti* 'to throw' to indic. *vrĭgą*. Cp. § 147 p. 132 f.

Rem. That the stage *χ't* lay between *kt* and *tχ'*, is confirmed by the inf. *vrĕšti* 'to thresh' (indic *vrĭch-ą* = **u̯ŗs-ā-m*, rt. *u̯ers-*, cp. O Lat. *vorrō*

'I draw through, sweep' = **ųṛs-ó*), since it must be traced back to prim. Slav. **ųerχ'tĭ*; it is uncertain whether *χ'* had arisen regularly in this form or whether it had been transferred from the indic. Serv. *vrijèći vrći* beside O Bulg. *vrĕšti* shows the falling together with original *kt* and *tj*. Cp. § 588 rem. 1.

Prim. Slav. *χ* (*ch*) = *ks* (except before *t*, see 2. pl. *tĕste* § 545) through the intermediate stage *χχ*. We leave it undecided whether the course was *ks—kχ—χχ* or *ks—χs—χχ*. *tĕchŭ* 'I ran', orig. f. **tēg-s-o-m*, pres. *teką bĕchŭ* 'I save, run away with' orig. f. **bhēg-s-o-m*, inf. *bĕgati*, it *bheg-* (§ 463). On the change of the *ch* to *š* in the 3. pl. *tĕšę bĕšę* cp. § 588, 1.

ks remained in Baltic. Lith. fut. *lìksiu*, to *lekù* 'I leave' (cp. Skr. *rēkšyámi*, Gr. *λείψω*), *bĕksiu*, to *bĕgu* 'I run, flee'. Pruss. *lauxnos* pl. 'constellations' : Av. *raoxšna-* 'shining'. Hence Indg. *gs* and *ĝs* did not fall together in Baltic-Slavonic, see § 414.

§ 463. Prim. Balt.-Slav. *g* = Indg. *g*.

Lith. *gìria* 'forest', O.Bulg. *gora* 'mountain' : Skr. *giri-ṣ* etc., see § 459. Lett. *gûws* 'cow', O.Bulg. *gomędo* 'bullock'. Skr. *gāú-š* etc., see § 428 *a*. Lith. *bėgu* 'I run, flee' *bogiù* 'I save, run away with something', O.Bulg. *bĕgŭ* 'flight' + Gr. *φεύγομαι* 'I flee' *φόβο-ς* 'flight, fear', rt. *bheg-*.

Prim. Slav. *dž* = *g* (§ 461). Thence O.Bulg. *ž*. *žeravĭ*, Lith. *gérvė* 'crane' · Gr. *γέρανο-ς* etc., see § 420. 3. sg. *vrĭžetĭ* (beside 1. sg. *vrigą* 'I throw'), cp. Goth. 3. sg. *vaírpiþ* 'throws', rt. *ųerg-*, § 444 *a*. Voc. *bože*, to nom. *bogŭ* 'god' adj. *božĭskŭ* 'divine' : Skr. *bhágа-s* etc., see § 450. *žaba* 'frog' fr. **gĕbā* (§ 76). Pruss. *gabawo* 'toad' · OHG. *quappa* Du. *kwab* 'eel-pout'. *po-žarŭ* 'incendium' fr. **po-gĕrŭ* (§ 76) beside *žera-tŭkŭ* 'heap of coals' *gorĕti* 'to burn' · Lith. *gãra-s* 'vapour', Skr. *gharmá-s* 'glowing fire'. *živŭ* Lith. *gývа-s* 'alive' · Skr. *jīvá-s* etc., see § 421. *žrŭny* 'mill' Lith. *gìrnos* pl. 'mill-stones, mill' (§ 303) : + Goth. *asilu-quairnu-s*, see § 442. *žĭrą* 'I swallow' : Skr. *gṛámi gilámi*, Indg. **gṛ-ó* (§ 305). Prim. Slav. *dž* = *gj*. *ostežа* 'chlamys' fr. **o-steg-jā* beside *ostegŭ* 'vestis' : Lith. *stógа-s*, Lat. *tegō toga* etc., see § 420. Cp. § 147 p. 133.

Prim. Slav. *dz* = *g* (§ 461). Still *dz* in the oldest O.Bulg. monuments, in the later almost exclusively *z* (Miklosich Vergl. Gramm. I² 251 ff.). Loc. pl *bo(d)zěchŭ* (*bogŭ* 'god') = Skr. *bhágēšu* cpf. **bhagoi̯su*. Opt. 2. pl. *vrĭ(d)zěte* (*vrĭgą* 'I throw') orig. f **u̯rgoi̯te*, cp Goth. *vaírpáiþ*. Sure examples seem to be wanting for prim. Slav. *dz* = *gi̯* = Indg. *gu̯*. Cp. § 84 p. 81 f, § 147. p 133.

§ 464 Prim. Balt.-Slav *g* = Indg. *gh*.

Lith. *genù* 'I chop off (branches)' *genù* 'I drive (cattle)', *ganaũ* 'I tend (cattle)', O Bulg. *iz-gonŭ* 'a driving away, chasing' : Skr. *hán-ti* 'strikes' etc , see § 429*a*. Lith *grúda-s* 'corn' *grúdžiu* 'I pound', O Bulg. *gruda* 'clod' · + OHG. *gruzzi* O.Icel. *graut* 'grit' OHG. *griuz* OS. *griot* 'sand, gravel', rt. *ghreu̯d-*. O.Bulg *gostĭ* 'guest, companion, friend' : + Lat. *hosti-s* Goth. *gasts*, see § 422 Lith. *sniẽga-s* O.Bulg. *sněgŭ* 'snow' : + Gr. *νίφα* etc , see § 423. Lith. *angì-s* 'snake', O.Bulg. *qgorištĭ* 'eel' : Skr. *áhi-š* etc., see § 433*a* O Bulg. *lęgą* 'I lie down', adj. *są-logŭ* 'consors tori' | Gr *λέχος ὐ-λογο-ς* etc , see § 425.

Prim. Slav. *dž* = *g* (§ 461) Thence O.Bulg. *ž*. *žĭnją* 'I cut (fruit), reap' inf. *žęti*, to Lith. *genù* (s. above), cp. Skr. *hanyátē* (§ 454 rem.). *sněžĭnŭ* 'snowy', to *sněgŭ*, s. above. *są-lože* voc. to *sąlogŭ*, s. above Prim Slav. *dž* = *gu̯*. *lŭžĭ* 'lying, false' fr. **lŭg-jĭ*, to *lugati* 'to lie' OHG. *liogan* 'to lie', rt *leu̯gh-*. *lože* n. 'couch, bed' fr. **log-je*, to *lęga*, s above. Cp § 147 p. 133.

Prim. Slav *dz* = *g* (§ 461). O Bulg. *dz*, later *z* (§ 463). *(d)zělŭ* 'vehemens' Lith *gailù-s* 'passionate', OHG *geil* 'extravagant, petulant, wanton'. *sně(d)zi* pl to *sněgŭ* 'snow', orig. f. **snoi̯ghoi̯* *lę(d)zěte* 2 pl opt. to *lęgą* Prim. Slav. *dz* = *gi̯*. *stĭ(d)za* 'way' fr **stig-ā*, to *stignų* 'I come from' : Skr. *stighnutē* etc., see § 422. Cp § 84 p. 81 f, § 147 p. 133.

The same change of *g* to *tz* was repeated in the combination *gu̯* before palatal vowels in the course of the individual dialects. O.Bulg. *(d)zvěrĭ* 'animal, wild animal' fr. prim. Slav. **gu̯ĕrĭ* : + Gr. *θήρ* Lat *fera*, see § 429*b*. Cp. *cvistĭ* § 462.

§ 465. Prim. Slav *sk, zg* before palatal vowels and before *j*. In the period of prim. Slav., in which *k, g* became

tš (č), dž; *sk, zg* correspondingly passed into *stš, zdž,* hence *štš, ždž,* further O.Bulg. *št žd.* Cp. § 147 p. 133 f. Suffix *-qo-* seems to be contained in O.Bulg. *-ište-* fr *-isk-ǫe-*, a further formation of *-isko-*, e. g. *ognište* n. 'hearth, fire-side' (cp. the primary form Pol. *ognisko* n). *moždanŭ* 'having marrow, marrowy' fr. **mozgĕnŭ* (cp. *běžati* 'to flee' fr. **bĕgĕti*, § 76) from *mozgŭ* 'marrow'; whether we have here Indg *zg* or *zgh*, is doubtful, see § 450.

Retrospect of the history of the velar explosives.

§ 466. Words containing Indg velars show these partly with and partly without labialisation in Greek, Ital , Kelt. and Germ. The *u̯*-afterclap, brought along from prehistoric times, could disappear in the separate languages by certain fixed sound-laws. But we thought that such a disappearance might only be assumed in such forms, as had parallels which were etymologically related, and which actually occurred with labialisation either in the same language or in another of the *u̯*-languages, e g. in Goth. *kaúru-s* 'heavy' (§ 444 *b*) We thought that it must be left undecided whether labialisation was ever present in those words, which certainly had an Indg velar, but do not appear in any of the *u̯*-languages with labialisation. The dropping of *u̯* can be assumed in some of these words, without the sound-laws of the separate languages standing in the way, thus e g. in Gr *κύτο-ς* Lat *cutis* OHG. *hūt* 'skin, hide' (cp. Pruss. *keuto* 'skin', Lith *kiautaĩ* pl. 'corn-hulls, -husks') from the fact that *u̯* disappeared before *u* in each of these languages (§§ 427 *c*. 428 *c*. 429 *c*. 431 *b* 444 *b*). In other cases the known sound-laws of the separate languages do not furnish any positive support for the assumption of the disappearance of *u̯*. But sound-laws may have operated in prehistoric times, which brought about the loss of *u̯* (e. g. perhaps before Indg. *a*, *ā*, as in Gr. *καρκίνος* : Skr. *karkata-s*, and if *u* or *u̯* directly preceded the velar, as in Gr. *ζυγό-ν* : Skr. *yugá-m*?) and the activity of which may have become so concealed by the later development that it is no longer possible for us to fix them.

Of late years the question has several times been raised

(most recently by Bersu p. 4 ff.) as to whether the words, in which the velars appear in Greek etc. with labialisation, were also once spoken in Ar., Armen., Alban. and Baltic-Slavonic with labialised *q*, *g*, *gh*, or whether the labialisation was an innovation of the *ḳ*-languages — ultimately an innovation which took place in one portion of the prim. Indg. language-terrain But nothing has hitherto been adduced which admits of a sure decision being formed either on the one side or the other. At all events *ḳ* may equally well have disappeared from those languages in which labialisation does not occur, as it did e. g. in Irish (*cethir* beside O Cymr. *petguar* 'four') and in French (*quatre* pronounce *katr* from Lat. *quattuor*).

Interchange of the palatal and velar explosives.

§ 467. In Aryan, Armenian and Baltic-Slavonic we occasionally find a guttural explosive or its regular successor, where we should expect the descendant of an Indg palatal explosive, i. e. spirant or affricata, and conversely. Examples from the first and last named language-groups, have been collected by J. Schmidt in Kuhn's Ztschr XXV 114 ff 125 ff. A final answer to the question, how this interchange is to be explained, must be left for the future For the present the following seems to to me probable.

1. In one portion of the cases the mixing of the two classes of consonants was caused by form-transference.

This is seen clearest of all in Sanskrit, where certain sounds, which were originally different, regularly fell together: *kš* = *qs* and *ĥs*, *ĵ* = *g* and *ḡ*, *h* = *gh* and *ḡh*

Thus *bhišákti* 'he heals' *bhišáktama-* superl. from *bhišáj-* 'healing', with *kt* instead of *št* on account of 2 sg. *bhišákši* nom. sg. *bhišák* (fr. **bhišakš*, § 647, 7) loc. pl. *bhišákšu*, cp. Av. *baęšaz-a-* = Skr. *bhēšaj-á-* 'medicine'. After the analogy of *tyāgá-* 'abandonment, resignation' beside *tyájatē* (rt. *tjeg-*) etc. was formed *yāga-* for older *yājá-* 'an offering' beside *yájatē* (rt. *ĵağ-*), correspondingly after *ni-dāghá-s* 'heat' beside *dah-* (rt. *dhegh-*) etc., *sạ-dēghá-s* for older *sạ-dēhá-s* 'a cementing to-

gether' (rt. *dheiĝh-*). With misplaced *g* also *bhárga-s* 'splendour' (cp. Av. *brāzaiti* 'beams, radiates'), *nir-márgá-* 'a stripping off' (cp. indic. 3. sg. *márṣṭi*), *sargá-* 'gutter' (cp. part. *sṛṣṭá-*). Further part. *dıgdhá-* 'besmeared' for regular **dīdha-*.

The converse transference occurred less often. Thus *drōdhar-* for and beside *drōgdhar-* part. fut. from *druh-* 'injure', rt. *dhreugh-* [1]).

In Armenian the *st* in *dustr* 'daughter', which does not agree with the root-final velar of the other languages [2]), may have come into existence through the influence of *ustr* 'son' (etymologically unexplained), with which according to Hubschmann Arm. St. I 47 it is mostly used.

2. Where *k* and *g* appear in Baltic-Slavonic in place of sibilants, they are due to a borrowing from the circle of languages with guttural explosives, this borrowing may partly be dated back to the period of the Indg prim. community, if by § 380 we already ascribe to this the difference of articulation, which permits the Indg. languages to be divided into two great groups. Thus O Bulg *svekrŭ* 'socer', *svekry* 'socrus' beside Lith. *szeszura-s* etc, which point to Indg. **sụeḱuo-* **sụeḱrū-* (§ 381), O.Bulg. *gąsĭ* beside Lith. *žąsì-s* etc, Lith. *klausaũ* 'I obey' beside O.Bulg. *sluchŭ* 'hearing, obedient' Skr. *śrōšamāna-s* 'gratifying', Pruss. *pecku* Lith *peku-s* 'cattle' beside Skr. *páśu* etc., Lith. *smakrà* 'chin' beside Skr. *śmáśru-* 'moustache' (to which O Ir *smech* 'chin'), Lith. *gařda-s* 'hurdle' O.Bulg. *gradŭ* 'inclosure, town', beside Lith. *žařdı-s* 'pasture-ground' (cp. § 389).

3. In one portion of the cases, which are generally classed under this category, we have different roots. Thus e. g. we separate *gnā-* **genā-* 'wife' (Skr. *gnā-* etc., s. §§ 428*a*. 437*a*) from rt. **ĝen-* 'gignere'; Skr. *áhı-ś* 'snake' Av. *aži-š* etc. (§ 433*a*) from rt. *añĝh-* 'to lace, string'; Skr *mēghá-* 'cloud' from *mēha-* Av. *maęza-* 'urine'. Such like roots, which are

1) With these Skr. new formations cp § 480 rem. 4

2) The *h* in Skr *duhitár-* is the regular representative of prim. Ar. *jh* = Indg. *gh* by § 445, as must be remarked because of J. Schmidt, Kuhn's Ztschr. XXV 68. 116. 122.

similar in sound and meaning, but nevertheless not related etymologically, occur indeed often enough elsewhere, as e. g. Skr. *skambh-* and *stambh-* 'fasten, support', *ŋegh-* and *ŋedh-* 'lead'.

Rem. The manner in which J Schmidt (in the article quoted above) attempts to explain the interchange of the two classes of consonants, is in my opinion by no means convincing

B THE EXPLOSIVES AFTER THEIR FORM OF ARTICULATION

Primitive Indg period.

§ 468. The Indg prim language had, as we have seen in § 322, four forms of articulation: tenues, voiced mediae, aspirated tenues and aspirated voiced mediae, e. g *t, d, th, dh.* Examples for the two first and for the last class have been given in §§ 324—326. 348 350. 381 383. 418—423.

We have not yet given examples for the tenues aspiratae in section A. And, owing to their comparatively small number and the peculiar difficulties with which the question of their regular representation in the various languages is surrounded, it seems appropriate not to treat this form of articulation in this section either, in each of the separate language-groups, but to treat it collectively at the end (§ 553), in order that everything, which belongs here from the various languages, may be brought together under one head Before then however we shall however have to discuss the history of the prim. Ar. tenues asp. in § 475.

§ 469. Several of the changes in the form of articulation, which are exhibited by the Indg explosives and which in many cases are regarded as having taken place within each development, had in all probability already arisen in the period of the Indg. prim. community. Eight cases are to be taken into consideration.

1. The change of mediae into tenues before voiceless explosives and spirants. Indg. **jugtó-* 'yoked' i. e. **jug+to-* from rt. *jeŋg-*: Skr. *yuktá-* Gr. ζευκτό-ς Lat. *jūnctu-s* Lith. *jùnkta-s.* Indg. **petsú* loc. pl. fr. **ped-* 'foot'. Skr. *patsú* Gr. *ποσσί ποσί.*

2. The change of tenues into mediae before voiced explosives and spirants. Indg. *-bd-* weakest form of *ped-*: Skr. *upa-bd-á-* 'a pounding, trampling' Gr. *ἐπί-βδ-αι* 'day after the feast' (§ 325). We assume **dn̥dbhis*, **μiĝbhis*, **ɣgbhis* as the Indg. prim. forms for the instr. pl. Skr. *dadbhíš* (*dat-* *dant-* 'tooth'), *viḍbhíš* (*viš-* 'clan, village community', cp. § 404, 3), *ɣghbíš* (*ɣc-* 'hymn'). This assimilation may also have extended itself to double consonants, as Skr. instr. pl. *nábhiš* (*napt-* *napāt-* 'offspring') fr. **nabdbhiš*, Indg. **nebdbhis*. Cp. also Av. instr. pl. *azd-bīš* fr. *ast-* 'bone' : Gr. *ὀστέο-ν* and Indg. *zd* from *sd* in **z-dhi* 'be' imper. fr. rt. *es-*, **se-zd-* perf. st. from rt. *sed-* and similar forms, § 589, 1

3 The side by side existence of Gr. *ἑβδομο-ς* and O Bulg. *sedmyjь* 'septimus' (§ 547 rem. 2) permits our assuming that in Indg. there stood beside **septn̥* the ordinal **sepdmó-* or **sebdmó-* In that case Gr *ογδοο-s* would be a special Greek transformation of *ὀγτ-* after the analogy of *ἑβδ-*. Similarly Osthoff Zur Gesch. d. Perf 321.

4. *t* before *t th* and *d* before *d dh*. Geminated explosives were probably not spoken here, but affricata + explosive. We write *t͡t(h)* and *d͡d(h)* but at the same time readily admit that it might perhaps have been more correct to have written *tt(h)* and *dd(h)*. For the literature on this point see Osthoff Zur Gesch d Perf 560 [1]). E g **set͡tó-* (part. fr. rt *sed-* 'sit') : Skr *sattá-* Av *hasta-* Lat *ob-sessu-s*; **ded͡dhí* (that is, **ded+dhi*, 2 sg imper. of the reduplicated pres of *dō-* 'give') : Skr. *dēhí* Av. *dazdi*.

5. Aspirates probably lost their aspiration before aspirates. We regard e. g. **ɣudbhis* as the Indg. prim form of Skr. instr. pl. *yudbhíš* (*yudh-* 'fight, battle'). If Gr. *κύσθο-ς* 'a hollow, pudenda muliebria', Lat. *custōs*, Goth. *huzd* 'treasure', which

1) The objection raised by Bartholomae in his recent work Ar. Forsch II 79 against what we have stated above for the Indg prim language, is not valid If *ks* became *k* before explosives, it by no means follows that the affricata *ts* (*t͡s*) must under the same conditions have become *t*. *kχ*, *pf*, not *ks*, *ps* correspond to *ts*.

belong to rt. *keudh-* in Gr. *κεύθειν* Ags. *hȳdan* 'to hide', were an extension of this rt. by means of the 'root-determinative' *dh* as we assume in §§ 494. 507. 536., then **kud$^{\text{h}}$dh-* (s. above 4) was probably spoken in prim. Indg.

6. How was the combination — which must be presupposed etymologically — media asp. + *t* or *s* spoken at the time immediately preceding the disintegration of the Indg. prim. community? What was e. g. the Indg. prim form of Av. *dug$^{\text{h}}$dar-* Lith. *dukter-* 'daughter', which, on etymological principles, would have to be put down as **dhughter-*? A positive answer has not yet been found. We leave out the question in our exposition of the history of the Indg. forms of articulation in the separate languages and discuss it at the end in § 552 In the section on Aryan § 482 we shall however previously treat the special history of media + media asp., which can be put down with certainty as the prim Ar. order of articulation.

7 Change between tenuis and media at the end of roots, e. g *sqap- sqab-* in Gr. *σκαπάνη* 'spade', O.Lat. *scaprēs* : Lat. *scabō*, Lith. *skabù-s* 'cutting' (§ 345); *pāk-* . *pāg-* in Lat. *pāx pācis* Skr. *páśa-s* 'loop, cord' : Gr *πήγνῡμι* 'I fasten', Lat. *pangō*; *(s)pek-* : *(s)peg-* in Skr. *páśyāmi* 'I see', Lat. *-spicio*, OHG. *spehōn* 'to spy' *spāhi* 'prudent, wise' : O.Icel. *spakr* 'prudent, sensible', O Bulg *pazitι* 'attendere', refl with *sę* 'cavere'. The tenuis is probably rightly considered as the older articulation. The circumstances, under which this sound-modification made its appearance, still remain undetermined Cp p 188 f.

Probably here also belong irregularities in the form of articulation, which occur in other positions than at the end of roots, e. g. Skr. *daśat-* . Gr. *δεκαδ-* 'decade' (cp. § 238).

8. Change between media asp. and media. *stembh-* : *stemb-* in Skr. *stabhnómi* 'I fasten' prop', perf. *tastámbha*, Gr. *ἀ-στεμφής* 'unpressed' *στέμφυλο-ν* 'a grape or olive already pressed' : Gr. *στέμβω* 'I shake, tread on', OHG. *stampfōn* 'to stamp' *stumpf* 'stump' (Lith. *stambra-s* 'trunk, stem', *stim̃bra-s* 'stump of the tail, stump' may belong to either root-form). *bhudh-* : *bhud-* (weak rt. forms) in Skr. *budhná-* 'bottom', Gr. *πυθμήν* 'bottom,

end of a root' : Gr. *πύνδαξ* 'bottom' (with *π-* for *φ-*, like *πίστις* for **φιστις* etc., see § 496), Ags. *botm* O.Icel. *botn* 'bottom' (Lat. *fundu-s* and O.Ir. *bond bonn* 'solea' are ambiguous). *meĝh-* : *meĝ-* in Skr. *mahán* 'great' : Skr. *majmán-* 'greatness', Gr. *μέγας* Goth. *mikils* 'great'. Skr. *ahám* : Gr. *ἐγώ*, Lat. *ego* Goth. *ik* 'I'. The media asp. is possibly the older sound. The circumstances, under which the modification made its appearance, are also here undetermined. In most of the cases a nasal is in the vicinity. Cp. Arkiv for nordisk Filologi I 176 rem.

Rem J. von Fierlinger Kuhn's Ztschr XXVII 478, following up J. Schmidt's theory, conjectures that in those cases where it is a question of *ĝh g*, 'the sound was neither $g^{i}h$ [*ĝh*] nor g^{i} [*ĝ*] in the parent language, but a voiced palatal spirant *γ*' So long as a more special (urgently needed) investigation into the whole question of the change in the form of articulation in the Indg prim period is still wanting, it seems to me more prudent not to separate the change *ĝh ĝ* from the cases *bh . b* and *dh : d* With these it is hardly possible to start from a spirant, which is homogeneous with the 'γ'.

Aryan.

§ 470. The difference between the Indg. forms of articulation was still preserved in the period of the Aryan prim. community.

The palatals *k̂*, *ĝ*, *ĝh* appeared as *ś*-sounds: *ś*, *ź*, *źh* (§ 396).

Indg. $d^{z}d(h)$ (§ 469, 4) probably then became *zd(h)*, e g. **dazdhí* = Indg. $^{*}ded^{z}dhí$ 'give' imper., and thus fell entirely together with Indg. *zd(h)* (§§ 590. 591). See § 476.

The order med asp. + *t, s* — which is etymologically to be postulated — was represented by med. (or voiced spirant) + *dh, zh* (§§ 469, 6 552) : *bdh*, $d^{z}dh$, *ydh*, *ždh* and *bzh, dzh, gžh, žžh*. For the further history of these combinations in Aryan see § 482.

The Sanskrit separate development left the Indg forms of articulation separate.

In Iranian the mediae asp. became mediae and *žh* became *ž*. These sounds thus fell entirely together with the Indg. mediae.

§ 471. Tenues. Prim. Ar. *p, t, k c, ś* = Indg. *p, t, q, k̂.*

Skr. Av. O.Pers *pat-* 'fall, fly', Indg. **pet-*. §§ 327. 351.

Skr. Av. O Pers. interrog stem *ka-*, Indg. *qo-*. Skr. Av. *ca* O Pers. *cā* 'and', Indg. **qe*. §§ 445—448

Skr. *áśva-* Av. O Pers. *aspa-* 'horse', Indg. **ek̂uo-*. §§ 396 - 401.

k seems to have disappeared in the prim. Ar. period in Skr. *túrya-* Av. *tūirya-* 'quartus' fr. ** ktur-*, to Indg. **qetuer-* Skr. *catvár-as*, cp. Av. *ā-xtūirya-* 'every fourth time' (cp. § 646); so also *t* in **napt-su* Av. *nafšu* loc. pl. from Ar. *napāt- napt-* 'offspring' (s. Osthoff Zur Gesch. d. Perf. 600).

§ 472 Further shiftings of the prim. Ar. form of articulation did not take place in Sanskrit.

Rem In forms like *vaghu-* 'tone, sound' (*vak- vac-*), *ghmín-* 'praising' (*ark- arc-*), *śaghma-* 'wealthy, benevolent' (*śak-*), *vaghmu- vaghín-* 'eloquent' (*vak- vac-*) *gh* had not regularly arisen from *k* (*-kn-, -km-, -kv-* remained, cp. *reknas-* 'wealth, riches', *vákmā-* 'shining', *pakva-* 'ripe',) but was borrowed partly from other forms of the same roots as instr *vaghbhiš, ghbhiš*, 2 sg imper *śaghdhí*, partly from forms of roots with original *g* (*ĝ*) as *tighmá-* 'sharp' rt (*s*)*teig-* (*śaghmá-* to *śakta-* like *tighma* beside *tiktá-*) Similar occurrences in Gr. see §§ 486 rem 495 rem

§ 473. In Iranian *p, t, k, c* were only retained before vowels and after *s, š* Otherwise they became spirants before consonants. This change took place before *i, u*, after these consonantal vowels had become spirantal (§§ 127 161).

1 Prim. Ar *p* Av. O Pers *fra-* 'before, fore' Skr. *pra-* Gr. *πρό*, Indg **pro* Av. *ərəzifya-* 'stretching itself, falcon' . Skr. *ghrghyá-* 'stretching itself, seizing on the wing', Armen. *arciv* 'eagle' (§§ 291, 1 330) Av. *āfant-* 'aquosus' from prim. Ar. **ap-ghant-* (§ 159 p. 143) to *ap-* (acc. *āpem* nom. *afš*) 'water' : Skr. *ap- āp-* 'water'.

Av. *-pt-* beside *-fθr-* fr. *-ptr-* (2.) and beside Pers. *-ft-* is strange. *hapta* 'seven' : Skr. *saptá ker*pta-* 'put in order, made right' : *klptá-*. Prim Iran *-ft-* probably became *-pt-*, cp. O.Icel. *epter* fr. *efter* 'after' etc. (Noreen Aisl. Gramm. § 183).

2. Prim. Ar. *t*. Av. *θwąm* O.Pers. *θuvām* (*θuv-* = *θv-*) 'thee' : Skr. *tvám*. Av. *ᶜθyeȷah-* n. 'need, danger' : Skr. *tyájas-*. Av. *miθra-* 'contract' : Skr. *mitrá-*. Av. *šyaoθna-* 'deed, work' : Skr. *cyautná-*.

In O.Pers. *θr, θy* passed into *š, šy*. *šɪ-* 'three' : Av. *θri-* Skr. *tri-* (§ 261) *hašɪya-* (*-šɪy-* = *-šy-*) 'true' . Av. *haiθya-*, Skr. *satyá-*.

In Av. *θr, θw* passed into *ϑ, ϑw* after *f* and *x* (voiceless spirants after the voiceless spirants *f x* became voiced). Acc. *fᵉϑr-ō* 'patres' (cp Gr. *θύγα-τρ-ας*) beside dat. sg. *piθrē* acc. sg *ptarem*, cp Skr. *pitr- pitár-*. *vaxdra-* 'word, speech' · *vak-trá-* 'mouth'. *vaxϑwa-* 'word' fr. prim. Ar. **ɣak-tɣa-*. Cp. *ϑ* fr. *θ* = prim. Ar *th* § 475

Prim. Ar. Skr. *tk* = Av *θk aθka-* 'dress' : Skr. *átka-*. *ta-θk-uš-* weak st. of the part perf. act. to *tacaiti* 'runs'.

Prim. Ar. *tc* (Skr. *cc*) = Av *sc* O.Pers. *šc*. Av. *yas-ca* 'quod-que', also inexactly written *yaθca* (according to the etymology : *yaθ+ca*) : Skr. *yác-ca*, prim. Ar. **ɣatca* Indg. **ɣotqe, *ɣod qe*. O.Pers. *anɪyaš-cɪy* 'anything else' : Skr. *anyác-cid* prim. Ar. **anyatcid*. Cp Kelt. Germ. *sk* fr. *tk*, §§ 516. 527.

Prim. Ar. *ts* became *s* in Av (O.Pers) through the intermediate stage *ss* Av. *masya-* 'fish' : Skr. *mátsya-*. Av. Gāθ. loc. pl. *drug-vasū* fr *drug-vant-* 'lying, false', cp Skr. *kéśa-vatsu* fr. *kéśa-vant-* 'having a mane'. Av. nom sg. *a-meᶜtā-tās* 'immortality' fr. **-tāt-s*, cp acc. sg *amerᶜtatāt-em*. Correspondingly Indg. *tˢt(h)* = prim Ar *tst(h)* (§ 469, 4) became *st* in Av. and O Pers. Av *ava-pasti-š* 'a falling down' : Skr. *patti-š*, prim. Ar. **patsti-š*, Indg **petˢti-s*, rt. *pet-*. Av *ašavastema-* superl. fr. *ašavant-* 'pious, holy', cp Skr *-vat-tama-* Av *ustema-* 'utmost' : Skr. *uttamá-*. Av Gāθ. 2 sg. perf. *vōistā* 'knowest' : Skr. *véttha* Gr. *οἶσθα*, Indg **ɣoᵢᵈtha*, rt. *ɣeid-*. O.Pers. *a-yastar-* 'possessor', to Skr. *a-yat-* 'attain, reach'.

Rem 1. Observe that this Iran *st* also appears after *i* and *u* and their diphthongs, as in *vista-* = Skr. *viktá-*, *vōistā* = Skr *véttha*, Gāθ. *raosta* (3. sg. mid from *raod-* 'grow up'), whereas Indg *st* had become *št* after the same sounds. The transition of *ts, us* into *š, uš* was already completed and was closed, when *tsi* became *st* in Iranian. See § 556, 1.

Rem. 2. Indg. *-st* and Indg. *-t^{s}t* remained separate in Av. also when final The former appears as *-s* (after *a*-vowels), the latter as *-st*, e. g. 3. sg imperf. *ās* 'erat'. Skr Ved. *ā́s* prim Ar **āst* Indg **ēst* (Gr. Dor *ἦς*), 3 sg imperf *hīšast* fr rt *sed* 'sit' fr. Indg. **si-set^{s}t*, that is, **si-sed+t*. Cp Bartholomae Handb. §§ 139—141, Ar Forsch II 78 f.

3. Prim. Ar. *k*. Av. *yuxta-* 'yoked' : Skr. *yuktá-*. Av. *suxra-* 'red' O.Pers. *puxra-* a proper name . Skr. *śuk-rá-* 'bright, white' For further examples see § 447.

4. Prim. Ar *c* was regular before no consonant except *i̯*. Av. *šy* O.Pers. *š̌y*. Av. *šyao-θna-* 'deed, work' O Pers *a-šiyav-am* (*-šiy-* — *-š̌y-*) 'I went, walked' Skr. *cyáv-a-tē* 'stirs, moves'. Cp. § 448.

§ 474 Prim Ar prim. Iran non-final *t* with preceding spirantal *r* became *š* in Avestic, as *mašya* (*mašiya-*) = O.Pers *martiya* Skr Ved. *mártya-* 'mortal being'. See §§ 260. 288. 353.

§ 475 The prim Ar. tenues aspiratae *ph, th, kh, ch* were not rare sounds in the period of the Ar. prim. community It is by no means definitely settled that these sounds are to be traced back in every case to Indg tenues asp. (§ 553). This form of articulation may partly have arisen in the prim Ar period from non-aspirate tenuis, e. g. Skr. *path-* 'path', *sthā-* 'stand' It is certainly not clear by what laws this aspiration arose

In the following §§ we shall discuss the history of the prim. Ar. ten asp without taking into consideration whether this form of articulation was old inherited or newly developed From § 553 it is obvious in what cases we hold the ten. asp. for prim. Indg.

The only case in which the sounds underwent a change in Sanskrit, was when the following syllable began with an asp. or with *s* + asp A tenuis then arose by dissimilation *kumbhá-s* 'pot, mug' fr **khumbha-s* — Av *xumba-* Perf *cichéda* 'I cut off' fr **chi-chēda* from prim Ar. *skhaid-*. Cp the dissimilation of the mediae asp. § 480.

Rem. 1 Forms like instr pl *khē-bhiš* from *kha-* 'opening in the body, mouth, ears etc', *pathí-bhiš* from *pathi-* 'path' were forms made by analogy after the cases, in which there was no reason for dissimilation. Cp. § 480 rem 1.

In Iranian the tenues asp. became spirants except after *s*, *š* and nasals, where they passed into tenues.

Av. *safa-* 'hoof' : Skr. *śapha-*. Av. *paϑ-* O.Pers. *paϑi-* 'path' : Skr. *path- pathí-*. Av. *bara-ϑa* 'ye bear' : Skr. *bhára-tha*. Av. *haxa* 'companion, friend' O.Pers. *haxāmaniš* proper name : Skr. *sákhā*. Av. st form *haš-* 'companion, friend' (only in compounds as *haš̌iϑ-biš-* 'friend tormenting') fr. prim. Ar. **sachi-*; Skr. *sakhi-* was formed after the analogy of *sákhā* etc.

Av. *sparāmi* 'I push, jerk' : Skr. *sphurámi* (cp. § 290) Av. O.Pers. *stā-* 'stand' : Skr. *sthā-*. Av. Gāϑ *vōistā* 'knowest' : Skr. *vēttha*. Av. *pantan-* 'path' : Skr *pánthan-*, beside *paϑ-* : *path-*. Av. *skārayant-* 'leaping' (or 'letting leap') in the proper name *skārayaϑ-raϑa-* : Skr. *skhálati* 'stumbles, makes a false step sticks fast'.

ϑ became *d* after *x*, *f* (cp *f"dr-ō* etc. § 473, 2). *uxda-* 'spoken' : Skr *uktha-m* 'a saying' *fraϱda-* 'satisfied, content' fr. prim. Ar **tṛmp-tha-*, cp Skr *tṛmpámi* 'I satisfy my appetite, become satisfied'.

Rem 2 Fierlinger Kuhn's Ztschr XXVII 334 f. conjectures that the tenues asp lost their aspiration in prim Aryan before *m*, *n*, *r* This however postulates the originality of the tenues asp as proved, which I cannot hold as certain

§ 476. Mediae. Prim. Ar *b*, *d*, *g ǰ*, *ź* = Indg. *b*, *d*, *g*, *ĝ*.

Skr *upa-bd-á-* 'a stamping, trampling' Av. *upa-bd-a-* 'foot', Indg **bd-* weak st form of *ped-*. §§ 325 328

Skr *dā-rá-* Av. O Pers *dā-ra-* 'distant', rt. *deu̯-*. § 354.

Skr *bhága-s* 'giver of blessings' O.Pers *baga-* 'god', Indg. **bhago-s*. Skr. *jīvá-* Av *jīvya-* 'alive', Indg **gīu̯ó-*. §§ 449—451.

Skr *jóša-* Av *zaoša-* 'favour, kindness', O.Pers. *dauštar-* friend', rt. *ĝeu̯s-*. §§ 402—404.

The transition of Indg *d*ʰ*d(h)* to *zd(h)* (§ 470) may be regarded as prim Ar.; it was in any case younger than the change of prim. Ar. *z* to *ž* (§ 591) *z* remained in Iranian; *azd(h)* became *ēd(h)* in Skr, cp *ōdh* from prim. Ar. *aždh* § 404, 2. Skr *dēhí* Av. *dazdi* 'give' imper., Indg. **de-d*ʰ*-dhí*, rt. *dō-* 'give'. Skr. *kṛyēdhá-* 'extensive, capax', prim. Ar. **kṛi̯ad*ʰ*dhō-*

i. e. **kiyat+dhā-*. Here belongs also *zdh* for Indg. *dh+t* (§ 552). Skr. *mēdhas-* Av. *mazdah-* 'wisdom', prim. Ar. **mazdhas-*, that is, Indg. **mŋ̍dh+tos-*, rt. *mendh-*. Av. *ver^{e}zda-* 'grown up, powerful' fr. prim. Ar. **ɣṛzdha-* i. e. Indg. **ɣṛdh+to-* (Skr. *vardh-* 'grow'). Osthoff Morph. Unt. IV 261 f. conjectures, that Av. *uz* 'out, upwards' beside Skr. *ud*, is a generalisation of the form regularly developed before *d-*, as in *uz-daẹza-* 'accumulation', and that *us* was developed from *ud* in compounds like *us-tāna-* 'stretched out' = Skr *ut-tāná-*, *us-ca* 'high up' = Skr. *uc-cá*; cp. also Gr. *ὑψ-πλῆξ* beside *ὑπ-τροιχες* and Cypr. Pamph. *ὑ* as also Germ *uz-* § 536 rem.

Rem. This regular state was frequently altered through new formations in Sanskrit and Iranian Skr. *daddhi* for *dehi*, *addhí* 'eat' imper. for **ēdhí*, *rudh-* for **runedhi* (*ṛṇédhi* arose at the time when such pres forms in *-ēdhi* were in existence, see § 404, 2). Av *mastī-* 'insight' for **mazdi-* i e **mŋ̍dh+ti-* (after the analogy of *cisti-* etc) See the author in Morph Unt III 144 ff, Bartholomae Kuhn's Ztschr. XXVII 360 ff

§ 477. Prim Ar *ž* (= Indg. *ĝ*) became the explosive *j* (§ 402) in Sanskrit, and the *ž* (= Indg. *q̂*) in *žd ždh* = prim Ar. *žd, ždh* was lost (§ 404, 1 2), whereas in *žbh* = Prim. Ar *žbh* it became *d* (§ 404, 3)

-dn- became *-nn-* : *bhinná-* 'split, divided', from *bhid-*

Rem Analogously *-nn-* from *-dn-* : gen. pl *ṣṇṇām* (*ṣáṣ-* 'six'), a new formation after *ṣaḍbhíṣ* etc , on this *dbh* cp § 591

No consistency exists in the treatment of *-dm-* and *-gm-*. *kakúnmant-* beside *kakúdmant-* 'providing with a point'. *mṛnmáya-* 'consisting of earth, clay' fr **mṛd-maya-*. *vāṅmáya-* 'consisting of speech' fr **vāg-máya-* beside *vagmín-* (§ 472 rem.). Whence this fluctuation arises, is not clear to me. Are the forms with *-dm-* and *-gm-* new formations as compared with the others?

§ 478. In Iranian *b, d, g j* apparently remained explosives throughout in O.Pers. and the Gāḷā dialect, whereas in later Av. they became the spirants *w, đ, γ ž* medially except after sibilants and nasals, *g* also initially before consonants except *r*.

Late Av. *vaẹđa* Gāḷ. *vaẹdā* 'he knows' : Skr. *véda*. *dađmahi* Gāḷ. *dad^{e}mahī* 'we give' : Skr. *dadmási*. *baγa-* O.Pers. *baga-*

'god' : Skr. *bhága-*. *uγra-* Gāþ. *ugra-* 'strong, powerful' : Skr. *ugrá-*. *ja-γm-ūši* fem. part. perf. act. from rt. *gem-* 'go' : Skr. *ja-gm-úṣī*. *γᵉnā-* Gāþ. *gᵉnā-* 'wife' : Skr. *gnā-*. *taęža-* 'sharpness, edge' : Skr. *téjas-*, beside late Av. *tiγra-* 'pointed' : Skr. *tigmá-* 'sharp, vehement'.

Rem. 1. *ǰ* is often written for *ž*, e g *aojah-* 'strength' : Skr. *ójas-* (§ 451) See Hübschmann Kuhn's Ztschr XXIV 353, Bartholomae Handb. § 129 rem.

Rem. 2. *derᵉuδa-* 'plait' may be held as an example for *w* = *b*: Skr. (and prim Ar) *dṛbdhá-* 'knitted, wound' from rt. *dei bh-*, it is however not certain, that prim Ar *b* was a continuation of prim Indg *b*, see §§ 469, 6 552

On the other hand the late Av. explosives initially (except *g* before consonants s. above) and after sibilants and nasals. Late Av. *daδmahi*: Gāþ. *daδᵉmahī* *hazdyāþ*: Skr. *sīdyát*, 3. sg. opt perf. from rt *sed-* 'sit', Indg. **se-zd-ié-t* *vandaitē* 'he loves' : Skr *vándatē* 'he praises' *gāu-š* 'bullock' : Skr. *gáu-ṣ*. *mazga-* 'marrow' . cp Skr. *majjan-* fr prim Ar. **mazjan-* (§§ 450. 590. 591). *aŋgušta-* 'toe' : Skr *aŋguṣṭha-*.

Prim Ai. *dn* appears in Av as *dv, db, đb, b* See § 356.

Late Av. *nm* from *dm* in *nmāna-* : Gāþ *dᵉmāna-* n. 'house', to Skr. *dáma-s* Gr δόμο-ς etc., similar in formation to Gr. δμη- in δίδμη-κα ἐν-δμητο-ς. Cp. Skr. *kahánmant-* § 477

Late Av *v* fr *gv*, see § 450.

Prim Ar. *žn* = Indg *ǧn* became *šn*, in Iran. prim. Ar. *žm* = Indg. *ǧm* became *sm* in Av. See § 403.

§ 479. Mediae aspiratae Prim. Ar *bh, dh, gh jh, žh* = Indg. *bh, dh, gh, ǧh*.

Skr *bhrátā* Av. *brāta* O.Pers. *brātā* 'brother', Indg. **bhrátō(r)*. § 329.

Skr. *dhárš-ā-mi* 'I venture', Av. *darš-i-š* 'vehement, eager', O.Pers. *a-darš-nau-š* 'he ventured', rt. *dhers-*. § 357.

Skr. *gharmá-* Av. *garᵉma-* 'heat', rt. *gher-*. Skr. *hánti* Av. *jainti* 'strikes', O.Pers. *ajan-am* 'I struck', rt. *ghen-*. §§ 452—454.

Skr. *háv-ana-* Av. *zav-ana-* 'call', weak rt. form *ǧhu-*. §§ 405—407.

§ 480. In Sanskrit *ẑh* became in the first instance *jh*, e. g. prim. Ar. **ẑhaų-* 'to call' became **jhaų-*, prim. Ar. **ẑhā-* 'leave, forsake' became **jhā-* (cp. § 406).

Then the law of the dissimilation of aspirates operated, by which the aspiration was dropped when the next syllable began with an aspirate. *bódhati* 'awakes, is heedful of' fr. prim. Ar. **bhaųdh-a-ti*, rt. *bheųdh-* (Gr. *πεύθομαι* 'I inquire', Goth *anabiuda* 'I bid, command'). *drógha-s* 'malicious injury' fr. prim. Ar. **dhraųgh-a-s*, rt. *dhreųgh-* (O.Icel. *draugr* 'ghost'). *dádhāti* 'places, lays' from prim. Ar. **dha-dhā-ti*, rt. *dhē-* (Gr. *θή-σω* 'I shall put, place'). *durbhíš durbhyás durbhyám* (from Indg. **dhur-* 'door', Armen. *durn*, Gr *θύρᾱ*, Goth *daúr*) from **dhur-bhiš* etc.; then after these *dúr-as dvár-as* etc instead of regular **dhúr-as* etc ; observe, that the word was current in the Veda only in the pl. and du., fewer case forms than was otherwise usual therefore stood opposite to the *bh*-cases. *jaghâna* perf 'he struck' fr. prim. Ar. **jha-ghān-a* Indg. **ghe-ghon-e*, imper *jahí* 'strike' fr. prim. Ar **jha-dhi* (a new formation for regular **ghadhi*, see § 454 rem.) Indg **ghų-dhí*, rt *ghen-* (Gr. *φόνο-ς* 'murder'). *já-hā-ti* 'leaves, forsakes' fr. prim Ar **ẑha-ẑhā-ti* (Av *za-zāiti*) through the intermediate stages **jhaẑhāti *jaẑhāti* (s below). *jaṅghâ-* 'the lower part of the leg' fr. prim. Ar. **ẑhaṅghā-* (Av. *zaṅga-* 'instep', Goth. *gaggs* 'way, street').

From the similar law affecting the tenues asp , which was undoubtedly specially Skr , I conclude that this law of dissimilation operated first in Skr , not already in prim. Aryan. See § 475.

Rem. 1 Forms like *vṛtra-há-bhiš* (*vṛtra-hán-* 'vritra killing') instead of **-ja-bhiš* (cp. *jahí* above) are easily explained as new formations So far as I know, dissimilation never appears, when the two aspirates belonged to different members of a compound, cp e g *abhi-bhūti-š* 'ascendency', *gaṅbha-dhi-š* 'the place for coition, nest', *ahi-hán-* 'serpent-killer'; cp. on the other hand Gr *ἐκε-χειρία* § 496. It must here be observed that such compounds might have been formed anew, after the above law had ceased to operate, and that the simple form — which was felt as a factor in composition — might always have exercised an influence on the old inherited and actually reproductive forms

Rem. 2. In forms like 2. sg. *dhatsé* beside 1. sg. *dadhé* 'I place for myself', fut. *bhōtsyáte* beside pres *bódhate* people often speak, in an

unscientific fashion, of a 'leaping over of the aspiration' on to the media of a preceding syllable *dhatsĕ, bhōtsya'e* had much rather retained the Indg initial (Indg. *dhē, bheydh-*) *-ts-* was here already in existence before the operation of the law of dissimilation, and when this came into operation there was nothing to be dissimilated in these forms, hence the initial remained intact Cp Gr *θρίξ τριχός*. § 496.

Rem. 3. In what manner did dissimilation regularly take place, when aspirates formed the initial sound in three or more syllables? e. g. Skr *ba-bŏdha* 3 sg perf = prim Ar **bha-bhaydh-a* This question requires further investigation.

jh (= Indg. *gh* and *ĝh*) became *h* after the conclusion of the aspirate-dissimilation, as *hánti* fr. **jhanti*, Indg **ghen-ti* (Av. *jainti*), *jáhāti* fr **jajhāti*, prim Ar. **źha-źhā-ti* (Av. *zazāiti*).

h appears several times for *dh* and *bh* without the reason for the change being clear. Thus *-hi* beside older *-dhi* Gr *-θι*, ending of the 2 sg imper., *-mahe* Av. Gāθ *-maidē* Gr. *-μεθα*, ending of the 1. pl mid., *sa-há* beside older *sa-dhá* 'at the same time, with' Av *ha-da gźh-ná-mi* beside older *gźbh-ná-mi* 'I seize' [Cp. von Bradke Ztschr d d morg Ges XL, p. 65 sqq.]

Rem 4 This change of *dh bh*, which caused the meaning of Skr. *h* to be fourfold, (Indg *bh, dh, gh, ĝh*), gave rise to several 'deviations' (Entgleisungen) Thus desiderative *jighźšati* 'he desires to seize' for **ji-ghźps-a-ti*, to *gźhnāmi*

§ 481. In Iranian prim. Ar *bh, dh, gh jh, źh* fell together with prim Ar. *b, d, g j, ź* (cp. Keltic § 524 and Baltic-Slav. §§ 542 549) Hence all the mutations, mentioned in § 485, took place here also.

The spirants *w, d, y ž* in later Av *awi* Gāθ *aibī* 'above, thereto, hither': Skr *abhí awi-a-n* 'cloud': Skr *abhra-*. Pres. stem *da-dā-* Gāθ *da-dā-* 'put, place' · Skr. *da-dhā-* prim Ar. **dha-dhā-*. *dar'ya-* Gāθ *dar'ga-* 'long' Skr *dīrghá-*. *yn-ē* 1. sg. pres mid from *jan-* (Indg *ghen-*) 'slay'. Skr. *ghn-é*. *snaežaiti* 'it snows', prim Ar *snajhati*: Gr *νείφει* Indg **sneygh-e-ti dažaiti* 'burns'. Skr. *dáhati* (cp. *ni-dāghá-s* 'heat'), Indg. **dhegh-e-ti*.

Rem. *j* written for *ž* e g. in *ar'jaiti* 'deserves, is worth' Skr *árhati*, rt *argh-* (§ 429 *a*). Cp § 478 rem 1

Explosives (*b, d, g j*) in later Av. *barāmi* 'I bear' : Skr. *bhárāmi*. *skemba-* 'pillar' : Skr. *skambhá-* 'supporting pillar'. *dāma* 'creature' : Skr. *dháma*, rt. *dhē-*. *mīžda-* 'pay, reward' : Skr. *mīḍhá-* Gr. *μισθό-ς*. *dazdi* 'give' imper. : Skr. *dēhí*. *bandayeiti* 'binds' : Skr. *bandhāyati*. *garᵉma-* 'glowing heat' : Skr. *gharmá-*. *zaŋga-* 'instep' : Skr. *jaŋghá-*. *jainti* 'strikes, kills' : Skr. *hánti*. *renjayeiti* 'he hastens' · Skr. *raṃhāyati*.

Late Av. *n* fr. *dn* : *buna-* 'ground, bottom' : Skr. *budhná-*.

Late Av. *v* fr. *gv*, see § 453.

Prim. Ar. *žhn, žhm* = Indg *ghn, ghm* became Av. *šn, sm*. See § 407.

§ 482. The prim Ar. combinations *bdh, dʰdh* (thence *zdh* already in prim. Ar.), *gdh, ždh* = original *bh, dh, gh, ĝh* + *t* and *bzh*, (*dzh*, thence *zh*,) *gžh, žžh* = original *bh, (dh,) gh, ĝh* + *s*. Cp. §§ 469, 6 470

Skr. *dṛbdhá-* 'knitted, tied, wound', Av *derᵉwda-* 'plait' (§ 478 rem 2), rt *derbh-*. Skr *mēdhas-* Av *mazdah-* 'wisdom' = **mṛ̥dh+tos-*, see § 476 Skr. *drugdhá-* n 'offence, insult', rt. *dhreṷgh-*. Av. Gāp. 3 sg imperf. mid *aoγᵉdā* (*aog- aoj-* 'speak, name') = **eṷgh+to*, cp. Gr. *εὔχομαι εὔ̓ντο*. Skr. inf. *vṓḍhum* 'vectum' — **ṷeĝh+tu-m*, Av. *važdri-š* 'promoter' = **ṷeĝh+tri-*, rt *ṷeĝh-*, see § 404, 2

Rem 1 Many exceptions to this law especially in Iranian — arose through the analogy of other words of the same suffix-category, in which the suffix had *t* (e g Skr *yukta-* Av *yuxta-* 'junctus') Examples Av. *dapta-* 'deceived, cheated' for **dauda-* = Skr *dabdhá-* Av O.Pers. *basta-* 'bound' for **bazda-*, cp Skr *baddhá-*, rt *bhendh-* Av. *druxta-* O.Pers. *dūrūxta-* 'cheated, belied' for Av **drugda-* (Gāp **drugᵉda-*) O Pers **dūrūgda-* = Skr *drugdha-* Av *aoxta* beside Gap *aogᵉdā*, see above. Av. *vaštar-* 'beast of draught' for **ražda-* (cp *ražri-š* above) = Skr. *vōḍhár-*. Skr Ved 2 du *dhaktam* for **dagdham* from *dagh-* 'reach to, attain', 1 pl *daghma* 3 sg mid. *dhaktē* 'ῥῆτρα' probably in the first instance for **daddhe* (see below) Cp Lat part. *com-ēstus* for *com-ēsus*, 2. pl. *ēstis* for **ēsis* etc, § 501 rem. 2, OHG *wista* for *wissa* etc., § 527 rem. 3.

The Skr. forms with *ddh*, as *baddhá-*, *buddhá-*, arose by attraction to the other forms of the same root, thus also **daddhé* probably as intermediate stage between **dēdhē* and *dhatte*. Cp. *daddhí* for *dehí* § 476 rem. 1, *didiḍḍhi* for **didīḍhi* § 404 rem. 2.

Skr. *dípsati* 'intends to injure', Av. *diwžaidyāi* 'to wish to deceive', desiderat. formations to Skr. *dabh-* Av. *dab-*. Skr. 2. sg. *dhókšī* 'thou milkest' (3. sg. *dógdhi*); Av. Gāþ. 2. sg. *aoγžā* (3. sg. *aoγ°dā* see above). Skr. 3. sg. *vákšat* Av. *vašaþ* *s*-aorist to Skr. *váhati* Av. *vazaiti* 'vehit', rt. *ueĝh-*.

Rem. 2. Examples for *dh* + *s* seem to be wanting. The *-ts-* in Skr *bhōtsyátē* (fut fr rt *bheudh-*) cannot be regarded as the regular continuation of *dzh*, because after prim Ar *zd(h)* from *dzd(h)* (§ 476) it is probable that *d* became assimilated to the following *zh* already in prim. Ar.

Armenian.

§ 483. The tenues were very variously treated as regards their form of articulation.

p appears as *ɸ* in the vicinity of original *s*: *ɸoɪt̆* '*σπουδή*', *eɸem* 'I cook' probably to Gr. *ἕψω*. As *v* after vowels: *ev* 'and, also', Gr. *ἐπί*, *evt̆n* 'septem'. As *h* (*y*) initially before vowels: *hing* '*πέντε*', *herɪ* 'distant' Gr. *πέραν* See § 330.

Initial *p* disappeared before *l* *li* (gen *lɪoy*) 'full' fr. **plē-i̯o-*: Skr. *prā-tá-* 'filled', Gr *πλή-ρης* 'full', Lat. *plē-nu-s*, O.Ir. *lī-naim* 'I fill'. *luana-m* 'I wash': Skr. *plāv-ayāmi* 'I inundate, pour over, wash', Gr. *πλύνω* 'I wash'.

t appears as *t* after *s*: *astl* 'star' Gr. *ἀστήρ*. As *t̆* initially before vowels and (under what conditions?) medially: *t̆aṙam-i-m* 'I become dry, wither' Gr. *τέρσομαι*, *ut̆* 'eight' Gr. *ὀκτώ*. *k̆* fr. *tu̯*: *k̆o* 'of thee' Skr. *tvám*. *t* appears as *d* after *r*, *n*: *mard* 'man, homo' Skr. *mṛtá-*, *dr-and* 'door-post' Lat. *antae*; cp. *g* fr. *k* below. See § 360.

Intervocalic *t* became *i̯* and then disappeared: *hair* 'father' Gr. *πατήρ*, nom. pl. *har-k̆* first probably fr. **hair-k̆*. *-aur-* from *-atr-* : *haur* 'father's' Gr. *πατρ-ός*. *-rh-* *-h-* fr. *-rti̯-* or *-rtr-* : *marh mah* 'death' Skr. *mṛtyú-š* or Goth. *maúrþr*. See § 360.

t- had disappeared initially in *ere-k̆* 'three', first of all from **re-k̆* : Skr. *tráyas*. See § 263.

q appears as *k* (*k̆*) and *ç* except after nasals and liquids: *akn* 'eye' Lith. *ak-i̯-s*; *lk̆-ane-m* 'I leave' Gr. *λιμπάνω*; *aç-k̆* pl. (*i*-stem) 'eyes' Lith. *akì-s*. As *g* after liquids and nasals: *arge*

'impediment' Gr. *ἀρκέω*; *hing* 'five' Skr. *páñca*; cp. *d* fr. *t* above. See § 455 [1])

Examples for the dropping of *q* are uncertain. See Hübschmann Arm. St. I 76.

k̂ generally appears as *s*: *sar* 'height' Skr. *śiras-*. *c* fr. *sk̂* (*ĺsk̂*, *ssk̂*) and *k̂s*. *harc* 'question' Skr. *pṛchá*, *vec* 'six' Gr. *ἕξ*. See §§ 408 561.

Loss of *k̂* before *t* in *ut* 'eight' (Skr. *aṣṭá*), probably also before *l* in *lu* 'audible' (cp. Skr. *śru-*). See § 408.

§ 484. The mediae *d*, *g* became tenues, *ĝ* became a voiceless affricata Cp the shifting of the mediae in Germanic, § 533.

d became *t*. *tiw* 'day' Skr. *dívā* instr. 'by day'. See § 361.

g became *l*. *ler* 'food, meat'. Skr. *girámi*, rt *ger-*. See § 456.

ĝ became *c*. *cer* 'old man' Av. *zaurvā-* 'age', rt. *ĝer-*. See § 409.

Examples for the shifting of *b* to *p* are unknown to me. Cp. § 331.

§ 485. The mediae aspiratae *bh*, *dh*, *gh* became *b*, *d*, *g*; *ĝh* became the voiced affricata *ǰ*, or the voiced spirant *z*.

bh became *b*, which remained initially and after *l*, *r*, *m*, but became *v* after vowels *ba-n* 'λόγος'. Gr. *φηγὸς elbeur* 'spring, source'. Gr. *φρέαρ*. *arbi* 'I drank'. Lat. *sorbeō*. Instr. sg. *akam-b* pl. *akam-bk̂* from *akan-* 'eye'. Skr. *-bhiš*. *lus-a-vor* 'clear, bright': Gr. *λευκο-φόρο-ς*. See § 332

dh became *d*. *diem* 'I suck': Skr *dhấyāmi*. See § 362

gh became *g*, which remained except before original *e-* and *i*-vowels, before these it passed into *j* initially, and into *ž* medially *gan* 'strokes, blows': Skr. *ghan-á-*. *jerm* 'warm': Gr. *θερμό-ς*. *iž* 'viper'. Av. *aži-š*. See § 457.

ĝh became *j* initially and after *n* and *r*, and *z* after vowels. *jaune-m* 'I consecrate, sacrifice'. Av. *zaotar-*. *anjuk* 'narrow':

1) The *j* in *arj* 'bear'. Skr *ṛkša-s* Gr *ἄρκτο-ς* is probably parallel to this *g* and *d*. Cp. § 561.

Av. *qzah-*. *barjr* 'high' : Av. *ber'zant-*. *lizu-m* 'I lick' : Lith. *leżiù*. See § 410.

Greek.

§ 486. The tenues generally retained their form of articulation.

p. *πλέ(ϝ)ω* 'I swim' : Skr. *plav-ē*. See § 333.

t. *τάλ-αντο-ν* 'balance' : Skr. *tulā-*. See § 363.

k̑. *καρδ-ίᾱ* 'heart' : Lat. *cor*. See § 384.

q. *καρπ-ό-ς* 'fruit' : Skr. *kṛpāna-s.* *ποινή* 'atonement' : Av. *kaenā-*. *τε* 'and' : Lat. *que*. See §§ 425. 426. 427.

These sounds seem to have been spoken with aspiration for a time in some districts, especially in Attica. Owing however to the inexactness and inconsistency of the written language it is impossible to determine accurately how far this tendency extended

Rem Many of the cases, where the aspiration was formerly regarded as being purely phonetic, are rather new formations made by analogy, e. g *ἀλείφω* 'I anoint with oil' (beside *λιπα-*, Skr. *limpāmi*), *δέχομαι* 'I receive' (beside Ion Dor Lesb *δικομαι*), perf *τετροφα τετράφαται* (to *τρέπω* 'I turn'). See Osthoff Zur Gesch d Perf 284 ff. In the same manner mediae also came into the place of tenues, as *κεκλεβώς* (Messen.) to *κλεπ-* 'steal', *ὠρύγην* to *ὀρυκ-* See Osthoff in the above work

§ 487. Tenuis became ten. asp. before *ῥ* i. e. voiceless *r* (cp § 266). *τέθριππο-ν* 'four-horse chariot' = *τέτῥιππο-ν* fr. **τετρ-ίππο-ν*. *φροῦδο-ς* 'gone away' = *πρόῦδο-ς* fr. **προ-όδο-ς*. This affection corresponds exactly to *ἐφοδος* 'approach' = *ἔπόδος*.

Tenuis became media before media. *ἐγ-δίδωμι* fr. *ἐκ+δίδωμι* (cp. Cret. *ἐὸδίηται* with *δὸ* fr. *γ-δ*, cp. *νυττί* § 384), *ἐγ-βάλλω*, *ἔγ-γονο-ς*, *ὑβ-βάλλω* The etymological orthography was frequently used, *ἐκ-δίδωμι* etc., and probably it was also pronounced *-κδ-* etc.

ντ = Indg. *nt*, *ŋq* (§ 427 *b*) became *(ν)δ* in Pamphyl. (for *-(ν)-* cp. § 205). 3. pl. conj. *ἄγω(ν)δι* = Dor. *ἄγωντι*. *πέ(ν)δε* = Att. *πέντε*, Indg. **peŋqe*.

§ 488. *πμ* mostly became *μμ*, Lesb. *πτ*. *ὄμμα* 'eye' fr. **ὀπμα*, Lesb. pl. *ὄππατα* *κέκαμμαι* 'I am bent' from **κεκαμμ-μαι* **κεκαμπ-μαι*, cp. 3. sg. *κέκαμπται*.

When μ in the combination $\tau\nu\mu$ suffered epenthesis (cp. *τεκταίνω* etc. §§ 130. 639), τ became assimilated to the ν and disappeared. *δέσ-ποινα* 'mistress of the house' fr. **ποτ-νμα* beside *πότνια* = **ποτ-νιμα*. Cp. *ῥαίνω* fr. **ῥαδνμω* § 492.

§ 489. $\hat{k}\underline{i}$, $q\underline{i}$ became a geminated spirant ($\underline{\hat{p}\hat{p}}$?) in prim. Greek, this sound was represented by *-ττ-* medially in Bœot., Thess., Att., and in the other dialects by *-σσ-*, but initially universally, as it seems, by *σ-*. On account of the vowel-length in *ἐλάττων* (§ 479) it must be assumed that *ττ*, and *σσ* arose first from a geminated spirant, since *αν* would not have been subjected to the process of compensation lengthening before an explosive. Cp. § 427 *d*. *μάσσων* 'longer' (to *μακρό-ς*) · Av. *mas-yå* 'greater'. *πάσσαλο-ς* 'plug, nail', rt. *pāk-* (Skr. *pāśa-s* 'string, sling'). *πέσσω πέττω* 'I cook', rt. *peq-*. *ὄσσε* 'both eyes' : Lith. *akì-s*. Hom. *σεῦε* (*ἔ-σσευε*) 'he drove, hunted, scared' : Skr. *cyav-cyu-* 'put in motion'. Megar. *σά* '*τίνα*' fr. **k*$^{\text{u}}\underline{i}$*-α* beside *ἄ-σσα ἄ-ττα* (on *ἀ-* s. § 654). In Att. *τεύμαομαι* 'I pursue' and *τευτάζω* 'I busy myself eagerly with something', in case they are from the same root as Hom. *σεῦε*, the initial *τ* may have come from the augmented and reduplicated forms.

t$\underline{i}$ became *ss* in prim. Gr. Hence universally *σ* after consonants. Fem. Cret. *πάνσα* Att. etc. *πᾶσα* Lesb. *παῖσα* 'tota' (§ 205) fr. **παντ-μα*. *δόξα* 'doctrine, opinion' fr. **δοκ-τ-μα*. *καμψό-ς* 'bent' (Hesych.) fr. **καμπ-τ-μος*. Cp. the *σ-* of *σέβεται* = Skr. *tyájatē* (cp. § 428 *a*), which probably arose from Indg. *tj-* (§§ 117. 598). Otherwise medial *σσ*, which was retained in Homer and elsewhere, seems to have become regularly partly *σ* (Ion. Att.), and partly *ττ* (Bœot. Cret.). *τόσσο-ς* 'tantus' *πόσσο-ς* 'quantus', *τόσος πόσος* (cp. *μέσσο-ς μέσο-ς* § 497), Bœot. Cret *ὁ-πόττο-ς*. With this *ττ* cp. Bœot. *κομιττάμενος* = Hom. *κομισσάμενος* fr. **κομιτσαμενος*, Cret. *δάτταθθαι* = Hom. *δάσσασθαι* fr. **δατσασθαι*.

Rem 1. The regular representatives of $\hat{k}\underline{i}$, $q\underline{i}$ mostly appear for *t$\underline{i}$* e g. Att. *ἐρέττω* (*ἐρέσσω*) fr *ἐρετ-* like *φρέττω* (*φρέσσω*) from *φρεικ-*, *κρείττων* (*κρείσσων*) fr *κρετ-* like *ἥττων* (*ἧσσων*) from *ἡικ-*. These were probably new formations after the analogy of those with original $\hat{k}\underline{i}$, $q\underline{i}$. Cp. the author's Griech. Gramm. p. 36 note 1.

The Indg. combination *ti* appears medially, in most dialects, generally as *si* after other sounds than *s* (cp. *ἔστι*, *πίστις*). Att. *δίδω-σι* 'gives' : Skr. *dádā-ti*; *βά-σι-ς* 'step, stride' : Skr. *gá-ti-š*; *ἀνεψιό-ς* 'first cousin' : O.Bulg. *netiji* cpf. **nept-iio-s*.

Rem. 2. The combination *-τι* was frequently retained in Bœot., Pamphyl. and Dor., where the other dialects had *-σι*, as Dor. *δίδωτι πλούτιο-ς* But also in those dialects, which show *-σι*, *-τι* occurs beside this, as Ion. Att. *ἔτι*, *αἰτιο-ς* (cp *πλούσιο-ς*), *ἀντί*, *κέρατι*, *φάτι-ς* (cp *φάσι-ς*). Form-transference may be assumed in many cases, e g *κέρατι* after *κέρατος* etc.; *σκότιο-ς* after *σκότο-*, *φάτι-ς μάρπτι-ς μάτι-ς* after the cases with *-tɛ̯-* Cp Hom *Ποσειδᾶων* Arcad *Ποσοιδᾶνο*, Lac *Ποσίδᾶνος* with *σ* instead of *τ* (Bœot *Ποτειδάων Ποτοιδάιχο*) after *Ποσιδ-* in Hom *Ποσιδήιος* etc. Nevertheless this does not clear the matter up satisfactorily It is questionable, whether *-σι* did not already arise, to a certain extent, in prim. Greek. Such a great antiquity is especially to be conjectured for the *-σι* in nouns like *βάσι-*, since these also occur with *σ* in Bœotian and the whole of Doric.

In Lac. and Cypr. *σ* = *tɪ̯*, in Cypr. at the same time the *σ* of *-σι* = *-ti* passed into *h*· Lac part. fem. *ἐν-ήβώαίς*, Cypr. 3 pl. conj. *φρονέωί* Thus *σ* became *ρ* in Eretria: part. fem. *ὀμνυούρας*, 3. pl. conj. *παρα-βαίνωριν*.

Medial *tɪ̯* became *σσ* in Ion. etc., and *ττ* in Bœot. and Att. Hom. *τέσσαρες* Herod *τέσσερες* Lesb *πέσσυρες* Arcad. *τεσσερράκοντα* + Bœot. *πέτταρες* Att. *τέτταρες* 'four' : Skr. *catvár-as*. Initially : Cret. *τϝέ* 'thee' (wrongly written *τρέ* in Hesych.) Dor. *τέ* Bœot. *τίν* Lesb. Ion. Att. *σέ* : Skr. *tvá-*. On the enclitic Ion Att etc *τοί* see § 187

§ 490 *ts* became *σσ* in prim. Greek, thence *σ* in later times. Hom. aor. *πάσσασθαι ἐπάσαντο* fr. **πατ-σ-* : pres. *πατέομαι* 'I eat, consume'. Hom aor. *ἐφ-εσσάμενο-ς ἀν-έσαντες* fr. **ἑτ-σ-* : *ἕδ-ος* 'seat' Hom. *ποσσί ποσί* Att. *ποσί* fr. **ποτσι* : *πόδ-ες* 'feet', cp. Skr. *patsú*. Correspondingly Indg. *t*s t(h)* became *st(h)* in prim. Greek. *ἄ-παστο-ς* 'jejune' : *πατ-έομαι*. *ἴστε* 'ye know' *οἶσθα* 'thou knowest' (Skr. *vétttha*) : *ἴδ-μεν οἶδ-α*. Cp *σθ* fr *d*s dh* § 494.

σκ from *γσκ*. *διδάσκω* 'I teach' : *δι-δαϰ-τό-ς*, Lat. *di-dic-ō*. *ἐίσκω* 'I make like' : *ἔοικα* Bœot *ἐς-κη-δεκάτη* = *ἐξ-κ*. Cp. also *ἐς-* fr *ἐξ-* 'ex' in Arcad. *ἐσδοτῆρες*, Bœot. Gortyn *ἐς τῶν*.

τρά-πεζα '(four-legged) table' fr. **πτρα-*, Indg. **qtur-*, cp. Skr. *túrya-* § 471.

§ 491. In most dialects, e. g. Ion.-Att., the mediae were voiced explosives in the oldest monuments.

b. *βάρβαρο-ς* 'foreign': Skr. *balbalā-karōmi*. See § 334.

d. *δέκα* 'ten': Skr. *dáśa*. See § 364.

ĝ. *γεύω* 'I let taste': Av *zaoša-* 'favour, kindness', rt. *ĝeus-*. See § 385.

g. *ἐρυγγάνω* 'I spit out': Lith *rúgiu*, rt. *reug-*. *βοῦς* 'bullock': Skr. *gaú-š*, Indg **gōu-s*. *δελφύ-ς* 'womb': Skr. *gárbha-s*, rt. *gelbh-*. See §§ 425 426. 428.

The voiced mediae became voiced spirants We may conclude that *β* had already become *b* in Lac and El. before the beginning of the Roman period, from the fact that *ϝ* (*F*) was represented in these dialects by *β*. In the oldest El. monuments *δ* appears as *ζ* i. e *đ*, e. g *ζέ*, *ζίναι*, *Fειζώς*, this affection, so far as we can see, did not take place in the other dialects until later Forms like *τριγαίνις*, *Σαραπιγῆον*, *ελαίγω*, occurring in the second century B. C., exhibit the transition of *γ* into the spirant *j* (in any combination whatever) The *γ*, which here represents the consonantal *j*, is only conceivable on the supposition that it denoted elsewhere a spirantal sound, the loss of *γ* after *ι* in Boeot. *ἰών* = *ἐγών*, Tarent. and elsewhere *ὀλίος* = *ὀλίγος* etc., also points to this change.

In Arcad. *ζ* was also written for *δ* = Indg *g*, e g. *ζέλλω* beside *δέλλω* 'I throw'. Hence a spirant was also spoken here. Cp. § 428 *b*.

§ 492 *βν*, *βμ* became *μν*, *μμ* in prim. Greek. *μνάομαι* 'I woo to wife' from **βνᾱ-* 'wife', Indg. **gnā-*, see § 428 *a*. *σεμνό-ς* adjectival part to *σέβομαι* 'I feel awe', rt. *tjeg-*, see § 428 *a*. *τρίμμα* (*τρῖμμα*) 'that which is rubbed', perf. mid. *τέτριμμαι*, to *τρίβω* 'I rub'.

In like manner *gn*, *gm* probably became *ən*, *əm*[1]) in the same period. *γί-γν-ο-μαι* 'am born' i. e. *gignomaj*. *στυγ-νό-ς*

1) For the grounds on which this theory is based see Ebel Kuhn's Ztschr. XIII 264, Westphal Method. Gramm. I 1, 17, the author in Curtius' Stud. IV 103 f, L Havet Mém. de la soc. de lingu. IV 276.

'hated' i. e. **stynəmos*. *inən* became *īn* in Dor., Thess., Bœot. and later Att., as Dor. *γίνομαι γῑνώσνω* (cp. § 618). *ăg-mŏ-ς* 'breakage' i. e. **anmos*. *ŋgm* became *ŋm* (written *γμ*) through the intermediate stage *ŋəm*, just as *mpm* became *mm* through *mmm* (§ 488): *ἔφθεγμαι, ἐλήλεγμαι* beside *-γξαι -γκται*

ῥαίνω 'I sprinkle' fr **ῥαϑ-νιω* (Osthoff Zur Gesch. d. Perf. 457 ff), like *δές-ποινα* fr **-ποτνια*, see §§ 488 639.

Lac. *ἑλλᾱ́* 'seat' fr. **ἵϑ-λᾱ*, see § 364.

§ **493**. *dĭ, ḡĭ, gĭ* became one sound, which was mostly written *ζ* *Ζεύ-ς*: Skr *dyāú-ṣ*; *πεζό-ς* 'on foot', to *πεδά πέδο-ν ἄζομαι* 'I stand in awe of', to *ἅγιο-ς*, Av. *yazaitē*, rt. *ĝag-* *ζῆ* 'lives' fr. **ζηει*, to Av *γyaiti-*, stem *gĭē-*; *νίζω* 'I wash', to *νίπτρο-ν*, rt *neig-* (cp § 428 *d*).

σδ was also written for *ζ* in Lesb., e g. *ἐικάσδω*. *-δδ-*, for which, initially, *δ-*, appears in Lac., Gortyn, Bœot., and Megar., e. g. the verbal endings *-άδδω -ίδδω* = *-άζω -ίζω*, *Δεύς* = *Ζεύς*, *δωός* = *ζωός*. Seldom *τ* = *ζ* in Cret., as *Τῆνα* = *Ζῆνα*, also *Ττῆνα*.

Owing to the uncertainty which exists regarding the value of these different letters, it is impossible to determine accurately the course of development, which the prim. Gr. combinations *dĭ, gĭ, gʷĭ* passed through.

Rem *ζ* was probably pronounced *zd* in Ion.-Att., cp O Bulg *žd* fr *dĭ* § 147 rem 1 *δδ* might possibly go back first of all to *zd* — or *žd* — See the author's Griech Gramm § 52 with addendum to p 47, G. Meyer Gr Gr ² 274 f

§ **494**. *ἴσθι* i. e. *isthi* arose fr. Indg. **ŋuᵉdhí* 'know' imper. (cp. Skr. *viddhí*, § 476) Whether the intermediate stage was **ŋuzdhi* or **ŋutsthi*, remains doubtful. Gr. *κύσθο-ς* 'a hollow, pudenda muliebria' was probably a similar case (§ 469, 5).

§ **495**. The mediae aspiratae *bh, dh, ḡh, gh* became tenues aspiratae in prim. Greek. These then probably remained unchanged in most dialects, certainly e. g. in Ion.-Att., down to historic times.

bh. *ὀφρῦ-ς* 'eye-brow': Skr. *bhrú-ṣ*. See § 335.

dh. *θῡμό-ς* 'heart, courage, passion': Skr. *dhū-má-s.* See § 365.

ĝh. *ἔχ-ω* 'I have, hold': Av. *haz-ah-*, rt. *seĝh-*. See § 386.

gh. *λέχος* 'bed': O.Bulg. *ležą*, rt. *legh-*. *φόνο-ς* 'murder' and *θείνω* 'I strike': Skr. 3. pl. *ghn-ánti*, rt. *ghen-*. See §§ 425. 426. 429.

The tenues aspiratae became voiceless spirants in most combinations, through the intermediate stage of affricatae. We are not in a position to determine precisely the place and time of this shifting, since the written language offers too few sure holds. The affricata-stage seems to occur in such spellings as *ὄχχος σκύπφος* and in measures like *ὄφιν* (Hom.) *βρόχον* (Theognis) as trochees. Cp Roscher Curtius' Stud. I 2, 63 ff. Blass Ausspr.[2] 84 ff. [G. Meyer Gr Gramm[2] 207 ff]. Spirantal value (*p̄*) can be established most extensively for *θ*. *θ* remained an explosive in Cret. (Gortyn) before *ρ ν*, as is seen by the writing *τρ τν*, and was a spirant before vowels. *θ* probably only remained an explosive after *σ* in Bœot, El, and Locr. (cp. Att. *ἐστι* beside *δίδωσι*, § 489), hence the writing of *στ* for *σθ*. In Lac., where *p̄* can be established with the greatest certainty, it passed (before palatal vowels?, see Baunack Die Inschr. von Gortyn p. 36) further into *σ*, as *Σίων* = *Θίων*. *θ* as *p̄* became *f* in Bœot. and Epir, as is shown by the writing *φ* in *φεός* = *θεός* etc. This *φ* also shows that prim. Gr. *ph* (*φέρω*) had become *f* in these dialects.

Rem The often assumed change of prim Gr. tenuis asp. to media never existed. In cases like *σταμφής*, *πύνδαξ* beside *πυθμήν* it is a question of Indg media (§ 469, 8), whereas in such as *κατα-λέγ-μενο-ς* (beside inf *κατα-λέχθαι*, rt *λεχ-*), *δράγμα* 'handful' (to *δραχμή δράσσομαι*, Skr. *darh-* 'fasten') we have merely new formations, made after the analogy of similar forms from roots with media (Osthoff Zur Gesch. d Perf. 301 ff.).

§ 496. The tenuis aspirata lost its aspiration in prim. Greek, when a tenuis aspirata followed at the beginning of the next syllable. *τίθημι* 'I place' fr. **thi-thē-mi*, aor. *ἐτέθην* fr. **e-the-thēn*, rt. *dhē-*. *ἐπύθετο* 'he inquired for' fr. **e-phuth-e-to*, rt.

bheu̯dh-. Gen. τριχ-ός 'hair's' fr. **thrikh-os*. ἐκε-χειρίᾱ 'cessation of hostilities', Delph. Ἐκέ-φῡλο-ς fr. **ekhe-kh.*, **ekhe-ph.*

θρῐ̄ξ : τριχός and θέσσασθαι : πόθο-ς (§ 429 *b*) = Skr. *dhatsé* : *dadhé*, see § 480 rem. 2. Hence forms like πεύσομαι πύστις, πείσω πίστις (rt. *bheu̯dh-*) are shown to be new formations for **φεύσομαι* etc.; cp. fut αὔσω for regular αὕσω § 564.

The remark, made in § 480 rem. 1 on Skr. *vṛtra-hábhiṣ abhí-bhūti-š*, also holds good for the forms ἐχύθην (χέω 'I pour out'), θεθμό-ς Locr 'statute' beside τεθμό-ς Pind., θίθεσθαι Cret. Gort. = τίθεσθαι, ἀμφί-φαλο-ς 'having a double comb', ἀμφι-χέω 'I pour around', παχύ-χῡμο-ς 'with thick juices' etc.

It is difficult to ascertain in what manner the law of the dissimilation of aspirates operated in cases where three or more aspirates followed one after the other (cp πίπουθε, prim. Gr. **phe-phou̯th-e*, τίθητι prim Gr **the-thē-thi*). Only so much is as yet clear, that the regular operation had been crossed in many ways by analogical formations. Cp. Osthoff's attempt in his Zur Gesch. d. Perf. 305

§ 497. Indg. *dhi̯*, *ghi̯*, *ghi̯* as *thi̯*, *khi̯*, *khi̯* *kh*^{u}*i̯* fell together in prim Gr with *ti̯*, *ki̯*, *ki̯* *k*^{u}*i̯* and accordingly experienced the same treatment as these (§ 489)

μέσσο-ς μέσο-ς 'medius' (Skr *mádhya-s*) like τόσσο-ς τόσο-ς.

ἄσσον 'nearer' (ἄγχι, root *añgh-*) like μάσσων.

ἐλάσσων ἐλάττων 'less' (ἐλαχύ-ς . Skr. *laghú-š*) like πέσσω πέττω.

Italic.

§ 498. The tenues remained unshifted on the whole.

p. Lat. *pāx*, Umbr *pase* 'pace', Osc Paakul 'Paculus' : Skr. *páśa-*. See § 336.

t. Lat. *tovo-s tuo-s*, Umbr. *tover* 'tui', Osc. tuvai 'tuae' : Skr. *táva*. See § 366.

k. Lat. *clī-nō*, Umbr. kle-tram 'lecticam' : Skr. *śráy-a-ti*. See § 387.

q. Lat. *canō*, Umbr. kanetu 'canito' : Skr. *kaṇ-kan-ī*. Lat. *qui-s*, Umbr. Osc. *pi-s* 'quis' : Av. *ci-š*. See §§ 430. 431.

Where shifting of the tenues happened through sound-change, in combinations, it is frequently not evident — owing to the scantiness of the Umbr.-Samn. monuments — whether this change is to be regarded as having taken place in prim. Italic or only in single dialects.

§ 499. Lat. *b* from *p* before voiced explosives. *ob-dūcō*, *ab-dūcō*, *sub-dūcō*: cp. *op-eriō* 'I close', *ap-eriō* 'I open' (cp Skr. *ar-* 'move something', *apa+ar-* 'remove, put aside, open'), Osc. *op eizois* 'apud eos', Gr. ἄπο, Lat. *super* Gr. ὕπο. Hence probably original *p* in *optineō*, *suppōnō* etc, *ab- ob- sub-eō* made by analogy; *abs*, *obstrūdō*, *obtrūdō*, *subtei* etc. phonetically wrongly spelt.

Lat. Umbr. *g* from *c* in the combination *-ŋkl-* Lat. *angulu-s*, Umbr. *anglom-e* 'in angulum' fr **aŋklo-* (§ 269), to Lat *ancu-s uncu-s*. Lat. *singulu-s* fr. **sem-klo-* (§ 269) The cause of the same change is less clear in *septin-gentī nōn-gentī* beside *ducentī* (Gr. ἑπτα-κόσιοι); *vīgintī* beside *vīcēsimus* no doubt owed its *g* to form-transference Cp Thurneysen Kuhn's Ztschr XXVI 312 f.

Media from tenuis after nasals and before *r* in Umbrian. *tursiandu* 'terreantur' *ander* 'inter' *an-dendu* 'intendito' fr. **an tentu* i e. **an tend-tō* *iuengar* pl 'iuvencae' *abrof* 'apros' *subra* 'supra' *adrer* 'atris' Cp also Osc. embratur 'imperator'.

§ 500 Lat. *mn* fr *pn* *somnu-s*, *sopor*, Skr. *svápna-s* etc., see § 324 *omnis* fr **opnu-s*, to *ops opēs* Cp. *mn* fr. *bn* § 506.

Lat *ŋn* (written *gn*) from *cn* already in prehistoric times. *dīgnu-s* fr **decno-s*, *decus*, *tīgnu-m* fr. **tecno-m*, to Gr *τεκ-* (cp § 65 p 53). *ūligno-s ūligneu-s · ilex -icis*. *āgna* 'spica' (Salian hymn), to *acus* 'chaff', Goth. *ahana*, OHG. *agana* 'chaff' (otherwise Kluge Kuhn's Ztschr. XXVI 88, who postulates Indg. *akh-* because of Gr. ἀχνή 'chaff, foam') *nīxu-s*, too, fr. **cnīxo-s* (rt *kneigh-*, § 433 *b*) had passed through the stage *ŋnīxo-s* (cp. *Gnīxī dī*). Analogously Umbr. *co-negos* ku-nikas 'conixus' [1]). On *ŋn* fr. *gn* (with original media) cp. what is said in § 506.

1) Cp. also Lat. *cygnu-s* beside *cycnu-s* fr. Gr κύκνος, *Prognē* fr Πρόκνη *Gnōssu-s* fr Κνωσσός.

Lat. *mm* fr. *pm. summu-s* : *superior*. So also Umbr. *somo* 'summum'.

Lat. *ŋm* (written *gm*) fr. *cm. sēgmentu-m* : *secāre*. Cp. *ŋm* fr. *gm* with original *g*, § 506

§ 501. The change of *ts* to *ss* seems to have been prim. Italic. After a long syllable and finally *ss* became *s* in Lat.

Lat. *con-cussī* · *con-cut-iō*. *suāsī* fr **sṷātsī* : *suād-eō*. *scāla* fr. **scanslā *scantslā* · *scandō* (§ 208 pp. 175 –176) *novi-tās* fr. **-tāt-s*. *ferēns* fr. **ferent-s*. *con-cors* fr. **-cort-s* (gen *-cord-is*). That *-ss* = *-ts* had not yet fallen together with Indg. *-s* after nasals and liquids in Latin, follows from the contrast of *ferēns* with *ped-ēs* Indg. **-ŋs* (§ 208 p. 175) and of *con-cors ars* etc. with *pār fār* (§ 655, 9) Cp also the contrast of *penna* O.Lat. *pesna* fr **pet-snā* with *pēn-s* fr. **pes-n-s* (Skr *pás-as* Gr. *πέος* 'penis'), § 570.

Umbr. zeřef *serse* 'sedens', kutef 'cautus' ('cautens', as it were), Volsc *asif* 'incendens, adolens flammis'. *-f* first of all fr *-β*, further fr *-ns* = *-nts*, see § 209

Where *ts* (z) appears in Umbr.-Samn., it was of later origin : in Umbr. prihaz 'piatus' Osc. húrz 'hortus' etc., in Osc az 'ad', an extension of *ad* after the analogy of Ital *aps, ops, eks*; in Umbr. *-nts-* fr. *-ns-* (§ 209).

The change of *ts* to *ss* was repeated in Latin *possum* fr. **pot-sum*, which was either a new formation after *potest* (fr. *pote est*) or had arisen by syncope (§ 633) fr **póte-sum*.

Rem 1 Compounds like *assequor* fr **atsequor* (*ad sequor*), were formed at various periods of the language It is difficult to say, in which examples *ss* had arisen regularly, and in which by analogy.

Indg. *t"t* apparently became *ss* everywhere except before *r* [1]) in prim. Italic, thence *s* after long syllables Lat *ob-sessu-s* : Skr. *sattá-* Av. *hasta-*, Indg **set"to-s* i. e. **sed+to-s*, rt. *sed-* 'sit'. *fassu-s* : *fateor. fossu-s* : *fodiō. vorsu-s*, Umbr. *trah-vorfi* 'transverse' (*rf* from *rs*, cp. § 209) : Skr. *vṛttá-* 'versus', O.Bulg. *vrĭsta* f. 'state, situation', Indg **ṷṛt"to-s*, rt *ṷert-* 'vertere'.

1) And except finally? Cp Lat *ēst* 'eats' from rt *ed-*.

morsu-s : *mordeō*. *scānsum* : *scandō*, cp. Skr gerund. *skantvā*. *vīcēnsimu-s vīcēsimus* : Bœot. *Fῑκαστό-ς*, cpf. **μῑ̆κm̥t^s to-*. *vīrōsu-s* fr. **μῑso-μm̥t^s-to-s*, see § 238. *ūsu-s ūsiō* fr. **oiso-s *oisiō*, Pelign. *oisa* abl. 'usa, consumpta' : *octor ūtor*. Cp. also *fīsu-s*, with which Bucheler connects Umbr. Fisiu abl. 'Fisio', from *feidō fīdō*, rt. *bheidh-* (§ 552).

Rem 2 Lat *ēstis ēste* (rt *ed-*) for **ēsis *ēse* after the forms of other verbs in *-tis -te* *com-ēstu-s* for and beside *com-ēsu-s* after forms like *ges-tu-s*, etc

cette, *mattu-s*, O Lat *ad-gi etu-s* by syncope (§ 633) fr **ced(i)te*, **mad(i)to-s*, **ad-gred(i)to-s*, cp *alitu-s* and *altu-s*, *e-lectu-s* and *al-lectu-s* Correspondingly Osc. úittiuf 'usio, usus' fr **oit(i)tiuf* (cp Lat *vomitiō*) This new *tt* remained unchanged like the *tt* in *attuli* fr *ad tulī* Cp the author in Morph Unt III 133 f, Osthoff Zur Gesch d Perf 555 ff

On the other hand *t^s tr* became *str*. *pedestri-s* : *pedit-ēs*. *assestrīx*, *ēstrīx* to *sed-*, *ed-*. Umbr.-Samn examples are wanting.

Rem 3 That the course of development was not here *ss* — *sr* — *str*, as some maintain, but that the *t* e g in *ex-trī-x* was the same as that in *vic-tri-x*, follows from the fact that *sr* did not become *str* but *fr* — *br* (§ 570)

The Italic treatment of Indg *t^s t* was precisely parallel to that of the Germanic. See § 527.

On initial *s-* fr *ps-* and *x-* see § 568, 2.

Lat *ff* from *pf*. *offerō*, *sufferō*.

Osc meddíss *meddis* 'meddix', cp Lat. *jū-dex*; nom. pl. meddíss beside *μiδδeiξ* fr. **-dik-(e)s*. Umbr. *osatu* 'operato, facito' *oseto* 'facta' beside Osc. úpsannam 'operandam, faciundam'.

§ 502. Prim Ital *kt* passed into *χt* (*ht*) in Umbr.-Samn., and prim. Ital. *pt* into *ft* (in Umbr further into *ht*). Umbr. rehte 'recte', aan-fehtaf 'infectas', uhtur 'auctor'. Osc. saahtúm 'sanctum', Úhtavis 'Octavius' Umbr. *screhto* 'scriptum', Osc. *scriftas* pl. 'scriptae'.

The combination *kt* arose anew in Umbr.-Samn. by vowel syncope (§ 633) and was now treated differently from prim. Italic *kt*. Osc. *factud* 'facito', *actud* 'agito'. Umbr feitu fetu *feetu* 'facito', aitu 'agito', to which aï-veitu *ars-veitu* 'advehito' (rt. *μeĝh-*) joined itself.

Rem. Prim Italic k^{w} = Indg. *q* seems to have remained an explosive both where it was followed by a *t* in prim Italic, and where it later came together with *t* by syncope Osc *Πομπτις* 'Quinctius', Indg. **perəqto-* 'quintus'. Umbr. *nuncto* 'ninguito' (cp § 570), fiktu 'figito' (O.Lat *fīvere* beside *fīgere*, *fībula* fr **fi(g)ue-blā*). umtu 'unguito' in the first instance from **umptō*.

k became *s* *š* before *e-* and *i*-vowels in Umbrian, e. g. fa*s*ia 'faciat' See § 387. How the form feia beside fa*s*ia is to be explained, I am unable to say Cp *muneto* 'muttitum', where *i* seems to express a voiced spirant (§ 508).

Osc *s* fr *tj*. *Bansae* loc 'Bantiae', cf *Buntins* 'Bantinus'.

§ 503 Loss of tenues in consonantal groups

Lat *poscō* fr **porc-sco* *prec-or* (§§ 269 288) *misceō* fr **mic-scō* : Skr *miśrá-* 'mixed' *illūstris* fr **in-louc-s-tri-s*. *luc-eō*. *discō* from **didcsco* i e **di-dc-scō* *di-dc-ī*, cp Gr. *δι-δα(ς)-σκω* § 490 *asporto* fr **aps-portō* *abs* i e *aps*. *ostendō* fr **ops-tendō* *ob* *sternō* fr **pster-*. Gr *πτάρνυμαι* 'I sneeze' fr. **πταρ-*

Lat *lūna*, O Lat inscrip *losna* fr **louc-s-nā* Av. *raoxšna-* 'shining, luminous'. *sene* fr **sexne sēmēnstris* fr **sex-mēnstri-s* *sub-tēmen* fr **-te men* *ala* fr **axla axilla*, OS *ahsla* 'axilla' *e-nūntiō* *ē-mergō* *e-ligō* *ē-dō* fr **ex-nūntio* etc (cf *dī-numerō* *dī-moveō* *di-luo* *di-dūco* fr **dis-numerō* etc) Cp. § 570.

Lat. *mulsī*, *fulsī* fr **mudxī*, **fudxī* *ursus* fr **urxu-s* : Skr *ɣhśa-s*. *torsī*, *sparsī* fr **torxī*, **sparxī* *ultus* fr **ulctu-s*. *tortus* fr **torctu-s*. cp *fortis* O Lat *forctis*. Skr *dṛdhá-s* (§ 295). *quintus* (beside inscrip *Quinctus*), but *ɣūnctus* *fūnctus* with *c* probably not without the influence of *ɣungō* *ɣunxī*, *fungor*; *defuntus*, *nuntus*, *santo* first on late inscriptions. *urna* fr **urcnā* : *urceus*. *pāstus* from **pāsctus*, *postulō* fr. **po(r)sctulō*, formed from the presents *pā-sco* *po-sco*

l- from *spl-* *stl-* through the intermediate stage *sl-*. *lien* : Gr. *σπλήν* *locus*, *lis* fr O Lat *stlocus*, *stlīs*. The stage *slīs* is found twice on inscriptions. On *ūlcō* cp § 570.

Umbr. *ostendu* 'ostendito' fr **ops-t*. Cp. also *osatu* 'operato, facito', § 501.

§ 504. The mediae generally retained their form of articulation.

b. Lat. *bibō* : Skr. *pibāmi*. See § 337.

d. Lat. *dīcō*, Umbr *deitu* 'dicito' Osc. deíkum 'dicere' : Skr. *diśámi*. See § 368.

ĝ. Lat *gen-us*, Osc. Genetaí 'Genetrici' : Skr. *jan-* Av. *zan-* See § 388.

g. Lat. *gelu*, Osc. *γελαν* 'pruinam' . O.Bulg. *zlědica*. Lat. *unguō*, Umbr umen 'unguen' fr. **umben* : Skr. *aṅjí-š* Lat. *veniō* fr. **guenīō*, Umbr. *benust* 'venerit' · Gr *βαίνω*, rt *gem-*. See §§ 430. 432

In the Italic branch other sounds — in Lat especially the Indg. med asp. — fell together with the Indg mediae Some of the changes of articulation, discussed in the following sections, equally concerned these other sounds

That Lat *b* (Indg *b, dh, bh, dh, gh*) was spoken as *b* from the second century onwards, seems to follow from such inscriptional forms as *quicus* for *quibus* and *cibes* for *cives* (Corssen Ausspr. I² 131 ff, Seelmann Ausspr 239 f).

§ 505. A media became a tenuis, when it came to stand before a voiceless spirant or explosive Lat *cette* fr **ce-dite* etc., see § 501 rem 2 Osc *actud* 'agito', Umbr ar tu 'agito' fr **aktōd*, prim. Ital **agetōd*, Umbr fiktu 'figito' umtu 'unguito', see § 502. Cp. also Lat *attuli, accumbō, appellō* fr *ad tulī* etc

§ 506. Lat *mn* fr *bn. scamnu-m scabellu-m* Cp *mn* fr. *pn* § 500

ŋn (written *gn*) from *gn* already in prehistoric times *lignu-m* fr **legno-m legō*, see § 65 p 53 *benignu-s* **ad-gnōscō* became **aggnōscō*, further *agnōscō*, written *agnosco* *ŋgn* became *ŋn* : *īgnōscō* i. e. *īŋnōscō* fr **in-gnōscō*; *cōgnōscō* i. e *cōŋnōscō* fr. **con-gnōscō* *ŋn* became *n* initially, probably at the same time as the *ŋn* which had arisen from *cn* (§ 500), this change took place about 150 B C. : *gnātu-s nātu-s, gnōscier nōscō*. So also Umbr naratu 'declarato', to Lat *gnāru-s nāru-s*.

Rem 1 The *n* instead of *gn* in *renum, propunator* etc, on inscriptions under the Empire, is also to be explained from the pronunciation *ŋn*.

ɔm from *gm.* *āgmen* i. e. *āɔmen* from **agmen.* From *exāmen* beside *āgmen*, the former of which points to **āgmen* with originally long *ā* (cp. *amb-āgēs*, *co-āgulum*) — **exăgmen* would have become **ex-egmen*, see § 97 — we may conclude that the simplification of *gm* to *m* took place regularly only before orig. long vowels, or diphthongs. With this also agree *con-tāmin-ō* : *con-tāgiu-m* and *jūmen-tu-m* . Gr ζεῦγμα Lat. *jūger-a.* Cp. *ɔm* from *cm* § 500.

m from *dm.* *caementu-m* : *caedō.* *rāmentu-m* : *rādō.* *flāmen* to Goth. *blōtan* 'to honour (the deity) with offerings' or to *flagrare*? *cacūmen* fr **cacūdmen*? . Skr *kúkud-* 'top'.

Rem 2 I do not venture to express an opinion as to the treatment of *dn* in Latin, but merely refer to the conjectures by W Meyer Kuhn's Ztschr XXVIII 164 f

nd (which had partly arisen from *md*) became *nn*, *n* in Umbr.-Samn. Umbr. *ponne pone* Osc pún 'quom' fr **pon-de*; Umbr. pane Osc *pan* 'quam' = Lat *quan-de*, see § 207. Umbr. an-penes 'impendes', *pihaner* 'piandi'. Osc. úpsannam 'operandam' This change was older than that of *nt* to *nd* in Umbr. *ander* 'inter' (§ 499)

Umbr. umen 'unguen' fr **umben*, § 432 *a*

Rem 3 The *l* in the Umbr fut ex *en-telust* 'intenderit' and a-pelus 'impenderis' a-pelust 'impenderit' is unexplained That the *l* goes back to *ndf* (Bucheler), is incredible to me, the composition of a participial stem **entendlo-* with *fust* (Bechtel Bezzenb Beitr. VII 7) is impossible

Lat *ll* fr *dl* and *ld.* *sella* fr. **sedlā* *sallō* fr. **saldō* See § 369.

Loss of *d* before *i*, *u* Lat *Jov-is*, Umbr. Iuv-e Osc. Iuv-eí 'Jovi': Skr. *dyáu-š* Gr. *Ζεύ-ς* Concerning Osc. *zicolo-m* 'diem' see § 135 extr. Lat. *suāvi-s* fr **sŋād-ŋ-i-s* . Skr. fem. *svād-v ī* 'suavis'.

Lat *v* fr. *gu* = Indg. *g.* *vīvo-s* : Osc. bivus 'vivi', Skr. *jīvá-s* etc. See § 432 *b.*

§ 507. Prim. Indg *d*ʰdh* became in prim Ital. *zdh* — *sth* — *sp* (§ 509), hence Lat *st.* Thus *custōs* : *huzd* 'treasure', see § 469, 5, perhaps also *hasta* : Goth. *gazds* 'a prick'.

Rem For Lat *crēdō*, first of all from **crezdō* (cp *pēdō* fr. **pezdō*, § 594), it would hardly be right to assume a **kred^{s}dhē-*, even in Indg since in Skr. the two members of the compound, **śrad* 'heart' and rt. *dhē*, were not yet fused into an inseparable unity (cp e. g. *śrád asmāi dhatta* 'believe in him' ṛgv II 12, 5) We must nevertheless start out from a prim Ital **cre(d)zdh-*, cp. § 521 on O Ir *cretim* 'credo'. It may be assumed that in Italic, as in Sanskrit, the feeling for the connexion with the other forms of rt *dhē-* was not yet extinct, and that *d* for regular *þ* was thus introduced after *con-do ab-do* etc (cp W Meyer Kuhn's Ztschr. XXVIII 166), just as *nōbis* stood for regular **nospis* (§ 594)

§ 508. *l* from *d* in Lat *lēvir* : Skr *dēvár-* and others See § 369.

ř, *rs* from *d* in Umbrian between vowels and finally, e g. te-řa *di-rsa* 'det.' See § 369.

In Umbr. *muneto* 'muttitum' beside *mugatu* imper. 'muttito' (Lat. *mūgīnor* 'I murmur') *i* probably represents a voiced spirant It may be conjectured that palatal vowels had a similar influence upon a preceding *g* as they had upon a preceding *k* (§ 502).

§ 509. The mediae aspiratae became tenues asp in prim Ital, then voiceless affricatae, and lastly voiceless spirants: *f*, *þ*, *χ*, *χ χ^{u}* Probably in the same period *þ* was further shifted to *t* after *s* and the non-labialised *χ* to *h* except after and before nasals and before *r* and *l*.

This state of the form of articulation generally remained in Umbr.-Samn., whereas medially the spirants were developed to mediae in Lat *b* fr. *f* = older *f* (§ 338) *þ* (§ 370) *χ^{u}* (§ 433*c*), *d* fr. *þ* = older *þ* (§ 370); *g* fr. *χ* = older *χ* (§§ 389 430); *ngu* (*ŋgu*) fr *ŋχ^{u}* = older *ŋχ^{u}* (§ 433*a*)*; *gu* (whence *v*) between vowels from *χ^{u}* = older *χ^{u}* (§ 433*b*) Further, initially, *g* from *χ* before *r* (§ 430).

1. Initially.

Prim. Ital. *f* (Lat. Umbr.-Samn. *f*) = Indg. *bh*. Lat. *ferō*, Umbr. *ferar* 'feratur' Marruc. *feret* 'feret' : Skr. *bhárāmi*. See § 338.

Prim. It. *f* (Lat. Umbr.-Samn. *f*) = Indg. *dh*. Lat. *fēlāre*, Umbr. feliuf 'lactantes' : Skr. *dhāyāmi*. See § 370.

Prim. Italic *h* (Lat. U.-S. *h*) = Indg. *ĝh gh* except before *r*. Lat. *humu-s*, Umbr. *hondra* Osc. huntru 'infra' : Gr. *χαμαί*, Indg. *ĝh-*. Lat. *hosti-s* : O.Bulg. *gostĭ*, Indg. *gh-*. A dialectical (Sabine) pronunciation of the *h* was represented by *f*: *folus, fostis*. See §§ 389. 430.

Prim. It. *χr* (Lat. *gr*) = Indg. *ghr* Lat. *gradior* : Goth. *gridi-* O.Bulg. *grędą* See § 430.

Prim. It. *f* (Lat. *f*) from χ^{μ} = Indg *gh* Lat. *formu-s* : Skr. *gharmá-s*, Goth. *varmjan*. See § 433*c*

2. Medially.

Prim. It *f* (Lat *b*, U.-S. *f*) = Indg *bh*. Lat. *ti-bī*, Umbr. te-fe Osc t(i)-fei 'tibi'. Skr *tú-bhyam*. See § 338

Prim. It. *þ* (Lat *d*, Osc *f*) = Indg. *dh* except before and after *r* (however in the combination *rþu*), before *l* and after *u* (*ų*), perhaps also after *m*. Lat *medĭu-s*, Osc. mefiaí 'in media' : Skr. *mádhya-s*. See § 370.

Prim. It. *f* (Lat *b*, U.-S *f*) = Indg *dh* before and after *r* (except the combination *rþų*), before *l* and after *u* (*ų*), perhaps also after *m*. Lat *rubro-*, Umbr. rufru 'rubros' : Gr. *ἐρυθρό-ς*. See § 370.

Prim It. *t* (Lat *t*) fr. *þ* = Indg *dh* after *s* Lat. *custōs* : Goth. *huzd*, Indg. **kud*^{z}*dh-* See §§ 469, 5. 507. Cp. also Lat. *st* fr. *sþ* = Indg. *sth* in *vīdistī* § 553.

Prim It *h* (Lat U.-S *h*) = Indg *ĝh* except after and before nasals and before *l* Lat. *vehō*, Osc. *vehia* 'plaustrum' : Skr. *váhāmi*. See § 389. This early weakening of *χ* to *h*, in this position, explains why the explosive *g* does not appear in Latin.

Prim It. *χ* (Lat. *g*) = Indg. *ĝh* (*gh*) after and before nasals and before *l*. Lat *ĭungō* : Skr. *lēhmi*, rt. *leiĝh-*. *mingō* beside *mējō* (§ 510). *māgnu-s* beside *māĭor* (§ 510). *trāgula* fr. **trāglā* beside *trahō*. See § 389.

Rem. 1 The *g* (instead of *h*) in *magis* and *ligūrĭō* was perhaps transferred from *māgnu-s* and *ĭungō*. But whence the *g* in *ad-āgĭu-m prōd-igu-m*, to *ājō* (§ 510)?

Prim. It. χ^{u} (Lat. *gu*) = Indg. *gh* after *n*. Lat. *ninguit*: Lith. *sniñga* See § 433*a*.

Prim. It. χ^{u} (Lat. **gu*, whence *v*) = Indg. *gh* between sonantal vowels. Lat. *niv-em*: Gr. *νίφ-α*. See § 433*b*.

Rem 2 The forms *leui-s* (Skr *laghú-ś*, Gr. *ἐλαχύ-ς*, Goth *leihts*, Lith *lengv-as*) and *brevis* (Gr. *βραχύ-ς*) still remain obscure.

Prim It *f* (Lat *h*, Praenest *f*) fr. χ^{u} = Indg *gh*. Lanuv *nebrundin-es*, Praenest. *nefrōn-es*: Gr. *νεφρό-ς* OHG. *moro*. See § 433*c*

§ 510. The fricative sound of *h* was reduced to a minimum in the Italic languages In certain positions the sound was entirely dropped

The weakness of articulation betrays itself in Latin through the doubt which existed as to where *h* should be written, and where not, e g *hālāre* for *ālāre* (§ 208 p 176), *ānser* for *hanser* (Gr *χήν*)

h disappeared uniformly before *i* *mājor* fr **mahi̯ōr* (beside *māgnu-s*). Skr *máhīyas-* 'greater' *āji̯ō* fr **ahi̯ō* or **āhi̯ō* (beside *aiāre* 'to call to, nominare'): Skr *áha* 'he spoke' Further, often between vowels, especially after *i*-vowels (accentual relations also formed a factor). *lien* Skr. *plīhán-* 'spleen' Gr *σπλάγχνο-ν* 'entrails'. *mēji̯ō* probably from **mei̯hō* Skr *méhāmi* 'I make water' *bīmu-s* fr. **bi-himu-s*. *nēmō* fr **ne-hemō* Further *nīl* = *nihil*, *prēndō* = *prehendō*, *praebeō* = *praehibeō*, *cōrs* = *cohors*, *prōbeō* = *prōhibeō* etc., which stand on a level with *dēsse* = *dēesse*, *coepī* = *coĕpī*

Cp also *diribeō* = *dis+habeo* with the same *r* from *s* as *dir-imō* etc (§ 569).

The same fluctuation in the writing of *h-* exists in Umbr.-Samn as in Lat Umbr *eretu* part pass to *heri* 'vult', conversely *he-* for *e-* 'ex' in *he-bet-af-e* beside *e-bet-raf-e* 'in exitus' (to Lat. *baetere*, cp. § 432 rem. 1). Osc. *Herukinaí* 'Erycinae, *Ἐρυκίνῃ*'.

It was dropped medially in Osc *mais* 'magis' *maimas* gen. 'maximae' beside Mahii[s] 'Magius'.

§ 511. In Lat. the *b*, *d*, *g*, which arose from voiceless spirants, underwent the same treatment as the corresponding original mediae. *grallae* 'stilts' fr. **grad-lae*, see § 369. *amni-s* fr. **abn-s*, along with O Ir. *abann* 'river' is probably to be connected with Skr *abhrá-* 'thunder-cloud', *Samnu-m* beside *Sabīnu-s* Osc Safinim 'Samnitium', see § 506.

Old Irish.

§ 512. The tenues except *p* were generally retained in prim. Kelt. *p* disappeared at that period in all positions except before consonants and before consonants it became a spirant.

t, *c* appear in Irish as the successors of prim Kelt. *t*, *k kᵘ* (Indg *t*, *k̑ q*) in absolute initiality and after spirants and *r*, *l*.

temen 'dark-gray' Skr *támas-* *tiagam* 'I stride, go' : Gr. στείχω, rt *steigh-* *ocht* 'eight' · Gr ὀκτώ *t*-pret *al-t* 'educavit'. See § 371

crude 'heart' : Lith *szirdì-s* *cara* 'friend' : Lett *kârs*. *cethir* 'four' : Gall. *petor-ritum*. Skr. *catúr-as*. *scāth* 'shadow'. Goth. *skadu-s* *iasc* 'fish' (*a*-stem) Lat. *pisci-s* Goth. *fiska-* *ro sescaind* 'he leapt' : Skr. *caskánda*. *scēl* 'narration, tidings' · Cymr. *chwedl* fr. prim. Kelt. **skᵘ-e-tlo-n* (Cymr *chw-* first fr **sᵘ-*), rt. *seq-* 'say' *sesc* 'barren' Cymr *hysp* 'dry, withered', Lat. *siccu-s* (cp. § 516) *ad-con-darc* 'I saw' Skr. *dadárśa*, rt *derk̑-*. *orc* 'pig' : Lith *paršza-s*, cpf **porko-s*. See §§ 390. 434. 436.

§ 513 *t*, *c* became voiced mediae after nasals, then the nasal disappeared (with compensation lengthening). The letters *t*, *c* were retained in the O.Ir. period. It was not until a later period that the orthography was set straight by the introduction of *d*, *g*. *cēt* 'hundred' · Cymr. *cant*, Lat *centu-m*. *ōac ōc* 'young'. Cymr. *ieuanc*, Lat. *juvencu-s*. See § 212.

§ 514. After vowels *t c* became *þ*, *χ*, which were written *th*, *ch*. Hence *đ*, *ʒ* in unaccented syllables (except finally). These were written *d*, *g*, like the voiced spirants which had arisen from original mediae (§ 522). *d*, *g* however occur consistently only for the palatalised *đ*, *ʒ*.

māthir mother' : Lat. *māter*. *cath* 'fight' : Gall. *catu-* (in prop. names), OHG. *hadu-* 'fight'. *cloth* 'renowned' : Gr. κλυτό-ς. 2. pl. *carthe, no charid*, to *caraim* 'I love'; cp. the personal endings Gr -τε Lat. -*tis* 3. sg. pass. *car-thir* 'amatur' *midi-dir* 'iudicatur' : cp. Lat. -*tur*. *beothu* 'life' gen. *bethad* dat. *bethid*, suffix *-*tūt-* : Lat -*tūt-*.

fiche 'twenty' : O Cymr. *ugeint*, Skr. *vi̯śatí-*. *sechur* 'sequor' rt. *seq-*. *marc-ach* 'equester' : Cymr. *march-awc*, Gall. *Bendacu-s*; *cumacht-ach* 'potens', 1. sg *cumacht-aigim* 'potior'. *cathr-ach* gen, *cathr-aig* acc, to nom *cathir* 'town'.

On the like origin of voiceless spirants in conditional initiality, e g. *a thuath* 'O folk', see § 658, 1.

Rem 1 On *mac* 'son', *muc* 'pig', *cacc* 'dirt', *lēicim* 'I leave', whose 'status durus' is remarkable, see § 436 rem

Rem 2 The spirants of the prepositions *ath-* 'against' (Gall *ati-*) and *frith-* 'towards' became assimilated to the initial consonant of the following word, when the preposition had the chief accent *tht* to *tt* *ni frittāt* 'non obsistunt' *thc* to *cc* (*c*) *tecomnacca* 'accidit' fr **to-ath-com-nacar*, *frecndairc* 'present' fr **frith-con-dairc* *thg* to *gg* (written *c* or *cc*, cp. § 519) *frecre* 'responsum' from *frith gairi*, *ecne* 'cognitio, sapientia' fr **ath-gne* (cp Thurneysen Revue Celt VI 320), *taccair tacan* 'congruus, decens' fr **to-ath-gair* *thb* to *bb* (written *p*, cp §§ 519 524) · *epert* 'speech' fr **ath-bert*

§ 515. *pt* probably became *cht* even in prim. Kelt. O.Ir. *secht* Mid Cymr *seith* 'seven' Lat *septem* See § 339

Indg *pn* in O Ir *suan* Cymr. *hun* 'sleep' : Skr. *svápna-s* Gr *ὕπνο-ς* etc It is highly probable that *p* was here also no longer an explosive in prim Kelt, see § 339 rem

§ 516. *tk* became *sk* in Kelt O Ir *sesc* 'barren' Cymr. *hysp* 'dry', fr **sisḳo-s* : Lat *siccu-s*, orig form **sitqo-s*. O.Ir. *mesc* 'intoxicating, drunk' Skr. *mádа-* drunkenness' *lesc* 'piger' : Goth *lats* 'lazy' *uisce* 'water'. Skr. *udán-* *udaká-* 'water'. Here belongs also O Ir. *brisc* Bret. *bresk* 'brittle', in case it comes from the rt. *bherdh-*, § 298. Cp. Av. *ƀk*, *sc* from prim. Ar. *tk*, *tc* § 473, 2 and Germ. *sk* fr. *tk* § 527. From the Gallic belong perhaps also here *Pruscia Pruđca* (d'Arbois de Jubainville Études grammaticales sur les langues celtiques I p. 31* ff.).

The Þ in the latter form denotes here, as also elsewhere, a voiceless spirant.

ss (whence further also *s*) from *ts* in the prim Kelt. period. O.Ir. 1. pl of the s-fut. *messimmr* to *midiur* 'I judge'. Fut. *ro-fessur* 'I shall know', rt *u̯eid-*. Future stem *sēs-* fr. **su̯ents-* i e. **su̯end+s-* (*su̯end-* 'drive, hunt') 1. sg. *cu-du-sē[s]-sa*, fut. sec 1 sg. *du-sēsaimm* (Thurneysen Kuhn's Ztschr. XXVIII 148).

ss from *t*ˢ*t* inf *mess* 'a judging', orig. form **met*ˢ*tu-* i. e. *med+tu-*. Inf *fiss* 'a knowing' i e **uid+tu* It is uncertain whether this change be prim Kelt., because of the Gallic spellings with Đ, as MEĐDVLVS beside *Messulus* (to O Ir *mess*).

O Ir *-ss-* fr *-st-* *ro chloss* 'was heard' fr **klus-to-*, *cluas* 'ear' fr **klous-tu-* or **klous-ta-*, to *cloor* 'I hear', cp. Skr *śruš-ti-š* 'compliance', OHG *hlos-ēn* 'to listen' OS. *hlus-t* 'a hearing', O.Bulg. *sluchъ* 'a hearing'. *aes* *aes* (gen *aisso aisa*) 'age' fr. **āi̯es-tu-* cp Gr *αἰές* 'always' *is* 'is' · Gr *ἔστι* *tair-issiur* I stand, stand still', *sessam* 'a standing' : Gr *ἵστημι* 'I place', Lat *sisto*

§ 517 *kt* became *cht* (*χt*) in prim. Kelt O Ir *ocht* Cymr. *wyth* Corn *eath* Bret *eiz* 'eight' Skr *aṣṭá*, Gr *ὀκτώ*. *recht* 'law' *as-r-ērracht* 'surrexit' Lat *rēctu-s*, rt. *reg̑-*. *ro iar-facht* 'he asked' (pres *iarme-foig* 'he asks') · Gr *ἐπο*ϙ, Lat. *vōx*, rt. *u̯eq-*. *in-nocht* 'hac nocte' Lith *naktì-s*

Rem *ct* was often written instead of *cht* in O Ir *oct rect* etc That *cht* (*χt*) was nevertheless spoken, is shown by Thurneysen Keltoromanisches p 14 f, where the stage *cht* is also found for Gallic in the name *Luχterios* on coins (written *Lucterius* in Caesar)

ks = O Ir *ss*, *s*, But *ch*, prim. Kelt. probably *chs* (*χs*). O.Ir. *sessed* O Cymr *chuechet* 'sextus' Gr. *ἕξ*, orig. f. **su̯eks*. O.Ir. *dess* Cymr. *deheu* 'dexter' : Goth. *taíhsva*, Indg **deks-* O.Ir. *ōs* *uas* Cymr *uch* 'above' Lith *áuksz-ta-s* 'high', rt. *aug-*. *no tes* 'effugiam' s-fut to *techim* 'fugio', Lith. *tekù* 'I run', rt *teq-*. *x*, *xs*, probably to be read as *χs*, appears in Gall. : *Uxellodūnum* 'Hightown', to O Ir. *ōs uas; Dexsiva*, to O.Ir *dess*.

§ 518. *t* and *c* were dropped before liquids and nasals (with 'compensation lengthening' after short vowels, § 620). *cenēl* 'race' : O.Cymr. *cenetl*, suffix *-tlo-* (§ 110 p. 104). *anāl* 'breath' :

Cymr *anadl*, prim. Kelt. **anatlā*. *dāl* 'a meeting together': O.Cymr. *datl* 'forum'. *ēn* 'bird' · O.Bret. *etn*, rt *pet-* 'fly'. *dēr* 'tear' : O Bret. *dacr* Gr. δάκρυ. Reduplic. fut. 1. sg. *cēl*, to *celim* 'I conceal' Cp also *suan* 'sleep' § 339 rem.

rct (*rcht*) was simplified to *rt* . *ro ort* 'delevit', part. *tinmorte* 'compressus', to *orgun* 'occisio' (rt *ergh-*, cp. § 552).

Correspondingly *rcs* to *rs*, whence *rr* (cp § 574) : 3. sg. of the s-fut. *orr*, of the same verb

§ 519. The mediae generally preserved their form of articulation in prim. Kelt In O Ir they remained mediae in absolute initiality likewise after *r* and *l*, *g* also after nasals These medial mediae were also written (*bb*), *dd*, *gg* or (*p*), *t*, *c* after *r* and *l*, in order to indicate that they were not to be spoken as spirants (§ 522) [1]

d *dēr* 'tear' · O Bret *dacr*, Gr δάκρυ. *cerd cerdd cert* 'artist, smith' Cymr *cerdd* 'art', Gr κέρδος 'gain', Lat *cerdō* 'workman' See § 372

ĝ, g *gein* 'birth' · Cymr *geni*, Skr *jan-* Av *zan-*, rt *ĝen-* *gāir* 'call' · Cymr *gaur*, Skr *gir-*, rt *gar-* *bin* 'alive' . Cymr. *byw*, Goth *qius* Lith *gyva-s*, Indg **gĕ-uo-s* *garg gargg* 'rough, wild' Gr γοργό-ς 'spirited, wild' *serg sergg serc* 'a passing away, decay, illness' · according to Windisch to OS *swercan* 'to become obscure, gloomy' *ferg ferc* 'anger' Gr. ὀργή 'impulse, feeling, disposition' *bongaim* 'I break, reap' . Skr *babhāñja* 'he broke' See §§ 391. 434. 437

g remained also after *d* = Indg *z*, see § 521

§ 520 The media *d* in the prep *ad-* = Lat. *ad* was assimilated to a following voiceless consonant, e g *-accai* 'I see' fr. *ad+cai*.

mb, nd became *mm, nn* The O Ir monuments frequently preserve *mb, nd* beside *mm, nn*, probably contrary to the then living pronunciation *camm* 'crooked' · Cymr. *cam* 'crooked' Bret *kamm* 'crooked' Gall *cambo-*, Gr. καμβό-ς

1) An example for *b, bb, p* = Indg *b* is wanting But cp *orbe* with Indg *bh* § 524

'crooked'. *ro se-scaind* 'he leapt' : Lat. *scandō*, Skr. *skánd-ā-mi*. *cenn cend* 'head, top, point' : Cymr. *penn pen* Corn. *pen*, prim. Kelt. **kṷindo-*, according to Windisch (Kuhn-Schleicher's Beitr. VIII 44) to Skr. *śvi-* 'to swell' and identical with Gr. *Πίνδο-ς*. *mennant mendat* Mid Ir 'dwelling' : Skr. *mandirá-m* 'lodging, habitation' Cp § 525

Ir. *mn* from *bn* (= Indg *bn*, *gn*). *fu-domain* 'deep', compar. *fu-dumnu* Cymr *dwfn* 'deep', Goth. *diups* Lith. *dubù-s* 'deep', rt. *dheub-* (§ 325); with these is said to be related O Ir. *domun* 'world'. Gall *Dumno-rīx*, older *Dubno-rīx*. *mnā* fr. **bnās*, gen to *ben* 'woman', Indg stem form **gnā-* **genā-*, see §§ 428*a* 437*a*

§ 521. O Ir *net nett* Cymr *nyth* 'nest' fr Indg **nizdo-* through the intermediate stage **neddo-* Cp *medg* Cymr *maudd* 'whey', fr. **medgā*, older **mezgā*, Gallo-Lat *mesga* 'whey', according to Thurneysen Kuhn's Ztschr XXVIII 152 to Slav. *mozgŭ* etc., hence uncertain, whether Indg *zg* or *zgh* (§ 450) See § 595

It seems to follow from Cymr *credu* that Indg **kred dhē-*, which is to be presupposed for *cretim* 'credo' and the Skr. and Lat. related forms (§ 507 rem.), had not passed through **kredzd-* to **krezd-* in prim Kelt., but that the nearest older form **kredd-* rather came direct from **kred d(h)-*.

Here may further be mentioned *ro-fetar* 'I have experienced, know' fr rt *ued-*, which Thurneysen Kuhn's Ztschr. XXVII 174, XXVIII 151 regards as an *s*-aorist **ṷedes-ar* gave rise to **fedsar* (§ 634), and this to *fetar*, since *d* remained an explosive before *s*, or *h* (§ 576)

§ 522. *b, d, g* became spirants after vowels . *b̄, d̄, ȝ*. The letters *b, d, g* were generally retained for these (*bh, dh, gh* in the modern orthography), on the other hand a double media or tenuis was written in cases where the sound had remained explosive (§ 519) *ph f, th, ch* were more seldom used to express *b̄, d̄, ȝ* (Zeuss-Ebel Gr. C. p. 62 sq.).

b ebaim 'I drink' : Skr *píbāmi*. See § 340

d cride 'heart' · Gr. Ion. *κραδ-ίη* *adfiadaim* 'I announce' : Skr. *vēdáyāmi*. See § 372.

ĝ, g. Imper. *agat* 'agant' : Lat. *agō*, rt. *aĝ-*. Gen. *tige* 'of a house' : Gr. *στέγος*, rt. *steg-* See §§ 391. 434.

These voiced spirants probably became voiceless when final, cp. *tech* beside *teg*, *camaiph* beside *cammaib* 'notwithstanding' etc.

On the spirantal pronunciation of *b, d, g* in conditional initiality see § 658, 1

§ 523. Loss of *d, g* (with 'compensation lengthening' after short vowels) before liquids and nasals *ār* 'battle, slaughter, butchery' Cymr. *aer* fr **agro-*, to O Ir *āg* (gen *āga*) 'battle', Gr *ἀγών*, rt. *aĝ-*. *ām* 'manus hostium' fr. **agmen* or **āgmen* : Lat *āgmen ex āmen*, rt *aĝ-* (cp § 506) Perf. *ro gēnar* 'natus sum' fr **ge-gn-*, rt *ĝen-* *uan* 'lamb' · Cymr. *oen*, Lat. *āgnu-s* with Indg *g*, see § 437 *c*

ng = Indg. *ŋg* had been dropped before *n* in *buain* 'a harvesting, reaping', inf to *bongaim* 'I break, reap' (§ 519)

Assimilation of *ng* to following *m* with lengthening of the preceding vowel *cēmm* 'a striding, step', to *cingim* 'I stride' (to Gr *σκάζω* 'I limp'?) Analogously *grēmm* 'progressus', to *in-grennim* 'I pursue' fr *grend-* with original *dh*, § 526.

§ 524. The mediae aspiratae fell together with the mediae in prim Keltic, as in Iranian (§ 481) and in Baltic-Slavonic (§§ 542 549). The laws, which obtain for the Indg. mediae (§§ 519—523), thus operated here also.

Media appears initially after *r* and *l*, *g* also after *n* (*ŋ*) :

bh *bin* 'sum' : Lat *fīō*, rt *bheu̯-* *orbe orbbe orpe* 'hereditas'. Goth *arbi* 'heritage', Gr. *ὀρφανό-ς* 'left, orphan' See § 341.

dh *dī-th* Mid.Ir. 'he sucked' : Skr *dhāyāmi*. *ard ardd art* 'high, great, noble', to which probably also *Arduenna silva* : Skr *ūrdhvá-s* *meld-ach mellt-ach* 'acceptus, gratus' : OS. *mildi* 'mild, kind, gracious' See § 373

ĝh, gh. *gam* 'winter' · Lith. *žiemà*. *in-grennim* 'I pursue' : O.Bulg. *grędą* 'I come' *orgun orggun orcun* 'a laying waste, devastating, killing, predatory excursion', Gall. *Orgeto-rīx* : Skr *ɣghāyati* 'trembles with passion, rages, raves', OHG. *arg* 'that which is worthless, vile, bad'. *cum-ung* 'narrow' : Gr. *ἄγχι*, rt. *aṅĝh-*. *esc-ung* 'eel' : Lat. *angui-s*. See §§ 392. 434. 438.

§ **525.** Ir. *mm, nn* from *mb, nd* = Indg. *mbh, ndh*, cp. § 520. *imm, imb* 'about, around' : Gall. *ambi-*, Gr. *ἀμφί*. *immlind* 'umbilicum' : Gr. *ὀμφαλό-ς* Lat. *umbilicu-s*. *in-grennim* 'I pursue' : O.Bulg. *grędą* Goth. *grudi-*. It is doubtful whether *bonn bond* 'solea' belongs here or to § 520, since this word seems to have had in prim. Indg partly *dh* (Skr. *budhná-s*) and partly *d* (Gr. *πύνδαξ*) (§ 469, 8) *mm* fr. *mb* = Indg. *ŋgh* in *imm imb* 'butter', see § 438 *b*.

A sure example for *mn* fr *bn* — Indg. *bhn* (or *ghn*) is unknown to me *tamun* 'stem' may belong to Skr. *stambh-*, with which it is generally connected, but the root had in prim. Indg. partly *bh*, and partly *b* (see § 469, 8), besides we probably ought to start out here from an original *mb(h)n* (cp. *buain* with *ŋgn* § 523)

To the form *net* 'nest' (§ 521) corresponds *brot* 'prick' fr prim. Kelt **brozdo-s*, the *d* of which was Indg *dh*, as is shown by Ags. *brord* O.Icel *broddr* 'prick'. See § 595

§ **526.** *b, d, g* as spirants, cp. § 522.

bh tri-b 'tribus' · Skr. *-bhiš* See § 341.

dh ruad 'a riding' : O Icel. *rīða* See § 373.

ĝh, gh ligur 'tongue' : Lith. *leżù*, rt. *leiĝh-*. *lige* 'bed' : O.Bulg. *lęgą*, rt. *legh-*. *snigid* 'it drops' : Gr. *νίφει*, rt *sneigh-*. See §§ 392 434 438

Dropping of *b, g*, as in § 523. Reduplic fut *do-bēr* (*do-bur* 'I give', rt. *bher-* 'carry, bear') fr. **bebr-*. *nēl* 'cloud' fr. **neblo-* . OHG. *nebul* O.Icel. *nifl-*, Gr *νεφέλη fēn* 'waggon, cart' . O Icel. *vagn* 'waggon', rt *ueĝh-*

grēmm fr. **grend-men* has already been mentioned in § 523.

Germanic.

§ **527.** History of the tenues.

p, k (*kų*) before *t* and *s* became *f*, *χ* (*χʷ*) in prim. Germ. similarly as in Iran. (§ 473), Umbr.-Samn. (§ 502) and Keltic (§§ 339. 515. 517 [1]).

1) Cp. also Mod.Gr. *ἔφτά κόφτω, ὀχτώ νύχτα*.

Goth. *hliftu-s* 'thief' : Gr. *κλέπτη-ς*. OHG. *nift* 'neptis', privigna' : Lat. *nepti-s*. OHG *wafsa* 'wasp' : Lith. *vapsà* 'horse-fly', O.Bulg. *vosa* 'wasp' fr. **u̯opsā* (§ 545) OHG. *refsan* 'to scourge, punish, blame', O.Icel. *refsa*, prim Germ. **rafsu̯ana-n* : Skr. *rápas-* n. 'bodily injury, violation'.

Goth. *raihts* OHG. *reht* 'right' : Gr. *ὀρεκτό-ς* 'stretched out', cpf. **rek̑tó-s*, rt *reĝ-* Goth *nahts* OHG *naht* 'night' : Lat. *nox noctis* etc., orig f **noqti- *noqt-* Goth *fimfta-* 'quintus' : Gr. *πέμπτο-ς*, see § 444*a.e* Goth. *saihs* OHG *sehs* 'six' : Gr *ἕξ*, cpf **su̯ek̑s*

Rem 1 Goth *u̯ĝpi-s* 'cousin, relation', O Icel *niðr* 'descendant' pl. *niðja*, Ags *niðða-s* pl 'homines' fr prim Germ **nu̯ĝu̯a-* and this from **ne(p)tu̯o-* in consequence of the combination of three consonants Similarly Ved. dat abl pl *nábhbhyas* from **n ábh-bhyas* i e **nept s bhyas*

The shifting of *ts* and *tpt* began simultaneously or even earlier, we put the latter for the prim Germ period in place of *t"t*, see § 469, 4

ts became *ss*, *s* OHG OS *u ssun* O Icel *visso vissu* (Goth. *vissedun*) 'they knew', probably to Hom *ἰσμεν*, cpf **u̯itsu̯ét* i e. **u̯id+s+u̯t* (Osthoff Zur Gesch d Perf 398, 561) OHG *zan* 'tooth' fr prim. Germ **tans*. Indg **dont-s*, cp Skr *dán* fr. **dants* (§ 647, 7). Gr *ὀδούς* Cp also Goth *ana-busns* 'command' fr **butsnā-*, to *ana-biudan* 'to bid, command', rt. *bheudh-* (§ 552)

tpt became *ss* except before *r*, whence *s* after a long syllable. Goth *ga-qissi-* (nom *qa-qiss*) 'agreement', to *qiþan*. Goth. *us-viss* 'unbound', to *viþan* OHG *gi-u is* 'certain, sure' adv. *gi-u isso* Gr *ἄ-ιστο-ς* 'unseen, unknown', cpf **u̯it"tó-s* i. e. **u̯id+to-*, rt. *u̯eid-* Ags. O Icel. *sess* m 'seat' part Skr. *sattá-* Av. *hasta-* Lat *ob-sessu-s*, Indg **sef"tó-s*, rt *sed-* Goth *missa-* in *missa-deþs* 'misdeed', OHG *missen* O Icel. *missa* 'to miss', to OHG. *mīdan* 'to avoid, intermit', Lat. *mitto* fr. **mītō* (§ 612), part. *missus*.

s from *ss* after long syllables Goth. *un-veis* (gen. *-veisis*) 'unknowing', OHG. *wīs* O.Icel. *vīs-s* 'wise' : Lat. *vīsu-s*, orig. form **u̯īt"to-s*, rt *u̯eid-* OHG *ās* n. 'carrion' : Lat *ēsu-m*, orig. f. **ēt"to-*, rt. *ed-* 'eat'.

The proper names *Chattus* (with Lat. ending) OHG. *Hassi Hasso* (to Skr. *śad-* 'to distinguish oneself, Gr. Dor. *κεκαδμένος*?) and Lango-Bard. *Tatto Tasso* i. e. 'regulator, distributor' (Goth. *ungatass* 'disordered' Ags. *tass* 'acervus, congeries frugum', Gr. *δατέομαι*) seem to show that *tp̄t* had become *ss*, *s* through the intermediate stage *tp̄*.

st arose before *r*. Goth. *blōstreis* 'sacrificer' OHG. *bluostar* 'sacrifice', to Goth. *blōtan* 'to sacrifice' Ags. *fōstor* O.Icel. *fōstr* 'maintenance, support', to Goth *fōdjan* 'to feed, nourish', Gr. *πατέομαι* 'I eat' The course of development seems to have been *tp̄t, pt, st.*

Rem 2 The Lat development (cp § 501 rem 3) renders it improbable that the course was *ss, s, st* (cp § 580), as is assumed by Kluge Paul-Braune's Beitr IX 150 157

Rem 3. Where *st* occurs in other positions than before *r*, they are new formations, e g Goth *káupasta* pret of *káupatjan* 'to box one's ears', OHG *wista* beside *wissa* 'I knew', *wurst* 'sausage' from rt. *wert-* 'turn' (after *turhst* 'loss' etc) Cp § 501 rem 2

th became *sk* (cp § 516) OHG *rasc* 'quick, active, strong' O.Icel *røskr* 'bold, brave' (Goth **rasqs*), prim Germ **raskŭa-z* fr **rathŭa-z*, to OHG *rad* 'wheel'; O Icel *løskr* 'soft, slack, loose', prim Germ **laikŭa-z*, to Goth *lats* 'weary', on the suffix *-kŭa-* = Indg. *-qo-* cp § 419 OHG. Ags *horsc* 'quick, smart, prudent' O.Icel. *horskr* 'prudent, wise' Goth *and-hruskan* 'to investigate, examine', probably to Goth *hard-u-s* 'hard' Gr. *κρατ-ύ-ς* 'strong', orig form **krt-ko-*, cp also Mid.English *harsk* Dan *harsk* 'rough, hard' O Icel *beiskr* 'sharp', to Goth *báit-ra-* 'biting, bitter'. Here probably also Ags *tusc* or *tūsc* 'tusk, tooth' (see Kluge Paul-Braune's Beitr VIII 537) = Goth **tunska-*, with which Skr *a-datha-* 'toothless' may be compared, although this was a Skr. new formation.

h had disappeared in OHG. before *s*+consonant. *mist* 'dung' : Goth *maíhstu-s wast* 'growth' · Goth *vahsts*. Cp Kogel Paul-Braun's Beitr VII 193 ff

§ 528. A general shifting of the still remaining tenues to voiceless spirants, e. g. Indg. **pətér-* 'father' to **fapér-*, and **péku* 'cattle' to **féχu*, probably did not take place until after

the tenues had modified their original manner of articulation in the position before *t*, *s* (*þ*) and *k* (§ 527).

The only exception to this law is that the tenues stood in combination with preceding spirants: *sp*, *st* (= Indg. *st* and = Indg. *t"t* before *r*, see § 527), *ft* (= Indg. *pt* and *qt*, see § 527), *χt* (= Indg. *k̂t* and *qt*, see § 527), *sk* (= Indg *sk̂*, *sq* and Indg. *tq*, see § 527) Cp.

Goth *speiwan* OHG *spīwan* 'to vomit' Lith *spáuju* etc., see § 342 Goth OHG *ist* 'is'. Gr *ἐστί*, Indg **és-ti* Goth *ga-kusts* 'a trying, testing' · Skr *púšṭi-š*, Indg. **q̑us-ti-s*. Goth. *blōstreis* 'sacrificer' OHG *bluostar* 'sacrifice, offering' with *str* = Indg. *t"tr* Goth *hliftu-s* 'thief' Gr *κλέπτη-ς* Goth *fimfta-* 'quintus' Gr. *πέμπτο-ς*, Indg **penqto-s* Goth. *raihts* OHG. *reht* 'right' Gr *ὀρεκτό-ς*, epf **rekto-s* Goth *nahts* OHG *naht* 'night' · Lith. *naktì-s*, Indg **noqti-s* Goth *skeinan* OHG *scīnan* 'to shine' Gr *σκά*, weak rt form *skə̄-* see § 393. Goth *us-skaua-* 'considerate, sober', OHG *scouuōn* 'to look, see' Skr. *kav-i-š* 'seer, teacher' weak rt form *squ-*, see §§ 439 589, 3 O.Icel *lqskr* soft, tender, slack', orig f *lət-qo-s*, rt *led-*, see § 527

Rem 1 The combination *sk-* probably lost its *k* already in the prim Germ period OHG *sliozan* 'to shut' O S *slutil* 'key' Gr *κλῄς* etc., see § 425

Rem 2 *sd*, *td*, *ld* are also written for medial *st*, *ft*, *ht* in OHG Franconian monuments See Kogel Ub d Keron Glossar p 70 f, Zu den Murbacher Denkm (Leipz 1883) 13 ff On the value of the spellings *sg*, *sch* beside *sk*, *sc* see Kogel in the first named treatise p 93, Braune Ahd Gramm p. 127

It is however quite possible that the tenues first underwent the same affection after spirants as in other cases and then after that became explosives again, that is Indg **ésti* became **isþi* and then **isti* (Goth. *ist*). Cp 2 sg *last* (*lisan* 'to collect, gather') fr. **las-þa* (§ 541, 7), OHG *cumft* fr **kumfþ-* (§§ 214 529) and Goth. *huzd* 'treasure' fr **huzda-n* (§ 538)

§ 529. The voiceless spirants in **faþér-* 'father' etc., which had arisen according to § 528, remained voiceless spirants initially in prim. Germ., and also medially if the sonant next preceding

received the principal accent (according to the old Indg. accentuation, § 686). The fricative sound of *χ* was reduced initially before vowels, and perhaps also medially under certain circumstances (not before consonants).

Gothic.

Initially. *fadar* 'father' : Lat *pater*. *fōt-u-s* 'foot' : Lat. *pēs*. *þat-a* 'that' : Gr. *τό*. *þaha* 'I am silent' . Lat. *taceō*. *hund* 'hundred' : Skr. *śatá-m*. *haírtō* 'heart' : Lith. *szirdì-s*. *háudu-s* 'way, manner' : Skr. *kētú-š*. *hlifa* 'I steal' . Pruss. *au-klipts*. *hva-s* 'who' : Skr *ká-s*.

Medially. *uf* 'under' : Skr. *úpa*, Indg. **úpo*. *brōþar* 'brother' : Skr. *bhrátar-*, Indg. **bhrátor-*. *vaírþa* 'I become' : Skr. *vártāmi*, Indg. **wértō* *faíhu* 'cattle' : Skr. *páśu*, Indg. **péḱu*. *swaíhra* 'father-in-law' . Skr. *śváśura-s*, Indg. **sṷéḱuro-s*. *saíhva* 'I see' : Skr. *sácatē*, Indg. 3. sg. mid. **séqetai*. *vulfs* 'wolf' : Skr. *vṛ́ka-s*, Indg. **wĺ̥qo-s*. See §§ 342. 374. 393. 439. 440. 441. 444*a*

German

f remained. OHG *fater* 'father'. OHG. *nefo*, cp. Ags. *nefa* O Icel. *nefe nefi* 'relation, nephew' · Skr *nápāt* 'descendant', Indg. **népōt-*.

þ became *d*, this remained down to the time of the OHG. monuments, and was represented by *th* (more rarely *dh*). In the course of the OHG period however it was developed to *d* in different parts at different times (first in Bavaria during the eighth century). OHG *thorn dorn* : Goth *þaúrnu-s*, O.Bulg. *trŭnŭ*. OHG. *bruother bruoder* 'brother'.

The letter *h* appears for prim. Germ *χ* in HG., as in Goth. The sound was merely an aspirate in every case initially, and medially certainly at least between vowels. OHG. *hunt* 'hundred'. OHG. *fāhan* 'to catch' : Goth. *fāhan*, prim Germ **faŋχana-n* (cp. § 214 p. 182). The *h* in initial *hw*, *hr*, *hl*, *hn* disappeared from the eighth century onwards, earliest in *hw*, e. g. *hwaz waz* 'what' : Goth. *hva*; *hliumunt humunt* 'renown' : Goth. *hliuma* m.

'hearing', rt. *kleu̯-*. Spellings like *Chlodovichus* (*Hludwīg*) show that the value *χ* still prevailed in the fifth and sixth centuries.

West Germanic consonant lengthening (gemination) through following *i̯* OHG *heffen* OS *hebbian* 'to raise' : Goth. *hafjan*, Lat *capiō*. OHG. *hlahhen* Ags *hlæhhan* 'to laugh' · Goth. *hlahjan*. Cp. §§ 532 535. 540 and the similar doubling of nasals and *l* §§ 216. 277.

mþ seems to have become *mſþ mft* OHG *cumft* 'a coming' (Goth. *ga-qumþi-*), *numft* 'a taking', *ramft* 'edge', MHG *brunft* 'rutting time of the red-deer' (*nf* from *mf*) Cp §§ 214. 528.

Rem In like manner perhaps *nþ* became *nſþ*, *nſt* OHG *kunſt* 'art', cp Goth *kunþi* 'knowledge' Doubts remain because of Goth *anþar* OHG. *ander*. On the s in Goth *ansts* etc see Kluge Paul-Braune's Beitr IX 154 f

§ 530. Medial *f*, *þ*, *χ* (*χ*^{w}) became *b*, *d*, *ʒ* (*ʒ*^{w}) in prim Germ — and at the same time *s* became *z* (§ 581) —, when the next preceding sonant did not have the principal accent (§ 529) or *t*, *s* directly followed (§ 527) This phenomenon is called 'Verner's law' (see Kuhn's Ztschr XXIII 97 ff) The Indg tenues, which were thus affected, fell together with Indg *bh*, *dh*, *ĝh*, *gh* (§ 538) and underwent all further developments in common with these

b, *d*, *ʒ* (*ʒ*^{w}) became *b*, *d*, *g* (*gu*) after nasals, very probably in the prim Germ period, and *ʒu* became *u* after vowels (§ 444*c*)

These voiced spirants also became mediae after *r*, *l* in Gothic, while in other cases they remained spirants, but were not distinguished from mediae in writing

The West Germanic dialects changed every other remaining *đ* to *d*. Then in Upper Germany and East Franconia *d* became *t* (which partly suffered further affections that need not be taken into consideration here), elsewhere it remained *b* and *ʒ* became *b* and *g* in HG (while they remained spirants in other West Germ dialects), and these became *p* and *k* in Upper Germany, but not universally

p. Prim. Germ **lībó* fr **līſó* 'I adhere, remain' (rt *leu̯p-*, cp. Skr. *limpâmi* Lith. *limpù*) . Goth *bi-leiba* (*b*), OHG. *bi-lība*

Ags. *be-līfe* (*f* is to be read as *ð*). OHG. *uoba* 'festival' *uobo* 'colonus', to Skr. *ápas-* 'religious work' Lat. *opus*.

t. Prim. Germ. **faðér-* fr. **faþér-* 'father' (Skr. *pitár-*, Gr. *πατέρ-*) : Gr *fadar* (*ð*), OHG. *fater fader* OS. *fader* Ags. *fæder* O.Icel. *faðer faðir*. Goth. *háidu-s* (*ð*) 'way, manner', OHG. *heit heid* : Skr. *kētú-š* Goth. *ga-tami-da-* (*ð*) 'tamed', OHG. *gi-zemit gi-zemid* : cp. Skr *dami-tá-* Lat. *domi-tu-s*. Prim. Germ. **χunðá-m* 'hundred' (whence **χunda-m*, further **χunda-n*) fr. **χunþá-m* (Skr *śatá-m*, Indg **ḱmtó-m*) : Goth *hunda-*, OHG *hunt hund* OS Ags. *hund* O.Icel. *hund-rað*. Goth. *munda-* 'believed' *ga-munði-* 'memory' Skr. *ma-tá- ma-ti-*. Goth. *sandjan* 'to send', OHG *sentan sendan* OS *sendian*, orig. form of the 1 sg mdic pres **sontéiō*, cp Goth. *siuþs* (st *siuþa-*), O Ir *sēt* 'way', cpf **sónto-* Prim. Germ. **χarðú-* fr **χarþú-* 'hard' (cp Gr *κρατύ-ς* with weak grade vowel in the root-syllable) : Goth *hardu-s*, OHG *hart hard* OS *hard* Ags *heard*, O Icel *harðr* Goth *fra-vardja* 'I destroy, spoil' : Skr. *vartáyāmi*, Indg **uorténō*

ĥ, g On Prim Germ. **sueχrú-* fr. **sucχrú-* (Skr. *śvaśrú-*, Gr *ἑκυρά*) are founded OHG *sweigar* Ags *swecer* 'mother-in-law', cp Goth *swaíhra* § 529 Goth *tigu-s* (*g*) 'decade', OHG. *-zig* Ags. *-tig*, O Icel *tegr* (*g* is the sign for *g*) are founded on Indg. **dekm* with accented suffix (cp. Skr instr *daśábhiš daśabhís*), dat. pl Goth *tigum* fr **teg-mi* (§ 244), cp Goth *taíhun* orig f **déḱmt* § 529 Goth *gagana-* (*g*) m or n. 'fight', OHG *gagan* OS *gagand* (*g* is the sign for *g*) Ags *wīgend* 'warrior' fr the prim. Germ tense stem **uīχá-*, rt *ueiq-* (§ 439), cp Goth. *veiha* 'I fight' orig form **uéiqō* Prim Germ **iūnga-* fr **iūngá-* fr **iūnχá-* 'young' (Skr *yuva-śás*) · Goth *juggs*, OHG OS *jung*, O Icel *ungr*, cp compar Goth. *jūhiza* O Icel *yðre* 'younger' fr prim. Germ **iū(u)χizo* (§ 214) Goth *hals-agga* m 'bend of the neck, nape' Skr *aṅká-*

Verner's law is of special importance for the proper understanding of the 'grammatical change' in the verb. In this respect the West Germ dialects show a variety of more archaic relations

than Gothic, since the regular differences had been levelled out in this language by form-transference. To Skr. *vártāmi* 1. sg. pres., *vavárta* perf. indic. 3. sg., *vavṛtimá* 1. pl., *vavṛtānáparticip.* from rt. *u̯ert-* 'turn' corresponded prim. Germ. **u̯érþō*, **u̯árþi*, **u̯urđumí*, **u̯urđaná-*. From these regularly Ags. *weorđe*, *weard*, *wurdon*, *worden* OHG. *wirdu*, *ward* (*wirthu*, *warth*), *wurtum*, *wortan*. On the other hand Goth. *vaírþa*, *varþ*, *vaúrþum*, *vaúrþans*, regular *đ* (cp. *fra-vardjan*) having been supplanted by *þ* in the two last forms. OHG. regularly *ziuhu*, *zōh*, *zugum*, *zogan* (rt. *deu̯k-* 'draw'), but Goth. *tiuha*, *táuh*, *taúhum*, *taúhans*, the two last for **tugum*, **tugans* (ʒ), etc.

On prim. Germ. (ʒ)*u* = Indg. *q* in Goth. *siuns* OS. *sium* 'countenance', OHG. part. *-liwan* 'lent' etc. see §§ 441. 444*c*.

In prim. Germ. *bn*, *đn*, *ʒn*, before the principal accent of the word, passed into *bb*, *đđ*, ʒʒ, further into *bb*, *dd*, *gg*, and these — still in the prim. Germ. period — became the tenues *pp*, *tt*, *kk* at the same time with the Indg. mediae (§§ 533. 534). Further shiftings took place in HG viz *pp* to *pf* (but Rhenish-Franconian *pp*), *tt* to *zz* (MHG *tz*), *kk* to *ch*, that is, *kχ* (but Franc *kk*) MHG. *hopfen* (Mod.HG Rhenish-Franc *hoppe*) Ags. *hoppian* O.Icel. *hoppa* 'to hop' = Goth **huppōn*, MHG. *hüpfen* (Mod.HG. Rhenish-Fr. *hüppe*) Mid Engl *hyppen* 'to hop' = Goth. **huppjan*, prim. Germ. **χupp-* fr. **χuƀ-n-*, orig. **qup-n-* : O.Bulg. *kypĕti* 'to hop, leap'. OHG **snizzen* (to be inferred from *snizzāri* 'carver') MHG *snitzen* 'to cut', prim. Germ. **snitt-*, fr **snid-n-* orig **snit-n-*, cp. Goth. *sneiþa* 'I cut' from original **sné̯tō* OHG. *zocchōn* MHG. *zocken* 'to pull, tug' = Goth. **tukkōn*, OHG. *zucchen* MHG. *zucken* 'to drag' = Goth **tukkjan*, prim. Germ. **tukk-* fr. **duʒ-n-*, orig. **duk-n-*, cp. Goth *tiuhan* 'to draw', rt. *deu̯k-*. The nasal in these intensives was the nasal of the present stem-suffix *-nā-* (Gr. *δάμ-νη-μι* etc.) On the other hand e. g. OHG. *smoccho* Ags *smoce* O Icel. *smokkr* 'underdress' (beside the intens. MHG. *smucken* 'to bevel, dress, adorn' to MHG. *smiegen* 'to press tightly' O.Icel *smjūga* 'to creep through' : Lith. *smùkti* 'to slide, glide' O Bulg. *smykati sę* 'to creep') contained a nominal weak stem-form **smuq-n-* (cp. Gr. *ἀρ-ν-* 'ram', Skr. *ud-n-* 'water'),

which underwent various transformations by analogy, after the strong forms **smuq-én-* etc. had died out (s. Kluge in Paul-Braune's Beitr. IX 169). Cp. §§ 214. 534. 538.

§ 531. The voiced spirants, which had been received from prim. Germ., passed into the corresponding voiceless spirants in Goth., when they came to stand finally or before *s*. Nom. masc. *tamiþs* 'domitus' neut. *tamiþ* 'domitum' beside gen. *tamidis* (*đ*) 'domiti' etc. 3. sg. pres. *bairiþ* 'bears' fr. **bʰriđ(i)*. Skr. *bhárati*. *af* 'of' beside *ab-u* with *b* (*-u* interrogative particle). 3. sg. pret. *bi-láif* (*bi-leiba* [*b*] 'I remain') fr. **-láiƀ(i)*, a new formation for prim. Germ. **láiƒi* = Indg. **le-lóiƥ-e*. The letter *g* was retained to express *χ*, see § 539

b, *d*, *g*, which are to be read as mediae after consonants, probably became tenues in the same position, but this change was not represented in writing Part nom *nasjands* acc. *nasjand* 'saviour' from prim. Germ. **-anda-z *anda-n* 3. pl. *nasjand* 'they rescue' prim Germ **-andi*. Nom. *alds* 'age' prim. Germ. **aldī-s*. Nom. masc. *juggs* neut. *jugg* 'young' prim Germ. **-ūnəgá-s *-unəgá-n*.

§ 532. Prim. Germ. *ƀ*, *đ*, *ȝ* became *bb*, *dd*, *gg* (gemination) before *i* in West Germanic, and these were further shifted to *pp*, *tt*, *kk* throughout the whole of High German OHG *uppi* 'ill-natured' prim. Germ **uƀia-*, to OHG *ubil* Goth. *ubils* 'evil', which as original **upélo-* 'going over the mark, bounds' is connected with OHG *ubir ubar* OS *obar* 'over' Skr. *upári* Hom. Gr. *ὑπείρ* OHG. *dritto dritto* 'tertius' OS. *thriddio* Ags. *đridda* Goth *þridja* (*đ*) O.Icel *þriđe þriđi* (fem. *þriđja*), prim. Germ nom. masc **þriđiʀ(n)* fr **þri-þiʀ(n)*: cp Skr. *tr̥tī́ya-s* Lat. *tertius*. OHG. *ekka* 'point, edge, corner' OS. *eggia* : Goth. **agja* (*ȝ*) O.Icel *egg*, gen. *eggjar* (*gg* fr. *ȝi* by a special Norse law), prim Germ **aȝiʀ-* fr. **aχiʀ-*: cp. Lat *acie-s*, rt *aĝ-*. OHG. *wulpa* MHG. *wulpe* 'she-wolf', with simplification of the *pp* after *l*, prim Germ. **wulbī* (Indg **ulqī́*, Skr *vr̥kī́*), gen. **wulbiʀ́s* (a new formation for **wulȝiʀ́s*), fem. to OHG. *wolf* Goth. *vulfs* prim. Germ. **wúlfa-z* (Indg. **ulq́o-s*), see § 444 *a*. Cp. §§ 529. 535. 540.

§ 533. History of the mediae.

These became tenues in prim. Germanic, except *d* in the Indg combination *dʰdh*.

Gothic like the other Germ. languages, except High German, retained these tenues.

b. diups 'deep' : Lith. *dubù-s*, rt. *dheu̯b-*. See § 343.

d. tuhan 'draw' Lat. *dūcō*. *haírtō* 'heart' : *καρδ-ία*. *asts* 'twig, branch' : Gr. *ὄζο-ς*, Indg **ozdo-s* See § 375.

ǥ, g. kaúrn 'corn' . O.Bulg. *zrŭno*, cpf. **ǥr-no-m*. *uf-rakjan* 'to lift up' : Av. *raz-išta-* 'straightest, most just', rt. *reǥ-*. *juk* 'yoke' : Skr *yugá-m*, Indg. **jugó-m* *qima* 'I come' : Skr. *gám-a-mi*, rt *gem-* *vaírpa* 'I throw' : O Bulg *vrŭgą*, rt. *u̯erg-*. See §§ 394, 439. 440 443, 444 *a*.

The character of these sounds remained unchanged in West Germanic in the period of the prim community. In HG however they underwent further shiftings

In Upper and Middle German dialects *p* became *pf* (written *pf* and *ph*) initially and after consonants, but *ff* (*f*) between vowels This *pf* became *f* (*ff*) initially in certain dialects and in most of them medially after consonants OHG *pflegan flegan* (Renish-Franconian *plegan*) 'to care for' OS *plegan* 'to promise, pledge', perhaps to Gr. *βλέφαρο-ν* 'eyelid' (Kluge Et Worterb.). OHG. *werpfan werfan* 'to throw' : OS *werpan*, Goth *vaírpan* with *p* fr. Indg *ǥ*, see above OHG *slaf* (gen. *sluffes*) 'slack, lax' . Du. *slap*, OHG. *slāffan slāfan* 'to sleep' · OS. *slāpan*, Goth *slēpan*, O.Bulg. *slabŭ* 'slack, weak', rt *slēb-* OHG *scuffōn* 'do, make' O Icel *skapa* (beside this OHG *scepfen* 'to scoop' : OS. *skeppian*, see § 535); this category has been ascribed to the rt. *sqab-* in Lith *skabù-s* 'cutting etc. (§ 346), the intermediate meaning being regarded as 'to bring to pass by hollowing out'.

t became *z*, that is *ts*, in HG. initially (except before *r*) and after consonants (except after *s*); after vowels it became the voiceless spirant *zz* (*ʒ*), see § 375. OHG *ziohan* 'to draw, pull' · OS. *tiohan*, Goth. *tiuhan*. OHG. *herza* 'heart' : OS. *herta*, Goth *haírtō*. OHG. *smelzan* 'to smelt, melt, become liquid' *smalz* n. 'grease' . Ags. *smolt* 'soft, quiet', Gr. *μέλδω* 'I soften,

melt'. OHG. *wizzan* 'to know' *weiz* 'I know' : OS. *witan wēt*, Goth *vitan váit*.

Initially OHG. *tr-* = Goth. *tr-* : *triuwa* 'fidelity' : Goth. *triggva*, Pruss. *druwi* (§ 375); on the spelling *dr-* for *tr-* in Franc sources, as *druuua*, see Kogel Keron Gloss. 70 f., Zu den Murbacher Denkm (Leipz. 1883) 13 ff.

OHG. *ast* 'branch' · Goth *asts*, Indg. **ozdo-s*. *nest* 'nest' : Ags. *nest*, Skr. *nīdá-s* 'lair of animals', Lat. *nīdu-s*, Indg. **ni-zd-o-s* (§ 355).

OHG. *gūfalōn* beside *zwīfalōn* 'to doubt' : Goth. *tweifls*. See § 375

k became *kχ* (written *ch*, *h* etc) in Upper German initially and after consonants (except *s*), whilst it remained *k* in Middle Germ. It became *χχ*, *χ* (*hh*, *h*) universally between vowels. OHG. *chorn korn* 'corn' Goth *kaúrn* *chnu knu* 'knee' : Goth *knu*. *chweman queman* 'to come' : Goth *qiman*. *werch werk* OS *werk*, Gr. *ϝεργο-ν* *danch thank* 'thought, thanks' : OS *thank*, Goth. *þagks*, Lat *tongeo* 'I know'. *wahhēn* 'to wake' : OS. *wakōn*, Goth *vakan*, Skr *vájáyati* 'urges on, drives on'. *dah*, gen *dahhes*, 'roof' O Icel *þak*, Lat *tegō*

OHG *masca* OS *maska* 'mesh, stitch'. Ags *mæsce*, O.Icel. *möskve möskvi*, Lith *mezgù* 'I knit' *mãzgas* 'knot', rt *mezg-*.

§ **534.** *bn, dn, gn* became *bb, dd, gg* before the principal accent in prim Germ, thence by § 533 *pp, tt, kk*, which were further treated just the same as the *pp, tt, kk* (§§ 530 538) which had arisen from Indg *pn, tn, ḱn qn* and from Indg. *bhn, dhn, ǵhn ghn* OHG *topfo* 'top' MHG. *topf* 'pot' (Rhenish-Franc *topp*), Ags *doppa* 'mergus', to Goth *dubs*, rt. *dheub-*. MHG. *rupfen ropfen* 'to pluck' (Rhenish-Franc. *roppe*), to OHG. *roufen* Goth *raupjan* 'to pluck, tear out', rt. *reub-* (§ 343). MHG. *stutzen* 'to push (with the horns), start back', to OHG. *stōzan* Goth *stautan* 'to push', Skr *tudámi*, Lat. *tundō*. MHG. *slutzen* 'to slit', to OHG *slīzan* OS Ags. *slītan* 'slit, split', rt. *sleid-* OHG. *loc loch* (pl *loccha*) MHG. *loc* (pl. *locke*) 'lock, ringlet', Ags. *locc* O.Icel *lokkr* = Lith. *lugna-s* 'pliable', to Gr. *λύγο-ς* 'pliant twig or rod' *λυγόω* 'I bend, tie'. OHG. *sluccho*

slukko 'glutton' MHG. *slucken* 'to gulp, have hiccup', to Gr. *λύζω λυγγάνομαι* 'I have the hiccup'.

§ 535. The prim. Germ. tenues, which had arisen from Indg. mediae, became *pp, tt, kk* (gemination) in West German. not only before *j*, but also before *r*, *l* and *w*. *pp* became *pf* (Rhenish-Franc. *pp*) in HG.; *tt* became *zz* before *j*, but remained before *r*. *kk* became *kχ* in Upper German. but remained in Middle German. OHG. *scepfen* 'to scoop' (Rhenish-Franc. *scheppe*), OS. *skeppian*, see § 533. OHG. *lezzan* MHG. *letzen* 'hinder, hurt', OS. *lettian* Ags *lettan* : Goth. *latjan*, rt. *lēd-* 'leave, let'. OHG. *ottar* 'otter' (on the anaptyctic *a* in this and the following forms see §§ 277. 628) : O.Icel. *otr* pl. *otrar*, Skr. *udrá-s* 'water animal', Gr. *ὕδρο-ς ὕδρᾱ* 'water serpent'. OHG OS. *bittar* 'bitter' : Goth. *báitrs* (ablaut difference **bhidro- *bhoidro-*), to Goth. *bītan* 'to bite'. OHG. *hlūttar* 'clear, pure', Ags. *hlūttor* . Goth. *hlūtrs*, Gr. *κλύζω* fr **κλυδ-jω* 'I wash out, clean'. OHG. *wecchen wecken* to wake', OS. *wekkian* : Goth. *vakjan*, O.Icel *vekja*, to OHG. *wahhēn* etc., see § 533. OHG. *acchar accar* 'acre, field', OS. *accar* : Goth. *akrs*, Gr. *ἀγρό-ς*. OHG *facchla facchala faccala* 'torch', it is doubtful whether it was borrowed from Lat. *facula*. OHG. *nacchot naccot* 'naked' Goth. *naqaþs*, Lat. *nūdu-s* fr. *no(g)ŭedo-s*, Skr. *nagná-s* (§ 432 *c*). OHG *chuecchēr quekkēr* infl adj form 'alive, quick' : O.Icel. *kykr* acc. *kykvan*, prim. Germ. **kuikua-*, beside Goth. *qius* (st. *qiva-*). On the loss of the *w* after medial *k* in OHG. see § 180. Cp. §§ 529. 532. 540.

§ 536. The *d* in *dzdh* became assimilated to the following *z* in prim. Germ. Goth. *huzd* 'treasure' OHG. *hort*, Indg. **kud̑dho-*. Perhaps also Goth. *gazds* 'sting, prick' OHG. *gart* 'rod, switch' O.Icel. *gaddr* 'sting' . Lat. *hasta*. See §§ 469, 5 507. 538

Rem Osthoff (Morph IV 262 f.) attempts to adjust Goth *uz-* OHG *ur- ar-* (Mod.HG *er-*) in *er-teilen* (for *ur-teilen*) to Skr. *ud* and Goth. *ut* OHG. *uz* 'out' by assuming that the form arose regularly in compounds like Goth. *us-driban* (for **uz-driban*) 'to drive out'. Cp Av *uz* § 476. OHG *ort* OS. *ord* O Icel *oddr* 'point, top', fr **ud-dhe* 'put up, lift up'?

The *z* in Goth. *uz-* became assimilated to a following *r*, as *ur-reisan* 'to rise up'.

§ 537. History of the mediae aspiratae.

In prim. Germ. they first became the voiced spirants *b̥, d̥, ʒ* (*ʒu̯*).

1. **Initially.** In the course of the individual dialects they were shifted to mediae; in Gothic all three in prehistoric times; in West Germanic *b* and *đ* in all branches likewise in prehistoric times, whilst ȝ remained as ȝ in OS. and Ags. down to historic times, in the period of the oldest runic monuments all three were still spirants in Norse. In HG. *b* and *g* were further shifted to *p* and *k* in Upper Germany, *d* was shifted to *t* both there and in East Franconia.

bh. Goth. *beitan* 'to bite', OHG. *bīzzan bīzan* Upper Germ. *pīzzan* OS. Ags. *bītan*, O.Icel. *bita* (prim. Norse **bītan*) : Skr. *bhédāmi*, rt. *bheid-*. See § 344.

dh-. Goth. *dags* 'day', OHG. Rhenish-Franc. *dag* East Franc. and Upper Germ. *tag* OS. *dag* Ags. *dæȝ*, O.Icel. *dagr* runic. *dagaʀ* (read *daȝaʀ*) . Lith. *dāga-s*, rt *dhegh-*. See § 376.

ĝh gh. Goth. **gans* 'goose' (from which Span. *ganso* was borrowed), OHG *gans* Upper Germ. *cans* Ags ȝōs, O.Icel. *gās* : Lith. *žąsì-s*. Goth. *gasts* 'guest', OHG. *gast* Upper Germ. *cast* OS. *gast* (ȝ) Ags. *ȝiest*, O.Icel. *gestr* runic *gastiʀ* (ȝ) : Lat. *hosti-s* O.Bulg. *gostĭ* In *gu-* (= Indg *gh-* ȝ-) was dropped already in prim Germ. : Goth *varmjan* 'to warm', OHG *warm* O.Icel. *varmr* 'warm' : Skr *gharmá-s* See §§ 395 439. 443.

§ **538.** 2 **Medially** The Indg. mediae aspiratae, through their being developed to voiced spirants, fell together with the Indg. tenues according to § 530, and thus the laws given in §§ 530—532 operated here also

The following forms, in the first place, are to be judged of by § 530.

bh Goth *luba-* (*b*) 'dear', OHG. *lubo* adv. 'with pleasure' Ags. *leófost* 'dearest' (*f* is *b*), O.Icel *ljūfr* 'dear' (*f* is *b*) : Skr. *lúbhyati* 'fosters a vehement longing', rt. *leubh-*. Goth. *kalbō* 'female calf', OHG. *chalba* f *chalb* n , Ags. *cealf* (*b*) n., O Icel. *kalfr* (*b*) : Gr. *δολφό-ς δελφύ-ς* 'womb' *δέλφαξ* 'pig'. OHG *chamb* (gen. *chambes*) 'toothed instrument, comb', Ags. *comb* : Skr. *jámbha-s* 'tooth', Gr. *γόμφο-ς* 'plug, peg, pin, nail', O.Bulg. *zǫbŭ* 'tooth'.

dh. Goth. *ana-biudan* (*đ*) 'bid, command', OHG. *biotan*

biodan OS. *biodan* Ags *beódan*, O.Icel. *bjōđa*, prim Germ. **beuđuna-n* · Skr. *bódhāmi*, rt. *bheudh-*. Goth. *bindan* 'to bind', OHG *bintan bindan* OS. Ags. *bindan*, O Icel *binda*, prim. Germ. **bindana-n* : Skr. *bándhana-m*, rt. *bhendh-*. Goth. *haírda* 'herd', OHG. *herta herda* Ags. *heord*, O.Icel *hjǫrđ*, prim. Germ. **χerđō* : Skr. *śárdha-s* 'herd, troop'.

ĝh, gh. Goth. *steigan* (ʒ) 'to ascend, climb', OHG. *stīgan* OS. *stīgan* (ʒ) Ags *stīgan*, O Icel. *stīga* (ʒ), prim. Germ **stīʒana-n* Gr. *στείχω*, rt. *steigh* Goth *aggvu-s* 'narrow', OHG. *engi*, O.Icel. *ǫngr* · Gr. *ἄγχω*, rt *anĝh-*. Goth *gaggan* 'to go', OHG. *gangan*, O.Icel *ganga* · Skr. *jaṅghā-* 'heel-bone', rt. *ĝhenĝh-*. Goth *láuna-varga-* 'unthankful man', OHG. *warg* 'strangler' MHG *er-wergen* 'to strangle', O Icel. *vargr* (ʒ) 'wolf. outlawed evil-doer'. Lith *veržiù* 'I string, compress, straiten', rt *uerĝh-*.

On prim. Germ (ʒ)*u* in Goth *snáivs* fr orig. **snoigho-s* and similar forms see §§ 443. 444*b*. In the cases there quoted prim Germ. ʒ*u* was the labialised form of Indg *gh*. The same loss of a suffixal *-u-* occurs in prim Germ **maiʒ)u-ī* 'girl' (Goth. *mari*, gen *márjōs*), to masc. Goth *magu-s* 'boy, child, servant' = O Ir *mug* 'slave, servant', cp Skr *sváid-v-ī* fem to *svād-ú-š* 'suavis'.

Here is further to be added — in contrast to § 530 — the case when prim Germ *d*, ʒ followed *z* Goth. *mizdō* 'pay, reward', in West Germ. with 'compensation lengthening' of the *e* > *i* OHG *mēta miata* OS *mēda* O Frs *mede* Ags *mēd* beside *meord* (*o* from *z*). Gr. *μισθό-ς*, Indg **mizdhó-* **mizdha-* (§§ 596 621) Goth. *huzd* 'treasure', OHG *hort* OS *hord* (*horth*) Ags *hord*, O.Icel *hodd* Indg **kud'dho-*, cp. §§ 469, 5. 507 536. OHG *marg* 'medulla' Ags. *mearʒ*, O.Icel. *mergr* (ʒ), Goth *mazga-*, pre-Germ. **mozgho-*, cp §§ 450 590 596.

Prim Germ *pp, tt, kk* from *bn, dn, ʒn*. Sure examples are known to me only for *kk*, as OHG. *lecchōn* Mid HG. *lecken* 'to lick', OS *leccōn*, prim. Germ. **likkōna-n* (cp Goth. *bi-láugōn*): Gr. *λίχνο-ς* 'lickerish', Lat. *lingō*, rt. *leiĝh-* Cp §§ 214. 530. 534.

§ 539. A change of *b, đ*, ʒ to *f, þ, χ* (*g*) in Gothic, cp. § 531. Masc. nom *hufs* acc. *huf* 'dear' beside gen. *hubis*

(*b*). *ráuþs ráuþ* 'red' beside gen. *ráudis* (*đ*), rt. *reudh-*. *vigs vig* (*χ*) 'way' beside *vigis* (*ʒ*), rt. *ueĝh-*.

Pret. *svarb* to *svaírban* 'to wipe from', rt. *suerbh-*; pret. *band*, to *bindan*, rt *bhendh-*; *gild* n. 'tax', to *fra-gildan* 'to requite', rt. *gheldh-*; *gaggs gagg* 'way, street'; *láuna-vargs* 'unthankful man' *-varg* are parallel to the forms like *nasjands nasjand* etc. in § 531. The forms *gazds*, *huzd* (st. *gazda-*, *huzda-*) were accordingly possibly pronounced with *st*.

§ 540. West Germ. *bb*, *dd*, *gg* (H. German *pp*, *tt*, *kk*) before *j*, see § 532. OHG. *sippia sippa* 'relationship', OS. *sibbia sibbea* Ags. *sib* (gen *sibbe*) : Goth. *sibja* (*b*), O.Icel. *Sif* (gen. *Sifjar*, *f* is *b*) goddess of the family and wedlock, Skr. *sabhá-* 'assembly, society of kinsfolk' OHG *mitti* 'medius', OS. *middi* Ags. *mid* (gen. *middes*) : Goth *midjis* (*đ*), O.Icel. *miðr* (acc. *miðjan*), Skr. *mádhya-s* 'medius' OHG. *bitten* 'to request', OS. *biddian* Ags. *biddan*. Goth *bidjan* (*đ*), O Icel *biðja*, Gr. *πείθω*, rt. *bheudh-* (§ 67 rem 3) OHG *ligen* 'to lie down', OS *liggian*: O Icel. *liggja* (*gg* fr. *ʒj* by a special Norse process), prim. Germ. **liʒjana-n*, Gr *λέχος* 'bed', rt *legh-*. Cp. §§ 529 535

§ 541. Chronology of the prim. Germ. shiftings of the explosives. The following is probably the order in which the chief acts of the prim Germ shifting of the Indg. explosives took place; we include at the same time the history of the Indg tenues aspiratae, which will be more fully discussed in § 553.

Act 1 (or 2). The aspirates become spirants *bh*, *dh*, *gh* become *b*, *đ*, *ʒ*, e g **bheudhō* becomes **beudō* (Goth. *biuda*), see § 537 *ph*, *th*, *kh* become *f*, *þ*, *χ*, e. g 2 sg. perf. **le-lós-tha* (rt. *les-* 'gather together') becomes **(le)-laspa* (Goth. *last*), **nokh-ló-* 'nail' becomes **naχlá-* (OHG. *nagal*), see § 553.

Act 2 (or 1). *p*, *k* become *f*, *χ* before *t* and *s*, e. g **rekto-s* 'right' becomes **reχta-s* (Goth. *raihts*), see § 527.

Falling together of the tenues asp with a portion of the tenues.

Act 3 The tenues become voiceless spirants elsewhere, *p*, *t*, *k* become *f*, *þ*, *χ*, e. g. **pətḗr*, **bhrātōr* become **faþḗr* **brōþōr* (Goth. *fadar*, *brōþar*), see § 528.

Falling together of a further portion of the tenues (eventually of all tenues, see the end of § 528) with the tenues asp.

Act 4. The voiceless spirants become voiced by Verner's law, *f*, *þ*, *χ* become *b̥*, *d̥*, *ʒ*, e. g. **naχlá-* becomes **naʒlá-*, **faþér* becomes **faðér*, see § 530.

Falling together of tenues asp. and tenues with the mediae asp.

Act 5. The *b̥*, *d̥*, *ʒ*, which had arisen from mediae asp. and tenues, assimilate a following *n* before the principal accent: *b̥b̥*, *d̥d̥*, *ʒʒ*, e. g. pres. stem **liʒ-nô-* 'lick' (Indg. **ligh-nâ-*) becomes **liʒʒô-* (OS *leccōn*), noun stem (weak) **smuʒ-n-* 'dress' (Indg. **smuq-n-*) becomes **smuʒʒ-* (O.Icel. *smokkr*). Indg. *b*, *d*, *g* with a following *n* simultaneously become *bb*, *dd*, *gg* when the accent is in the same position, e g. **lug-nâ-* 'lock, ringlet' (Indg. **luq-nó-*) becomes **luggâ-* (O.Icel. *lokkr*). Then *b̥b̥*, *d̥d̥* *ʒʒ* become *bb*, *dd*, *gg*. **liʒʒô-* **smuʒʒ-* become **liggô-* **smugg-*. See §§ 530 534 538.

Falling together of mediae with tenues and tenues asp.

Act 6. The mediae become tenues, *b*, *d*, *g* become *p*, *t*, *k*, e g. **deuχō* 'I draw' (rt. *deuk-*) becomes **teuχō* (Goth. *tiuha*), **azda-* 'branch' becomes **asta-* (Goth. *asts*), **liggō-*, **smugg-*, **lugga-* (see 5.) become **lukkō-*, **smukk-*, **lukka-*. See § 533.

Act 7 *sþ*, *zd*, *mb*, *nd*, *ŋʒ* become *st*, *zd*, *mb*, *nd*, *ŋg*, e g. **(le-)lasþa* (1.) becomes **lasta* (Goth. *last*), **mizdō-* 'pay, reward' becomes **mizdō-* (Goth. *mizdōn-*), **(be-)bande* 'he bound' becomes **bande* (Goth *band*) See §§ 530. 538.

Rem. That *sþ* first became *st* at this period, is only deduced from the change of *zd* to *zd*, which cannot have taken place earlier Here belongs eventually also the origin of the tenuis in Goth *speiwan*, *sat* etc, see § 528 (end) and 3 above.

Baltic-Slavonic.

§ 542. The Indg. tenues and mediae remained in the period of the Balt.-Slav. prim. community, while the mediae aspiratae, as in Iran. (§ 481) and Kelt. (524), became mediae and thus fell together with the Indg. mediae.

Indg. *k̂, ĝ, ĝh* were *š*-sounds in this period. See § 412.

§ **543.** History of the tenues, prim. Balt.Slav. *p, t, k* and *š*. These sounds generally remained unshifted.

p. Lith. *pìlna-s* O.Bulg. *plŭnŭ* 'full' : Av. *per'na-*, rt. *pel-*. See § 345.

t. Lith. *tą̃* O.Bulg. *tŭ* 'the' acc. : Skr. *tá-m*. See § 377.

q. Lith. *kà-s* O Bulg. *kŭ-to* 'who?' : Skr. *ká-s*. See § 462.

k̂. Lith. *szvit-ėti* O.Bulg. *svĭt-ĕti* 'to shine' : Skr. *śvit-rá-s*, rt. *k̂ueit-*. See § 413.

§ **544.** The assimilation of Indg. *ts* to *ss*, of Indg. *t'st* to *st* and of Indg. *k̂s* to *šš* seems to have been effected in the period of the Balt.-Slav. prim. community.

ts to *ss*. Lith. *ėsiu* 'I shall eat' : cp. Skr. fut. *atsyámi*, O.Bulg. 2. sg. *jasi* 'thou eatest' : cp. Skr. *átsi*, O Bulg. aor. *jasŭ* 'I ate' fr. **ēt-s-o-m*, pl. *jasli* 'manger' fr. **ēt-slo-*, rt. *ed-* 'eat'. Lith. *mèsiu* fut. to *metù* 'I throw'. Lith. *kiřsiu* fut. to *kertù* 'I hew sharply' : cp. Skr. *kartsyámi* 'I shall cut', rt. *qert-*. Lith. *krìsla-s* 'crumb, scrap', to *krintù* (pret. *krìtaũ*) 'I fall'. O.Bulg. *čisŭ s*-aorist I counted' *čislo čismę* 'number', to *čĭtą* 'I count'. Lith. part. *vežą̃s* 'vehens' fr. **uegh̃ont-s* = Skr. *váhan*; the corresponding forms of O.Bulg. probably also came from Indg. **-ont-s*, as *vezy* 'vehens' *spěję* 'hastening', cp. acc. pl. *vlŭky* 'lupos', *konję* 'equos' from **-ons* (§§ 84. 219).

It may be concluded that this *ss* = *ts* had not yet entirely fallen together with Indg. *s* in prim. Slav., since *s* = *ts* did not become *ch* as was the case with Indg. *s* (§ 588, 2). Forms like 1. sg *jachŭ* 1. pl. *jachomŭ* 3. pl. *jašę* beside *jasŭ jasomŭ jasę* (*s*-aorist from rt. *jad-* 'eat') were later formations (§ 588 rem. 2).

t'st to *st*. Lith. *vřĩsti* 'to fall down, change', O.Bulg. *vrĭsta* 'state, condition' : Lat. part *vorsu-s*, Skr. *vṛttá-m* 'state, situation', Indg. **uṛt'stó-*, rt. *uert-*. Lith. *ėst* O.Bulg *jastĭ* 'eats' : cp. Lat. *ēst* Skr. *átti*. Lith *dů̃st* O.Bulg. *dastĭ* 'gives' : cp. Skr. 3. sg. mid. *datté*, from the reduplic. root *dō-* 'give'. Lith. *pėsczia-s* 'being on foot' first of all from **pēstia-s* (§ 147), to *pedà* 'foot-

step'; on the East Lith. form *pĕszczia-s* see § 587, 3. O.Bulg. *čĭstĭ* 'honour', to *čĭtą* 'I count, reckon, honour'.

ĥs became *šš*. Lith. *aszì-s* O.Bulg. *osĭ* 'axis' · Lat. *axi-s* Lith. *deszinė̃* 'right hand' O.Bulg. *desĭnŭ* 'dexter' : Skr. *dákšma-* Av. *daśma-*. See § 414.

With the reduction of *ss* to *s* and *šš* to Lith. *sz* O.Bulg. *s*, compare that of prim. Balt.-Slav. *ss* -- Indg. *ss* to Lith. O.Bulg. *s*, as Lith. *lèsiu* fr. **les-siu*, fut. to *lesù* 'I pick up, peck at', O.Bulg. *otŭ-trę̀sǫ* fr. **-trę̀s-sę*, s-aorist to *otŭ-trę̀są* 'I shake off'. See § 585, 3.

Further the loss of the dental in Lith *ãszma-s* 'octavus', Pruss. *asma-n* acc., O Bulg. *osmyjĭ* might also be prim Balt.-Slav. : cp. Skr. *aštamá-* O.Ir. *ochtmad*. —

Lithuanian. In forms like partic. pres act *lìpdama-s* (*lìpti* 'I climb, mount'), *vil̃kdama-s* (*veĺkti* 'I trail, drag') the pronunciation has apparently fluctuated for centuries between *pd*, *kd* and *bd*, *gd* in some parts of Lithuania Analogously *mèsdama-s* and *mèzdama-s*, to *mèsti* 'I throw' This phenomenon is easily explained from the fact that the constant striving after assimilation has been again and again counteracted by the feeling of relationship between kindred forms, e g. *lìpti lìpsiu* etc., *vil̃kti vil̃kiu* etc., *mèsti* etc. Cp the fluctuation between *pìsiu* and *pìnsiu* § 218 rem

Rem 1 The change between *áugti* (inf) *áugsiu* (fut) and *aukti auksiu* (pres *áuga* 'I grow'), between *dìrbti dìrbsiu* and *dirpti dirpsiu* (pres *dìrba* 'I work') etc in Lithuanian writings is merely of an orthographical nature, only *k t ks pt ps* is spoken everywhere Cp the phonetically inexact Mod.HG spellings like *sagte, raubte, flugs*

The simplification of consonantal groups is rare, as *deszim̃s* beside *deszim̃ts* 'ten'.

Rem 2 It is not certain whether *nakvoju* 'I pass the night with', *nakvynė* 'night quarters' belong here, since *naktvoju, naktvynė*, existing side by side of these and regarded ast he original forms, might have got their *t* from *nakt-s* an older stem **noqtu-* is by no means proved for certain through Lat *noctū* (see the author in Ber d sächs Ges der Wiss. 1883 p. 192)

sztr from *szr* in *asztrù-s* 'sharp' beside *aszru-s* (Dowkont): O.Bulg. *ostrŭ* 'sharp' from **osrŭ* (§ 545), Skr. *áśri-ṣ* 'corner',

Gr. *ἄκρο-ς* 'pointed'. It is however questionable whether the Lith. word has not acquired its *t* through the influence of the corresponding Slav. word.

§ 545. Slavonic. On prim. Slav. *č*, *c* from *k* = Indg. *q*, prim. Slav. *tχ'* (O.Bulg. *št*) from *kt* = Indg. *qt*, prim. Slav. *χ* (*ch*) from *ks* = Indg. *qs* see § 462.

Loss of tenues before following consonants (cp. § 281 rem. 3):

p disappeared before *t*, *n*, *s* in the prim. Slav. period. O.Bulg *netьjь* 'nephew, cousin' fr. **neptĭjŭ* (§ 36) = Gr. *ἀνεψιό-ς*, cpf. **nept-ŋo-s*. *po-črěti* 'lade, scoop' fr. **čerti* **čerpti*, to 1. sg. pres. *po-čьrpą* Correspondingly *greti* 'to scrape, scratch' fr. **grepti*, to 1 sg. *grebą* with *b* = Indg. *bh* (§ 552). The forms *po-črěsti -črĭsti -črĭpsti* and *gresti grebsti*, met with in later monuments, were new formations, which seem to have arisen from a dislike — also met with elsewhere — for infinitive forms with short stem-syllable; the *s* was transferred from *plesti nesti* etc. *sŭnŭ* 'sleep' from **sŭpnŭ* = Gr. *ὕπνο-ς* *pri-lĭnų* 'I stick to' from **-lĭpnų*, cp. *pri-lĭpěti* 'to stick to'; *pri-lĭpnų*, which occurs beside *pri-lĭnų* in the literary monuments, had borrowed *p* anew from form-association *rosa* 'wasp' fr. **ŋopsā* = Lith *vapsà* 'gad-fly'. *osina* 'aspen-tree'. Lett. *apse* Pruss. *abse* Cp also the *s*-aorist *grěsŭ*, to *grebą* I scrape, scratch'

t disappeared before *l*, *n* O Bulg. part pret. *plelŭ* fr. **plet-lŭ*, to *pletą* 'I twist'. This disappearance before *l*, like that of *d* before *l* (§ 548), seems to be old only in the southern and eastern dialects; in the western dialects prim Slav. *tl* seems to have prevailed down to historical times, e g Upper Sorabian *pleśl* = O.Bulg. *plelъ*. Examples for the disappearance of *t* before *n* occur in all branches, as O.Bulg *o-svĭnąti* 'to become light' fr. '*svĭt-nąti* (cp. *svĭtěti* 'to shine'), Servian *svanuti* Nevertheless I do not know whether this dropping of *t* is to be regarded as prim. Slav. Cp. *dn* § 548.

k disappeared in the prim Slav. period in *pętĭ* 'five' = Skr. *pañkti-š* 'the number five' (cp. Av *pantaŋha-* 'fifth part' beside *panca* 'five', Lat *quīntus* beside *quīnque*). This

reduction of *nkt* to *nt* must be older than the change of *kt* to *tχ'*. *k* disappeared also in the prim. Slav. period in *-kst-* (Indg. *-qst-*). 2. pl. of the *s*-aorist *těste*, to 1. sg. *těchŭ* = orig. **tēq-s-o-m* (§ 462). In like manner *plesti* 'to twist' from **plekstī* i. e. **plekt+tī* (cp. Lat. *plectō*, OHG. *flehtan*), which gave the impulse to the new formations pres. *pletą* noun *plotŭ* 'twist, plait' etc., forms, in which *t* cannot be explained as having arisen phonetically from *kt*.

Loss of tenues between *s*+conson. O.Bulg. *slězena slezena* 'spleen': Gr. *σπλήν σπλάγχνο-ν*. *plesnąti* 'to clap' fr. **plesk-nąti*, to *pleskati* 'to clap'.

Development of *t* as glide in *sr* = Indg. *ĥr* in prim. Slavonic. O.Bulg. *ostrŭ* 'sharp': Gr. *ἄκρο-ς* etc., see end of § 544. *pĭstrŭ* 'variegated' fr. orig. **piĥ-ro-s*: Skr. *piśāmi* 'I adorn, shape', Gr. *ποικίλο-ς* 'variegated'. The same development occurs also at a later period, e. g. O.Bulg. *strĭšen-ĭ* beside *srĭšen-ĭ* 'hornet, gad-fly': Lat. *crābrō* (§ 303). Cp. Slav. *str* = Indg. *sr*, § 585, 2.

§ 546. History of the mediae, prim. Baltic-Slav. *b, d, g* and *ź*.

b. Lith. *dubù-s* 'deep, hollow', O.Bulg. *dŭbrŭ* 'ravine, valley': Goth. *dumps*. See § 346.

d. Lith. *dū́-ti* O.Bulg. *da-ti* 'to give': Lat. *dōs dōtis*. See § 378.

g. Lith. *gìria* 'forest', O.Bulg. *gora* 'mountain': Skr. *giri-ṣ*. See § 463.

ǧ. Lith. *žìrn-s* 'pea', O.Bulg. *zrĭno* 'corn': Goth. *kaúrn* See § 415.

§ 547. The transition of *d'd(h)* to *zd(h)* and of *dm* to *m* seems to belong to the period of the Baltic-Slav. prim. community.

The 2. sg. imper. O.Bulg *viždĭ* 'see', *věždĭ* 'know', *jaždĭ* 'eat' from **ųīzdĭ*, **ųēzdī*, **ēzdī*; the *ž* instead of *z* arose from a contamination with the optative forms which had *-ųē-* and were used imperatively (see Osthoff Morph. Unt. IV 387 and the accidence). **ųēzdĭ* = O.Lith. *veizd(i)* 'see'. The cpf. was

**ǫeiǯdi* fr. **ǫeiǯʰ-dhi* (with different, older root-vocalism Gr. ἴσθι and Skr. *viddhí*).

Rem 1. O.Lith. *veizd(i)* coming to be on a level with forms like *leid(i) ved(i)*, the *z* forced its way into the remaining forms of the verbal system also (first of all into the imper. pl.), hence *véizdmi véizdžiu* instead of **veidmi *veidžiu*, lastly into noun formations also, hence e g *ap-veizda-s* 'providence' beside *véida-s* 'face, countenance'

It is doubtful whether O Bulg. *daždĭ* 'give' imper also belongs here, since it might possibly stand for **dādĭ* and along with O.Lith. *dŭdi dŭd* represent an orig **dō-dhi* Cp the accidence

dm (partly from Indg. *dhm*) became *m*. Lith. *čmi* O.Bulg. *jamĭ* 'I eat' fr **ēd-mi*: Lith *ėdmi* is a new formation (cp. rem. 3). Lith. *dŭmi* O Bulg. *damĭ* 'I give' fr. **dōd-mi*. Lith. *dėmi* 'I place, put' fr **dēd-mi*, O.Lith *demi* fr. **ded-mi*, rt. *dhē-* O.Bulg. *věmĭ* 'I know' fr **ǫoid-mi*, it *ǫeid-* O Bulg. *vymę* 'udder' fr. **ūd-mēn*. Skr. *údhan*.

Rem 2 The loss of the labial in O.Bulg *sedmyjĭ* 'septimus' must be younger than this dropping of *d* It may however have been effected already in the Baltic-Slav prim. language, since by § 469, 3 the tenues in Lith *sėkma-s* (first of all from **sepma-s* or from **setma-s*? § 345) and Pruss *septma-s sepma-s* seem to be due to a new formation after the analogy of the cardinal number

Rem 3 The apparent dropping of *d* before the suffix of the 1 du in Lith *dvi̇va* O Bulg *dave* *javě* etc has probably arisen from analogy with the 1. sg and 1 pl The regular form may be retained in Lith *ėdva* and this might have aided in the creation of *ėdmi ėdme.*

§ 548. No further changes, which need to be mentioned here, took place in Lithuanian

Slavonic On prim Slav. *dž dz* fr. *ǧ* = Indg *g* see § 463

Loss of the mediae *b d* before following consonants. We also take into account here the mediae which had arisen from Indg. mediae aspiratae.

b disappeared before *n* in prim. Slavonic. O Bulg. *dŭno* 'ground, bottom' fr. **dŭbno*, beside Lith. *dùgna-s* (§ 346), to *dŭbrŭ* 'ravine, valley', rt. *dheub-*, see § 325. O Bulg. *sŭ-gŭną* 'I fold' fr. **gŭb-ną*, to *sŭ-gybati* 'to fold', Lith. *dvi-guba-s* 'two-fold, double'. *gyną* beside *gyb-ają* 'I sink, go to ruin'; *b* has been restored in *gybną* like the *p* in *pri-lĩpną* (§ 545).

d disappeared before *l*, *n*. O.Bulg. part. *palŭ* fr. **pād-lŭ*, to *padą* 'I fall', rt. *ped-*. *šilo* 'awl' fr. **šī-dlo*, *ralo* 'plough' fr. **rā-dlo*, *žęlo* 'point, prick' fr. **žę-dlo* with suffix *-dlo-* from Indg. *-dhlo-* (Gr. *-θλο-*, Ital *-flo-*) *jela* 'fir' : Pruss. *adde* Lith. *ẽglė* fr. **edlė* (§ 378). This loss of *d* before *l* is old only in the southern and eastern dialects, it was retained in the western dialects, as Czech *šídlo* Sorab. *šidło* Polish *szydło* 'awl', Polish *żądło* 'edge' *jodła* 'fir'. Examples for the loss of *d* before *n* occur in all branches, as O.Bulg. *za-ganą* 'coniectura assequor' fr **gād-nā*, to *gad-ają* 'conicio' O Icel. *geta* 'to get, hit upon, guess', rt. *ghed-* (§ 425); *vŭz-bŭną* 'I awake', to *bŭdĕti* 'to wake, be awake', Skr. *budh-*, rt. *bheudh-*, *u-vędną* 'I become withered', to *u-vęd-ają* 'I become withered'; the *d* in *padną* 'I fall' (beside *padą padają*) etc. had been restored by form-association. It is however questionable whether the dropping of *d* before *n* took place so early as the prim. Slav. period. Cp. *tn* § 545.

§ **549.** History of the mediae aspiratae. They fell together with the mediae in the period of the Balt.-Slav. prim. community, as was the case also in Iranian (§ 481) and Keltic (§ 524). The laws, which have been laid down for the Indg. mediae (§§ 546—548), therefore held good also here.

bh. Lith. *bijóti-s* O Bulg *bojati sę* 'to be afraid' : Skr. *bháy-a-tē*. See § 347.

dh. Lith. *dė̃-ti* O Bulg. *dě-ti* 'to lay, put' : Skr *dhā-ma*. See § 379.

gh. Lith. *snẽga-s* O.Bulg. *sněgŭ* 'snow' : Gr. *νίφα*, rt. *sneigh-*. See § 464.

ĝh. Lith. *žemà* O Bulg. *zima* 'winter' : Gr. *χειμών*. See § 416.

§ **550.** Prim Baltic-Slav. change. *dm* became *m*: O.Lith. *demi*, O.Bulg. *vymę*, see § 547.

§ **551.** On prim. Slav. *dž dz* from *g* = Indg. *gh* see § 463.

O.Bulg. *ralo* fr. **rā-dlo* with suffix *-dhlo-*, *vŭz-bŭną* fr. rt. *bheudh-* and similar forms see, § 548.

The combination media aspirata + *t, s*.

§ 552. It has already been remarked in § 469, 6 that a sure answer has not yet been found to the question how the combination media asp. + *t* or *s* was pronounced at the time just before the dissolution of the Indg prim. community.

In Aryan we must hold as the regular continuations of the Indg. prim. forms such forms as Skr. *dṛbdhá-* Av *der^{e}wāa-*, Skr. *dípsati* Av. *diwžaidyāi*, which yield for the Ar. prim. community *bdh* as the continuation of *bh*+*t* and *bzh* as that of *bh*+*s* etc The history of these Ar groups is treated in § 482.

All the European languages have for the original combinations the same representations as for Indg. *pt ps, t^{e}t ts, kt ks, qt qs*. Examples:

Greek *ῥοπτό-ς* 'sipped, supped', to *ῥοφέω*, Lith. *srebiù* 'I sip', rt *srebh-*. *ἀ-πυστος* 'not heard of' (*πεύθομαι*), Skr *buddhá-s*; *πεύσεται* 'he will search, inquire' : Skr. *bhōtsyátē*, rt *bheudh-*. *ἀν-εκτό-ς* 'bearable' (*ἔχω*) . Skr. *sādhá-s* fr. **sāždha-s*; fut. *ξω* : Skr. 1. sg. aor. mid. *ásākṣi*, rt. *seǧh-*. *εὖκτο, εὔξομαι* (*εὔχομαι* 'I supplicate, pray') : Av 3. sg. *aog^{e}da*, 2. sg. *aogža*, rt *eugh-* (§ 482). *ἔνῖψε* 'it snowed' (*νίφει*), it *sneiǧh-*.

Italic Lat *nāptum nāpsī*, to *nūbō* Gr. *νύμφη* (Fick Vergl. Worterb. I^{3} 648). *ab-sorpsī*, to *ab-sorbeō* (*srbh-*), Gr. *ῥοφέω*, see above. *gressu-s*, to *gradior*, Goth. *grid-*. *jussu-s*, perf. *jussī*, to *joubeō*, see § 370. *dī-vīsu-s*, perf *dī-vīsī*, to *dī-vidō*, Skr. *vídhyāmi* 'I pierce through' *vectum vector*, *vēxī* (*vehō*) : Skr. *vóḍhum* Av *važdri-š*, Skr. *vákṣat*, rt. *ueǧh-* (§ 482). *forcti-s fortī-s* : Skr. *dṛdhá-s* 'fastened, fast', rt *dherǧh- anctu-s ānxiu-s*, to *angō angor*, rt. *añǧh- lectus* 'couch', to Gr. *λέχος*, rt. *legh-*. *nīctō cō-nīxī*, to *cō-niveō*, rt. *kneiǧh-*. *nix nīnxit*, to *ninguit*, rt. *sneiǧh-*.

Old Irish. *tuchtæ* (**to-achtæ*) 'angustus', rt. *añǧh-*. *snechta* 'snow', rt. *sneiǧh-*. *for-tiasam* 1. pl. of the *s*-fut. to *for-tiagaim* 'I help, cp. Gr. *στείξομεν*, rt. *steiǧh-*.

Germanic. MHG. *wift* 'fine thread' OHG. *uiften* 'texere' O.Icel. *veftr veptr* 'weft', to OHG. *weban* O.Icel. *vefa* 'to

weave', Skr. *ubhnáti* 'binds, fastens' part. *ubdhá-*, Gr. *ὕφος* 'web', rt. *ɥebh-*. OHG. *musse* f. 'spring, source' prim. form **mudh+tī* : cp. OHG. *mutilōn* 'to murmur, mutter', Gr. *μῦθο-ς* 'speech' (Kögel Paul-Braune's Beitr. VII 180 f.). Goth. *gilstr* 'tax', to *gild* 'tax', rt. *gheldh-*. Goth. *ana-busns* 'commandment' prim. Germ. **-butsnī-*, to *ana-biudan*, rt. *bheudh-*. Goth. *daúhtar* OHG. *tohter* 'daughter' : Av. *dug°dā duγδa*, Indg **dhugh+ter-*. Goth. *mahts* OHG. *maht* 'might, power', to Goth. *magan* 'may, be able', O.Bulg. *mogą* 'I can, may'. Goth. *leihts* OHG. *līht* 'light, easy', prim. Germ. **leɔxta-z* : Skr. *laghú-* Gr. *ἐλαχύ-ς*, rt. *leɔgh-*.

Baltic-Slavonic Lith. *skrepti* 'to dry' fut. *skrepsiu*, to pres. *skrebiu*, Gr. *κάρφω* 'I make dry or withered' (cp. § 589, 3). O.Bulg. *greti, grěsŭ* fr. **greptī*, **grěpsŭ*, to *grebą* 'I scrape', Goth. *graba* 'I dig' (§ 545) Lith *vèsti* O.Bulg *vesti* 'to lead', Lith. fut. *vèsiu* O.Bulg. aor *vĕsŭ*, to pres. Lith, *vedù* O.Bulg. *vedą*, Skr. *vadhú-* 'bride, young woman' (she who is to be led home, she who is led home). Lith. *vèszti* O.Bulg. *vesti* 'to drive, ride', Lith. fut. *vèsziu* O.Bulg. aor *vĕsŭ*, to pres. Lith. *vežù* O.Bulg. *vezą* : Skr. *váhāmi*, rt. *ɥegh-*. Lith. *duktĕ* O.Bulg *dŭšti* 'daughter' : Av. *dug°dā*. Lith. *dèkti* O.Bulg. *žešti* 'to burn', Lith fut. *dèksiu* O.Bulg. aor. *žĕchŭ*, to pres. *degù*, *žegą*, Skr. *ni-dāghá-s* 'heat', rt. *dhegh-*; for the initial sound in Slav cp. § 379 rem.

Rem 1 I do not know any examples from Armenian which belong to this class. By § 467, 1 the word *dustr* does not come under consideration.

The question now remains, is this representation of the original sound-combinations in the European languages the regular continuation of the Indg forms, or have new formations arisen of the nature of Av. *dapta-* for **dawđa-* = Skr. *dabdhá-* etc. (§ 482 rem. 1)?

Some scholars have come to the conclusion that the latter is the case at least as regards the combination media asp + *t*, because they thought that they had also found in the Europ. languages an aspect differing from Indg. tenuis + *t*, which is to be regarded as the regular development. Nevertheless all

the cases, which have been brought forward, also admit of a different descision regarding them.

Rem. 2. Bartholomae (Kuhn's Ztschr. XXVII 206) explains Gr. *θυγάτηρ* on the ground of a presupposed prim Gr. double form **dhughater-* and **dhugdher-*. But the form may also belong to the class *ἰγώ μέγας* etc. (§ 469, 8). Gr. *κύσθο-ς* Goth. *huzd* Lat. *custōs* need not contain **kudh+t-* (cp Bartholomae Ar. Forsch. I 176, Kluge in Paul-Braune's Beitr IX 153), but admit of being traced back to **kudh+dh-* so, too, Goth. *ga-hugdi-* 'understanding' to **ḱuq+dh-*, whence **ḱugdh-* (cp §§ 469, 5 507. 536. 538). Still more uncertain is the material which W Meyer in Kuhn's Ztschr. XXVIII 166 f. has brought forward from Lat. and Kelt. beside *custōs*.

Therefore the possibility still remains, that forms like Gr. *ῥοπτό-ς* etc. exhibit the regular continuation of the Indg. prim. forms.

Rem 3. Osthoff Zur Gesch. d Perf p 320 f. regards *bth*, with voiced media *b*, as being the form which was in existence in the last stage of the Indg prim language, from which was regularly developed on the one hand Skr *bdh*, and on the other hand Gr *πτ* etc. This is however not very probable from a phonetic point of view.

The Indg. tenues aspiratae.

§ 553. It is less doubtful that the Indg. prim. language possessed tenues aspiratae than, to what extent it possessed this mode of articulation. Of late there has been a tendency to regard all or almost all of the Ar. tenues asp. (§ 474) as being old inherited, according to which e. g. **sthā-no-* 'stand' (noun), not **stā-no-* would have to be put down as the Indg. form (Skr. *sthāna-* Gr. *δύστηνο-ς* Lith *stóna-s*). But in my opinion we have no right, with the present state of our knowledge, to put down the Indg. prim. forms with ten. asp in such cases where only Aryan points to tenuis asp., but the other languages to tenuis. For the question would be asked in vain, why e. g. in Greek does not an **ἔσθην*, but *ἔστην* (Skr. *ásthām*) stand beside such cases as *ἦσθα οἶσθα* with Indg. *sth*, *t^{s}th* (see below), and why do not **πάθο-ς *πόνθο-ς*, but. *πάτο-ς πόντο-ς* correspond to Skr. *path- pánthā-* 'path, way'.

Therefore prim. Indg. tenuis asp. can, as yet, only be put down with any degree of probability in such words, where the

languages outside the Aryan group exhibit an aspirate or a sound which can be traced back to an aspirate. Such forms are the following:

1. Suffix of the 2. sg. perf. Indg. **-tha*. Indg. **u̯oi̯d'tha* 'knowest' fr. rt. *u̯ei̯d-*, Skr. *véttha* Av. Gāþ. *vōistā* Gr. οἶσθα. Gr. ἦσθα ἐησθα 'wast' (originally a perf. form, see the accidence), Skr. *ásitha*. Lat. *dīx-tī dīx-is-tī* (for the vowel of the suffix see the accidence). Goth. *last* (*lisa* 'I gather together'), *slōht* (*slaha* 'I strike'), *hlaft* (*hlifa* 'I steal'); after such forms arose *qast* (*qiþa* 'I say') *haiháist* (*háita* 'I name') etc., in which *-ss* was the regular ending (cp. *káupasta* for **káupassa* etc., § 527 rem. 3), then also *bart* (*baíra* 'I bear'), for **barþ*, etc. [1]).

2. Skr. *skhálāmi* 'I stumble, stick fast, go wrong' Av. *skārayant-* 'leaping, letting leap' (in the proper name *skārayaþ-raþa-*), Arm *sxalem* 'I go wrong, stumble, err, sin', Gr. σφάλλομαι 'I stumble, fail, suffer a disaster' (also Lat *scelus* 'crime, impious action' and OHG. *sculd* 'guilt' Goth. *skulan* 'to owe, shall'?), rt. *sghel-*.

3. *chinád-mi* 'I cut off, tear' Av opt perf *hi-sid-yāþ*, Gr. σχίζω 'I split' σχινδαλμό-ς 'a piece of cleft wood, splinter', Lat. *scindō cuedō*, Goth *skáidan* 'to divide, separate' OHG. *scintan* 'to flay' rt *sk̑hai̯t- sk̑hai̯d-*

4. Skr *śaṅkhá-s* 'muscle, shell' Gr. κόγχο-ς, Lat. *congiu-s*.

5. Skr. *nakhá-s* Mod Pers *nāxun* Osset *nŭx* 'nail', Armen *magil* 'claw, talon' (whence *m-* for *n-*?), Gr. ὄνυχ-ος gen. to ὄνυξ 'nail, talon', Lat. *ungui-s*, Mid Ir *inga* O Cymr. *eguin* Mod Cymr. *ewin* 'nail, talon', Goth. *nagljan* 'to nail', Lith *nāga-s* O.Bulg. *nogŭtĭ* 'nail, talon'.

Without representation in Aryan are:

6. Armen. *durgn* 'potter's wheel', Gr. τροχό-ς 'wheel, potter's wheel' τρέχω 'I run' fut. θρέξομαι, Goth. *þragja* 'I run' OHG.

1) Cp the ending of the 2 du. act Goth *-ts* = Skr *-thas* or *-tas*. We must assume that original *-ts* stood regularly only in forms like perf. **lēsts*, **lusts*, **slōhts*, **hlēfts* (transformed into *lesuts*, *lusuts*, *slōhuts*, *hlēfuts*) and in the pres **s-tas* or **s-tis* (Skr *sthás* 'ye two are') and then was transferred to the other verbs See the accidence.

drigil 'servant' (runner), rt. *thregh-*. It is doubtful whether O.Ir. *traig* 'foot' Gall. *ver-trago-s* name of a kind of dog (= 'great foot, swift runner'?) belong here; cp. O.Ir. *droch* 'wheel'.

7. Lat. *habeō*, Goth. *habáiþ* 'has' common stem form **khabhē-*.

The Indg. tenues asp. fell together with the Indg. mediae asp. in Greek and Italic (see §§ 495. 509), and with the Indg. tenues in Germanic (see §§ 528—530. 509). The voiceless spirants, which arose after *s* in Lat. and Germanic, passed into tenues (cp. §§ 507 528 end. 541, 7). Tenues arose after *s* in Balt.-Slav., elsewhere the tenues asp. fell together with the mediae asp. in this branch also, just[1]) as in Armen If O.Ir. *traig* belongs to the rt. *thregh-*, it follows that Indg initial *th-* was treated differently in Kelt. before *r* from Indg. *gh* after *n* (*inga*).

THE SPIRANTS

§ 554. Spirants are produced by the mouth channel being narrowed at one part in such a manner that the expiratory current gives rise to a grating noise on the edges of the narrowed part

The following spirants are to be ascribed to the Indg. prim. language:

1. A voiceless *s*-sound, whose place of articulation cannot be exactly defined (cp the various *s*-sounds in Sievers' Phonet.[3] p. 122 f)

2. The voiced sound *z*, corresponding to this *s*.

Rem 1 As a hypothesis which is at any rate worth noticing, we may mention here that Bartholomae (Ar Forsch I 18 ff. II 54 ff.) ascribes aspirated *s* und *z* (*sh* and *zh*) also to the Indg. prim. language. E g. he puts down *qsheɣ-* as the rt for Skr *kšināti* 'ruins' Gr *φθίνω*, and *ĝzhom-*, *ĝhm-* (the latter with loss of *z*) as the stem forms for Skr. *kšám-* Av acc *ząm* gen *z^{e}m-ō* Gr *χθών* O Bulg *zemlja* 'earth'. Cp. also prim Ar and perhaps Indg. *bzh* from *bh+s* etc. §§ 469, 6. 470. 482 552 589, 4

1) According to this it would also be possible to trace the suffix Slav. *-dlo-* Gr. *-θλο-* Ital. *-flo-* back to Indg *-thlo-*, as has been done.

3. The palatal spirant *j*, strictly to be distinguished from consonantal *i* (*i̯*).

To these is probably to be added:

4. The labial spirant *v*, strictly to be distinguished from consonantal *u* (*u̯*). *v* and *u̯* have fallen together in most languages, and as was already mentioned in § 117 it is often difficult to decide whether the one sound or the other is to be assigned to the Indg. prim. form. The surest criterion for Indg. *v* is want of an old inherited weak grade form, in which *v* was fused with the neighbouring vowel to sonantal *u*, e. g. rt. *ves-* 'clothe' (§ 555).

Rem 2 The question of the separation of Indg *v* and *u̯* is so involved and still so little investigated that we must content ourselves here with having referred to it generally.

It has been conjectured that the sound, from which Skr. *h* Gr. Lat. *g* in cases like Skr. *ahám* Gr. *ἐγώ* Lat. *ego* 'I' have arisen, was a spirant which closely resembled *j* Attention has already been drawn to the uncertainty of this hypothesis in § 469 rem.

Lastly the question may still be raised whether a sibilant was not spoken after the *k*-sound in words in which a Gr. *κτ* stands opposite to a Skr *kš*, as in *tákšan-* *τέκτων* 'carpenter' *ṛkša-* *ἄρκτο-ς* 'bear', and whether it differed from the Indg *s* sound which is to be presupposed for cases like Skr. *ákša-s* Gr. *ἄξων* 'axle' Skr *dákšina-s* Gr. *δεξιό-ς* 'dexter', and was perhaps a *þ*. For it has not hitherto been possible to discover a law by which the difference *κτ* · *ξ* might have arisen specially in Greek.

Indg. *s*

Prim. Indg. period.

§ 555. **septṃ* 'seven': Skr. *saptá sápta*, Arm. *evtn*, Gr. *ἑπτά*, Lat *septem*, O.Ir. *secht n-*, Goth *sibun*, Lith. *septynì* O.Bulg. *sedmь*. **seno-* 'old': Skr. *sána-s*, Arm. *hin*, Gr. fem. *ἵνη*, Lat. *senex*, O.Ir. *sen*, Goth. superl. *sinista*, Lith. *sẽna-s* Reflexive pronoun **sṷo-* **sṷe-*: Skr. *svá-s* 'own' Gr. *ὅ-ς* 'own' *ἑ* 'se', Goth. *svēs* (gen. *svēsis*) O.Bulg. *svojь* 'own'. Rt. *sneiǵh-* 'to snow': Av. *snaẽžaiti* Gr. *νείφει* 'snows' *ἀγά-νιφο-ς* 'much snowed upon',

Lat. *ninguit*, O.Ir. *snechta* Goth. *snáivs* Lith. *snẽga-s* O.Bulg. *sněgŭ* 'snow'. Rt. *sreu̯-* 'flow' : Skr. *sráv-a-ti* Gr. *ῥέϝει* 'flows', O.Ir. *sruth* OHG. *stroum* 'stream', Lith. *sravà* 'a flowing, bleeding' O.Bulg. *o-strovŭ* 'island'. Rt. *stā- stə-* 'stand' : Skr. *sthí-ti-ṣ* Gr. *στά-σι-ς* 'a standing', Lat *statiō*, O.Ir. *-tau* 'sum' from **stā-i̯ō*, Goth. *staþs* 'stead', Lith. *stóna s* O.Bulg. *stanŭ* 'stand' (noun). Rt. *ves-* 'clothe' : Skr *vás-tē* 'puts on' (perf. *va-vas-ē*), *vás-ana-m vás-tra-m* 'cloak, dress' *vás-man-* 'cover', Arm. *z-ges-t* (gen. *z-gesti*) 'dress' *z-ge-nu-m* 'I dress myself' (*z-* prefix), Gr. Hom. aor. *ἕσ-σαντο ἕσαντο* 'they put on' *ἑσ-θής* 'clothing' *εἷμα* Lesb. *Fέμμα* 'dress', Lat. *ves-ti-s*, Goth *ga-vas-þan* 'to dress' MHG. *wester* 'baptismal robe'. Rt. *dhei̯s-* 'dare' : Skr. *dhárš-āmi* 'I dare', Gr. *θάρσ-ος* 'boldness' *Θερσ-ίτης* prop. name ('bold one'), Goth. *ga-dars* 'I dare', Lith. *drį̃s-ti* to dare' (§ 285 rem.). **aḱs(i)-* 'axis' : Skr. *ákša-s*, Gr *ὄξων*, Lat *axi-s*, OHG. *ahsa*, Lith *aszì-s* O.Bulg. *osĭ*.

s a frequent suffixal element. *-si̯o-* future and *-s-* aorist suffix : Skr *dhā-syá-mi á-dhā-s-am* from rt. *dhē-* 'put, place', *dēk-šyá-mi á-dik-š-ata* (3 pl. mid.) from rt. *dei̯ḱ-* 'show', *á-sahi-š-ata* from rt. *seĝh-* 'subdue'; Gr. *ἔδειξ-α, ἦδε-α* (on the function of the latter cp the accidence), Lat *dīx-ī, fax-ī-s, vīder-ī-s*; O.Ir aor. conj. (= fut.) 2. sg *for-tēis*, 2 pl *for-tēsid* from **-tēssis*, **-tēssit(e)*, prim f **steigh+s-e-s, -te*, to pres. *for-tiagaim* 'I help' (cp Gr *στείχω*); Lith fut *dė̃-siu* from rt. *dhē-*, *vil̃k-siu* from rt. *u̯elq-* 'trail, drag', O Bulg part fut. *byšąšte-je* 'τὸ μέλλον' (to Lith. *bú siu* 'I shall be'), aor *dě-chŭ*, 2 pl. *dě-s-te*, from rt. *dhē-*. Personal ending of the 2. sg *-s* as in **bhéro-i̯-s* 'feras' **s-i̯ḗ-s *s-i̯ḗ-s* 'sis' . Skr *bhárē-š syā́-s*, Gr *φέροι-ς εἴη-ς*, Lat. *ferē-s siē-s sī-s*, Goth. *bai-dái-s* OHG. *sī-s*, O.Bulg. *berì* (from **berē-s*). Noun-stem suffix *-es-* (as **ĝén-es-* neut. 'genus') : gen. sg. Skr. *ján-as-as*, Gr. *γέν-ε-ος γέν-ους*, Lat. *gen-er-is*, O.Ir. *tige* 'of the house' = Gr. *στέγε-ος τέγε-ος*, Goth. *riq-iz-a-* neut. 'darkness' (cp. Skr. *ráj-as-*), Lith. nom. *deb-es-ì-s* 'cloud', O.Bulg gen. *neb-es-e* 'of the sky' = Skr. *nábhas-as*. Sign of the nominative *-s* (as in **ék̑u̯o-s* 'equus') : Skr. *áśva-s* Gr. *ἵππο-ς* Lat. *equo-s*, Gall. *tarvo-s* 'bull', Goth. *vulf-s* Lith. *vil̃ka-s* 'wolf'.

Aryan.

§ 556. Indg. *s* experienced several changes in the period of the Aryan primitive community.

1. *s* passed into *š* and *ss* into *šš* after *i ī* and *u ū*, *i̯* and *u̯* (as second component of diphthongs), *r̥ r̥̄ r*, *q*, *k̂*. By this means Indg *st* and *k̂t*, *sq* and *k̂q* and probably also *ss* and *k̂s* fell together at that period, see §§ 396. 399. 401.

This *š* remained in Iranian, but in Sanskrit it was further changed to cerebral *ṣ*, and *ṣṣ* (= Indg. *ss* and *k̂s*) became *k̂ṣ* (as *ss* became *ts*, see § 557, 1).

After *i*- and *u*-vowels. 3. sg. pres act. Skr *tí-ṣṭh-a-ti* Av. *hi-št-a-iti*, O.Pers. 3 sg imperf mid. *a-i-št-a-tā*, from rt. *stā-* 'stand' : Gr. *ἵ-στη-μι*, Lat. *si-stō* Skr. *ni-ṣīd-a-ti* 'he sits down', causat. *ni-ṣādayāmi* Av *ni-šādayēmi*; O.Pers *niy-ašādayam* with *š* carried over into the augmented form (like Skr. *ny-aṣīdam* beside regular *ny-asīdam*, *pary-ašahata* beside regular *pary-asahata* imperf to *pari-šahatē* 'he endures', *savya-šthár-* after *savyē-ṣthar-* 'standing on the left') Nom Skr *páti-ṣ* Av. *pauru-š* 'master' · Gr. *πόσι-ς*. Loc pl. *áśvē-ṣu* Av. *aspaę-šu -šv-a* O Pers. *aspai-šuv-ā* (*áśva- aspa-* 'horse'), cp Skr *sénā-su* Av. *haenā-hu -hv-a* O.Pers *hainā-uv-ā* (*sénā- haęnā- hainā-* 'army') : O.Bulg. *vlŭcě-chŭ* (*vlŭkŭ* 'wolf') beside *rąka-chŭ* (*rąka* 'hand'). Part Skr. *uṣṭá-* Av. *ušta-* Lat. *ustu-s*, Indg. **us-to-s*, rt. *eu̯s-* 'burn' Skr. *śuṣ-ka-* (from **suš-ka-*, § 557, 4) Av. *huš-ka-* O.Pers. *uš-ka-* 'dry', prim. f **sus qo-*, rt. *sau̯s-*. Skr *jóṣ-a-* Av. *zaoš-a* 'favour', Skr. *jōṣṭár-* 'loving' O Pers. *dauštar-* 'friend' : Gr. *γευστέο-ν* 'meet to be tasted', Lat. *gus-tu-s*, Goth. *kius-a* 'I test, choose'. Skr. 2. sg. *dvékṣi* 'thou hatest' from **dvēš-ṣi*, 1. sg. *dvéṣ-mi*. Skr. fut. *śōkṣyámi* 'I shall dry up' fr. **śōš-šyámi*, pres. *śúṣ-yāmi* (§ 557, 4), cp. Gr. fut. *αὔσω* fr. **αύσ-σω*, rt. *sau̯s-* [1]).

1) Some assume that Skr. *š* also regularly stands for *s* after *i̯*, *u̯*, e. g. *pi̯š-ánti* 'they pound' : Lat *pīnsō*; then the forms *pināš-mi* etc. for **pinas-mi* etc. would have been formed after the analogy of *pi̯š-* (cp. Av. *cinah-mi* 'I announce' 3 sg *cinas-ti*, from *cacš-*). I consider not only *pinaš-mi* but also *pi̯š-ánti* as a new formation (after *pipéša*, *piṣṭá-* etc.). For in the period of the Ar. prim community, when *s* became *š*, the preceding

After *r*-sounds. Skr. *dhṛṣ-nṓ-mi dhárṣ-āmi* 'I dare', Av. *der°š-nao-mi* 'I dare' *darš-i-š* 'vehement', O.Pers. *a-darš-nau-š* 'he dared' (*-š* taken over from the *s*-aorist). Skr. *śīrṣ-á-m* 'head' : Gr. *κόρση* 'head, temple', Indg. *ḱr̥s-* (§ 306).

Indg. *qs* = prim. Ar. *kš* : Skr. *kṣ* Av. *xš*. Future Skr. *vakšyámi* Av. Gāþ. *vaxšyā* 'I shall speak', nom. Skr. *vák* from **vākṣ* (§ 647, 7) Av. *vāxš* = Lat. *vōx*, rt. *ueq-*.

Rem. 1. The Av. combination *xš* became voiced in the dat abl. pl. *vāγž°-byō* which was formed anew from the nom. sg Cp *awž-dā/a-* § 558, 2.

Indg. *ḱs* : Skr *kš* Av. O Pers. *š*. 2. sg. Skr. *vákši* Av. *vaši* 'thou art willing', to 1 sg *váš-mi vas 'mi*, rt. *ueḱ-*. Cp. § 401.

2. *sc* (Indg. *sq*) became *šc* or *šc* : Skr *šc* Av *sc* O Pers. *šc*. Skr *káš-cid* Av. *kas-ciþ* O.Pers *kaš-ciy* 'any one'. Av. *sc* : Skr. *šc* Av *nc* · Skr *ñc* (*pañca páñca*), see § 200.

3. Final *s* in prim Ar *-as* and *-ās* underwent a change which gave to these endings the form *-ō* and *-ā* in Skr, *ō* and *-a* (Gāþ. *-ā*) in Av, e g nom. sg Skr *áśvō* Av. *aspō* = prim. Ar **aśu̯a-s*, nom pl. Skr. *áśvā* Av *aspa* (*aspā*) = prim. Ar. **aśu̯ās*. This change cannot have taken place before voiceless dentals and palatals, as is shown by the combinations Skr. *áśvas tad*, *aśvaś ca* etc. and Av. *aspas ca* etc., also not in pausa, as clearly follows from the Skr. usual forms *áśvaḥ*, *áśvāḥ* (Av. *aspå*, the more rare secondary form of *aspa*, seems to be most closely related to *áśvāḥ*). It may however belong to Skr. *-ḥ* from Indg. *-s* in as much as *-aḥ -āḥ* might both be regarded as the previous stages of Skr. *-ō*, *-ā* Av. *-ō*, *-u*. It is not improbable that the *-aḥ*, *-āḥ*, which arose in pausa in prim. Ar., forced their way at that period into the place of *-az*, *-āz* before voiced explosives and spirants and of *-as*, *-ās* before vowels; and whilst they were now retained in pausa down to the time of

nasals cannot at that time have been so absorbed in the vowels, that only a nasal vowel was spoken, and the latter would in all appearance be the necessary presupposition for the influence of the *i* or *u* on the *s*-sound. Cp. § 199 rem. 1. *hi̯santi* 'they injure', *ni̯satē* 'they kiss', gen. *pu̯s-ás* 'of the man' show the regular development.

the Skr. separate development, where they settled also before *k, p,* and *-āh* became *-ā* in Av., they regularly passed into *-ō, -a* before voiced sounds, and these two stages might have been reached already in the prim. Ar. period. When *-ō* came to stand before other vowels than *a* in Skr., it became shortened to *a*, e. g. *aśva upa*; whereas **aśvō api* became *aśvō 'pi*. Cp. Bloomfield in the American Journal of Philology III 25 ff., Osthoff Zur Gesch. d. Perf. 36 ff., furthermore §§ 646. 647, 1 and 6. 649, 7.

Rem. On O Pers. final *-a* = prim. Ar. *-as* see § 558, 4.

§ 557. The Indg. *s*, which had come over from prim. Ar, mostly remained unchanged in Sanskrit, e g. *saptá* 'septem', *ásti* 'est', *jánas-as* 'generis'. Changes took place in the following cases:

1. Prim. Ar *-ss-* became *-ts-*, just as prim. Ar *-šš-* led to *-kš-* (§§ 401. 556, 1) and probably prim. Ar. *-sś-* to *-tś-* (2 below). *vatsyámi* from **vas-syāmi* fut. from *vas-* 'clothe' (cp Gr. fut. ἕσ-σω). *vatsyámi* fut., *ávātsam* aor from *vas-* 'stay, dwell' (cp. Gr. ἄ-εσα). Loc pl. *vid-vátsu* from **vid-vas-su*, to acc. sg. *vid-vā́ṣ-am* instr. sg. *vid-úṣ-ā*, part to *véda* 'I know'. *-dhvatsu* loc. pl. to *-dhvas-* 'falling', the final member of compounds. The *-t* of the form *tánt* acc. pl. masc. 'the', which appears before *s-*, had perhaps also arisen from *s* (cp. *tā́ṣ* before *t-*, elsewhere generally *tán*). Av. *-s-* corresponded to this *-ts-*.

Rem. The *ss* in the loc *vácassu* (*vácas-* 'word', cp Gr ἔπεσσι ἔπεσι), *máhīyassu* (*máhīyas-* 'greater' cp Gr μείζοσι), *māssu* (*más* 'moon, month') is due to analogy In like manner also *ásse* 'thou sittest' (Gr ἧσαι) for **āt-sē* after *ástē* etc. *vidvátsu* in union with *vidvádbhiš* and the other *bh*-cases, in which *dbh* arose from *zbh* (§ 591), produced the form *vidvát*. Cp. the accidence.

2. Indg. *sḱ* appears as *ch* (*cch*) = Iran. *s*. *gá-chā-mi* (*gácchāmi*) 'I go': Av. *ja-sā-mi*, Gr. *βά-σκω*, Indg. **gm̥-skō*. See § 400. *sś* was probably spoken in the prim. Aryan period. *sś* passed into *tś* in Skr. (cp. *ts* from *ss* above), and this into *ch*, as in *pachás* (*pacchás*) 'pada by pada' from **pat-śas* from *pad-* (§ 351). *tāñchatrūn* acc. 'these enemies' = *tān(s)* + *śatrūn* is

perhaps also to be traced back to **tāntśatrān* with transition of *śś* to *tś*. Cp. *tānt* before *s*- above.

3. *s* was dropped between *t* or *p* and following explosive or spirant. *áchāntta* from **a-chānt-s-ta* 2. pl. of the *s*-aorist from *chand*- 'shine'; *utthā*- 'rise' from **ut-sthā*-, e. g. inf. *utthātum*; correspondingly *sattá*- = Av. *hasta*- from prim. Ar. **satstá*- Indg. **set°tó*-, part. from rt. *sed*- 'sit' (§ 469, 4). *átāpta* from **a-tāp-s-ta* 2. pl. of the *s*-aorist to *tápati* 'is warm'. Cp. the analogous treatment of *z* at the end of § 591.

4. *s* became *ś*, if *ś* or *ṣ* stood at the beginning of the next syllable.

śváśura- 'father-in-law' from **svaśura*-, cp. Av. *xwasura*- Gr. *ἑκυρό-ς* Goth. *svaíhra*. *śmáśru*- 'moustache' : O.Ir. *smech* Lith. *smakrà* 'chin' (§ 467, 2), perhaps also Lat. *maxilla* *śá-śvant*- 'complete, whole, each' fr **sa-śvant*-, cp. Gr. *ἅ-πᾶς* (§ 166).

śuṣká- 'dry' *śúśyati* 'drys in' fut. *śōkṣyáti* (from **śōṣṣyati*, § 556, 1) : Av *huška*- O.Pers *uška*- 'dry', rt. *saṷs*-. The change of the initial *s* might have taken place here at the time when the root-final *s* was already an *ś*-sound, but had not yet acquired the cerebral articulation (*ṣ*).

The same assimilation as in *śváśura*-, only in the opposite direction, seems to exist in *śaśá-s* 'hare' : OHG. *haso* Ags. *hara* (*r* from *z*, § 581) Pruss *sasn-i-s* 'hare'.

Cp. the analogous assimilation in Lith., § 587, 2.

§ 558. Prim. Ar. *s* was retained in Iranian before *n*, *p*, *t*, *k* and after *t*. It became *š* after *p* (*f*). In other cases it either became an aspirate or disappeared.

1. Retention of *s*. Av. *snaẓ̌aiti* 'snows' : Goth. *snáivs* 'snow', rt. *sneiǥh*-. Av. *sās-na*- 'a teaching' : Skr. *śás-ana*- 'assignment'. Av. *spas*- 'spy' : Skr. *spáś*- Lat. *au-spex*. Av. *as-ti* O.Pers. *as-tiy* 'is' : Skr. *ás-ti* Gr. *ἐσ-τι*. Av. *skemba*- 'pillar' : Skr. *skambhá*-. *s* along with a preceding *t* became *ss*, whence *s*, as in Av. *masya*- 'fish' = Skr. *mátsya*-, see § 473, 2 p. 349.

2. *š* from *s* after *f* (cp. § 473), except when *r*, *tr* followed, in which case *s* remained (Bartholomae Handb. § 149 rem. 1). Av. *drafša*- 'drop' : Skr. *drapsá*- 'drop'. *āfš* (acc. *āp-em*) 'water':

Skr. *áp* from **aps* (§ 647, 7). With *āfš* the new formation *awš-dāta-* 'resting in the water', where *fš* had become voiced, cp. *vāγž°-byō* § 556 rem. 1.

3. Aspirates from *s*.

Initially.

Av. O.Pers. *h* before prim. Ar. *a ā, i ī, y* Av. O.Pers. *hama-* 'equal' : Skr. *samá-*. Av. *haenā-* O.Pers. *hainā-* 'army' : Skr. *sénā-*. Av. *hindu-š* O.Pers. *hidū-š* (§ 197 rem.) 'country of the Indus' : Skr. *síndhu-š* 'river, Indus'. Av. opt. *hyāḇ* 'it may be' : Skr. *syāt*. O.Pers. *hya* 'qui' (relat.) · Skr. *syá* 'that'. In Av. also before *u, ū*, and in the Gāþā dialect before *v. hu-* 'well, very, rich' : Skr. *su-*. Gāþ. *hva-* 'own' · Skr. *svá-*.

For *hy-* Gāþ. also *xy-*. For Gāþ. *hv-* Late Av. *xw-*. See its treatment medially.

In O.Pers. *h* is wanting before *u* and *uu̯* = *u̯*. *u-* 'well' : Av. *hu-* Skr. *su-*. *uva-* 'own' : Av. Gāþ. *hva-* Skr. *svá-*. Cp. medially.

Prim. Ar. *sm-* = Av. *m-* (intermediate stage **hm-*) : *maraiti* 'is mindful' : Skr. *smárati*, *mahi* 'sumus' · Skr. *smási* Prim. Ar. *sr-* = O.Pers. *r-* : *rauta* neut. 'river' · Skr. *srótas* neut. It cannot be decided whether *s* had also disappeared in O.Pers. before *m* and in Av before *r*

Medially.

Av. *h* after prim. Ar. *a*-vowels before *i ī, u ū*. 2. sg. *bara-hi* (Gāþ. *bara-hī*) 'fers' : Skr. *bhára-si* Goth. *baíri-s* O.Bulg. *bere-ši*. *ahura-* 'master' : Skr. *ásura-* 'alive, spiritual, spirit'. *yāhu* loc. pl. from stem *yā-* 'quae' : Skr. *yá-su*.

Av. *əh* between *a*-vowels. Sg. instr. *manaəh-a* dat. *manaəh-ē* gen. *manaəh-ō* (*manah-* neut. 'sense, mind', Gr. *μένος*) = Skr. *mánas-ā, -ē, -ō*, prim. Ar. **manas-ā, -aɨ̯, -as*, cp. loc. *manah-i* = Skr. *mánas-i*. Conj. 3 sg. *aəh-aḇ* from *ah-* 'be' : Skr. *ásat* Lat. *erit*. *yåəhąm* gen. pl. from *yā-* : Skr. *yá-sām*, cp. Av. loc. *yā-hu*.

O.Pers. *h* corresponded to this Av. *h* and *əh* except before *u*. 2. sg. conj. *bavā-hy* 'sis' : Av. *bavā-hi* Skr. *bhávā-si*.

nāha-m acc. 'nose': Av. *nå̊hā-* Skr. *násā-*. *h* is wanting before *u*, as initially (see above). *aura-mazdāh-* Ormazd : Av. *ahura-*. It is improbable that *h* was here also entirely unpronounced, cp. below on *uv* = prim. Ar. *su̯*.

Rem. 1. *h* remained here and there unwritten in O.Pers. also before other vowels than *u*, e *g* imperf. *a-šštatā* 'he placed himself', cp. Av. pres. *hištatē*; *pātiy* (probably to be read *pautiy*) for *p·hatiy* 'he announces' beside imperf. 3 sg. *apaha*.

Av. *å̊* before *r* (also written *å̊*, *å̊y*, *å̊h*). *ha-zaå̊ra-* 'thousand' : Skr *sa-hásra-* Gr Lesb. *χέλλιοι*, Indg. **ĝheslo-*.

Av. *hm* O.Pers. *m* from *sm*. Av. *ahmi* O.Pers. *amiy* 'sum' : Skr. *ás-mi*. Av. *ahmākem* O.Pers. *amā̊xam* gen. 'of us' : Skr. *asmákam*.

Av. *ñh* Gāþ. *hy*, O.Pers. *hy* from prim. Ar. *su̯*. Av. *vañhō* Gāþ. *vahyō* 'melius' . Skr. *vás-yas*. O.Pers. gen. sg. *kāra-hyā* (*kāra-* m. 'people, army') Gāþ. *haoma-hyā* (*haoma-* 'somadrink') : Skr. *sóma-sya* For this and the initial *hy* in Gāþ. also *ẋy* : *aẋyā* beside *ahyā* 'huius' : Skr. *asyá*; *ẋyāþ* 'sit' : Skr. *syát*.

Prim. Ar. *su̯* became Av. *xw* and *å̊uh*. *huraxwaitī-* = Skr. *sárasvat-ī-* prop. name, cp. initial *xw*, as *xwa-* 'own' = Gāþ. *hva-*. 2 sg. imper. mid. *bara-å̊uha* = Skr. *bhára-sva*, rt. *bher-* 'bear'. The duality *xw* : *å̊uh* was originally probably such that *xw* made its appearance under the conditions by which *s* without *u̯* passed into *h*, but *å̊uh*, where *s* without *u̯* had become *å̊h*. Also for medial *su̯* in Gāþā *hv* : imper *gūša-hvā* 'hear', cp. *hva-* 'own'. In O.Pers. *uv* from *su̯*. 2. sg. imper. *puti-paya-uvā* 'protect thyself' : Skr. *-sva*, cp. *uva-* 'own'. The pronunciation of this *uv* is not clear, it follows however from Gr. *Χωρασμία* = O.Pers. *uvārazmī-š* and similar forms, that a spirantal element was not wanting. Cp. § 159 p. 143.

4. Aryan final *-s* was entirely lost in O.Pers. (but not so *-š*, cp. *kūrū-š* Cyrus) Nom. sg. *aniya* 'alius' (stem *aniya-*) : Av. *anyas(-ca) anyō* Skr. *anyás anyó*. Nom. acc. sg. neut. *rauca* 'day' (st. *raucah-*) : Av. *raocas(-ca) raocō*. 2. sg. impf. *gaudaya* 'thou concealedst' : Av. *-ayas(-ca) -ayō*. It is not clear whether prim. Iran. *-s* was dropped here or whether we have to do

with the offspring of an already prim. Ar. further development of *-as* (see § 556, 3).

Rem. 2. If it were certain that the nom. *napā* 'grand-child' had arisen from **napās* and were identical with Skr. *nápāt* from **napāts*, the form *anya* would be supported as the regular continuation of prim. Pers **anyas*.

Armenian.

§ 559. *s* was retained before *t*, *x*, in combination with *s* and after (dropped) *n*, *m* *astl* (gen. *astel*) 'star' : Skr. *stṛ-* Gr. *ἀστήρ* Lat. *stella* Goth. *staírnō* 'star' *ster* 'barren' (of animals) : Skr. *starī-š* Gr. *στεῖρα* Lat. *sterili-s* 'unfruitful', Goth. *staírō* 'barren woman'. *z-gest* 'dress' · Lat. *ves-ti-s* etc., see § 555. *sxalem* 'I go astray, err' : Skr. *skhálāmi* 'I stumble', Gr. *σφάλλομαι* 'I stumble, fail', rt. *sqhel-*. 2. sg. *es* 'art' from **es-si* : Gr. Hom. *ἐσσί*. *amis* (gen. *amsoy*) 'month' : Gr. Lesb gen sg *μῆνν-ος* from **μηνσ-ος*, Lat. *mēns-i-s*, O Ir gen *mīs*, cpf. **mēns-*. Acc. pl. *eris* 'three' from **tri-ns* : Goth. *þri-ns*. *us* (gen. *usoy*) 'shoulder' : Skr. *áṃsa-s* 'shoulder', Umbr *onse* loc 'in umero', Goth. *ams* m. 'shoulder', Indg **ómso-*.

§ 560. Initial *s* disappeared before sonantal vowels and before nasals. *al* 'salt' : Gr *ἁλ-ς* Lat. *sāl* O Ir *salann* Goth. *salt* O.Bulg. *solĭ* 'salt' *erkn* 'seven' Skr *saptá* etc., see § 555. *amaṙn* 'summer' OHG O Icel *sumar* 'summer' (§ 232). *m-i* (gen. *m-ioy*) 'one' from **sm-* : Gr. *μία* 'one' fem from **σμ-ια*, *μῶνυξ* 'with single uncloven hoof' from **σμ-ωνυξ*, Indg. **sm-* weak stem-form beside *sem-* (Gr. *ἑν*). *nu* (gen. *nuoy*) 'daughter-in-law' Skr. *snuṣā-* OHG. *snur* O Bulg. *snŭcha* 'daughter-in-law'. *neard* (gen. *nerdi*) 'nerve, sinew' : Skr. *snávan-* 'string, sinew' : Av. *snāvar*^{e} 'sinew'. *h-* occurs however before vowels in two words at least without any apparent reason : *hin* 'old' : Skr. *sána-s* etc., see § 555; *h-* from **hu-* prefix, e. g. *h-lu* 'obedient' : Skr. *su-* O Ir *so-* *su-* 'well, very'.

p- probably from *sp-* in *poit* '*σπουδή*'. *t-* from *spt-* probably in *tuk* 'spattle' *e-tuk* 'he spat' : Gr. *πτύω* from **(σ)πτῡ-μω* Lat. *spuō* Lith. *spiáu-ju* 'I spit' (cp. § 149).

k- from *sw-* (cp. *g(u)* from *w*, § 162). *koir* 'sister' : Skr. *svásar-* Lat. *soror* from **swesōr* (§ 172, 3) Cymr. *chwaer* Goth.

svistar Pruss. *swestro* 'sister', Indg. **sụésor-*. *Kirtn* (gen. *Krtan*) 'perspiration' (*-rt-* from *-tr-*, § 263) : Skr. *svídyāmi* 'I perspire', Gr. *ἱδρώς* Lat. *sūdor* from **sụoid-ōr* (§ 170 p. 150.) Cymr. *chwys* 'perspiration' OHG. *sweiz* 'perspiration', rt. *sụeid-*. *Kun* (gen. *Knoy*) 'sleep' : Skr. *svápna-s* Lat. *somnu-s* from **sụepno-s* (cp. *soror*) O.Icel. *svefn* 'sleep'.

Rem If *vec* 'six' in Armen arose from **sụeks*, the duality *k-* and *v-* = *sụ-* must probably be placed on a level with the duality *g* and *v* in *loganam* and *koi* (§ 162) But it may also represent a pre-Armenian form **ụeks*, see § 589, 3

§ 561. Medially and Finally.

eṗem 'I cook' to Gr. *ἕψω ὀπο-ν* with orig. *ps?*

c = Indg *ks* and *sk* *vec* 'six' : Gr. *ἕξ* Lith. *szesz-i* (cp. § 560 rem.). *harc* 'quaestio' *harc-ane-m* 'I ask' : Skr. *pṛchámi*, Lat. *posco*, OHG *forsca*, prim. f **pṛ(k)-sk-*. See § 408.

The *š* in *gišer* 'night' is not clear : Gr. *ἑσπέρα* Lat *vesper* O.Ir. *fescor* Cymr. *ucher* Lith. *vākara-s* O.Bulg. *večerŭ* 'evening'.

The *j* in *arj* 'bear' (Skr. *ṛkša-s* Gr. *ἄρκτο-ς* Lat. *ursus*) probably arose from *ṙ* (p 358 footnote 1), but on account of Gr. *ἄρκτο-ς*, it is questionable whether the Indg prim. form contained *s*, cp. § 554.

-y- from *-sụ-*. Gen. *mardo-y* (*mard* 'man, homo') : Skr. *mṛtá-sya*, Gr Hom *βροτοῖο* from **-o-σιο*

Intervocalic *s* disappeared *k'oir* 'sister', pl. *k'or-k'* : Skr. *svásā svásār-as*. *nu* 'daughter-in-law : Skr *snuṣá*.

s disappeared between a vowel and *k* (Indg. *q*), *r*, *m*, *n* *muk* (gen. *mkan*) 'mouse, muscle' · Skr *muš-ká-* 'testicle' *mūšaka-s* *mūšikā-* 'rat, mouse', Lat *mus-culu-s*, O.Bulg. *myšica* 'arm'. *bok* 'bare footed' prim. form **bhos-qo-s* : OHG. *bar* 'naked, only' prim. Germ. **bazá-s*, O Bulg *bosŭ* 'bare footed'. Gen. *k'er* 'sororis' : Goth. *svistrs*, prim. f. **sụesr-os* or *-es*. *em* 'I am' : Skr. *ásmi*, Indg. **és-mi*. Pronominal dative ending *-um*, e. g. *im-um* 'to my' *or-um* 'to which' : cp. Skr. *-a-smāi* in *tá-smāi* 'to the', Pruss. *-e-smu* in *ste-smu* to this'. *z-ge-nu-m* 'I dress' : Gr. Ion. *ἕννῡμι* from **ϝεσ-νῡ-μι* (§ 565), rt. *ves-*, see § 555.

s disappeared after *r* (probably only under certain conditions).

i ver 'up, above, over', *i veroy* 'above' : Skr. *várṣīyas-* 'higher' Lith. *virsz-ù-s* 'the upper part, point' (Hübschmann Ztschr. d. deutsch. morg. Ges. XXXVI 121). *tar-am-im* 'I cause to fade, dry up' : Skr. *tarš-a-s* 'thirst'. Gr. *τέρσομαι*, 'I become dry', Lat. *torreō*, Goth. *ga-þairsan* 'to be arid, gape from dryness', rt. *ters-*. But beside this appears also *taršam-im*, the relation of which to *taram-im* is not clear to me.

s disappeared finally after vowels. Nom. sg *mard* 'homo' : Skr. *mṛtá-s*. Gen. sg. *haur* 'of a father' : Gr. *πατρ-ός* But acc. pl. *z mards* Indg. **mṛtó-ns*, cp Goth. *vulfa-ns*.

§ 562. Indg. *s* seems to have been assimilated to the *ḱ* at the beginning of the following syllable in *skesur* (gen. *skesri*) 'mother-in-law' : Gr *ἑκυρά*, Goth *swaihra*, Indg. **sṿeḱrā-*; *sk-* thus = *ḱṿ-*, see § 162. Cp. Skr. *śvašrú-* § 557, 4 and Lith. *szeszura-s* § 587, 2

Greek.

§ 563. *s* was preserved down to historical times in the following cases.

1. In combination with voiceless explosives. *σπαίρω* 'I pant, gasp'. Skr. *sphurámi* 'I push away with my foot, pant, tremble', Lat. *spernō*, OHG *spurnu* 'spur', Lith *spirù* 'I push with my foot', rt. *sper-* *ἀλείφω* 'I shall anoint' · Skr. *lēpsyámi* 'I shall spread upon, besmear', Lith *lìpsiu* I shall remain sticking', rt. *leip-*. *ἦσ-ται* 'sits' : Skr *ás-tē* *ἧσ-θα* 'thou wast' · cp. Skr. *ás-i-tha* (cp. § 553) Aorist Hom *πάσσασθαι* 'to eat, consume' from **πατ-σασθαι*, to pres *πατέομαι*; with reduction of the *σσ* to *σ* Hom. *ἐπάσαντο* (cp § 490) *βάσκω* 'I go'. Skr. *gáchāmi*, Indg. **gṃ-skō*, rt. *gem-*. *ἄξ-ων* 'axis'. Skr. *ákš-a-s* etc., Indg. **aḱs-*, see § 555 *σκάνδαλο-ν* 'stumbling-block' : Skr. *skándāmi* 'I jerk, leap upon', Lat *scandō*, O.Ir perf *ro se-scaind* 'he leapt', rt. *sqand-*. *σφάλλομαι* 'I stumble, stagger, fail'. Armen. *sxalem* etc, rt. *sqhel-* (§ 553). Fut *λείψω* 'I shall leave' : Skr. *rēkšyámi* 'I shall leave, give up to', Lith. *lìksiu* 'I shall leave', rt. *leiq-*.

Rem 1. For the *κτ* in *τέκτων* 'carpenter' *ἄρκτο-ς* 'bear' *κτίσι-ς* 'a founding' (Skr. *tákṣā ṛkṣa-s kṣi-ti-š*) etc see § 554.

2. In combination with *s*. Hom. aor. *ζέσ-σ-α*, to *ζέω* 'I seethe, bubble' : Skr. *yás-āmi* 'I bubble seethe, boil', OHG. *jesan* 'to ferment, froth', rt. *jes-*. Hom. loc. pl. *ἐπεσ-σι* (*ἔπος* 'word') : cp. Skr. *vácas-su*, § 557 rem. This *σσ* became *σ* at the same time with the *σσ* = *ts* (above n. 1 and § 490) and *σσ* = *tj̑* *ṭhj̑* (§ 489). Hom. already *ἔπεσι* etc., Att. only *σ*, *ἔζεσα ἐπεσι*.

3. With preceding *ρ* (Indg. *r, ṛ, r̥*). Aeolic *θέρσος* (cp. *Θερσίτης*) Att. *θάρσος* 'boldness', rt. *dhers-*, see § 555. *σ*-aorist Hom. *ἔφθερσα* (*φθείρω* 'I destroy') : cp. Skr. *ábhārṣam* (*bhárāmi* 'I bear'). *ἕρση* 'dew' : Skr. *varš-á-* 'rain'. *ἄρσην* Ionic *ἔρσην* 'masculine' : cp. Skr. *ṛ̀ṣa-bhá-* 'masculine, bull' Av. *aršan-* O.Pers. *-aršan-* 'man, male' or Skr. *vṛ́ṣan-* 'masculine, bull'. *κόρσ-η* 'head, temple' · Skr. *śirš-á-m* 'head', Indg. *ḱr̥s-*, see § 306. Probably also with *λ*. *τέλσ-ο-ν* 'boundary', which either represents the weakest stem-form of *τέλος* (*τελεσ-*) with *o* extension or, what is more probable, belongs to Skr. *kárš-āmi* 'I furrow, plough (rt. *qels-*, § 427 *b*) and was only popularly connected with *τέλος*. Hom. aor. *ἐτελσα*, to pres *τέλλω* 'I move, drive'.

ρρ from *ρσ* in later Attic· *θάρρος, ἄρρην, κόρρη*.

Rem 2 Hom *ἔκειρα*, Att *ἔφθειρα ἐστειλα* beside Hom *ἔκερσα ἔφθερσα ἔτελσα* were new forms, made after the analogy of forms like *ἔκτεινα ἔνειμα* (from nasal stems),

4 In the combination *nsi*, whence *σσ* *πτίσσω* from **πτινσ-jω* 'I bruise, pound' Lat *pinsō pīnsō*, Skr. 3 pl. *piṣ-ánti* 'they pound' 1. sg. *pináṣmi* (cp p 410 footnote 1) *πίσσομαι* from **πι-νσ-jο-μαι* 'I go away, return home' beside *πίομαι* from **πεσ-ο-μαι* : Skr. *nás-ami* 'I approach some one, I unite myself to some one', OHG. *gi-nesan* 'to recover, remain alive'

5. Finally *ἵππο-ς* 'horse' · Skr *áśva-s*, Lat. *equo-s*. *ἡδύ-ς* 'sweet' Skr *svādú-s* *ἔφερε-ς* 'thou didst bear' : Skr. *ábhara-s*. Acc. pl. masc. Cret *τό-ις* Att *τοί̃ς* 'the' Goth *þa-ns*. Nom. *κύκλ-ωψ* 'round-eyed', like Lat. *vōx* Av *vāxš* 'voice' Nom. *νεό-της* 'youth' : Lat. *novi-tās*, Indg. **-tāt-s*.

6. In the initial combination *sm*. *σμερδαλέο-ς* 'terrible' OHG. *smerzo* 'pain' Mid. Engl. *smerte* 'sharp, bitter'. Beside these also the assimilation of the *σ* to *μ*, as in *μεμ[illegible]* 'to

smile' *φιλο-μμειδής*, to Skr. *smáy-a-tē* 'he smiles'; *μία* 'una' from **σμ-ια* fem., to *ἕν* neut. from **sem*; which is to be explained from the different conditions of sandhi (cp. § 589, 3).

§ 7. It is not quite certain that initial *sy̯* became *σσ*, *σ*. The following comparisons have been made *ἴσσο-ς ἴσο-ς* Cret. *ϝίσϝο-ς* 'equal' with Skr. *viṣú* 'in both directions' *viṣuva-m* 'aequinoctium'[1]) and Arcad. *ἥμι-σσο-ς* 'half' with Av. *þri-šva-* 'third part' (on *ἥμισυ-ς* see Osthoff Morph Unt. IV 187)

Rem. 3 Imper. *φέρεο φερου* not = Skr *bhára-sva*, but = Av *bara-ŋha* Indg **bhére-so* *ἰο-ς* 'arrow' to Skr *iṣu-ṣ* 'arrow', but it did not arise from **ἰσϝο-ς* but either *o-* and *u*-stem existed side by side from the beginning, or *ἰό-ς* had been carried over into the *o*-declension from **ἰυ-ς*, cp. *νυό-ς*: Lat *nuru-s*, *sū-s* beside *sūs-ς*

If the above comparisons are right, it would then be possible to explain the initial *σ-* = *sy̯-* instead of *ϝ-* *h-* (§§ 166. 564) in certain words, e. g. in *σάλος* 'groundswell, fluctuation' : OHG *swellan* 'to swell'; *σίνομαι* 'I rob' : OHG. *swīnan* 'to disappear'; *σῑγή* 'silence' : OHG. *swīgēn* 'to keep silent' (rt *sy̯a'ĝh- sya'ĝ-*). The *σ* would have its regular position only medially (in the inner part of the sentence), cp. *γονί-σσαλος*, *ὁ σάλος*, *ἐκ σάλου*, *ἐσάλευον*, *ἐσῑνόμην*. Cp. Osthoff Morph. Unt. IV 359.

Rem. 4 We thus arrive at an explanation of *σῦ-ς* beside *ὗ-ς* 'pig'. Corresponding to *πάλαι-ς* 'fat hog' from **σϝ-καλο-ς* (cp Goth *sv-ein* 'pig', O Bulg *su-inŭ* 'suillus') there existed once the form *σϝ-ος* beside *ὑ-ός* (cp Goth. *sv-ein* as opposed to Lat *su-ĭnu-s*, like Ved *dva* beside *duvá* 'two'), the *σ* of which was retained in the inner part of the sentence and then was transferred to *ὗς ὑός* Cp Osthoff loc. cit.

§ 564. *s* became *h* in prim. Greek initially before sonants and between sonants, and then in the latter case disappeared altogether.

ὁ 'the' : Skr. *sá* Goth. *sa*. *ἱμάς* 'strap, rein' : Skr. *sī-mán-* 'parting, boundary', OS. *sī-mo* 'cord, rope', O.Bulg. *si-lo* 'cord

1) Bechtel (Philol. Anz 1886 p. 15) puts **ϝιδ-σϝο-ς* down as the prim. form, which he connects with *εἴδομαί τινι* 'I resemble some one' This would do very well as regards meaning, but the assumed suffix formation is not justifiable.

rope'. ὗς 'pig' : Lat. *sū-s*, OHG. *sū* 'sow' (on σῦ-ς see § 563 rem. 4). *ἀμό-θεν* 'from some place or other' : Goth. *sums* 'anyone', cpf. **sm̥m-ó-*.

Hom. ἦα (Att. ἦ) 'I was' : Skr. *ás-am*, Indg. **és-m̥*. γένε-ος γένους 'generis' : Skr. *jánas-as* Lat. *generis*. 2. sg mid. φέρε-αι φέρῃ (φέρω 'I bear') : Skr. *bhára-sē*. ᾔδε-α 'I knew' : Skr. *ávēdi-š-am*.

Rem 1 Sometimes *σ* seems to have remained unaffected between vowels, as in *τίθε-σαι* beside *φέρε-αι*, nor Att *ἐποίησα* beside El. *ἐποίηα* On this point see the accidence

Initial *h* passed into the spiritus lenis in prim. Greek, if an aspirated tenuis or *h* = *s* stood in the next syllable or the next but one. ἔχω 'I hold, have' fr. **ἴσχω* (cp. ἕξω, ἐ-σχ-ο-ν) : Skr *sáhē* 'overpower', Indg act. **sé ĝhō*; ἴ-σχω from **ἰ-σχ-ω*. ἑδεθλο-ν 'seat' beside ἕδος 'seat' Skr *sádas-* 'seat, a sitting'. ἅ-λοχο-ς 'consors tori' beside ἅ-παξ 'once', ἀ- = Skr. *sa-* 'with', Indg **sm̥-* αὑω 'I dry, wither' from **αἵ̯hω*, older **αὐhω* (cp. fut. αὑσω). Lith *saũs-u-s* 'dry', OHG *sōrēn* 'to wither, dry up', rt. *saus-*. ἔχω : ἕξω and αὑω : αὑσω = τριχός : θρίξ.

Rem 2 ανω beside αὑω and Att (inscript) ἔχω beside ἔσχω were formed after ᾔσω, ἕξω Conversely αὑσω for *αυσω, πεύσομαι for *φευσουαι (§ 496). In like manner each of the two forms ἀ- and ἁ- 'with' went beyond its original sphere, e g ἁ-θυόο-ς after ἀ-πᾶ, etc., conversely ἄ-πε-δο-ς after ἅ-λοχο-ς ἄ-δελφό-ς etc (Cp rem 3

Initial *sm̥-* became voiceless *ϝ-*, and this became *h-*. ϝοῖ ϝέ, οἷ ἕ 'sibi, se' : Skr. *svá-*. Cp § 563, 7 on σάλος etc.

Initial *si̯-* became *h-*. ἰ-μι/ν 'thin skin, sinew' : Skr. *syú-man-* 'string, strap'. Medial *si̯* became *i̯*, which disappeared after Homer. Hom. τοῖο Att. τοῦ 'of the' from *το-σι̯ο : Skr. *tá-sya*. See § 131.

Prim Gr *h-* (= Indg. *s-*, *sm̥-*, *si̯-* and *i̯-*, § 129) was lost in Lesbian according to the testimony of the old grammarians: ὁ = *o* etc. (Meister Griech. Dial. I 100 ff.). *h-* seems to have been reduced in Ionic-Attic at an early period. It disappeared altogether in the christian era.

Rem 3. Besides the forms quoted in rem. 2 there are still many others with *h-* where the spiritus asper might be expected. In some cases it

seems to be merely a question of inexactness in the representation of the sound. In other cases it is more or less clear that they have been formed by analogy. Thus Att. *ἀλκυών* 'kingfisher' beside *ἀλκυών* (Lat *alcēdō*), after *ἅλς* from **σαλς* (de Saussure's comparison of *ἀλκυών* with OHG. *swalawa*, Mém. de la soc de lingu VI 75, does not convince me), Dor. *ἁμές* Att *ἡμεῖς* (Skr *asma-*) after *ὑμές ὑμεῖς* from **ϝυσμε-* (to Skr *yuṣma-*. § 129); *ἧσται* 'sits' (Skr *ástē*) after forms from *ἐδ-* 'sit' Indg *sed-*; Heracl. *ὀκτώ* 'eight' (Lat. *octō*) after *ἑπτά* 'septem' Further *εἰπόμην* for **εἰπσόμην* (from **ἐ-(h)επσομην*) after *ἑπσόμην ἕπομαι*, and many others

§ 565. Initial *s* before *n* became assimilated to this in prim. Greek, e. g *νίφ-α* acc. 'snow' : Lith *sniẽga-s* etc , see § 555. The fuller initial was still preserved in *ἀγα-νιφο-ς* 'deeply covered with snow' *ἔ-νηε* 'nebat' (O.Ir. *snā-the* 'filum', OHG. *snuor* 'thread, string') (§ 654, 4).

s, between a sonant and following nasal or between a nasal and following sonant, became assimilated to the nasal in prim. Greek. The stage of assimilation remained in Lesbian and North Thessalian, whilst in the other dialects a reduction of the nasal, partly with 'compensation lengthening' (cp § 618), took place. **φαϝεσ-νο-ς* 'shining', to *φάος* · Lesb *φάεννο-ς*, Ion. *φαεινό-ς*, Dor. *Φαηνό-ς*. **ἐσ-μι* 'I am' (Skr *ásmi*) Lesb *ἐμμι*, Att. *εἰμί*, Dor. *ἠμί*. *ζῶμα* 'girdle' from **ζωσ-μα* · Lith. *jůs-mā* 'girdle', rt. *jōs-*. Aor. **ἐμεν-σα* 'I remained' **ἐνεμ-σα* 'I allotted' : Lesb. *ἔμεννα ἐνεμμα*, Att. *ἔμεινα ἐνειμα*, Dor *ἔμηνα ἐνημα* Gen **μηνσ-ος* 'of the month' (O.Ir. *mīs*) : Lesb. *μῆνν-ος* (Thess *ἱστερο-μεινι-ᾶ*), Att. Dor. *μην-ός*.

σ frequently came to stand before *μ* and *ν* again by form-association. Thus were formed *ἐσμὲν* 'sumus' beside regular *εἰμὲν* after *ἐστὲ ἔστι*, *ἠμφί-εσμαι* 'I am dressed' (rt *ves-*) beside regular *εἵμαι* after *ἠμφί-εσται* etc This *σμ* as well as that which arose from *tsm* (as in *ἄσμενο-ς* 'rejoicing' from **σϝατ-σ-μενο-ς*, to *ἡδομαι*, see § 566 ; *ὀσμή* 'smell' = **otsmā*, that is, **ὀδ+σμᾱ*, beside *ὀδ-μή*) passed into *zm*, which is shown by the spelling *ζμ* and Cret. *κόρμο-ς* = *κόσμο-ς*, the *ρ* of which in the first instance arose from *z* (cp. *Θεορδότειο-ς*, § 593). On the other hand the new *σν* became *νν*. Thus in Att. **ἐσνῦμι* took the place of the regular (Ion.) *ἕννῡμι* 'I dress' after the forms *ἐσ-θῆναι* etc., and this became

ἔννῡμι probably at the same time when *Πελοπόννησος* arose from **Πελοπόνησος*. In like manner Att. *ζώννῡμι* from **ζωσ-νῡ-μι*, a new formation for regular **ζωνῡμι*, cp. *ζώνη* 'belt' from **ζωσ-νᾱ*, rt. *ǰōs-*, and others of the same kind.

sr became voiceless *ρρ* in prim Greek, which underwent simplication initially. Hom *ἐ-ῤῥεε ῥέε* 'flowed' : Skr. *á-srav-a-t srávᵊa-t*. Cp. § 266. It is doubtful whether such *ρρ* was anywhere medially reduced to *ρ* with 'compensation lengthening'.

sl became *λλ*, initially *λ*, at the same period. *ἄ-λληκτο-ς μετα-λλήξαντα* (Il. *I* 157), *λήγω* 'I cease' : OHG. *slach* O.Icel *slakr* 'slack, lazy', rt *slĕg-* Lesb *χέλλιοι*, Ion. Att. *χείλιοι* (beside *χίλιοι*, the *ī* of which has not yet been satisfactorily explained), Dor. *χήλιοι* 'thousand', from **χεσλ-ιο-*. Skr. *sa-hásra- sa-hasríya-*, Indg. **ǧheslo- *ǧhesl-ĭo-*.

§ 566. Transposition of *σ* seldom took place, as in *ξίφος* Lesb. *σκίφος* 'sword, Syrac *ψέ* Ion. *σφέ* 'se'.

Assimilation of *s* to following explosives or spirants, whereby the *st*, which had arisen from *t't* (§ 490), stood equal to original *st*. Lac *ἀ-ττᾶσι* · *ἀνά-στηθι* Hesych, *ἀγκόῤ* = *ἀσκός* 'leather bag'. Cret Gortyn *μέττις* 'up to' from **μεστις*, which may be regarded as *μεστε-ς* (cp. *μέχρι-ς ἄνευ-ς* etc.) or as *μεστ' ἐς* (cp. *μέστε, μέστα*). Bœot *ιττι* = *ἐστι* 'till', that is, *ἐς τι, ἴττω* = *ἴστω* 'let him know'. Cret. *θθ* from *σθ*, as *διδόθθω* = *διδόσθω, πρόθθα* = *πρόσθα*, Bœot. *τθ*, as *ὀπιτθοτίλᾱ* 'cuttle fish'. These *θθ* and *τθ* are probably both to be read *ƥƥ*; *sƥ* became *ƥƥ*. Cret. *ἰθθᾶντι* (*ἴθθαντι*?) = Att *ἱστᾶσι* shows the development *st ƥt ƥƥ*.

Disappearance of *σ* in combinations of three consonants. *πτέρνα* 'heel, foot' : Skr *pāršṇi-ṣ* OHG. OS. *fersna* 'heel'. *πτύω* 'I spit' from **(σ)πτῑ-γω* (§ 131 p 119), in case the dropping of the *σ* does not come under § 589, 3 (cp. O.Bulg *plju-ją* 'I spit'). *πτάρνυμαι* 'I sneeze' from **πσταρ-*, rt. *pster-*, Lat. *sternuō*. 3. sg. of the *σ*-aorist *πάλτο* (act. *ἐπηλα* 'I swung'), *λέκτο* (act. *ἐλεξα* 'I read') from **παλ-σ-το, *λεκ-σ-το*, formed like *ἄσμενο-ς* 'rejoicing' from **σϝατ-σ-μενο-ς* (§ 565); cp. the accidence. Cp. also *ἑκκαίδεκα, ἑκμηνο-ς* etc., with *ἕξ* 'six'.

Italic.

§ 567. Some of the changes, which *s* underwent within Italic itself, belong to the development of the separate dialects, as is shown either by Latin or the Umbr.-Samn. dialects, e. g. Lat. *aēnu-s* from prim. Lat. **a(ɣ)es-no-s*, cp. Umbr. ahesnes 'aēnis'.

In other cases the agreement of the Ital. languages, as evinced by their monuments, justifies our ascribing the change to the period of the Ital. prim. community, e. g. *z* from *s* between vowels may be regarded as prim. Italic.

There are other affections where we are unable to say how old they are, because the material is too limited, e. g. Lat. *-br-* from *-sr-*.

§ 568. *s* was retained in all dialects·

1. Initially before vowels (including *u*) Lat *s-unt*, Umbr. *s-ent* Osc. s-et 'sunt' : Skr. *s-ánti* Goth. *s-ind*, rt. *es-* 'be' Lat. *sē*, *sovo-s suo-s*, Umbr *seso* 'sibi' svesu 'suum' Osc sifei 'sibi' súvad abl. 'sua' : Skr *svá-* 'own' Lat *suāvi-s* . Skr *svādú-š* Gr. *ἡδύ-ς* OHG *suuazi* Indg. **sṷād-u-* 'sweet, lovely' Lat. *soror* from **sṷesōr* . Skr *svásā* etc., see § 560

2 In combination with explosives and *s* Lat *spectō*, Umbr. speture 'spectori' : Skr. *spáś-* 'spy, watchman', rt *ᵘek-* Lat *stō*, Umbr. *stahituto* 'stanto', Osc. stahint 'stant' . Gr. *στάσι-ς* etc., see § 555. Lat. *est estōd*, Umbr. est Osc ist *estud* : Gr. *ἔστι ἔστω*, rt *es-* 'be'. Lat. *pistu-m pistor*, Umbr. pistu 'pistum' Skr. *piṣṭá-* 'rubbed, ground'. Lat *scabō* : Goth *skaba* 'I scrape', Lith. *skabėti* 'to cut', cp § 346. Lat *gnō-scō nō-scō* : Gr. *γι-γνώ-σκω* 'I get to know'. Lat. *serpsī* : Skr. *á-sarps-am* and *á-srāps-am* (pres. *sárpāmi* 'I creep, crawl'), Gr. *εἵρ̣ψα* (*ἕρπω* 'I creep, go'). Preposition prim. Ital. **ops* : Lat. *obs-trūdō* read *opstrūdō*, *os-tendō*, Umbr. *os-tendu* 'ostendito'. Initial *ps-* seems to have become *s-* : Lat. *sabulu-m* according to Osthoff from **psaflo-m* : Gr. *ψάμμο-ς* 'sand' from **ψαφ-μο-ς*, to *ψῆφο-ς* 'small stone' [1]). Lat. *con-cussī* from **-cutsī*, to *con-cutiō*, see § 501.

1) It is not probable that *ps-* has become *p-* in *palpare* and others (Stolz Lat. Gr. § 63, 2).

Lat. *dīxī* : Skr. mid. *ádikṣi* (*diśámi* 'I direct, show'), Gr. ἔδειξα (*δείκνῡμι*). Nom. Lat. *vōx* : Av. *vāxš*, Indg. **u̯ōqs* 'voice, word'; Osc. meddíss 'meddix'. Initial *ks-* has perhaps been simplified to *s-* in Lat. *su-b s-uper*, Umbr. *s-omo* 'summum', to Gr. ἐξ-ύπερθε (for other quite as uncertain or still more uncertain examples see Osthoff Morph. Unt. IV 266, Zur Gesch. d. Perf. 612). Lat. *ges-sī* beside *ges-tu-s*, *hausī* beside *haus-tu-s*. From prim. Ital. **is-so* **is-sā* or **es-so* **es-sā* '*iste, ista*'[2]) comes the Umbr. Osc. stem *is(s)o- es(s)o-*, as in Umbr. *isso-c eso-c* 'sic' *essu esu* abl. 'hoc' *esa* 'hac', Osc. eseí loc 'in eo'.

3. In *-ns-*. Lat. *mēns-i-s*, Umbr. menzne 'mense' (*-nz-* from *-ns-*, see § 209) : Gr. Lesb. *μῆνν-ος* (§ 565). Lat. *cēns-eō*, Osc. *censamur* 'censetor' : Skr. *śaṃs-āmi* 'I pronounce solemnly, recite'. Lat. *anser* : Skr *haṃsá-s* OHG *gans* Lith. *žąsìs* 'goose'. Lat. *pīns-ō pīns-tō* Skr 3 pl *piṃś-ánti* (§ 556)

So also original *s* after original *m* Lat *sūmpsī* with excrescent *p* (§ 228) Umbr uze *onse* loc. 'in umero' : Goth. *ams* 'shoulder'.

Rem It is however questionable whether orig *-ms-* had not become *-ns-* in prim Italic, just as *-mt-* became *-nt-* (§ 207), so that these examples would not come into consideration for the prim Indg combination *-ms-* Lat *sūmpsī* may have been a new formation like *sūmptu-s*. Lat *umeru-s* can scarcely come from a prim Ital **omso-*. The pre-Italic form seems to be **omeso-* and the Umbr word may have arisen from this by syncope (§ 634) The same relation would follow for Osc Niumsieís 'Numerii beside Lat *numerus* Cp §§ 209 269 rem. and § 570 rem. 2 on *tenebrae*

4 Often finally (cp. § 655, 9). Nom. sg Lat. *hortu-s*, Umbr. pihaz *pihos* 'piatus' Osc. húrz 'hortus' : cp. Gr. *λύκο-ς*, Gen. sg. Lat *familiās*, Osc. *moltas* 'multae' : cp. Gr. *χώρᾱς*.

§ 569. *s* between sonantal vowels became *r* in Latin at the beginning of the historical period; *s* is still found in the

2) Neut. nom. acc. **is-tod* or **es-tod*, masc. acc. **is-tom* or **es-tom*. The first part of the compound was related to the *s-* in Pruss. *s-tesse* etc. *t* was carried over to the nom. sg masc fem. in Lat., *iste, ista*, conversely in the other dialects *s* was carried over from these cases into the others. Cp. Danielsson Pauli's Altital. Stud. III 158 ff and the accidence.

oldest period. In Umbr. *s* and *r*, in Osc. *s* and *z* (= French, Slav. *ž*). *r* arose everywhere first of all from *z* (cp. Lat. *mergu-s* from pre-Ital. **mezgo-s*. § 594), and *s* in the old Ital. monuments is an inexact expression for *z*. The change to *z* was probably completed in the prim. Italic period.

Lat. *erō* O Lat. *esō* conj. (fut.) to *sum* · Skr. *ásāni*, Gr. ἐσ-σο-μαι. Acc. *mūr-em* (nom. *mūs*) : Skr. *múš-* OHG *mūs* 'mouse'. *aur-ōr-a* : Skr. *uš-ás-* Gr. Lesb. αὔ-ως 'dawn' Gen. *gener-is* : Skr. *jánas-as*, Gr. γένε-ος γένους. *vīder-a-m* : cp. Skr. *á-vēdiš-am* Gr. ἴ-δε-α. With *s*, inscript. *Lases* beside *Lares*, in grammarians besides *esō* also *āsa* : *āra*, *arbosem arborem* etc. Cp. further *ār-ō* : *us-tu-s*, *quer-or* : *ques-tu-s*, *quaer-ō quaes-tor quaesō* (from **quaes-sō*); *honōr-is* · *honōs hones-tu-s*; *dir-imō* : *dis-imeō dis-siliō*.

Rem. 1. The process of rhotacism was at an end at the time of Appius Claudius (Censor 442 U C) From the report that he removed from the alphabet the letter *Z* we may conclude that *z* was also written in Lat, as in Osc., for the voiced sibilant

Umbr *r* and *s* e r u *erom* 'esse', rt. *es-*. fu-r-e n t 'erunt', cp. *fu-s-t* 'erit'. h a p i n a r u gen pl. fem. 'ovium' : Skr *tásām* 'harum' a s a *asa* abl 'ara'. The spelling of the latter word with *s* was a graphic archaism, or it was borrowed from another dialect without rhotacism. On the change between *s* and *r* finally see § 655, 9.

Osc *z* and *s* *ezum* 'esse', Umbr *erom* *rensa-zet* 'censebunt' t r í b a r a k a t t u - s e t 'aedificaverint', cp Umbr. f u - r e n t. *egmazum* 'rerum', cp. Umbr. h a p i n a r u. F l u u s a í dat. 'Florae'. a a s a s pl. 'arae'. To which Pelign. *coisatens* 'curaverunt', Lat *coirāre coerare cūrāre*, perhaps to Gr. τειρη-μένο-ς 'sorrowful, troubled', τι(σ)- from **qis-* (§ 427, *b*)

In Lat. *r* = *s* also before *u̯*. *Minerva* from **Menes-u̯ā*, cp. Skr. *mánas-* Gr. μένε-σ- 'sense, mind' *furvo-s* beside *fuscu-s*, in case the latter has not arisen from **fursco-s*. *lārva* (*lārua*) possibly connected with *Larēs* (*Lases*).

Rem. 2 In Lat *r* = *s* often came through analogy into positions, especially finally in which it could not have arisen regularly. *honor* beside *honōs*, *arbor* beside *arbōs*, *mājor* for **mājōs*, after *honōr-is* etc. Cp. also

veternu-s veterrimu-s, to *vetus -eris* = Gr *ἔτος -εος*, through association with *hibernu-s dcerrimu-s* etc. with old *r*. *pūbertās* to *pūbēs -eris*, after *ūbertās* with old *r*

Rem. 3 After the conclusion of the process of rhotacism *s* often came to stand again between vowels and now remained unaffected, e g. *quaesō* from **quaes-sō*, *hausī* from **haus-sī*. The assumption is unsatisfactory that *nāsu-s* (cp. *nār-ēs narium*, *nās-turtiu-m*, Skr *nas-* OHG. *nasa* 'nose', Ags *næs-ðyrla* 'nostrils', Lith *nósi-s* 'nose') was formed anew from a nom. sg. **nās* (cp *aurōr-a* etc); the *s* in Slav. *nosŭ* is also strange (§ 588, 2), did *s* arise in both languages from a form with *-s-s-* (stem **nās(e)s-*, cp Skr *vats-á-*)?

§ 570. *s* before nasals and liquids.

sn. *s* disappeared in Lat., but was retained in Umbrian. Lat. *nāre*, Umbr snata 'umecta' : Skr *snā-mi* 'I bathe, wash, water', O.Ir. *snām* 'a swimming'. Lat. *ninguit nix* : Lith. *snẽga-s* 'snow'; if Umbr *nuctu* is really related to *ninguitō*, we have here a different treatment of initial *sn-* which may possibly depend on different conditions of sandhi Lat. *nuru-s* : Skr. *snuṣā* OHG. *snura* 'daughter-in-law'. *aēnu-s aēneu-s*, Umbr ahesnes 'aënis', to *aes aeris*, Skr. *áyas-* neut 'metal, iron'. Lat. *pēni-s* from **pes-ni-s* : Skr. *pás-as* neut Gr *πέος* neut 'penis'. Lat. *dē-gūnō* beside *dē-gus-tō*, rt *ǵeus-*. *dī-numerō* from **dis-n.* In *satin potin* from *satis-ne potis-ne*, *vidēn dūn* from *vidēs-ne abīs-ne* the long vowel was shortened after the dropping of the *s* and the final *-e*.

xn, tsn *lana*, O.Lat inscript. *losna*, from **loqc-snā* : Av. *raoxšna-* 'shining' *sēnī* from **sex-nī* *ēnūntiō* from **ex-n.* *penna*, O Lat. *pesna*, from **pet-snā*, rt. *pet-* 'fly'.

sm. *s* disappeared in Lat, but was retained medially in Umbr.-Samn Lat. *merda* 'dirt' : Lith. *smirdėti* 'to stink' *mī-ru-s* 'wonderful' : Skr. *smáy-a-tē* 'smiles' *prīmu-s*, Pelign. *prismu* 'primo' or 'primum'. Lat. *dī-movēō* from **dis-m.* Umbr. pusme 'cui' : Skr. *kás-smāi* 'to whom?'; do the Lat. adverbs *quom cum* and *quam* also belong here? Osc. *posmo-m* 'postremum', cp. Lat. *pōne* from **pos-ne.*

Rem 1. It is uncertain whether *Casmēna* = *Camēna* and *dusmō* = *dūmō* (*dusmo in loco*) in Paul Fest. are examples of the retention in Lat. itself of *s* in this combination *sm.* Corssen Krit. Beitr. 431 regards

cosmittere = *committere* in the same source as containing — but hardly rightly — a *cons-*, formed like *abs o(b)s-*, Osc. a z etc. Cp. also Bücheler Rhein. Mus. XXXVI 241 f

xm. *sub-tēmen* from **-texmen.* *sē-mēnstri-s* from *sex-m.* *ēmergō* from **ex-m.*

sl. *s* was lost in Lat. *langueō* : OHG. *sluch* 'slack, lazy', rt. *slēg-* (§ 565). *lūbricu-s* : Goth. *sliupan* 'to slip'. *dī-luō* from **dis-l.* *pīlu-m* 'pestle' from **pins-lo-m*, *ālu-m* from **anslo-m*, see § 208.

xl, tsl. *āla* from **axlā*, to *axilla*, OHG. *ahsla* 'axle'. *vēlu-m* from **vexlo-m*, to *vexillu-m.* *ēliqō* from **ex-l.* *scāla* from **scant-slā*, to *scandō.*

According to some scholars (see Kuhn's Ztschr. XXVII 328. XXVIII 270) *s* disappeared in Lat. before nasals and before *l* without compensation lengthening (or with later shortening of the lengthened vowel), if the vowel was unaccented. The least doubtful examples are *Camēna* (rem. 1), *o-mittō* from **o(p)s-mittō*, *corpulēntu-s* from **corpos-lento-s*, *colīna collīna* from **co(c)-sl-īnā* It is here a question of later Lat accentuation (§ 681), and on account of *o-mitto* it would have to be assumed that a short vowel had regularly arisen in *dī-numerō ē-mergō* etc, quoted above, and that the long vowel was due to the analogy of forms with *dī- ē-.*

Initial *s* also disappeared in cases where it came to stand before *l* after the dropping of *t*, but not until a later period. *stlīs, slīs, līs.* *stlocus, locus* Cp. also *lien.* Gr. *σπλήν* 'spleen'. See § 503. L. Havet, Mém. de la soc. de lingu. V 229 f., derives *illicō* from **in slocō*, like *pīlu-m* from **pnslo-m* § 208, 2.

sr became *fr*, further *fr*, whence medially Lat. *br.* Examples only in Latin. *frīgus*: Gr. *ῥῖγος* 'frost', cpf. **srīgos.* *frāgu-m*: Gr. *ῥᾶξ -γός* 'berry'. *sobrīnu-s* from **sŋesr-īno-s*, to *soror*: Skr. *svasar- svasr-*, Indg. **sŋésor- *sŋesr-.* *cerebru-m* from **ceres-ro-m*, to Skr. *śiras-* 'head'. *fūnebri-s* from **fūnes-ri-s*, to *fūnus -eris, fūnes-tu-s.* *crābrō* from **crās-rō* : Lith. *szirsz-ů* etc., see §§ 303. 306. *membru-m* from **mēms-ro-* : O.Ir. *mīr* 'a piece of flesh' (§ 574); **mēms-ro-* became in Ital. first of all **mensro-* (§§ 207.

812), hence **menĝro- *memfro- membro-*. *tenebrae*: Skr. *támisrā- tamisra-m* 'dark, dark night'.

Rem. 2. The *n* for *m* in the last word is best explained by assuming an orig double from **temsrā*, whence **tensra-* (cp. OHG. *dinstar* 'dark' from prim. Germ **þimsi(t)ra-* and Lith *tìmsra-s* 'like a sorrel-horse'), and **temərā-* The *n* in the first form was transferred to the latter.

Rem 3. *dī-ruō* was formed after *dī-luō dī-moveō* etc. or arose regularly through *-sr-* (*-zr-*) being treated differently at a later period than in the cases mentioned above In the latter manner the difficult form *vēr rēris* (to Gr. *ἔαρ* Lith *vasarà* etc) might also be explained by assuming, along with L Havet (Mém de la soc de lingu. V 447), that a stem-form **ŭefr- *ŭebr-* = Indg. **ŭes-r-* was transformed to **ŭesr-* (**uezr-*) after the analogy of the nom acc *ŭeser* (**ŭezer*) and that from this arose *rēr-*, which, being carried over from the oblique cases, gave rise to the nom. acc *vēr*. Or does *ver* belong to O Icel *vār* 'spring'?

§ 571. *rs, ls.* In Lat. *s* became, if it was not protected by a following consonant (*tostu-s* from **tors-tu-s*), assimilated to the liquid, probably after it had first become *z* *rs* was preserved in Umbr.

rs Lat *terreō*, Umbr. *tursitu* 'terreto' : Skr. *trásāmi* 'I tremble at', Gr. *τρέω* (aor. Hom *τρέσ-σαι*) 'I tremble, flee' *ἐτερσεν· ἐφόβησεν* Hesych., O.Ir. *tarc-ach* 'timid' (?); the root form *ters-* instead of *tres-* seems to be a secondary formation after the analogy of the form *tŗs-* (Umbr. *turs-*). Lat. *fār farris, farreu-m*, Umbr. *farsio* 'farrea', stem *far-s-* to Germ. **bar-iz-* 'barley' (O Icel *barr* neut , Goth *bariz-eins*). Lat. *errō*: Goth. *airzeis* OHG. *irri* 'astray'. *verrēs*: Lith. *vẽršis s* 'calf', Skr. *vŗ́ša-s* 'bull', rt. *ŭers-*. Lat. *verrō* O.Lat. *vorrō* : O.Bulg. *vrĭchą* 'I thresh', rt. *ŭers-*. Lat. *ferre* from **fer-se*, cp. *es-se. torreō* beside *tostu-s*. Gr. *τέρσομαι* 'I become dry'.

Rem Observe that *rs* = *rᵊt, rts, rks* remained in Lat. *versu-s* : Skr *vṛttá-s*, Indg **ŭṛtᵊto-s arsī* to *ardeō. ursu-s* : Skr. *ṛ́kša-s* (cp. however § 554) Cp. Umbr. *trahaf-vorfi* 'transverse' (§§ 209. 501).

ls. Lat. *collu-m* 'neck' : *hals* (stem *halsa-*) 'neck'. *velle* from **vel-se*, cp. *es-se.*

Lat. *rn ln* from *rsn lsn. cernuo-s* from **cers-nuo-s*, to *cerebru-m* (§ 570). *alnu-s* from **als-no-s*, probably to Lith. *ẽlks-ni-s* m. 'alder' (with excrescent *k*), further OHG. *elira* Ags. *alor* (*r* from *z*) O.Bulg. *jelĭcha* 'alder'.

§ 572. *-ss-* = Indg. *-ss-* remained after short syllables, but, like *ss* = *t*^{s}*t ts* (§ 501), became *s* after long syllables, e. g. *haesī* from **haes-sī* (*haereō*) beside *ges-sī* (*gerō*).

differō from **dis-ferō*.

Old Irish.

§ 573. Initial *s* was retained before sonantal vowels; as so, too, in Gallic, while in Britann. — first probably only after final vowels — it became *h* *su- so-* 'bene', e. g. *su-thain* 'perpetuus' (*tan* 'time'), Gall. *Su-cai-s* (prop. name) Cymr. *hy-gar* Bret. *he-gar* 'comis, benignus, amicus' : Skr. *su-*. *sēt* 'way', Cymr. *hynt* Bret. *hent* : Goth. *sinþs* 'way, course, time'. *samail* 'resemblance', Cymr. *hafal* 'similar' (§ 243, 4) : Skr. *samá-* 'even, equal', Gr. *ὁμοῦ* 'together' *ἅμ-α* 'at once', Lat. *simili-s*, Goth. *sama* 'the same, O Bulg. *sę-* 'with' *samŭ* 'self'.

sŋ appears initially as *s*, as *suir* 'sister' : Cymr. *chwaer*, Skr. *svásar-*, medially as *f* (*b*), as perf 3. sg. *do-sefainn* 'I hunted, drove', rt. *sŋend-*. See § 175 p 154

§ 574. *sn- sm- sr- sl-* were retained initially *snāim* 'I swim' · Skr. *snā-mi* *snechta* 'snow' : Goth. *snáivs*, rt. *sneigh-*. *smir* 'marrow' : Goth. *smairþr* 'fat, fatness' OHG. *smero* (gen *smerwes*) 'fat, grease'. *smech* 'chin' : Lith *smakrà* chin' (§ 557). *sruth* 'stream' : Skr. *srāv-a-ti* 'flows' etc., see § 555. *ro slecht* 'destructus est', cp perf. *ro se*[*s*]*lach* 'I struck down' : Goth *slaha* 'I strike' (§ 576 p 431)

Medial *-sm-* became *-mm-*. 1 pl. *ammi* 'sumus', cp. Gr. *εἰμέν* Skr. *smás*; 1 sg. *im am* 'sum' : Skr. *ásmi* (cp. Zimmer Kelt. Stud. II, 133).

mīr 'a piece of flesh', according to Thurneysen from prim. Kelt. **mēnsr-*, to Lat. *membru-m*, Skr. *māṣá-* etc., see §§ 570. 585 rem. 3.

s remained, except when originally final (§ 576), after nasals which themselves disappeared (§ 212) *gēis* (gen. du. Mid. Ir. *gēsi*) 'swan' : Skr. *haṃsá-s* OHG. *gans* 'goose'. Gen. sg. *mīs* (nom. *mī*) 'of a month' : Lat. *mēns-is*.

s became assimilated to a preceding *r*. *err* (gen. *erre*) 'tail' : OHG. *ars* 'rump', Gr. ὄρρο-ς 'tail, rump'. Cp. also *orr* from **or(c)-s* § 518.

§ 575. *s* in combination with explosives and *s*.

It disappeared initially before *t*. *tiagaim* 'I stride, go' : Skr. *stighnutē* 'leaps upon, climbs up' (not found), Gr. στείχω 'I stride, go', Goth *steiga* 'I climb', Lith. *staigýti-s* 'to hasten'. *-tau* 'I am' : Lat. *stō* etc., see § 555. Cp. on the other hand O.Bret. *strouis* 'stravi' Goth. *stráuja* 'I strew, spread out'; Bret. *sterenn* 'stella' Corn. *steyr* 'stellae'. Skr. *stṛ-* 'star' etc., see § 559.

Medial *st* and *ts* became *ss* (*s*). *ro closs* 'I was heard' fr. **klus-to-*. *s*-fut. *ro fessur* 'I shall know' fr. **u̯it-s-*, rt. *u̯eid-*. See § 516.

sc. *scaraim* 'I separate, sever' : Lith. *skiriù* 'I separate, sever'. *ro se-scaind* 'he leapt' : Skr. *ca-skánda*. *cum-masc* 'a mixing, mixing oneself' *con-mescatar* 'miscentur' : Lat. *misceō*, OHG. *misken* 'to mix'

ks became *ss* (prim Kelt. probably *χs*). *dess* 'on the right hand' : Goth. *taihsva* Gr. δεξιό-ς. *s*-fut. 1. pl. *for-tiasam* 'shall help', to *tiagaim*, cp. Gr στείξω. See § 517.

ss *-accastar*, that is, **ád-ces s-a-thar* 3. sg of the pass. *s*-conjunctive of *ad-cí* 'I see', cp. *ad-chess* 'visum est', the *ss* of which arose from *st*

§ 576. *s* was dropped between sonantal vowels, the intermediate stage was *h*. This phenomenon occurs also in Britannic. *suar* 'sister', Cymr. *chwaer*, prim f. **sṷesōr*. O Ir. *iarn*, O.Cymr. *hearn* (the *h* prefixed from the inner part of the word — **iharn* **eharn* - ?) 'iron', prim Kelt. **isarno-* in the place name *Isarnodori* i. e. 'ferrei ostii' : Goth. *eisarn* 'iron' a Keltic loan-word. *ro cloathar* 'audiat', to *ro closs*, Skr. *śruš-ṭi-š* etc., see §§ 516. 576 *au ō* 'ear' : Lat. *auri-s* Goth. *áusō* neut. Lith. *ausì-s* O.Bulg. *ucho* 'ear'. 2. sg. *beri* 'fers' fr. Indg. **bhéresi*, Skr. *bhárasi*.

s was treated in the same manner after vowels before liquids and nasals. Perf. *ro selaig* 'he struck down' i. e. *seslaig*, see § 574. *senaich* 'stillavit' i. e. *sesnaich*, to *snigid* 'it drops'.

Every final *s* was dropped, both orig. postvocalic *s* and the *s* which arose from *-ks*, *-ts*, *-ns*. This dropping of *s* was late, since the Ogam inscriptions still have final *s*, as this also is still found in Gall. O.Ir. *Luigdech* = Ogam inscript. *Lugudeccas*, gen. sg. to nom. sg *Lugaid* = **Lugudex* (*c*-stem); O.Ir. *tarb* 'bullock' = Gall. *tarvo-s*. *bō* 'cow' : Skr. *gáu-š* Gr. *βοῦ-ς* 'bullock'. *rī* (gen *rīg*) 'king' Gall *Dubno-rīx* : Lat. *rēx*. *se* 'six' = Lat. *sex*, beside *sessed* 'sextus'. *oen-tu* (dat. *oentid*) 'unitas' from **-tūt-s* : cp Lat. *servitūs* (gen *-tūt-is*). *mī* (gen *mīs*) 'month' from **mēns* . Gr. *μείς* from **μηνς* (§ 611). Acc. pl. *firu* 'viros' (nom sg. *fer*) . Goth *vaíra-ns*. This loss of final *s* was later than the change of initial explosives to spirants which was caused by a preceding vowel; for the latter change does not show itself in cases where *s* was final (§ 658, 1)

Germanic

§ 577. *s* was generally still intact in prim Germanic The only changes, which it underwent in this period, are the change of it to *z* by Verner's law and the assimilation of *sm* to *mm*.

§ 578. Initial *s*.

s before sonantal vowels. Goth. *sunu-s* OHG. *sunu sun* OS. Ags. *sunu* O Icel *sunr* 'son' : Skr *sūnú-š* Gr. *υἱύ-ς* 'son', O.Ir. *su-th* 'birth, fruit', Lith *sūnùs* O.Bulg. *synŭ* 'son'. Goth. *saian* OHG. *sāan* 'to sow' : Gr. *ἧμα* 'a throw', Lat. *sēmen*, O.Ir. *sīl* 'seed', Lith. *sėju* O.Bulg. *sějǫ* 'I sow', rt. *sē-*.

sl, sm. Goth. *sniþan* OHG. *snīwan* 'to sew' : Skr. *syū-tá-s* Lith. *siú-ta-s* 'sewn', Indg. **sl̥ū-*, cp. § 143. Goth. *svistar* OHG. *swester* 'sister' : Skr. *svásā*. OHG. *sweiz* 'perspiration, sweat' : Skr. *svéda-s* 'sweat'.

sn, sm, sl, sr. Goth. *snáivs* OHG. *snēo* 'snow' : Lith. *snẽga-s* 'snow', cpf. **snoiǵho-s*. Goth. *snō-rjō* 'wicker-work, basket' OHG. *snuo-r* 'string, cord' : O.Ir. *snā-the* 'filum'. Goth. *smaír-þr* 'fat' OHG. *smero* 'fat, grease' : O.Ir. *smir* 'marrow'. MHG. *smiegen* 'to ply, bend' OHG. *smoccho* 'underdress, shirt' : Lith. *smùkti* (indic. *smunkù*) 'to slide' O.Bulg. *smykati sę* 'to creep, slip'.

Goth. *slēpan* 'to sleep' OHG. *slaf* 'slack' *slāfan* 'to sleep' : O.Bulg. *slabŭ* 'slack'. OHG. *slingan* 'to wind to and fro' *slango* 'snake' : Lith. *slenkù* 'I crawl' O.Bulg. *slękŭ* 'bent'. *sr-* became, as medially (§ 580), *str-*. OHG. *stroum* O.Icel. *straumr* 'stream' : Skr. *sráv-a-ti* 'flows'.

sp, st, sk. Goth. *speiwan* OHG. *spīwan* 'to spit, vomit' : Lith. *spiáu-ju* 'I spit'. OHG. *spuon* 'to succeed, have success' : Skr. *sphāyāmi* 'I swell, thrive', O.Bulg. *spějǫ* 'I succeed'. Goth. *stiks* 'point of time' OHG. *stih* 'point' : Gr. στίζω 'I prick', Lat. *īn-stīgā re*. Goth. *us-skáus* 'provident, sober' OHG. *scouwōn* 'to look, view' · Gr. θυο-σκόο-ς 'sacrificing priest'. Goth. *skei-nan* OHG. *scī-nan* 'to shine' : Gr. σκιά 'shadow'

§ 579. *s* in combination with Indg. voiceless explosives medially and finally.

OHG *aspa* 'aspen-tree'. Lett. *apse* Pruss. *abse* O.Bulg. *osina* (from **opsīnā*, § 545); it is uncertain whether the original order was *sp* or *ps*. OHG. *wafsa* 'wasp' : Lith. *vapsà* 'gad-fly'. OHG. *refsen* 'to chastise, blame, punish' prim. Germ. 1. sg. pres. **rafsjō* : Skr. *rápas-* neut. 'bodily injury'.

Goth. OHG. *ist* 'is'. Gr. ἐσ-τι. Goth. *bat-ists* OHG. *bezz-ist* 'best' : cp. Gr. μέγ-ιστο-ς. Prim. Germ. *ss*, *s* from *ts*. OHG. *zan* 'tooth' from prim Germ. **tans* Indg. **dont-s*. See § 527 p. 382.

Goth. *fisks* OHG. *fisc* 'fish' : Lat. *pisci-s* O.Ir. *iasc* 'fish'. OHG. *forscōn* 'to ask' : Lat. *poscō*. Goth. *aúhsa* OHG. *ohso* 'ox' : Skr. *ukṣá* 'ox'. Goth. *saíhs* OHG. *sehs* 'six' : Gr ἕξ Lat. *sex*.

So also *s* in combination with Indg. *s* probably remained unchanged in prim. Germanic

Rem. I do not know any sure examples Goth. *is* 'thou art' may represent either **ɪss(ɪ)* (Gr. Hom. ἐσσὶ Armen *es*) or **ɪs(ɪ)* (Skr. *ási* Gr εἶ). Does the genitive *-s* of *a*-stems (Goth *vulfis* OHG. *wolfes* O.Icel. *ulfs* 'wolf's', Norse run. *godagas* proper name) go back to *-ss-*?

§ 580. Medial *sr*, like initial *sr* (§ 578), probably became *str* before Verner's law came into operation (see § 581). Goth. stem-form *svistr-* O.Icel. *systr-* 'sister' (gen. *svistrs* etc.) = Skr. *svasr-* Lat. *sobr-* (§ 570) O.Bulg. *sestr-* (§ 585, 2), Indg. **sụesr-*;

from here *t* was carried over into the forms, in which *s* and *r* were not in direct combination, hence e. g. nom. sg. Goth. *svistar* O.Icel. *syster systir* OHG. OS. *swestar*. OHG. *dinstar* Mid. Du. *deemster* 'dark' : Skr. *tamisra-m* 'darkness', Lat. *tenebrae*, see § 570.

§ 581. In prim. Germ. *s* became *z* except in combination with voiceless explosives and spirants, if the sonant, directly preceding it, did not bear the principal accent of the word. This process of changing voiceless into voiced sounds concerned at the same time the spirants *f*, *þ*, *χ*, see § 530. *z* remained in Goth. but in the other dialects mostly became *r*.

Rem. Thus Indg. *s* partly fell together with Indg. *z*. See § 596.

First the *s* which remained unchanged. Goth. *kiusa* OHG. *chiusu* 'I test' prim Germ **kéu̯sō* : Skr. *jóšāmi* 'I taste, enjoy', Indg. **ǧéu̯sō*. OHG *mūs*, pl. *mūsi*, 'mouse' : Skr. *múš-* pl. *múš-as*.

z. Compar. m *-ɪz-ō*, Goth. *jūhiza* O Icel *ōre* OHG. *junǫiro* 'younger', prim Germ **i̯ú(ɯ)χ-ɪz-ō* (s § 530 p. 387) : cp Skr. *-iš-* Gr. *-ισ-* in the superlative. Goth 2. sg. indic pres. pass. *bairaza* (*bairan* 'to bear') : cp Skr. *bhárasē*. Goth. *riǫiz-a-* (nom. acc. *riǫis*) O.Icel. *røkkr* neut. 'darkness' : Skr. *rájas*, Gr. ἐρεβος. Goth. *áiz-a-* OHG. *ēr* 'ore, metal' O Icel *eir* 'copper' prim. Germ **aɨz-a-* from **aɨ-ɪz-a-* (§ 635). Skr. *áyas-* Lat *aes aeris*

Gothic, by levelling out, mostly gave up again the grammatical change *s* : *z(r)* in the verb To Skr *jóšām* 1 sg. pres., *juju̯ṓša* pf. indic 3 sg. *juju̯šimá* 1 pl., *juju̯šāná-* partic corresponded in prim. Germ. **kéu̯sō*, **káu̯si*, **kuzumí*, **kuzaná-*. Hence regularly OHG. *chiusu, chōs, churum, choran*, O.Icel *kys, kaus, kørom, kørenn*. On the other hand Goth *kiusa káus, kusum, kusans* with *s* in stead of *z* in the two last forms, an innovation, which at a later period also made its appearance in the other dialects Correspondingly Goth. *nasjan* 'to rescue' with *s* for *z* after *nisan* as opposed to OHG Ags *nerian*, prim. Germ 1. sg. **nozɨǭ*.

The contrast, between Goth. *áusō* 'ear' MHG *æse* 'ear' and OHG. *ōra* 'ear', and between OHG. *haso* and Ags. *hara* 'hare' etc, was also caused by an old difference of accentuation.

Goth. *z* regularly passed into *s*, if it came to stand finally,

cp. § 531. 2. sg. *baíris* from **baíriz(i)* = Skr. *bhárasi*, cp. O.Icel. *ber-r*. Nom. *riqis* from **riqiz(-a-n)* beside gen. *riqiz-is* (the spelling *riqiz* is inexact, just as Mod.HG. *raub* instead of *raup*, after *raubes* etc., Lat. *urbs* instead of *urps*, after *urbis* etc.). Adv. *áiris* 'earlier' beside nom. sg. *áiriz-a*.

§ 582. The change of *s*, mentioned in § 581, can also be traced in the combinations *rs, ls, sl, sn, ms*. The differences, which had regularly arisen in prim. Germ., were obliterated here also partly by levelling out and partly by processes of assimilation.

rs and *rz* (West Germ. *rr*). OHG O.Icel *ars* buttock' prim Germ. **ársa-z* = Gr. Att. *ὄρρο-ς* from **ὀρσο-ς*. Goth. *vaírsiza* Ags. *wiersa wyrsa* from **wiers-(r)a* 'peior', prim. Germ. **wírs-iz-ō*. O.Icel. *hjarse hjarsi* m. 'giddiness' prim. Germ. **χérs-ē* from Indg. **ḱérs-en-* (cp also Lat. *cernuo-s* from **cers-n-*, § 571) beside **ḱr̥s-én-* (see below), to a neuter **ḱéres-*, represented in Lat. *cerebru-m* (**ceres-ro-*. § 570). Goth. *ga-þaírsa* 'I am withered, gape from dryness' : Gr *τέρσομαι* (the accent of which does not come into consideration here) OHG. *fersana* OS *fersna* 'heel' prim. Germ. **férsnō*, Ags. *fyrsn* 'heel' prim Germ. **férsni-z* · Skr. *párṣni-ś* 'heel' Gr. *πτέρνα* 'heel, foot'; the *z* in Goth. *fairzna* is strange Goth *airzjan* OS. *irrian* OHG *irren* 'to mislead' prim. Germ 1 sg **irzi̯ó*, Goth. *airzeis* OHG. *irri* 'astray' prim Germ. **irzi̯é-* Lat. *errāre* from **ers-āre*. Goth. *marzjan* 'to vex' OS. *merrian* OHG *merren* 'to delay, hinder, disturb' originally 'to make one unmindful' seems to have been an old causat. verb, related to Skr *mŕṣ-yāmi* (perf. *ma-márṣ-a*) 'I forget, neglect' *mŕṣā* adv. 'in vain, fruitlessly, erroneously' OHG. *hirni* neut. 'brain' from **χirz-n-i̯á-* 'belonging to the head' (cp. O.Icel. *hjarse* above) OHG. *hornuz* 'hornet' prim. Germ. **χurz-n-áta-z* from a **ḱr̥s-en- ḱr̥s n-* = Lith *szirsz-ũ -ẽns* O Bulg. *srŭš-en-ĭ* 'hornet, gad-fly', beside Mod HG. *horsel* Dutch *horzel* · Lith. *szirszlỹ-s*; cp also Lat *crābrō* (§§ 303 306. 570)

Rem 1 Goth 1. pl *ga-daursum* 'we dare' for **-daúrzum* (= OHG. *gi-turrun*, Skr *dadhr̥ṣúmá*) after sg. *ga-dars* (Skr *dadhárṣa*), like *kusum* for **kuzum* (§ 581) Goth. *þaúrsu-s* 'parched, dry' for **þaúrzu-s* after

ga-þairsan etc, cp O.Icel. *þurr* O.Swed. *þörr* OHG. *durri* 'withered, dry', Skr. *tṛṣ-ú-ṣ* 'greedy, gaping with thirst'

ls and *lz* (West Germ. *ll*). Goth. *hals*, gen. *halsis*, OHG. *hals* 'neck' prim. Germ. **hálsa-* : Lat. *collu-m* from **colso-m*. Goth. *ga-talzjan* 'to teach, instruct', to *un-tala-* (nom. *untals*) 'disobedient'; *talz-* may represent a nominal *-es*-stem. OHG. *bellan* 'to bark' Ags. *bellan* 'to bark, scream, howl' Low German *bulle* 'bull' point to a prim. Germ. pres. **bélsō* pret. pl. **bl̥zumi* : Lith. *balsa-s* voice, sound', Skr. *bhášāmi* 'I bark' (cp § 259), Indg. **bhélsō*; the *ll* = *lz* in *bullun* 'barked' etc. had crushed out the regular *ls* of the pres and sg. pret

sl and *zl* (*ll*). I do not know an example for *sl* [1]). *zl* in MHG. *krol*, gen. *krolles*, 'curled, curled in locks' *krolle* 'curl, lock' Mid. English *crullen* 'to curl', prim Germ **kruz-lá-*, to MHG. *krūs* 'crisp, curled' Mid English *crūs* 'crisp, angry'. Cp. also O.Icel. *hrolla* to tremble, quake' beside *hrjōsa* 'to shudder', to Gr. *κρυόεις* 'awful, causing shudder' *κρυσ-ταίνω* 'I make to freeze!'.

sn and *zn* (OHG. *rn*) Goth. *asneis* OHG. *esni* Ags. *esne* 'day-labourer' prim. Germ **ás-niɻa-*, as opposed to OHG. *arn* (gen. *arni*) 'harvest' O.Icel *ǫrn* season for working in the field' from prim. Germ. forms with unaccented root-syllable; cp. Goth. *asans* 'harvest, summer' Goth *razn* O Icel. *rann* Ags. *ærn* (from **ærzn*, and this from **rœzn*) 'house' prim Germ. **raz-ná-*, to OHG. *ras-ta* 'rest, repose, a certain distance' Goth. *ras-ta* 'a certain distance'. OHG. *lirnēn lernēn* Ags. *leornian* OS. *lnōn* (cp. OS. *mēda* § 596) 'to learn', would have been in Goth. **liznan* pret. **liznōda*, to Goth. *láis* 'I know' OHG *lēren* 'to teach', rt. *leɻs-*.

ms and *mz*. Goth. *ams* (st. *amsa-*) m. 'shoulder' : Skr. *áṃsa-* 'shoulder'. Goth. *mimza-* 'flesh' : Skr. *māṃsá-m* Pruss. *mensā menso* O.Bulg. *męso* 'flesh'.

Rem. 2. Did the *s* in *ns* once become *z*? For *nz* I do not know any other examples besides Goth. acc. pl. *hvanz-uh* 'all' *þanz-ei* 'which',

1) The nominal suffix *-sla-* must be left out of the question, since this probably represents an Indg. *-t+tlo-*. See Kluge's Nominale Stammbildungslehre p. 64.

but *nz* cannot have been prim. Germ. in this case (§ 583) In numerous cases *ns* appears on all sides where *nz* or its further development might be expected, e. g OHG. part *dunsan* 'swollen' (*dinsan* Goth. *þinsan* 'to draw, pull' : Skr. *tąsáyāmi* 'I pull to and fro, shake', Lith. *tęsiù* 'I stretch by pulling', rt *tens-*). I conjecture that *ns* had been developed to *nts* (as in Umbr, in Lith dialects and elsewhere) at the time when Verner's law operated *s* could not become voiced with this articulation.

Owing to Goth. *þamma* 'to the', beside Skr. *tásmād tásmāi* Pruss. *stesmu* etc. Umbr p u s m e 'cui', and Goth. *im* O Icel. *em* 'I am', beside Skr. *ásmi*, it may be assumed that *sm* became *mm* in prim. Germ, *im* first of all from **imm* Otherwise, but not convincing to me, Osthoff Zur Gesch. d. Perf 428.

§ 583. Final *s* (Indg. *-s* and *-z* — see § 645 finals 3 — may at that time partly or entirely have been levelled out to *-s*) was also subject to Verner's law. This law thus gave rise e. g in the nom pl of Germ. *a-* and *ō*-stems to *-ōz* beside *-ôs* (Skr. *-ās*), and in the gen sg. of *i*-stems to *-aiz* beside *-áis* (Skr. *-ēš*). Such doublets were then treated differently in the separate dialects.

In Gothic, *-z* became *s* (**wulfōz* 'wolves' **ga-gumþáiz* gen. 'of a meeting, synagogue' **bairáiz* opt 'feras' became *vulfōs gagumþáis bairáis*) either at the same time with the *z* which became final at a later period (e. g. **bairiz(i)* 'thou bearest', § 581 p. 534 f.) and thus fell together again with the *s* which had remained unchanged (*mundōs* nom 'existimatae' = Skr. *matás*, Indg **mntás*). Or else, before the dropping of the final short vowels (§ 660, 1), a generalisation of the *-z* first took place, as in Norse, so that e. g. **mundōz* was also spoken instead of regular **mundōs*, and then later *-z* everywhere became *-s*. I am in favour of the latter assumption. For thus can be best explained why *z* regularly appears for original final *s*, when a particle is attached to it (e. g. *is* 'he' : *iz-ei*; *veis* 'we' : *veiz-uh; hvas* 'who?' : *hvaz-uh, vileis* 'velis' : *vileiz-u*), whilest *s* appears in *vas-uh* beside *vas* 'he was', where *s* had only become final at a later period (**wasi*, prim. form **we-wós-e*).

-z, as absolute final, was dropped in West Germanic, whilst *-s* was retained. *-z* had frequently been extended beyond its original sphere and had supplanted *-s*. Nom. pl. OHG. *geba* OS. *gêba* Ags. *ȝifa* 'gifts' = Goth. *gibōs*. Nom. sg. OHG. OS.

Ags. *sunu* 'son' = Goth. *sunu-s*. In OHG. the *z*-form was generalised in the nom. pl. of *a*-stems, *taga*, in OS. and Ags. the *s*-form, OS. *dagos* Ags. *dazas*. Likewise the *-s* in the OS. gen. sg. *burges nahtes kustes* etc. is probably to be regarded as Indg. final *-s*. OHG nom. *sū* 'sow' from **sūz* for older **sū-s*. Where *r* = *z* occurs in West Germ., as OHG. *ir er* (Goth. *is*), *wir* (Goth. *veis*), *zar- zer- zir-* (Goth. *tuz-*), this mode of treating the *z* was occasioned by the close connexion with following words and by the different stress which the pronouns and particles had in the sentence and in compounds. Cp. Paul in Paul-Braune's Beitr. VI 550 ff.

Prim. Germ. *-z* was generalised in Norse, whence *-r*, e. g. *syr* 'sow' (dat. acc *sū*), *ulfar* 'wolves', *gjafar* 'gifts'.

Nothing prevents our assuming that *-z* became generalised in the nom. sg. in the prim Germ. period.

Baltic-Slavonic.

§ 584. Indg *s* remained generally intact in the period of the Balt.-Slav. primitive community.

The changes in this period were:

ks became *šš*, whence Lith *sz*, O.Bulg *s* Lith. *aszì-s* O Bulg *osĭ* 'axle' : Lat. *axi-s*, cpf. **akši-*. See § 414. 544 p 398.

Primitive Balt.-Slav. *šš* = Indg *sk* is less certain, as Lith. *maiszýti* O.Bulg. *měsiti* 'to mingle, mix'. See § 414 rem.

§ 585. *s* remained unchanged in Balt. and Slav in the following positions:

1. Initially before sonants and consonants (except *sr*). Lith. *septynì* O.Bulg. *sedmĭ* 'seven'. Skr. *saptá*. Lith *sūnù-s* O.Bulg. *synŭ* 'son' : Skr. *sūnú-š*. Pruss. *swai-s* 'his' O.Bulg. *svatŭ* 'relation' *svojĭ* 'own' : Skr. *svá-*. Lith. *sesů̃* O.Bulg. *sestr-a* 'sister' : Skr. *svásar-*. Lith *snẽga-s* O.Bulg *sněgŭ* 'snow' : Av. *snaęžaiti* 'it snows', rt. *sneigh-*. Lett. *smẽi-ju* 'I laugh' *smai-da* 'a smiling' O.Bulg. *smě-jǫ sę* 'I laugh' Skr. *smáy-a-tē* 'he smiles'. Lith. *smùkti* 'to slide' O.Bulg. *smykati sę* 'to creep, slip' : MHG. *smiegen* 'to wind, bend'. Lith. *srav-à* 'a flowing, bleeding' O Bulg. *stru-ja* a flowing' (with excrescent *t*, cp. 2.) : Skr. *sráv-a-ti* 'flows'. Lith.

slenkù 'I creep' O.Bulg. *sląkŭ* 'crooked' : OHG. *slingan* 'to wind to and fro' *slango* 'snake'. Lith. *spėju* 'I have time, leisure' O.Bulg. *spějǫ* 'I have success' : Skr *sphāyāmi* 'I swell, thrive'. Lith. *staigýti-s* 'to hasten' O.Bulg. *stignąti* 'to come somewhere' : Gr. *στείχω* 'I stride, go'. Lith. *skabėti* 'to cut' O.Bulg. *skoblĭ* 'radula' : Lat. *scabō*.

2. Medially in the combinations *sų*, *sm*, *sn*, *sr*, *sl*, *st*.

sų. Lith. *ès-va* O.Bulg. *jes-vě* 1 du. 'we two are' : cp. Skr. *s-vás*.

sm. *es-mì* O.Bulg. *jes-mĭ* 'I am' : Skr. *ás-mi*. Lith. *jŭ̃s-mi* 'I gird' *jůs-mū̃* 'girdle' : cp. Gr *ζῶμα* from **ζωσ-μα* (§ 565), rt. *jōs-*. Lith *ges-mẽ* 'a low glimmering fire', to *gèsti* (pret. *gesaũ*) 'to expire, go out'. O.Bulg. *kosmŭ* 'hair' beside *kosa* 'hair' (cp. § 588 rem. 4)· OHG. *hār* 'hair' from prim. Germ. **χēzá-*?

Rem 1 The datives Lith. *támui tám* and O.Bulg *tomŭ* 'to the' beside Pruss *s-tesmu* Skr *tásmāi* have not lost their *s* regularly, but are new formations after the analogy of other cases with *m*-suffixes without *s*. See the accidence

sn. Lith. *prus-nà* 'mouth' (*praus-iù* 'I wash my face') O.Bulg. *prys-nǫ* 'spargo' · Skr. *pruṣ-nu-tē* 'squirts, trickles, wets'. Lith. *pa-klus-nù-s* 'obedient' (cp Pruss *po-klus-ma-n* acc. 'obedient'), to *klausà* 'obedience' . O Bulg *sluchŭ* 'a hearing, obedience', Indg *klęus-*; on the initial Lith *k* cp § 467, 2. Lett. *sausni-s* 'a dried up tree', to Lith *saũsa-s* 'dry', rt. *sąus-*. O.Bulg. *ves-na* 'spring' beside Lith. *vasarà* 'summer', Skr. *vas-antá-s* 'spring'. O.Bulg. *gasnǫ* 'I expire' beside Lith. *gesaũ* 'I extinguish; to which Skr. *ghas-* 'consume'? O.Bulg. *po-jas-nĭ* 'girdle' . cp Gr. *ζώνη* 'girdle' from **ζωσ-νā* (§ 565), rt. *jōs-*.

Rem. 2 Slav *-chn-* in *dŭchnąti* etc. has arisen by analogy. See § 588 rem. 2

sr became *str* (cp. *str* from *ĥr* § 545) in Slavonic universally, in Lithuanian only partially. O.Bulg. *sestr-a* 'sister from **sesr-ā* : Skr *svasr-*. Lith. *tìmsra-s* 'sorrel' Skr. *tamisra-m* 'darkness' etc, see §§ 570. 580. Lith. *nas-raĩ nastraĩ* pl. 'throat', to *nósi-s* 'nose'. Correspondingly *srovė* and *strovė* 'a flowing' (cp. 1.) etc. It is not clear in what parts of Lith. and to what extent the excrescent consonant made its appearance.

Rem. 3. O.Bulg. *nozdri* pl. 'nostrils, nose' has been directly connected with Lith. *nasraĩ*, as if *zdr* had arisen from *sr*. It is probably better to divide the word into *noz-dri* and to regard the second part as a noun belonging to the root *der-*, cp. O.Bulg. *dira dĕra* 'slit', Skr. *dāra-* 'slit, hole'. Also *męzdra* 'fine skin on a fresh wound, the fleshy part on a thing', which has been connected with Lat. *membru-m membrāna* (*-br-* from *-sr-*, § 570) and O.Ir. *mír* 'piece of flesh' (§ 570), and regarded as a further formation of *męso* 'flesh' (Skr. *māṃsá-* Goth. *mimza-*) may be compounded of **mems+drā-* (from the same root *der-*, with **mems-* cp. the Skr. stem *māṃs-* instr. sg. *māṃs-ā* compound *māṃs-pácana-* 'serving for the cooking of the flesh') and have originally signified 'a skinning of the flesh'.

sl. Lith. *veislĕ* 'brood' *veislù-s* 'fertile', to *veisiù* 'I propagate'. Lett. *trusls trausls* 'fragile', to *trusu* 'I become bristly', Lith. *triūsaĩ* pl. 'the long feathers in the tail of a cock'. O.Bulg. *tręslŭ* part. pret. to *tręsą* 'I shake'.

Rem. 4. Slav. *-chl-* in *u-sŭchlŭ* etc. has arisen by analogy. See § 588 rem. 2.

st. Lith. *ès-ti* O.Bulg. *jes-tĭ* 'is' : Skr. *ás-ti* Lith. *jũ̃s-ta-s* girded' : Av. *yāṇs-ta-* Gr. ζωσ-τό-ς 'girded'. O.Bulg. 2. pl. of the *s*-aorist *dĕ-s-te*, to *dĕ-ti* 'to put, place' : Skr. *dhā-s-ta*.

3. In the medial combinations *ms*, *ns*, *ls*, *ts*, *ss*.

ms. Pruss. *mensā menso* O.Bulg. *męso* 'flesh' : Goth. *mimza-* Skr. *māṃsá-* 'flesh'. Lith. fut. *iñmsiu*, to *imù* 'I take', O.Bulg. aor. *jęsŭ*, to *imą* 'I take' : cp. Gr. ἔνεμμα from **ἐ-νεμ-σα* (§ 565).

ns. Lith. fut. *pįsiu*, to *pinù* 'I plait, twist', O.Bulg. aor. *pęsŭ*, to *pĭną* 'I strain, hang'. Lith. *žąsì-s* 'goose' : OHG. *gans*. Lith. *tęsiù* 'I stretch' *tąsù-s* 'extensible' : Goth. *at-þinsan* 'to draw towards'. O.Bulg. *tręsą* 'I shake' from *tres-* (Gr. Hom. τρέσ-σαι) with 'nasalinfix' or from **trem-s-* (cp. Lat. *tremō*)? Old Czech loc. pl. *Polás* (proper name, see Miklosich Vergl. Gramm. III 16), to nom. pl. O.Bulg. *poljan-e* 'field inhabitants', according to Leskien for prim. Slav. **polją-sŭ* (**poljān-sŭ*) after the analogy of *polja-mi -mŭ* (with regular loss of the *n* before *m*, § 219); in other cases, after vowels, Slav. *-chŭ* = Skr. *-su*, § 588, 2.

Rem. 5. Forms like *pęchŭ*, beside *pęsŭ*, were new formations. See § 588 rem. 2.

ls. Lith. *balsa-s* 'voice, tone' : OHG. *bellan* 'to bark', Skr. *bhāṣāmi*, see § 582 p. 436. Lith. *skelsiù* 'I drive away, reach out'; *delsiù* 'I tarry, delay'. Lith. fut. *kélsiu*, to *kelù* 'I raise'. O.Bulg. *glasŭ* 'tone, note, voice' from prim. Slav. **golsŭ*, to O.Icel. *kalla* (*ll* from *lz*? § 582) 'to name, call'.

ts became *s* through the intermediate stage *ss* in both language divisions Lith *ėsiu* 'I shall eat', O.Bulg *jasi* 'thou eatest' aor. *jasŭ* . cp. Skr. fut. *atsyámi* 2. sg. pres. *átsi*, rt. *ed-*. See § 544.

Rem 6 Forms like *jachŭ*, beside *jasŭ*, were new formations See § 588 rem 2

ss became *s* in both language divisions. Lith. fut. *lėsiu*, to *lesù* 'I pick up', Goth. *lisa* 'I gather together'. Lith fut. *jŭ́siu*, to *jŭ́s-mi* 'I gird', cp. Gr aor. *ἔζωσα* from **ἐ-ζωσ-σα*, rt. *jōs-* O.Bulg. *s*-aorist *otŭ-trьsŭ*, to *otŭ-trьsą* 'I shake off'. O.Bulg. *jesi* 'thou art' : cp Gr. Hom *ἐσσί* *nasŭ* (gen. loc pl to *my* 'we') from **nās-sŭ*, cp. the possessive pronoun *našĭ* from **nās-jĭ* (§ 588. 2 3)

§ **586.** Besides the cases mentioned in § 585 Indg. *s* also regularly remained in Lithuanian in the following cases:

1. After vowels and diphthongs before sonantal vowels. *lesù* 'I pick up' Goth. *lisa* *saũsa-s* 'dry' : Skr. *śōṣa-s* 'drying up, parching' (§ 557, 4), rt. *sauṣ-*. Part perf. act. fem. *áugus-i*, to *áugu* 'I grow' : cp. Skr *vid-úṣ-ī* (indic. *véda* 'I know').

Rem. 1. *sz* frequently appears where we should expect *s* Concerning *maiszýti* etc. see § 414 remark *máisza-s* 'large sack, hay net', which has been regarded as a genuine Lith word and brought together with Pruss. *moasis* 'bellows' O Bulg. *mĕchŭ* 'hide, leather bag', might have been borrowed from German (OHG *meisa* 'a frame for carrying on the back', O Icel *meiss* 'food basket'), with the same substitution of *sz* for Germ. *s* as in *ãszila-s* beside *ãsila-s* 'ass' from Germ (Goth.) *asilu-s* Cp. further § 587 rem. 2

2. In *sį*. *siūvù* 'I sew' *siúla-s* 'thread' : Skr. *syū-tá-s* 'sewn'. Fut. *dŭ́-siu* 'I shall give' : Skr. *dā-syámi*, Indg. **dō-sjō*.

3. in *qs*. Fut. *lĩksiu* 'I shall leave' : cp. Skr. *rēkšyámi*.

Rem 2. Such futures with *ks* are not quite reliable examples, since *s* may have been introduced by analogy just as in *gérsiu* (§ 587 rem. 1). **lĩksziu* can hardly be regarded as the regular form, even if

áukszta-s 'high' is related to Gr. *αὔξω* Lat *auxilia-m* O.Ir. *os uas* Cymr *uch* (§ 434)

4. Finally. Nom. sg *vil̃ka-s* 'wolf' · Skr. *vṛ́ka-s*. Nom. pl. *dùkter-s* 'daughters' : Gr. *θυγατέρ-ες*

§ 587. Changes of *s* in Lithuanian.

1. *rs* became *rsz*. *mar̃sza-s* 'a forgetting' *mirszaũ* 'I forgot' : Skr. *marṣa-s* 'a patient enduring' *mṛ́ṣyāmi* 'I forget, bear patiently'. *ver̃szi-s* m. 'calf' : Lat. *verrēs* from **versēs* (§ 571), Skr. *vṛ́ṣa-s* 'bullock'. *virszù-s* 'top, point' : Skr. *várṣīyas-* 'higher', perhaps also Lat. *verrūca* 'lump, wart'.

Rem 1 Fut. *gérsiu* had been formed after the analogy of *kélsiu dů̃siu* etc. Leskien (Der Ablaut der Wurzelsilben im Lit. 65) explains *gar̃sa-s* 'noise' as coming from **gard+sa-s*, to *girdė́ti* 'to hear'. *varsà* 'flake' is a borrowed word, see Brückner Litu-Slav Stud. I 151

2. *sz* for *s* through assimilation to the *sz* of a neighbouring syllable. *szeszura-s* 'father-in-law' from **seszura-s* : Gr. *ἑκυρό-ς*, Indg. **sṷéḱura-s*. *szą-szlavýna-s* beside *są-szl* 'heap of sweepings' : O.Bulg. *są-* Skr *sam-* 'with'. Assimilation in the opposite direction probably in *szãsza-s* 'scurf' : O.Bulg. *socha* 'piece of wood' *o-sošiti* 'abscindere', Skr. *śāsāmi* 'I cut, slaughter'. Cp. the analogous assimilation in Skr. § 557, 4.

3. *scz(i)* from *stį* became *szcz(i)* in East Lithuanian dialects. Opt. *kláuszcziau* (*kláuszcze*) from *kláuscziau*, to indic *kláusiu* 'I ask'. Cp. *pészczia-s* from *pészcia-s* i. e. **ped+tja-s*, § 544 p. 397 f. *sz* is pronounced softened (*sź*), the course of development was *stsź* — *śt'sź* — *sź'tsz*

4. *kláuzdama-s* beside *kláusdamas* (part. of *kláusiu* 'I ask'), just as *mèzdama-s* beside *mèsdama-s* See § 544 p. 398.

Rem 2. Has *sk* become *szk* in pure Lith. words? *jeszkóti* 'to seek' (O Bulg *iskati* 'to seek' OHG *eiscōn* 'to seek') and the suffix *-iszka-s* e g *tẽv-iszka-s* 'fatherly' (O Bulg *žen-ĭskŭ* 'womanish', Goth *barn-isks* 'childish') have the suspicion of being borrowed from Germanic. Cp § 414 rem

§ 588. Prim. Balt. Slav. *s* did not remain unchanged in Slavonic in any of the positions, in which it was preserved in Lith. (§ 586), nor in those in which it underwent a change in Lith. (§ 587), the case in § 587, 2 excepted.

1. *ch* (*χ*) from *s* after *k* (Indg. *ḱ*) and *r*.

ks became *chch*, further *ch*. Aor. *těchŭ* 'I ran' prim. f. **tēq-s-o-m*, to pres. *teką*. See § 462.

rch. *vrachŭ* 'a threshing' from **ǫorchŭ*, *vrĭchą* 'I thresh' from **ǫĭrchą* : Lat. *verrō vorrō*, rt. *ǫers-*. *vrĭchŭ* 'top' : Lith. *virszù-s* Skr. *várṣīyas-*, see § 587, 1. *s*-aorist *trĭchŭ*, to *tĭrą* 'I rub'.

This *ch* became *š* and *s* under the same conditions as those by which *k* passed into *č* and *c*, see §§ 461. 462. *vrišetĭ* 3. sg. to *vrĭchą*. *srĭš-en-ĭ* 'hornet, horse-fly' from **sĭrch-en-* : Lith. *szirsz-ŭ̃*, prim f. **kṛs-en-* (§ 582). *vrĭsi* nom. pl. to *vrĭchŭ* 'top' (stem *vrĭcho-*). *vrišĕte* 2. pl. opt. to *vrĭchą*.

Rem 1 The inf. *vrĕšti* 'to thresh' must be explained from **ǫerchti*, more precisely **ǫerχ'tı*, see § 462 rem. Cp. with it however *tı ĭste* from **tĭrste* 2 pl to *trĭchŭ* Which of the two forms represents the regular treatment of *rst*?

2. Further *ch* (*š*, *s*) for Indg *s* between vowels; numerous sure examples for *ch* especially after *u-* and *i*-vowels. *snŭcha* 'daughter-in-law' *snŭšinŭ* 'like a daughter-in-law' Skr *snuṣā́*, Indg **snusā́-*. *mŭchŭ* 'moss' : Lith. pl. *musaĩ* 'mould', OHG. *mos* 'moss'. *myšĭ* 'mouse' · Lat. *mūs* OHG. *mūs*. *jucha* 'soup' : Pruss. *juse* 'broth', Skr *yūṣa-* 'sauce', Lat *jūs*. *duchŭ* (voc. sg. *duše* nom. pl *dusı*) 'breath', *duša* soul' from **dūchǫā* : Lith. *daũsos* pl 'upper air' Part pret. fem. nom sg. *pek-ŭšı* (*peką* 'I cook') from **-ŭchī*, acc sg. *-ŭšą* from **-ŭchǫą* : Skr. *-uṣ-ī- -uṣ-yā-*. *pĭchatı* 'to push, stamp, strike', indic. pres *pĭšą* from **pĭchǫą* : Lith *pes-tà* 'stamping vessel' *paisýti* 'to strike the awns off barley' . Lat *pīns-ō*. *lěcha* 'beet root' prim. f. **loǫs-ā* : Lith. *lýse* 'beet', Lat. *līra*, MHG. *leis leise* 'trace, track'. *socha* 'piece of wood' *o-sošitı* 'abscindere' : Skr. *śásāmi* 'I cut, slaughter'. Aorist ending 1. sg. *-chŭ* 3. pl. *-šę* (cp. Skr. *-s-am-*) : *da-chŭ* to *da-tı* 'to give', *dě-chŭ* to *dě-tı* 'to place', *by-chŭ* to *by-tı* 'to be', *plu-chŭ* to *plu-ti* 'to sail', *vi-chŭ* to *vitı* 'to wind' Suffix of the loc pl. *-chŭ* = Skr. *-su* : *žena-chŭ* to *žena* 'woman', *vlŭcě-chŭ* to *vlŭkŭ* 'wolf', *pątĭ-chŭ* to *patĭ* 'way' Gen. pl. *těchŭ* to *tŭ* 'the' : Skr. *tḗ-ṣām* O.Icel. *þeı-ra* (Goth. *þı-zē blindái-zē*). Ending of the 2. sg. *-šı* from **-chī* (not = mid. Skr. *-sē* Gr. *-(σ)αι*; for prim. Slav. **-choį*

would have become **-si*) : *bere-ši* to *berą*; cp. beside this *jasi* 'thou eatest' from **ĕtsī*, *jesi* 'thou art' from **essī* § 585, 3.

Rem 2 Through new formation *ch* frequently came into positions where it could not have arisen regularly. *chn* · *dŭchnąti* 'to breathe', *sŭchnąti* 'to become dry'. *chl* : *u-sŭchlŭ* 'dry' *sŭchlĭ* f 'dry wood' *ch* after nasal vowels : aor *pęchŭ* beside *pęsŭ*; *ąchati* 'to smell' instead of **ąsāti* (**an-s-*, to *v-on-ja* 'smell' cp Lat *ānu-m* (*h*)*ānāre* from **anslo-* §§ 208 570) through association with *ja-chati* 'veh' (Skr *yā-mi* 'I drive' Lith *jó-ju* 'I ride') *ma-chati* 'agitare, ventilare' (beside *ma-ją* 'vibro') *ch* for *s* = *ts* aor *jachŭ* beside *jasŭ* 'I ate' (§ 543) Cp § 585 with rem. 2. 4 5 6.

Rem 3 *ch* appears often initially before vowels and *r*, *l*, *v* Most of the words are unfortunately not etymologically clear Some are undoubtedly borrowed words and the *ch* in them has nothing to do with *s*, as *chladŭ* 'coolness, dew' from Germ (Goth) *kalds* 'cold'.

chodŭ 'incessus, iter' has been regarded as a pure Slav word and connected with Gr ὁδό-ς Skr *ā-sad-* 'reach, attain', so, also, *chromŭ* 'lame' to Skr *śrāmá-s* 'lame' I know nothing which helps to explain their *ch*

s often appears where, from what has been said above, we should expect *ch* (or *š*). Examples. *nosŭ* 'nose' : OHG. *nasa*. *bosŭ* 'bare footed · Lith. *bãsas* OHG. *bar*. *po-jasŭ* 'girdle'. *gasĭti* 'to extinguish' : Lith. *gesýti*. *bĕsŭ* 'demon' : Lith. *baisà* 'fright'. *rosa* 'dew' : Lith. *rasà* 'dew', Skr. *rasá* 'that which is wet, fluid', Lat. *rōs rōris*. *kosa* 'hair' · OHG. *hār*? Gen. *sloves-e* (nom. *slovo* 'word') : Skr. *śrávas-as* Gr. *κλέ(ϝ)ε-ος*. I cannot find any special reason (vicinity of sounds etc) which should have prevented *s* from passing into *ch* in these examples. I conjecture that none of these words had an *s* at the time *s* became *ch*.

Rem. 4. For some cases a plausible explanation lies close at hand. *po-jasŭ* after *po-jasnĭ*, *gasĭti* after *gasnąti*, *kosa* after *kosmŭ* or similar forms, in which *s* regularly remained *sloves-e sloves-i* etc. may be explained, if we take into account that for *sloves-ĭmĭ -ĭmi -ĭmŭ -ĭma* there once existed **sloves-mĭ -mi* etc and for *sloves-ĭchŭ* **sloves(s)ŭ* (cp. *polja-mi* from **poljān-mi* etc § 585, 3); **slovos* could also have formed a factor, if *-s* had not already been dropped at that time (7) On *nosŭ* cp. § 589 rem. 3. The whole question requires a thorough investigation.

3. Prim. Slav. *š* = Indg. *sį* had, as we saw under 2., passed through the stage *chį*, in *duša pĭšą* etc. On the other hand *š* is to be traced directly back to *sį* in *šitĭ* 'to sew' from **sįĭtī* **sįy-ti* = Lith. *siú-ti* and in such cases as *gašą* 'I ex-

tinguish' beside 2. sg. *gasiši* etc. (2.). This latter, younger change took place at the same time with the transition of *sį̂* = Indg. *ḱį* into *š*, as in *nošą* 'I carry' from root *neḱ-*, *pišą* 'I write' from root *peįḱ-* (§ 147). *gašą* : *gasiši* = *nošą* : *nosiši*.

4. *stį̂*, *strį̂*, *skį̂*, *slį̂*, *snį̂* became O.Bulg. *št*, *štrj*, *št*, *šlj*, *šnj*. *goštą* 'I take as guest' from **gostįą*, inf. *gostiti*, to *gostĭ* 'guest' : Lat. *hostis*, Goth *gasts*. *tŭštĭ* 'empty' from **tŭskį̂ĭ* : Skr. *tuchyá-* 'empty'. See § 147.

5. If *s* came to stand before mediae, it passed into *z*. *zborŭ* fr. *s(ŭ)-borŭ* 'a bringing together, a uniting'. *zdělati* fr. *s(ŭ)-dělati* 'to carry out, complete'. *zdravŭ* fr. *s(ŭ)-dravŭ* 'healthy'. Here eventually also *nozdri*, see § 585 rem. 3.

6 *rsn* became *rn* in prim. Slav. *črĭnŭ* 'black' fr. **čĭrsno-*, Pruss *kirsna-* Skr. *kṛšná-* 'black', Indg. **qrsno-*. Cp § 302 rem. 1.

7 Final *s* was dropped *nebo* 'sky' Skr *nábhas*, Gr. *νέφος*. Other examples in § 665,4.

Primitive Indg. changes of *s*.

§ 589. The following modifications of *s* may be regarded as prim. Indg.

1 *s* became *z* before voiced explosives and spirants, e. g. **z-dhí* 'be' imper. from rt *es-*, **menez-bhi(s)* instr. from *ménes-* 'sense'. See § 590. Cp. Indg. *-bd-* from *-pd-* etc. § 469, 2.

2. *ssḱ* became *sḱ* **esḱó* i. e. **is+skó* pres. from rt. *aįs-* 'seek' : Skr. *ichámi* 'I seek, wish', cp. OHG *eiscōn* 'to seek'.

Rem. 1. There is little foundation for the assumption that intervocalic *ss* has also become *s* in sceondary accented syllables, as **esi* 'thou art' (Skr. *ási* Gr. *εἶ*) from **es-si* (Osthoff Z Gesch. d Perf. 18), and that *ss* has become *ts* under certain conditions (J. Schmidt Kuhn's Ztschr. XXVI 343 ff. XXVII 330 ff.).

3. Initial *s* was dropped under certain conditions before consonants, possibly e. g. after *s* at the end of words, so that this reduction would be identical with the one mentioned under 2. (Cp. Skr. *dušṭuti-š* 'bad song of praise' = *duš+ṣṭuti-š*, Gr. *δύστηνο-ς* = *δυς+στηνο-ς*, Gortyn inscript. *ταισταγαις* = *ταῖς*

στέγαις). Hence it often happens that several languages concurrently show loss of *s*- without a sufficient reason for its loss being discoverable by the sound-laws of the separate languages. Thus e. g. *steg*- and *teg*- 'cover': Skr. *sthágāmi* 'I conceal, hide', Gr. *στέγος* 'roof', Lith. *stóga-s* 'roof' O.Bulg. *o-stegŭ* 'toga' + Gr. *τέγος* 'roof', Lat. *tegō*, O.Icel. *þak* OHG. *dah* 'roof'. Goth. *stáutan* OHG. *stōzan* 'to push' + Skr. *tudámi* 'I push', Lat. *tundō*. Skr. *spáś*- 'spy, watchman', Lat. *-spiciō*, OHG. *spehōn* 'to spy' O Icel. *spakr* 'sensible' + Skr. *páśyāmi* 'I see', O.Bulg. *paziti sę* 'cavere', rt. *spek*- *speg*- (§ 469, 7). Gr. *θυοσκόο-ς* 'sacrificing priest', Goth. *us-skáu-s* 'provident, prudent' + Skr. *ā-kuvatē* 'he intends' *kaví-ś* 'seer, prophet', Gr. *κοέω* 'I observe', Lat. *caveō*. Skr. *smárāmi* 'I intend, bear in mind' + Lat. *me-mor*, O.Ir. *maraim* 'maneo' (cp. Lat. *mora*). Perhaps here belong also Armen. *vec* 'six', Pruss. *wuschts uschts* 'sextus' (to which also Lith. *ūszės* beside *szēszios* pl. 'childbed') as opposed to Gr. *ἕξ* from **σϝεξ* Lat. *sex* etc. Cp. further Gr. *σκάζω* 'I limp' + OHG. *hinchan* 'to limp'; Gr. *ἔννη* 'nebat', O.Ir. *snīm* 'a spinning' (*ī* = Indg. *ē*) *snāthe* 'filum' (*ā* = Indg *ō*) OHG. *snuor* 'cord, string' + Goth. *nēþla* OHG. *nādela* 'needle'

It is certain that *s*- often first disappeared in the separate developments of the Indg. languages, as in Skr. *utthátum* inf. 'to rise' from **ut-sthātum* (§ 557), Lat. *nāre* from **snāre* (§ 570), O.Ir. *-tau* 'am' from **stā-y̯ō* (§ 575), and it is not possible everywhere to separate this loss from that in the parent Indg.

4. It is probable that the combinations *bh, dh, ĝh, gh+s*, which are etymologically to be presupposed for words like Skr. *dípsati*, had experienced a change of articulation in the prim. Indg period But it is not yet determined what this change was. *bzh, dzh* etc. are to be assumed for prim. Aryan. See §§ 469,6. 470 482. 552.

Rem 2. That *s* was dropped between explosives already in prim Indg., is an uncertain conjecture This theory is based on OHG *sehto* O.Icel. *sētte sētti* Gr. *ἕκτο-ς* 'sextus' I grant an Indg **sųekto-s* But it is however quite possible that this form had never had the final *-s* of **sųeks*. For the present it seems to me wisest to regard the loss of *s* between explosives as a process carried out in the separate languages

Indg. *z*.

§ 590. Primitive Indg. period. So far as can be seen *z* occurred only in combination with following mediae or mediae aspiratae.

Before mediae. **ni-zd-o-* 'place of rest' (*ni-* 'down', rt. *sed-* 'sit') : Skr *nīdá-s* 'place of rest, nest', Armen. *nist* 'seat, possession' Lat. *nīdu-s*, O.Ir. *net* 'nest', OHG. *nest* 'nest'. **ozdo-s* 'branch, twig' : Armen. *ost*, Gr ὄζο-ς, Goth. *asts*. Rt. *mezg-* 'tie knots' : OHG. *masca* 'mesh, loop', O.Icel. *mǫskve mǫskvi* 'loop', Lith. *mezgù* 'I tie in knots, knit' *mãzga-s* 'knot'.

Before mediae aspiratae. **z-dhí* 'be' imper. from rt. *es-* 'be' : Av. Gāþ. *zdī*, Gr. ἴσθι. Instr. in *-z-bhi(s)* from *s*-stems : Skr *uṣádbhiṣ* from *uṣás-* 'dawn of day', Gr. ἐρέβεσφι from ερεβεσ- 'darkness'.

Root forms *mezg-* and *mezgh-* 'duck, sink down' (cp *stemb-* and *stembh-* etc. § 469, 8) . Skr. *májjāmi* 'I duck under' *madgú-š* a water fowl *majján-* 'marrow' (*g*) Av. *mazga-* 'marrow' (*g* or *gh*), Lat. *mergō merg-us* (*g*), Gallo-Lat. *mesga* whey' (*g* or *gh*, cp. § 521), OHG. OS. *marg* 'marrow' (*gh*), Lith *mazgóti* 'to wash' O.Bulg. *mozgŭ* 'marrow' (*g* or *gh*).

z probably occurred finally before voiced explosives, but we are no longer able to follow it in detail (§ 645, 3).

§ 591. Aryan Indg *zd(h)* fell together with Indg. *d*ʰ*d(h)* in prim. Aryan, see § 476 At the same time Indg *z* became *ź* under the same conditions as *s* became *š*, and then *ź* became *ẑ* in Skr., as *ś* became *ś*, see § 556, 1. In consequence of this change to *ź*, Indg *zdh, zbh* fell together with *ĝdh, ĝbh*, see §§ 404. 482.

Prim. Ar. *azd(h) āzd(h)* = Skr. *ēd(h) ād(h)*, Iran. *azd āzd* Reduplic. stem Skr. *sēd-* Av. *hazd-* from rt. *sed-* 'sit', 3 sg opt. perf. *sēd-yá-t, hazd-yâ-þ*, Skr. *sēd-í-ṣ* 'a weakening' : Lat. *sēd-imus sēd-ēs sēd-āre*, Indg. **se-zd-*. Skr. *néd-īyas-* Av. *nazd-yah-* 'nearer' from prim. Ar. **na-zd-* from the same root *sed-*, properly 'ἐφίζιων, προσήμενο-ς'. Skr. *ēdhí* 'be' imper. from prim. Ar. **az-dhi* beside Av. Gāþ *z-dī*, cp. § 313 p. 252. Skr.

mědas- 'fat' : OHG. *mast* 'feeding' (v. Bradke Kuhn's Ztschr. XXVIII 300). 2. pl. of the *s*-aorist Skr. *trādhvam* Av. Gāþ. *þrā-z-dūm* from Ar. *trā-* 'protect'; in like manner Skr. *á-rādhvam* beside 3. pl. *á-rā-s-ata* from Aryan *rā-* 'present, grant'. Skr. 2. pl. *ádhvē* 'ye sit' beside 3. sg. *ás-tē* : Gr. ἧσ-θε ἧσ-ται. *ādaghná-* from **āz-d* 'reaching up to the mouth' (*ás-*). Cp. Skr. *dēhí* Av. *dazdi* imper. 'give' from Indg. **de-dʰ-dhí*, § 476.

Prim. Ar. *žd(h)*, e. g. *ižd(h)* = Skr. *īd(h)*, Iran. *ižd*. Skr. *nīdá-s* from **nižda-s* prim. Ar. **nižda-s* Indg. **ni-zd-o-s*, see § 590. Skr. *pīdáyāmi* 'I press' from **pi-zd-* ('sit up') : cp. Gr. πιέζω 'I press' from **πι-σεδ-γω* or **πι-σε-σδ-ω*. Av. Gāþ. *cīždī* from *caęš-* 'make known'. Skr. *dū-dáś-* 'impious' *dū-dhí-* 'having an evil disposition' Av. *duž-dāh-* 'acting badly, villain', cp Skr. *duš-* Gr. δυς-. Skr. 2. pl. mid. of the *s*-aorist *ástōdhvam* from **a-stō-ž-dhvam* : 3. sg. *á-stō-š-ta*, pres. 1. sg *stāú-mi* 'I praise, value'. Cp. Skr *līdhá-s* 'licked' from prim Ar **liždha-* i. e. **liǧdha-*, § 404.

Rem. 1. 2 sg imper *dviddhí* (to indic. *dvéš-mi* 'I hate') instead of **dvīdhí* was a new formation of the same kind as *didṛddhi* (to *dideśmi* 'I show'). See § 404 rem. 2.

Prim. Ar. *zbh* = Skr. *dbh* (Iran. *zb*, not found). Skr. instr. pl. *uṣádbhiṣ*, *vidvádbhiṣ*, *mādbhíṣ* from *uṣás-* 'dawn, day-break', *vidvás-* 'knowing', *más-* 'moon, month'.

Rem. 2. The endings of the instr. pl. of stems in *-as-* Skr *-ō-bhiš* Av. *-ē-biš* O.Pers. *-a-biš* were new formations. See the accidence.

Prim. Ar. *žbh*, e. g. *ižbh* = Skr. *idbh* Av. *ižb*. Skr. instr. pl. *dviḍbhíṣ* from *dvíṣ-* 'hating'. Skr. *vi-prúdbhiṣ* from *vi-prúṣ-* 'crumb, small spot'. Av. dat. du. *snaiþižbya* from *snaiþiš-* n. 'sword'. Av. instr. pl. *da-d-ūž-biš* from *da-d-ūš-* part. perf. act. from *dā-* 'give, place'. Cp. Skr. *vidbhíṣ* Av. Gāþ. *vīžbīš* from Skr. *viś-* Av. *vīs-* 'clan, village community', orig. **ṿiǧbhis* § 404, 3.

Rem. 3. The Skr. endings of the instr. pl of stems in *-iṣ- and -uṣ- -ir-bhiṣ* and *-ur-bhiṣ* were new formations. See the accidence.

Prim. Ar. *azg* = Skr. *adg* Av. *azg*. Skr. *madgú-ṣ*, a water fowl, Av. *mazga-* 'marrow', rt. *mezg-*, see § 590. But

prim. Ar. *azj* passed through *adi* into *ajj* in Skr. (cp. *újjiti-ś* 'victory' from **ud-jiti-ś*, § 355). *májjāmi* 'I duck' *majján-* 'marrow' from the same root *mezg-*. *sajjatē* 'clings to something' from **sa-zj-a-* redupl. (cp. *sa-śc-a-ti* 'follows' from *sac-*) : cp. Lith. *segù* 'I fasten'.

z was dropped between explosives and spirants (cp. § 557, 3). Skr. *ámugdhvam* i. e. **amugzdhvam* 2. pl. mid. of the *s*-aorist (3. pl. *ámukšata*) from *muc-* 'loosen'. In *sá-gdhi-ś* 'a common meal' i. e. **sa-gzdhi- gzdh* was = *ghst* (*ghas-* 'eat'), and in the 3. du. *babdhắm* from **ba-bzdhām bzdh* was = *bhst* (3. sg. indic. pres. *bá-bhas-ti* 'chews'), cp. § 589, 4 From the fact that we have here *gdh*, not *gdh*, it cannot without further consideration be concluded that the dropping of the sibilant was older than the prim. Ar. transition of *z* to *ź*. *gźdh* may have existed in prim. Ar. and have become *gdh* in the Skr. separate development, before prim. Ar. and prim. Skr. *ź* and *ś* acquired the cerebral articulation (*ź*, *ś*)

§ **592.** Armenian. The only sure examples seem to be *nist* 'a lying, nest' and *ost* 'branch', see § 590. On the sound-shifting cp §§ 361. 484.

§ **593.** Greek. *z* was retained in combination with mediae; in writing it was not sufficiently distinguished from *s*.

σβέννῡμι 'I quench, put out' aor. *ἔσβην*, probably from a weak-grade root form *zg-*, of which the strong-grade *seg-* exists in Lat. *sēgnis*. *πρέσ-βυ-ς πρέσ-γυ-ς* 'old', the origin of which is not quite clear (cp. § 428 *c*). The voiced pronunciation of the *σ* is vouched for in these words by the appearance of *ζ* (*ζβέννῡμι πρεζβευτής*), which came into use during the Hellenic period.

zd appears as *ζ*, Lesb. *σδ*. *ὄζο-ς* Lesb. *ὄσδο-ς* 'branch' : Goth. *asts*, see § 590. *ἵζω* 'I set' Lesb. *παρ-ίσδω* : Lat. *sīdō*, Indg. **si-zd-ō*, fr. root *sed-*; for Skr. *sīdámi*, which cannot be separated from these presents, we should expect **sīdāmi*; this verb probably had *d* for *d* through association with *sádāmi sasáda* etc. It remains doubtful whether *ἵζομαι* arose from **σε-σδ-ο-μαι* or **σεδ-ι̯ο-μαι*. Cp. further *Διόσδοτο-ς Διόζοτο-ς* 'god given'

(*Διος-* gen. sg.) and *Ἀθήναζε* 'to Athens' = *Ἀθήνας-δε*. Ion. Att. *ζ* was probably only the graphic representative of *zd*, cp. § 493 rem.

z before mediae became dialectically *ρ*, as Thess. *Θεορ-δότειο-ς* beside Ion. etc., *Θεόςδοτο-ς* (new formation after *Διός-δοτο-ς*); cp. Eretr. *ὁμνυούρᾱς* § 489, Cret. *κόρμο-ς* § 565, El. *τίρ* § 653, 6.

z before mediae asp. became along with these voiceless in prim. Greek (§ 495). *ἐρέβεσ-φι*, prim f. **regez-bhi*, § 590. Aor. *ἔ-σχ-ο-ν* 'I got, had', prim. f. **e-zǧh-o-m*, rt. *seǧh-*. *ἴσθι* 'be' prim. Gr. **izdhi* with vowel prothesis, caused by *z* (§ 626) · Av. *zdī*, § 590. Cp. *ἴσθι* imper. 'know' from Indg. **μid^{s}dhí*, rt. *μeid-*, § 494.

§ 594. Italic. Sure examples are found in Latin only.

zg became *rg* (cp. 569). *mergu-s* from rt. *mezg-*, see § 590.

z was dropped before *d*, with 'compensation lengthening' after short vowels. *nīdu-s* fr Indg. **ni-zd-o-s*, see § 590. *pēdō pōdex* from **pezdō* **pozdex* : Gr. *βδέω* 'I break wind' from **βzδ-έω* (cp. § 334). Sloven *pezdēti* 'to break wind'. With *sīdō* (see § 593) Bucheler connects Umbr. sistu, as being *sīditō*; but this explanation of the form is very doubtful. Cp. further *trēdecim* fr **trēz-decim*, *jūdex* fr. **jouz-dex*, *quīdam* fr **quiz-dam*, *īdem* fr. **iz-dem*. the *s* in *cūjusdam ējusdem eīsdem* etc. and doubtless also the *s* in *isdem* — *īdem* had been introduced by analogy, just as *m* for *n* before *d*, see § 207.

rzd became *rd* in *hordeum*, prim. f. **ghṛzdeǧo-m* : OHG. *gersta* 'barley' (Gr. *κρῑθή* is to be separated from it), and in *turdu-s turdēla* : O.Icel. *þrǫstr* MHG *drostel* Lith. *strāzda-s* 'thrush'. We are not, however, certain whether we have Indg. *zd* or *d^{s}d* in these words.

Lat. *sp, st, sc* are to be expected as the regular representatives of original *zbh, zdh, zgh*, cp. *st* from *d^{s}dh* § 507. Perhaps here belong also *hasta* (see § 507) and *fastīgiu-m* (see § 595)

nōbīs vōbīs from **nozbīs* **vozbīs* or **nōzbīs* **vōzbīs* with Indg.

bh-suffix (see page 123 foot note), cp. *nos-ter*, *vos-ter* and O.Bulg. gen. loc. *nasŭ* from **nās-sŭ*; but these forms with *zb* were not the regular continuation of the Indg. original forms, cp *crēdō*, which had probably taken the place of regular **crestō* (§ 507 rem.).

§ 595. Old Irish. *z* before mediae became *đ* in Irish and Britannic. Gallo-Lat. *mesga* 'whey', which is to be read *mezga*, became first of all in those branches **međga*, thence O.Ir. *medg* Mod.Ir. *meidhg*, Cymr. *maidd* (from **međja*). **nizdo-s* (§ 590) became Ir. Brit. **neđdo-s*, thence O.Ir. *net* Cymr. *nyth* (from **nyđđ*) Bret. *neiz*. Cp § 521.

In like manner O.Ir. *brot* 'sting, prick' from prim. Kelt. **brozdo-s*, **borzdo-s* (cp. *frass* § 274). The root is *bha^{x}rs-* (Skr. *bhṛṣ-ṭi-ṣ* 'point, prong'), and OHG. *brort* 'edge' Ags. *brord* 'sting, prick' O.Icel. *broddr* 'point' and O.Bulg. *brazda* 'furrow' show that the Indg. form contained *zdh*. With these is also related Lat. *fastīgiu-m* from **farst-*; it cannot however be determined, whether its *st* was Indg. *zdh* or Indg. *st* (cp. Skr. *bhṛṣ-ṭi-ṣ*).

§ 596. Germanic. *z* + media became *s* + tenuis in prim. Germ. (§ 541, 6). OHG. *masca* 'mesh' OHG. *nest* Goth. *asts* (§ 590), OHG. *mast* 'a feeding' (§ 591), OHG. *gersta* MHG. *drostel* (§ 594) have already been mentioned. In addition to these possibly OHG. *nestilo* 'loop of riband' to Lat. *nōdu-s*; OHG. *geist* 'spirit' to Skr. *héda-s* 'anger' *hīḍ-* 'be angry' (3. sg. perf. mid. *ji-hīd-ē*), to which perhaps also Av. *zōiždišta-* superlative with the meaning 'very bad' (v. Bradke Kuhn's Ztschr. XXVIII 295 ff.); OHG. *mast* 'ship's mast' to Lat *mālu-s*, if this arose from **mādo-s* (§ 369).

z + media asp. became *z* + voiced spirant in prim. Germ., further *z* + media (§ 541, 7). The transition of *z* to *r* in West Germ. and Norse was mentioned already under the prim. Germ. *z* which arose from Indg *s* (§ 581). OHG. OS. *marg* Ags. *mearg* O.Icel. *mergr* 'medulla', Goth. **mazga-* : O.Bulg. *mozgŭ* etc., see § 590. OHG. *brort* 'edge' etc. · O.Bulg. *brazda*, see § 595. Goth. *razda* 'pronunciation, language' OHG. *rarta* Ags. *reord* O.Icel. *rǫdd* 'voice, language from original **raz-dh-*, to rt. *rā^{x}s-* :

Skr. *rásatē rásati* 'sounds, screams'. Ags. *heord* O.Icel. *haddr* 'hair' beside O.Bulg. *kosa* 'hair' Lith. *kasà* 'braid of hair'. Goth. *mizdō* f. 'pay, reward' OHG. *mēta miata* (cp. § 75 rem. 2) OS. *mēda* Ags. *mēd* and *meord* 'pay, rent' : Skr. *mīdhá-* 'prize of battle, combat' Av. *mīžda-* 'reward', Gr. *μισθό-ς* O.Bulg. *mĭzda* 'pay'; with compensation lengthening in West Germ. comes OS. *līnon* beside OHG. *lirnēn* (§ 582 p 436 § 621).

§ 597. Baltic-Slavonic. *z* + media and *z* + media asp. must have fallen together, as in Iran. and Keltic

Lith. *rezgù* 'I knit' : Skr *rájju-š* 'string, rope'. Lith. *mezgù* I knot, knit' : OHG. *masca*, see § 590. Sloven *pezdẽti* Little Russ. *pezdíty bzdíty* Czech *bzdíti* 'to break wind' : Lat. *pēdō*, see § 594. It is doubtful whether Lith. *strãzda-s* 'thrush' belongs here, see § 594. Cp. further O.Bulg. *noz-dri* 'nostrils' and *męz-dra* 'fine skin', § 585 rem 3.

O Bulg. *mĭzda* 'pay' : Goth. *mizdō*, see § 596.

It is doubtful whether O.Bulg. *mozgŭ* 'marrow' contains Indg *zg* or *zgh*, see § 590

Indg. *ȷ*

§ 598. This spirant can be established as Indg. with most certainty initially before vowels.

Rt. *ȷeug-* 'yoke' : Skr. *yugá-m* Gr. *ζυγό-ν* Lat. *jugu-m* Goth. *juk* Lith. *jùnga-s* O Bulg. *igo* (from **jĭgo*, § 145) 'yoke' Rt. *ȷōs-* 'girt' : Av. *yās-ta-* Gr. *ζωσ-τό-ς* Lith. *jůs-ta-s* 'girded', O.Bulg *po-jas-nĭ* 'girdle' Rt. *ȷes-* · Skr *yás-āmi* 'I bubble', Gr. *ζέω* 'I seethe, bubble', OHG *jesan* 'to ferment, foam' Skr. *yáva-s* 'corn, barley', Gr. *ζειαί* 'spelt', Lith. *javaĩ* pl. 'corn'. Skr *yūša-* 'sauce, broth', Gr. *ζύμη* 'leaven', Lat. *jūs jūsculu-m jūreu-s*, O.Bulg. *jucha* 'sauce, soup'.

Greek alone kept initial *ȷ-* and *i̯-* apart, the former being represented by *ζ*, the latter by the spiritus asper (§ 129). *j-* fell together with Indg. *di̯-* in prim. Greek, hence *ζυγό-ν* like *Ζεύ-ς*, *δυγό-ν* like *Δεύ-ς*, *τώτᾱ* (*ζᾱ́νη*) like *Ζῆνα* (*Ζήνα*), see § 493. In the other Indg languages the two sounds fell together in *i̯*. But here, too, the original difference can still be

recognised, in so far as an old inherited weak-grade form with *i* or *ī* (as representative of *j* + *a*-vowel) is wanting in roots beginning with *j*-. Cp. e. g Skr. perf. mid. *yēš-é* from **je-js-*, part. pass. *yas-tá-* from *yas-* = Indg. *jes-* 'bubble' (Gr. *ζέω*) as contrasted with *īj-é iš-ṭá-* from *yaj-* = Indg. *jag-* 'respect, honour' (Gr. *ἅγιο-ς*).

It is less certain that *j* stood beside *i* medially also in the period of the prim. Indg. community. The assumption of a rt. *ǩej-* 'lie' for Skr. *śé-tē* (part. perf. *śa-śay-āná-s*) Gr. *κεῖ-ται* and of a rt. *tjeg-* 'leave, withdraw' for Skr. *tyaktá-s* Gr. *σεπτό-ς* (on *σ-* see § 489) is nevertheless not improbable. Cp. § 117.

OTHER COMBINATORY SOUND-CHANGES.

§ 599. In the first Section (§§ 28—598) we considered the history of sounds by taking each of the prim. Indg. sounds, so far as was possible by itself, and following its development through the separate languages. There thus remains a number of change-processes which could hardly be fully and sufficiently discussed, because in these either a great number of different sounds would be concerned in quite the same manner, or because there are more complicated changes which a rather large series of elements underwent at the same time within a phonetic unity (word-unity or sentence-unity).

These processes are as follow:

CONTRACTION (HIATUS, ELISION).

§ 600. By contraction we understand the uniting together under one syllabic accent, of two vowels or sonants generally, which come directly together and are pronounced with a separate expiratory impulse. In this way arise either simple long vowels (Gr. *ἄθλον* from *ἄεθλον*) or diphthongs (Gr. *παῖς* from *πάϊς*).

We saw in §§ 111—116 that contractions took place even in the period of the prim. Indg. community.

There is sufficient reason for assuming that all cases of hiatus, caused by the addition of stem-forming or flexional elements, were removed already in the Indg. prim. period, so that every historic word-form containing one root only, which exhibits medial hiatus, did not assume this state until the period of the separate developments. Cp. § 111 rem.

Rem No hiatus existed from the very first in the sonantal combinations *iu*, *ua*, *ɣa*, *ɣa* in the interior of such unitary word forms. *i*, *u*, *n*, *r* were here pronounced as glides from the prim. Indg. period onward, e. g. **pətr-iu̯o-s* = Skr. *pitr-iya-s* Gr *πάτρ-ιο-ς* Lat. *patr-iu-s*, **is-ɣro-s* = Skr. *iṣ-irá-s* Gr. Corcyr. *ἰ-αρό-ς* See § 117.

On the other hand hiatus might still have occurred at the point of junction in compounds at the period of the dissolution of the prim. Indg. community, e. g. **juqto-ek̑u̯o-* (**juqto-* 'yoked', **ek̑u̯o-* 'horse'). In Vedic we have *yuktaaśva-*, in Av. *yuxtaaspa-*, in O.Bulg. *dobrookŭ* 'beautiful-eyed' etc., and though it may be in itself highly possible that all such compound forms with hiatus are due to composition in the individual languages, yet the fact, that the pure compounds in the separate languages go hand in hand with the generally later juxtaposita as regards the treatment of the junction, speaks strongly in favour of the assumption of an open **juqtoek̑u̯o-* directly inherited from the Indg. primitive language. In Sanskrit contraction took place: class. Skr. *yuktāśva-s* see above, *prārtha-* 'implements' from *pra+artha-*, *apāṅga-* 'outer corner of the eye' from *apa+aṅga-*, *sūktá-* 'beautifully spoken' (Ved. *su-uktá-*) Elision in Greek. *ἱππ'αγωγό-ς* 'carrying horses', *ἀπ'άγω* 'I lead away'; beside these *προαγωγό-ς προάγω*. Elision in Latin also: *mult'angulu-s*, *ap'erīō* (§ 499), *ab'igō*. Hiatus in O Bulg.: *dobrookŭ* see above, *poorati* 'to plough'.

Opportunity for contractions in the individual developments was given

1. through two originally independent words, the first originally ending in and the second originally beginning with a sonant, entering into a fixed combination;

2. through forms with hiatus having been newly made

after the type of forms without old inherited hiatus (e. g. Hom. *στήομεν δώομεν*);

3. through a consonant or combination of consonants disappearing between sonants in the body of a simple word or in the junction of two words drawn near together.

§ 601. Aryan. Contraction seems not to have taken place in the old Aryan dialects when a consonant was dropped in the body of a word.

Rem On O Pers 3. sg. pres. *bātıy* beside 3 sg pret *aβaha* see § 558 rem. 1 and on O.Pers. *māhyā* Bartholomae Bezzenb. Beitr. IX 309 f.

Contraction however was frequent through the fusion of two stems of a compound or of two words. But, on the one hand, it is difficult here to separate that which has arisen phonetically from that which is merely due to the imitation of older type-forms on the other hand; it can hardly be determined how far the natural language was ruled by the constraint of metre and by grammatical reflexion. In Vedic and Avestic the contracted and uncontracted forms, the latter recognisable as such through the metre, existed side by side without any perceptible differences In classical Sanskrit the contracted forms with few exceptions became the rule.

Examples. Skr *yuktāśva-* beside *yuktaaśva-*, Av. *yuxtāspa-* beside *yuxtaaspa-*, see § 600. Skr. *upāiti* Av. *upāıti* 'draws near', prim. Ar. **upa+aiti* (simple form Skr. *éti* Av. *aeiti*). Skr. *avāhanam* O.Pers. *avājanam* 'I slew, killed', prim. Ar. **ava+ajhanam*. Skr *ēhi* imper 'come near' = *ā+ihi*. O.Pers. *paraıdıy* imper. 'go to' = *para+idıy*, Skr. *parēhi*. Skr. *maharši-ṣ* 'great wise man' from **mahā+ṛši-ṣ*. Skr. *sūktá-* (Ved. *suuktá-*) Av. *hūxta-* 'well spoken'. Skr. *adhīśa-s* 'supreme lord' from **adhi+īśa-s*

§ 602. Armenian. Contraction after the loss of *s* in *ǩoır* 'sister' pl. *ǩor-ǩ*, see § 561; after loss of *t* in *hair* 'father' pl. *har-ǩ*, see § 483; after loss of *u̯* in *kea-n-ǩ* 'life', *kea-* (monosyllabic) from **kiu̯a-* = **gĭu̯ə-* **gĭu̯ā-*, see §§ 421, etc.

§ 603. Greek. Very many contractions in consequence of the dropping of intersonantal *ϳ*, *u̯* (*ϝ*), *s* (§§ 130. 165. 564).

Examples. Att. *φορῶ* 'I carry' from *φορέω*, older **φορεϝω*; *παῖς* 'boy' from *πάις*, older **παϝι-ς*; *γένους* 'generis' from *γένεος*, older **γενεσ-ος*; *ἵππον* 'equi' from *ἵπποο*, older **ἱππο-σϝο*. Since the loss of consonants took place at different times — partly in prim. Greek (*s*, *i̯*), partly in the course of the individual dialects (*u̯* and *i̯* as remnant of *si̯*, cp. § 639) —, the contractions took place at various periods. Most of them did not happen until after the dialectical variation was already considerably developed. The uncontracted forms were most completely put aside in Attic, while Ionic preserved the full forms to the greatest extent.

When the components of contraction were qualitatively equal, simple long vowels uniformly arose, e. g. Att. *Ἀθηνᾶ* from *Ἀθηνάᾱ*, *βασιλῆς* 'kings' from *βασιλῆες* Cypr. *βασιλῆϝες*, El. and elsewhere *Δί* from (Att.) *Διί*, older *Διϝί*. *εε* and *οο* gave in Ion.-Attic., partly in the Dor. dialects as also in North West Greek, close *ē* (written *ει*) and close *ō*, which was further weakened to *ū* (written *ου*), e. g. *τρεῖς* 'tres' from **τρεϝι-ες* Skr. *tráy-as*, gen. Hom *ἠοῦς* from **ἠοσ-ος* cp Skr. gen. *ušás-as* Lat. *aurōr-a*. These were no more real diphthongs than the *ει* and *ου* (§ 618) which had arisen by compensation lengthening.

If a monophthong arose from two vowels having a different quality, the levelling was sometimes progressive, e g. Att. *ἄκων* 'unwilling' from *ἀέκων*, older **ἀ-ϝεκων*, Dor gen. sg. *Ἀτρεΐδᾱ* from (Hom.) *Ἀτρεΐδᾱο*, gen. pl. fem. *τᾶν* 'of the' from (Hom.) *τάων* (Skr. *tásām*, Lat. *istārum*), Att *Διομήδη* from (Hom.) *Διομήδεα*, older **-εσ-α*, Att. *ἐλάττους* Dor. *ἐλάσσως* pl. 'smaller' from *-ο(σ)-ες*, cp. Lat pl *mā-jōr-ēs* (*οε* after complete assimilation of the *ε* to *ο* was treated like original *οο*); sometimes regressive, e. g. Att. gen. pl. fem. *τῶν* = Dor. *τᾶν*, gen. sg. *γένους* from *γένεος*, **-εσ-ος* (*ε* became *ο* by attraction to the *ο* which was pronounced close, and this gave rise to *ū*).

So-called diphthongs arose if the second element was *ι* or *υ*, and the first an *α-*, *ε-* or *ο*-vowel, as *παῖς* from *πά(ϝ)ις*, *οἶς* 'sheep' from *ὄ(ϝ)ι-ς*, *εἶ* 'thou art' from **ἐ(σ)ι*, *δαυλό-ς* 'thick, shaggy' from **δα(σ)υλο-ς* cp. *δασύ-ς* 'densus'. Furthermore *ευ* from *εο*

in Lesb., Ion., Rhod., as *φορεῦνται* from *φορέονται*, gen. *βέλευς* 'of an arrow, dart' from *βέλεος*, and *-αυ* (*-ᾱυ*?) from *-ᾱο* in Arcad.-Cypr., as gen. *Ἀπολλωνίδαυ*

If the first of the vowels in the contraction was long, it was frequently shortened before the proper contraction, see § 611.

Hiatus rarely arose through new formation in non-compounded words The treatment was the same as the hiatus which was produced through the loss of consonants. Conj. Hom. *στήομεν*, *δώομεν*, Att. *στῶμεν δῶμεν*; *στήομεν* stands in contrast with Arcad. *ἵστᾱτοι*, notwithstanding the clearer development of the original elements of the formation, just as later new formations like e. g. Lat. *coagitō* as opposed to *cōgitō* (§ 604). Hom. *ζωός* was a new formation for older *ζώς*. Such new creations did not come into existence until after hiatus had arisen in many cases in the body of a word through loss of *i̯* etc.

Compounds with old inherited hiatus and the union of two words, the one beginning and the other ending in a vowel. Elision is seen e. g. in *ἱππ'αγωγό-ς*, *ἀπ'άγω*, *ἐμ'αυτόν*. Hiatus remained in *προ-άγω προ-αγωγό-ς* It cannot be decided whether in forms like *πολύανδρο-ς βοτιάνειρα περίειμι* there was spoken in prim. Greek and later in the commissure *-uə̯- iə̯-* (hiatus) or *-uu̯a- -i̯a-*[1]) Prim Greek contraction e. g. in *ταῦια* from **τα ὐ τα*, *οὗ[-τος]* from **ὁ ὐ* = Skr. *sá u*; *ὐ* = Skr. *ú* is a particle. In individual dialects e g in Att. *τἄλλα* = *τὰ ἄλλα*.

§ 604. Italic. Most contractions after the loss of medial *i̯* (see § 134). A part of them may be prim. Italic. Lat. *trēs* from **tre(i̯)-es*, Umbr puntes (*ē*) 'pontes' from **ponte(i̯)-es*, cp. Skr. *tráy-as*. Lat. *monēte* from **mone(i̯)e-te*, cp Skr. *mānáyata*. Lat. *stō* from **stā-i̯ō*, *amō* from **amā-i̯ō*, Umbr. *suboco* 'adoro' (cp. perf. *subocavu*) Lat *stat* from **stā-i̯e-t*, Peligu. *incubat* 'incubat'. Lat. *amēs* from **amā-iēs* (Indg. **-i̯oi̯s*), cp. *cap-iēs*.

The combinations *eŏ*, *eă*, *aé* remained uncontracted in Latin. *moneō*: Skr. *mānáyāmi*. *eam* 'her': Goth. *i̯a*. *aēnu-s*: Umbr. ahesnes 'aënis', cp. Skr. *áyas-*; on the other hand *aer-is* =

1) Osthoff's remarks (Morph. Unt IV 383) on forms of this kind, are quite uncertain.

Skr. *áyas-as* [1]), after which the nom. acc. *aes* was formed anew (**a(i̯)os* would have become **ōs* or **ās*). Cp. also Umbr. *eam* 'eam', Osc. ío-k 'ea'.

Vowel contraction after the loss of *h*. Lat. *nēmō* from **ne-hemō*, *bīmu-s* from **bi-himu-s*, *praebeō* beside *prae-hibeō* Umbr pre-habia 'praebeat'. See § 510. Cp. Umbr. mes-tru 'maior', Osc. *mais* 'magis' : Lat. *magis mājor*.

Old inherited hiatus and hiatus which had arisen anew through new compounds. Elision: e. g. *mult'angulu-s*, for which *multiangulu-s* came into existence at a later period after the analogy of *multi-foru-s* etc.; *noenum* (*nōn*) from *ne+oenom* 'not one'; *nūllu-s* from *ne+ūllu-s* Contraction: *dēgō* from **dē-agō*, *cōgō* from **co-agō*, *cōpula* from **co-apula*, *prōmō* from **pro-emō*, *cōpia* from **co-opia* Such contraction did not take place however if the second vowel was long and had the principal accent: *co-áctu-s*, *cō-égī*, *co-águlu-m*, thus the same case as *acēnus* beside *aer-is*.

Rem 1 The exception *coepī* beside *coēpī* (Lucretius) I explain with Osthoff (Zur Gesch d Perf. 158) by assuming that contraction took place regularly in *co-episti co-épertāmus* etc and that this form of the stem became generalised That in the form-system *coēpi* forms like **coepisti* had to give way, was due to the uncompounded form *ēgī*

Forms like *co-agitō co-alēscō* were created at a later period and remained uncontracted; cp. older *cōgō cōgitō*.

Rem. 2 I do not venture an opinion on the relation of the dissyllabic *neuter* to the trisyllabic *ne-uter* and of both to *n'ūllu-s* etc A plausible explanation must first be given for the initial sound in *uter* etc, of which we have already spoken in § 431 rem 3

§ 605. Old Irish. Very many contractions in consequence of the disappearance of intersonantal *p* (§ 339, the loss belongs to the prim. Kelt. period), *i̯* (§ 138), *u̯* (§ 174) and *s* (§ 576). *tē* (pl. *tēit*) 'hot' from **te(p)ent-*. *-tau -tō* 'am' from **stā-(i̯)ō*, rt.

1) The contraction of **a(i̯)er-* to *aer-* did not occur until after the later Lat. accentuation came into being (§ 681). For if it had already taken place in the period of the older, **áesno-s* would in all probability have become **áesno-s*. The accentuation **aésnos* preserved this form from contraction.

stā- 'stand'. *biid* and later *bīd*, gen. of *biad* 'nourishment' (prim. Kelt. **biu̯oto-n*), Gr. *βίοτο-ς*. *ō* from prim. Ir. *o̯u* underwent fusion with the following vowel, *ōac*, later *ōc* 'youth' : Cymr. *ieuanc* (§§ 212. 243); gen. pl. *bō n-* 'boum' : Gr. *βο(F)-ῶν*. *beri* 'fers' from prim. Kelt. **bere(s)i*.

Contraction takes place after the loss of *f* : *tōr- tuar-* from *to-for, tō- tū* from *to-fo-*. The same phenomenon also frequently appears where words meet together having prefixes beginning with or ending in a vowel, e. g. *forōcrad* 'indicatus est' = **fo-ro-od-garad*. In this case elision also appears elsewhere, as e g. *tar-* from *to-ar-*, *tess-* from *to-ess-*, *tind-* from *to-ind-*.

§ 606. Germanic. Processes of contraction from prim. Germanic, Gothic and OHG. are unknown to me.

Rem In Goth *salbōm* OHG *salbōmēs* 'we anoint' there is no contraction of *-ō(u̯)a-* to *-ō-*, see the accidence. Goth *bairáu* (1 sg opt. to *baíra* 'fero') hardly from **bera(u̯)u(n)*, see § 142 Phenomena like prim. Germ. **aɣz-a-* 'ore, metal' from **aɣiz-a-*, OHG *eidehsa* 'lizard' from *eidehsa* are rather to be regarded as examples of syncope than of contraction, see § 635.

Hiatus, which had arisen in word-forms through new formations made by analogy and at the point of junction in compounds was partly permitted and partly removed by elision.

Goth *aíáuk* sg pret. of *áukan* 'to increase'; *saísōum* (trisyllabic) pl. pret. of *saian* 'to sow' *ga-arman* 'to pity', *fra-ïtan* 'to consume', *ga-unlēdjan* 'to make poor', *sa-ei* relat. 'qui'. On the other hand *nist* 'is not' from *n(i)-ist*, *sei* 'quae' from *s(i)-ei*, *karist* 'it troubles' from *kar(a)-ist*, *þammuh* 'to this' from *þam-m(a)-uh*

OHG. *ka-augan ke-auckan gi-ougen* 'to bring before one's eyes, show' *be-unwerdēn* 'to appear despicable', MHG. *misse-ahten* 'to despise'. On the other hand *galtiro* (beside *gialtiro*) 'contemporary', *nein* 'no' from *n(i)-ein*, MHG. *binnen* 'within' from *b(i)-innan*.

That hiatus remained at one time, and that at another elision took place, is due to the various influences of sentence accentuation. That elision occurred already in prim. Germ., is

rendered probable by Goth. *frēt* OHG. *frāz* 'ate' (of lower animals); prim. Germ. 3. sg. **frēti* from **fra-ēti*. With this cp. OHG. *fr-avili* 'outrageous' to OHG *avālon* 'to trouble oneself' O.Icel. *afl* n. 'power, strength'.

§ 607. Baltic-Slavonic. The commissure of compounds only comes under consideration.

In Lithuanian hiatus is generally permitted or there is elision *pri-imti* 'to accept' (*priimti* is also heard). *pā-ausi-s* 'the part about the ears'. *pa-eīti* 'to go away' *be-aũsi-s* 'one without ears' *be-určdi-s* 'one without office'. On the other hand *tateĩt* 'he may come' from *te-at-eĩt* *timẽ* 'he may take' from *te-imẽ*. *natimk* 'do not take away' from *ne-at-imk*. *neĩk* 'do not go' from *ne-eĩk*. *pasiimti* 'to take up' from *pa-si-imti*. Differences of sentence accentuation have been at work also here (cp. § 606).

Older East Lithuanian shows a real contraction, as there *ne* 'not' along with the *a-* of some prepositions appears as *no-*, e g. *notamenu* 'I do not remember' = *ne ata-menu*. In the first instance *ne-* had probably become *na-* by assimilation. See Garbe Lit. und Lett. Drucke des 16. und 17. Jahrh, B. IV. p. XXV.

In Old Bulgarian partly hiatus, partly contraction. *dobrookŭ* 'εὐόφθαλμος'. *golo-ąsŭ* 'beardless' (*golo-* 'naked, bare'). *mŭnogo-učenŭ* 'πολυμαθής'. *po-orati* 'to plough' *pro-iti* 'to go through' *pri-iti* 'to go to'. *pra-otĭcĭ* 'grandfather'. Imperf. *želěachŭ* to *želějǫ* 'I wish', *dělaachŭ* to *dělajǫ* 'I do'; the second member is **ěchŭ* **jachŭ* 'eram', see the accidence. Forms of the compounded adjectival inflexion: gen. sg *novaago* from *nova jego*, loc. sg *nověěmĭ* from *nově+jemĭ*, dat. sg. *novuumu* from *novu+jemu* (*novŭ* 'new', stem *novo-*); beside this loc. sg. *doblиimĭ* from *doblи+jemĭ* (*doblĭ* 'brave', stem *doblje-*, cp. § 84). Beside these also contracted forms already in the oldest monuments: *priti*, *želěchŭ*, *dělachŭ*, *novago*, *nověmĭ*, *novumu*, *doblimĭ*. Similarly instr. sg. *novymĭ* from *novy-(j)imĭ*.

A very old contraction seems to occur in *němĭ* 'am not' *nĕsi* 'art not' etc. = **ne-esmĭ* **ne-esi* etc, dating back to the period when initial *e-* had not yet become *je-* (*jesmĭ*), see § 666, 1.

SHORTENING OF LONG VOWELS.

§ 608. Simple long vowels may be shortened under very different relations and from very different causes. We treat here only the most important phenomena of vowel shortening.

Shortenings happened already in the period of the Indg. prim. community under the influence of the chief accent on the following syllable, as **stətó-s* (Skr. *sthitá-s* Gr στατός) from **stā-tó-s*. See §§ 310. 316.

§ 609. Aryan. Shortening in Avestic in final syllables, as *brāta* 'brother' = Skr. *bhrátā*, see § 649, 1.

§ 610. Armenian The long vowels had undergone shortening in most cases (if not in all) in prehistoric times. This can be controlled with the greatest certainty in original final syllables and in those syllables which preceded the penultimate syllable. For the dropping of vowels, which happened here, concerned the original long vowels as much as the short. Thus the former must have been shortened, e. g. *dustr* 'daughter' from **dustir*, older **dustēr* : Gr. θυγάτηρ; *l-nu-m* 'I fill' from **li-nu-m* older **(p)lē-* Lat. *ex-plē-nunt*, O Ir. *lī-naim* 'I fill' Cp §§ 632. 651, 1. 675

§ 611 Greek. Shortening before *u̯*, *i̯*, nasal, liquid + explosive or spirant in prim Greek Ζεύς from **dʒēu̯-s* · Skr. *dyáú-ṣ* 'sky' βοῦς 'bullock' from **gōu̯-s* . Skr. *gáú-ṣ*. πλεῖστο-ς 'plurimus' from **plēis-* i e **plē-* + comparative suffix *-is-*, cp. O Icel. *flestr* from **fleistr* and compar. *fleire* § 614; the same **plēi̯s-* also in Hom. πλεῖες πλέας Cret πλίες πλίας; **πλεϝσ-ες -ας* became **πλειϝ-ις -ας*, and then πλέες πλέας Instr. pl ἵπποις (ἵππο-ς 'horse') from **-ōi̯s* : Skr *áśvāiṣ* (§ 115). Part. ἄεντ-'blowing' (indic. ἄημι) from **ἀϝεητ-* : Skr. *vánt-*; 3. pl. aor. ἔμιγεν (1. sg. ἐμίγη-ν 'I mixed myself') from **ἐμιγη-ντ*. στόρνῡμι 'I spread' from **στωρ-νῡμι* beside στρω-τό-ς, from *stṛ-* (rt. *ster-*); Lesb. βόλλομαι 'I am willing', older **βολνομαι*. from **βωλ-νο-μαι*, from **gl̥-* (rt. *gel-*), see §§ 306. 312. Perhaps also here belong *s*-aorists like ἔψευσα ἔτεισα ἔκερσα, cp. Skr. *ábhāutsam* etc., see § 314 p. 253.

The operation of this law of shortening was later than the transition of *-ns-* to *-nn-*. This is shown by *μην-ός* Lesb. *μῆνν-ος* from **μηνσ-ος* gen. = O.Ir. *mīs* Lat *mēnsi-s* (§ 565); cp. beside this the nom. sg. *μείς* from **μενς* with regular shortening. But it was older than the dropping of final *τ* (§ 652, 5). This is shown by *ἔμιγεν* from **ἐμιγη-ντ*.

Rem Certain exceptions to this sound-law were caused by new formations, e. g. Ion *νηῦς* 'ship' formed after *νη(ϝ)-ός* etc. beside regular Att. *ναῦς*; 3 pl conj act *φέρωντι* (Dor.), *φέρωνται* for **φεροντι*, **φερονται* after *φέρωμεν* etc (in order to distinguish the conj from the indic.)

Long vowels remained, if the same sound-combination arose in a later period through regular transformation, e g. *ᾱ̓́ᾱστο-ς* (*ᾱ̓́* = *ᾱι̯*) from *ᾱ̓́ᾱιστο-ς* 'easiest', *ὁρῶντες* 'videntes' from *ὁράοντες*

Shortening of long vowels before vowels. Hom. *ἥροος* = *ἥρωος* 'of the hero', *βέβλεαι* = *βέβληαι* 'art hit', Herod. *νέες* from *νῆ(ϝ)-ες* 'naves', *ζόη* = *ζωή* 'life, Att *νεῶν* from *νη(ϝ)-ῶν* 'navium' In such cases it is probably a question to some extent of medium long vowels, which could not be represented as such.

The so-called quantitative metathesis in Ionic and Attic is connected with this latter reduction of quantity, e. g. Ion. part perf. *ἑστεῶτες* 'stantes' from *ἑστη-(ϝ)ότ-ες*, *τεθνεῶτες* 'mortui' from *τεθνη-(ϝ)ότ-ες*, Att. gen. *στέᾱτ-ος* 'of standing fat' from **στη-(ϝ)ατ-ος* (§ 165), Att. gen. *ἱππέως* acc. *ἱππέᾱ* (*ἱππεύς* 'horseman') from *ἱππῆ(ϝ)-ος ἱππῆ(ϝ)-α*. This phenomenon sometimes formed the stage previous to contraction, as Ion gen. *Παχτύω* beside *Φιλιστίδεω* cp. Hom. *Ἀτρείδᾱο*; Att gen. *Πειραιῶς* acc. *Πειραιᾶ* from *-έως -έᾱ*.

§ 612. Italic. In Latin (it cannot be determined whether also in the other dialects) shortening before *i̯*, *u̯*, nasal, liquid + explosive or sonant. *oloes illīs* from **-ōi̯s*, see § 81 p. 74, § 115; cp. Pelign. *cnatos* 'gnatis, filiis'. *nau-fragu-s* from **nāu̯-fr.* or **nāu̯(-i)-fr.*; *claudō* from **clāu̯(i)dō*, to *clāvi-s* Gr. *κλη(ϝ)ίς*; *gaudeō* beside *gāvīsu s*, Gr. *γηθέω* from **γᾱϝ-εθεω*, cp. § 633. *ventu-s* from **u̯ē-nt-o-s*, cp. Gr. *ἄεντ-* § 611. *membru-m* from **mēms-ro-*, see § 570. In *mēnsi-s* (Gr. Lesb. gen. *μῆνν-ος*, O.Ir. gen. *mīs*) *ē* may have been shortened and then lengthened

again in accordance with § 619. Lat. *ars artis* from **ārti-*, prim. fr. **ṝ-ti-*, see § 306.

Rem 1. The nom. *bōs* must be left out of the question, since it is probably not a pure Latin word (§ 432 rem. 1)

Shortening of long vowels before vowels in Latin. *neō* from **nē(i̯)ō* : OHG. *nāan* 'to sew'. *reī, fidēī* from *rēī, fidēī*, cp. also *diēī*. *illius* from *illīus*. Shortening of *dē-, sē-* in *deorsu-m seorsu-m* etc. The forms with shortening got more and more the upper hand in the poets. We do not know in detail by what laws shortening took place and did not take place in the naive common language.

Long vowels in final syllables were shortened to a great extent in Latin, e. g. *equam* = Skr. *áśvām*, see § 655, 4.

In the same language shortening frequently took place under the influence of the sharply cut tone, in this case the quantity, taken from the vowel, was transferred to the following consonant, hence this was also written double. *cuppa* (and *cupa*) . Skr. *kúpa-s* 'hole, hollow'. *Juppiter* (and *Jupiter*) voc, = Gr. *Ζεῦ πάτερ* (L. Havet Mém de la soc. de lingu. V 230 f.). *mittō* from **mītō* : OHG. *mīdan* 'to let go, avoid'. *littera* (and *litera*, inscrip. also *leitera*). *muccu-s* (and *mucu-s*) : Gr. *ἀπο-μύσσω* 'I blow my nose' from **-μυκ-jω* (§ 489). *allūcinārī* (and *alūcinārī*) : Gr. *ἀλύω* 'I am troubled, ill at ease' *ἠλεός* 'bewildered'. *narrāre* from **gnārāre*. *parricīda* (and *paricīda*). There are about 12 more cases which may be regarded as certain or probable. The fluctuation of the orthography in most of the examples met with, seems to be not so much due to a retention of old literary forms after completion of the process, as to the fact that a difference in pronunciation existed between these geminated consonants and other double consonants (cp. e. g. *cuppa* with *suppetō*).

Rem. 2 Analogous cases in other languages. Pāli *khiddā* beside *kīlā* = Skr. *krīdā* 'game', Prākr. *pémma* = Skr *prēman-* 'love' *čva* = Skr. *eva* 'straight, even'. Mod.HG. *mutter* = MHG *muoten*, *jammer* = MHG. *jāmer*. French (16. Cent.) *complette*, now written *complète*, = Lat. *complēta*

§ 613. Old Irish. Shortening took place in all except chief accented syllables, e. g. the form of the feminine suffix *-ā-* in pl. nom. *túatha* dat. *túathaib* i. e. *túathᵃib* by § 640 (nom. sg. *tuath* 'folk') and in pl. nom. *mná* dat. *mnáib* (nom. sg. *ben* 'woman'); nom. *béo-thu* 'life' gen. *bé-thath*, from **-tū(t)s* **-tūt-os* (Cymr. *-tut*, as *duutut* 'deitas', Zeuss-Ebel G. C. 844): Lat. *-tūt-i-*, Goth. *-dūþ-i-* (Lat. *vir-tūs*, Goth *gamáin-dūþs* 'community'). These reduced vowels remained, if the syllable in question was the last of the word, as in the examples given above. They generally disappeared altogether, if one or more syllables still followed See § 634.

It is not clear to me how far vowel shortening had happened either in chief accented syllables both before the appearance of the above named reductions or in the other syllables. That no vowel shortening took place before *-ns-*, is shown by *mī mīs* 'month', which can only be explained from **mēns-*, not from **mens-*, and *mīr* 'piece of flesh', only from **mēnsr-*, not from **mensr-*.

§ 614. Germanic. Vowels seem to have been shortened in prim Germanic before *n* + explosive or spirant. Goth. *vinds* OHG. *wint* · Lat. *ventu-s*, Skr. *vánt-*, see §§ 611. 612 Less certain are Goth. *mimz* (stem *mimza-*) 'flesh' : Skr. *māṣá-* (cp. O.Bulg. *męso*, § 615), and Goth *juggs* OHG *jung* O Icel. *ungr* 'young' from **ɣūnga-z*, older **ɣuunga-z* (§ 179); whether the latter word belongs here, is uncertain, because we do not the quantity of the Goth. *u*. The same reduction before *ɣ* + explosive or spirant is seen in O.Icel *fleire fleiri* (compar. to *margr* 'many a') from prim Germ. **flaɣz-ē* from **plēɣs-*, cp. Gr. *πλεῖσ(σ)το-ς* § 611. Cp. also Goth. *gibái* from **ɣebōɣ* and other examples in § 659, 3.

Vowel shortening took place in Goth and OHG. in final syllables only, as Goth. *baíra* OHG *biru* 'fero' from prim Germ. **berō*, see §§ 660. 661. But towards the end of the OHG. period the shortening of vowels in syllables without the chief accent began and this became characteristic for MHG. and Mod HG. This shortening gradually spread more and more and in the Mod.HG.

period brought about relations which, in some respects, resemble Irish: e. g. OHG. *salbōn*, MHG. *salben*, Mod.HG. *salbę salbęn*; OHG. *friuntlīh*, MHG. *vriuntlīch*, Mod.HG. *freundlich*.

§ 615. Baltic-Slavonic.

Shortening before ę or Nasal + explosive or spirant. Lith. instr. pl. *vilkaĩs* 'with the wolves' from **-ōįs*: Skr. *vṛkāiš*, see § 115. Gerundive *jészkant* from **-ōnt*, cp. 2. pl. indic. *jẽszko-te* 'ye seek'. Acc. pl. fem. O.Lith. *rankans* 'hands' (the older form for *rankàs*) from **-ōns*, cp. instr. pl. *rañko-mis* (cp. also Pruss. *gennans* 'feminas'). Correspondingly O.Bulg. *rąky*, which in the first instance is derived from **ronkons* (§ 219 p 187), may also be traced back to an older **ronkāns*, see the accidence. Here perhaps also belongs O.Bulg. *męso* 'flesh': Skr. *māṣá-* (cp. Goth. *mimz* § 614).

The quantity of the vowels in the O.Bulg. period is not determined. *ě, a, i, y* must once have been long in the prim. Slav. period, since they with Lith. *ė, ō ů, y, ū* represent the continuation of Indg. *ē, ā ō, ī, ū* (*ı* also = Indg *eį*), so too *u*, since it took the place of older *oų* (Lith. *au*) In the modern Slav. developments where we are able to control the relations of quantity, these vowels often appear as short and conversely O.Bulg. *e, o* = Indg *e, a o* and the representatives of O.Bulg. *ĭ, ŭ* = Indg *ı, u* as long These changes were undoubtedy due in a great measure to the relations of accentuation. It has not yet been settled how far the shortenings of the modern dialects had already taken place in the O Bulg. period or in the period of the Slav. prim. community.

In Lith. the long vowels frequently suffered reduction in the final syllables, e. g. nom. *algà* 'reward' = Gr. *ἀλφή*. See § 664, 3.

LENTHENING OF SHORT VOWELS.

§ 616. Aryan. In Skr. 'compensation lengthening' exists in *līḍhá-* 'licked' from prim. Ar. **laiźdha-* etc. See §§ 404. 591.

Rem. On Av. Gāp. *asti* 'is' = Skr. *ásti*, O Pers. *akūtā* 'he made himself' = Skr *ákṛta* etc., see § 649, 1.

§ 617. Armenian. 'Compensation lengthening' had in all probability once taken place in the forms in which *m* and *n* disappeared after short vowels before *s*, as *us* 'shoulder' (Goth. *ams*), acc. pl. *eris* 'three' (Goth. *þrins*). Cp. §§ 202 610.

§ 618. Greek. 'Compensation lengthening' is here a very frequent phenomenon Att. *κτείνω* 'I kill' = Lesb. *κτέννω* prim. Gr. **κτενjω*, Att. *φθείρω* 'I destroy' = Lesb. *φθέρρω* prim. Gr. **φθερjω*, see § 131 p. 119. Ion *γοῦνα* 'knee' = Lesb. *γόννα* prim. Greek **γονϝα*, Ion. *πείρατα* 'ends' = Lesb. *πίρρατα* prim. Gr. **περϝατα*, Hom. *οὖλο-ς* 'whole, all' prim. Gr. **ὁλϝο-ς*, see § 166. Att. *βούλεται* 'he wishes, is willing' = Lesb. *βόλλεται* prim Gr **βολνεται*, see § 204 Att. *τοὺς* acc pl. masc. 'the' = Cret. prim Gr. *τόνς*, see §§ 205 and 204 rem 2 Ion. *ἄσσον* 'nearer' : *ἄγχι*, see §§ 489 497. Late Att Dor *γίνομαι* 'I become' from *γίγνομαι*, see § 492 Ion. Att *εἰμι* 'am' = Lesb. *ἐμμι* prim Gr. **ἐσμι*, Ion Att. *χείλιοι* 'thousand' = Lesb. *χίλλιοι* prim. Gr **χισλιοι*, see § 565

It may be remarked once more here (§ 205 rem. 3) that the *ει* and *ου*, which arose by 'compensation lengthening', were not diphthongs any more than the *ει* and *ου* which had arisen by contraction from *εε* and *οο* (§ 603).

§ 619. Italic. Every vowel was pronounced long before *ns, nf, gn, gm* in the Latin classical period, hence vowel lengthening must be assumed for forms like *pīnsō cōnsul, īnfēlīx, dīgnus benīgnus, āgmen*, see §§ 208. 500. 506 A similar lengthening and at the same time suppression of consonantal elements had taken place in an older period of the Lat. language in *equōs* fr. **equo-ns, pīlum* fr. **pinslo-m, scāla* fr. **scantslā* etc, see § 208; *aēnu s* fr. **aes-no-s, dīmovēō* fr **dis-moveō, sēnī* fr. **sexnī, subtēmen* fr. **-termen, dīluō* fr. **dis-luō, āla* fr. **axlā* etc., see § 570; *nīdus* fr **nizdo-s* etc., see § 594.

Rem. 1. In many cases, where vowel lengthening was formerly assumed in Latin, they are much rather pre-Italic long vowels, or diphthongs, e g. *ēsus* fr. **ēsso-s* i e. **ēd+to-* (§ 501), *rēctu-s, ēmptu-s* etc. It is immaterial here whether the long vowels in the cases in question had been handed down from the Indg. prim period or whether they had arisen by new formation

Rem. 2. The long vowels in *quīnque quīntu-s, ōrdō* etc. are not clear to me.

§ 620. Old Irish. 'Compensation lengthening' exists in *sēt* 'way' = Cymr. *hynt* Bret. *hent*, *cenēl* 'race' = O.Cymr. *cenetl*, *dēr* 'tear' = O.Bret. *dacr*, *ām* 'manus hostium' fr. **agmen* etc. See §§ 212. 518. 523. 526. The name-forms in *-agni* (*Dalagni*, *Corbagni*) on the Irish Ogam inscriptions, as the predecessors of the later in *-āin* (*Ultāin*, gen. of *Ultān*)

§ 621. Germanic. 'Compensation lengthening' exists in prim. Germ. before *ə̯χ*, e g. **fāχō* 'I seize, catch' (Goth. *faha*) fr. **faə̯/ō*, see § 214.

Such lengthenings did not take place in Gothic.

In West Germ OHG. *mēta* OS *mēda* 'hire': Goth. *mizdō*; OS. *līnon* 'to learn'. OHG. *lirnēn*. See § 538 p. 394. § 582. p. 436 § 596.

Many lengthenings in High German in the later phases of the language, as Alemanic *sāft* 'soft', *ūsir* 'our'

Cp. further O.Icel. *gās* Ags. *gōs* = OHG. *gans* 'goose', O.Icel. *hūsl* Ags *hūsl* = Goth. *hunsl* 'offering', Ags. *fīf* 'five' = Goth. *fimf*, Ags *ōðer* 'other' = Goth. *anþar*, O.Icel. *tār* 'tear' from **tahr-* (OHG *zahar* Goth. *tagr*), Ags. *rīnan* 'to rain' = Goth. *rignjan*.

§ 622. Baltic-Slavonic.

In Lithuanian 'compensation lengthening' exists in *žāsì-s* (written *žąsì-s*) 'goose' = OHG *gans* etc., see § 219.

a and *e*, too, were often lengthened elsewhere in this language, but it remains to be determined by what laws.

dēga 'burns' beside inf. *dèkti*, cp. Skr. *dáhāmi*. *ārau āre* 'he ploughs', 1. sg. *arù* = O.Bulg. *orjǫ* (cp. § 147). *tāka-s* 'footpath' = O.Bulg. *tokŭ* 'course, river'. *māra-s* 'pest' = O Bulg. *morŭ* 'death' Pl. *sẽsers* 'sisters', cp. O.Bulg. *sestra* 'sister'. *kálna-s* 'mountain': Lat. *colli-s* fr. **colni-s* (§ 208). *áugu* 'I grow' = Goth. *auka*. *mélžu* 'I milk' = Gr. *ἀμέλγω*. *véida-s* 'face', cp. Gr. *εἶδος*

Rem According to Baranowski and H. Weber Ostlit Texte I p. XXIII sqq. it is here everywhere a question not of real long, but only of medium

long vowels. In *dē-ga ā-rsa* the second mora of the medium long vowel has the accent, in *kál-nas áu-gu* the first. Cp § 691 rem.

in, un became *ī, ū* (O.Bulg. *i, y*) before explosives and spirants in Slavonic in the period of the prim. community, e. g. O.Bulg. acc. *gosti* 'guests' = Goth. *gasti-ns, syny* 'sons' cp. Goth. *sunu-ns*, see § 219.

O.Bulg. *vlěką* 'I draw' from **ǫelką, vlakŭ* 'draught' from **ǫolkŭ* etc., show another kind of origin of long vowels.

Vowel lengthening in O.Bulg. through following *ʒ* in *ij* from *ěj, yj* from *ŭj*, see §§ 36 84.

Lengthenings (date still unknown) through the influence of accentual relations can be proved in the modern phases of the language, concerning which see § 615.

ANAPTYXIS FROM CONSONANTS.

§ 623. It is here a question of the development of a short or reduced vowel from a voiced consonant, namely medially before or after another consonant, initially (prothetic anaptyxis, prothesis) and finally

If anaptyxis takes places medially after a consonant preceded by a sonant, the syllable must be pronounced with a double pointed accent. This prepares the way for the development of two syllables from one, e g OHG. *berac* 'mountain' from *beřc*. If the vowel is developed from the second consonant, the latter becomes sonantal in the first instance, e. g. French *canif* from Low Germ. *knīf* through the intermediate stage **cǫ(n)īf* (*-(n)-* represents the consonantal glide).

How far the development of vowels initially and finally (in the latter case exceedingly rare) was caused by the relations of word-position in the sentence (sandhi), is left out of question here.

Rem 1. The transition of **cǫ(n)īf* to *canif* is the same process as that by which Indg **tṇú-* became Skr. *tanú-* Gr. *ταν-* etc. and Indg. **gṛrú-* became Skr *guru-* Gr *βαρυ-* etc. (§§ 227 287) The latter cases do not however belong here, because it cannot be proved that these Indg forms originally had a shape, shorter by one syllable, corresponding to *knif*, cp §§ 312 313.

For comparison may also be mentioned here the case where a vowel is developed from a sonant liquid or nasal between consonants or finally after a consonant, thus e. g Gr. *δερτό-ς δαρτό-ς* 'skinned' from Indg. **dr̥to-s*, *οὖθαρ* 'udder' from Indg **oudhr̥*, Lat. *tentu-s* fr. Indg **tn̥to-s*, *decem* fr. Indg. **dekm̥* (§§ 223. 224 284. 285) **agro-s* 'field' became in prim Ital. **aqr̥s*, thence **agers *ager* Lat *ager* Umbr. *ager* Osc Frunter (cp §§ 633 655, 9) Nom. sg. **brē-tr̥* f. 'word' (gen *brēthre*) became **brēt̥* in Irish, thence *briathar*, cp also *criathar* 'sieve'; here belong also *omun* 'fear' *ess-umn* 'fearless' Gall *Exobnu-s*, *fu-domain* 'deep' (compar. *fu-dumnu*) Cymr *dwfn* 'deep', Lith *dubù-s* 'deep', both with *-mn-* from *-bn-* (§ 520) Cp § 634. Lastly OHG. *acchar* 'field', *fogal* 'fowl', *eban* 'even' (Goth *akrs*, *fugls*, *ibns*), concerning which see §§ 215 277 660, 1. 661, 2

Rem. 2. One speaks also of anaptyctic prothesis before voiceless consonants, e g Gr *ἴκτις* beside *κτίς* 'weasel', *ἀσπαίρω* beside *σπαίρω* 'I struggle convulsively', Late Lat. *ispiritu-s istatua*, Prākr. *itthī-* (Gāḍ *istrī-*) = Skr. *strí-* 'wife' So far as it is here really a question of a pure phonetic product — in many of the cases brought under this head the vowel has an etymological value (remnant ef a prefix etc) —, it is always a process of sandhi The vowel was developed from the close of preceding words.

§ 624. Aryan.

Sanskrit. Medial anaptyxis made its appearance first in the Prākrit dialects, e g. *harisa-* = Skr *harša-* 'joy', *paduma-* = Skr *pádma-* 'water-rose', *sumarāmi* = Skr. *smárāmi* 'I think of', *sinēha-* = Skr. *snēha-* 'attachment', while prothesis appears already in Vedic in *iraṇyati* 'puts in order', *iradhatē* 'seeks to win', *ilaya-* 'resting' (beside *laya-* 'rest'), *ulōká-* (beside *lokú-*) 'free space, world'. These forms were possibly taken from some vulgar dialect

Anaptyctic vowels were very frequent in Avestic. The orthography fluctuated considerably, and these vowels are almost without exception of no importance for the metre. It is thus not a question of a full vowel. The development of a vowel takes place most frequently before and after *r*, uniformly before initial *rĭ*, *rŭ*, *rv* and after final *r*. It is generally represented by *e*, sometimes by *a*, *ē*, *ō* and *i*, *u*, the latter especially initially. Examples for anaptyxis from *r*, as *dādar^{e}sa 'rista- antar^{e}*, see §§ 157. 260. From other voiced consonants : *γ^{e}na-* 'murder' : Skr. *ghná-*; Gāḍ. *dad^{e}mahī* 'we give' : Skr. *dadmási*; Gāḍ. *d^{a}bitya-* 'the second' : Skr. *dvitīya-*.

Only *u*, between *d-r* and *g-d*, can be established with certainty as anaptyxis in Old Persian. The following or preceding syllable contains an *u*-sound in all the examples met with *dūrūjīyāmīy* 'mentior' · Skr. part. *drúhyant-* 'injuring in a cunning manner'. *sugūda- suguda-* Sogdiana : Av. *suγda-*. *ū* is to be read as *u*, see p 25.

§ 625. Armenian. Prothesis before initial liquids, e. g. *erek* 'evening' · Skr. *rájas-*. See § 263.

§ 626. Greek A vowel between consonants is regarded as anaptyctic in many words (see among others Curtius Grundz.[5] 727 ff., G. Meyer Gr. Gr 95 ff., 2 edition p. 109 ff.), but only few cases are certain,[1]) as e. g. Lesb. *μέτερρο-ς* from **μετερμο-ς* = Att. *μέτριο-ς* 'within measure' from *μέτρο-ν* 'measure' (§ 131 p. 119).

On the other hand prothesis is certain in many cases. Most frequently before liquids, as *ἐρυθρό-ς* 'red' · Lat *ruber*, *ἐλαφρό-ς* 'nimble' = OHG *lungar*, see § 266. Before *ϝ* in Ionic . Hom. *ἐ(ϝ)έρση* Cret *ἄερσα* 'dew' beside *ἔρση ἕρση* : Skr. *varšá-s* 'rain'; Hom. *ἑ(ϝ)είνοσι* beside *(ϝ)είκοσι* 'twenty' Lac. *βείνατι* Bœot. *ϝίκατι*, Lat. *vīgintī*. Before nasals probably e. g in *ἀμέλγω* 'I milk' · Lith. *mélžu*: *ὀμίχλη* 'fog' (Att. *ὁμίχλη* through association with *ὁμο-*?, cp. § 564 rem. 3) *ὀμῑχέω* 'I make water', inf. aor. *ἀμῖξαι* in Hesych : Lith. *miglà* 'fog', Lat *mingō*; *ἀνεψιό-ς* 'first cousin' O.Bulg *netьjь*

That prothesis sometimes appears, and sometimes not (cp. *ἐρύομαι* and *ῥύομαι*, *ἀλείφω* and *λίπα*, *ὀμόργνῡμι* and *μόργνῡμι*, *ἀνεψιό-ς* and *νέποδες*) seems partly to be due to difference of dialect, and partly to be explained from various kinds of sandhi-relations.

The development of the *i-* in *ἴσθι* 'be' imper. = Av. Gāp. *zdī*, Indg. **z-dhí*, see §§ 590 593, is older than the development of the ten. asp from med. asp (§ 495) Prothesis perhaps also in *ἰχθύ-ς* 'fish' and *ἐχθές* 'yesterday'.

1) Curtius and Meyer use the term anaptyxis in a wider sense, according to which it includes the phenomena discussed in § 623 rem 1. Many of the forms, brought forward by both these scholars, certainly contain no development of a vowel either in the stricter or wider sense, e. g. *ἐρ-ε-τμός* in Curtius, *ὠλ-ε-νη κολ-ω-νός* in Meyer

§ 627. Italic.

Medial anaptyxis in Latin with liquids and nasals, the vowel thus developed usually taking the timbre of the vowel in the following syllable. *pō-colo-m pō-culu-m* from *pō-clu-m*, *sta-bulu-m* from **sta-blo-m*, *sta-buli-s* from **sta-bli-s*, *singulu-s* from **sem-clo-s*, see § 269. Acc. *famulu-m* probably from **famlo-m*, *familia* from **fam-liā*.

Rem. 1. In the forms with *-l-* the frequent fluctuation in the orthography (cp also *saeclum* beside *saeculum*, *poplus* beside *populus*, *dis-iplina* beside *disciplina* etc.) probably points partly to different influence of the accent in the various cases, and partly to the fact that at first only *l̥(l)* or *ᵊl* (say *disciplla* or *disciᵊlina*) was spoken beside *l* and that this sound was written sometimes *l*, sometimes *ul*, the latter at least in the oldest period of historic Latinity. Cp rem 3.

Inscript (ca 218 B C.) *Terebonio* = *Trebōniō*. Late Lat. acc *magistarātu-m* = *magistrātu-m*, *carābrō* = *crābrō* (Italian *calabrone*) etc.

Anaptyxis with nasals can be established with the greatest certainty in loan-words, as *Tecumēssa*, *drachuma*, *mina*, *techina*.

Rem 2 *sumus*, *humus*, *homō*, *hemō*, *umerus* and *numerus* hardly belong here, see § 269 rem 568 rem I come to no decision with regard to *terminus* and similar forms, see § 241.

Anaptyxis seems to have been foreign to Umbrian. We find it all the more frequently in Oscan. Examples for the development of a vowel from liquids as aragetud 'argento' see § 271 From nasals · akenei from **akneí* 'in fundo' or 'in agone'; Patanaí dat. sg from **Patnaí*; Líganak-díkeí dat sg from **Lígnak-d*

From the material brought forward by Thurneysen Kuhn's Ztschr. XXVII 181 f, it is probable that anaptyxis only took place regularly in the combinations *tr*, *kr*, *tl*, *kl*, *tn*, *kn*, if the preceding syllable was short. Cp. e. g. maatreís 'matris' Fuutreí 'Genetrici' with patereí 'patri'; sakarāklúm 'sacrum' with Pukalatúí (to *pŭklo-*).

Rem. 3 The Osc. leaden tablet (published by F Bücheler, Frankf a M. 1877) does not contain these inserted vowels, e g sakrim 'sacrum' against σακορο 'sacrum' sakarater 'sacratur' elsewhere Hence it is probable that at first only the weak glide vowel was spoken or after consonants at first only sonant liquids and nasals, thus *arᵊgetud*, *akᵊneí* or *akn̥eí* Cp. rem. 1.

Anaptyxis also in Pelign., as in *Alafis* 'Alfius', see § 271.

§ 628 Germanic. Goth. *miluks* OHG. *miluh* Ags. *meoloc* O.Icel. *mjolk* (fr. **meluk* by so-called 'fracture'), connected with OHG *melchan* Lith. *mélžu* etc., seem to be an example of primitive Germanic anaptyxis. If it be maintained along with Paul that liquid + explosive in final syllables gave rise to anaptyxis in prim. Germ., then OHG. *hiruz* beside *hirz* might also be understood (cp. § 533). Both words must have been consonantal stems.

Goth. Anaptyxis perhaps in *filigrja-* (Luke XIX, 46 *filegrja-*) n. 'a hiding, hole', to *filhan* 'to hide'. Here comes into consideration the inconvenience of the combination *lgrj*, but at the same time also the possibility of a popular association with *ligrs* 'couch'.

Frequent anaptyxis in West Germ., especially in OHG. With *r* + *i*, e. g. *herige* 'to the army' : Goth *harja* § 143 p. 129. With cons. + *u*, e g *zesawēr zesewēr* 'dexter' Goth *taihsva*, see § 180 p. 157 With cons + nas, e. g *wahsamo* m. 'growth' beside *wahsmo*, see § 215. With liqu + *h* and other letters, e. g. *ferah* 'soul, life' : Goth. *fairhvu-s* 'world', see § 277

§ 629. Baltic-Slavonic.

In Lithuanian appear frequent attempts at anaptyxis, which may be represented somewhat in this way. *g'r̃ĩszti* 'to return' *kᵘrúma-s* 'shrub', *sukᵉnè* 'dress', *šarʲstýti* 'to scrape', *marʲgẽle* (*mergẽlė*) 'girl', *balᵘdóti* 'to knock', *nénᵉdre* 'reed'. In the case of vowel development from liquids and nasals after consonants it is mostly merely a question of the consonants becoming sonants. Observe that the phenomenon has nothing to do with the contrast between slurred and broken accentuation (*nénᵉdre*). Cp. Bezzenberger Z. Gesch. d. lit. Spr. 67 f., Bruckner Litu-slav. Stud. I 49, Leskien-Brugmann Lit Volksl. u. March. 290.

In Slavonic, anaptyxis was connected with the process of transformation of prim. Slav. *or*, *ol*, *er*, *el*, before consonants, cp. Russ. *porosjá* 'sucking-pig' : Lith. *parsza-s* etc., see § 281.

VOWEL ABSORPTION.

§ 630. Vowel absorption often happens in languages with predominantly expiratory accentuation. The stronger the chief accent of the word, the more easily loss of vowel takes place in syllables which have not the chief accent.

If the absorption happens between consonants in such a way that the word loses one of its syllables, the loss of vowel is called syncope, e g. Lat. *caldu-s* fr. *calidu-s*. We have besides loss initially before consonants (aphaeresis) and finally after consonants (apocope); in the latter cases it is often difficult to say whether the changes were caused by the relations of accentuation only of the word in question, or whether they were due to relations of sandhi.

If the absorption happens in such a manner that the syllable retains its value as a syllable, which is only possible, if another sound is able to undertake the part as bearer of the syllabic accent, we call the process samprasārana (after the Indian grammarians).

Vowel absorption took place already in prim. Indg. under the influence of the chief accent of following syllables Syncope: stem **pt-é-* from **pet-é-*, Gr. *πτ-έ-σθαι* 'to fly'. Aphaeresis: **s-té* from **es-té* 'ye are', Skr. *sthá*. Samprasārana · stem **dr̥k̂-é-* from **derk̂-é-*, Skr. *dr̥ś-á t á-dr̥ś-a-t* 'he saw'. Cp. § 307 ff.

§ 631. Aryan. Samprasārana in Av. acc. sg. *aiiim* = Skr *anyá-m* 'alium', *pouru-m* = Skr. *pūrvá-m* 'primum' etc. Cp. § 125 p. 115, § 159 p. 143.

§ 632 Armenian *i* and *u* only remained in final syllables between consonants, in other syllables they were dropped. *gtanem* 'I find' from **gi-ane-m* · aor *e-git*. Gen. *dster* 'of a daughter' from **duster* : nom. *dustr* See §§ 31. 47.

§ 633. Italic. Syncope frequently occurred in all dialects, and it may be conjectured that it was partly completed during the period of the Ital. prim. community, just as the samprasārana (§§ 33. 623 rem. 1) in the transition of **ágro-s* 'field' to **agr̥s*

(hist. Lat. *ager*), of **ágro-lo-s* (cp. *porculu-s, fīliolu-s*) to **agṛlo-s* (hist. Lat. *agellu-s*), of **sácro-dō(t)s* to **sacṛdō(t)s* (hist. Lat. *sacerdōs*), of **sḗ-crinō* to **sēcṛnō* (hist. Lat. *sēcernō*) etc.

Syncope shows itself in Latin in the syllable immediately following the one which had the chief accent (according to prim. Lat. accentuation, see § 680), if one or more syllables followed this *reppulī, rettulī, reccidī* from **ré-pepulī, *ré-tetulī, *ré-cecidī* Correspondingly *dēcidī, attigī, incurrī* from **dé-cecidī, *át-tetigī, *ín-cecurrī. cette* from **cé-dte, mattu-s* from **mádito-s,* see § 501 rem. 2 *hospes* from *hostpes *hosti-pes* (§ 81 p 73). *claudō* from **clávidō,* cp § 612 *undecim* from **únu(s)decim, quīndecim* from **quinquedecim. prīnceps, manceps, vīndēmia* from **prīmi-ceps* etc *surgō* from **súb-regō, surpuī* from **súb-rapuī. caldu-s, soldu-s, valdē* beside *calidu-s, solidu-s, validu-s. ārdu-s* (Lucil.), *ārdeō* beside *ārdu-s.* It is questionable whether the spelling should be trusted in the case of certain examples of syncope which are found on inscriptions only, as *decmus vicesma* (acc. sg. fem.), *viglias.*

Syncopation, so far as we know it, was comparatively more frequent in Umbr.-Samn. than in Latin. Umbr. *co-vertu* 'convertito', *an-dendu* 'intendito' (§ 499), *sestu* sistu 'sistito', *umtu* 'unguito' fr. **umptōd *umbetōd* (§ 502 rem.), sumtu 'sumito'; Osc. *factud* 'facito' = Umbr. *feitu* (§ 502), *actud* 'agito' Umbr. *osatu* 'operato', Osc. úpsannam 'operandam' Umbr. *amb-* Osc. amfr- (Lat. *amb-*) fr. **amfer-*, a transformation of **amfi* after *ander* 'inter' etc.; on the Umbr. form cp also § 209. Osc. *vincter* 'convincitur', úittiuf 'usio, usus' (§ 501 rem 2), *minstreis* 'minoris' (cp. Lat. *minister*) Pelign. *af-ded* fr. **af-dēd* 'abdidit'.

Short vowels were also syncopated in final syllables in this Ital. branch (except some cases, where syncopation was prevented by double consonants, as 3 pl. fut. *erunt* 'erunt' cp. Lat. *fuerint*). Nom. sg. Umbr. pihaz 'piatus' fratreks 'fratricus', Osc. húrz 'hortus' túvtíks 'tuticus, publicus'. Umbr. Osc. *fust* 'erit' cp. Lat. *fuerit* Cp. § 655, 5.

§ 634. Old Irish. The syllable, immediately following the one with the chief accent, was the least accented in the

word (as in Ital.), and its vowel became reduced and disappeared, if one or more syllables followed, thus having either syncope or samprasārana. On the retention of the vowel in final syllables see § 613.

Syncope. From the stem **fóllessu-* 'clear, manifest' was formed nom. pl. *fóilsi* with the derivatives fem *fóilse* 'clearness' and the verb *fóilsigim* 'I show'; the middle syllable of the stem **fóllessu-* had experienced syncope here, while the nom. sg. *fóllus* retained the same syllable, as a syllable, which had become final after the loss of the end syllable. From **béromi*, older **béro-me(s)-i* (1. pl. indic pres. from *ber-* = Indg. *bher-* 'ferre'), arose *bérme* (*-e* was caused by the *o* which was dropped; beside this 3. pl *bérit* from **béront(i)*. *menme*, dat. *menmain*, 'sense' from prim. f. **men-ə-men-*, see § 110 p 104 From the stem **cárēt-* 'friend' (from **cárn̥t-*, see § 212 and cp. Gall. *Carantonus Carantillus*, Cymr pl. *ceraint*) pl. dat. *cáirtib* acc. *cáirtea*, but sg. nom. *cáre cára* gen. *cárat* dat. *cárit*. Instructive for this process are also the Lat. loan-words, e g *péccad* 'peccatum' gen. *péccthe, ídal* 'idolum' dat. pl. *ídlaib*.

Samprasārana. Beside nom. sg. *só-nirt só-nairt* 'strong, brave (*nert* 'strength') stood dat pl *só-nartaib* compar. *só-nortu* 'stronger' and the derived substantive *só-nirte só-nairte* 'strength, firmness'. In the latter forms the syllable *-nert-* had become *-nṛt-*, the timbre of *ṛt* was conditioned by the vowel in the following syllable; *ṛ* then generated a reduced vowel. So also *du-fú-tharcair* 'volvit' goes back in the first place to **du-fú-thṛcair*, this to *-thracair* (cf. *dú-thracht* 'will') Cp. §§ 66. 298. Here belong also cases like *bria-thar*: the course of development was *-trā, -tṛ* (*ṛ* with *a*-timbre), *-tar*, cp. § 623 rem. 1.

Rem On the *ai* in *só-nairt, só-nairte* cp. § 640

§ 635. Germanic.

Prim. Germanic syncopation. **áiz-a-* 'ore, metal' (Goth. *áiza-*, OHG. *ēr*) from **áiz-a-*, cp. Skr. *áyas-*. So probably also **máiz-ō* 'maior' (Goth. *máiza* OHG *mēro*) in the first instance from **máizō* Further **ármēd(i)* 'he has compassion on' (Goth. *armáiþ*

OHG. *armēt*) fr. **ármē-ii-đi* and **frijōjđ(i)* 'he treats lovingly' (Goth. *frijōþ*) fr. **frijō-ji-đi*, see § 142. This syncopation, which did not take place if an *i* directly preceded the *j*, belongs to the later prim. Germ. changes. For it presupposes the new Germanic accentuation (§ 687).

Syncopation in Gothic in final syllables, e. g. *vulfs* 'wolf' fr. prim. Goth **vulfa-z* See § 660, 1. Whether forms like *ibns* 'even' *akrs* 'acre' were pronounced as monosyllables or dissyllables (*ibjs akjs*), is not clear, cp. §§ 215. 277 (p 221 foot-note 1). 660, 1 Here may also be placed the transition of *ij* to *j* after consonants, as in *satja* 'I set' from prim Germ **satijō*, *hairdjōs* nom. pl. 'shepherds' from prim. Germ. **χirđijōz* (nom sg. *hairdeis* from **χirđii-z*).

Rem. Some regard this latter process as prim. Germanic But then the 2 sg imper *sati* (Indg **sadʰi*) could not well be explained For **satij* would certainly also have become **satj* in prim Germ., and this would have led to **sat*.

In West Germanic a law of syncope operated which Paul (Paul-Braune's Beitr. VI 144) has formulated in the following manner: — Short vowels were dropped in open syllables 1. after chief accented syllables, if these were long, 2. after a secondary accented syllable following the one with the chief accent, whether this was long or short. The operations of this law are in many cases not evident and clear, because the secondary tone and the deeptone also changed their position in the same word according to logical principles and many levellings took place by analogy. OHG. *hōrta* 'I heard' for **hōrita* = Goth. *háusida*, *branta* 'I burnt' for **brannita* = Goth. *brannida*. OHG. OS. *hērro* 'master', compar. of *hēr* 'high, sublime', from **hêrira* (Goth. **háuriza*), OHG. OS *jungro* 'younger' from **júngiro*, cp. Goth. *jūhiza* OHG. *andres* gen. of *ander* 'alius', *unsres* gen. of *unser* 'our'. OHG. *sēula* OS. *sēola* 'soul' = **sēwla*: Goth *sáivala*. OHG. *īsnīn* 'iron' adj. from *īsan* 'iron' OS. *mahtigro* from **máhtîgiro* gen. dat. sg. fem. and gen pl. of *mahtig* 'mighty', cp. Goth. gen. *þizōs*. Forms like OHG. *zimbarta* 'built' (§ 310 rem.) *acchar* 'field' *fogal* 'bird' *eban* 'even' had experienced samprasārana, see §§ 215. 277. 623 rem. 1.

For the activity of the West Germ. law of syncope in final syllables, see § 661, 2.

§ 636. Baltic-Slavonic. *i* experienced syncopation in unaccented syllables in Lithuanian. I am not in a position to say how far the phenomenon, which can only be proved for a comparatively small number of words, is dialectical and how far it was dependent on various grades of accent-stress or similar factors. Examples: *szulnỹs* beside *szulinỹs* 'well, spring'. *mótna* beside *mótina* 'mother' (also *mótyna*); fut. 2. pl. *árste* beside *árs'te*, 1 du. *ársva* beside *ársiva*, from *arìu* 'I plough'.

Vowels were dropped in final syllables by syncope, e. g. pl. *dùkters* 'daughters' fr. **dùkter-es* (Gr. *θυγατέρες*), gen. sg. *dukterȇs* fr. **dukter-ès* (O.Bulg. *dŭšter-e*). Cp. § 664.

ĭ and *ŭ*, which were reduced vowels already in the prim. Slav. period, disappeared in Slavonic medially in open syllables. In the O Bulg. monuments e g *vsi* beside *vĭsi* gen. of *vĭsĭ* 'vicus', *rekšu* beside *rekŭšu* dat. sg of the part. perf. of *reką* 'I say'. See §§ 36. 52.

PALATALISATION AND LABIALISATION WITH EPENTHESIS.

§ 637 Consonants are often palatalised by sonant and consonant *i*- and *e*-sounds following them, through the mouth-articulation anticipating the *i* or *e*. In like manner *u*- and *o*-sounds cause labialisation.

If any other vowel but an *i* or *u* precedes a consonant or group of consonants thus palatalised or labialised, this often becomes an *i*-, or *u*-diphthong, e. g. *aį̓l'i̯*- from *al'i̯*- (where ' indicates the palatalisation of the *l*). The *i*- or *u*-articulation thus extends still further than the specific articulation of the consonants. This phenomenon is called epenthesis. It occurs in the older phases of the Indg. languages only in the case where postconsonantal *i* or *u* was consonantal. This *i̯* and *u̯* then disappeared in the preceding consonant, a result of the intensity of the process of palatalisation or labialisation.

Rem. The phenomena, which are denoted as umlaut, fracture, vowel-harmony etc., do not differ materially from epenthesis, e. g. OHG. *nerian* = Goth *nasjan* § 83, O.Ir *fer* 'man' fr **wiro-s* § 34, O.Bulg. *tobojǫ* instr. beside *tebe* gen., *tebě* dat loc. of *ty* 'thou'.

§ 638. Aryan. Simple consonants and *nt* appear palatalised in Avestic before *i, ī, y, ę, ǐh* (from Ar. *sį*, § 558, 3 p. 415) after *a, ā, u, ū, ę̄, o, ę, aę, ao*; the palatalisation was indicated by an *i* written before the consonant. *aipi* 'up, on, in' = O.Pers. *apiy* Skr *ápi*. *barainti* 'they bear' = O.Pers. *bara(n)tiy* Skr. *bháranti*. *per°sāiti* 3. sg. conj. of *per°sāmi* 'I ask' = O.Pers. *parsātiy* Skr. *pṛchāti*. *stūidi* 2. sg. imper. of *staomi* 'I praise' : Skr. *stu-hí*. *ker°naoiti* 'he makes' = Skr. *kṛnó-ti*. *ber°zaitīm*, acc sg fem of *ber°zant-* 'great, high', = Skr. *bṛhatím*. *aęibiš* instr pl., *aeibyō* dat. pl. to *aem* 'this', = Skr. *ēbhíṣ*, *ēbhyás*. *daδ-maidē*, 1 pl. mid to *daδąmi* 'I place', = Skr *dádh-mahē*. *ber°zaitę*, dat sg. masc. of *ber°zant-*, = Skr. *bṛhaté*. *aiñhå*, gen. sg. fem. to *aęm*, = Skr. *asyás*.

r appears labialised before *u, ū, v* after *a, ā, o*, an *u* written before the *r* marked the labialisation. *auruša-* 'white, glittering' = Skr. *arušá-*. *dāuru* 'wood, spear' = Skr. *dáru*. *pouru* (also written *paouru-*) 'much' = O.Pers. *paru-* Skr. *purú-* (§ 290) *aurvant-* 'quick, strong' = Skr *árvant-*.

Rem. The metre proves that diphthongs were not spoken in forms like *aipi pouru*. This mode of writing is to be explained from the fact that the transition from the *a, ā* etc to the *i-* or *u*-position of the palatalised or labialised consonant gave the impression as if an *i* or *u* was heard before the consonant

Hence it is quite out of the question to speak of a triphthong in forms like *aęibiš* etc

Cp. the similar mode of writing in Irish, § 640

In Bartholomae's Handb d. ir dial this *i* and *u*, just as the anaptyctic vowels (§ 624), are placed above the other letters in small type, e. g. *aⁱipi aęⁱbyō*, *aᵘruša-*

§ 639. Greek. Epenthesis of *i* and probably also of *u* took place in the period of the primitive community.

Epenthesis of *i*. The palatalised consonant was single or double : *ν, κν, πν, φν, τν, δν, χμ, ρ, σ, ϝ*. *φαίνω* 'I show' from **φαν-ιω*. *κοινός* 'common' fr. **κον-ιο-ς* (§ 204). *τεκταίνω* 'I make, fabricate' fr. **τεκταν-ιω*, older **τεκτᾱ-ιω* (§§ 130. 234).

αἶκνο-ν · δεῖπνον (Hesych.) fr. *ἀκνιο-ν, to Skr. *aś-nā-ti* 'eats'. δεῖπνο-ν 'meal' fr. *δεπνιο-ν, rt. *deq-* (§ 444 *c*). ἐξ-αίφνης 'suddenly' fr. *-αφνιᾶς, cp. ἄφνω · ἐξαίφνης (Hesych.). τ and δ disappeared by assimilation before *ν* : δέσποινα 'mistress of the house' fr. *-ποτνια, ῥαίνω 'I besprinkle' fr. *ῥαδνιω, see §§ 488. 492. αἰχμή 'point of a spear' fr. *ἀγμιᾱ, probably related to ἔγχος, ἀχ- = *ϝεχ-. μάκαιρα fr. *μακαρ-ια, fem. to μάκαρ 'blessed'. σπαίρω 'I struggle convulsively' fr. *σπαρ-ιω, original form *σπερ-ιω (§§ 129. 293). Hom. τοῖο 'of the' Att. τοῦ Dor τῶ fr *τοισο, the latter fr. *το-σιο, Hom κλαίω 'I weep' fr. *κλαιϜω, this fr. *κλαϜ-ιω, see § 131.

Rem. Epenthesis of *ι* has been wrongly assumed in κρείττων 'stronger' beside Ion. κρέσσων, prim. Gr *κρετ-ιων, and in μείζων 'greater' beside Ion. μέζων, prim. Gr *μεγ-ιων. *ει* had taken the place of *ε* here through analogical association with χείρων 'inferior in strength etc.' ἀμείνων 'better' ὀλείζων 'smaller'. Epenthesis of *ι* has also been wrongly sought in κτείνω 'I kill', ἄμεινων, Hom. εἶν 'in', φθείρω 'I destroy', χείρων, Hom. ὑπείρ 'over'. In the first instance assimilation took place in these cases (cp. -λλ- from -ελι- in ἀτελλω), then 'compensation lengthening'. See §§ 131. 618.

Cypr. αἰλο-ς beside Arcad. Att. ἄλλο-ς 'alius' is very strange. It stands too isolated to be able to establish with certainty a process of epenthesis for the period of the separate dialects. Cp. Spitzer Lautl. des Arcad. Dial. 34.

Epenthesis of *u* in Greek is entirely denied by some scholars, and it is clear that most of the examples brought forward are certainly or probably false. The following are less doubtful. ταῦρο-ς 'bull' beside Gall. *tarvo-s* and *Κ(ε)νταυρο-ς* = Skr. *gandharvá-s* (Κένταυρος for *Κεντθαυρο-ς, which is to be presupposed by § 496, through popular association with ταῦρο-ς, or κεντέω, or both at the same time).

In the transformation, which guttural and dental explosives experienced through a following *i̯* or *ι* in prim. Greek or in the period of the separate dialects, as -σσ- fr. -*ki̯*- -*ti̯*-, -σι- fr. -τι- (§§ 131. 489. 493), it was in all cases a question of palatalisation.

§ 640. Old Irish. Palatalisation and labialisation took place extensively. At the end of chief accented syllables, in

which the original vowel-differences were kept apart, the palatal timbre of the consonant was denoted by placing an *i* before it, and in like manner the labial by an *u* or *o*. We have thus no more to do with proper diphthongs or triphthongs here than in Avestic (§ 683). The vowels following the chief accented syllable, which had imparted their timbre to the preceding consonants, were mostly dropped according to the laws for unaccented syllables, so that no trace of their existence was left except in the colouring of the preceding consonants. In Keltic grammars this process is called infection.

For the sake of clearness we give here in small type the vowels which serve only to indicate the timbre of the consonant (cp. § 24 p. 27).

Palatalisation. Gen. *e'ch* 'of a horse' fr. prim. Kelt. **ekuī*, to nom. *ech* *su'de* 'seat' fr **sodio-m*, rt *sed-*. Gen. *ma'cc* 'of a son' fr. *maqi* (Ir Ogam inscript.), to nom sg. *macc*. *a'le* 'alius', stem **alio-*. *fā'th* 'poet' fr **uātis* . Lat *vātēs*. Acc. *rū'n* 'secret' fr. **rūnin*, to nom. *rūn* fr **rūnā* *for-tē's* thou wilt help' fr. **tēssi(s)* with *ē* = Indg. *ei* Cp. §§ 58. 66. 82 98. 106.

Labialisation. Dat. *ne"rt* fr. **nertu* **nertō*, stem *nerto-* 'strength'. Dat. *e°ch* fr **echu* **ekuō*, st. *echo-* 'horse'. *ad-ga"r* 'I prohibit' fr **-garu* **-garō*. Cp. § 66. 98.

If the vowel of the syllable which had not the chief accent was still present only as an irrational vowel, its colouring was dependent on the timbre of the following consonant, e. g. (*ni*) *épur* (fr. **éd-bur*) beside *at-bi"r* 'dico', both from the same original form, but with different accentuation according to the connexion, so, too, nom. *biad* gen. *biid* ('victus') fr. **biuot(o-m)* **biuot(ī)* See §§ 66. 82. In like manner the irrational vowel, which was developed in Keltic itself from sonant liquid, assumed the quality of the following consonants, e. g. *só-nirte* beside *nért* 'strength'. See § 634.

Where a diphthong is written in unaccented syllables, the second vowel was properly the syllabic vowel and the first really only shows the timbre of the preceding consonant. Hence

we may write *epiur*, which occurs beside *epur*, as *ép'ur*. Correspondingly *só-n^{a}irte* beside *só-nrte*, *rér^{a}ig* 'direxit', dat. *túath^{a}ib* beside *túathib* 'populis' (cp. *mnā^{a}b* from *ben* 'woman'), 1. sg. *cár^{a}im* beside *cárim* 'I love'. In general this colouring of the consonant is the quality of the vowel which originally followed the consonant, cp. e. g. *ép'ur* with *at-bi^{u}r* and 3. sg. *ad-cón-d^{a}irc* (Gr. *δέδορκε*) with 1. sg. *ad-cón-darc* (Gr. *δέδορκα*).

Rem. If two consonants with different timbre came together through loss of vowel, the second became assimilated (with certain exceptions) to the first, e g in **fé'dligeiho* 'of persistence' (nom *fé'dligud*, to *fé'dligim* 'I continue, hold out') a palatal *g* and a dark *th* came together after the loss of the *e* in the last syllable but one The latter then also became palatal, hence the form *fé'dligth^{e}o* The timbre of the preceding consonants had influence upon final vowels partly even in O Irish, but especially in Mid Irish E g *sé'digth^{e}o* 'of setting' became *sé'digthe*, nom. pl *gnīm^{a}* 'deeds' (also written *gnīmi* without indication of the timbre of the *m*, nom sg *gnīm*) became *gnimi* or *gnímœ gníme* (all these spellings exist side by side of each other) — According to Thurneysen Cp also § 657 rem.

§ **641.** Germanic. Until recently a prim. Germ. epenthesis of *i* was universally assumed in a series of words, as Goth. *háils* OHG *heil* 'whole', which is said to be related to Skr. *kalya-s* 'healthy, pleasant', Goth. *hráiva-* (in *hráiva dauþō*) OHG. *hrēo* (gen *hr ēwes*) 'corpse', said to be connected with Skr. *krávya-m* 'raw flesh' See Scherer Z Gesch. d. deutsch. Spr.^{2} 74, J. Schmidt Vocal II 474 ff, Osthoff Kuhn's Ztschr. XXIII 427 f. I am by no means convinced of the correctness of this assumption, on *háils* cp § 439.

§ **642.** Baltic-Slavonic Palatalisation exists largely. On the palatalisation of consonants in Lithuanian see §§ 26. 147 280

Original *rĭ, lĭ, nĭ* appear in O.Bulg as palatalised *r, l, n*, *ĭ* had been absorbed in the preceding consonant. Palatalisation was also the first stage in the development of *kĭ ke* to *č če*, of *chĭ che* to *š še* etc See § 147

LOSS OF SYLLABLE BY DISSIMILATION.

§ **643.** When two medial syllables with the same or similiar initial sound follow each other, one of the two is often

lost. When a person reproduces sounds from impressions on the memory and repeats their order in speaking, the syllables with the same initial sounds run into one another, and thus after the production of the initial sound of the first syllable he at once passes over to the production of the sounds following the second, e. g. Gr. *τέτραχμον* 'four drachmae' = *τετρ[άδρ]αχμον*. Such hurrying over one part of the sounds of the body of a word does not always become chronic and universal, hence the frequent co-existence of the full and the shortened form in languages closely related together.

In languages with preponderating expiratory accentuation it was probably always syllables which had not the chief accent which were affected by this act of dissimilation.

Aryan. Vedic *irádhyāi* inf 'to try to gain' = **iradh[a-dh]-yāi*, cp 3. pl. mid *iradhanta*. Avestic *dūraoša-* 'shining far' = **dūr[a-r]aoša-*. *amerᵉtāt-* beside *amerᵉta-tāt-* 'immortality'. *maiδyāirya-*, name of a feast, fr **maiδy[a-y]airya-* (*maiδya-* 'medius', *yārᵉ* 'year').

Greek. *ἀμφορεύ-ς* beside *ἀμφι-φορεύς* 'jar with two handles'. *ἡμέδιμνο-ν* beside *ἡμι-μέδιμνον* 'half a bushel'. *κωμῳδιδάσκαλο-ς* beside *κωμῳδο-διδάσκαλος* 'comic poet'. *λιπυρίᾱ* 'intermittant fever' = **λιπ[ο-π]υρια*. *στόμαργο-ς* 'talkative' = **στομ[ο-μ]αργο-ς* or **στομ[α-μ]αργο-ς*. *ὀπισθέναρ* 'back of the hand' = **ὀπισθ[ο-θ]-εναρ*. *κέντωρ* 'goader' = **κεντ[η-τ]ωρ* from *κεντέω*. *θάρσυνο-ς* 'confident' fr **θαρσ[υ-σ]υνο-ς*.

Italic. Latin. *sēmodiu-s* beside *sēmi-modiu-s*. *sēmēstri-s* 'semi-monthly' = **sēm[i-m]ēstris*. *trucīdāre* fr. **truc[i-c]īdāre antestārī* = **ant[e-t]estārī*. *lūculentātem* acc. beside *lūculenti-tātem*. *dēbilitāre* = *dēbili-t[āt]-āre*. *hērēditāriu-s* = **hēredi-t[āt]-āriu-s*. *calamitōsu-s* = **calami-t[āt]-ōsus*. *dentiō* = **dent[ī-t]iō*. *nūtrīx* = **nūtr[ī-tr]īx*. Umbrian *suront* beside *sururont* 'item'.

Rem. 1. From what has been said above it is probable that forms like *dēbilitāmus dēbilitāvissem, nūtrīcis nūtrīcāmus, dentiōnis* were already created in Latin at the time **dēbilitātō* (1 sg.), **nūtrītrīx*, **dentītiō* were still spoken. The shortening of the latter forms was due to the analogy of the first through a *dēbilitō* being created to *dēbilitāmus* etc.

Rem. 2. The later stages of development of Latin also show many phenomena which belong here, as Italian *avamo* fr. *avevamo*, *cavalleggieri* fr. *cavalli leggieri*, French *neté* fr *netteté*. See Car. Michaëlis Stud. zur roman. Wortschöpfung 18.

Keltic. I do not know anything belonging here from Irish[1]). In Gallic *Leucamulus* = **Leuc*[*o-c*]*amulu-s* (cp. *Leucimāra* etc. and *Camulus*), *Clutamus* = **Clut*[*o-t*]*amus* from *Cluto-* and the not unfrequent element *-tamu-s*. See Esser Beitr. zur gallo-kelt. Namenknnde I p. 46.

Germanic. Goth. *avistr* n., OHG. *ewist* m. *awista* f. 'sheep fold' = **av*[*ı-v*]*ıstr*, **ew*[*ı-w*]*ıst* **aw*[*i-w*]*ista*, the second part to OHG. *wist* 'stay, dwelling place'. In like manner **navistr* = **nav*[*i-v*]*istr* 'abode of the dead' which is to be deduced from Goth. *ga-navistrōn* 'bury'.

Possibly also Goth. *áınōhun* 'ullum' = **áin*[*an*]*ō-hun*. The spelling *áınnō-hun* is due to an attempt of the writer to take a middle course between the form actually spoken by him and the form dictated to him by his grammatical feeling.

Baltic-Slavonic. Lith. *akū́ta-s* beside *akůtū́ta-s* 'awny' (from *akū́ta-s* 'awn'). Loc. sg. fem. *gerõjoje* = **gerojo*[*e-j*]*oje*, to nom. *geró-ji*, definite form of *gerà* 'bona'. O Bulg. fem. gen. *dobryję* = **dobry-j*[*ej*]*ę*, dat *dobrěji* = **dobrě-j*[*ej*]*i*, instr. *dobrojų* = **dobroj*[*ą-j*]*ą* and this = **dobroją-j*[*ej*]*ą*, to nom. *dobraja*, definite form of *dobra* 'bona' With the last named double shortening cp. Lat *voluntārıu-s* = **volunt*[*āt*]*ārıu-s* and this = **volunt*[*ı-t*]*āt-ārıu-s*.

SANDHI (SATZPHONETIK).

§ 644. Words, united together so as to form a single thought, are mostly also spoken in a connected manner, so that the whole sentence, or at least a member of it consisting of several words, forms a complete phonetic unity. The sounds of the

1) The first consonant was dropped in Irish in such cases, and the vowels, thus brought together, were contracted: e. g. **arob-ró-nenasc* became *arob-rónasc* 'I have betrothed you' (*nascim* 'I bind'), where *oi* is to be read as a pure diphthong (Thurneysen Rev. Celt VI 323 f.).

word are dependent on the varying position of the word in the sentence. It makes a difference whether a word with this or that set of sounds precedes or follows another, whether the word begins or ends the sentence, whether it has the chief accent of the sentence or not. As a word has generally life in connected speech only, it develops itself phonetically also in connexion, and those variations of position are often at the same time the active cause which produces the change. Thus e. g. in Skr. *tát phálam* 'this fruit' and *tád dātrám* 'this gift' the difference of the final sound of the first word was caused by the difference of the initial sound of the second word, in *śúciś tvám* 'splendidus tu' and *śubhrás tvám* 'nitidus tu' the difference of the initial sound of the second word was occasioned by that of the final sound of the preceding word The shortening of prim. Balt. *-ā* in the Lith. nom sg fem *gerà* 'bona' was brought about by the position at the end of a sentence (absolute finality, position in pause), and the reduction of *ῥῥ-* = Indg. *sr-* to *ῥ-* in Gr. *ῥεῖ* 'flows' (Skr. *srávati*, cp. *ἔῤῥει* 'flowed' Skr *ásravat*) by the position at the beginning of the sentence (absolute initiality). OHG. *mo* 'to him' *nan* 'him' beside *imo inan* arose from the fact that they were used unaccented (enclitically) in the sentence as a whole; when preceded by the chief accent they became subject to the law of syncope (§ 635).

Those changes, which absolutely initial and final sounds underwent and which were caused by such positions of the word, may generally be separated as forming a special category of phonology.

But the sound-affections, which a word suffered through its connexion with a preceding or following word, are not to be separated from those, which were caused through the connexion of the sounds and syllables of the same word as a whole. In many cases no one even thinks of making such a separation. Thus no one treats under the laws of sandhi the Att. *η* = prim. Gr *ᾱ* in *τιμή* or in *ἦγον*, which is of the same nature as that in *μητερες*. But e. g. in the acc. pl. like *νύμφᾰς*, *νόμοϛ* (in several dialects equal to Att. *νύμφᾱς*, *νόμους*), in

Att. *κἆπὶ* Dor. *κᾐπὶ* = *καὶ ἐπὶ*, in *τὸλ λόγον* = *τὸν λόγον*, *ἐρ Ῥόδῳ* = *ἐν Ῥόδῳ*, *ναν νόμον* = *κατ νόμον*, in Hom. *ὅττι* (Att. *ὅτι*) = **ὅδ τι* (§ 363) etc. we can also only speak of such laws as generally held good for the sound-combinations in question. *νύμφᾰς* arose from *νύμφᾰνς* in combinations like *νύμφανςγαλάνς* according to the same law as that by which **κενστό-ς* became *νεστός* (§ 204 p. 171). *κἆπὶ κᾐπὶ* from **κα(ι)επι* like *τῑμᾶτε τῑμᾶτε* from **τιμα(ι)ετε* (§ 603). As regards *τὸλ λόγον* etc. and *ὅττι*, such assimilations, it is true, did not take place at the same time in the body of a word — we take the term word here in its narrowest sense, thus we do not regard compounds like *πάλλευνο-ς παρῥησίᾱ* as one word —, but it was only because the sound-groups in question did not occur in the body of the word at the time when the change took place[1]). The latter is just as much a secondary consideration for the sound-change itself, as it is immaterial for the changes which take place in a word when isolated, if the sound-group in question at the time of the change occurred in the isolated word only as e. g. in the transition of *-νι-* to *-σσ-* or of *-γι-* to *-ζ-* in Greek.

The following circumstance also does not occasion an exceptional condition for the laws of sandhi in question. After the ending of a word has assumed a different shape caused by the varying nature of the following initial sound and the activity of the respective sound-law or of the respective sound-laws has become extinct, the different forms are often used promiscuously, irrespective of the conditions by which the difference was brought about, or at least one of the different forms goes beyond its original sphere Thus in Greek *νύμφᾰς* came to be used also before vowels while *νύμφας*, which had arisen in combinations like *νύμφανςαἰτάνς* (cp *πᾶσα* from *πάνσα*) and when absolutely final, appeared before consonants[2] The same holds good with regard

1) On account of *κὰν νόμον* observe that the syllabic division *κάτ|νόμον* was in opposition e g to *φά|ττη*

2) On the newly found inscription of Gortyn the old phonetic division still shows itself in preferring especially the article form *τὸνς* before vowels and the sister form *τὸς* before consonants.

to initial sounds. Double forms like Gr. *στέγος* : *τέγος* 'roof' were originally dependent on the varying form of the end of the preceding word (§ 589, 3). But both forms then became generalised in use. Now this fluctuation did not for the most part stop here. One of the different forms gained the mastery and entirely suppressed the other or the others. Thus in the Attic dialect the accusative forms *νύμφᾱς, τᾱ́ς, νόμους, τούς* came to be the only forms in use, *νύμφᾰς, τᾰ́ς, νόμος, τός* became extinct[1]); in Latin *steg-* entirely gave way to *teg-* (*tegō toga*). It is here everywhere merely a question of the effects of analogy, which followed after the regular change had taken place, and the case is essentially the same as if e. g. in OHG. *jungro* had arisen by syncopation beside *bezziro* etc. and *jungiro* had then been formed after the latter and similar forms (§ 635). The latter new formation is parallel to the younger *τὸνς παῖδας* (*τοὺς παῖδας*) instead of the regular *τὸςπαῖδας*.

If, in sandhi-changes, transformations of finals through the following initials are much more frequent than transformations of initials through the preceding finals, it fully corresponds also to what we may observe with regard to the changes in the body of a word, namely that transforming operations are far more frequent in a regressive direction (anticipations) than those in a progressive direction.

In the so-called laws of finals and initials it is not merely a question of the last or the first sound in the body of the word, but often also of the medial sounds. The important part is that the cause of transformation lay outside the body of the word, in the first case in the following, in the second case in the preceding word. The most striking examples

1) The existence side by side of *εἰς* and *ἐς* (older *ἐνς* and *ἐς*, originally *ἐνς* only) is the same as *τά*, and *τᾱ́ς, τονς* and *τός*. If in Attic the fluctuation between *εἰς* and *ἐς* continued long after the victory of *τᾱ́, τούς* was decided (see the author Ber d. sächs. Ges der Wiss 1883 p. 186 f), this is to be explained from the fact that the accusatives with compensation lengthening were the regular, often used pause-forms, while the preposition was generally pronounced only in close connexion with following words and *εἰς* only occurred rarely as pause-form.

are the Skr. combinations like *prá haṇyatē*, *agnḗr ávena*, where *ṇ* took the place of *n* through the influence of the *r* in the preceding word (§ 648, 3). The expressions laws of finals and initials are thus too limited. We retain them however in default of a more appropriate short name. —

On the basis of the above explanation we ought, in the discussion of sound change, to separate from all other changes, those which happened in the beginning and end of a sentence and were caused by this position of the sounds. With the present state of our science, this is unfortunately impossible in an exposition of the history of sounds, which everywhere starts from the prim Indg. sounds: the cases are too numerous, in which we do not know whether the word has obtained its present form when absolutely initial or final respectively or conditionally so i. e. in the juxta-position with the sounds of other words. Every thing, which preceded in the prehistoric periods of the separate developments, is known to us by induction only. But processes certainly happened even then, quite as complicated as those we can so often observe in the later phases of language: conflict of the pause-forms and the forms at the beginning of the sentence with the medial forms and of the latter with one another, utter loss, without leaving any trace, of one or several of the different forms which had arisen phonetically, etc. We are mostly not in a position to reconstruct these prehistoric processes in their course with any certainty. And even where we work on the basis of historic records we are often badly off from the fact that the written exposition, as regards the formation of the final and initial parts of words, is generally still less a faithful picture of the living speech than as regards the medial syllables, since they had arisen by sound-laws which operated independently of the connexion in the sentence. In writing one generally recalled to mind the isolated word as an independent whole and either overlooked the sandhi-operations altogether or only imperfectly paid regard to them. In this point, it is true, the exposition of the Sanskrit forms a brilliant exception. But what in the

other languages is too little, is too much here. The sandhi-system of the Hindoos is not free from various pedantic niceties and exagerated generalisations; it is quite inconceivable that the naive speech, uninfluenced by grammatical theorising should always have moved in the track, which the grammarians prescribe, and which became the normal for the written exposition of the language The fettered language of the Vedas already furnishes the proof that the sandhi-system of the classical Sanskrit is not a thing of natural growth. —

In face of the overwhelming difficulties we shall therefore not undertake the theoretical division mentioned above. But it seemed to me necessary to point out here at least the aim, which a more searching investigation of details should have specially in view in the future even more than hitherto.

Rem. Cp. among others Schuchardt Romania III 1 ff, Sweet Transact of the Philolog soc, London 1875—76 p 470 ff, Curtius Stud X 205 ff, Sievers Paul-Braune's Beitr V 61 ff Phonet ^{3} 205 ff, Paul Princip, der Sprachgesch p 100 ff. and elsewhere, Neumann Ztschr f roman Phil VIII 243 ff, Holthausen Die Soester Mundart, 1886, § 44 f §§ 204—222.

Prim. Indg. period

§ 645. Only a few changes can be established with probability in conditionally final and initial sounds.

Finally.

1. *-ōu̯* became *-ō* before certain consonants in the nom. acc. du. of *o*-stems, say **dṷṓ sūnú* 'two sons' beside **dṷóu̯ ékṷōu̯* 'two horses'. This is shown by the fact that the Vedic has mostly *-ā*, rarely *-āu*, before consonants, and *-āu* rather more frequently than *-ā* before vowels.

In classical Sanskrit the forms in *-āu* came to be the only ones in use. Conversely in the European languages the forms in *-ō* almost entirely supplanted those in *-ou̯* : Gr. *δώ-δεκα*, *ἵππω*, Lat. *duo*, O Ir *dā*, Lith. *dù* from **dṷṓ*, *gerù* from **gerṓ* (§§ 184. 664, 3), O.Bulg *dva*, *vlŭka* *-ōu̯* was retained in O.Ir. *dau dō* (older *dāu*) 'two' and Goth *ahtáu* 'eight' (§ 85). Cp. Meringer Kuhn's Ztschr. XXVIII 217 ff.

From this it may be assumed that *-ōn̥* once interchanged with *-ō* in the loc. sg. in *-ōn̥* also as **sūnáu̯n̥* = Skr. *sūnāú* etc. (§ 85).

Compare Indg. **gōm* acc. sg. 'bullock', which probably arose from **gōu̯-m*, § 188.

It is more doubtful whether *-ēl̥* interchanged with *-ē* in a similar manner. Vedic loc. sg. *agnā́* of *agní-š* 'fire' suggests the conjecture that there existed in prim. Indg. a loc. sg. in *-ē*, which had arisen from *-ēl̥*. The latter form is said to be represented by Goth. *anstái* (stem *ansti-*). Cp. the accidence.

Compare the hypothesis according to which Indg **rēs* 'res' arose from **rēl̥-s*, § 150

Rem 1 That nominatives like Gr. *Πυθώ* and Skr *sákhā* (pl *sákhāy-as*) represent an Indg *-ō* from *-ōl̥*, as has been maintained, seems to me very doubtful

2. *-i* and *-u* were pronounced as consonants before sonants. E. g. **prótl̥* beside **próti* 'against' (Skr *práty* and *práti*, Gr. *πρός* and *προτί*, cp. *προσσω* from **προτjω*), the former e g. in Skr. *praty-abharam* = Gr *προσ-ἔφερον* **upérl̥* beside **upéri* 'over' (Skr. *upáry* and *upári*, Gr. Hom. *ὑπείρ* and **ὑπέρι*, cp. Hom. *εἰν* and *ἐνί*, § 131 p 119) **médhu* and **médhu* 'honey', the latter e. g. in Skr *mádhv asti* 'mel est'. Cp. §§ 122 156.

In like manner *-u̯* and *-m* probably interchanged, e g. acc. sg **bhrátor-u̯* (Gr *φράτορα*) and **bhrátorm* (Goth *brōþar*). Cp. § 192 231 rem.

Rem 2 On the accusative forms like **dṛ́ém* (Skr *dyā́m*) see § 188. If the conjecture given there is right, there existed between **dl̥ém* and **nau̯m* (Hom *νῆα* Lat *navem*) the same relation as between **bhrátorm* and **bhrátorn̥*

3 Voiceless explosives and spirants became voiced before voiced explosives and spirant, say **édōdbhrátral̥* = **édōt+bhrátral̥* 'he gave to the brother' (Skr. *ádad bhrátrē*); **tázgu̯ás* = **tás+gu̯ás* 'these sinews' (cp. Skr. *tā́ jyā́h*). Cp. **-bd-* from **-pd-*, **dn̥dbhis* = **dn̥t+bhis* § 469, 2, **zdhi* = **s+dhi* § 589, 1. Conversely voiced explosives and spirants became voiceless before voiceless explosives and spirants, say **u̯it*tótpl̥ú* = **u̯it*tód+pl̥ú* 'know thou (let him know) much' (Skr. *vittā́t purú*),

**tótsiiēt* = **tód+siiēt* 'that may be' (Skr. *tát syāt*). Cp. **juqtó-* = **jug+tó-*, **petsú* = **ped+sú*, § 469, 1.

Sanskrit and Greek especially point to such assimilations.

4. Bremer (Paul-Braune's Beitr. XI 38 f.) assigns it to this also, that the nom. endings sg. masc. fem. of *n*- and *r*-stems sometimes have *-n* and *-r*, sometimes not, e. g. Gr. *ἄκμων*, *πατήρ*, but Skr. *áśmā*, *pitā* (see § 92). The duality was formerly frequently explained by assuming that the forms without *-n* and *-r* were once the only ones in use and that the final consonant was transferred from the other cases. In the *n*-stems one might also imagine that the forms with *-ōn-* without gradation like Gr. *ὀνραν́ων-* Goth. *raþjōn-* O.Bulg. *poljan-* (§§ 219 extr. 311. 585, 3) had originally the nominative with *-n*, the others without *-n* and that then intermixture took place. The uncertainty however prevents anything being here definitely arrived at.

Initially.

1. *s*- disappeared before consonants after *-s*, perhaps also after other consonants, hence the double forms like *steg-* and *teg-* 'cover'. See § 589, 3

3. Double forms like **siiḗm* and **siiḗm* 'sim' **duṷó* and **duṷó* **mriiétai̯* and **mṛiétai̯* 'moritur' were due to a varying construction of the preceding syllable. See § 120 p. 112 § 153 p. 138 f.

3. Indg. **toi̯* from **tuoi̯*? See § 187.

Aryan.

§ 646. Prim. Aryan.

Finally. 1. Nasals adjusted themselves to the organ of the following consonants, so that e. g. *-n* and *-m* became *-ṅ* before *k*-, and *-ñ* before *c*-.

2. The ending *-am* attained complete supremacy in the acc. sg. of most consonant stems, the origin of which must apparently be explained from sandhi relations. Analogously *-am* in preterites like *ás-am* 'eram'. See §§ 231 rem. 645 p. 489.

3. The explosives and spirants, which had become voiced before initial voiced explosives and spirants, remained voiced;

correspondingly those, which had become voiceless before initial voiceless sounds, remained voiceless (§ 645 finals 3). *t* and *d* occurred most frequently finally. The aspirates, from of old rare finally, may have then lost the aspiration in this position. *-z* stood beside *-s*, *-ž* beside *-š*; *-ź* and *-ś* = Indg. *-ĝ* and *-k̂* were rare (§ 396).

-as and *-ās*, when absolutely final, passed into *-ah* and *-āh* (Skr.) or groups similar to these, and it seems that these forms, introduced also into the position before voiced explosives and spirants and before vowels, became here *-ō* and *-ā* already in prim. Aryan. See § 556, 3.

Initially. 1. *kt-* became (when absolutely initial?) *t-* : Skr. *túrya-* Av. *tūirya-* 'quartus' from **ktur-*, cp. Av. *ā-xtūirya-* 'four times repeated'. See § 471.

2. *s-* became *š-* after *-i*, *-u* etc (§ 556, 1), whence Skr. *š-*. Hence such combinations as *hí šáh, hí šma, diví ṣṭha, nú ṣṭhirám.*

Rem Since we are not justified in assuming that the transition of *s* to *š* (*ś*) was still active in the Sanskrit separate development, this phenomenon of sandhi must be referred back to the prim Aryan period. It is immaterial whether in individual cases we have to deal with a prim. Ar word-combination or with one which had first come into being in Sanskrit itself. In the latter case it is a question of imitation of older models.

§ 647. Sanskrit. Finals.

1. The *-ē*, which arose from prim. Ar *-aį* when absolutely final and before consonants, was also introduced if the next word began with a sonant, e g. *-ē a-* for regular *-ay a-*, cp. Av. *zastay-ā* O.Pers. *dastay-ā* 'into the hand', loc. sg. + *ā* 'towards a thing'. Before *a-*, which for its part disappeared, *-ē* remained, before other sonants it was shortened to *-a*. *vánē 'smín* from *vánē asmín* loc. 'in this forest'. *vána āsīt* from *vánē āsīt* 'he was in the forest'. This loss of *a-* was in its first beginnings in the Vedic period.

The *-ō* which had taken the place of *-as* (§ 646) was treated in like manner. *anyó 'nyám* 'one to the other'. *rāmá uvāca* 'Rama spoke'.

-āy became *-ā* before sonants. *strıyá adadāt* 'he gave to the woman'.

2. The assimilation of the nasals to following consonants (§ 646), remained e. g. *táṁ kavím* 'this sage', *tán dēvám* 'this god'. *-m* passed into the so-called 'Anusvāra' before sibilants, *h* and *r*, e. g. *táṃ sṭhám* 'this lion' (cp. § 199 rem. 1).

3. *-r* became *-h* when absolutely final Voc. *mátah* 'mother' = Av. *mātar*^{e} Gr. *μήτερ*. 3. pl. perf. *as-úḥ* = Av. *åŋh-ar*^{e} from Ar *as-* 'be' (§ 290).

The *r*, which had first become final in Sanskrit (by 7), also underwent this change. *ákaḥ* = *ákar* 'thou madest, he made', when 2. sg. arose from **a-kar-ṣ*, when 3. sg from **a-kar-t*.

4. Absolutely final explosives and spirants were pronounced voiceless only, hence here e g. *tát* 'this' from **ta-d*, Indg. **tó-d*.

The law, inherited from the pre-Aryan period, that explosives and spirants were pronounced voiced before voiced and voiceless before voiceless explosives and spirants (§ 645 finals 3), was followed by an analogical innovation They said *tát phálam* 'this fruit', *tád dātrám* 'this gift' (prim f **tód*) and *ábharat phálam*, *ábharad dātrám* (prim. f **ébheret* 'he brought'), but *tád ánnam* ('food'), *tád vástram* ('dress'), *tád mádhu* ('honey') opposed to **ábharat ánnam*, — *vástram*, — *mádhu* The latter state was levelled out and *ábharad ánnam* etc introduced

ábharad ánnam for regular **ábharat ánnam* after *ábharad dātrám* and *tád ánnam* may be compared with *śagmá-* 'powerful, helpful', for regular **śakmá-* after *śagdhí* and *tigmá-*, see § 472 rem

-t remained in the old combination *bhárat-u* 'let him bring' (injunctive *bhárat* + particle *u*), because it was felt as a single word. See Osthoff Z Gesch. des Perf. 42.

5 *-t c-* became *-cc-*, as *ádācca* 'dabatque', *-t ś-* became *-ch-* (*-cch-*), as *ádāchatám* 'dabat centum'. Cp §§ 352. 355. Cp. also § 557, 2 on *táñchátrūn* acc. 'these enemies'

6. The endings *-as* and *-ās* have been treated in § 556, 3. 646. 647, 1.

-ḥ appears in pausa for the *ṣ* which arose from Indg. *s* prim. Ar. *ś* after *i-* and *u*-vowels (§ 556, 1), e. g. *áviḥ* 'sheep', *sūnúḥ* 'son'. It is uncertain whether the transition to *ḥ* was phonetically developed or whether it is a question of analogy after *áśvaḥ* = *áśvas* etc. *-ś* was retained in Vedic before *p-* and *k-*, e. g. *dyāuṣ pitā́* (= Ζεὺς πατήρ), but the pause-form in *-ḥ* forced its way in also before these initial sounds, just as there still appears the older ending *-as* (e. g. *yás pátiḥ* 'qui dominus') in Vedic before *p-* and *k-*, but beside this already also *-aḥ* *-ṣ* too is still Vedic before *t-*, where *t-* was pronounced cerebral (§ 352), e. g *śúciṣ tvám* 'splendidus tu'. But beside this also *śúcis tvám*, a new formation after the analogy of *-as t-*

-ḥ for *-s* and *-ś* also where these did not become final until after the loss of a following consonant (7.), e g. *áḥ* 'he was' = **ās(t)*, *ájaiḥ* 'he overcame' = **ajāiś(t)*, cp. *ákaḥ* = **akart* above 3. Also *-ṭ* = *-št*, e. g 3. sg. injunct aor. *nát* = **naš-ṭ* from *naś-* 'to attain' (cp 3. sg. *váṣṭi* 'he is willing' from *vaś-*, § 399).

Original *-ɪs*, *-us* had become *-ɪž*, *-už* in prim. Aryan before voiced explosives and spirants, e g **patɪž dadāti* 'the master gives'. *-ɛ* (= Skr. *-ž*) already at an early period, perhaps in the Aryan prim community (cp Av. *duž-ɪta-* 'difficult of access' *duz-vacah-* 'speaking badly'), came to stand also before vowels, liquids and nasals through generalisation by analogy and here passed into *-ɪ* in Sanskrit, e. g. *śrír ɪyám* 'this splendour' from **śrīž*. This *-r* then came to be used by analogy also before voiced explosives and spirants, e g. *pátɪr dadāti* 'the master gives', *sūnúr dadāti* 'the son gives', *pátir bharati* 'the master brings' the regular forms had been **pátī dadāti*, **sūnú dadāti* (cp. *dū-dáś-* 'impious', § 591) and **pátid bharati* (cp. *druḍbhíṣ* ibid.). *r* was even also transferred to the ending *-as* in Vedic, as *áśvar* 'horse' *śrutár* 'renowned'

7. Of two or more final consonants (except *i̯* and *u̯* as the second components of diphthongs before consonants) the first only was preserved. *ábharan* 'they brought' from **a-bhara-nt*. *ákar* 'he made' from **a-kar-t* : Av. *cor̥p* (prim. Ar. **car-t*, Indg.

**qer-t*). *ás* 'he was' from **ās-t*. *á-jāiṣ* 'he overcame' from **a-jāi-ṣ-ṭ* : Av. *cōišt* 'he made known' from *caęš-*. *áp* 'water' from **ap-s* : Av. *afš*. *dēvá-tāt* 'divine service' from **-tāt-s* : Av. *a-mer'ta-tās* 'immortality'. *dík* 'region of the sky' from **dikṣ*, prim. f. **dík-s* (§ 401 rem. 2). *vák* 'speech' from **vākṣ* : Av. *vāxš* Lat. *vōx*, Indg. **u̯ōq-s* (§ 556, 1).

ábhār 'he brought' from **a-bhār-ṣ-ṭ* (*s*-aorist). Nom. sg. *práṅ* 'turned forwards' from **prāṅk-ṣ*. Nom. sg. *tudán* 'tundens' from **tudánt-s*.

-nn appears instead of *-n* after short vowels, as *ábharann*, *tudánn*.

The simplification of final consonant groups was older than the origin of short nasal vowels from short vowel + nasal before *s*. This is shown by the gen. sg. *dán* (*dánn*) from **dáns*, 2. sg. *ágan* (*ágann*) from **a-gans* See § 199.

If a long vowel preceded the nasal + *s*, *-n* stood in only absolute finality, in conditioned finality a long nasal vowel was pronounced and *-s* had the same form as after non-nasalised long vowels. *áśvān* 'equos' in pausa, but *áśvāṯs t-*, *áśvāṯś c-*, *áśvāḫ p-*, *áśvā a-*. *sūnún* 'filios' in pausa, but *sūnū̆ḫ p-*, *sūnū̆r a-*. *vidván* 'knowing' in pause, but *vidvā̆ṯs t-* etc. *átān* 'he stretched' (*s*-aorist, from **a-tān-s(-t)*, 1. sg. *átāṯs-am*) in pausa, but *átāṯ a-*.

Rem From this it seems to follow that *n*, after long vowels before *-s* not ending the sentence, had become with the preceding vowel a nasal vowel earlier than elsewhere Of course in this question there comes into consideration the fact that the long vowels in the accusative endings *-ān -ūn -īn* have not yet been satisfactorily explained (the last attempt at an explanation by Hanssen in Kuhn's Ztschr XXVII 615), and that the nom. *vidrān* was a new formation for **vidvā́s* (cp Av *vīδvå*, Gr. *εἰδώς*). Thus the ending long vowel + *n* + *s* is not proved as old inherited in any of the cases here.

§ 648. Sanskrit. Initials.

1. On the loss of *-a* after *-ē*, *-ō*, see § 647, 1.

2. *-ch-* (*-cch-*) fr. *-t ś-*, see § 647, 5.

3. *r* also caused cerebralisation of a following *n*, if the two sounds belonged to different words. In Vedic *pári ṇas*,

vár ṇáma, prá haṇyatē, índra ēṇam, agnér áveṇa. Cp. *bhára-māṇa-s* in § 199 and the phonetic explanation of its origin given there.

4. *-š* changed *t-* into *ṭ-*, as *śúciṣ ṭvám.* Cp. §§ 352. 647, 6.

Rem. On *hí ṣáḥ* etc. see § 646 initials 2.

§ 649. Iranian. Finals.

1. In late Avestic final *-ā, -ī, -ū* were shortened in polysyllabic words. Nom. sg. *haęna* 'army' : Skr. *sénā.* Nom. sg. *brāta* 'brother' : Skr. *bhrátā.* Nom. du. *puθra* 'the two sons' : Skr. *putrá.* Nom. sg. *ber^{e}zaiti* 'alta' : Skr. *bṛhatí.* Nom. du. *pauti* 'the two masters' : Skr. *pátī. mainyu* 'the two spirits' : Skr. *manyú.* On the other hand e. g. *z^{e}mā* instr. to *zå* 'earth' : Skr. *jmá.*

All final vowels are written as long in Gāθā, not only *haęnā mainyū,* but also e. g *barā* 2. sg. imper. = Skr. *bhára* Gr. *φέρε, ástī* 3. sg. indic. = Skr. *ásti* Gr. *ἐστι.* It is probably rightly assumed that these longs are due to a later transformation on the part of redactors and that they were pronounced short — perhaps with a few exceptions — in the same manner as elsewhere, at the time of the origin of the hymns. See Bartholomae Die Gāθā's p. 67 ff, Handbuch p. 3.

In Old Persian the deviations from the quantity, which is to be expected by the prim. Ar. sound-laws, are likewise only of a graphic nature, e. g. 3 sg. *akūtā* 'he made himself' : Skr. *ákṛta; abara(n)tā* : Skr. *ábharanta* Gr. *ἐφέροντο; amīy* 'I am' : Skr. *ásmi* Gr. *εἰμί; pāṭūv* 'let him protect' · Skr. *pátu.* Cp. § 21.

2. Late Av. *-ę* fr. *-ąa -ąā*, as *ye-hę* = Skr. *yá-sya.* See § 125 p. 115.

Av. *-ē* from *-aą*, as *aspē* = Skr. *áśvē.* See §§ 62 rem. 78. 94.

3. Av. *-ą̄* (written *-ą, -ąn, -ąm*) from *-ām -ān*, as *θwą θwąm* = Skr. *tvám.* See § 200.

4. Av. *-r^{e}* fr. *-r*, as *antar^{e}* = O.Pers. *a(n)tar* Skr. *antár.* See §§ 260. 624. The anaptyctic vowel arose before initial consonants, at the same time perhaps in absolute finality.

5. Final combinations of consonants were mostly permitted. Cp. the Av. forms *cor°þ, cōišt, āfš, vāxš* in § 647, 7. Exceptions under 6.

6. Prim. Ar. *-t* and *-d* after vowels (also anaptyctic) fell together in Av. in *-þ*. This sound or a similar one, in any case a consonantal element, was also spoken in O.Pers., since *-a* appears for prim. Ar. *-at* and *-ad*. If the sound *-a* had ended the word, this vocalic finality would have been expressed by the addition of the *a*-sign (in the transcription *-ā*) See § 21 rem. 3. sg. Av. *abaraþ* O.Pers. *abara* 'he brought' : Skr. *ábharat*. Av. *ciþ* O.Pers *ciy*, indefinite particle : Skr. *cid*, Lat *quid*.

-t appears unchanged in Av. in *-st* = prim. Ar. *-tst* prim. Indg. *-t°t*, as *hīšast*, and in *-št* = prim. Ar. *-št* prim. Indg. *-st*, as *cōišt*. On the other hand *-s* from prim Ar prim. Indg *-st*, as *ās*. See § 474 rem 2

-t was dropped after *n* in prim Iran. 3. pl. Av. *abaren* O Pers. *abara* Skr. *ábharan ábharann*, Indg. **ébheront*, rt. *bher-* 'bear'.

7. On Av. *-as* -ō O.Pers *-a* = prim. Ar. *-as* see §§ 556, 3. 558, 4. 646 finals 3.

Ar. *-ās* appears in Av as *-å* nom. pl fem *yå* 'quae' = Skr *yás*, 2. sg. conj. *barå* 'feras' = Skr. *bhárās*. Beside this *-a* (from older *-ā*, see 1): nom. pl *aspa* 'equi' = Skr. *áśvās*. *-å* probably corresponds to Skr *-ah*, and *-a* to Skr. *-ā*. The ending *-åsca* (*ca* 'and'), as in *yåscа*, seems to be a transformation of regular **-āscа* after *-å* Only *-ā* occurs in O.Pers., e. g. nom. pl. *martiyā* 'men', which may also correspond to Av. *-å* and *-a*. Cp. § 556, 3.

Opposed to Skr. acc. pl *tān* (§ 647, 7) and Gr. τάνς Goth *þans* stands in Av. *tą* (also written *tąn, tąm*).

Prim. Ar. *-š* = Indg. *-s* (§ 556, 1) was, as it seems, the rule in every connexion in both Iranian languages. Av. *ažiš* 'dragon' . Skr. *áhiš*, *manyuš* 'spirit' · Skr. *manyúš*. O.Pers. *fravartiš* Phraortes, *kūrūš* Cyrus Sanskrit relations of sandhi (see 647, 6), which certainly partly represent prim. Ar. differences

of finals, show that the Iran. *-š* did not stand regularly in all word-combinations.

§ 650. Iranian. Initials.

1. The development of anaptyctic vowels in Av., as *'rista-*, and the metathesis of *vr-*, connected with it, as **rvāta-*, may regularly have taken place partly in absolute initiality and partly after certain consonants. See §§ 157. 260. 624.

2. So also the transition of prim. Ar. *sm-* (through the intermediate stage *hm-*) to *m-*, in Av. *mahi* 'sumus' = Skr. *smási* etc. See § 558, 3.

Armenian.

§ 651. Finals.

1. The vowels in the originally final syllables of polysyllabic words disappeared, whether they themselves, or consonants following them, ended the word. *em* 'I am' : Skr. *ásmi*. *mardoy* 'of man' : Skr *mṛtásya*. Nom. *dustr* 'daughter' fr. **dustir*, older **dustēr* : Gr *θυγάτηρ*. *astł* 'star' : Gr. *ἀστήρ*. Nom acc. *mard* 'man' : Skr. *mṛtá-s*, *mṛtá-m* Nom *akn* 'eye' (gen. *akan*) : cp. Gr. *τέκτων*. *haur* 'of a father' : Gr. *πατρός* *dster* 'of a daughter' : *θυγατέρος*. Acc *marts* (*mards*) 'men' from **mardo-ns* · Gr Cret. *νόμο-νς*.

Monosyllables retained the vowel. *mi* 'lest' : Gr. *μή*. Nom. *šun* 'dog' from **ḱṷōn* (§ 87), but *akn* (see above). Acc. *eris* 'three' from **rıs*, **trıns* = Goth. *þrıns*, but *sirts* from **sirtıns* from stem *sirtı-* 'heart'.

2. *-m* disappeared: acc. *mard* = Skr. *mṛtá-m* (§ 202). *-n* remained: nom. *šun, akn*.

Rem Therefore *tasn* 'ten' cannot be derived regularly from Indg. **deḱṃ* (Skr. *daśa* Lat *decem*) We must start, as in the case of Goth. *taihun*, from **dekṃt* . the labial nasal became dental before *-t*, **tasant* became *tasn*. Or did the word receive its *-n* from *inn* 'nine' = **enṃ*, as Lat *novem* conversely took the place of **noven* after *decem*?

3. *-s* disappeared after vowels: nom. *mard* = Skr. *mṛtá-s*; gen. *haur* = Gr. *πατρός*. It remained, if a nasal preceded it: acc. *marts* (*mards*) = Indg. **mṛto-ns* (cp. § 202).

Initials. *e, o* or *a* was prefixed to an initial liquid, as *erek* 'evening' = Skr. *rájas*. See §§ 263. 625.

Greek.

§ 652. Prim. Greek finals.

1. Short vowels often suffered elision before vowels. The elision, e. g., in *ἀπ'αὐτοῦ, οἵ δ'ἄλλοι* etc. may be regarded as prim. Greek. See § 603 p. 457.

2. The contrast between *ποροτὶ* and **ποροτί* (*πρός*), *ἐνὶ* and **ἐνί* (*εἰν*) was inherited from the pre-Greek period. See § 645 final 2.

If a word ended in an *ι*-diphthong and the following word began with a sonant, *ι* was dropped as elsewhere (§ 130), e. g. *κα(ι) ἐπὶ, κα(ι) ἀγαθός* = Att *κἀπὶ, κἀγαθός*

3. *-m* became *-n*, as *τό-ν* = Skr *tá-m* See § 204 p. 171 f. This occurred in absolute finality and also before dentals. Cp. § 653 rem. 2.

4 *-ϝ* became *αρ* in absolute finality, as *οὖθαρ* 'udder' from **oudhϝ*. See § 285.

5. All explosives were dropped 3. sg *ἐφερε*. Skr. *ábharat*. 3. pl *ἔγνον* from **ἔγνο-ντ* (cp § 611): cp Lat. *era-nt* Dor. *ἦς* 'erat': Skr. Ved *ás*, Indg. **ēs-t*. *τό*: Skr *tá-d*. *τί*: Lat. *qui-d*. Voc. *γύναι* from **γύναιϝ*, cp. acc *γυναῖϝ-α* 3 sg. *ἦ* 'spoke' from **ἠϝκ-τ* (to Skr. perf. *áh-a*), with which goes the new formation 1. sg. *ἦν*.

The exceptions as Hom. *ὅττι* from **σϝόδ τι*, *ὅππως* from **σϝόδ πως*, *ἐκ*, where the consonant remained on account of the close connexion, show that this change belonged entirely or especially to the absolute finality.

6 *-s* and *-z* (e. g. **τίz δὲ* 'but who') had come over from the pre-Greek period. See § 645. final 3.

-ss became *-s* before consonants and when absolutely final. *μῦς* 'mouse' *μείς* 'month' from **mūs-s *mēns-s*. Dor. *πώς* 'foot' Att. *νεότης* 'youth' from **pōss *neϝo-tāss*, older **pōts *-tāts* (§ 490).

§ 653. Finals in the separate dialects.

1. The prim. Gr. elision (§ 652, 1) was extended further. With this went contraction (crasis), as Att. *τἄλλα* from *τὰ ἄλλα*, to which was joined aphaeresis, a phenomenon differing from the former rather in the written representation than in reality, as Att. *ἐμοῦ 'πάκουσον*.

The tendency to remove hiatus, was intentional in the literary language and in some works it is avoided altogether.

Rem 1 The so-called ν ἐφελκυστικόν has not arisen from an attempt to get rid of hiatus. Its use in antiquity was not at all regulated according to the theory of later grammarians The consonant rather had an original etymological value in some forms and then became further extended by analogy See the author's Gr Gr § 64 rem and the literature quoted there and G. Meyer Gr Gr.² 297 ff

The contractions in cases like Att *κἄπί* Dor. *κᾐπί* from *καὶ ἐπί* belonged to the period of the separate dialects (§ 652, 2).

2. The loss of the *-ι* in *-ηι -ωι -āι* (*-ῃ -ῳ -ᾳ*) as in Att. *τιθῇ τιμῇ ἵππῳ χώρᾳ* was effected in the same manner as medially See § 132.

3 *-ν* (= Indg. *-n* and *-m*) was assimilated to following guttural and labial sounds, e. g Att. *γῆγ ναὶ, τὴμ πόλιν, μισθούντωμ μὲν*. The omission of the nasal in writing in Cypr., e. g *na-o-to-te* = *ναὸ(ν) τό(ν)δε*, permits our assuming that here, as medially, a nasal vowel only was spoken. Cp. § 205.

Rem 2 *χθών* and *χιών*, already discussed in § 204 p 172, show that Indg final *-m* was not retained in *τὸμ, τὴμ* (cp Skr. *tá-m, tā-m*) before labials If Indg *-m* had been preserved before labials to any extent in prim Greek, *χθονός χιονος* would not then have taken the place of **χθομ-ος* **χιομ-ος*. *-ν* = Indg *-m* had been once generalised in prim. Greek

4. *-ρ* became assimilated to *δ-* in Cret (Gortyn), as *ἀνὴδ δῷ* = *ἀνὴρ δῷ*

5 The tendency, inherited from the pre-Greek period, to level explosives with different form of articulation (tenuis and media) operated further. *ἐγ Βυζαντίον* Att., *ἐγ Βαγχωδᾶν* Corinth. *ἐγβάλλω* Paros, *ἐγ δίκης* Att., *ἐγ δακτύλων* Att. (*ἐγ* = *ἐξ*, cp. *ἐκ ποδῶν* Att.), *ἐγδικάζω* Chios, *κἀδ δέ* Hom., *κάββαλον* Hom.

Assimilation of the position of articulation: Hom. *καπ πεδιόν* from *κατ π.*, *κάππεσον* from **κάτ-πεσον* Thess. *ἀτ τᾶς* from *ἀπ τᾶς*, Hom. *κάββαλον* from **κάδ-βαλον*, Cret. *ἐδδίηται* from **ἐγδίηται*.

6. *-s* and *-z* (§ 652, 6) became assimilated in Cret. (Gortyn) to *θ*, *δ-*, *λ-*, as *τὰθ θυγατέρας* (cp *πρόθθα* from *πρόσθα*, § 566), *νίέεδ δὲ, πατρὸδ δόντος* (cp the verbal ending *-άδδω* from **-αζδω*? § 493 rem.), *τοῖλ λείονσι*.

-z passed into *-ρ* in El., e. g. *τίρ* = *τίς*, *τᾶρ* = *τᾶς*, *πεπολιτευκώρ* = *πεπολιτευκώς*. *-s* beside this existed in the older periods. But the old regular spheres of use of *-ρ* and *-ς* were even then no longer kept apart (e. g. *γᾶρ τᾶρ* . . instead of *γᾶς τᾶρ* .) and the forms in *-ς* were gradually driven out by those in *-ρ*.

-ρ from *-z* also in the dialects of Laconia and Thera.

Cp Thess. *Θιορδότειος* beside Ion. etc. *Θεόδοτος* i. e. *Θεόζδοτος* and *Διόζοτος*, § 593.

§ 654. Initials in prim. Greek and later.

1. It was remarked in § 626 that doublets like *ὀμόργνῡμι* and *μόργνῡμι* (Skr. *marj-*) arose from differences of sandhi.

2. *r̥-*, *l̥-*, *l̥̄* always appear as *ἀρ-*, *ὀρ-* (before consonants), *ὀλ-* (before consonants), as *ἄρκτο-ς* 'bear', *ὀρθό-ς* 'upright'. This is undoubtedly the form for absolute initials. On the other hand the particle *ῥά* = Lith. *ir* Indg. **r̥* arose after consonants. Cp §§ 292. 306.

3. On differences like *στέγος* and *τέγος* 'roof' from rt. *steg-*, *σμερδαλέο-ς* 'terrible' (OHG. *smerzo*) and *μειδῆσαι* 'to smile' (Skr. *smáyatē*), which mostly seem to go back to the pre-Greek period, see §§ 563, 6. 589, 3.

4. Where double consonants had arisen by assimilation, they were simplified when absolutely initial, and probably also after consonants. *ῥεῖ* = *srávati*, beside *ἔρρει* (§ 565). *νίφα* beside *ἀγά-νιφο-ς* from rt. *sneigh-* (§ 565). *μειδήσαι* beside *φιλο-μμειδής* (see 3). *σεῦε* beside *ἔ-σσευε* : Skr. *cyav-* (§ 489). The geminated consonants still appear in: Hom. *τε ῥηξειν M.* 198, as *ἔ-ρρεξα*; *ὅτε σσεύαιτο P* 463, as *ἐ-σσευε ἐ-σσυτο*; Ionic *οποῖά σσα*, Att.

ὁποῖά ττα, *πηνίκα ττα* from **qja*, cp. Megar. *σά* 'quae?' (§ 489). Cp. also Thess. inscript. *οἱ ττολίαρχοι* from *οἱ πτ.* (as *ἀρχιττολιαρχέντος*, *Λεττίναιος*, see § 333).

Rem. In *ὁποῖά ττα*, *σμικρά τια* etc. was developed the feeling for a causal dependence of the *ττα* on preceding *-α*, so that these combinations were felt as *ὁποῖ' ἄττα*, *σμικρ' ἄττα*. The result was that *ἄττα* came to be used independently also Thus in Plato *τέτταρα ἐν αὐτοῖς ἄττα*. In like manner arose the postposition *ούνεκα* = *ἕνεκα* 'on account of' in combinations like *ἐκείνούνεκα*, where *ἕνεκα* had been fused by crasis with final *-ου*. See Wackernagel in Kuhn's Ztschr XXVIII 109 ff.

5. *τράπεζα* '(four legged) table' in absolute initiality from **πτραπεζα*, Indg. **qtŋr-*. See § 490.

Italic.

§ 655. Finals. Owing to the scantiness of the Umbrian-Samnitic materials, handed down to us, it remains doubtful at what period certain processes of sandhi took place in Latin.

1. Prim. Ital. *-ι* became in Lat partly *-e*, and was partly dropped. The former: *mare*, *animāle*, *sedīle*, *ante*, loc. *rūre* see § 33. The latter: *aut* : Osc. *avti* *avt* Umbr. ute *ote* 'aut'. *tot* : cp. *toti-dem*. *et* : Gr. *ἔτι* 'still', again'. *per-* (*per-idōneu-s*, *per-māgnu-s*) : Gr. *πέρι*. *animal*, *exemplar*, etc. It is I believe no mere accident that the latter form of the final occurs especially in such words as seldom or never ended the sentence.

Prim. Ital. *-e* was in Latin partly retained and partly dropped. The former: *eque*, *legite*, *quīnque*, *neque*, *neve*. The latter: *nec*, *neu*, *quī-n*, *satī-n*, *dīc dūc* beside older *dīce dūce*. Umbr. pum-pe 'quomque' and *nei-p* *ne-p* 'neque, neve, non', voc *Tefre* Osc. nei-p *ne-p* 'neque, neve'.

Prim. Italic. *-o* and *-a* became *-e* in Latin. *sequere* : Gr. *ἕπεο* (§ 81). *pede* instr. : Gr *πεδά* (§ 97 p. 91). Loss of *-o* : Lat. *ap-eriō* (§ 499) and so *ab eō* etc, Pelign. *af-ded* 'abdidit' : Gr. *ἄπο*; *-o* was retained in Lat. *po-situs*, where the already prim. Indg. loss of the initial *a-* preserved the *-o* from disappearing.

Prim. Italic *-i*, *-e*, *-o*, *-a* had thus fallen together in *-e* in Latin. This was connected with the position in unaccented

syllables. Loss of the vowel occurred regularly before vowels, partly perhaps also by syncope (before consonants), see §§ 633. 679.

Rem 1. It is doubtful whether the elision of vowels, which became the rule in Lat verse (e g Lucret I 234 *átque ante ácta*, four syllables), is directly connected historically with the loss before vowels In any case however the custom of the poets, which extended itself to long final vowels also (e g. *spatio átque* in the same verse, four syllables), was founded on a stopping of hiatus in the ordinary language of the people.

2. The Romans began to shorten *-ō -ā* already in the pre-literary period. First of all in iambic words. The rest followed gradually, for the most part probably by form-transference. *duo* : Gr. *δύω*. *ego* : Gr. *ἐγώ*. *modo* instr. sg. : cp. Lith. *gerù*, *gerǟ́-ju*. *fero* : *φέρω*. *homo* : cp. Skr *áśmā*. *equa* : Skr. *áśvā*. *juga* : Skr. Ved. *yugā́*. In the poets the forms with long vowel still occur beside those with the shortened, and it is pretty easy to follow in them the course of development, which the shortening took; e. g. *ambŏ* beside *ambō* came into existence later than *duŏ*. Cp. Stadelmann De quantitate vocalium Latinas voces terminantium, Lucerne 1884 [1]) Especially instructive are the numerals as *trīgintā septuāgintā*, old nom. acc pl neut. *-ā* remained here, because these words were early isolated from the connexion in thought with *juga bona* etc. (cp. *trīgintā viri*). They prove that the shortening of neuters with non-iambic ending, *armenta* etc., was due to the analogy of *juga* etc.

Contemporaneous shortening of *-ē* in locatives from *i*-stems as *peregre*, if it is true that these with Skr. loc. as *agnā́* go back to Indg. *-ēi*. See p. 489 and the accidence.

-ā -ē, which arose by contraction, also underwent shortening in iambic word-forms. In the dramatic poets imper. *roga puta mone habe* etc., originally **-ā-ie *-eie *-ē-ie*. But no generalisation took place here (not imper. *plantă* etc.). In the classical period it was again (with few exceptions) *rogā* etc.; the long

1) With reference to this treatise and other expositions of the vowel shortening in question, it does not seem superfluous to point out that *equă* cannot be the old vocative form (cp Gr. *νύμφᾰ*) nor *duŏ* identical with Gr. *δύο* By 1. we should expect **eque* and **due*, like *pede* and *sequere*.

vowels were thus restored again after the analogy of non-iambic forms like *plantā*.

The relations of quantity cannot for the most part be controlled in Umbrian-Samnitic. We saw in § 105 that *-ā* in the nom. sg. fem. and nom. acc. pl. neut. had become an *o*-vowel in Umbr. and Oscan. Since this cannot be separated from the *o* in Umbr. *pihos* 'piatus', and this *o* was certainly long, it must be assumed that the final vowel was still long *-a* at the time the weakening took place.

3. From *-ōi̯*, *-āi̯* Lat. *-ō*, *-ā*, e. g. dat. *equō*, *Mātūtā*. See § 136.

Lat. loc. *ūsū*, Umbr. manuv-e 'in manu' contained Indg. *-ōu̯*, if they were locatives like Skr *sūnāú* See § 85.

4 Long vowels were shortened in Latin before *-t*, *-m*, *-r*, *-l*. This change belongs to the archaic period, in which poets still often have long vowels. *siet siem* beside *siēs*. *amet amem amer* beside *amēs amēris*. *pater* : Gr *πατήρ*. *erat eram* beside *erās loquar* beside *loquātur*. *equam* : Skr. *áśvām*. *exemplar animal* beside *exemplāre animāle* (cp. 1). *clāmor* beside *clāmōris*. *vīderim vīderit*, *sim sit* beside *vīderīmus*, *sīmus* The long vowels remained in monosyllabic words in *-r*, *-l* *fār sōl*

Osc paam acc. sg. 'quam'.

5. In Umbr.-Samn. short vowels were syncopated in final syllables ending in a consonant, as Umbr. pihaz 'piatus', Osc. húrz hortus'. See § 633. The contrast between Umbr Ikuvins 'Iguvinus' Osc. Púmpaiians 'Pompeianus' on the one hand and Umbr. *abrof* 'apros' Osc. feíhúss 'fines', whose endings arose from **-ons* (9.), on the other, proves that the former syncope was late; the *-ns* in the nom. sg. must have been restored again through the influence of form-system.

On the samprasāraṇa in Lat. Umbr. *ager* from prim. Ital. **agr̥s* see 9 p. 506.

6. Final *-m* and *-n* may have been assimilated even in prim. Ital. to succeding consonants produced by different organs e. g. **kʷoɔ kʷe* from **kʷom kʷe* (Lat. *quonque*, Umbr. pumpe). See § 207. On *-m* in Lat. see § 208 p. 176. *-n*

was assimilated in the same language, as inscript. *im bello* etc. shows. On *-m* and *-n* in Umbr.-Samn. see § 209.

On Umbr. *-r* see § 270.

7. *-t*, so far as it was not dropped, appears in Italic as *-t* and *-d*. Lat. *siet sient, erat erant;* on archaic inscriptions *feced fecid* etc. Osc. fusíd 'esset' (cf. Lat. conj perf. *fuerit*), pútíad 'possit'. I am not satisfied with any of the various explanations of this duality (Bugge Kuhn's Ztschr. XXII 385 f., Osthoff Rhein. Mus. XXXVI 487 f., Stadelmann De quantitate etc. p. 64 sq., Danielsson in Pauli's Altit. Stud. III 148).

-t disappeared in Latin after *c*, *s*, *r*. *lac* fr. **lact*; the form *lact* in Varro was formed anew after the analogy of the other cases. *os* fr. **ost*, cp. Av. gen. sg. *ast-ō* 'of a bone'. *sem-per tantis-per* etc : Osc. *petiro-pert* 'quater', Gr. Pamphyl. *περτ-ίδωκε*; was the cpf. **perti?*

8 *-d* remained in Lat. after short vowels : *id, quid, quod, illud, ad* It disappeared after long vowels in the archaic period, from which many forms with *-d* are handed down to us: abl. *equō(d) equā(d) mē(d) tē(d)*, imper *estō(d)*

Umbr. asam-a asam-ař 'ad aram' (ř from *d*, § 369 p. 280). It was dropped everywhere after long vowels: abl. *pihaclu* 'piaculo', imper. sumtu 'sumito'.

Osc. píd Pelign. *pid* 'quid', Osc. púd *pod* quod', abl. *dolud* 'dolo' *tovtad* 'civitate' akrid 'acri', imper. estud 'esto' *actud* 'agito'.

-d disappeared in Lat. or in prim. Italic after *r* : Lat. *cor* fr. **cord*, cp. *cord-is*.

9. *-s* after explosives remained in absolute finality in all dialects. Lat *ex, vōx, au-spex, pēs novitās* from **pēts* **novitāts*, *agēns* from **agents*, *con-cors* from **-corts*, *puls* from **pults*, *nox* from **norts*, *abs* i. e. *aps*. Umbr. fratreks *fratrexs* 'fratricus', pihaz 'piatus'. Osc. meddíss *meddis* 'meddix' from **-diks*, húrz 'hortus', az 'ad' i. e. *ad+s*.

-nts in Umbr. forms an exception: zeřef 'sedens', like *abrof* 'apros' (see below).

For conditional finality cp. Lat. *ē* Umbr. eh (i. e. *ē*) from *eks*, § 570.

-s after vowels. Lat. *equo-s*, *genus*. Umbr. puntes 'pontes'. Osc. *scriftas* pl femin. 'scriptae', Lúvkanateís gen. 'Lucanatis'.

-s is often wanting on Lat. archaic inscriptions, e. g. *Cornelio* = *Cornēlius*, *locu* = *locus*, *mino* = *minus*. The archaic poets (as also Cicero in his juvenile poems) allowed the sound sometimes to make strong position, sometimes not, e. g. in dactylic hexameters *imāgini(s) fórmam*, *flúctibu(s) mándet*. The writers of the classical period restored *-s* in all cases. It is frequently left out again on the inscriptions of the later imperial period. The conclusion drawn from these facts, that *-s* after vowels had throughout a weak articulation already several centuries B. C. which was retained in the vulgar language, while the full articulation was restored in the classical period in the language of cultured persons is unsatisfactory from the very fact that the sound has remained in some Romance developments down to modern times. It ought rather to be assumed that just as *s* (like *z*) disappeared medially before nasals, *l* and *d* (§§ 570, 594), it was also dropped before these consonants at the end of words, they said e. g. nom. *manu laeva* gen. *manū laevae* (like *corpulentu-s* from **corpozlento-s*) beside *manus parva* etc; the different forms were then used promiscuously, especially by the poets, to whom these sentence-doublets, in the case of final syllables with short vowel, afforded considerable ease; grammatical reflexion, regard for clearness of word-form, and regard to Greek (*equos*: ἵππος, *genus*: γένος etc.) procured complete supremacy for the forms in *-s* in the literary language of the classical period.

Just as *s* had become *z* medially between vowels (§ 569), *-z* may also have arisen regularly finally before vowels. The *-r*, which is to be expected as its continuation, exists only in *dir-imo* and similar words.

In Umbr. nom. pl. Ikuvinus Ikuvinu and *Iiovinur* 'Iguvini', Indg. *-ōs*; the last form presupposes *-z*. What the sandhi processes were which gave rise to these differences remains

undetermined; it must be taken into account that *s* beside the voiceless sound perhaps represented the voiced sound also.

Rem 2 The question of postvocalic *-s* in the Italic languages requires a thorough investigation, in which the next following initial sound in the texts handed down to us must carefully be taken into account. Our exposition given above is especially intended to suggest such an investigation

-s after liquids had disappeared throughout the Italic branch. Cp. the nom. sg. Lat. *par, fūr, sōl, ager* (st. *agro-*), *ācer* (st. *ācri-*), *famul* (st *famulo-*), Umbr. *ager* 'ager' (gen. *agre*), katel 'catulus' (acc. katlu), Osc. Fruntor 'Frunter', *famel*, Mutil 'Mutilus'. We may assume that the changes **agros* **agrs* **agers ager* and **ākris* **ākrs* **ākers āker* were effected in the period of the prim. Ital. community. Cp. Lat *sacerdōs* from **sácro-dōts* and *sēcernō* from **sḗcrinō*. See § 33. 623 rem. 1. 633.

-s after nasals Lat. *aprōs* Umbr *abrof* fr. prim Ital. **apro-ns* (cp. Goth *vulfa-ns* 'wolves'), Osc. feihúss 'fines'. See §§ 208. 209.

§ 656. Initials.

1. In the vowel elision mentioned in § 655, 1, the *e-* was lost in *est*, which was attached enclitically: *itast, sitast* = *ita est, sita est*. These forms being felt as *ita'st, sita'st*, there were formed after them also *autemst, situst, situmst*, etc.

2. *u̯-, i̯-* appear in Latin as *an-, ar-*, as *antae, arduos*. See §§ 253. 306. They were the forms of absolute initiality.

3. *f* = Indg. *bh dh gh* maintained itself in Lat. only initially, as *ferō fūmu-s formu-s*. See § 509. It was the form of absolute initiality.

4. Lat. *stlīs slīs līs* etc., see §§ 503. 570.

Old Irish.[1]

§ 657. Finals.

1. Final short vowels were dropped in polysyllabic words,

1) With my insufficient knowledge of the sound-laws of the Britann. dialects I am not in a position everywhere to keep apart properly what

except when *i* preceded. This loss was not effected until after the vowels had imparted their timbre (palatal, labial) to the preceding consonants (§ 640), and thus the quality of the dropped vowels is mostly still recognisable.

Voc. *a maicc* 'son' from **makʷe*: cp. Gr. ἄδελφε. Imper. sg. *beir* 'bear' from **bere*: Gr. φέρε. Imper. *berid* 'bear ye' from **berete*: Gr. φέρετε. *ad-cón-dairc* 'conspexit' from **(de-)dorce*: Gr. δέδορκε. *berid* 'he bears' from **bereti*: O.Bulg. *beretĭ*. *is* 'is' from **esti*: Gr. ἔστι. *berit* 'they bear' from **beronti* (cp. § 212): Gr. Dor. φέροντι. Dat. (loc) *athir* 'patri' from **(p)ater-i* or **(p)atr-i* (cp *brathar* from **brētrā*, § 623 rem. 1): Gr. πατέρι πατρί. Cp. also *imb-* 'around, about': Gall. *ambi-* Gr. ἀμφί.

Pres. secund. 3. sg *no-bered no-berad* 'ferebat, ferret' from **bereto*· Gr. φέρετο Skr. *bharata*. Also the 3. pl. pres. *do-berat*, which cannot be explained from **beronti*, may be middle: Gr. φέροντο; for another explanation see § 82 p. 76. Loss of Indg. *-a* in the voc. *a thuath* 'folk'? cp Gr. νύμφᾰ. *suth* n. 'fetus' fr. **sutu*: Gr. cp. μέθυ.

2. Similarly long vowels disappeared, except when *ɫ* preceded.

Nom. acc. du *sūil* 'eyes' from **sūlī*: cp Skr. *pátī* 'masters'. Nom. sg. fem. *Brigit* from **brigentī*: Skr. *bṛhatĭ* femin. 'high'.

as-biur 'I bring forward, say' from **-berō*: Gr. φέρω. Dat. (instr.) sg. *fiur* (to nom. *fer* 'man') from **u̯irō*: Lith. *gerù gerū̃-ju*. Nom. *tuath* 'folk' from **tōtā*, **teu̯tā*: Goth. *þiuda*. Nom. acc pl. neut. *trī chēt* 'three hundreds' from **centā*: Skr. Ved *trí śatá*.

Nom. sg. fem. **brétrā* 'word' became **brétɣ*, then *briathar*. Gen. **cētlī*, dat. **cētlō* (stem *cētlo-* 'song' from **can-tlo-*, pl. nom. *cētla* dat. *cētlaib*) became *cētil, cētul* through an intermediate stage with *ɫ*, which in the former case had an *i*- and in the latter an *u*-timbre. See §§ 623 rem. 1. 634.

is to be ascribed to the special Gaelic and what to the prim. Keltic period of development.

3. After *i̯* (*iı̯*) short vowels united with this and formed sonantal vowels (cp. pp. 124. 125) and long vowels were shortened.

Voc. *ā chēli* (st. *cēliı̯o-* 'companion') beside *ā maicc.*

no rāidiu 'I speak' beside *as-biur.* Dat. instr. *ailiu, cēliu* beside *fiur. air-mitiu* 'honour' : Lat. *mentiō*

Rem. *-ı̯u* further became *-i* Hence e. *ḳ* dat. *duni* beside *duniu* 'homini'. This phenomenon is parallel with the transition of *gnímⁿi* to *gnímа* (§ 640 rem.).

4. *i̯*-diphthongs became monophthongic and were then treated like long vowels. Nom. pl. *eich* 'equi' from **ekṷī *ekṷoi̯*, see § 82. Nom. acc. du. fem. *tuaith* from **tōtī *teṷtai̯*, see § 98; cp. *dī* 'two' = Skr. *dvé.* Dat. sg. *tuaith* from **tōtī* and older probably **teṷtāi̯* : Gr. *-ᾳ*[1]).

5. If a consonant followed a short final vowel in polysyllabic words, the vowel disappeared, where it was not preceded by *i̯* and had not become long by 'compensation lengthening'.

fer 'man' from **ṷiro-s* Nom. acc. neutr. *tech* 'house' fr. **tegos* : Gr. στέγος. Gen. *bethad* 'of life' from **biṷo-tūt-os* cp Gr. ποδ-ός. *athir* 'fathers' from **(p)ater-es*: Gr. πατέρ-ες. *fāith* 'poet' from **ṷāti-s*: cp. Lat. *hosti-s. fid* 'tree' from **ṷidu-s*: OHG. *witu.*

fer n-(aile) 'virum' (alium)' from **ṷiron* : Lat *viru-m. sūil n-(aile)* 'oculum (alium)' *from **sūlin* : cp. Lat. *siti-m. fid n-(aile)* 'arborem (aliam)' from **ṷidu-n* : cp. Lat. *fructu-m. deich m-(bai)* 'ten (cows)' from **decen,* Indg. **dekṃ. ainm n-(abstil)* 'nomen (apostoli)' from **an-men*, Indg. **-mṇ.*

no beir 'fert' from **beret* : Gr. φέρει Skr. *bhárat.*

In *eter etir* 'between' = Lat. *inter* **-ter* had in the first instance become **-tr̥.* Cp. *criathar* under 2.

A short vowel combined with preceding *i̯* (*iı̯*) and formed a sonantal vowel (cp 3.). Nom. *aile cēle* acc. *aile n- cēle n-* beside nom. *fer* acc. *fer n-.*

---

1) If this explanation of the dat. sg *tuaith* be right, the dat *fiur cēliu*, which we brought under 2 and 3 as instr. in original *-ō*, cannot at the same time be, as has been believed, the Indg dat. form in *-ōi̯* (Gr. *-ῳ*). For it is not probable that *-ōi̯* should have become *-ō*, while *-āi̯* became *-ai̯ -i.*

6. If a consonant (except *-m*, see 7.) still followed an original long final vowel, the vowel was shortened. So, too, were long vowels which had arisen by 'compensation lengthening'.

athir 'father' · Gr. *πατήρ*. *siur* 'sister' from **svi(s)ur* : Lat. *soror*, older *sorōr*.

Nom. *tuatha* 'peoples' from **tōtās* **teutās* : Goth. *þiudōs*, Osc. *scriftas*; cp. *mnā* 'women' = Skr. Ved. *gnās*. Voc. *a firu* 'viri' from **wirōs* : Goth *vaírōs*, Osc Núvlanús. Compar. *laigiu* 'smaller' from **lag-iōs*, see § 139.

Conj *-air-ema* 'suscipiat' from **emāt* : Lat *emat*. Indic. *no chara* 'he loves' from **carāt*, originally **-a-ie-t*; conj. *ro-chara* from **carāt*, orig **-a-iā-t*

Long vowels by compensation lengthening. Acc. pl. *firu* 'men' *fāthi* 'poets' *cruthu* 'forms, shapes' from **-ōs* **-īs* **-ūs*, orig. **-o-ns* **-i-ns* **-u-ns*. Nom. *care cara* 'friend' (gen. *carat* dat. *carit*) from **carent-s*. *fiche* 'twenty' (gen. *fichet* dat. *fichit*) from **wikent-s*, orig. stem-form **wikṇt-* or **wikm̥t-*. *tricha* 'thirty' (gen. *trichat* dat *trichait trichit*) from **tricont-s* Cp. § 212.

7 Long vowels seem to have been early shortened before nasals (cp. Latin § 655, 4) and then to have been treated by 5. Conj. *do-ber* 'afferam, dem' from **berām* : Lat. *feram* O.Bulg. *berą*, cpf. **bherā-m*. Gen. *ech n-(aile)* 'equorum (aliorum) from **ekuōn* (Gr ἵππων) or from **ekuon* (cp. O.Bulg. *vlŭkŭ*)? cp. the accidence. --

All the vowel shortenings and loss of vowels discussed in 1.—7, were caused by the development of the strongly expiratory accent at the beginning of words. Cp 634. 684. 685.

8. *-m* became *-n* in prim. Keltic This was often retained at the beginning of the following word, before vowel or media. Examples under 5. and 7. and in § 211.

9. *-t* was dropped. *no beir* from **beret*. *for-tē* *s*-fut. 'he will help' (1. pl. *for-tiasam*) from **-stēkst* i. e **steugh+s+t*. Did the dental in original *-nt* remain? See § 76.

10. *-s* was dropped everywhere.

Vowel + *s*. *fer* 'man' from **wiro-s* (5). *tuatha* 'peoples' from **tōtās*, *mnā* 'women' from **bnās* (6.).

-ns. firu 'viros' from **ϕiron-s* (6.). *mī* 'month' (gen. *mīs*) from **mēns* : Gr. *μείς*.

-ts -nts. beothu 'life' (gen. *bethad*) from **-tūt-s*, *care cara* 'friend' from **carents* (6.).

-ks. rī 'king' (gen. *rīg*) from **rīss *rīks* : Gall. *-rīx*, Lat. *rēx*. *aıl* 'rock, stone' (gen. *ailech* dat. *ailig*) from **aileks*.

§ 658. Initials.

1. Just as *t* and *c* became *þ* (written *th*) and *χ* (*ch*) in the body of a word after vowels (§ 514), spirants also arose initially after words ending in a vowel. This affection took place, before the final consonants had been dropped (§ 657). For no spirants show themselves where a final consonant did not originally stand. Thus we arrive at the following important conclusion for the investigation of the history of sounds: word-forms, after which spirants generally make their appearance, originally ended in vowels, and those, after which the tenues remained, originally ended in consonants To these were added various innovations by transference of forms, and the law can still be observed with any consistency in our monuments only in groups of words which are syntactically closely connected. *ā thuath* 'O folk', *ā chara* 'O friend' : Gr. *ὦ* Lat. *ō*. *dā charit* 'two friends', *dī thuath* 'two peoples' : Skr. *dvá, dvé ro charus* s-pret. 'amavi', *ro* = Gr. *πρό*. Cp. the list of the forms, behind which spirants appear for the tenues, in Windisch's Ir Gram. § 92. Compare also the initial sound after the members of compounds. *oen-chossid* 'one legged' from **oino- c., so-thenga* 'eloquent' from **su-t.*

t became *d* in pre-accentual syllables, when absolutely initial, e. g. *do-gúr* 'he calls', but *tó-gairm* 'a call'; *do-máthir* thy mother', but *co-t-máthir* 'with thy mother' *t-és-ērge* 'thy resurrection', cp. Skr. *táva* Gr *τεό-ς*). So also Mid. Cymr. *dy wlat* 'thy land' (*gwlat*), but *yth wlat* 'in thy land'.

In the same positions where the tenues became spirants, *s-* passed into *s-* (*h-*) and *f-* was dropped (the muteness of the *f* is represented by *ḟ*). *no sessam* 'or standing' : cp. Lat. *sistō*. *ā fir* 'O man'. Compare the transition of medial *s* to *h*, see § 576, and the loss of medial *ϕ*, see § 174.

We saw in § 522 that *b, d, g* had become *b̆, d̆, ɣ* after vowels, while the letters *b, d, g* were retained in Old Irish writings. That this change was also effected in conditional initiality, that e. g. *a dē* 'O god' was pronounced *a d̆ē*, may be concluded from the modern orthography which also puts *bh, dh, gh* initially.

A similar relation existed between *siur* and *fiur* 'sister' from **sụe(s)ōr* as between *s-* and *ṡ-*. The form with *f-* stands regularly after words ending in a vowel. Cp. § 175.

2. We saw in §§ 212. 513 that *-nt-* and *-nc-* became *-nd-* and *-ng-* and the nasal disappeared, e. g. *cēt* pronounced *cēd* (Mod.Ir. *ceud*) 'hundred' = Cymr. *cant* Lat. *centum*; *ēc* pronounced *ēg* (Mod.Ir *eug*) 'death' = Bret. *ancou*. Further by § 520, that *-mb-* and *-nd-* became *-mm-* and *-nn-* in O.Irish, e. g. *camm* 'crooked' = Gall. *cambo-*. Both previous stages occur also in the junction of connected words.

From gen. pl. **inna n-cert* 'of the rights', **inna n-tuath* 'of the peoples' (cp. *inna n-anmann* 'of the names' etc. §§ 211. 657, 5. 7. 8) arose *inna gert, inna duath*, generally written *inna cert, inna tuath* (like *ēc, cēt* instead of *ēg, cēd*); it was only in few cases in the O.Ir. period that account was taken of the change which had taken place, by the writing of the media. In Mod.Ir. orthography they write *gc-, dt-*, e. g. *na gceart* = O.Ir. *(in)na cert*. This phenomenon is called eclipsis destituens in Keltic grammar.

Gen pl. *inna m-bō* 'of the cows' became *inna mmō, inna mō, inna n-dath* 'of the colours' became *inna nnath, inna nath*. The old spelling was however retained, and the spelling *-mb-* and *-nd-* also existed medially in the O.Ir. period beside the phonetic spelling. Cp. also *athconnarc* beside *athcondarc* 'I looked' (to Gr. *δέδορκα*). This phenomenon is called eclipsis nasalis in Keltic grammar.

Gen. pl. *inna sūle* 'of the eyes' from **inna n-sūle*, just as medial *n* disappeared before *s*, e. g. in *gēis* 'swan', see § 212.

3. *s-* disappeared before *t*, e. g. *tiagaim* 'I stride, go': Gr. *στείχω*. See § 575.

Germanic.

§ 659. Finals in Prim. Germanic.

1. Final long and short vowels underwent no reduction at this period.

**feχu* n. 'cattle' Goth. *faihu* : Skr. *páśu*. **berizi* 'thou bearest' **beriđi* 'he bears' Goth. *bairis bairiþ* : Skr. *bhárasi bhárati*. **uχsin-i* loc. sg. of the st. **uχsen-* 'ox' Goth. *aúhsin*: cp. Skr. *ukšáṇ-i*. **μaχti*, older **μaχte* 'he knows' Goth *váit* : Gr *οἶδε*. **μulfi*, older **μulfe* voc. 'wolf' Goth *vulf*: Gr. *λύκε*. **aƀa* 'of, from' Goth. *af* (*ab-u*): Gr. *ἄπο*

Rem. Some assume that all short vowels except *-u* were already dropped in prim Germ in unaccented syllables. But then **berizi berirđi* must necessarily appear in Goth as **bairs *bairþ* and the 2 sg imper **μarđaμ* = Skr. *vartáya* Indg **μortéy* as **vaúrđi* (whereas it is *fra-vaúrdei* 'destroy')

**friμōndī* fem. 'friend' Goth. *frijōndi*: cp. Skr. part. fem. *tudatī* 'tundens'. **χumō* 'homo' Goth. *guma* Lat. *homō*. Nom. acc. pl. neut. **μukō* 'yokes', Goth. *juka* beside *þō*: cp. Lat. *oppida* *oppida*, Skr Ved. *yugā́*. Nom sg. fem. **uμnō* 'una' Goth. *áina* beside *áinō-hun sō*· Gr. *οἰνή* 'the ace on dice'.

2. In like manner *-aμ* = Indg. *-oy* and *-aμ* suffered no change. Nom. pl. **blindai* 'blind' Goth. *blindái* OHG. *blinte*: cp. Gr. *καλοί*. Loc. sg. **μulfaμ* (**μulfa-* 'wolf'), OHG. *wolfe* O.Icel *ulfe ulfi*: cp. Gr *οἴκοι* 'at home'.

3. *-ōy, -ōμ* became *-aμ, -aμ*. Dat. sg. fem. **χeƀōμ* 'to the gift' became **χeƀaμ* Goth. *gibái*: cp. Gr. *χώρᾳ* (cp. also dat sg. Goth. *þizái* and Skr. *tásyāi*). OHG. *wolfe* (2) was also probably a dat. form, which arose from **μulfōy*. Gr. *λύκῳ*. **aχtōμ* 'eight' became **aχtaμ* Goth. *ahtáu* OHG. *ahto*. Loc. sg. **sunōμ* (*sunu-* 'son') became **sunaμ* Goth. *sunáu*. It is more uncertain whether Goth. *anstái* (st. *ansti-* f 'favour') came from **anstēμ* (§ 645 finals 1.)

These shortenings were carried out in absolute finality and before initial consonants. Cp. **flaμzē* (O.Icel. *fleire*) fr. **flēμzē* § 614.

4. Vowels remained unshortened before nasals, liquids, ex-

plosives and spirants, e. g. nom. sg. **ɣulfaz* nom. pl. **ɣulfōz*: Skr. *vṛ́kas vṛ́kās*.

5. *-m* became *-n* and thus fell together with Indg. *-n*. Acc. sg. **ɣulfa-n *sunu-n* Goth. *vulf sunu*, cp. Goth. *þan-a* 'the' : Skr. *vṛ́ka-m sūnú-m tá-m*. Gen. pl. **ʒebōn* Goth. *gibō*: cp. Av. *vanąm* 'of trees'. Indg. *-n* e. g. in nom. sg. **raþi̯ōn* 'account' Goth. *raþjō* : cp. Gr. *μήκων* 'poppy'. Later *-n* dropped out after short vowels, whereas it was only reduced in some way or other after long vowels. **ɣulfa-n *sunu-n* became **ɣulfa *sunu*, but **ʒebōn *raþi̯ōn* became **ʒebō* *raþi̯ō**. Cp. § 214 p. 182.

-rm (through the intermediate stage *-rn*) probably became *-r* in prim. Germ. For Goth. acc. *brōþar* 'fratrem' probably arose from **bhrā́torm*. See § 645, finals 2.

6. Explosives dropped out. It cannot be determined whether they had previously undergone all the stages of sound-shifting (§ 527 ff) If we assume that they disappeared after undergoing complete sound-shifting, the prim. Germ. changes are to be exhibited as follow: - 3. sg. opt. pres. **béra̯i̯(t)* 'he may bear' Goth *baírái* : Skr. *bhárēt* Indg **bhéro̯i̯t*. 3. sg. opt. pf. **bēri̯(t)* Goth *bēri* cp Lat *velit*, the ending *-ī-t* was a new formation for Indg *-i̯ē-t*, see the accidence. 3. sg. **i̯i̯ē(t)* 'went', Goth. *iddja* · Skr *á-yāt*. 3. pl. opt. pres. **béra̯i̯n(t)*, probably a Germ. new formation, Goth. *baíráin-a* (the particle *-ō* may have been first added after the dropping of the dental) : cp. Gr. *φέροιν* subsidiary form of *φέροιεν*. 3. pl. opt. pf. **berīn(þ)*, certainly a Germ. new formation (see the accidence), Goth. *bērein-a*. 3. pl. indic. pf. **bērún(þ)*, Goth. *bērun*; *-un(þ)* = Indg. *-n̥t*, § 226. **téχun(t)* 'ten', Goth. *taíhun* : cp. Lith. st. *dẽszimt-*; the same ending in Goth. *niun* 'nine', but this is probably a Germ. new formation after the word for ten, since judging from the other Indg. languages we should rather expect **niu* (= **neɣɣ*) in Goth. (§ 179).

Goth. *þamma* 'to the' may have been ablative, prim. f. **tosmēd* (cp. *hvammē-h*), in which case OHG. *demu* would be fr. **tesmōd* : Skr. *tásmāt*; but the prim. Germ. ending *-ē -ō*

might equally have been an instrumental ending, Indg. *-ē -ō* (Goth. instr. *þē*). The same doubt exists in the case of Goth. *vulfa*, which can be traced back to Indg. **ulqēd -ōd* abl. and to **ulqē -ō* instr. and possibly was a continuation of both Indg. cases at the same time. Cp. the accidence.

7. Indg. *-s* and *-z* may for the most part have been levelled to *-s*, when Verner's law began to operate. By this law, the double endings like *-ōz* and *-ōs* in the nom. pl. of Indg. *o-* and *ā*-stems then arose. See § 583. Was *-z* in the nom. sg. already at that period generalised?

-ts became *-ss -s*, *-ks* became *-χs* according to § 527. One said e. g. **fōss *fōs* 'foot' (Gr. Dor. *ποώς*, Indg. **pōts*, stem *ped-*, cp. 311 p. 249) and **meluχs* 'milk' fr. **melχs* (§ 628): Goth. *fōtus* and *miluks* were new formations.

§ 660. Finals in Gothic

1. With the exception of *u* all other prim. Indg. final short vowels, or short vowels which became final in prim. Germ. were dropped and also in the final syllables of polysyllabic words when followed by a single consonant other than *i, u* (§ 659, 1. 4. 5. 7).

2. sg. *bairis* fr. **birizi*. 3. sg. *váit* fr. **uaiti*. Voc. *vulf* fr. **ulfi*. 2. sg. imper. *fra-vardei* fr. **uarđii(i)*. *af* fr. **aba*. But *faihu*: § 659, 1.

Acc. *vulf* fr. **ulfa*. Acc. *gast* 'guest' fr. **gasti*. But *sunu*. § 659, 5.

For the different treatment of the *u* in *triu* 'stick, prop' fr. **triu(a-n)* and *lēv* 'opportunity', fr. **lēu(a-n)* cp. § 179 p. 156.

Nom. sg. *vulfs* fr. **ulfa-z*. Nom. sg. *gasts* fr. **gasti-z*. Nom. pl. *gumans* 'homines' fr. **guman-iz* : cp. Gr. *τέκτον-ες*. Nom. pl. *sunjus* fr. **suniu-(i)z* (cp. § 179 p. 156). Nom. pl. *gasteis* fr. **gastii(i)z*. Adv. *mins* 'less' fr. **minns*, further **minniz*, cp. adj. *minniz-a* gen. *minnizins*. But with *u* nom. sg. *sunu-s*, 3. pl. *bērun*; with double final consonants acc. pl. *vulfa-ns*, *gasti-ns*.

Rem. 1. The acc. *brōþar* would also form an exception, if *-n* was dropped already in prim Germ See § 659, 5

Rem. 2. So far as the vowels in final syllables are concerned the language on Norse runic inscriptions is more archaic than Goth. Acc. sg. Neut. *horna* 'horn' = Goth. *haúrn*. Nom. sg. *dagaʀ* 'day' = Goth. *dags*. Nom. sg. *gastiʀ* 'guest' = Goth. *gasts*. Nom. pl *dohtr-iʀ* 'daughters'.

When Consonant + nas., liquid, *i̯ or u̯* preceded the vowel, the nas., liquid, *i̯, u̯* became sonantal (Samprasāraṇa):

Nom. **ebna-z* acc. **ebna(-n)* 'even', nom. **maiβma-z* acc. **maiβma(-n)* 'present', nom. **akra-z* acc. **akra(-n)* 'acre', nom. **fuzla-z* acc. **fuzla(-n)* 'bird', respectively became *ibn̥s ibn̥, máiβn̥s máiβn̥, akr̥s akr̥, fugl̥s fugl̥*, in like manner gen. **faðraz* 'father's, loc. *faðri* (= Gr. *πατρός πατρί*) became *fadr̥s fadr̥*. We do not know however whether these forms remained disyllabic in Goth. or whether they had become monosyllabic by further reduction (*ibns ibn* etc.). Cp. §§ 215. 277. 635.

2. sg. imper. *hiri* 'come hither' fr. **hir-i̯i*, older *-i̯e* (2. pl. *hirjiþ*): Gr. *κλαῖε* fr. **κλαϝ-ιε*. Acc. sg. masc. *hari* 'army' fr. **χar-i̯a(-n)*. Nom. acc. sg. neut. *kuni* 'race, sex' fr. **kun-i̯a(-n)*. Nom. *skadu-s* acc. *skadu* 'shadow' fr **skaðu̯a-z -u̯a(-n)*, as is to be concluded from the derivatives *ufar-skadvjan* 'to overshadow' and from OHG. *scato* gen. *scatawes*.

Rem 3 Nom like *harjis* 'army', *aljis* 'alius' present difficulties. Forms in *-i̯o-s* and *-i̯i-s* had descended from pre-Germanic times, cp. Lith. *naũ-ja-s* 'new' and *mẽdis* 'tree' (fr. **med-i̯i-s* § 147 p. 131). See § 84 rem 1. I believe that both categories first of all regularly fell together. **alja-z* (Lat *alius-s*) became **aliz* and **ali-z* (O.Lat *alis*) became **aliz* (with the latter compare **þuniȝ-* fr. **þuniȝ-* § 180 p 158). Goth. then re-introduced the *i̯* (*alis*) after the gen *aljis* on the analogy of the (regular) formal equality of the nom *vilþeis* ('wild') and gen. *vilþeis* etc. Did *niujis* 'new' appear for **niwis*?

2. Prim. Indg. long final vowels, or those which became final in prim. Germ., were shortened in the final syllables of polysyllabic words (§ 659, 1. 6).

Nom. *frijōndi* fr. **fri̯ōndī*. *guma* fr. **ȝumō*. *baira* 'I bear' fr. **berō*: Gr. *φέρω*. *áina* fr. **a̯nō*. Acc. *hvan-a* 'whom?' fr. **χu̯an-ō*, cp. *hvan-ō-h*; *-ō* particle. *hvamma* fr. **χu̯ammē*, cp. *hvammē-h*. *bēri* fr **bērī*.

3. Prim. Germ. *-ai̯* = Indg. *-oi̯ -āi̯ -ēi̯* (?) *-oi̯t* (§ 659, 2. 3. 6) and prim. Germ. *-au̯* = Indg. *-ōu̯* (659, 3) remained unchanged: *blindái, gibái, anstái* (?), *bairái, ahtáu*.

4. The reduced nasal (§ 659, 5) disappeared after long vowels, but the long vowel remained unchanged. Nom. sg. fem. *raþjō* fr. **raþjōⁿ*. Gen. pl. *gibō* fr. **ʒebōⁿ*. Nom. acc. sg. neut. *haírtō* 'heart' fr. **χertōⁿ*, cp. nom. acc. pl. *haírtōn-a*. Gen. pl. *vulfē* fr. **ɥulfēⁿ*. Nom. sg fem. *manageı* 'multitude' fr. **manaʒīⁿ*, cp. gen. sg. *managein-s*.

Rem. 4. Acc. sg. *gıba* was the nom. form which supplanted **gıbō* (cp. Skr. *áśvā-m*). 1 sg. *tavıda* 'did' was the form of the 3. sg = prim. Germ. **-dēđ*, which was supplanted by *-dō* fr. **-đō-m* (Norse run *tawıdo*), in like manner also in Norse the real old 1. sg. in *-đa* later gave way to the form of the 3. sg. in *-đe đi* (Noreen Aisl. and Anorw. Gramm. § 449).

5. *-þ*, *-đ*, *-ʒ*, *-z* became voiceless (for *-rz* see 6.). *af* 'of, from' fr. **aþ(a)*. *baíriþ* 'bears' from **þiriđ(ı)*. Acc. sg. *vıg* 'way', read *viχ*, fr. **ɥiʒ(a-n)*. Nom. sg. *vulfs* fr. **ɥulfa-z*, pl. *vulfōs* fr. **ɥulfōz*. *baírıs* 'bearest' fr. **þirız(i)*. This change regularly took place partly in absolute finality, and partly before voiceless spirants (cp. nomin. sing. *liufs* 'dear' from **liuþs*). See §§ 531. 539. 583.

We conjectured in these passages that in like manner the voiced explosives became voiceless, even though the writing does not exhibit them as voiceless sounds, e. g. *band* 'he bound'.

6. *-rz* became *-rr -r*. Nom. *vaír* 'man' fr. **ɥir(a)-z* (gen *vaírıs*), correspondingly *baúr* 'son' *stıur* 'bull', *káısar* 'emperor', *anþar* 'second', *unsar* 'our'. Exceptions are adjectives like *hōrs* 'adulterous' (Eph. V. 5) *skeırs* 'clear' in which the *-s* was restored to distinguish them from the neuter. Cp. footnote on p. 221.

Rem. 5. Compare on the other hand the adv *vaírs* 'worse' fr **ɥirsız* (adj. *vaírsiz-a*).

§ 661. Finals in West Germ. especially in OHG.

1. Final long vowels, inherited from prim. Germ., were shortened in prim. West Germ. (§ 659, 1. 6). OHG. *biru* 'I bear' fr. prim. Germ. **þerō*. OHG. instr. sg. *tagu* fr. prim. Germ. **đaʒō*, st. **đaʒa-*. Ags. nom. sg. fem. *ʒiefu* 'gift' fr. prim. Germ. **ʒebō* (OHG. *geba* is the acc. form). OS. nom. acc. pl. neut. *fatu* 'vats, vessels' fr. prim. Germ. **fatō*. Ags. *đon-e* OS. *than-a* 'the' (acc.) fr. prim. Germ **þan-ō*. Ags. nom. sg fem *hēđ* 'field, heath', older **haiþi* (2.), fr. prim. Germ. **χaiþī* (Goth. *háiþi*). OHG. 3. sg.

opt. pf. *zigi* 'he may have accused' (1. sg. indic. pres. *zihu* 'I accuse') fr. prim. Germ. **tiʒ*(þ)* (Goth. *taihi*).

2. After the completion of this process the West Germ. law of syncope operated (§ 635) according to which final short vowels or short vowels followed by a single consonant disappeared in the final syllable of disyllabic words (with the accent on the first syllable), when the first syllable was long; they likewise disappeared in trisyllabic and polysyllabic forms when the penult had the secondary accent. The purely regular relation was often disturbed through new formations made by levelling.

OHG. *sunu* 'son' = Goth. *sunu-s*, *fihu* 'cattle' = Goth. *faihu*, but *fluot* 'tide' = Goth. *flōdu-s*; the forms *sun*, *lid* (Goth. *lithu-s* 'member') etc. were new formations after forms like *fluot*. OHG. *chumi* 'a coming' = Goth. *qums* prim. Germ. **kumi-z*, but *gast* 'guest' = Goth. *gasts* prim. Germ. **ʒasti-z*; *stat* 'place, stead' = Goth. *staþs* prim. Germ. **staði-z* (OS. still *stedi*) etc. were new formations. Here are also to be compared the compounds like OHG. *situ-līh* 'moral' (*situ*, Goth. *sidu-s*) *witu-hopfo* 'hoop' i. e. 'wood-hopper' (*witu* 'wood') beside *lust-sam* 'pleasant' = Goth. *lustu-sams* 'wished for'; *steti-got* 'genius loci' *slegi-rind* 'a bullock to be killed' (OS. *slegi* 'a slaying') beside *gast-hūs* 'inn' (cp. Goth. *gasti-gōdei* 'hospitality').

OHG. *wolf* = Goth. *vulfs* prim. Germ. **ɣulfa-z*, *sceffin* 'sheriff', *drigil* 'servant-boy', *irdīn* 'earthy' = Goth. *airþeins* prim. Germ. **irþīna-z* etc. were regular, and after them were formed such as *tag* 'day', *weg* 'way'. In like manner also neut. *joh* 'yoke' (prim. Germ. **ɣuka(-n)*) after *wort* 'word' etc. Cp. *tago-līh taga-līh* 'daily' *wego-wīso wega-wīso* 'sign-post' with *wīn-garto* 'vineyard' *himil-rīhhi* 'kingdom of heaven'.

Prim. Germ. **ʒastiɨ-iz* 'guests' regularly became **ʒastīz*, through the intermediate stage **ʒastiɨz*, (after this **þrīz* 'three') which gave OHG. *gesti* (5. 6.).

After *hilf* 2. sg. 'help' fr. **hilfi* were formed such as *bir* 'bear' for **biri* (Gr. φέρε); prim. Germ. **naziɨi* 'make whole' (Goth. *nasei*) became **nazī*, thence (by 6.) *neri*. After *bant* 'he bound' (prim. Germ. **þandi*, Skr. *babándha*) *chōs* 'he chose'

(prim. Germ. **kaŋsi*) etc. were formed such as *was* 'he was' *nam* 'he took'. 3. sg. indic. pres. *birit* fr. **biriđi* (Goth. *bairiþ*). Instr. pl. *blintēm* 'blind' fr. **blindaz-mi* (Goth. *blindáim*). *aba* 'from' : Gr. *ἀπο*.

1. sg. *biru* 'I bear'; forms like *hilfu* were either formed after *biru* or had regularly remained unshortened before enclitics and then came to be used in other cases (cp. Paul in Paul-Braune's Beitr. VI 160). Instr. *tagu;* after this and the trisyllabic forms, in which the case endings had a secondary accent and therefore remained (§ 689), arose forms like *sēwu* (nom. *sēo* 'sea'); in this the effort not to leave the form phonetically equal to that of the nom. and acc., might have formed a factor. Ags. preserved the regular double forms in the nom. sg. of the Germ. ō-stems : *ȝiefu* 'gift' (Goth. *giba*), but *sorȝ* 'sorrow' (Goth. *saúrga*) *firen* 'sin' (Goth. *fáirina* 'debt'); OHG. had the regular forms in *buoȝ* 'improvement' (Goth. *bōta* 'benefit') *kuningin* 'queen' adj. *blint* 'caeca' (Goth. *blinda*) etc., the forms *buoza kuninginna geba* etc. beside these were accusatives. In the nom. acc. pl. neutr. the regular state shows itself in Ags. OS. *fatu* 'vats, vessels' against Ags.OS. *word* 'words' (Goth. *vaúrda*); on the other hand OHG. *faz* a new formation after *wort*. Ags. *đon-e* OS. *than-a* 'the'. Ags. *hǣđ* 'heath' = Goth. *háiþi*, beside this OS. *thiui* 'maid' = Goth. *þivi*. OHG. 3. sg. opt. *zigi*, but also *hulfi bāri* etc.; that the regular forms **hulf *bār* were put aside, was due to the influence of the other persons of the same mood (cp. the 3. sg. opt. of the Alemanic weak preterites like *salbōtī neritī mohtī*, where the influence of the other persons is still clearer, cp. 2. sg. *salbōtīs* 1. pl. *-īm(ēs)*).

In all the cases named it is a question of loss of a vowel by which the word lost one syllable. On the other hand forms like OHG. *eban* 'even' *acchar* 'acre, field' *fogal* 'bird' had experienced samprasāraṇa: the first form e. g. had passed through the stages **ebnaz *ebŋz *ebŋ eban*. See §§ 215. 277. 635. 660,1. Here perhaps also belong forms like nom. sg. masc. *gelo* 'yellow' (gen. *gelawes*) from **ȝelŋa-z* (cp. Lat. *helvos*), nom. acc. sg. neut. *melo* 'meal' (gen. *melawes*) from **melŋa(-n)*.

3. The *-aᵽ*, which arose from *-ōᵽ* in prim. Germ. (659, 3), became *-ō* in West Germ. at the same time with the other *aᵽ* in unaccented inflexional syllables. Hence OHG. OS. *ahto* 'eight' = Goth. *ahtáu*. The shortening of the *-ō* took place according to 6.

4. The weakened nasal of prim. Germ. forms as nom. sg. **χanōₙ* 'cock' (beside **χanō* = Goth. *hana*) gen. pl. **đaʒōⁿ* 'of days' (beside **đaʒēⁿ* = Goth. *dagē*) nom. sg. **manaʒīⁿ* 'multitude' (Goth. *manageı*) was dropped in prim. West Germanic: OHG. *hano, tago, managi menigı*. The shortening according to 6.

5. Of the prim. Germ. postvocalic *-s* and *-z* the former remained in West Germ., e. g. OS. *dagos* = Goth. *dagōs*. The latter was preserved as *-r* when closely connected with a following word, as in OHG. *ır* = Goth. *is*, in other cases it was dropped, e. g. OHG. OS. nom. *sunu* = Goth. *sunus*. See § 583. On the shortening of the long vowels after the loss of the *-z* see 6.

Rem The *-s* of the OHG. 2. sg opt *beres* (prim. Germ. **bérałz*, Goth *bairáıs*) and of the 2 sg indic *bırıs* (prim Germ. **berızı*, Goth. *bairıs*) is due to the pronoun *du* prim West Germ. **þū* being frequently attached enclitically. The sibilant was pronounced voiceless before *þ-* and *þ-* became *t-* (cp Goth 2. sg. perf. *last* from **lasþa*, §§ 541, 1. 553, 1). Thus arose OHG *berēstu, bırıstu*, correspondingly also opt. *bārīstu* and Indic. *nerıtōstu*. From these were then made by false etymological division *bırıst du (thu)* etc., in which process the 2. sg. *bıst*, which had already previously come into existence for *bıs* after the analogy of the preterite-presents *kanst tarst*, helped to set the model.

But beside these still appear in OHG. *wili* = Goth. *vileıs* (Lat. *velīs*), *bāru* = Goth *bēreıs* etc, which represent the undisturbed development of the West Germanic ending *-īz* (cp. von Fierlinger Kuhn's Ztschr. XXVII 430 ff.).

6. Later than the shortening mentioned under 1. occurred the shortening which was experienced in polysyllabic words by the long vowel, after which *-ⁿ* (4.) or *-z* (5.) had been dropped, and by *-ē* and *-ō* (§ 83 p. 79) from *-aᵽ* and *-aᵽ*, which were either already final in prim. Germ. or had become so after the loss of *-z* (5.), as well as by the *-ī* (2.) which had arisen from *-iᵽi*. This shortening also, as it seems, occurred already in the period of the West Germ. prim. community.

OHG. *hano* from **hanō(n)*. *tago* from **dagō(n)*. *managi menigi* from **manaʒī(n)*; the form *managī* existing beside this had its *-ī* after the analogy of the other cases (*managīn*).

OHG. 2. sg. *wili* from **wilī(z)*. *bāri* from **bārī(z)*. Nom. pl. *gesti* 'guests' from **ʒastī(z)* prim. Germ. **ʒastiįiz* (Goth. *gasteis*); cp. beside this *drī* 'three' (Goth. *þreis*). Nom pl. masc. *taga* 'days' = Goth. *dagōs*. Nom. pl. *geba* 'gifts' = Goth. *gibōs;* I leave it undecided whether the form *gebā* had its long vowel from other cases with long vowel or from once present secondary (originally oxytoned) forms in *-ōs* (§ 583).

OHG. nom. pl. masc. *blinte* 'blind' = Goth. *blindái*; beside this *dē* 'the' = Goth. *þái*; in *andrē*, which is met with twice, the *-ē* was transferred from *dē*. Loc. sg. *tage* from prim. Germ. **đaʒaį* (cp. § 659, 2. 3). 3. sg. opt. *bere* 'he may bear' from prim. Germ. **beraį(đ)* = Goth. *baírái ed-do* 'or' : Goth. *aiþþáu. ahto* 'eight' = Goth. *ahtáu* Skr. *aṣṭāú. suno* 'of the son' from prim. Germ. **sunaų̯z* = Goth. *sunáus.*

OHG. 2. sg. imper. *neri* 'make whole, heal' from **nazī*, prim. Germ. **naziįi* Indg. **nosέįe.*

§ 662. Initial sounds.

1. Prim. Germ. *χ* from *k* seems to have undergone the transition to *h* first initially before vowels, perhaps already in the prim. Germ. period. **hunda-n* 'hundred' Goth. *hund* OHG. *hunt* etc. See § 529.

2. *wr-*, *wl-* became *r-*, *l-* and *hw-*, *hr-*, *hl-*, *hn-* became *w-*, *r-*, *l-*, *n-* in OHG., e. g. *rıʒ* 'stroke' = Goth. *vrits*; *waʒ* 'older *hwaʒ* 'what' = Goth. *hva*. See §§ 178. 529.

3. Notker's († 1022) law of initials, the so-called canon Notkerianus. For *d-*, *g-*, *b-* (= prim. Germ. *þ-*, *ʒ-*, *ƀ-*), which remained after vowels, liquids and nasals, were put *t*, *k-* (*c-*), *p-* after tenues, after voiceless *-d*, *-g*, *-b* and after voiceless spirants as well as in absolute initiality. *eines tritten, dıh tritten* beside *demo dritten. ih tih* beside *in dih. mag ter* beside *dū daz. gab cold, des coldes, daz cold* beside *demo golde. sīnes pruoder* beside *mīn bruoder. sālig pin, ih pın* beside *dū bist.* Since *d*, *g*, *b* were pronounced voiceless and *t*, *k*, *p* without aspi-

ration, it is here merely a question of the various grades of stress with which the sounds were produced[1]).

I cannot feel convinced that Nother's law only exhibits an arbitrary orthographical adaptation of fluctuating spelling (cp. Steinmeyer Ztschr. f. deutsch. Altert. XVI 139, Scherer Z. Gesch. d. d. Spr.[2] 143), but believe that there existed a real observation of an actual difference.

Baltic-Slavonic.

§ 663. Finals in prim. Balt.-Slavonic.

The following changes seem to belong to this period.

1. *-ōm -ōn* became *-ūn* (cp. 2.), whence Lith. *-ų̄* O.Bulg. *-y*, e. g. Lith. gen. pl. *dėvū* (*dėvų̄*) 'deorum', O.Bulg. nom. sg. *kamy* 'stone'. See § 92.

2. *-m* became *-n*, e. g. Lith. acc. sg. *tą̄*, dialectically *tan tŏn* 'the', Indg. **to-m*, O.Bulg. *sŭn-ĕsti* 'comedere', Indg. **som*. See §§ 217. 218 219.

3. *-t* and *-d* were dropped. 3. sg. opt. Lith. *te-vežė̃* O.Bulg. *vezi* (Lith. *vežù* O.Bulg. *vezą* 'I drive, ride') = Skr. *váhēt* Indg. **ǫeĝhoi̯-t* O Bulg 3. sg. aor. *veze* = Skr. *váhat* Indg. **ǫeĝhe-t*, 3. pl. aor. *vezą* = Skr. *váhan* Indg. **ǫeĝho-nt*. Lith. nom. acc. sg. neut. *vėžą̃* (see Kurschat Gramm. d. lit. Spr. § 1345) from **vežant*, cp. Gr. *φέρον* from **φεροντ*. O.Bulg. *to* 'the' = Skr. *tád* Indg. **tó-d*. It is less certain that the gen. sg. Lith. *vil̃ko* O.Bulg. *vlŭka* 'of a wolf' corresponds to the abl. Skr. *vṛ́kād* Lat. *lupō(d)*, see footnote to page 108

Rem. The assumption of some scholars, that *-r* was dropped in the period of the Balt.-Slav. prim community, is exceedingly uncertain Lith. *motė̃* 'wife' O Bulg *mati* 'mother' and Lith *sesů* 'sister' (Skr *mātá*

1) With our sound-law is compared a law which obtains in the middle and south Italian dialects as also in Sardinian, according to which we have e. g. *sas cosas*, but *una gosa* (like *connosco . formiga*), *sos poveros*, but *su boveru* (like *ispingo : pobulu*), *sos tempos*, but *su dempu* (like *postu : istadu*) (Schuchardt Verhandl. der Leipz. Philolog.-Versamml. 1872 p. 208 and Romania III 1 ff.). Cp. also French *gras*, which had arisen from *crassus* after vowels (Neumann Ztschr. f. rom. Phil. VIII 255), and O.Ir. *inna gert*, *inna duath* (§ 658, 2).

svdsā) prove nothing at all, cp. § 645, finals 4. That O.Bulg. nom. *voda* 'water' is identical in the ending with Gr. *ὕδωρ* and voc. *brate* 'brother' with the ending in Gr. *σῶτερ*, and that the loss of *-r* in the former case caused the transition to the *ā*-declension (acc. *vodą* etc.), and in the latter case to the *o*-declension (nom. acc *bratŭ* etc.), are mere hypotheses.

§ 664. **Finals in Baltic, especially in Lithuanian.**

1. Final short vowels, except *-u*, were dropped under certain conditions which are not clear. Lith. 3. sg. *ẽsti* and *ẽst* 'is'. O.Bulg. *jestĭ* Gr. *ἔστι*. Instr. sg. *aki-mì* and *aki-mĩ* (nom. *akìs* 'eye') : cp. O.Bulg. *pątĭ-mĭ* (*pątĭ* 'way') Skr. *sánē-mi* 'from of old, olim'. *sukúi-si* and *sukúi-s* 'I turn myself'. 2. pl. *vẽža-te* and *vẽža-t* 'ye drive, ride' : O.Bulg. *veze-te* Gr. *φέρε-τε*. Voc. sg. *mótyna* and *mótyn* (nom. *mótyna* 'mother') : O.Bulg. *ženo* 'O wife' Gr. *νύμφᾰ*. From *pirmà* adv. 'before' arose the preposition *pirmĩ* 'before'. The latter form shows that these shortenings took place in conditional finality.

-u suffered such a loss nowhere, as it seems. Neutr. *gražù* 'beautiful' (masc. *gražùs*) : cp Gr. *ἡδύ*. O.Lith. loc. pl. *akisù* (*akìs*) : cp. O.Bulg. *pątĭ-ch-ŭ* Skr. *ávi-šu* (*ávi-ṣ* 'ovis').

Thus disappeared dialectically also by 3. the *-i*, which had been shortened from *-ī*, in the feminine forms *tó-ji* 'the same' *áugusi* part. pret. (to *áugu* 'I grow') : *tój áugus*.

2. *e* was dropped in the ending *-es* in a prehistoric period of Lithuanian. Nom. pl. *ākmens* 'stones', *dùkters* 'daughters' *dẽszimts* and *deszimts* 'decades' : O,Bulg. *kamen-e* from **-es*, Gr. *θυγατέρ-ες*, O.Bulg. *deset-e*. Gen. sg. *akmeñs*, *dukterš* : O.Bulg. *kamen-e* (§ 665, 4), O.Lat. *salūt-es* class. *salūt-is* (§ 81 rem. 1).

At a later period *a*, *i*, *u* also disappeared before *-s*.

sẽna-s and *séns* 'old' (on the accentuation cp. § 691 rem.), *dẽva-s* and *dẽvs* 'god' : Skr. *sána-s dēvá-s*. This shortening of the nom. sg. of Indg. *o*-stems is more frequent in some Lith. dialects than in others, but seems nowhere to be entirely wanting. I conjecture that it had its beginning in forms of three or more syllables like *óbůla-s* 'apple' *āvina-s* 'ram' and participles in *-dama-s*.

-i disappeared only in forms of three or more syllables. Instr. pl. *akimìs* beside *akimìs*, *mergõms* beside *mergomìs* (*mergà* 'girl') : cp. Skr. *-bhiṣ*.

So also *u*. Dat. pl. *vilkáms* from O.Lith. *vilkamus* (cp. § 691 rem.). The form may be identical with O.Bulg. *vlŭkomŭ*, see the accidence.

3. Long vowels and also *ē* and *ō* were shortened in final syllables, if they had the broken accent (§ 691); see Leskien Archiv. f. slav. Phil. V 188 ff. Since *a* appears for *ō*, it may be assumed that this shortening took place, when *ā* or at least very open *ō* was still pronounced for *ō* (cp. § 108).

Nom. sg. fem. *gerà* 'bona' from **gerā*, cp. the compound form *geró-ji*, so too *tà* 'the' beside *tó-ji* : cp. Gr. *χώρᾱ*. Instr. sg. fem. *gerà* beside *gerá-ja*, so too *tà* beside *tá* (the latter originally only proclitic); the ending *-á* from **-ām*. Acc. pl. fem. *geràs* beside *gerás-ias*, so too *tàs* beside *tás* (the latter to be judged like *tá*); *-ās* from **-āns* Nom. sg. fem. *patì* 'wife, spouse' from **patī* : cp. Skr. *dēvī* 'goddess'. Nom. acc. du. *naktì* (*naktì-s* 'night') *žmogù* (*žmogù-s* 'man') from **naktī *žmogū* : O.Bulg. *noštь* (*noštĭ* 'night') *syny* (*synŭ* 'son'). 3. sg. fut. *bùs rìs* beside 1. sg. *búsiu* 'I shall be' *rýsiu* 'I shall swallow'. Nom. pl. masc *gerì* beside *gerë-ji* (beside this strangely *tẽ*) : cp. Gr. *καλοί*, *τοί*. Nom. acc. du. fem. *gerì* beside *gerë-ji*, so also *dvì* 'two' : Skr *áśvē*, *dvé*, Indg. *-ā̆i*. Instr. sg. masc. *gerù* beside *gerū̃-ju* . cp. Lat. *modo*, Indg. *-ō*. Nom. acc. du. masc. *gerù* beside *gerū̃-ju*, so also *dù* from **dvū̃* (§ 184) : cp. Gr. *ἵππω*, *δώ-δεκα*. 1. sg *sukù* 'I turn' beside the reflex. *sukū̃-si sukū̃-s* (1.).

Rem Compare the retention of long vowels with slurred accent in gen. sg. *anõ* 'illius', gen. pl. *mergū* 'puellarum' gen. sg *mergõs* 'puellae', gen. sg. *naktiẽs* etc.

Such shortening also before *u̯*, *i̯*, *r*, *l*+*s*. It shows itself here by the broken accentuation passing into the slurred. Compar. *geriaũs* adv. 'better' beside *geriáusiai* 'best'. 3. sg. fut. *gaũs*, *kelaũs*, *pa-leĩs*, *geĩs*, *keĺs* beside 1. sg. *gáusiu* 'I shall get', *keláusiu* 'I shall travel', *pa-léisiu* 'I shall let loose', *gérsiu* 'I shall drink', *kélsiu* 'I shall raise'. Cp. the author Lit. Volksl. u. März. p. 315, Bezzenberger in his Beitr. X 202 ff., and § 691 rem. below.

4. Prim. Balt. *-ōi̯ -āi̯* became *-ui -ai*. Dat. sg. masc. *vil̃kui* : Gr. *λύκῳ*. Dat. sg. fem. *rañkai* 'to a hand' *tai* 'to the' : Gr. *χώρᾳ, τῇ* (Dor. *τᾷ*). With this compare *vilkaĩs* § 148.

5. Assimilation of final nasals to explosives and spirants of different organs, as *in̯ kìtą* 'in alium' *im põną* 'in dominum'. The treatment of *-n* (= Indg. *-n -m*) in other respects has already been discussed in § 218.

6. *-s* became assimilated to following *sz- and ž-*. *vẽnaszóvė* 'one shot' = *vẽnas szóvė*. *tókiožùvys* 'such fishes' = *tókios žùvys*. So also *s-* following *-sz*. *asų̃siu* 'I shall send' = *àsz sių̃siu*. *isvẽto* 'out of the world' = *ìsz svẽto*.

7. Of the numerous other final changes of the Lithuanian dialects, suffice it here to mention the shortening in certain districts of *ō, e, y, ū* to *a, e, i, u*, which took place at the end of words and before final single consonants, if the syllable did not bear the chief accent. Gen. sg. *rañkas* 'of a hand' (standard Lith. *rañkos*) beside *mergõs* 'of a girl'. Nom. sg. *mergẽle* 'girl' (stand. Lith. *mergẽlė*) beside *srovẽ* 'a flowing'. Nom. pl. *pãtis* 'ipsi' (stand. Lith *pãtys*), *sùnus* 'sons' (stand. Lith. *sùnūs*). This shortening was caused by the expiratory accentuation.

§ 665. Finals in Slavonic, especially O.Bulg.

1. In prim. Slav. *o* became *u* before nasals in final syllables. **u̯lkŭ-n* 'the wolf' (O.Bulg. *vlŭkŭ*) from **u̯lqo-m* : Skr. *vṛ́ka-m* Gr. *λύκο-ν*. **nesu-n* 'I carried away' (O.Bulg. *nesŭ*) from **neĥo-m* : Skr. *ábhara-m* Gr. *ἔφερο-ν*. **u̯lkŭ-ns* acc. 'wolves', whence further by § 219 **u̯lkūs* (O.Bulg. *vlŭky*) : Gr. Cret. *λύκο-νς* Goth. *vulfa-ns*.

2. Then the *-n* of the endings *-un, -in, -ūn* was dropped, and there arose *-ŭ, -ĭ, -y*, the historical endings of O.Bulg. Acc. *synŭ* 'son' : Skr. *sūnú-m*. Acc. *vlŭkŭ* : Skr. *vṛ́ka-m* (1.). Acc. *gostĭ* 'guest' : cp. Skr. *ávi-m* 'ovem'. Nom. *kamy* 'stone' : cp. Gr. *ἄκμων* (§ 663, 1).

Rem. The ending of the gen pl. *-ŭ*, e. g. *vlŭkŭ* 'of wolves' *mater-ŭ* 'of mothers', must be explained from *-om*. See the accidence.

So also prim. Slav. *-en* and *-ṛn* (the latter = Indg. *-m̥*, *-n̥*) lost the nasal and there arose *-e*. Nom. acc. sg. neutr. *polje* 'field' from **polje-n*, older **poljo-m*. Acc. sg. *mater-e* from **mātĕr-ṛn*. See § 219 p. 186 f.

On the other hand *-ān* and *-ēn* became nasal vowels. Acc. sg. fem. *ženą* 'wife' : cp. Skr. *áśvā-m* Lat. *equa-m*. Nom. acc. sg. neutr. *imę* 'name' from **ī-mēn*. See § 219 p. 186 f.

3. Indg. prim. Balt.-Slav. *-ā̆i̯* became *-ai̯* and fell together with Indg. *-ai̯* *-oi̯* and *-ē̆* in *-ē*. In historical times there appears partly *-i*, e. g. O.Bulg. nom. pl. masc. *ti* = Lith. *tẽ* Gr. *τοί*, *mati* 'mother' = Lith. *motẽ*, partly *-ē*, e. g. dat. sg. fem. *rącě* 'to a hand' = Lith *rañkai* (§ 664, 4), loc. sg. masc. *vlŭcě* (*vlŭkŭ* 'wolf') = OHG. *wolfe* (§ 659, 2). To what this duality *-i* and *-ě* is due, remains undetermined. See §§ 76. 84.

Indg. prim. Balt.-Slav. *-ōu̯* became *-ou̯*, further *-ū*. Loc. sg. *synu* · Skr. *sūnāú* Goth. *sunáu* (§ 659, 3).

4. Originally final *-s* and the *-s* which later became final, were dropped. Nom. sg. *synŭ* : Lith. *sūnù-s*. Nom. pl. *synov-e* : Skr. *sūnáv-as*. Gen. sg. *kamen-e* : Lith. *akmeñ-s* (§ 664, 2). Nom. acc. sg. neutr. *nebo* 'sky' : Skr. *nábhas* Gr. *νέφος*. 2. sg. *veze* 'thou drovest' : Skr. *váha-s*. 2. sg. opt. *vezi* : Skr. *váhē-ṣ*. Acc. pl. *syny* from **sūnūs*, older **sūnuns* (§ 219) : cp. Goth. *sunu-ns*; *vlŭky* (1.) : Goth. *vulfa-ns*; *krajǫ* (*krajǐ* 'edge') from **krāi̯ens*, older **kāi̯o-ns* (§§ 84. 219). 2. 3. sg. *da* (1. sg. *dachŭ* 'I gave', 2. pl. *daste*) from **dās*; prim. Balt.-Slav. 2. sg. **dōs-s* 3. sg. **dōs-t*. 2. 3. sg. *ja* (1. sg. *jasŭ* 'I ate' prim. f. **ēts-o-m* i. e. **ēd+s-o-m*, rt. *ed-* 'eat') from **ēs*; prim. Balt.-Slav. 2. sg. **ēts-s* 3. sg. **ēts-t*.

This loss of *-s* was probably brought about in absolute finality and before words beginning with a consonant. See § 281 rem. 3.

5. *-ĭ* and *-ŭ* disappeared in the O.Bulg. period, after imparting their timbre to the preceding consonants, e. g. *pątem(ŭ)*, *pątech(ŭ)*. See §§ 36. 52. The transition of *-ŭ* to *o* in combinations like *iz-bavito i (jĭ)* 'liberat eum' *iz-bavljęto i (jĭ)* liberant eum' etc. is to be explained from the fact that the

pronoun, which was attached enclitically, was still only spoken as *j*: from *-tŭ j(i)* arose *-to j(ĭ)* like *domoch(ŭ)* from *domŭch(ŭ)*, see § 52.

§ 666. Initials in Baltic-Slavonic.

1. *i̯* and *u̯* frequently arose before initial vowels. The phonetic condition was that the preceding word ended in a vowel. *i̯* and *u̯* represent the movement of transition.

Lith. *i̯*. *j-ìmtı* 'to take'. *j-iñ* 'in'. *j-ìrkŧa-s* 'oar'. *j-yrà* 'is'. *j-ieszkótı* 'to seek' : OHG. *eiscōn*. *prı-si-j-ésti* 'to gorge oneself'. *su-j-ésti* 'comedere'. *lēpe-j-elti* 'he bid go'. Also *j-añt* 'up', *j-àsz* 'I' etc. *j-* seems to have been entirely generalised only in *jĕszkóti* and in *j-ùnkti* 'to become accustomed' (O.Bulg. *v-yknǫ* 'I learn' Goth. *bi-ūhts* 'accustomed'); association with *jùnkti* 'to yoke' (rt. *jeu̯g-*) formed a factor in the latter word.

Lith. *u̯*. *v-ugnì-s* 'fire'. *v-ùpė* 'river'. *v-oszkà* 'goat'. *v-ŭszvė* 'mother-in-law'. So far as I know *v* became fixed nowhere before *u-* and *o-*, whilst in some dialects it became permanent before *û-* and entirely supplanted the form with *û-* (*ŭszve*). Here probably also belongs the *v-* in *v-ĕna-s* 'unus', which must be very old, since it occurs permanently in Lettic (*w-îns*) and in the whole of Lithuanian.

Slav. *i̯*. *j-estĭ* 'is' : Lith. *ẽsti*, cp. *nĕstĭ* from **neestĭ* § 607. *j-elenĭ* 'stag' : Gr. ἔλαφο-ς. *jastĭ* 'eats' from **j-ĕstĭ* (§ 76) : Lith. *ėsti*; but *iz-ĕstĭ* 'consumes'. *imą* 'I seize' from **j-ĭmą*, inf. *j-ęti* : Lith. *imù imti*, *j-imù j-iñti*; but *iz-ĭmą iz-ęti* 'to take out'. *j-ęza* 'illness' from **i̯nzā*, prim. f. **i̯ghā*, from rt. *añgh-*. *j-ęzykŭ* 'tongue' : Pruss. *insuwis*. *j-ablŭko* and *ablŭko* 'apple'. *j-ąza* and *ąza* 'cord'. *j-utro* and *utro* 'morning'.

Slav. *u̯*. *v-yknǫ* 'I learn' from **ŭnknǫ* (§ 219 p. 187) beside *učiti* 'to teach' : Lith. *j-ùnkstu* 'I become accustomed' (see above). *v-ydra* 'otter' : Lith. *údra* (§ 257). *v-ymę* 'udder' from **ūdmēn* : Skr. *údhar* (§ 547). *v-* was fixed in these words as well as in *v-onja* 'smell' beside *ąchati* 'to smell'. *v-ąsŭ* beside *ąsŭ* 'moustache'. *v-ąza* beside *ąza* and *j-ąza* 'cord', to which also *v-ęzati* 'to bind' with permanent *v-* [1]).

1) Further examples for Slav. *j-* and *v-* in Miklosich's Vergl. Gramm. I² 198 f. 234 f

Rem. 1. We must leave it for a more thorough investigation to determine, between what vowel qualities *j-* and *v-* were regularly developed in each single case and how far levelling out has taken place, further, whether anything prevents our assigning the beginning of the development of these glides to the Baltic-Slavonic primitive community (cp. Lith *-jėsti* O.Bulg. *jasti* etc.).

2. *e-* uniformly became *a-* in certain Lith. districts, e. g. *asù* = *esù* 'I am', *aĩsiu* = *eĩsiu* 'I shall go' (but *at-eĩsiu, isz-eĩsiu* etc.). If we remember that every consonant before *e* had a palatalised pronunciation in the dialects in question, this change is easily explained as an affection of absolute initiality.

3. In Slav. *ě-* (from older *oi̯-*) became *i-*. *inŭ* 'one' = Lat. *oino-s ūnu-s*. See § 84.

Rem. 2. We have probably no right to explain this change by assuming that *i̯* was first developed before *oi̯-* as a glide and that *i̯oi̯-* then became *i̯ei̯- i̯ē-* (cp *jechŭ* § 84 p. 82). Such an *i̯-* before *o* has not yet, so far as I know, been established.

ACCENTUATION.

The nature of accentuation[1]) and the accentuation of the Indg. languages in general.

§ 667. 1. Accentuation of syllables, words and sentences.

By accentuation in the widest sense is understood the gradation of a sentence according to the stress and pitch of its *members*.

In every separate syllable, i. e. in every quantity of sound produced with a single independent expiratory impulse, there is always one element which with respect to accentuation has the precedence of the rest, e. g. *a* in English *man*; this element is called the sonant of the syllable. The form of the tone movement in the whole of the syllable, the relation, in which non-sonant members of the syllable stand in respect of accentuation to one another and to the sonant, may differ, e. g.

1) Cp. among others Sievers Grundzüge der Phonet.[3] 176 ff, Seelmann Die Ausspr. des Lat. 15 ff.

Lith. *vìr-siu* 'I shall cook' and *viř-siu* 'I shall fall', Gr. *οἶ-κοι* loc. sg. and *οἶ-κοι* nom. pl.

In a polysyllabic word there is always one syllable which by its accentuation takes precedence of the rest. This syllable is generally called simply the accented syllable. Syllables which have not the high tone or principal accent can also display different degrees of accentuation, which characterise the word. E. g. in Mod. English *chérishing, forgétfulness* the final syllable is more strongly accented than the penultimate, in Mod.HG. *ábend-dämmerung* 'evening twilight' the antepenultimate more strongly than the other syllables which have not the principal accent and these latter again show gradations among themselves. Word-accent is thus the relative characteristic of all the syllables of a word.

The word seldom stands alone; generally it is the member of a sentence which in phonetic just as in syntactical relations forms a complete unity. Within this whole again there are words with higher, others with lower accent-points Cp. e. g. the accentuation of the sentence *speak trúth and lie not.* To the accentuation of the sentence belongs thus everything, which bears upon the different accentuation of the words as members of a sentence.

2. Expiratory and musical (chromatic, tonic) accentuation

If the preeminence of the sonantal element consists in the greater force, with which the breath-current is expelled (voice-stress), we have expiratory accent, if on the other hand in a raising of the voice above its ordinary level (voice-pitch) we have musical accent. The latter may be heard e. g. in the final syllable of our *really,* when spoken in a tone of surprised enquiry.

Rem. 1. For accentuation, particularly expiratory, quantity also requires attention. Languages with considerable differences of accent-stress, as German and English, have generally also more considerable differences in the duration of syllables than languages, which, like Romance, Slavonic and Mod.Gr., form their syllables with less varying stress. The treatment of syllables, which do not bear the principal accent in languages

where the accent is strongly expiratory, often shows very distinctly, how the different quantity of these syllables and the different grades of the secondary accent stand in mutual relation to one another.

None of the Indg. languages had and has exclusively expiratory and none exclusively musical accentuation. But one of the two methods of accentuation always appears in the stages of development accessible to our observation as dominant and typical for the history of sounds. Essentially expiratory accent appears in Old Armenian, in the Old Italic dialects, in Keltic, Germanic and Lithuanian, essentially musical in Sanskrit and Old Greek; we have no satisfactory information concerning the accentuation of the Old Iranian dialects and of the Old Bulgarian.

3. Three accent-grades.

Between the highest imaginable and the lowest imaginable grade of accentuation there are, strictly speaking, innumerable intermediate grades For all practical purposes it is sufficient to distinguish three grades The highest grade of the expiratory accent we designate the principal accent, that of the musical accent high tone, the lowest grade absence of accent (also loss of accent) and low tone. Between these lie secondary accent and medium tone

Rem 2 The grammatical terminology here roughly resembles that for the positions of articulation of the lingual palatals, here as there we have to deal with an unbroken graded series, and the ordinary division into dentals etc leaves free scope, since such division fails to draw sharply defined limits.

4. The different forms of syllabic accent.

Expiratory accent. An expiration, simply allowed to die away, contains but one point of expiration. If on the other hand fluctuations in the expiratory impulse take place, still other points become perceptible alongside the principal point; these owing to their smaller force are felt as subordinate to the principal point. Where the accentuation has only one point, the sonant, the bearer of the syllabic accent, is separated from the following consonant simply by the change of position in the organs of articulation, it is cut off by the consonant, and such accent is called clear cut accent (´), e. g. English *hát*. Where

the accentuation has two (˜) the second point may still fall upon the sonant of the syllable, e. g. Mod.G. *sõ* (in certain cases), or on the consonant immediately following, e. g. *mān* (Thuringian).

Musical accent. Whilst the sonant or the syllable lasts, the voice remains on the same level (level tone), or ascends from its level (rising tone), or descends (falling tone), or within the same syllable both rises and falls, or falls and rises (musical circumflex). The level tone also combines in different ways with the rising and falling tones, e. g. /¯.

These differences of accentuation hold good for all syllables, not merely for principal accented and hightone syllables, in which alone according to the ordinary mode of marking accentuation they are usually indicated. This conclusion is established by the following considerations. In Lithuanian the nom. sg. **várnā* 'crow' became *várna,* just as **gerā́* became *gerà*, and the gen. sg. *tìlto* 'of the bridge' retained the length of the *-ō* just like *anõ* (§ 664, 3). The final syllables of **várnā* and **tìltā* (*tìlto*) had thus an accent of the same form as the final syllables of **gerā́* and **anā́* (*anõ*)[1] In Greek lowtone final *-οι* was counted long for the word-accentuation, in case the syllable, if bearing the accent, shows the circumflex, e. g. loc. sg. *οἶκοι* beside *Ἰσθμοῖ*, on the other hand it was treated as short where the syllable, if bearing the high tone, shows the acute, e. g. nom. pl. *οἶκοι* beside *καλοί*; the *-οι* of *οἶκοι* was thus circumflexed, but the *-οι* in *οἶκοι* had the acute.

§ 668. Our means for determining the accentuation in the older periods of the Indg. languages are the works of the native grammarians, metre, the accent marks of the texts handed down to us, the modifying influences, exercised by the accent on the sounds, and the accentuation in those living languages which form the continuation of these older stages of development.

1) Native Lithuanian scholars affirm that the differences of syllabic accent appear also in syllables which do not bear the principal accent, that e. g. in the instr. sg *kirvíù* the same slurred ('geschliffen') accentuation is heard in the first syllable as in the nom. sg *kir̃vis* 'axe'.

Notices of grammarians we possess for Sanskrit and the classical languages. They are not precise enough to furnish us with a clear and complete picture of the accentuation.

Metre hardly requires consideration elsewhere than in HG.

For the same languages we have accented texts. The system of indicating accent is however very incomplete. The Hindoos marked with the udātta only the word-accent, without betokening the differences of accentuation between the syllables which had not the high tone and without taking account of the kind of emphasis, the quality of syllabic accentuation. Sentence accent was indicated only in so far, as under certain circumstances words with subordinate tone in the sentence as a whole, remained without mark of accent In Greek the tone movement, which was worked out within the individual syllable, was expressed by the distinction of acute and circumflex, only however, if the syllable was the most prominent in the word. Both accents thus served at the same time to indicate the position of the high tone in the word. First attempts at indicating sentence-accent were the use of the grave (e. g *βασιλεὺς ἐγένετο* but *ἐγένετο βασιλεύς, περὶ τούτου* but *τούτου πέρι*) and the non-accentuation of words

From sound-changes we may often gather what the accentuation was. Reduction and total loss of syllables point to a more strongly developed expiratory accentuation. If the accent-force of several syllables is concentrated upon one, those left without force lessen their duration and firmness. Thus the position of the principal tone is at once recognisable.

Conclusions, drawn from the younger periods of languages, are not to be applied to the older without great care. As the languages, whose course of development we can trace through considerable periods of time, show, the accentuation of a language may undergo complete modification in a comparatively short time. Only where on the whole a coincidence in the accentuation of earlier and later periods seems already probable on other grounds, ought the younger phases of language to be adduced, e.g. in HG., to clear up the phenomena of the older periods.

Primitive Indg. period [1]).

§ 669. The position of the word-accent can be arrived at through comparison of Sanskrit, Greek and prim. Germanic

1) Of the older works on the accentuation of the Indg. languages in general or of single Indg. languages we may mention here: L. Benloew De l'accentuation dans les langues indo-européennes, 1847, F Bopp Vergleichendes Accentuationssystem, 1854, C. Göttling Allgem Lehre vom Accent der griech. Sprache, 1835, W Corssen Über Aussprache, Vokalismus und Betonung der lat. Sprache II² (1870) p 794 ff.; cp. the list of literature in F. Misteli's Über griech. Betonung, 1875, p. 3 ff

Modern literature. General: L Masing Die Hauptformen des serbisch-chorwatischen Accents nebst einleitenden Bemerkungen zur Accentlehre insbesondere des Griechischen und des Sanskrit, 1876. A Hillebrandt Zur Lehre von den starken und schwachen Casus, Bezzenb Beitr II 305 ff. (cp also X 318 ff). — Sanskrit: R Garbe Das Accentuationssystem des altind Nominalcompositums, Kuhn's Ztschr. XXIII 470 ff. W. D Whitney Sanskrit Grammar, 1879 p 29 ff. F Knauer Über die Betonung der Composita mit *a* priv. im Sanskrit, Kuhn's Ztschr XXVII 1 ff — Greek F. Misteli Über griech Betonung, 1877, Erläuter zur allgem. Theorie der griech Betonung, 1877 J. Wackernagel Der griech. Verbalaccent, Kuhn's Ztschr. XXIII 457 ff L Schroeder Die Accentgesetze der homer Nominalcomposita, mit denen des Veda verglichen, ibid XXIV 101 ff Th Benfey Die eigentliche Accentuation des ind praes. von *i*, und *φα* sowie einiger griech Präpositionen, in: Vedica und Linguistica, 1880 F Blass Über die Aussprache des Griech , 1882, p. 106 ff. M Bloomfield Historical and critical remarks, introductory to a comparative study of Greek accent, Americ. Journ of Philol IV 21 ff J. Kuhl Die Bedeutung des Accents im Homer, Progr von Jülich, 1883 R. Meister Bemerkungen zur dor Accentuation, in: Zur griech Dialektologie, 1883. Brugmann Griech Gramm in I Muller's Handbuch d klass Altert-Wiss II 48 ff. F Hanssen Der griech Circumflex stammt aus der Ursprache, Kuhn's Ztschr XXVII 612 ff B. J. Wheeler Der griech. Nominalaccent, 1885. — Latin: F. Scholl De accentu linguae Latinae, Acta soc phil. Lips. VI 1 ff R Kühner Ausführl Gramm. der Lat Sprache I 145 ff F. Hartmann Ein merkwürdiger Fall von Verbalenklise im Lateinischen, Kuhn's Ztschr. XXVII 549 ff E Seelmann Die Ausspr. des Latein, 1885, p. 15 ff. F. Stolz Lat Gramm in I. Müller's Handb d klass Altert-Wiss II 192 ff, Gibt es wirklich gar keine Spuren einer älteren Betonung des Lat ?, in: Wien Stud VIII 149 ff. — Keltic: H Zimmer Über altir. Betonung und Verskunst = Kelt Stud. II, 1884 R Thurneysen L'accentuation de l'ancien verbe irlandais, Rev. Celt VI 129 ff, Zur ir. Accent- und Verslehre, ibid VI 309 ff — Germanic: K. Verner Eine Ausnahme der ersten Lautverschiebung, Kuhn's Ztschr XXIII 97 ff. E Sievers Zur Accent- und Lautlehre der

(Verner's law). The word-accent was free, that is, unrestricted either by number of syllables or by questions of quantity. E. g. **pətḗ(r)* 'father' : Skr. *pitá*, Gr. *πατήρ*, Goth. *fadar* O.Icel. *faðer faðir* prim. Germ. **faðḗr*. **bhrā́tō(r)* 'brother' : Skr. *bhrā́tā* Gr. *φρᾰ́τωρ* Goth. *brōþar* prim. Germ. **brṓþōr*. **oktṓ* 'eight' : Skr. *aṣṭá*, Gr. *ὀκτώ*. **dr̥kónt-es* nom. pl. part. act. from *derk-* 'see' : Skr. *dr̥śánt-as* Gr. *δρακόντ-ες*. **é̯i-mi* 'I go' **i-més* 'we go' : Skr. *émi imás*. **lelip-mmé* or **lelip-mé* 1. pl. indic. perf. act. from *leip-* 'smear, stick to' : Skr. *lilipmá* Goth. *bi-libum* prim. Germ. **libumí*. **u̯ortéi̯ō* causat. from *u̯ert-* 'turn' : Skr. *vartáyāmi* Goth. *fra-vardja* prim. Germ. **u̯arðíi̯ō*. Sanskrit preserved most accurately the word-tone, nevertheless we find even in this language also not a few instances of shifting, see § 672.

For the relation to one another of the syllables of a word which do not bear the high tone (§ 667, 3 p. 529) we have no certain information as regards the time immediately before the breaking up of the Indg. prim. community. From certain fluctuations perceptible in the historical periods and affecting the accentuation of certain classes of genuine nominal compounds, owing to which the accent rested sometimes on the first, sometimes on the second member of the compound, we may conclude that the less accented member had preserved as medium tone the high tone originally belonging to it as an independent word, just as the syllable *-zeh-* in Mod.HG.

germ. Sprachen, 1878. F. Kluge Das germ. Accentgesetz, in Beitr. zur Gesch der german. Conjug p 131 ff, Kuhn's Ztschr. XXVI 68 ff W Scherer Zur Gesch. d. deutsch Sprache [2] p. 75 ff. H Paul Zum Verner'schen Gesetz, Paul-Braune's Beitr VI 538 ff and elsewhere. — Lithuanian. F Kurschat, Gramm. der littau. Sprache, 1876, p. 57 ff. A. Baranowski and H. Weber Ostlitauische Texte, 1882, p. XV sqq. A. Leskien Die Quantitätsverhältnisse im Auslaut des Litauischen, Arch. f. slav. Philol. V 188 ff Bezzenberger Zur lit. Accentuation, in his Beitr X 202 ff. — Slavonic L. Masing Die Hauptformen etc., see above. Nemanić Čakavisch-Kroatische Studien, 1. Accentlehre 1883—85, Sitzungsber. der Wiener Akad. B. 104 105. 108. J. Hanusz Über die Betonung der Substantiva im Kleinrussischen, ein Beitrag zur vergleichenden Accentlehre im Slav., 1883. A. Leskien Untersuchungen über Quantität und Betonung in den slav. Sprachen, I, 1885.

wéchsel-beziehungen still exhibits the word-accent of *beziehungen* or the syllable *-lai-* in Lith. *vaĩk-palaĩkis* ('ne'er-do-well') that of *palaĩkis* (§ 691 end). The misplacing of the high tone in the former case resembles that in the German *ùnbeschréiblich* beside *únbeschrèiblich, ùngeméin* beside *úngemèin* etc.

So far as sentence-accent is concerned, the enclitic use of certain words and categories of words in Sanskrit, Greek etc. was doubtless inherited from the period of the prim. community.

Thus enclitic were:

Certain particles, as **qe* 'and' : Skr. *ca* Gr. *τε* Lat. *que*; **u̯ĕ* 'or' : Skr. *va vā* Gr. **ϝε* in *ἠ-ὲ* from **ἦ-ϝε* (§ 677) Lat. *ve*.

The interrogative pronouns (st. **qo-* and **qi-* : Skr. *ka-* and *ci-*, Gr. *πο-* and *τι-*, Lat. *quo-* and *qui-*), if they had an indefinite meaning, cp. e. g. Gr. *τί-ς* 'who?' and *ἀνήρ τις*.

The personal pronouns, if no contrast of meaning prevailed, as between *I* and *thou* etc., cp. e. g. the enclitic Skr. *mē* Gr. *μοι* O.Bulg. *mi* 'to me' [1]).

Further, probably in many instances, the vocative, see § 672;

Lastly the finite verb also to a large extent, always if the temporal particle **é*, the augment, immediately preceded it, e. g. **é dr̥̄ket* 'he looked' : Skr. *ádr̥śat* Gr. *ἔδρακε*; apparently already in the period of the Indg. prim. community an agglutination had taken place here which obliterated the feeling for *é* as an independent word Further, the verb in the principal sentence was frequently appended with the low tone to those adverbs which appear in the separate languages as prepositions, as **pró bherō* = Skr. *prá bharāmi* [2]); more rarely the verb was welded into a unity with living case-forms. But apart from such definite categories of words with which the verb showed a special pre-

1) It is assumed that this enclitic use had occasioned the weakening of a form **tu̯oi̯* to **toi̯* 'to thee' (Skr. *tē* Gr. *τοι* O.Bulg *ti*). Cp. § 187.

2) So also the passive participles and verbal abstracts with suffix *-ti-* had the tone on the prefix, e. g **próbhr̥to-s* **próbhr̥ti-s* (Skr. *prá-bhr̥ta-s prábhr̥ti-ś*) beside **bhr̥tó-s* **bhr̥ti-s* (Skr. *bhr̥tá-s bhr̥ti-ś*) c

ference for enclitic connexion, the verb in principal sentences had the low tone. In these it preserved its accent in Sanskrit only when the first word of a sentence (§ 672).

§ 670. Did the expiratory or the musical accentuation preponderate at the time of the breaking up of the primitive community?

The reduction and rejection of vowels point to a more strongly developed expiratory accent. This method of accentuation therefore must be referred to that period of the Indg. primitive language in which the syllable preceding the principal tone underwent the weakenings, mentioned in § 310 ff., when e. g. **pet-é-* and **derḱ-é-* became **pté-* and **dṛḱé-*. That between these processes and the close of the primitive language a certain time had elapsed, is shown by the fact that the state of the language, phonetically produced by those accentual influences, was altered by a series of new formations which with good reason are referred to prim. Indo-Germanic.

Rem. E. g. dat. sg. **bhrā́tr̥-ai̯* 'to the brother' (Skr. *bhrā́trē*) had come in either for older **bhr̥ā́tor-ai̯* after the analogy **pətr-ái̯* 'to the father' (Skr. *pitrḗ*) or for older **bhr̥tr-ái̯* after the analogy of the stem-form of the strong cases **bhrā́tor-* (e. g. acc. **bhrā́tor-m*). Nom. pl. **mātér-es* 'mothers' (Skr. *mātáras*) with strong grade radical vowel beside **pətér-es* must in like manner have been influenced by analogy. Prim. Indg. is also the levelling of **dérḱ-m*, **dṛḱé-s*, **dṛḱé-t*, **dérḱo-mem*, **dṛḱé-te*, **dérḱo-nt* (rt. *derḱ-* 'see') on the one hand to **dérḱo-m*, **dérḱe-s*, **dérḱe-t* etc. (Skr. *dárś-a-m*, *dárś-a-s* etc.), on the other hand to **dṛḱó-m*, **dṛḱé-s* etc. (Skr. *dṛś́-á-m*, *dṛś́-á-s* etc.).

Towards the end then of the Indg. primitive community the expiratory character of the accent seems to have no longer preponderated. The fact that Sanskrit and Greek with preponderantly musical accent show as separate languages hardly any phonetic changes which could be ascribed to the effects of expiratory accent, points to this conclusion [1]). If at the time of the separation of the peoples and accordingly still in the oldest periods of their separate existence the accent had had

1) In Aryan the only difference to be considered is that of $a = \breve{a}$ and $an = \breve{a}$ (§§ 228. 230) and Skr. *yā́t-ās* beside *yā́nt-am* (§ 198).

a strongly marked expiratory character, these two languages would doubtless not have preserved so faithfully and so unabbreviated the old inherited condition of the sonants. I am of opinion therefore — without venturing to express a final decision on a question so difficult and still so much requiring a comprehensive and thorough investigation —, that Skr. and Greek accentuation on the whole represent in the point in question the method of accentuation which prevailed at the time of the separation. In the prim. Germanic development the Indg. accent again became more strongly expiratory; for it is to the strengthened breath-current of the syllable bearing the principal accent that we must ascribe the circumstance that the voiceless spirants (**bʰrā̆par-* 'brother' **kéu̯sō* 'I test') remained voiceless (see §§ 530 581).

§ 671. The contrast between circumflex and acute in Greek and that of the slurred (geschliffen) and broken (gestossen) accent in Lithuanian appear to correspond to one another and to stand in historical connexion. Gr. nom. sg. *τῑμᾱ́* nom. pl. *τῑμαί* (orig. nom du., see accidence) : gen. sg. *τῑμᾶς* = Lith. nom. sg. *geró-ji* nom du. *gerë-ji* : gen. sg. *gerõs-ios*. Nom. du. *καλώ* nom. pl. *καλοί* : gen. pl. *καλῶν* loc. sg. *Ἰσθμοῖ* = nom. du. *gerū̃-ju* nom. pl. *geré-ji* : gen. pl. *gerū-jū* loc. sg. *namẽ* ('at home'). Cp. further 3. sg. opt. *λείποι* and *te-sukẽ* with reference to the remarks made on final *-οι* page 530.

Rem. 1 Hanssen's attempt (Kuhn's Ztschr. XXVII 612 ff.), to establish this difference of syllabic accent for Germanic also, has, in my opinion, not succeeded.

Further the difference of accentuation in Skr. nom. *dyāúš* and voc. *dyāuš* and Gr. nom. *Ζεύς* and voc. *Ζεῦ* points to an original qualitative difference in Indo-Germanic (§§ 673. 677).

Hence it may be conjectured that already in the time of the Indg. primitive community, there existed different forms of syllabic accent.

Rem. 2. Owing to the incompleteness of the present investigation, I have taken no account in writing the Indg prim. forms in this work of these different accents. In every case the word-accent has been written with the acute (').

Rèm. 3. In Italic, Keltic and Germanic, a stress accent was developed on the first syllable of the word, which drove out the Indg. free accent. Thurneysen (Revue Celt. VI 313) conjectures historical connexion here and sets up 'a general West European regulation of accent'. The assumption of such a connexion is bold. For since in the special Germanic development the prim Indg word-tone still acted as a stress accent (Verner's law), the new Germanic accentuation would be a borrowing from Keltic, the Germanic tribes would through contamination have given up their native accentuation in favour of the Keltic · should not then Keltic influence reveal itself in other directions too in a far larger extent than is actually provable? Moreover Lettic and Czech show by their accentuation on the first syllable that languages can pass through the same revolution in accent quite independently To the assumption of a connexion between Keltic and Italic accentuation I am less opposed. No other branches show so many special coincidences as Italic and Keltic.

Aryan.

§ 672. With Sanskrit accentuation alone have we a tolerably intimate acquaintance.

It has been already remarked in § 669 that the Hindoos preserved on the whole the prim. Indg. position of the word-accent. Changes were doubtless due only to analogy; in one set of instances however it is impossible to decide whether the variation belonged to the Sanskrit or the prim. Aryan period.

Examples. For **ganwás* 1. du. 'we come' (from **gm̥-u̯ás*, § 229) came *gánvas* after the singular forms like *gánti*; the formal similarity with the forms, accented on the root, which had arisen phonetically, occasioned this innovation, cp. alongside these *ga-thás ga-tás* etc. Presents with original *á* in the root syllable, as *bhárāmi*, caused the accent in those verbs whose root syllable had unaccented *a* to pass over to the root syllable: *gáchāmi* 'I come' for **gachámi* from **gm̥-skó* (cp. *ichámi ṛchámi* etc.), *dáśāmi* 'I bite' for **daśámi* from **dn̥kó* (§ 224). The transition from *mati-ṣ* to *máti-ṣ* ('thought'), from *pakti-ṣ* to *pákti-ṣ* ('a cooking') etc. is connected with the circumstance that these nouns from the Indg. prim. period had a final and initial accentuation which varied in the different cases. The accentuation *pañcá* (Atharvaveda V 15, 5) for *páñca* 'five' follows *saptá* 'seven'; cp. *pañcábhiṣ* : *saptábhiṣ*.

As regards sentence accent Sanskrit appears to have preserved the old position almost invariably. At least the enclitic use of the particles, like *ca vā u ha*, of the forms of the personal pronouns, as *mē mā*, of the vocative and of the verb must be regarded as Indg., as was already remarked p. 534. In independent sentences the verb had no accent unless at the beginning of a sentence, e. g. *agnim īḍē purōhitam* 'I praise Agni, the house-priest' (beginning of the Rigveda). The vocative had from the beginning the high tone on the first syllable, e. g. *pítar* 'O father' *mátar* 'O mother' (Gr. *πάτερ, μῆτερ*). It had however its independent high tone only at the beginning of a sentence, otherwise it was unaccented, e g. *idám indra śṛṇuhi* 'this, O Indra, hear'. Just as this use appears to be original, so also the law may be old which requires the vocative, if connected with a word which more nearly defines it, to form in respect of accent a unity with that word, e g. *vásō sakhē* or *sákhē vasō* O good friend', *sáhasah sūnō* or *sūnō sahasah* 'O son of strength'. I conjecture that this practice in Sanskrit as in other languages, if it did not occasion, at any rate helped the formation of improper compounds, cp. e. g Skr. *jás-pati-ṣ* 'lord of the family', Gr. *δεσ-πότης*, voc. *δέσ-ποτα*, 'house master' (§ 204 p. 171)[1]), *Διόσ-κουροι* 'sons of Zeus', Lat *Juppiter* (see § 612 p. 463), *Dies-piter*.

§ 673. According to the account of the native grammarians the Sanskrit accent was a musical one. It is obvious that there had also existed alongside that accent differences of voice stress. The expiratory accent cannot however have been very strong.

The high tone was called udātta, that is, 'raised' (´). Opposed to it was the anudātta, that is, 'unraised' (not-high tone).

The udātta was a simple rising tone. If the udātta-syllable was followed by two or more unaccented syllables, the first of these syllables had the so-called enclitic svarita (`). it was

1) The combination **dems-potis* probably dates from the Indg. primitive period; op. Skr. *pátir dán* and *dámpatiš*, the latter perhaps for **dáṃs-patiš-*, with substitution of the pause-form *dán*.

pronounced with falling tone, and its accent formed the natural transition from the high tone reached in the udātta-syllable to the low tone of the next syllable but one, e. g. *bhrātàras* 'fratres', *vidúṣṭàrēbhyas* 'doctioribus'.

There was, besides, the so-called independent svarita (ˆ). It arose, when a high accented vowel was joined in the same syllable with a low accented vowel, e. g. *divîva* from *diví iva*, *ēvâśnīyāt* from *ēvá aśnīyāt*, *sôbravīt* from *só (a)bravīt*, *apsv̂antár* from *apsú antár*, *vy̆āptiṣ* from *ví-āpti-ṣ*. This accent is defined as a compound accent, as a combination of a higher and a lower tone within the limits of a single syllable. It was rising-falling, the combination of the udātta with the enclitic svarita. It may be, accordingly, compared with the Greek circumflex (e. g. τρεῖς from *τρέες)

The contrast in accentuation between nom. *dyāúṣ* and voc. *dy̆āuṣ̂* appears to have descended from the period of the Indg. primitive community, since it corresponds to the contrast between Greek Ζεύς and Ζεῦ. Cp. § 677.

Rem. Further peculiarities of Sanskrit accentuation in Whitney § 80 ff, L Masing Die Hauptformen etc p 37 ff 72 f. and elsewhere.

§ 674. As regards the accentuation of the Old Iranian dialects we have no information

If the sound-law respecting the transition of *r* before *k*, *p*, *t* into a spirant which has been assumed by Bartholomae for Avestic and mentioned above in § 260, is correct, we must conclude that at the time when this sound-change took place, Avestic had in general the same word-accent as Sanskrit.

Armenian.

§ 675. That the accentuation of Old Armenian was once essentially expiratory, is shown by the numerous weakenings of syllables.

Since the vowels of the original final syllables in polysyllabic words disappeared (§ 651, 1), the accent must have been thrown back, cp. e. g. *mard* 'man' from Indg. **mr̥tó-s* (Skr. *mr̥tá-s*). And since *i*, *u*, *ĕ*, *oi*, *ea* remained unchanged

only in the originally penultimate syllables, while in earlier syllables *i* and *u* were rejected and *ē*, *oi*, *ea* were reduced to *i*, *u*, *e* (§§ 31 47. 63. 79. 632), the accent must have been concentrated on the originally penultimate syllables.

Further conclusions depend upon the answer to be given to the question of the chronological relationship between the weakening in originally final syllables and the weakening in syllables earlier than the original penultimate. I believe we must assume with Hubschmann that the first mentioned weakening was earlier in time. Consequently we must conclude that in the first place a withdrawal of the accent from the final syllables in general took place, but that at the period when gen. **duster* became *dster*, accentuation of the final syllable was the regular principle.

The abandonment of the prim. Indg. word-accent presupposes the development of an expiratory secondary accent, limited by number of syllables This gradually overpowered and drove out the original accent.

Greek.

§ 676. The prim. Indg. freedom in the position of the word accent and the capability of the prim. language to use enclitically in the sentence words of any number of syllables whatever (particles, pronouns, forms of the finite verb), were materially limited in Greek through the development of a secondary accent, of the accent, which displays itself in the so-called law of three syllables. The chief points are as follow (cp. Wheeler's treatise, cited above p. 532.):

1. Dissyllabic words with a short final syllable were not subject to the action of the secondary accent but generally preserved the old inherited word-tone. *πόδα πόδες, ποδός ποσί* : Skr. *pádam pádas, padás patsú*. *τρεῖς* from **τρέ(ι)ες, τρισί* : *tráyas, trišú*. *πέντε δέκα, ἑπτά* : *páñca dáša, saptá*. *πέρι* : *pári*. *ἄρκτο-ς* : *ṛkša-s*. *γόμφο-ς* : *jámbha-s*. *ἵππο-ς* : *áśva-s*. *ἀγό-ς* : *ajá-s*. *ὀρθό-ς* : *ūrdhvá-s*. *μισθό-ς* : *mīdhá-m*. *θῡμό-ς* : *dhūmá-s*. *ἀγνό-ς* : *yajñá-s*. *κλυτό-ς* : *śrutá-s*. *γνωτό-ς* : *jñātá-s*. *βαρύ-ς* :

gurú-ṣ. *ἡδύ-ς* : *svādú-ṣ*. *μέθυ* : *mádhu*. *νέφος* : *nábhas*. *ἄνθος* : *ándhas*. *εἶμα* : *vásma*. Here belong also word-combinations like *ὅς τε* : Skr. *yáṣ ca*.

2. In disyllabic words with long final syllable and in all trisyllabic and polysyllabic words, as also in similar combinations under one accent, there was developed, in the period of the Greek primitive community, a secondary accent on the third mora from the end or, if the word ended in a trochee, on the fourth mora. Accordingly at the end of a word or combination of words not more than two, or in the case of a trochaic ending three morae could remain unaccented. In words with long final syllable the effect of the law was to permit only the acute and not the circumflex to stand on the penultimate The secondary accent conquered the older accent, situated nearer to the beginning of the word.

Thus arose *ἡδέων* from **ἡδέων*[1]) : Skr. *svādíyān*. *φερόμενος φερομένοιο -ου* from **φέρομενος *φέρομενοιο* : *bháramāṇas bháramānasya*. *Ἀγάμεμνον* from **Ἀγαμεμνον* : cp. *ἄδελφε* beside *ἀδελφός* etc. *ἀπό-τισις* from **ἄπο-τισις* : Skr. *ápa-citiṣ*. *ἀν-επί-θετος ἀν-επι-θέτοιο -ου* from **ἄν-επι-θετος *ἄν-επι-θετοιο* : *án-apihitas án-api-hitasya*. *ὁππότερος, αὐτὸς πότερον* (i. e. **αὐτός πότερον* 'ipse utrumvis') from **σfόὸ ποτερος* (cp. Goth. *sva*), **αὐτός ποτερον ζυγὸν φεροίμεθα* (i e. **ζυγόν φεροίμεθα*) from **ζυγόν φεροιμεθα* : *yugám bharēmahi*. *Ζεὺς ἥμιν* (i. e. **Ζεύς ἥμιν*) from **Ζεύς ἡμῖν*.

Rem 1. Almost all the forms of the finite verb had the recessive tone, cp e g *ἰμεν δίδοσκε* with Skr *imás dadárśa* This is probably not to be explained exclusively from the enclitic use in the principal sentence (§ 669 p 534) Nothing prevents our assuming that the accentuation of the subordinate sentence was still in force at the time when the secondary accent was developed. Then many forms of the principal sentence necessarily acquired the same accent as the forms of the subordinate sentence. **⏑ ⏑ φερομεν* of the principal sentence (Skr *⏑ ⏑ bharāmas*) became *φέρομεν*, the form of the subordinate sentence (Skr. *bhárāmas*), **⏑ ⏑ φεροιμεθα* of the principal sentence (Skr. *⏑ ⏑ bharēmahi*) and **φέροιμεθα* of the subordinate sentence (Skr. *bhárēmahi*) fell together in *φεροίμεθα*, etc. Such falling together of a part of the forms, led to considerable levellings, after the

1) We give the words as they exist in Ionic or Attic. Strictly speaking we ought to have given the prim. Greek forms.

analogy of the accentuation of the forms of the principal sentence, e. g. *ἰδοῖμεν of the subordinate sentence (Skr. *vidéma*) gave way to ἴδοιμεν of the principal sentence.

The newly developed accent had not suppressed the old one in ἄνθρωπόν τινα, ἄγγελός που, σῶμά μου from *ἄνθρωπον τινα, *ἄγγελος που, *σῶμα μου. The accent, which the first word bore, if it was not burdened with any enclitic, was too strongly fixed in the mind, to have absolutely no value. We have thus to do with the operations of analogy. Such influence shows itself still more clearly in cases like σῶμά τε. If the development had not been disturbed we should have had σώμα τε (cp. σῶμα : σώματος); the Greek left the circumflex on σῶμα and accented after the analogy of καλός τε etc.

Irregular, too, is ἄλγεά τινων for *ἄλγεα τίνων (*ἀλγεα-τίνων), cp. πατὴρ ἡμῶν; the accentuation here followed the analogy of ἄλγεά τινος, τινι etc. Conversely ἄλγεα ἔμιν for *ἄλγεά ἡμιν after ἄλγεα ἡμῶν.

3. No changes took place if the position of the original accent and that of the secondary accent coincided. Voc. θύγατερ : Skr. *dúhitar*. ὔστερο-ς : *úttara-s*. Neut ἧδιον : *svádīyas*. ὀκτώπους : *aṣṭá-pāt*. φίλος τις, Σωκράτης τις, πατήρ μου, ποταμοί τινες.

4. If the original accent stood nearer to the end of the word than the place of the secondary accent, the former partly remained and was partly thrown back.

The old tone had remained e. g. in γενετήρ : Skr. *janitá*; ἱαρό-ς ἰαρός ἱερό-ς : *iṣirás*; παχυλό-ς : *bahulá-s*; πεφυώς : *babhūvân*; πατέρες : *pitáras*; δρακόντες : *dṛśántas* Further in combination with enclitics : ἀγαθά τε, ἀγαθός τις, πατήρ γε.

If the accent was thrown back we have to distinguish two cases.

a. Oxytons ending in a dactyl became paroxyton independently of the secondary accent. ἀγκύλο-ς καμπύλο-ς from *-υλό-ς : cp. παχυλό-ς. ἐρρωμένος ἀκαχμένος λελειμμένος from *-μενό-ς : cp. Φαμενό-ς Τεισαμενό-ς and Skr. *sasṛmaná-s*; the accent of the forms of the perf. part. which ended in a dactyl was

generalised, hence λελῠμένο-ς instead of *λελῠμενό-ς etc. τελεσφόρο-ς from *-φορό-ς : cp. φορό-ς and ψῡχο-πομπό-ς πομπό-ς; forms in ⏑⏑ were followed by δημιο-βόρο-ς αἰσχρο-λόγο-ς etc. instead of *δημο-βορός etc.

Rem. 2. This law of accent seems to have been the model in the levelling of the accent in the case-forms of the consonantal declension. Following it also appeared e. g. ὀφρῦς ὀφρύος ὀφρύι (Skr. *bhrūś bhruvás *bhruvi*) beside regular πού, ποδος ποδί, and such accentuation may in many cases have been the pattern for the polysyllabic stems

For details see Wheeler loc. cit. pp. 60—104.

b. The secondary accent appears in place of the original. πέλεκυ-ς : Skr. *paraśú-ś*. ἔλυτρο-ν : *varútra-m*. ἕκτο-ς : *ṣaṣṭhá-s*. Whether in such cases the secondary accent drove out the original in the same way as *ἥδῐων became ἡδΐων through *ἥδῐων, or whether the throwing back of the accent was in the first instance quite independent of secondary accent and the latter afterwards defined how far the accent should be thrown back, is quite uncertain; we might assume, e g. that the plural *πελεκέες = Skr. *paraśáv-as* had first become *πέλεκεες from which arose afterwards πελέκεες πελέκεις. The second hypothesis seems to me the more probable.

Rem 3. Some cases have been already mentioned in which the effect of analogy had caused a change of the old accent position. Such alterations af accent occurred frequently in other cases also We may further mention ἑκυρό-ς instead of *ἔκυρο-ς (Skr. *śvaśura-s*) after ἑκυρᾶ; χρυσοῦς instead of *χρυσους (from χρύσεο-ς) after χρυσοῦ χρυσῷ (from χρυσέου χρυσέῳ); conversely εὖνον instead of *εὐνοῦ (from *εὐνόου) after εὖνους εὔνουν (from εὔνοο-ς εὔνοο-ν)

§ 677. The syllabic accentuation of Greek was down to the christian era essentially musical

Rem. 1. Soon after the beginning of that period, as is shown by certain metrical peculiarities, the expiratory accent became stronger and in the Middle Ages the language had already the same essentially expiratory accentuation which it has at present

The acute (´) was a rising tone. If the sonant element had two morae, the accent continued rising in the second mora. The circumflex (˜), produced by gradual rounding of (ˆ), was a rising-falling tone. That this difference of accentuation existed also in syllables which had not the high tone, is demonstrated by direct proofs, as was shown in § 667, 4 (p. 529).

The acute on long vowels and diphthongs is parallel to the 'broken' tone in Lithuanian, nom τῑμά: Lith. *geró-ji*, see § 171. The circumflex corresponds to the 'slurred' tone in Lithuanian, e. g. gen. τῑμᾶς: Lith. *gerõs-ios*, loc. cit. The accent in voc. Ζεῦ corresponds to the Skr. independent svarita *dyâuš*: the whole rising movement fell to the first mora (cp. πάτερ beside πατήρ), and thus there remained for the second only the falling movement, see §§ 671 673. The new circumflex which arose by vowel contraction (τρεῖς from *τρέες, οἰνοῦς from οἰνόεις, φοβοῦμεν from φοβέομεν, τῑμῆντα from τῑμήεντα) teaches us that the second of the sonants which have run together, had the same or a similar tone movement as the Sanskrit enclitic svarita. Thus the svarita in Skr. *divîva* from *divi iva*, may be compared with this circumflex, see § 673.

Besides the acute and the circumflex the old grammarians ascribe to Greek the grave accent (βαρεῖα προσῳδία), marked by `. It is alleged for two essentially different cases.

Firstly, for the last syllable of proclitic words, e. g. τινὰ γάρ, περὶ τούτου, ἀλλὰ ταῦτα, ἢ σύ. The accent of these words, when not used proclitically, was τίνα, πέρι, ἄλλα, *ἦ-ϝε; the last form is proved by the fact that -ϝε is the old Indg. enclitic *-*we* (Lat. *-ve*), § 669 p. 534.

Rem 2. That the Byzantines and we along with them write the proclitic ἐν, ἐξ, ἐ., ὁ ἡ οἱ αἱ without accent, but πρὸς. περὶ. τὸ, τὸν with the grave, has a purely graphical reason When in the case of initial vowels the signs for accent and breathing coincided in the same letter, the proclitic monosyllables were relieved of their accent-sign See Wackernagel Kuhn's Ztschr. XXVIII 137

Secondly, as substitute for a final acute, when the word did not close the sentence (βασιλεὺς ἐποίησε), with the exception of τίς τί, which always retained the acute (τίς ἐποίησε;).

Whether in both cases there was precisely the same tone movement, is not clear. Equally obscure is the character of the modification undergone by the acute in βασιλεὺς ἐποίησε.

Rem. 3. If we speak of a 'weakened' or 'stifled' acute, the matter is as obscure as before (see L. Masing's excellent remarks loc. cit. p. 19 ff.)

Only this much is certain, that the explanation of the phenomenon must start from the fact that the grave had its position where a syllable was spoken directly after in which the tension of the voice began to rise or reached a point. In cases like *τρέες (τρεῖς), ἄλλος, τά-δε, ὅς τις, παλοί τινες the syllable following the acute had a falling movement, the tension of the voice began to relax in it, and after ἐποίησα βασιλεύς came complete absence of tension, the pause On the other hand in *βασιλεύς Σπάρτης and in *βασιλευς ἐγένετο a rising tone movement directly followed the rising acute. Compare with *βασιλεύς Σπάρτης the fact that, in the body of a word, two acutes are not tolerated in two successive morae, whence, e. g., there is no *ἄγγέλος τις, as might be expected (see Wheeler op cit pp. 126 129). We may thus conjecture that the grave was not solely a rising tone

§ 678. In matters of accentuation only trivial differences appear between the different Greek dialects.

The Lesbians alone instituted a more important innovation, by throwing back, as the grammarians tell us, the accent in every case according to the law of three syllables, e. g *σάφος*, *βασίλενς*, *Ἄτρενς*, *θῦμος*, *πόταμος*.

Rem When it is said that prepositions and conjunctions as *ἀνά*, *διά*, *ἀλλά* retained their accent on the last in Lesbian too, it is simply a question of the proclitic grave (§ 677), which formed no opposition to baryton accentuation.

The Lesbian accentuation seems, in the main, to have arrived at this position through the great bulk of forms with baryton accent dating from the Greek prim. period having gradually drawn over the forms which were otherwise accented

Italic.

§ 679. While the native grammarians tell us something of the accentuation of Latin, in the investigation of the accentuation of the other Old Italic dialects we are thrown back on what their phonetic form teaches us when compared with that to be presupposed for the period of the Italic and Indg. primitive period.

There is nothing to contradict and much to support the assumption that the prim. Indg. accentuation had already, during the prim. Italic unity, undergone a complete revolution. In polysyllabic words the accent which was expiratory was borne by

the first syllable. Thus a secondary accent had developed on the first syllable and driven out the competing original accent.

Rem. The assumption of F. Stolz (Lat. Gramm. p. 148 and Wiener Stud. VIII 149 f.), that the Indg. final accent in **aɣɣó-m* (*aevom*), gen **nāɣ-ós* (*nāvis*) etc still survived in the separate Lat. development, does not convince me in the slightest.

This accentuation also held good for the compound verb, and it was here certainly not merely caused by the mechanical principle of initial accentuation, but represents the prim. Indg. accentuation of the principal sentence. Such compounds with accentuation of the preposition in the Italic prim. period are e. g. Lat. *prae-hibeō praebeō* Umbr. pre-habia 'praehibeat', Lit. *pro-hibeō* Osc. *pru-hipid* 'prohibuerit', Lat. *in-eo* Umbr. en-etu imp. 'inito', Lat. *con-vertō* Umbr. *co-vortus* 'redierit' To the prim Indg. enclisis of the verb in the principal sentence may also be due Lat. *né-sciō, nōn vīs, má-vīs* etc. So also *ɣitur* which is the same as the second member of *ad-ɣitur* and occurred originally only in such combinations as *quid ɣitur*? = **quid agitur*? etc.; if *ɣitur* at a later period appeared as the first word in a sentence this is parallel to the similar use of Greek τοι in τοι-γαρ-οὖν. Here belongs further also the unaccented forms of the indic. of the substantive verb, as Lat. *pótis-sum póssum, sítus-est sítust,* Umbr. *peretom-est* 'peremtum est', Osc. prúftú-set 'probata sunt'.

The enclisis of certain pronouns and particles was also descended from the early period. Lat. *sī quis, nĭm quis* etc., Umb. *sve-pis* Volsc *se-pis* Osc *svae-ps* 'si quis', Osc. pútúrús-píd pl. 'utrique' Lat. *ne-que*, Umbr. *nei-p* 'nec, non, neu', Osc. nei-p ne-p 'nec, neu'; Lat. *uter-que*, Umbr. putres-pe 'utriusque'. Lat. *sī-c, hī-ce hī-c*, Umbr. *eso-c* 'sic', Osc. *ion-c* 'eum'. Lat *alter-ve.*

Postpositions too were enclitic in primitive Italic. Lat. *quō-cum,* Umbr. asa-ku 'apud aram'. Lat. *tantis-per parum-per sem-per,* Umbr. *trio-per* 'per tria, ter', Osc. *petiro-pert* 'quater'. It is impossible however to make out if this usage was pre-Italic.

Certain vowel weakenings may have been called into being in the prim. Italic period through the action of initial ac-

centuation. Cp. the nominatives Lat. Umbr. *ager* Osc. Frunter against Gr. *ἀγρό-ς*, Lat. *famul* Osc. *famel* 'famulus', §§ 623 rem. 1. 633. 655, 9. Compare further the loss of the final vowel in some prepositions, as Lat. *ab* = Gr. *ἄπο*, *s-ub* = Gr. *ὕπο* : Lat. *ab-dō*, Pelig. *af-ded* 'abdidit', Lat. *sub-dō sub-tendō*, Umbr. sutentu 'subtendito'. Here syncope might be suspected (§ 633). Yet it must be remembered that these prepositions often stood before vowels, and thus the form which had lost its final vowel before other vowels, might have become generalised (§ 655, 1).

§ 680. In Latin the initial accentuation, descended from the prim. Ital period, caused vowel reduction in the next syllable, which had the weakest accent. The method of its action was twofold, the syllable either retained its syllabic value or, as a syllable, entirely disappeared.

pepercī from **péparcī · parcō. cecīdī* from **cécaidī* : *caedō. cōn-scendō* from **cón-scandō* : *scandō. an-hēlō* from **án-(h)anslō* : *hālō* from **(h)anslō* (§ 208). *ex-erceō* from **éx-arceō* : *arceō. ob-sideō* from **ób-sedeō* : *sedeō. cōn-ficiō cōn-fectu-s* from **cón-faciō *cón-factu-s · faciō factus prae-hibeō* from **prái-habeō* : *habeō*, Umbr pre-habia 'praehibeat'. *cōn-stituo* from **cón-statuō* : *statuō*, Osc. Anter-stataí dat. '*Interstitae'. *er-īstumō* from **éx-aistumō aestumō in-clūdō* from **ín-claudō* : *claudō. sē-cernō in-certu-s* from **sé-crimō *ín-crito-s* : Gr *α-κριτο-ς*. *in-imīcu-s* from **ín-amīco-s* : *amīcu-s. con-tubernāli-s* from **cón-tabernāli-s · taberna*. Cp. §§ 33. 65 81. 97. 109 d. That this vowel weakening was not one of the oldest historical characteristics of the prim. Latin period, is shown by the form of the borrowed words *Alixenter, Agrigentum, Tarentum*; these came by their *e* instead of *a* through the same phonetic law and were at the time accented on the first syllable.

Rem. Historical forms like *ab-arceō* beside *ab-erceo*, *ob-tractō* beside *ob-trectō*, *ex-pandō* do not prove that the law worked irregularly Such forms depend on a re-composition, just as e. g Mod HG. *ur-theil drittheil* for *urtel drittel* show a revival of the second part of the compound after the analogy of *theil*

ind-uō from **ind-ovō. clūdcru-s* from **clavācru-s*. See § 172, 1.

reppulī from **ré-pepulī. ūndecim* from **únu(s)-decim. surpuī* from **súb-rapuī.* See § 633.

Perhaps the fact, that *o* remained unweakened before consonants in final syllables, e. g. *novo-s socio-s* (*sociu-s*), but became an irrational vowel in middle syllables, e. g. *novi-tās socie-tās*, is to be explained froma secondary accent carried by the final syllable in polysyllabic words. Cp. § 81 p. 73.

§ 681. In trisyllabic and polysyllabic words an expiratory secondary accent developed itself in pre-literary Latin according to the quantity of the penultimate syllable If this syllable was long it bore the accent, if short, the accent was carried by the antepenult. Thus **pépercī* became *pepércī*, **inimīcu-s inimícu-s*, **éxīstumāmus exīstumámus*, and **éxīstumō* passed into *exístumō*, **cónficiunt* into *cōnficiunt*, gen. **cóntubernālium* into *contubernálium*.

Rem. "The Romance languages, by preserving, as a rule, the first syllable of Latin words while unaccented middle syllables often disappeared show that the first syllable always retained a considerable secondary accent; cp. **mànsiōnāticum* French *maisnage, ménage*" Thurneysen Revue Celt VI 313.

Through loss of vowel in final syllables this new word-accent came to stand here and there on the last syllable, as in **illíc(e), tantō-n(e), audín(e), disturbát* from *disturbávit, mūnít* from *mūnívit.* Whether the nominatives as *nostrás Arpīnás Samnís Compáns*, usually classified with these forms, were genuine Latin nominative formations, may be doubted

It is difficult to get a clear idea of the nature of the newly developed expiratory accent as syllabic accent.

According to the native grammarians there were an acute (ˊ) and a circumflex accent (ˆ). The former stood on all short vowels, e. g. *núx, béne, véterem*, on long vowels in the antepenult, e. g. *dēleō*, and on long vowels in the penultimate, if the final syllable was long, e. g. *rēgēs.* The latter stood on long vowels in monosyllables and on the final syllable of polysyllabic words, e. g. *rêx, illîc*, and on the long vowels of the penultimate, if the end syllable was short, e. g. *rēgis, rēgîna.* So far as the accentuation of the long vowels is concerned

(*régēs*, but *rēgis*), this difference in the forms of the syllabic accent is probably rightly regarded as a pedantic fiction of the grammarians.

Vowel shortening in *Júppiter* (*Jūpiter*) etc. points, as we saw in § 612, to a clear cut accent. Nevertheless the reason for the separate treatment of the words in question, while other words apparently similarly formed have no shortening, is quite obscure.

§ 682. Besides the cases of enclisis, mentioned in § 679, there are others whose age we are not in a position to determine Here may be mentioned especially combinations like *invicem*, *dēnuō* from *dē novō*, *ílicō* from **ín sloco*, *profertō* from **pró factō* originally something like 'as good as a fact' (cp. *cōnfectu-s* § 680).

Compound words with an enclitic as second member were also subjected to this new law of accent (§ 681) **tántō-ne*, **úter-que*, **útrā-que*, **útrōrum-que*, **scélerıs-que*, **scélerum-que* passed over into *tantóne*, *utérque*, *utráque*, *utrōrúmque*, *scelerísque*, *scelerrúmque*, here too the accent of the initial syllable was retained as secondary accent On the analogy of such accentuation people also said *tantáne*, *utráque*, where the new law had nothing to do with the giving up of the original accentuation, and *scelerā-que*, for which **scelérăque* might have been expected. In the latter case moreover this analogy was not, as it seems, the only influence; the circumstance that the last syllable of polysyllabic words had originally a secondary accent (cp. § 680 p. 548) was also not without effect. In combinations like *scelera-que* which were always felt by the speaker as a combination of two elements, the tone movement of the uncompounded first member (*scélerà*) counteracted the accentuation of the antepenult (**scelérague*) which formed a sharp contrast to it. This seems to be specially supported by *agité-dum* which had no form so accentuated as *scelerís-que* alongside it.

The retention of the old accentuation by *ita-que úti-que* etc., is to be explained from the fact that they were no longer felt as

compounds They might be adduced as additional proof that **útrā-que, *tántă-ne* was once the pronunciation.

§ 683. We saw that in prehistoric times Umbrian-Samn. dialects shared the initial accentuation of Latin. Hence the numerous instances of syncope in these dialects, as Umbr. *osatu* 'operato' Osc. úpsannam 'operandam' from **ópesā-*, see § 633.

Whether this accentuation still prevailed at the date of our monuments or whether a new system of accentuation had already taken its place, is a subject for further investigation. The extensive rejection of vowels in final syllables, as in Umbr. pihaz 'piatus' Osc. túvtíks 'publicus' (§§ 633. 655, 5), leads us to conjecture that the initial accentuation was retained.

Old Irish.

§ 684. The effects of accent on the form of words, prove that in the primitive Keltic period the first syllable had come to bear the word-accent owing to the development of an expiratory secondary accent.

This mode of accentuation prevailed in noun forms whether the word was simple or compound. O.Ir. *necht* O Corn. *noit* 'neptis' : Skr. *naptí-ṣ* O.Ir. *cloth* 'renowned' O.Bret. *clot* (f.?) 'renown' : Skr. *śrutá-*. Gall. *Trí-casses*; the accentuation of this word is cleared up by its Romance form, French *Troyes* (from **Tricas*). O.Ir. *túus* 'leadership, superiority, beginning', Cymr. *tywys* 'guidance' from **tó-ɥessu-s* = **to-ɥed+tu-* (O.Ir. *do-ſédim* 'I lead'), with its derivative in *-āko-* **tó-ɥessāko-s* O.Ir. *tóisech* 'guide' Cymr. *tywysog* 'guide, leader, chief' O.Kelt. inscript. (Denbighshire) *tovisaci*; the great antiquity of the accentuation of this prefix follows from the *t-* instead of *d-* in the Gaelic and in the Britannic branch.

In the case of the verb there was a difference according as the verbal form was accompanied by a preposition or not. While the uncompounded verb had initial accentuation (e. g. O.Ir. *caraim* O.Cymr. *caram* 'I love'), the compound verb was not accented on the first syllable of the word, but on the first syllable of the second member of the combination; the imperative formed

an exception, for in it the preposition bore the word-accent. A peculiarity doubtless to be referred to the prim. Indg. verbal accentuation. The accentuation of the prim. Indg. subordinate sentence was retained and generalised; the imperative alone, which had no place in the subordinate sentence, still represents the accentuation of the principal sentence (cp. Skr. *prá-bhara*, Gr. *πρό-φερε*). Irish has best preserved these relations, e g. *do-mélim* 'vescor', but imper. *tó-mil* 'vescere'; *do-bérid* 'fertis, datis', but imper. *táibrith* 'ferte, date'. The prefix form *do-* with *d* shows that the Britannic branch once shared in them (Thurneysen Revue Celt. VI 311).

The fact that, in the time of the prim. Keltic unitary period, when the initial syllables received the word-accent, combinations like O.Ir. *do-mélim* did not take the accent on the pre-position, proves that the latter was not yet fused with the verbal form into an indissoluble unity The *n* of *con-* etc. points also to this as will be seen below.

Thus far the relationships of verbal accentuation allow themselves to be without difficulty connected with those which we must presuppose for the Indg. primitive period. Now Irish still shows a rule of accentuation which also seems to date from prim Keltic, viz. the same accentuation as in the imperative 1. after the negative particles *nī ni* 'non' (*mani* 'si non', *coni* 'ut non' etc.), *nā nād nách* 'non', 2 after the relative *(s)a(n)*, if it was suffixed to a preposition, including the particle *in-* 'in which' and the conjunctions *ar-an-* 'ut', *di-an-* 'cum', *co-n-* 'donec, ut'; 3. after the interrogative particle *ind- inn- in-*. E. g. *nī épur* 'non dico' beside *at-bíur*. That this accentuation goes back to prim Keltic, is shown by the double form *con-* and *cóm-* of the preposition, corresponding to Lat. *cum*. Thus *con-écat* 'possunt', but *nī cúmcat* 'non possunt'. The transition from *m* to *n* cannot be comprehended from the difference of accentuation by itself, but only from the prim. Keltic sound-law according to which final *-m* became *-n* (§§ 211. 657, 8); *com* thus became *con* at a time when as yet no closer connexion with immediately succeeding verbal forms had been introduced (cp.

Goth. *and-beita* 'I scold', § 687). The retention of the *m* in *nī cumcat* will then have been due to the same cause as in the imperative, that is, the firm connexion of the preposition with the verb and the accentuation of *cóm-* in *nī cúmcat* were prim. Keltic. It has not yet been satisfactorily explained how this method of accentuation in the case of preceding negative particles etc., was arrived at in prim. Keltic.

Enclisis, inherited from the prim. Indg. period, probably appears in O.Ir. *cā-ch* O.Cymr. *pau-p* 'everybody', O.Ir. *ne-ch* Cymr. *ne-p* 'quisquam, ullus' (scarcely to be connected directly with Gr. *-τε*, since we should expect **cāich *neich*).

§ 685. The accentuation, characterised in the last paragraph as primitive Keltic, appears to have experienced no material alteration in the special Irish development down to the Old Irish period.

How the strongly expiratory word-accent occasioned in many cases sound-weakening and loss of syllables, has been remarked in §§ 66. 82. 90. 98. 106. 613. 623 rem. 1. 634. 657. Consequently the Indg. vowels retained their qualitative and quantitative differences with comparative purity only in syllables under the principal accent.

We have seen in § 634 that in a certain prehistoric period of Irish the syllable immediately following the accented syllable in trisyllabic and polysyllabic words had the weakest accent, cp. e. g. dat. *cáirt-ib* beside gen. sg. *cárat*, to nom. *cára* 'friend'.

The prim. Keltic accentuation suffered greater changes in Britannic. Cymric accents almost all polysyllables on the penult. Matters are more complicated in Bas Breton.

Germanic.

§ 686. Verner's law, treated in §§ 530. 581, shows that the prim. Indg. free accentuation had still long existed in the special primitive Germanic period. On the chronology of this sound-law cp. also § 541. The word-accent had at that

time, as has been remarked in § 670 p. 536, an expiratory character.

§ 687. During the prim. Germanic period a new expiratory accentuation came into being, which in all material points was similar to that of Keltic.

The first syllable became the bearer of the accent in nominal forms, both simple and compound. Goth. *fáđar* OHG. *fáter* etc. 'father' from prim. Germ. **fáđer-*, older **fađér-* : Skr. *pitár-*. Goth. *háidu-s* OHG *héit* 'manner' : Skr. *kētú-ṣ*. Goth. *ánda-vaurdi* OHG. *ánt-wurti* 'answer'.

The simple verb likewise took initial accentuation. Goth. *vitum* OHG. *wízzum* 'we know' from prim. Germ. **ẘitumi*, older **ẘitumí* : Skr. *vidmá*. Goth. *sátja* OHG. *sézzu* 'I set' from prim. Germ. **sátiō*, older **satiō* : Skr. *sādáyāmi*.

On the other hand in the compound verb[1]) the first syllable of the second member received the accent. Goth. *fra-liusa* OHG. *far-liusu* 'I lose'. OHG. *fir-túom* 'I extirpate, destroy, execrate', cp. *frá-tāt* 'scelus'; *ir-lóubōm* 'I permit' cp. *úr-loub* 'permission'; *ob-lázzu* 'I forgive', cp. *áb-lāz* 'pardon'; *zir-gángu* 'deficio', cp *zúr-gang* 'defectio', also Ags. *ȝea-twe* pl. 'equipment' = Goth. **gá-tēvōs*. The different forms, which the prefix assumes in Goth. *and-beita* 'I chide' *and-hafja* 'I answer' and *anda-beit* 'blame' *anda-hafts* 'answer' show that this accentuation of compounded verbs was due to the fact that the preposition did not form a word-unity with the following verb. The pre-Germanic form of the prefix was **antí* (cp. Gr. ἄντα), and if the prim. Germ. **anda* in *and-beita* etc. had lost its final *-a*, this loss can only be explained by the law of finals (§ 660, 1), thus *anda* must at that time have been still an independent word. Cp. O.Ir. *con-* in *con-écat* § 684 p. 551.

Rem The tmesis in Gothic, as *ga-u-láubjats* 'do ye two believe?', *ga-u-hva-sēhvi* 'if he saw aught'; *bi-u-gitái* 'shall he find?', *diz-uh-þan-sat* 'and he then seized' (see Bernhardt on I Corinth. XV, 15) seems, at first sight, yet more distinctly to point to this slack connexion of the pre-

1) Denominatives like OHG. *ántwurten* 'to answer' from *ántwurti*, *úrchunden* 'to testify' from *úrchundi* 'testimony' do not of course belong to this class.

position with the verb in the prim. Germ. period. But Kluge (Kuhn's Ztschr. XXVI 80) assumes with good reason that the prefix was not proclitic here, but had the full accent and that the verbal form was enclitic, just as in Skr. *ápa ca tiṣṭhati* etc. If this is right, this tmesis does not prove anything for cases like *fra-liusa*.

In Germanic, so far as we can see, the imperative of compounds does not, as in Keltic § 684, form an exception. For Gothic cp. *andbindiþ* John XI, 44 'loose ye', *andhafjiþ* Mark XI, 30 'answer ye' not *anda-*. It had thus no doubt the accentuation of the subordinate sentence on the analogy of other verbal forms. An extension of this accentuation beyond its original sphere may be observed in the noun formations which attach themselves closely to the verb. That the passive participles had originally, in agreement with Skr. *prá-bhṛta-s* etc., the nominal accentuation, is still shown by e. g. Goth. *ánda-þāhts* 'discreet' beside *and-þágkjan* 'to deliberate', OHG. *úntar-tān* Mod.HG. *únter-than* 'subject', *dúruh-noht* 'perfect' (to *duruh-núgan*), *missi-lungen* 'miscarried' (to *missi-lingan*), Ags. *frá-cod* 'despised' = Goth. *fra-kunþs*. But beside these already Goth. *and-húliþs and-bítans*, OHG. *far-hólan* etc. Cp. Kluge loc. cit., p. 68 ff.

Enclitics descended from pre-Germanic. *-h* in Goth. *ni-h* 'and not' = Lat. *ne-que*, *hvō-h* fem. 'each', cp. Lat. *quae-que*. *-k* in Goth. *mi-k* (OHG. *mi-h*) 'me', cp. Gr. *ἐμέ-γε*.

The new accentuation of Germanic had probably occasioned to some degree vowel absorption in the prim. unitary period. See § 635.

The question is, did the new accentuation arise through the development of an expiratory accent on the first syllable of the word, which struggled for a long time with the old word-accent and finally overpowered it, or is Verner right in saying (Kuhn's Ztschr. XXIII 129): "The transition to the fixed accentuation (root accentuation) is an analogical formation, completely carried out. The cases, in which the accent rested upon the root-syllable, were already under the old principle of accentuation in the majority, and this mode of accentuation then spread itself in the Germanic primitive language, since the word-forms,

which had the accent on the ending, gradually threw it back on to the root syllable". That in certain cases the analogy of forms, accented on the first syllable from of old, had influence, is not to be denied, but I do not think that we can rid ourselves of the assumption of a free development of the recessive accent. I do not see e. g. how the effect of analogy helps us in the case of the numerous polysyllabic adverbs and prepositions whose initial syllable, as has been established by Verner's law, had originally no accent.

§ 688. In Gothic there are a number of sound-weakenings which show that the new Germanic accentuation remained for a certain time in this dialect on the whole unchanged, e. g. *sátja* 'I set' from **sátiǭ, súnjus* 'sons' from **súniuiz* (cp. with this *qiuš* from **qiua-z*, § 179 p. 156), *baíris* 'bearest' from **bírizi*. See § 635. 660.

It cannot be decided with certainty whether this system of accentuation existed still at the period of our monuments. The alterations in Gothic, which appear in the period after Ulfilas, do not prevent us from assuming that the traditional accentuation had remained, and so we may believe that it did remain.

§ 689. In West Germanic, especially in High German, the new accentuation has persisted in the main down to the present day.

The West Germanic law of syncope (§ 635) shows us the position of the word accent, and at the same time the relation of stress, which the accents of syllables without the principal accent, had to one another. If e. g. in OHG. *hôrta* (Goth. *háusida*) the *i* was dropped, but remained in *nérita* (Goth. *násida*), the second syllable must have had a weaker accent in the first case than in the second; and *hôrta* shows further that the last syllable in the older form **hôrita* had a secondary accent. According to Paul (Paul-Braune's Beitr. VI 136 ff.) the secondary accent in polysyllables did not merely follow mechanical routine, but was guided also by logical principles. The logical character of the secondary accents is shown by their varying with the flexion in the same word. Thus

e. g. the ending of the nom. and acc. sg. and probably also of the plural had a weaker grade of accent than the endings of the other cases, so that in the nom. and acc. of trisyllabic nouns the penult had stronger accent-stress than the last, while in the other cases the reverse held true. Paul conjectures that these functional differences of accent were already in existence in the primitive Germanic period.

In a number of cases vowel loss is to be explained from frequent enclitic or proclitic use of the word. Thus OHG. *mo nan* from *imo inan*, see p. 484; *mih* 'me' *daz* 'that' with final vowel loss in contrast with such forms as *chumi*, see p. 517. Cp. Paul loc. cit. pp. 125. 132. 144 and elsewhere.

Baltic-Slavonic.

§ 690. Lithuanian and a part of the Slavonic languages show freedom of accentuation, and there can be no doubt that this method of accentuation extends back to prim. Baltic and prim. Slavonic. But the two branches go in details only partially hand in hand, and neither of the two systems quite agrees with the system which must be presupposed for the prim. Indg. period.

There are here two possibilities — either new principles of accentuation came into being as in other Indg. languages, which caused a new word-accent but which are still concealed from us, or the innovations in accent were the affects of analogy only, the old inherited word-accent having been generalised differently in different categories of forms. The latter, so far as we can see at present, is the more probable hypothesis and two examples may be given to show how in this way deviations from the prim. Indg. word-accent could have arisen. The accent falls on the ending in the 1. and 2. sg. in Lithuanian, and in Slavonic (i. e. in the dialects which retained the original Slavonic accentuation) in all the persons of the pres. indic. corresponding to the Skr. *váhāmi* (Indg. **u̯éǵhō*) : Lith. *vežù vežì*, Russ. *vezú vezéš vezét* etc., Bulg. *vezǔ vezéš vezé* etc.

Servian *vèzēm vèzēš vèzē* etc. (for older **vezém* etc., see § 692). We may assume that in the period of the Balt.-Slav. prim. community, the accent was already at any rate on the 1. sg [1]) pushed from the root syllable towards the end of the word (cp. Leskien Archiv. f. slav. Phil. V 509 f.). If we consider now that the final accentuation in present forms composing the Skr. 6. class (*tudámi*) comes from prim. Indg., that this accentuation therefore in such forms as Lith. *sukù* Russ. *skú* 'I turn', may be treated as original, it is not hard to conjecture that in prim. Baltic-Slavonic **ɥéžō* was modified into **ɥežó* after the analogy of **sukó*. In Lith. and Slav. the masculine noun stems in *o* never have the accent on the final syllable in the nom and acc. sg. If then e. g Lith. *dúma-s dúmą* and Russ. *dym* (O.Bulg. *dymŭ*) correspond to Skr. *dhūmá-s dhūmá-m* and Greek *θῡμό-ς θῡμό-ν*, this may depend on a generalisation of the accentuation of such nouns as Lith. *vìlka-s vìlką* Russ. *vólk* (Skr. *vṛ́ka-s, vṛ́ka-m*). Whether the whole of the deviation in Baltic-Slav. accent from the prim. Indg., may be thus explained, rests with more accurate investigation to show.

It seems to me to be highly probable that the Balt.-Slav. innovations, as regards the position of the word-accent, were brought about in this latter manner, owing to the fact that the twofold quality of the Lith. syllabic accent is historically connected with that of Greek (§ 671), although this duality of the syllabic accentuation has directly nothing to do with the contrast between syllables with and syllables without the high tone (see p. 530).

It may be further mentioned that Baltic-Slavonic, like all other branches of languages, possesses old inherited enclitics. Lith. *nè-gi* 'not surely' *kàs-gi* 'who surely? who then?', O.Bulg.

1) The prim Slav. and O Bulg. form *vezą* was not in any case, it is true, the Indg form **ɥeĝhō*, but a conjunctive form **ɥeĝhām* = Lat. *veham* (see § 219), which suppressed the indic. form. But this conj. form too had the accent originally on the root syllable and we may assume that the accentuation of the indic. and conj. forms was identical at that time of the prim. Slavonic period when the two forms were used indifferently i e. shortly before the suppression of the indic. form.

ne-go ne-že, the strengthened comparative particle *ne* (cp. Skr. *ná* 'not' and 'even as') : Skr. *gha* in *ná gha* etc. O.Bulg. *mi* 'mihi' enclitic beside *mĭně*, like Skr. *mē* beside *máhyam*. Indefinite pronouns Lith. *ka-s* O.Bulg. stem *ko-* (nom. *kŭ-to*), e. g. Lith. *nĕ-kas* O.Bulg. *ni-kŭto* (dat. *ni-komu*) 'nobody'.

§ 691. Baltic.

The accentuation of Prussian is not known.

Lettic always accents the first syllable, and it is clear that this accentuation is younger than the Lith. free accentuation. The syllabic accent is of a twofold character. We have to distinguish between broken ('gestossen') and lengthened ('gedehnt') tone; for further information see Bielenstein Die lett. Sprache I 32 ff.

Lithuanian accentuation seems on the whole to be the unchanged continuation of that of prim. Baltic.

It is essentially expiratory throughout, as it seems, the whole sphere of the language. The musical accent does not however play a subordinate part

In certain Lithuanian districts the word-accent is thrown back on to the initial syllable This phenomenon is apparently most widely spread in the Memel dialect, and in this case it might perhaps be due to the influence of the Lettic dialect (des kurischen Dialektes) In the other dialects, e. g. that of Godlewa (see Brugmann Lit. Volksl. u. March. p. 295), such influence cannot be assumed, except in case that the eastern, little known dialects similarly share in the change, and thus a geographical communication with the area of the Lettic language be established.

Frequent elaborate attempts have been made to explain the differences of syllabic accentuation, which is either broken ('gestossen') or slurred ('geschliffen' better 'schleifend'). But the descriptions of these differences differ materially from one another, so that it is not easy to form a correct picture from them. The chief points are as follow :

1. Short syllables have always the same single-pointed accent, e. g. *bù-tas* ('house'). Syllables, in which a tautosyllabic liquid or nasal follows the short vowel, form an exception to this

rule; these sound-combinations stand on the same level as the diphthongs (*ai* etc.).

2. In long syllables, that is, in such as contain a long vowel or short vowel + *i*, *u*, nasal, liquid, it makes a difference whether the moment of the greatest intensity of expiration falls on the first or last mora. In the former case we have the broken ('gestossen') accent, e g. *bú|ti* ('to be'), *láu|kiu* ('I abide'), *vár|na* ('crow'), in the latter the slurred ('geschliffen'), e. g. *kū|das* ('thin, lean'), *tvā|nas* ('an overflowing'), *laū|kas* ('field') *vil̃|kas* ('wolf'). No fluctuation seems to take place with broken accentuation, the voice-stress slackens steadily. On the other hand a secondary point seems to exist with slurred accentuation. Kurschat says of the latter accent, that a leap is made to a higher step, "so that such a vowel appears, as it were, compounded of two vowels of which the first is unaccented, the second accented", and that also a "falling" takes place between the first and the second step. The secondary point — which in any case is insignificant — is thus situated **before** the chief point. Sievers Phonet ³ 203. also indicates this accent as double pointed. Musically speaking the broken tone is a simple falling, the slurred either a simple rising (/) or a combination of a rising and a level tone (/¯).

Rem The quantity of syllables was taken too little into account in the older investigations on Lith. accentuation Baranowski and H. Weber in the East Lith texts p. XV sqq throw light on the relation of this to the accent That which is published here is unfortunately only the beginning of a systematic exposition of the Lith accentuation, so that in a work like ours it is only possible to take account of it incidentally The chief points are as follow.

In Lith a distinction is to be made between short, medium long and long vowels and syllables (⏑, ⏑⏑, ⏑⏑⏑) Liquids and nasals, which follow a vowel, can form one or two morae. The varieties of accentuation are caused by these differences of quantity, not conversely.

If no tautosyllabic liquid[1]) follows a middle long vowel, the accent always falls on the second mora of the vowel (⏑⏑), e g *tvā|nas* Medium long syllables always have the slurred tone

If a tautosyllabic short liquid follows a medium long vowel, the accent falls on the first mora of the syllable (⏑⏑⏑), e. g. *vár-na*, as if *vâar|na*.

1) That which we have said here and in the following exposition of the liquids, also holds good of the nasals in all cases.

But if the vowel is short and the tautosyllabic liquid medium long, the second mora of it, that is, the third of the syllable, has the accent (◡◡◟), e. g. *var̃|das* ('name'), as if *varr̃|das*. In the latter case a shifting of quantity took place in certain dialects, the vowel becoming medium long and the liquid short, *varr̃|das* became *vaur̃|das*.

Long vowels (◡◡◡) can be accented on the first (◟◡◡) and on the last mora (◡◡◟), e. g. *bú|ti* = *búuu|ti*, *sū̃|das* 'justice' = *suur̃|das*.

If we apply these laws to the law of vowel shortening in final syllables, treated in § 664, 3 (p. 523), we have the following results: As **gerā̃* became *gerà*, the final syllable was deprived of two morae, ◟◡◡ became ◟. *anō̃* had a medium long vowel (◡◟) and retained it. In the transition of *gérs* to *geĩs* ◟◡◡ (*éei*) first became ◟◡ (*ér*); but the medium long syllable did not tolerate this accentuation, ◡◟ necessarily arose, thus *geĩs*.

We saw in § 664, 2 that *sẽ̄nas* 'old' *gẽ̄ras* 'good' became *séns gérs*. The second syllable being abolished as such and in the former case the *n*, in the latter the *r*, adding a mora to the preceding medium long vowel (◡◟), the result was first of all ◟◡◡ This accent position was not tolerated, there arose ◟◡◡, thus *séns*, *géis*. Has not also the dat. pl. *vilkáms* from *vilkāmus* been brought about in the same manner (cp § 664, 2)?

If a short vowel was dropped in the last syllable which had the word-tone (§ 664, 1. 2), the syllable immediately preceding it received the word-accent in the shape of a slurred tone. This modification cannot have taken place in absolute finality. Loc. sg. *toje* passed into *tõj*, instr. pl. *tomìs* into *tõms*, instr. sg. *akmì* into *akmĩ*, instr. pl. *akmìs* into *akmĩs*, *pirmà* into *pirmĩ*. According to this the gen. sg. *akmeñs dukteĩs* had arisen from **akmen-ès* **dukter-ès*.

It may be mentioned lastly that in nominal compounds, if the first member has the word-accent of the whole compound, the second member exhibits its own word-tone as secondary accent, e. g. *vaĩk-palaĩkis* 'a worthless young fellow' *ìsz-kekszìnis* 'bastard child', and that likewise verbal forms, if they had the prefix *pér-* 'over, through', retain their own word-accent as secondary accent, e. g. *pér-lėkti* 'to fly over' *pér-važiúoti* 'to ride through'.

§ 692. Slavonic. Since the accentuation of Old Bulgarian is not recorded and the phonetic changes of the prim. Slav. and O.Bulg. periods offer insufficient help for the determination of the accentuation (cp. § 281 rem. 3 extr.), we are obliged to

have recourse in the first instance to the Modern Slavonic dialects.

Of these Polish, Sorabian and Czech have given up the free word-accent. They accent all words in the same position; Polish has the accent on the penult, Sorabian and Czech on the first syllable.

Among the West Slav. languages Polabian preserved the movable accent, the material is here however of a limited nature. The languages of special importance are the South Slavonic languages (Servian-Croatian-Slovenian and Bulgarian) and the Russian dialects These represent on the whole the prim. Slavonic accentuation. But it must be noticed that in the greatest part of the Servian-Croatian dialects, in the so-called Štokavian dialect (i. e. in the dialect, in which the neut. interrogative pronoun is *što*, in contrast to Čakavian, where this pronoun is *ča*), a shifting of the principal accent has taken place in such a manner that it was thrown back from its original position near a syllable from the beginning of the word, so that it only preserved its old position when it originally rested on the first syllable.

Thus e. g. on account of Russ. *nesú* Bulg. *nesǔ* Ser.-Štokav. *nèsēm* (from **nesēm*) Rezian. *nœsœ́* we can deduce a final syllabic accentuation for O.Bulg. *nesą* and further for prim. Slav. **nesą*.

Rem Many excellent treatises have been made on the accentuation of single Slav languages and dialects But a treatment on the whole Slavonic accentuation in general is still wanting, and since my knowledge of the modern Slavonic dialects is insufficient to undertake such a treatment and to be able to draw conclusions for the prim Slav. period, I leave off with the above hints.

ADDITIONS AND CORRECTIONS.

P. 10 l. 6 read Manx for Many
p 15 l 6 read ın for ım.
p. 31 l. 8 read Germanic for Teutonic.
p. 78 last line read *drōg* for *droz*
p 94 l 18 and p 406 l. 19 (cp. also p 95 l 22, p 274 § 354, l. 8, p 350 l. 7 from the bottom) occurs the root *sqhaɣd-*, *sqhaɣd-* 'scindere' Since Av. *scindaɣeiti*, which has been assigned to this root, belongs rather to *skenda-* 'blow' from **skanda-* (on the a in the root-syllable *scind-* cp. § 94 p 89), while Av *sid-* in the 3. sing opt. perf. *hi-sid-yaŋ* 'might have torn, destroyed' corresponds to Skr. *chid-* (see Hübschmann Ztschr d deutsch morgenl Gesellsch. XXXVIII 424 f, Burg Kuhn's Ztschr XXIX 358 ff), the root must probably be put down with a palatal sound as *sk̂haɣd-*, *sk̂haɣd-* (cf § 400) and Lith *skedù skaistùs* be explained according to § 467 (cp also § 414 rem)
p. 223 § 280 l 2 read bordering for boarding
p. 224 last line but 4 read Low Sorab for Low Sorab
p. 288 l 3 read **sueḱrā-* for **sueḱrū-*
p. 325 § 437 l 1 read Ir Brit *b* initially and in the combination *gg*, and add O Ir. *imb* 'butter' which by mistake has been put as an example to § 438[b]) at the end of *a*) in § 137
p 326 ll 10—11 omit On what I cannot say.

ABBREVIATIONS.

Ags = Anglo-Saxon
cpf = common primitive form
fr. = from
MHG = Middle High German
OHG = Old High German
OS = Old Saxon
prim f. = primitive form.

Printed by G Otto Darmstadt.