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SOCIAL AND RURAL ECONOMY

OF

NORTHERN INDIA

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VOL. I

BY

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PREFACE

The piecemeal publication of the work which from the outline would appear to be a concrete whole owes an apology. It was completed a few years from now. But the printing is delayed due to unavoidable circumstances. Of late these difficulties have considerably increased. The first volume is therefore hurried through in great stress. I wont put forth my own preoccupations as a plea. The indulgence of readers is craved for slight printing and other mistakes which if pointed out, will be thankfully received.

My thanks are due to those journals who have given kindly berth to much of the contents of this volume, to the C. U. Press which printed the bulk of this book and is printing the second volume, to the Eka Press which printed the introductory parts, to my numerous friends and professors from whom I got encouragement and helpful suggestions, particularly to Profs. H. C. Raychaudhuri, M.A., Ph.D. and B. M. Barua, M.A., D.Litt. to whom I am deeply indebted for this humble research enterprise.

Calcutta
March, 1942.

ATINDRA NATH BOSE

ABBREVIATIONS

An.	Anguttaranikāya
Āpast.	Āpastamba
Arr.	Arrian's Indica
Arr. Anab.	Arrian's Anabasis
Arth.	Arthaśāstra of Kauṭilya
Av.	Atharvaveda
Baudh.	Baudhāyana
Ch. Dhp.	Chinese Dhammapada (Beal)
Cp.	Cariyapiṭaka
Cv.	Cullavagga
Dhp.	Dhammapada
DhpA.	Dhammapada Atthakathā
Diod.	Diodorus
Dn.	Dīghanikāya
E. I.	Epigraphia Indica
Gaut.	Gautama
Jāt.	Jātaka
J. S.	Jaina Sutras (Jacobi)
Kāt.	Kātyāyana (collection)
Mbh.	Mahābhārata
Mil.	Milindapañho
Mn.	Majjhimanikāya
Mv.	Mahāvagga
Nār.	Nārada
Peri.	Periplus of the Erythrean Sea
Ptol.	Ptolemy's Geography
Pug.	Puggalapannatti
Pv.	Petavatthu
PvA.	Petavatthu Atthakathā
Rām.	Rāmāyaṇa
Rv.	Ṛgveda
Sn.	Saṃyuttanikāya
Śp.	Śāntiparva, Mahābhārata
Str.	Strabo's Geography
Śuk.	Śukranīti
Sut.	Suttanipāta
Therag.	Theragāthā
Therig.	Therigāthā
Ud.	Udāna
Vāś.	Vāśiṣṭha
Vbh.	Vibhaṅga
VbhA.	Vibhaṅga Atthakathā
Vin.	Vinaya
Vis.	Viṣṇu
Vṛ.	Vṛhaspati
Vv.	Vimānavatthu
VvA.	Vimānavatthu Atthakathā
Yāj.	Yājñavalkya

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Introduction

Though sufficient work has been done in the field of Indology to dispel the antiquated notion that ancient Indians wandered only in spiritual quests and knew no economic enterprise worth the name, the rebuilding of a consistent and comprehensive economic history of India still awaits completion. A cursory chapter by Rhys Davids in his Buddhist India, Mrs. Rhys Davids' erudite collections on "Early Economic Conditions in Northern India" in J. R. A. S. 1901, Richard Fick's celebrated "Die sociale Gliederung im Nordöstlichen Indien zu Buddhas Zeit" written from a social rather than purely economic standpoint, were till lately the sole conspicuous works in the field; and even these were written exclusively on Buddhist sources. The authors moreover antedated their materials, as has been revealed by modern research. The plausible effort of N.C. Banerji stops with the first volume of the "Economic Life and Progress in Ancient India" ending before the period of the Maurya Empire. This volume, which is a masterly collection of valuable data, together with J. N. Samaddar's small series of Ashutosh Lectures on Economic Condition of Ancient India just offer the starting point for a more systematic and comprehensive attempt. The chief drawback of the latter is that it makes no endeavour to collate the evidences gathered from different source materials and is at best a good analysis of them. There are excellent monographs like Ghoshal's Hindu Revenue System (his Agrarian System in Ancient India is only a summary of his Revenue System with a short lecture added on the legal ownership of land) and Mukerji's Indian shipping. But such treatises again are limited in their scope and the former does not fully exploit the Pali literature; nor has any appreciable work as yet been done to bring the prodigious labours of Maine and Baden Powell into line with modern discoveries on the agrarian system.

The purpose of this thesis is to attempt, not too succinctly or piecemeal, an economic survey of Northern India between the days of Buddha and Kaniska's successors, i e., *cir.* 600 B.C.

—200 A.D. Between the supremacy of Magadha under Bimbisāra and decline of the Kuṣāṇa Empire after Vāsudeva I, the politicial history of Northern India has been reconstructed into a workable frame-work intervening two big gaps still unconquered by labours of research. The economic development of this age, summarily but not too plausibly called the Buddhist age is full of interest and organised effort and may be taken up with some confidence. The Jātakas and the Pali canon after the period of their development has been ascertained though between widely stretched limits, require to be studied with reference to the copious contemporary literature that has come down in the shape of the epics, legal codes, commentaries, inscriptions, notes of foreigners, etc. This is a desideratum in the field of economic history of ancient India.

Buddhist Literature

The Buddhist works, the canon with the voluminous commentaries of Buddhaghosa and Dhammapāla and the mass of the Jātaka stories are not only the widest source, they give the truest picture from life. The law-books, even the didactic portions of the Epics, take up law and morals for the guidance of public and private life only from the standpoint of theorising Brāhmanism, irrespective of facts, to establish the 'divine' rule. This is illustrated in the priestly theory of caste which never existed in contemporary society in the form of four *varṇas*[1] and strictly demarcated mixed and sub-castes on functional basis with precise rules on marriage, interdining, ceremonial pollution and social sanction as represented in the Brāhmanical and theoretical portions of Buddhist books[2]. If the Brāhmanical theory in its turn reacted powerfully on actual conditions (helped by localisation of crafts and professions), the results are to be sought in an age much later than ours. Where the Buddhist

[1] Such opinion was held by Kern, Oldenburg and others.

[2] See Senart—Les Castes Dans L' inde, pp. 139-40; "La doctrine officiale n'admet que quatre castes; la réalité fait eclater ce cadre trop étroit: elle en montre un nombre infini—Mais la théorie par plus d'un indice, par les contradictions même on elle s'engage, constate et avoue que de vieille date, les castes été bien autrement nombreuses que'lle ne paraît d'abord le suposer. J'ai dit combien il est douteux qu'une caste de Kṣatriyas et de Vaicyas ait jamais réellement existe. On sent de reste combien des catégories si vastes sont peu compatibles avec les régles méme avec cet exclusivisme jaloux, cette organisation corporative et autonome qui caractérisent la caste vivante. P. 138. See also Fick—Die Sociale Gliederung, pp. 3-6.

writers do not go for theorising they observe an objective attitude on material life and the casual nature of their references, unconnected with the morals, or the parables drawn up to emphasise a sermon, testify to the genuineness of the data on popular life which we find therein. The Jātakas are peoples' literature and (garbled as they are with legends and partially vitiated with the Bodhisatta factor) for the reconstruction of the peoples' history their worth is far weightier than that of the Smṛtis with their pedantic polemics or of the Epics with their sophisticated poetry.

The view upheld by Bühler, Rhys Davids and Fick and followed even by recent scholars[1] that the Buddhist texts and the Jātakas represent society only prior to the fourth century B.C. has undergone considerable revision. Reference in the Jātakas to Jambudipa, Suvaṇṇabhumi, Andhapura and Tambapaṇṇi, display a far larger geographical horizon and nomenclature than any pre-Maurya literature. The Jātakas know the various forms of slavery enumerated in the the Arthaśāstra and the legal literature which the Vinaya Piṭaka, believed to be among the older portions of the Pali conon, does not[2]. The Jātakas reflect the syncretising process between Brāhmaṇic and Buddhist cults except in the matter of animal sacrifice. Buddha's homily of equality of castes in the Assalāyana Sutta is in pronounced contrast with later texts where the isolation of the despised Caṇḍālas and Pukkusas even smack of Manu.

The Tipiṭaka or Pali canon is said to be a compilation of Buddha's sayings as preserved by oral tradition and according to tradition was brought to Ceylon by Mahinda and first committed to writing under the Ceylonese king Vaṭṭagāmani in the first century B. C. Between the third and the first centuries B. C. the canon underwent great transformations. This accounts for numerous contradictions, repititions and juxtapositions of early and late traditions within the canon.

[1] See R. C. Majumdar: Corporate life in Ancient India, Introduction. Ghoshal: Agrarian System in Ancient India, P. 89.

[2] The Jātakas are familiar with slaves (1) reduced by punishment (I. 110), (2) purchased (III. 343), (3) 'born in the house' (I. 452), (4) captured in raids (IV. 220), (5) by gift (VI. 546f), (6) voluntary enslavement (VI. 87), (7) by fear (VI. 285). For later classification of slaves, *cf.* Arthaśāstra, III. 13, and Manu, XVIII. 415. The Vinaya distinguishes slaves only as follows: (1) born slaves, (2) purchased with money, (3) captured in raids: antojāto dhanakkito karamarānito (Bikkhunivibhanga, Saṃghādisesa, 1. 2. 1.). Ignorance of the 'daṇḍadāsa' is particularly significant.

Below is given an analysis of the Tipiṭaka with reference to the birth period of its component parts as established by the latest research[1].

A. Vinayapiṭaka: rules of the Order or monastic discipline.

I. Suttavibhanga—(1) Mahāvibhanga (2) Bikkhunivibhanga.

II. Khaṇḍakās—(1) Mahāvagga (2) Cullavagga.

III. Parivāra or Parivārapāṭha—a much later production.

B. Suttapiṭaka: Dhamma or the Religion.

I. Dīghanikāya—3 Books represent successively later strata of tradition.

II. Majjhimanikāya—contains similar interpolations, e.g., *suttas* Dn. 14. Mn. 123 attribute to Buddha and Moggallana all the miracles which Buddha himself instructed monks not to practice and which are seen in later non-canonical works like Nidānakathā, Lalitavistara, etc. Mn. 93 mentions Yona-Kambojas of Graeco-Bactrian empire i.e., of the third century B. C.

III. Samyuttanikāya—Some *suttas* exhibit an epic and dramatic tinge hardly creditable to early Buddhist monks (e.g., V. 3). The prose enwrapping the sayings on Karman (III. 2, 10, 31) reads much like a commentatorial addition.

IV. Anguttaranikāya—Compiled at a time when the deification of Buddha was complete; compare the manner in which preaching monks answer to Indra (IV. 163f) with Aśoka's Bhabru Edict—"all that Buddha said is well said" and later Sanskrit work like Divyāvadāna—"the Buddhas will never utter what is false".

V. Khuddakanikāya—the collection was probably concluded at a late period and not a few texts included even afterwards. Its works originated at different times. (1) Khuddakapāṭha or short recital (2) Dhammapada or religious sentences (3) Udāna or pithy sayings—narrative portion is often silly compared to the verse and seems added by compiler. In the Pāṭalisutta it is prophesied that Pāṭaliputta will be a great metropolis and will be partly destroyed

[1] Winternitz: History of Indian Literature, Vol. II. B.C. Law: History of Pali Literature, Ch. I.

by fire, flood and war. History testifies to the accuracy of the prophecy which seems to have been made after the incidents (4) Itivuttaka or 'thus spake Buddha' sayings—contain earlier and later matters in both prose and verse (5) Suttanipāta or section of discourses— the three ballads dealing with scenes from Buddha's youth prepare the chief features of the later Buddhist legend like the epic counterpart of the Ākhyāṇas, by the insertion of narrative stanzas between conversational stanzas. Sometimes a Yakkha or a God comes irrelevantly to introduce a dialogue (I. 6, 10; II. 4, 5, ; III. 10) no doubt made by the Sangitikārakas (6) Vimānavatthu or stories of divine places and (7) Petavatthu or stories of the dead—belong to the latest stratum of literature incorporated in the canon. They explain the sublime doctrine of Karman of Brāhmaṇical and Buddhist texts with crude examples. Even later commentators sometimes admitted their spuriouness e.g., King Pingalaka (Petav. IV. 3) ruled according to Dhammapāla's commentary 200 years after Buddha (8) Theragāthā or songs of Elders and (9) Therigāthā or songs of lady Elders—the old and new are mixed up, e. g., a monk who wandered in heavens for 8,000 million years by offering a single flower, forestalls the Buddhist cult of Mahāyāna texts (Therag. 96); a seven year old saint performs miracles (429ff) ; a monk multiplies himself a thousand times and flies through the air (563ff) ; 10,000 Gods of Brahmā's heaven receive Sāriputta and do him honour (1082ff) ; the two poems describing the decay of religion (920-48, 949-80) are held to be post-Aśokan. So also Therig. 400-47, 448-51 particularly the last two songs (10) Jātakas or Bodhisatta stories—in their present form, represent no single culture period. To gain converts, Buddhist monks circulated popular folk-tales in which Bodhisatta was made to play a part and thus converted any folk-tale into a Jātaka story. Besides they improvised new ones. Thus were accumulated fables and sermons of many generations. The original canonical Jātaka does not contain all the Jātakas available in the commentary edited by Fausböll.[1] That much of both prose and poetry belonged to Budhist tradition in the second century B. C. is proved by the Barhut, Bodhgaya and Sanchi reliefs depicting scenes which occur only in prose. "For the great mass of the verses however, no greater antiquity than the third century

[1] See Rhys Davids : Buddhist India. Ch. XI. B.M. Barua : Barhut, Bk. 1.

B. C. can conscientiously be urged, certainly not proved, and much of the prose assuredly belongs to the Christian Era"[1] (II) Niddesa or explanations,—a commentary of antiquity (12) Patisambhidamagga or path to analysis— treated after the fashion of the later Abhidhamma texts (13) Apadānas[2] or glorious deeds—parellel to the Sanskrit Avadānas; as copious a narrative work as the Jātakas and one of the very latest; included in the canon not earlier than the 1st century B. C. (14) Buddhavaṃsa[2] or legend of the 24 former Buddhas—the commentator says that the work was recited by Buddha and handed down in uninterrupted course to the third council and beyond. But the earlier texts are familiar with only six predecessors of Gautama and it is replete with that Buddha worship and Buddha deification foreign to earlier texts. Included in the canon not earlier than the 1st century B. C. (15) Cariyapiṭaka—35 Jātakas in verse illustrating the Pāramitās of Bodhisatta. They presume a knowledge of the Jātaka stories and dry them up for purpose of canonisation; one of the latest products.

C. Abhidhammapiṭaka: Dhamma treated in more scholastic and catechistical fashion: (1) Dhammasaṃgani (2) Vibhanga (3) Dhātukathā (4) Puggalapannatti (5) Kathāvatthu—attributed by tradition to Tissa of the third century B. C. who wrote it to refute heresy and quotes from Vin. P., Sutta P. and other authorities all in the name of Suttanta. In its present form it is even garnished by the later orthodoxy (6) Yamaka (7) Patthana Pakaraṇa.

The authenticity of the Abhidhammapiṭaka as Buddhavacana has been doubted.

Two non-canonical Pali works may be useful for our purpose; the Milindapañho, a composition of the first century A. D. at the latest when the memory of the Greek King might still be fresh; and the Mahāvastu—a treasure house of Jātaka and other narratives extending between the second century B. C. and fourth century A.D.

The later compilation of the canon and its composite character disallow us as firm a chronological footing for the

[1] Winternitz: History of Indian Literature; tr. by Mrs. S. Ketkar. Vol. II. pp. 121-2.

[2] See B.M. Barua: Asutosh Silver Jubilee Volumes,—Mahāyāna in the Making, where the author argues that the books were thrown in after the compilation of the Canon.

6th century B. C. as some Andhra and Saka inscriptions provide us in the 2nd century A.D. But a careful scrutiny of the canon would reveal materials that may safely be used for the time of Buddha and others unquestionably for pre Mauryan times. The early and late portions may be pro bably distinguished from their geographical notes which, far more accurate than the Mahābhārata, seem to be solidly founded on personal observation[1] Stray and scanty but nevertheless positive data for the pre-Mauryan period are also available in incidental notes of foreign historians and in indigenous works like Pāṇini's grammar which may be referred back to the 7th or 6th century B. C.

The veil of the mystery of Tretā and Dwāpar hanging around the great Epics has long been torn off; and it is now accepted without dispute that they unfold to the critical eye successive strata of social and economic development extending over a wide range of place and time.

The Mahābhārata

That the Mahābhārata was a unified composition conceived and worked out by a master artist of romote antiquity[2] is a theory no longer credited with accuracy. Its battle episodes alone reflect a long span of evolution—religious and political. There are striking contradictions throughout its composite structure. While the Kauravas are the villain of the piece and Pāṇḍavas pious and brave, it is the latter who knock down the Kaurava heroes with treachery and unfair combat; and Kṛṣṇa, the archtraitor and casuist who defends all his guiles as means to an end is elevated as incarnation of Viṣṇu. Winternitz[3] explains the anomaly by supposing that the bards originally under the aegis of the Kauravas, must have remodelled their songs to suit new patrons when political supremacy passed to the Pāṇḍavas; and the deified Kṛṣṇa,—there might have been more than one man of that

[1] E. g., the description of Giribbaja and its five mountains, of the townlets and the 6 large metropoles in the time of the Mahāparinibbāna. Mark also that where Pāṭaliputra comes, it is introduced only by way of prophecy to materialise in future, otherwise the placename being Pāṭaligāma.

[2] J. Dahlmann: Das Mahabharata als Epos und Rechtsbuch; also Sylvain Levi, etc

[3] History of Indian Literature, Vol. I.

name,—was invoked to defend their questionable methods.[1] The whole of the Virāṭaparva is again believed to be a later production :—the simultaneous defeat of all the Kaurava stalwarts within a few hours at the hand of single-handed Arjuna fits ill with the main battle won after eighteen days with bitter travail by the mobilised forces of the Pāṇḍavas and their allies.

Nor is the Mahābhārata homogenious in language, style and metre. The language is at places archaic, akin to the Vedic literature, at places it sounds like the Purāṇic. The style varies from the naive Ākhyāṇa or narrative style of the Brāhmaṇas and Upaniṣads to the most negligent Purāṇa style and the Kāvya recalling even the ornate lyric of Kālidāsa.[2] The metre, mainly abides by the *śloka* which originated in the *anuṣṭuv*. But this exhibits earlier and later forms ; and there are also old prose, rhythmical prose and prose interspersed with verse ; *triṣṭuv* metre in old and later forms and elaborate metres of classical Sanskrit.

So the Mahābhārata suffered retouch and interpolations as late as in the 4th century A.D. After that, except for comparatively minor additions and alterations, the book was accepted as a sacred text[3]. As regards the earlier date, it harks back to the Vedas. But the Vedic texts never mention it by name. The Sūtra literature gives earliest references to the book and its characters. Śāmkhāyana cites a war in the Kuruksetra which ruined the Kauravas, Āśvalāyana mentions the Mahābhārata as a sacred book. Pāṇini explains the derivations of names like Yudhiṣṭhira, Bhīma, Vidura, Mahābhārata, etc. The existence of the Vaiśampāyana Mahābhārata is presupposed by Pāṇini. In Patañjali are available definite allusions to the story of the battle between the Kauravas and the Pāṇḍavas. In the Pali canon as well as in the Brāhmaṇas we find the narrative form trying its hand for the epic. Names from the Mahābhārata occur also in the Jātakas ; that their surroundings and the story spun around them are a caricature of the Epic probably only explains that it did not as yet travel far in eastern India. Hence it definitely goes as far as 4th century

[1] A disputable assumption however. If true, the reconciliation of the crafty and divine Kṛṣṇa was done almost to perfection.

[2] Droṇaparva—the nocturnal scene of the battle-field. Canto 185.

[3] Winternitz—*op. cit.* Vol. I. p. 463. Washburn Hopkins : Cambridge History, Vol. I. Ch. XI. p. 258.

B. C. and most probably fu ther back to the 6th century B.C. i.e., earlier than Pāṇini. Thus our Epic may have received roughly its present shape during the period extending between *cir.* 600 B.C. and *cir.* 400 A.D.[1]

The Rāmāyaṇa

The Rāmāyaṇa was subjected to similar transformation though perhaps in a lesser degree than the Mahābhārata. The singers of the Rāma saga no doubt took some liberty with the original tradition orally handed down, to suit the vagaries of audiences. This alone may explain the difference between the available recensions of the text. Upon the first written story of Vālmiki again, accumulated a heap of interpolations difficult to trace. To this category belong perhaps Sītā's fire ordeal at the end of the Laṃkākāṇḍa where Rāma with unwonted cruelty and shamelessness says to Sītā that he rescued her only to vindicate Ikṣvāku honour and condones her death and which brings the gods to invoke Rāma as god Viṣṇu, the following scene of Rāma's interview and embrace with Daśaratha, the scene of the sending of search parties for Sītā in the Kiṣkindhyākāṇḍa,[2] the romantic scenes in the Sundarakāṇḍa, the Brāhmaṇical legends at the beginning of the Āraṇyakāṇḍa and others. By an examination of a portion of the Rāmāyaṇa Jacobi found only a quarter as genuine.[3]

The Ādikāṇḍa and the Uttarakāṇḍa, the first and the last Books are held to be spurious in toto. Events like the marriage of Rāma's brothers referred to in Book I are completely ignored in later ones. The language and style are also inferior. In these two Books Rāma is an incarnation of god Viṣṇu while elsewhere, with rare exceptions (which are supposed to be interpolated) he is a mortal hero. The main theme of the narrative is frequently broken by the insertion of Brāhmaṇical legends in the manner of the Mahābhārata and the

[1] The eralier date of the composition of the Mahābhārata is generally placed about 400 B. C. But the reference in Āśvalāyana to Jaiminīya Bhārata and more particularly, in Pāṇini to the Vaiśampāyana Mbh. leaves little room for doubt that there was a pre-Pāṇinian version of the Mahābhārata as distinguished from the later (Maurya ?) recension.

[2] The four directions are mentioned in such a way as to seem that the sender of emissaries, Sugrīva, is seated at somewhere about the Kuru country while he was really at Kiṣkindhyā (Deccan). This suggests that somebody from the region of Kurukṣetra introduced the scene (40-43).

[3] Quoted in Winternitz—*op. cit.* Vol. II. p. 500 fn.

Purāṇas, a case rare among other Books. Thus in Book I the legends of Ṛsyaśṛnga, Vaśiṣṭha and Viśvāmitra, of Vāmanāvatāra, of Gaṃgā's descent from heaven, of the churning of the ocean by the gods and demons, are related at the flimsiest pretexts and so the geneology and chronology of the Rākṣasas, the adventures of Rāvana, Hanumat, etc., the myths of the slaying of Vṛtra by Indra in Book VII have no bearing on the narrative. Only a fourth of the Uttarakāṇḍa bears on Rāma and Sītā. In these two Books Vālmiki becomes a contemporary of his hero and consequently a legendary figure. These two phenomena alone, deification of Rāma and conversion of Vālmiki into a legendary figure presuppose centuries of development.

The Rāmāyaṇa falls within the larger period of development of the Mahābhārata which is a larger and subtler epic. The latter presents with the first and last Books of the Rāmāyaṇa the same Brāhmaṇical legends but with such variation as to suggest a common source. The two Epics also show remarkable conformity in phrases, idioms and even whole verses and in language, metre and style.

In connexion with the abduction of Draupadī the Mahābhārata relates the Rāmopākhyāṇa, i.e., the abridged Rāmāyaṇa in its fully developed form.[1] It contains many other references which prove familiarity with the Rāmāyaṇa as an ancient work. The Rāma epic is fully known to Aśvaghoṣa, author of Buddhacarita and contemporary of Kaniska. From the second century the Rāmāyaṇa begins to be hardened as a popular epic. Its public recitation came in vogue in the time of Kumāralāṭa's Kalpanāmaṇḍitikā (*cir.* 200 A. D.) and it was garbled with Buddhist motives by Chinese translators from the third century onwards. These data fix the posterior date of Rāmāyaṇa to some time earlier than 200 A.D.

The determination of the anterior date with any claim to approximation is a more complicated affair. What is the farthest antiquity that the Rāmāyaṇa can claim? The Vedic literature is as silent on the Rāmāyaṇa as on the Mahābhārata. So the Pali canon: it knows the Rāma saga but no Rāma epic and its ballad poetry is forerunner of the epic

[1] Raychaudhuri opines that the Rāmopākhyāṇa is not borrowed from the finished Rāmāyaṇa but derives from a common tradition as does the Dasaratha Jātaka—Studies in Indian Antiquities, Part. I. Ch. III.

poetry. Both its contents and style assign it an earlier date than the Rāmāyaṇa. Pāṇini is equally mute. The use of the significant words "Kiṣkindhyāguhā" and "Vānarasainya" by the commentator Patañjali indicates that the Rāmāyaṇa was a widely circulated written book by the second century B. C. The name of Daśaratha, Aśoka's grandson certainly borrowed from the Rāmāyaṇa dates the popularity still earlier. Coming from external to internal evidence we find that the knowledge of southern India beyond the Godāvarī is still very vague. The older and authentic portions of the Rāmāyaṇa show absolute ignorance of Greeks and Greek-influence. From the mention of Buddha as an atheist punishable like a thief (II. 109. 34), it seems that Brāhmaṇism was hostile to Buddhism and that the eclecticism of the Kuṣāṇa period was far to come. The Rāmāyaṇa reflects the Vedic ritual; its gods are elemental (Indra, Varuṇa, Pavana, etc). not sectarian (Viṣṇu, Śiva, etc) who stepped in from the time of the Kāṇvas and the Sātavāhanas. The reference to Rājagṛha and not Pāṭaliputra as the capital of Magadha and of Kośala as a Mahājanapada suggests that the memory of Kośalan ascendancy did not yet fade among the public. These clues throw the original composition of the Rāmāyaṇa as far back as the fourth century B. C.[1]

Thus the course of modification and development of the Rāmāyaṇa may be roughly placed between *cir.* 400 B. C.—*cir.* 200 A. D.

Megasthenes

Megasthenes' accounts in its surviving scraps within the Greek epitomes is meagre and distorted, but still it is a precious mine of concrete information for our period. Only he requires careful sifting and interpretation by reference to current theories and folklore. His quaint remarks, often summarily dismissed as cock and bull stories,[2] shed off

[1] Winternitz (*op. cit.* Vol. II. pp. 503ff.) places the origin in *cir.* 300 B. C. It has even been argued that the Rāmāyaṇa is anterior to the Mahābhārata and that the latter represents a more barbaric stage of Indo-Aryan culture owing to foreign irruptions —Nagendra nath Ghosh: Asutosh Silver Jubilee volumes, Vol. III. Part. II. pp. 362ff For the opposite view see Weber, History of Indian Literature, pp. 191-94 & Macdonell: History of Sanskrit Literature, p. 300.

[2] See Rhys Davids: Buddhist India, pp. 260ff. He follows Strabo and Pliny in a somewhat unfair disparagement of Megasthenes. A powerful vindication of Megasthenes is made in the introduction to Schwanbeck's collection which is quoted in McCrindle's edition.

their oddity and give reliable data when the reader manages to see things with the eye of people who lived 2,300 years back, who viewed every strange phenomenon with superstition and shrouded every uncommon incident with legends,—when the reader subjects them to analystic criticism and divests them of the cloak of antiquity. A few illustrations may be taken to illuminate the point.

The seven castes of Magasthenes were not all imagination. As has been said above, the fourfold division of caste was only a Brāhmaṇical fetish at least before the Christian era. As to the classification which slowly emerged out of the separation of crafts and callings, hardening gradually under the principle of heredity, Megasthenes was not very wide of the mark. His philosophers correspond to the Samaṇa and Brāhmaṇa, his husbandmen to the Gahapati and Kuṭumbika, his herdsmen and hunters to the Pasupāla and Nesāda, his artisans to the Kammāra and Vaḍḍhaki, his warriors, overseers and counsellors and assessors to the Rājabhogga and Rājañña, all of wh ch find plenty of references in the Jātaka stories. Nor was the principle of endogamy which he averred—though too dogmatically, entirely a fiction.

That the Indians employed slaves is not disproved by Magasthenes' statement. But it shows the magnitude of difference in the position of slaves in ancient India and Greece. He could not equate the *dāsa*s with the slaves and helots of his own country and sea ched in vain in India for the vertebrate creatures of the Greek mines and the Roman *latifandia*. The *bhataka* or hireling who stood lower than the *dāsa* 'n economic scale was no man's chattel and could not technically be called a slave.

That famine never visited India may also have been a comparative statement or he may have meant a general or protracted scarcity. "The times of scarc'ty in Buddhist record apparently refer only to brief periods over restricted areas."[1]

For the gold-digging ants, the Greek visitor was undoubtedly indebted to folk-tale. But it has surely a substratum of truth. Even if the theory that it was a mythical version

[1] Mrs. Rhys Davids : Cambridge History of India. Vol. I. Ch. VIII.

of Tibetan miners[1] is not given credence, there is no dispute that the Indian soil was rich in gold mines and her sands and river beds contained gold-dust, whether these were extracted planfully by man or by some prehistoric animal by chance. So the assertion that Indians are ignorant of writing must be understood with reference to the absence of written laws and to judicial transactions made upon the memory of the judges, which perhaps was a fact[2] as well as in the broader sense that it was more in practice to hand down tradition and wisdom by oral transmission; that Indians do not practice usury reflecting the stigma placed on it by law-givers or as conveying that rates of interest were low and money-lending did not lead to spoliation of the debtor; that land was held in tenancy from the crown by payment of a rent as indicating that the crown was the theoretical owner of all land.

Megasthenes' accounts exist through the works of Strabo Diodorus, Quintius Curtius, Arrian, Justin, Aelian, etc., who had access to other first-hand materials now lost to us,—a crop of narratives and memoirs from men who accompanied Alexander's expedition or visited the Indian courts. The incidental notes of Herodotus, Ctesias and Plutarch are of little good. Other classical works for reference are Pliny's Natural History and Ptolemy's Geography. The Periplus of the Erythrean Sea gives a host of details that contirbute to the bulk of our chapters on Industry and Commerce.

Archeological Material

Archeological matters are the most trustworthy of our sources; but their paucity is tantalising. The land charters of later times which throw a flood of light on contemporary economic organisation are conspicuous by their absence. The monuments and relics of Taxila, Rajgir, Sarnath, Pāṭaliputra, etc., throw sidelights on the progress of mechanical arts and craftsmanship. Aśoka's Edicts are far less helpful for the reconstruction of Maurya economy than for an understanding of his ethical and administrative system. The Barhut reliefs and inscriptions attributed to the time of the Śungas, the votive inscriptions from Sanchi topes and the Bhaṭṭiprolu Inscriptions both assigned by Bühler to *cir.*

[1] See Ind. Ant. Vol. IV. pp. 255 ff.
[2] See J. H. Nelson: J. R. A. S., Vol. XIII. Pt. II.n.s. p. 208.

200 B. C. and the Jaina sculptures and inscriptions from Mathura assigned by the same scholar between the 1st and the 2nd centuries A.D. give more concrete materials to fill up gaps or corroborate evidences of literature. Hardly less profitable are Khāravela's Hathigumpha Inscription, the Karle and Nasik Cave Inscriptions and the Girnar Rock Inscription of the Saka Rudradāman from the 2nd century A.D. Few as they are, without these inscriptions and similar objective data our work would be a mass of boneless and hypothetical speculation founded on air, without a footing of time and place.

The Śāstra & Sūtra Literature

The Arthaśāstra attributed to Kauṭilya and the voluminous lawcodes, the earlier Dharmasūtras of Gautama, Baudhāyana, Āpastamba and Vāśiṣṭha and the later Dharmaśāstras of Manu, Viṣṇu, Yājñavalkya, Nārada and Vṛhaspati in order of date—form a class by themselves. The Arthaśāstra, an encyclopaedic digest of social sciences and allied branches, is the most precious of our source materials after the Jātakas. But many scholars have fallen into a double error in utilising it. They take it conclusively to be a work of the early Maurya period emanated from the brain of an iron chancellor. There is weakness in these theories and in my opinion the work may be assigned *a fortiori* to near about the 1st century A.D.[1] Again it is often treated in a way as if it is an administration report while really it is polemical literature evincing how far the conception of administrative perfection may go. In sharp contrast to the other authorities the Śāstras concentrate exclusively on theorising and scholars are prone to arriving at conclusions on facts and institutions from political and juristic opinion.[2] As has been said above, the theory of *caturvarṇa* adumbrated with great pains finds less correspondence in facts. The laws of property and inheritance, of

[1] See my paper in Indian Culture, Vol. IV. No. 4.

[2] Cf. Ghoshal: Agrarian System in Ancient India, p. 5—"the resemblance between the Arthaśāstra material on law and polity and that of the Smṛtis is so close that we can unhesitatingly take them to be the allied branches of a common system. The roots of this system should doubtless be traced to actual forms of state and bodies of law existing in ancient times although it is impossible to specify either the period of time or the tract of country to which they belonged". Also Hindu Revenue system, p. 13.

It is confidently asserted by another scholar that the Arthaśāstra represents actual and not ideal conditions of state and administration as conceived and executed by the author. See M. H. Gopal, Mauryan Public Finance, p. 14.

marriage, on king's prerogative and subject's right have all to be treated with much scepticism. The political and legal literature serve as a commentary on other references; and it is well to remember Senart's admirable instruction;—ce n'est pas la théorie qui peut rendre compte des faits; ce sont les faits qui aident à voir la théorie sous son vrai jour à la ramener dans ses justes limites.

So far for out materials. Yet these are not all. For I have not hesitated to draw carefully from much later literature particularly theoretical treatises like the Jaina scriptures, the Dharmaśāstras and the Śukranīti. Works like these which embody time-worn traditions should not be studied with strict chronological demarcation. But it will be erroneous to gauge our resources from their volume. The treatises on Arthaveda which formed a branch of study among a group of four, comprising the *summum bonum* of life, and on Vārttā, the sciences on agriculture, cattle-breeding, trade and usury referred to by the Arthaśāstra attributed to Kauṭilya have all been lost except the above-mentioned one. And barring this and the Periplus, none of our books are written from an economic point of view and we ransack them in vain for detailed information and proved facts. They throw us moreover amidst a host of difficulties. The Smṛtis, the Epics, the Purāṇas and the Jātakas describe a social condition different from the time of their composition. They jumble up time-worn traditions and legends with contemporary institutions and the only way out of the puzzle is to sift and arrange them in order of a natural process of evolution, checked with informations supplied by Megasthenes, the inscriptions and literature of which the date is less conjectural. Our materials moreover, present no homogeneous society with uniform practices prevailing all over Northern India to be drawn in bold outline. The tone of the Buddhist literature is democratic. The Ksatriyas are theoretically awarded social precedence but in popular stories the moneyed middle class (*seṭṭhi* and *gahapati*) the industrial and commercial aristocracy of Anāthapiṇḍika's type is most prominent. The Epics barring certain interpolated episodes, paint a theocratic state wherein martial and religious motives preponderate. The law-books are written with the declared purpose to enforce the divine law. The Arthaśāstra while agreeing with them

[1] *op. cit.* p. 129.

on many points maintains all along an economic outlook. Again the sphere of Brāhmaṇical culture was the land of the Kurus, Pañcālas, Matsyas and Śūrasenas styled by Manu as the land of Brahmarsi. Hence also the people of Magadha and Videha who did not come under full influence of Aryan culture, are included by Manu and other law-givers among the mixed castes. This Brahmarsideśa was the western part of Madhyadeśa and the pivot of the Mahābhārata. Farther east the Rāmāyaṇa centres about Kośala; and the Jātaka stories and the Buddhist literature, cradled in the Gangetic provinces, embraced not only the whole Prācya and eastern Madhyadeśa but often travelled as far as Gandhāra and Uttarāpatha and sometimes brought within its purview the far east and the far south.

This maze of traditions and institutions, dogmas and realities intermingled between widely separated ages and regions baffles all consistent efforts at maintaing the time sense and the place sense in our thesis. The only relieving feature is that a remarkable identity within the divergence is noticeable on the fundamentals of social doctrines and conditions. In the midst of political clashes and religious revolutions, the social system evolved slowly and unaffected by sudden radical expositions. A new order must stand outcast and excommunicated. But if and as soon as it fought out its existence, the general tendency is marked that a compromise was made with it by the all-powerful tradition and common law and it sent a fluttering wave all over the land penetrating political and religious barriers.

Despite shortcomings, our sources open vistas and offer glimpses of a region hitherto unexplored. They reveal interesting institutions and practices at work, corporate endeavours, man's helplessness against nature, as well as his struggle—offensive and defensive, the struggle to open up her resources and to combat her freaks,—all of which conjure up behind the divine liturgies and sacrificial fire an advanced materialistic consciousness that had been long locked up in the priestly coffer of "Sacred Books".

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India in international trade. Mesopotamia; the Euphrates route; Iran, imports and exports. The Mediterranean or Nile route; Arabia, Socotra, Berbera; Arab monopoly in Red Sea; Egypt, development of Egyptian trade, Indo-Egyptain trade routes. Arab-Roman rivalry. Roman Empire, Indian goods in Roman market, Exports and imports. Indo-Roman trade curve.

The Southern trade. The Tamil countries and Ceylon. Burma and Indonesia.

History of foreign trade. The Mauryas. The Sakas. The Andhras, Kalingas and Vangas. The Kuṣāṇas.

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Practice: the *śulka*, protection; moderation; reduction and remission; assignment of toll receipts, subsidy and loan. Realisation of toll, suppression of smuggling. State monopolies. Control by the Sakas, protection. Control by the Mauryas, rigorous and drastic.

Theory: principles of assessment. The *sannidhātṛ*. Encouragement of import. The charges. The *śulka* or toll rates. The *dvāradeya* or gate due. The *vartanī* or road cess. Realisation of dues and suppression of smuggling. The *praṇaya* or benevolence. The *rājakarīya* or forced labour. Port dues. Monopolies. Price-fixing. Control of buying and selling. From free to regulated economy.

BOOK IV. BANKING AND CURRENCY

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Productive industries and unproductive business. From money to money-lending. Business loan. Famine loan. Instruments of credit: pledge, surety. Bond of debt; acquittance. Rate of interest; discriminating and differential rates; accumulation; forfeiture and moratorium. Illegal rates, condemnation of usury. Inheritance of debt and credit. Repudiation and debt suit. Service and slavery for default; Forcible realisation. Punishment for unpaid debt. Insolvency. The debtor's plight.

Ch. II. Banking.

Hoarding. Deposit and its laws. Origin of banking,—economic influence. Corporate banks. Industrial banks. Fixed deposit and endowment in guild banks. Real property as deposit. Rate of interest on fixed deposit. Security and stability. Ubiquity of banks. Comparison between the North and the South.

Ch. III. Exchange and Currency.

Origin of currency. Barter. Standard media of exchange. Transition to currency. Foreign or Indian origin ? Foreign coins and their influence. Persian *siglos*. Roman *aureus* and *denarius*. Barter holds ground.

Development of currency. 'Circulating monetary weights'. Metric divisions. Attestation : punch-marks,—by traders, by local government. Local character of coin-types.

Metallic contents of currency. Gold. Silver. Copper,—the standard *kārṣāpaṇa*, the tokens of *kārṣāpaṇa*, fluctuating relations. The exchange ratio,—gold and silver, gold and copper, fluctuating relations. Other metals.

State monopoly of currency.? Private coinage. State regulation. Debasement of coins. The *rūpasutta* or science of currency and coinage.

BOOK V. OCCUPATION AND EMPLOYMENT

Ch. I. Services and Royal Entourage.

Occupations outside the *vārttās*. King's officers,—the *amacca*, *rājabhogga*, *rājañña*, 'seventh caste'. The senior *amaccas*,—*senāpati*, *purohita*, *mahāseṭṭhi*, *gandhabba*. The second grade,—*uparāja*, *rajjuka*, *vohārika*, *bhaṇḍāgārika*. The *adhyakṣas*,—of elephants, of horses, of cows ; others ; animal-doctors. The *agghāpaka* or court-valuer. The *nagaraguttika* or police commissioner. Spies. Clerks. Lower incumbents. The bather and shampooer. Specialists. Artists and technicians.

Bureaucracy of the Arthaśāstra. The grades, military and espoinage service. Benefits. Payment by cash and by assignment of revenue.

Ch. II. Independent Professions.

Teaching profession ; centres of learning ; applied education ; fees. Artistic professions ; singer and music-player ; actor, troupes ; bards, mimes etc ; stigmatisation. Occult professions ; astrologer ; soothsayer ; Palmist etc. Miscellaneous.

Ch. III. Bad Livelihood.

Greek observers on public morality. (1) Gangster and thief ; tribal bands, ransom gangs, pilferers, cattle-lifting, gang-laws. Detection and punishment. (2) Hired assassin. (3) Forger. (4) Imposter. (5) Sorcerer. (6) Gambler, gambling and betting ; perils of gambler. Licensing, revenue. (7) Tavern-keeper ; drinking and dissipation, liquors. Crime-centres. Revenue. (8) Brothel-keeper. (9) Prostitute, two categories. Fees. Manners and morals. Public esteem. Revenue and espionage.

The underworld and the state.

BOOK VI. SOCIAL PHYSIOGNOMY

Ch. I. Slave Labour.

Origin : Prisoner of war. Inherited. Born. Purchased. Gift. Mortgaged. Judicial punishment. Apostate. For food. Debtor. Voluntary. By wager. Growth of slavery. Manumission.

Functions : Personal attendance. Domestic service. Industrial establishments. Working for hire. Prostitution of female slaves.

Code of relation. Legal position. Social position.

Actual treatment : Chain & whip. 'Slave's fare'. Runaway slave. Freed slave.

The slave and the slave class. The Ārya and the Śūdra slave. Indian and Western slavery.

CH. II. HIRED LABOUR.

Free labour—agricultural and pastoral; industrial; mercantile; domestic; miscellaneous. Origin in pauperism. Modes of payment. Degradation and devaluation of labour. Wage and profit rates. Free contract? Terms of hire. Slave and hired labour. Labourer and outcast. Paucity of unrest.

CH. III. DESPISED CASTES AND RACES.

The *hīnajāti*. (1) The Caṇḍāla: Origin. Appearance. Arts and professions; corpse-burner, executioner, hunter, magician. Habitat. Social segregation. Social and economic disabilities. General status.

(2) The Pukkusa: Origin. Profession. Status.

(3) The Nesāda; Origin and identity. Racial and professional stigma. The hunting profession, *luḍḍaka, kevaṭṭa*. Methods, equipments and accessories for hunting and fishing. Habitat. Social status.

(4) The Veṇa: Ethnico-professional castes. Status. Craft.

(5) The Rathakāra: Origin and degradation. Craft;—chariot-building, leather-work. Status.

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CH. IV. DESPISED CRAFTS AND CALLINGS.

The *hīnasippa*. (1) Basket-maker (2) Cobbler (3) Potter (4) Weaver (5) Barber (6) Acrobat (7) Snake-charmer (8) Snake-doctor (9) Physician (10) Miscellaneous (11) Vagrancy.

CH. V. CLASS BASIS OF SOCIAL ECONOMY.

The real India. Subjective character of canonical and court literature. Material for peoples' history. Comparative objectivity of popular literature.

Popular religion. Aboriginal fetishism. Aryan elemental gods. Symbolic gods. Growth of sects and rituals. Priesthood,—rise to wealth and power. Official and private bounties. Corruption. Regular and secular clergy.

Kings and military lords. Merchants. Economic background of Buddhist heresy.

Slaves and wage-earners. Economic determinism in social gradation. The pariah, his position *vis-a-vis* the Samgha. The social contrast.

Class compromise. Immaturity of class consciousness. Lower middle class the centre of gravity. Exploited elements a composite body. Ignorance and subjection of the Śūdra.

CH. VI. MATERIAL BACKGROUND OF INDIAN CULTURE.

APPENDIX. I. DATE OF THE ARTHASASTRA

MAPS

1. THE CHIEF CITIES
2. THE MAIN TRADE ROUTES

BOOK I

AGRICULTURE AND LAND

tato dhānya-dhanopetān dānaśīlajanān śivān
akutaścid-bhayān ramyāṃ-ścaityayūpa-samāvṛtān
udyān-āmravanopetān sampanna-salilāśayān
tuṣṭapuṣṭajanākīrṇān gokulākulasevitān
rakṣaṇīyān narendrāṇāṃ brahmaghoṣābhināditām
rathena puruṣavyāghraḥ kośalānatyavarttata

Rāmāyaṇa, II. 50. 8-10.

Then the tiger among men left behind the villages of Kośala which were rich in wealth and paddy; inhabited by charitable men; having no cause for fear; pleasing and covered with temples and altars; adorned with parks and mango-gardens; equipped with reservoirs; thickly populated with happy and healthy folk; served by many herds of cattle with attachment; deserving of protection by kings; and resounded with Vedic chants.

CHAPTER I

Physical and Geographical Background

The Indian soil: classification. (1) Hill tracts. (2) Deserts. (3) Alluvial soil. The river system. Ganges basin. Indus basin. The Mahānadī, the Narmadā, the Tāpti and the Godāvarī. The Daṇḍaka forest. Meteorology, monsoon phases, climate. Nature and man. Gift of nature.

Geographical divisions. Three village types. Aryan and non-Aryans villages. The tribes and Janapadas.

The key to the economic progress of Northern India is in the long range of the Himālayas in the north which obstructs the summer monsoon and sends torrents of water down its foot-hills supplied by rains or melting glaciers, and in the two great rivers of the Ganges and the Indus which carry this water into the plains all the year round. Physically this territory, stretching down to the Godāvarī in the south,[1] is divisible into three parts: (1) the mountainous borders of the Himālayas in the north and of the Vindhyas in the south with the linings of the Ghāts in the south-western and the south-eastern coasts, and the transverse range of the Aravalli hills in the centre, (2) the steppes of Sind and Rajputana extending from the coasts of the Indus up to Delhi and the Aravallis in the east, "the oldest mountain range of India," [2] (3) the rich alluvium of the Indus and the Ganges mostly Aryan settlements, intervalled with large forest tracts.

The soil.

[1] By the term Dakṣiṇāpatha was understood land beyond the Godāvarī and not beyond the Narmadā. The texts frequently include principalities of the northern Deccan like Avantī, Kaliṅga, Aśmaka, Daśārṇa, Andhra, etc., among place names of Northern India.

[2] Imperial Gazetteer, Vol. I, p. 33.

Hill tracts.

The primordial mountains, clothed with impenetrable forest remained inaccessible for human settlement. But the many foot-hills where the slopes were not prohibitive, must have been increasingly brought under cultivation and settlement. The upland valleys skirting the Himālayas include some of the most fertile of Indian low-land formation in the north-west and from historic times these were liberally "supplied with moisture by the rains and snows" (Str. XV. i. 17 ff.).

The desert.

Aristoboulos noted the contrast that "rains and snow fall only on the mountains and the regions which lie at their base and the plains experience neither the one nor the other, and are never laid under water except when the rivers rise." This often happened during the rains and Alexander's camp and the cities assumed the appearance of sea-girt islands. Otherwise the plains were a bleak and barren lot. Aristoboulos saw no rainfall between Paṭalene and the Hydaspes and in this respect Onesicritos, Magasthenes, Eratosthenes and Nearchos do not differ from him. It is because "the mountainous and northern country was the most habitable and fertile, while the southern country was onewhere waterless and elsewhere liable to be inundated by the rivers and scorched to the last degree by burning heat, fit enough to be occupied by wild beasts, but not by human beings," that Alexander resolved "to make himself master first of that part of India which had a good report" and set his route across the land of the five rivers (*ibid*).

The river system.

Of course Aristoboulos meant only the plains of the Indus and not the Gangetic plains. The regions of Delhi, western Rajputana and Sind formed a vast arid patch,[1] but the Doab, soaked as it was by the many affluents and the main stream, was a

[1] Earlier in prehistoric times the Indus had other affluents which later lost their course, among which tradition records the flow of the Saraswati even in the 6th century

fertile country and the farther lands of Magadha and Vaṅga were drenched by abundant rainfall which was stored in the great south-eastern forests. The Indian river-system, moreover, did not fail during the hot weather, for it was watered by the melting snows of the Himālayas. The climate also escaped the blighting heat of Arabia and Ethiopia for although the temperature was the same in respect of the sun's rays, India "surpassed them in having copious supplies of water, whence the atmosphere is humid, and therefore more nutritious and productive, as is equally the case with the land and the water" (*ibid.*, 22). A third point in India's favour is that unlike the Nile the Indian rivers "pour their waters into plains of greater length and breadth and lingers in the same climate" (?) thereby proving of more nutritive value than the Nile (*Ibid.*, 23).

Indo-Ganges valley.

Megasthenes and earlier Greek eye-witnesses whose memoirs were utilised for reference by subsequent classical writers, were all impressed by the great rivers of India whose magnitude and number they celebrated with reckless hyperboles. The spinal cord of these watery nerves was formed by the Ganges which was the eastern boundary of the Gangaridai (Kaliṅga) and by the Indus which was the western boundary of India, both "having their sources in the mountains which stretch along the northern frontier" (Diod. II. 36). Each of these was fed by a host of tributaries in their mid-course, the Ganges by 17 (Arr. IV. According to Pliny, 19), the Indus

B.C. "Over a vast space of the now desert country east of the Indus traces of ancient river-beds testify to the gradual desiccation of an once fertile region; and throughout the deltaic flats of the Indus may still be seen old channels which once conducted the waters of the Rann of Cutch, giving life and prosperity to the past cities of the delta which have left no living records of the countless generations that once inhabited them .....It is...clear that the Indus was not always shut off from the Peninsula of India by such wide spaces of desert as now form a formidable obstacle to progression from its bank eastward." *Ibid.*, p 80.

by almost an equal number (Arr. IV has 13, Strabo has 15, Pliny, 19) most of which were navigable (Arr. IV). The Ganges is said to have been 30 stadia[1] broad at the source (Diod. II. 37) elsewhere 100 stadia where narrowest, the shores being invisible from each other where the river spreads out into lakes (Arr. IV). The breadth is computed by another between 8 and 20 miles (Solin. 52.6 f.). The Indus is just inferior to the Ganges but surpasses any other river in the world. "We ought not, therefore, to distrust what we are told regarding the Indus and the Ganges, that they are beyond comparison greater than the Ister and the Nile" (Arr. IV). Altogether the number of Indian rivers is computed at 58 all of which are navigable (Diod. II. 37). Thus as Egypt is the gift of the Nile, Northern India is the making of the Indus and the Ganges, rivers of perennial water unlike their sisters in the South.

The Ganges basin.

"There is not a river in the world which has influenced humanity or contributed to the growth of material civilisation or social ethics to such an extent as the Ganges."[2] It formed the main artery of inter-state commerce and brought down the wealth of Northern India for the carrying trade at Tāmralipti. Great Janapadas flourished on its banks. Material prosperity, political ambition and spiritual ideals were simultaneously nurtured in this plain and made it the pivot of that culture and magnificence which was India's pride.

Being within the influence of the south-west monsoon which at present accounts for almost 90 p.c. of the total rainfall, and overhung with the thick humid atmosphere of steamy effervescence which is the characteristic of Lower Bengal and of those Southern provinces which are watered by the Mahānadī, the Gangetic basin was as now green and thick with the luxuriance of vegetation. The casual refer-

[1] 1 Stadium = about 606 English feet.

[2] Imperial Gazetteer, Vol. I, p. 26.

ences in the Pali works conjure up the panoramic vision between the Oudh and the Delta of "a wide area of crop-producing land, broken by clustering groves of mango, tamarind and other trees, giving place gradually to long lines and avenues of palms bordering the fresh verdure of irrigated rice-fields in the lower reaches of the valley." [1]

The Indus basin.

The western arm of the Indo-Gangetic depression presents slightly different characteristics from the Ganges valley. The upper Indus plain was not a flat treeless terrain as now. Its banks grew forests enough to enable Alexander to build his Indian flotilla; and about the valley of the Peshawar there were wide spaces of waterlogged and swampy plains with thick forests sheltering elephants and rhinoes. Accordingly the meteorological conditions of the Punjab valley could not have been as they are now and the terrific heat of summer and scanty rainfall must have been unknown.[2]

Unlike the Ganges again the Indus keeps its characteristics of a gorge-enclosed river throughout its course up to the sea. Like the Brahmaputra it builds up its bed by the deposit of silt. The gradually increasing elevation of its great silt-formed aqueduct is always a serious menace to the surrounding country inasmuch as it leads to very extensive and very dangerous floods." [3] Such floods were encountered by Alexander and the memoir-writers of his campaign.

The Deccan plateau.

The basin of the Mahānadī differs very little from the Ganges basin in essential physical characteristics. Its rich delta no doubt contributed to the prosperity of the ancient state of Kaliṅga as Avantī was favoured by the estuaries of the Narmadā and

[1] *Ibid.*, p. 22.

[2] In the 5th century B. C., the Punjab or the Indian satrapy of Darius' Empire was the richest province and yielded a tribute of 560 talents of gold each year (£8,000,000).

[3] *Ibid.*, p. 30.

the Tāpti and the Rann of Cutch in the low-lands and by the precious sheet of black cotton soil in the uplands (Peri. 41). Except for the western states of Avantī and Mālwā and the eastern ones of Aśmaka and Kaliṅga, the broad central plateau between the Ghāts and the Vindhyas and the Godāvarī was covered by the primeval forest of Daṇḍaka which was the more effective barrier between the North and the South than the Vindhya range or the Narmadā river.[1]

Meteorology, monsoons, climate.

Like the topography, the meteorology of India is full of variety and contrasts; it ranges between the heavy rainfall of Assam and Cherrapunji and the absolute dryness of upper Sind.[2] The coasts are exposed to fierce cyclones hardly known in Europe, bringing storm waves that sweep the low coastland of lower Bengal and the deltas of the Mahānadī and the Godāvarī destroying the crops and drowning the inhabitants. The monsoon phases of India are pronounced and their contrast is more marked than anywhere else. During one half of the year, the term of the North-East monsoon, it is swept by dry land winds with little cloud and rain, and during the other half, in the South-West monsoon time, it is blown by winds of oceanic origin with high humidity, much cloud and frequent rain. These factors are connected with a noteworthy combination of tropical and temperate region conditions. "Tropical heat, heavy and frequent rain and fierce cyclones are prevalent at one period of the year; while moderate temperature and rain, with shallow, exten-

[1] The Rāmāyaṇa account interposes the forest in the vast gap between Avantī, Vidarbha, Matsya and Kaliṅga in the north and Andhra, Puṇḍra, Cola and Pāṇḍya in the south (IV. 41).

[2] According to the Arthaśāstra, rainfall in the country of Jāṃgala (desert countries) is 16 *droṇas*, in moist countries (anupānām) 24 *droṇas*, in the Aśmakas (Mahārāṣṭra) 13½ *droṇas*, in Avantī 23 *droṇas*, in the western countries (Aparāntānām) and the Himālayan borders an immense quantity. II. 24.

sive storms, conditions resembling those of south-eastern Europe, obtain at another." [1]

Nature *vs.* man.

The natural surroundings, therefore, did not promise the Indian too easy a life. Among those who believe that Indians were never hard fighters against nature nor ambitious for material prosperity, it is a common stock of argument that while in temperate regions an economical nature yields nothing save in response to hard labour, in the tropics, nature except for sudden vagaries supplies the necessities of man with very little strain on his part and this promotes inertia and fatalism. An economist has refuted this theory and upheld that "the greater the fertility, the greater the incentive to skill"; [2] and the contention is amply borne out by the early economic history of the Gangetic provinces. The preachers of "oriental apathy" moreover overlook the fact that India is not uniformly a tropical region and nature is not as munificent as it is supposed to be.[3] Within the boundaries of the northern sector almost any extreme of climate that is known to the tropics or the temperate zone may be found. Throughout its major portion rainfall is precarious and the lands of Upper Sind and western Rajputana must have suffered under chronic drought and depended entirely on irrigation as now. The marked discontinuity of Indian rainfall and its confinement to certain definite seasons causes shortage of soil moisture, soil erosion and water-logging and so flood has always been a serious natural enemy which

[1] Imperial Gazetteer, Vol. I, p. 105.

[2] A. M. Carr-Saunders—*The Population Problem*, p. 422.

[3] "For ages the Indus has been pushing its bed across the valley from east to west, generally by the gradual process of erosion, which effectually wipes out every trace of town and village on its banks, but at times also by a more or less sudden shifting of its waters into entirely new channels, leaving large tracts of country to go to waste, and forcing the inhabitants of many a populous place to abandon their old homes, and follow the river in search of new settlements." J.R.A.S., Vol. XVI, p. 281. See Strabo, XVI, i. 19.

calls forth all the nerve and ingenuity that man is capable of.

From the diversity of her physical features, India came to possess a great variety of animal, vegetable and mineral products; the thick-coated hill sheep of Kashmir, the camel of Sind and the elephant and tiger of Bengal forest; the wheat, fruit and fir trees of the north and the rice and cocoanuts of the hot low-lying swamps and coastal regions; the coal and ironfields of Bengal, Bihar and Orissa and the gold of Mysore and the salt ranges of the Punjab. The density of population and the economic habits of the people have also varied greatly, influenced by diverse physical conditions; the peaceful agriculturist of the Gangetic valley, the hard-working Deccanese, the shepherd hillmen of the Himālayas and the primitive huntsmen of the forest regions —all live side by side on the Indian soil.

During the period under study, villages may be classified into three economic types. The main and the majority were those which grew out of an intermixture of the Aryan and non-Aryan settlers founded chiefly on agriculture.

Three types of villages.

The habitat, centred round the patron deity of the villages, was encircled by the *gāmakhetta* or cultivated field outside which lay forests and pasture grounds. Of a different type were the *paccantagāma* or border villages inhabited by aboriginal or degraded tribes. These people occupied also the slopes of the Himālayas, the Vindhyas and the Aravallis even as now as well as the trans-Gangetic regions where Ptolemy locates all non-Aryan tribes with a thin sprinkling of Brāhmaṇical settlements. In the Mahābhārata native and foreign barbarians like the Kirātas, Daradas, Cīnas, Śakas, etc., and outcasts like the Bālhikas, Madras, Prāgjyotiṣas, etc., are seen distributed along a semi-circular arch from Sind to the Bengal Delta (*cf.* Baudh., I. 1. 2. 13-15). Outside the 16 *Mahājanapadas* of the Anguttara-nikāya land was mostly occupied by the

aboriginals. As land of the superior grade was appropriated by the conquerors, the original settlers were pushed into the marches where land offered little attractions to the cultivator. These people accordingly led a bohemian life upon freebooting, hunting and pastoral enterprise. The third type consisted of industrial and professional villages, *i.e.*, villages founded on a particular trade or profession, the inhabitants whereof specialised in a particular art and catered to the needs of neighbouring districts.[1]

Geographical divisions.

Cunningham, following Yuan Chwang and the official records of the Thang Dynasty of the 7th century, has divided the Indian continent into five Indies, *viz.*, North, West, Centre, East and South.[2] These correspond respectively to the fivefold division given in the Kāvyamīmāṃsā and in the Bhuvanakoṣa section of the Purāṇas, *viz.*, Udīcya (Pali—Uttarāpatha), Aparānta (Pali—Aparāntaka), Madhyadeśa (Pali—Majjhimadesa), Prācya and Dakṣiṇāpatha (Pali—Dakkhināpatha).

The Anguttara-nikāya enumerates sixteen Mahājanapadas, *viz.*, Kāsi, Kosala, Aṅga, Magadha, Vajji, Malla, Cedi, Vaṃsa, Kuru, Pañcāla, Matsya, Surasena, Assaka, Avantī, Gandhāra, Kāmboja (I. 213 ; IV. 252, 256, 260). Between the similar lists of the Karṇaparva of the Mahābhārata and of the Janavasabha Suttanta of the Dīghanikāya, this is the most exhaustive. The Jaina Bhagavati Sutra shows a wider horizon of a later time. In the Bhīṣmaparva of the Mahābhārata as many as about 150 tribal or place names are recorded for northern India (9. 38 ff.). But the list is of very little use, vitiated as it is by mythical names, duplications and triplications, juxtaposition of old and late names, etc.

[1] The first type comes within the purview of this Book. The villages of robbers and the huntsmen are treated in Book V, Ch. III, of the *Caṇḍālas* and degraded castes and professions in Book VI, Ch. III, the industrial villages in Book II, Ch. V.

[2] Ancient Geography of India, pp. 11 ff.

Of the 16 *Mahājanapadas* of the Anguttara-nikāya as many as 12 flourished in the Ganges valley. Only Gandhāra and Kāmboja are seen in the Indus valley, Avantī on the Narmadā and Assaka on the Godāvarī. Other important *janapadas* or tribal settlements whose existence was not merely imaginary and which may be located with approximate precision are Bālhika and Surāṣṭra in Sind and Gujarat, Madra in the Punjab, Daśārṇa in the Central Provinces, Vidarbha in Berar, Puṇḍravarddhana in Western Bengal, Vaṅga in Eastern Bengal and Kaliṅga which included Orissa and northern part of the Madras Presidency. Besides, the Greek writers give a long list of petty principalities in Sind and the Punjab.

Except for the inscriptions, which are moreover few and taciturn, all our sources are confined almost exclusively to the description of the Madhyadeśa which stretched between the Kuru country and the Puṇḍravarddhana. Information about the people of the Punjab, Sind and trans-Gangetic regions are meagre, coloured with prejudices and garbled with legends. Megasthenes himself was trapped into the old wives' tales regarding some of these peoples which were current among the people of the Madhyadeśa. The fabulous stories about the Madras and the Bālhikas in the Epics is a sad contrast to the realistic picture of the Magadhans and Kosalans in Pali literature and until streaks of light radiate from the inscriptions in the rock-caves of Karle, Nasik, Junagaḍh, Hathigumpha, etc., the reader remains almost in the dark about local institutions and enterprise and the stages of economic development.

CHAPTER II

The Agrarian System

Theories of peasant, communal and state ownership of land. Ownership and possession—right of transfer. Individual ownership with rights of transfer; significance of Karle and Nasik charters. Communal ownership; Baden Powell's theory. Theory and practice of royal ownership; scope of royal title. Royal domains. Partnership of rights and title between Crown, community and cultivator in ordinary land excepting land under sole authority of Crown or community.

Big and small estates : agricultural indebtedness. No privileges based on land.

Divergent theories of ownership.

The difference of scholastic opinion over the land system of the Indo-Aryans has not been narrowed down with the progress of research on the subject since the memorable works of Maine and Baden Powell inaugurated the controversy. There is no dearth of ancient authorities for every rival opinion to substantiate its claim that the land system was founded on individual, communal or royal ownership. These conflicting theories and facts in our literary material rule out the convenient solution of labelling for a vast country where different cultural and racial units fused together or thrived in isolation and lead to the only safe conclusion that "different villages in different districts varied one from another in the customs of land-tenure and in the rights of individual householder as against the community." [1]

Ownership distinguished from possession.

Doubt has even been raised whether the conception of ownership of agricultural lands had at all been reached when the Sacred Law was formulated [2] and the contention has been competently fought by an Indian scholar.[3] As has been

1 Rhys Davids—Buddhist India, Ch. III.

2 Moreland—Agrarian System of Moslem India, p. 4.

3 Ghoshal—Agrarian System in Ancient India, Lec. V.

pointed out, the Sacred Law distinguishes even in respect of terminology the idea of ownership from that of restricted real rights: ownership indicated by *svatva*, *svāmītva*, etc., possession by the root *bhuj* and its derivatives. The field belongs to him who first removes the weed as the deer to him who first stalks it.[1] Though mere possession as distinct from ownership is implied in this injunction, it recognises the right of first clearing as constituting the original title to the land. This distinction between possession and title is repeatedly emphasised in later law books (Yāj II. 29; Vṛ. IX. 2 ff). Mediaeval law-digests explicitly define ownership as the quality of the object owned, of being used according to pleasure. The Smṛtis further testify that the essential attributes associated with ownership are sale, gift and mortgage (Gaut. XIX. 17; Baudh. III. 10. 15; Manu, X. 114; Vṛ. VIII. 6 f.; Arth. III. 9); an owner might also use land as pledges (Manu, VIII. 143; Nār. I. 125. Asahāya's commentary).

Individual ownership in Pali works

An examination of literary matters shows that individual ownership of agricultural and homestead land stood the application of these tests.[2] It is a common warning in canonical works that a genuine *bhikkhu* has no sons, animals, arable or homestead land,[3] *i.e.*, the movable and immovable property as generally belongs to the householder. The implication is clear that land is as much personal property as cattle. The *khetta* and the *vatthu* also figure along with *hiraññā*, *suvaṇṇa*, *gāvi*, *dāsa*, *bhariya*, etc., as gifts that may be

[1] Sthāṇucchedasya kedāram āhuḥ śalyavato mṛgam: Manu IX. 44. See also Kullūka's comment on it.

[2] Vedic Aryans at the dawn of their history exhibit instances of full-grown private proprietorship. See Macdonell and Keith: Vedic Index, I. 211. Also N. C. Banerji: Economic Life and Progress, pp. 100 ff.

[3] na tassa putta pasavo vā khettaṃ vatthuṃ na vijjati. Sut. IV. x. 11. In the Kāmasutta this ownership is spoken of in positive form (IV, i). *Cf.* Jāt. II. 99.; Mbh. XII. 296. 3; Jacobi: J. S. II, pp. 59, 90, 347.

offered to a *bhikkhu* by a woman, a harlot, an adult girl, a eunuch, a king, a robber and a rascal (Mv. III. 11. 4 ff.; *cf.* Mil. p. 279; Therag. 957). The passage illustrates not only a ripe sense of ownership but also that there was at least no strict and universal sex-barrier against ownership of land of which Ambapāli and Visākhā Migāramātā are concrete examples (Therig. 340). A parable in the Milindapañho illustrates how acquisition of land by clearance of forests tended to develop into a legal title:

"It is as when a man clears away the jungle and sets free a piece of land and the people say—'that is his land.' Not that the land is made by him. It is because that he has brought the land into use that he is called the owner of the land."

"Yathā.....koci puriso vanaṃ sodhitvā bhūmiṃ nīharati tassa sā bhūmīti jano voharati na c'esā bhūmi tena pavattitā taṃ bhūmiṃ kāraṇaṃ katvā bhūmisāmiko nāma hoti." P. 219.

Similar instances of private appropriation with reclamation of forests is seen in the Jātakas (IV. 167) and the Epics (Rām. II. 32. 30). A glimpse into the legal origin of individual ownership is afforded by the tradition embodied in the Jātaka stories where the deer eat up the crops of villagers and an understanding is reached between the man king and the deer king to the effect that each man should mark out his plot and set up a placard therein so that the deer folk might distinguish it from unclaimed land and spare it (I. 153; IV. 262 f.). A Brāhmaṇa landowner of Magadha offers 1,000 *karīsas* of his estate as a gift to a parrot (IV. 281). The Jātakas record the donation of parks by the doctor Jīvaka at Rājagaha, by the courtesan Ambapāli at Vesāli and by the merchant Anāthapiṇḍika at Sāvatthi who, moreover, gives the pleasance after purchase from prince Jeta thus showing a double process of private transfer. Elsewhere Bodhisatta is seen

to form an estate outside his native village which indicates that alienation of land by sale, mortgage or otherwise was not unknown (III. 293) and that land had acquired a certain measure of fluidity. The story which relates how Bodhisatta remonstrated a *gahapati* who murdered his nephew to be owner of an undivided estate and concluded his sermon by uttering a verse to elucidate how silly it was to guard one's fortunes whimpering 'mine, mine' all the while (III. 301 f.), sets at rest all doubt as to whether a clear notion on the concept of ownership in land had grown up as yet.

The transaction between Anāthapiṇḍika and Jeta is of unique interest to bear quotation.

Land suit over Jetavana.

Anāthapiṇḍiko gahapati.....Jetaṃ kumāraṃ etad avoca : dehi me ayyaputta uyyānaṃ ārāmaṃ kātun ti. adeyyo gahapati ārāmo api koṭisantharenā 'ti gahito ayyaputta ārāmo 'ti. na gahapati gahito ārāmo 'ti. gohito na gahito 'ti vohārike mahāmatte pucchiṃsu. mahāmattā evaṃ āhaṃsu : yato tayā ayaputta aggho kato gahito ārāmo 'ti. atha kho Anāthapiṇḍiko gahapati sakaṭehi hiraññaṃ nibbāhāpetvā Jetavanaṃ koṭisantharaṃ santharāpesi." Cv. VI. 4. 9.

Evidently Jeta's answer to the offer of purchase is misreported here for on the merit of this the law-suit cannot go against him. Buddhaghoṣa in his commentary Sāmantapāsādika gives the correct report based upon some older Indian legend which the Bārhut sculptor had before him. From this version as well as the Bārhut representation it appears, moreover, that Anāthapiṇḍika took Jeta at his word, took possession of the park and asserted his right of ownership by going so far as to cut down all the trees except one mango and a few *candana* trees.[1] The bargain, the taking of possession, Jeta's ultimate backing out,

[1] Hardy : Manual of Buddhism, p. 218 f. Barua : Bārhut, II, p. 31.

reference to law court [1] and the judicial verdict are all unmistakable cases in point of legal ownership of the individual and transfer of right by sale.

Cursory and allegorical references in the Dīgha-nikāya corroborate the foregoing conclusion. It significantly remarks on the 'division of rice-fields' and setting up 'of boundaries between the two' (sattā sāliṃ vibhajiṃsu mariyādaṃ thapesuṃ, XXVII. 18) and on the stealing of another's plot (khetta, *ibid.*, 19).[2] In a parable Buddha derides the folly of "a man who neglecting his own field should take thought to weed out his neighbour's field" (sakaṃ khettaṃ ohāya paraṃ khettaṃ niddayitabbaṃ, XII. 7). This became an oft-quoted expression to laugh down a fool, for the sarcastic analogy occurs in the Mahābhārata as well—parakṣetre nirvapati yaśca vījam (V.36.5).

Gift of land is classed among acts of exemplary piety in the Epics (Mbh. III. 199. 127 ff.). The imprecatory verses of the Mahābhārata directed against those who revoke grants or infringe rights of land once transferred (XIII. 62; V. 36. 13) are conventionally and meticulously repeated in the land-charters inscribed on stone and copper-plates. There is no reason why an act of grace which would be salvation for the royal race should not be the same for humbler folk (Rām. III. 68. 29; VII. 28. 21; Mbh. XIII. 23. 111; 62).

Right of leasing land for rent.

According to Āpastamba land might be let by an individual against a certain share of the produce (kṣetram parigṛhyo' tthānābhāvāt phalābhāve yaḥ samṛddhaḥ sa bhāvi tadaparihāryaḥ, II. 11. 28. 1.1; *cf.* I. 6. 18. 20). Vyāsa and

[1] That civil suits over dispute on land were not infrequent is pointed out by the Milinda parable (p. 47) where a *khettasāmiko* litigates against another who burns his field. *Cf.* Baudh. I. 10. 19. 12; II. 1. 2. 4; Arth. III. 9.

[2] The dispossessor of another's plot is one of the six varieties of *ātatāyin* according to the commentator on the Mahābhārata: V. 173. 1; *Cf.* Yāj. II. 155; Arth. III. 9, 17; IV. 10; Gaut. XIII. 17.

Vṛhaspati also imply the leasing of fields in the same manner. Similarly the Arthaśāstra lays down that if a holding is taken possession of by another on some reasonable grounds, he shall be made to pay the owner some rent, the amount of which is to be fixed after mature consideration of what is necessary for the subsistence of the cultivator of the holding for him (karaṇādane prayāsam ājīvaṃ ca parisaṃkhyāya bandhaṃ dadyāt, III. 9). In contrast to the rule on royal land, the indifferent cultivator does not forfeit his plot: the man who makes improvement on another's neglected plot must surrender it after five years to the owner on obtaining a compensation (anādeyam akṛṣato 'nyaḥ pañca varṣāṇy-upabhujya prayāsa-niṣkrayeṇa dadyāt, III. 10).[1]

Significance of Karle and Nasik Inscriptions

Early epigraphic records give scanty but illuminating data. An early instance of private transfer is furnished by Dharmanandin, son of an *upāsaka* who made a bequest of a field for the clothes of some ascetics living in one of the Nasik caves (No 9. pl. iii). In the Karle Cave Inscriptions, Uṣavadāta's assignment of 16 villages to *devas*, Brāhmaṇas and ascetics seems to imply only the assignment of revenues for allowing peaceful pursuit of spiritual avocations—not the transfer of ownership or right of alienation by sale, mortgage or gift as is customary in later land-charters. A similar gift to the Bhadāvaniya sect of the *saṃgha* is recorded in the Nasik Cave Inscription 2. i. The following plates are more interesting and deserve more than passing notice. The charter of Vāśiṣṭhiputra Pulumāyi

[1] If these rules were meant for practical application, the existence of a class of under-ryots with a corresponding type of landlord who is proprietor of the soil, may be presumed. But in view of lack of records, it would be rash to draw an analogy with the present zemindary system with its paraphernalia of *zutdārs*, *pattanidārs*, etc. Absence of corroborative reference in the Jātakas and popular literature shows that there was no widespread subinfeudation of land in any sense.

is marked by three characteristics: (*a*) the village is assigned "to be owned by the *bhikkhus* . . . dwelling in the cave to produce a perpetual rent for the care of the cave" (bhikhuhi devileṇavāsehi nikāyena Bhadāyaniyehi patigaya dato), (*b*) with customary immunities belonging to monks' land (bhikhuhalaparihāra) free from the entry of royal officers and the police, *i.e.*, from revenues and fines[1] and from the royal monopoly of salt. (*c*) The king's right to abrogate the grant substituting another in its stead is implicit in the donation (3. ii). With exactly the same immunities a field of 200 *nivartanas* in a village is assigned to the Tekirasi ascetics by Gautamiputra Śātakarṇi (4. ii). In both cases the donor is a king, the donee a religious order, the immunities are the same, but in the former case the gift is a whole village, in the latter only a *Khetta*. The nature of the grant cannot be the same in the case of a village (with its population of cultivators) and that of a cultivated field thereof, however, conventionally the immunities may be repeated. The contrast is boldly marked out by another writ of Gautamiputra Śātakarṇi which directs that since a field in the village of *kakhadi* granted to certain ascetics was not cultivated, nor the village inhabited, 100 *nivartanas* of land from the same be given to the ascetics with customary immunities (5. ii). The field is explicitly characterised as a 'royal field' (rājakaṃ kheta). The probable explanation is that originally only the revenues of the crown land were assigned (the ownership indicated in 3. ii must be understood in this sense) but since the village was depopulated for some reason or other and the field remained untilled and produced no revenue to be enjoyed, the king assigned a portion thereof with complete rights of a beneficiary and usufructuary—and

[1] *Cf. adaṇḍakarāṇi* in the Arthaśāstra, II. 1.

if we may hazard the suggestion, as a *brahmadeya* gift of land.

Right of freeholders not infringed by royal grant.

The implication and upshot of these instances are that the king's charter might bear on private land or on crown land. In the first case it was only a matter of transfer of revenue over which the king had undivided legal right, and not of ownership and usufruct. In the second case, the assignment is only of revenue when whole villages are disposed of along with the tillers and their holdings, and of ownership and usufruct when the gift consists of a few acres of land.[1] The right of freeholders stood unimpugned in the case of transfer of land which was not crown property.[2] This is proved by the grant of Usavadāta (10. iv) in which a field was bought from a Brāhmaṇa "belonging to his father" for the price of 4,000 *kahāpaṇas* and "from it food will be procured for all monks dwelling in my cave."[3] This is why the *brahmadeya* gift of land which carried with it ownership and usufruct and not merely revenue, could be made only of crown lands (Dn. III. i. 1; IV. i. 1; XII. i. 1; Mn. 95; Arth. II. 1). This was the general custom and order prevailing not only in the Deccan under Sātavāhana rule but according to all extant testimony, also in the Indo-Ganges valley from much earlier time down to a few centuries of the Christian era.

[1] Distinctive gifts of land and villages occur side by side in the Mahābhārata, XIII. 10. 64; 23. 111.

[2] We shall see that in crown lands there were no freeholders but only king's tenants and agricultural labourers.

[3] *Cf.* a Tamil inscription of Kṛṣṇa III wherein the king assigns land to a god after purchasing it from the members of a village assembly. Ep. In. VII. 20G. These are definite recognitions of personal and communal ownership with rights of transfer by sale, etc.

Impartible real estate—a blow on theory of individual ownership.

But peasant-proprietorship was not the uniform and universal principle of land tenure. Although Maine's analogy with the Teutonic mark [1] is now universally discredited, Baden Powell's theory of undiluted private ownership [2] supported by most of the modern scholars does not stand close examination. As observed by Washburn Hopkins—"The general Hindu theory of impartible real estate is a distinct blow to the sweeping generalisation made by Baden Powell when he stated that the early Aryans in India recognised only private ownership in land." [3] The early jurists like Gautama, Manu, Uśanas are very reticent about partibility of land.[4] It is only later jurists of the 4th and 5th centuries who recognise land to be partible. It may be noted also that while Manu's boundary laws open with rules for the adjustment of boundaries between disputing villages (X), the subsidiary law in regard to boundary lines of a field, spring, reservoir, garden or house being added only as an appendix, Yājñavalkya reverses the order laying down 'the law in regard to fields' and adding that 'the same applied to villages.' An interesting admonition from a sage to his brother in the Mahābhārata on the evils of partition of patrimony which encourages quarrel, estrangement and ruin reflects the working of this tendency, *i.e.*, how ownership of the joint family (which is conterminous with joint village in patriarchal society) was sought

[1] "The Indian and the European systems of enjoyment and tillage by men grouped in village communities are in all essential particulars identical"—Village Communities of the East and West, p. 103

[2] Indian Village Community. Article on Origin of Village Land Tenures in India, *J.R.A.S.*, Vol XXX.

[3] India—Old and New, p. 218

[4] This must not be taken to mean that partition of estates was totally unknown. The Ṛg-veda bears witness that the son's right in real property was implicit even in father's life-time and could be exercised in partition, the right which is the basis of the *Mitākṣarā* system of the law of succession (*cf.* Ait. Br., V. 14; Tait. Saṃ., II. 6 1).

to be maintained by wise counsel against the encroachment of partition and full-fledged private individual property (I. 29. 16-22).

Communal ownership in tradition and folk-lore.

The tradition of unrestricted communal ownership on soil was handed down from hoary antiquity from the region of the extreme north associated with the Uttarakurus who were proverbial for their piety and wisdom (kṛtapuṇya-pratiśrayaḥ, Mbh. VI. 6. 13.). These idealised folk called no goods their own, nor women their chattels and their crops were yielded without toil, so goes the pæan of praise in the Dīgha-nikāya (XXXII. 7). In the same vein Vaiśampāyana describes the Kuru land in the good old days of Duṣmanta (Mbh. I. 68). Nor was the custom confined to the north-west or to pre-Buddhistic times. In the Tiṇḍuka Jātaka a fruit tree appears among the corporate property of a village (II. 76 f.). In the Siha-camma Jātaka a *yavakhetta* where an ass is let loose by a sharper and which is defended by all the villagers in a body seems to be common village property unless of course this be a field under collective farming (II. 109 ff.). To the village corporation belonged the village pond (candanikam), the motehall (sāla) and irrigation tanks and canals, roads, bridges, parks, etc. (Jāt. I. 199). The Jātaka evidences also leave no room for doubt that the ill-defined belt of pasture land around the *gāmakhetta* was enjoyed and owned by the villagers in common (*cf.* Ṛv. X. 19. 3f.). According to Manu the land around a village on all sides for 100 bows (about 600 ft.) is common land (VIII. 237 f.). According to the Arthaśāstra this is 800 *angulas* (III. 10).

In aristocratic republics.

The brief story in the *paccupannavatthu* of the Kunāla Jātaka throws a vivid sidelight on the agrarian system in certain aristocratic republics (V. 412 f.). The Śākyas and the Koliyas each cultivated their tribal land held in common

enterprise and organisation by means of a dam from river Rohini worked by co-operative irrigation. The owners proper of the land were the *rājakulas* or aristocratic families. They had subordinates to work the estates or manage the administration (tasmiṃ kamme niyutta amacca). To this category of intermediaries belonged the *sevaka*, *bhojaka*, *amacca* and *uparāja* (*cf.* Jāt. I. 504). The actual labour was done by slaves (dāsi, dāsa) and hired hands (kammakarā) who fell to quarrel on behalf of their masters over the prior claim to the waters. The *rājakulas* together with their vassals and officers formed the tribal body or body-politic and the slaves and serfs are left out when the Śākyas and Koliyas are mentioned. The latter version of the dispute significantly makes the partition—' dāsakammakarā c'eva sevakabhojakāmacca uparājāno ca'ti sabbe yuddhasajjā nikkhamiṃsū.'

This supposition is strengthened by a passing observation in the Mahāvastu. The Śākya chiefs give their incoming sisters' children ' Sākya wives, cultivated lands and villages.' [1] The presumption is that land was held in common between the *rājakulas*, members whereof either parcelled out portions to others on tenancy or held plots in usufructuary enjoyment.

Speaking of certain unspecified tribes, probably of the Punjab, Strabo notes that " the land is cultivated by families in common and when the crops are collected, each person takes a load for his support throughout the year " (XV. i. 66). In the Arthaśāstra, land owned by village community is hardly traced. But like the Smṛtis it deals not only with boundary disputes between individuals but

[1] See B. C. Law : Study of the Mahāvastu, p. 57. The Mahāvastu and the Jātaka commentary are of course both later works. But the joint-family ownership must have been a feature of the oligarchical and corporate life associated with the Śākya clan from much earlier time.

also between villages which are to be settled by elders of 5 or 10 villages (III. 9). The significance of such village boundary, however, is not made clear. Had the village community the right to collect some taxes within its jurisdiction ? The probability is strengthened by the rule in next chapter that the fine levied on a cultivator who arriving at a village for work does not abide by the contract shall be taken by the village itself (karṣakasya grāmam abhyupetvā-'kurvato grāma evātyayaṃ haret). It would be rash to infer the leasing of communal land to an outside cultivator from this meagre statement. It would rather suggest a system of collective farming in which workers were employed under a co-operative enterprise for cultivation of the villagers' fields.

In the Arthaśāstra.

After laying down that no bidding must be done in the absence of owner, the Arthaśāstra gives another law, 'saptarātrād-ūrddhvam-anabhisarataḥ pratikruṣṭo vikrīṇīta' : "if the owner does not come forward even on the expiration of seven nights, the bidder may take possession of the property." Reading this with the rule in next chapter (III.10)—'akaradāḥ paratra vasanto bhogam upajīveyuḥ'—"non-taxpayers (*i.e.*, owners of *brahmadeya*) shall retain ownership even if they sojourn abroad,"—it seems that an owner (taxpayer) lost his title to the *vāstu* if he left it for a foreign land and remained untraced for seven nights, when the villagers in a body, represented by the elders, might dispose of it.

In later Inscriptions.

Thus although in the land system of the Arthaśāstra communal ownership was obviously on the wane, it still had lingering traces which restricted real rights of cultivators. Nor was it totally extinct in any period in the ancient economy of northern India not to speak of the Tamil countries of the far south. A Gwalior Inscription of as late as the 9th century

records a temple grant by a town of plots of land " which was its own property (svabhuñjamāna, svabhukti) specified as belonging to village so and so and cultivated by so and so (memmakavāhitakṣetraṃ).[1] Here obviously the corporate person is the legal owner and the cultivator only a tenant.

A few copper-plate documents of Bengal from the 5th and 6th centuries recording purchase and gift of land lend strength to this supposition. In some of these the intending purchasers, official or non-official, had to address in their application for purchase not only the administrative functionaries of the province (bhukti) and the district (viṣaya), but also the leading man or elders in the same, as well as the other rural officers, *e.g.*, *aṣṭakulādhikaraṇas*, *grāmikas* and the chief householders (kuṭumbins), while in others the purchasers approached with their application the administrative machinery of the district town which had a Board or Council attached to it consisting of the representatives of the four important interests of those days, *viz.*, the merchants, the traders, the artisans and the scribes or Government secretaries. Sometimes the documents bear the seal of the two Government courts, *viz.*, that of the district of Vārakamaṇḍala and of the district town of Koṭivarṣa. The land for sale is cultivable field (kṣetra), homestead land (vāstu) or waste land (khila). Who were the owners of these lands ? R. G. Basak pertinently asks that if they belonged to the state, " why it could not alienate them without the consent or approval of the peoples' representatives, the *mahattaras* and the businessmen (vyavahārin) of the province and the district and sometimes even the common folk ? " Moreover, why should the state, in a sale of land which is absolutely its own, get only 1/6 of the sale proceeds as is clearly

[1] Ep. In. I. 20.

mentioned in one of the documents ? It seems clear that the remaining 5/6 went to the funds of the village assemblies who formed a party with Government in granting prayers for purchase and that there was a joint ownership of land between the state and the village community—a state of affairs very similar to that prevailing in the village economy of the far south.[1]

Baden Powell's arguments against communal ownership.

Baden Powell tries to establish his theory of peasant ownership by examining the character of the severalty and the joint villages which are distinguished from one another by the following features. The former has a *patel* or headman, the latter none. The former has holdings which have always been separate, the latter has holdings which are only inherited shares of an original single estate. In the former each holding is assessed separately, the latter has a joint liability, the revenue being assessed at a lump sum. The joint village is of three types. In the tribal or clan type, members hold shares separately, there being only united ownership of waste land and of the village site, and a united responsibility for taxes. Such a tribal allotment has actually been the starting point of the true severalty village, as shown by the primitive Kolarian village. The associate joint village is founded by different families for the purpose of mutual protection against intruders and are joint only in assuming a united responsibility for taxes. The ancestral joint family village is the only unit resembling a village community. Here all the shares are portions inherited from an original single estate. The heirs hold the property always liable to division, so that there is no communal holding even though a few of the heirs do not partition their estate. Still less does the whole village own the land which is

[1] See R. G. Basak's illuminating article on Land Sale Documents of Ancient Bengal in Asutosh Silver Jubilee Volumes, Vol. III, Part II.

generally rented to tenants, the rents being divided among the descendants of the original lord of the manor. Even when the estate is undivided each heir is actually in possession of a special part and holds it for his own benefit.

According to this analysis the types are severalty and joint villages, not communal types. The most communistic form is the still undivided inheritance of a joint family, but even this is always partible. It is concluded therefore that "the joint family with its original common ownership of land is sufficient to account for all such traces of communistic landownership as we have any record of, and the joint ownership of the village had only the form of the modern 'joint village.'[1] This proposition, however, founded on a hypothesis of consanguinity, is applicable to the tribal oligarchies noted above, but is too generalised to meet all conditions. During the period under study, patriarchal villages are not the general order of society. It is no exception that families of different castes and professions are sometimes grouped in village settlements and do not shed off their communal tinge withal. Nor is joint ownership by industrial guilds or religious fraternities a rare feature in Indian land system.

Legacies of communal ownership.

Taken together, the available data do not warrant Rhys Davids' conclusion that in Buddhist India the peasantry were only shareholders in communal land without rights of sale, mortgage or bequest of their share.[2] The utmost that can be assumed with safety is that "the old tradition expressed in the Brāhmaṇas.....may have survived in the

[1] Washburn Hopkins : *op. cit.*, p. 229.

[2] Rhys Davids : *loc. cit.* He is misled by the term *gāmakhetta* and by its analogy with the Buddhist patchwork robe to think that it was "the common property of the village community" divided only for purposes of cultivation (Vin. Texts, Vol. II, pp. 209 f. fn., 12).

villages as a communal anti-alienating feeling concerning any disintegration of the basis of their social and economic unity."[1] Although alienation of private land to an outsider may not have been totally unknown this was against custom and law. In the Mahābhārata selling of land is categorically stigmatised as sin (XII. 78. 2.). The Arthaśāstra explicitly rules that holdings (vāstu) may be sold only to kinsmen and neighbours (jñātisāmanta, III. 10). This is the unwritten law in many parts of rural India even today. Consent required of the village community for alienation of private land may have been in some quarters another vestige of village ownership.

Emergence of royal title.

Thus from the earliest times communal ownership thrived side by side with private ownership in a modified form. The evidence of the Ṛgveda shows that the arable land was held in individual or family ownership while communal ownership was confined probably only to the grasslands lying on the boundaries of the fields. Originally the king's title to ownership of all land was identified with the communal title, he being the communal head or lord of the *viś*. With the advance of royal power and bifurcation of communal and royal jurisdictions he emerged as a third factor in the land system and developed certain prerogatives over the soil as reflected in the Brāhmaṇas. In the Śatapatha Brāhmaṇa it occurs that to whomsoever a Kṣatriya with the approval of the people or clan grants a settlement, that is properly given (VIII. 1. 1. 8; 1. 73. 4). Evidently public land of the folk or state is meant and not private land of freemen; and it appears that while gift of such

[1] Mrs Rhys Davids : Cambridge History of India, Vol. I, Ch. VIII. Land sale documents of Bengal in the 5th century testify that sale of land was generally accompanied with the condition of non-transferability (nivīdharma) although exceptions were made in particular cases. See the Dhānāidaha and Dāmodarpur Copperplate Inscriptions of the time of Kumāragupta I.

land with tribal consent was customary law, it was sometimes arbitrarily disposed of by the ruler—thus generating a tendency to reduce public lands to king's private estates which is encouraged by all possible means in the Arthaśāstra.

Theory of royal ownership.

This royal pretension hardened into a theory promulgated consciously by a royalist school or unconsciously by lawyers and economists to justify king's right to a sixth of the produce for protection of his subjects; and this royalist theory attained enough force to mislead foreigners from the East and West who visited India, as well as some modern scholars [1] into a belief that in India all land belonged to the Crown. This royalist theory led to the perverted derivation of *khattiya* (Dn. XXVII. 21) in the Pali canon, "khettaṃ patīti kho khattiyo." The king is entitled to half of ancient hoards and metals underground by reason of his giving protection and of being the master of land—so says Manu (bhūmer adhipatir hi saḥ, VIII. 39). A *śloka* quoted by Bhaṭṭaswāmī in the commentary on the Arthaśāstra (II. 24) goes: "Those who are well-versed in the Śāstras admit that the king is the owner of both land and water and that the householders can exercise their right of ownership over all other things excepting these two."

Rājā bhūmeḥ patirdṛṣṭaḥ śāstrajñai rudakasya ca
Tābhyām anyattu yaddravyaṃ tatra svāmyaṃ kuṭumbinām.[2]

Megasthenes aligned with this tradition when he stated that all India is the property of the Crown and no private

[1] Vincent Smith: Early History of India, pp. 137 ff.; J. N. Samaddar: Economic Condition of Ancient India, p. 56.

[2] Note that *pati* and *svāmī* appear synonymously. K. P. Jayaswal (Hindu Polity, II, p. 182) translates *pati* as protector and reads *svāmyam* as *sāmyam*, thereby twisting the meaning of the later half to "the people have equality of rights over all other things." While *pati* may be used in the sense of 'protector,' *sāmyam* is not the accepted reading and T. Ganapati Sastri, Shamasastri and Jolly-Schmidt have all adhered to the reading given above.

person is permitted to own land (Diod. II. 40; Str. XV. i. 39-41, 46-49). The Chinese travellers knew no better.

Assertion of royal title.

That this titular right was sometimes sought to be actively asserted is proved by literary tradition of diverse sorts to the effect that the king might lay hand on individual property or real estate in the name of emergency at his sweet will (Jāt. III. 301 f. ; Mbh. III. 2. 39 ; Rām. I. 53. 9 f.) without the retribution of the Jewish king who despoiled Nabboth of his vineyard. The Arthaśāstra indicates that the king sometimes exercised the overriding authority and confiscated land (I. 14) [1] though it caused resentment and alarm thus creating a situation inviting to a foreign enemy. In the Rāma story as repeated in the Mahābhārata, Daśaratha claims before Kaikeyī that all property in his domain except that belonging to Brāhmaṇas is his, and he can confiscate anybody's wealth :

> Dhanaṃ dadāmi kasmād hṛyatāṃ kasya vā punaḥ
> Brāhmaṇasvād ihānyatra yatkiñcid vittam asti me
> III. 275.23.

This is an echo of the Vedic teaching that the king is owner of all wealth that belongs to any person except Brāhmaṇas (abrāhmaṇānāṃ vittasya svāmī rājeti vaidikam, Mbh. XII. 77.2). This claim has been justified by learned men in the Vedas on the ground that if he cannot rightly seize others' wealth how will he practise virtue ? (na ceddhartavyam anyasya katham taddharmam ārabhet, XII. 8.26.) Hence "all the wealth of the earth is the Kṣatriya's and no one else's" (dhanaṃ hi kṣatriyasyaiva dvitīyasya na vidyate, XII. 136. 3).

Vṛhaspati claims for the king the right of transfering land in certain circumstances from one individual to

[1] *Cf.*, the comment on '*paryādātavya*' in II. 9.

another, although such steps should not be taken to override a justified title (XIX. 16 ff.). Even though royal pretension to ownership was not accepted in general it was never disputed that the king had certain transcendant authority over all land which prevented untrammelled disposal or enjoyment of land by private owners. According to Manu land given by the king could not be alienated. Nārada legislates that immovable property held for three generations is incapable of being alienated without the king's sanction. Śātavāhana kings have been seen even to abrogate their gifts substituting new ones, although these gifts tantamount only to the assignment of revenue. In the Arthaśāstra it is ordained that if disputes about fields are not settled mutually or by elders, these revert to the Crown as well as land of which ownership has been lost (pranaṣṭasvāmikam), *i.e.*, for which no claimant is forthcoming (III. 9). Intestate and ownerless land always went to the king (Jāt. I. 398, IV. 485, VI. 348). A vestige of royal right is also found in the Arthaśāstra rule that the king is entitled to a toll on every occasion of sale of a holding by public auction (III. 10).[1]

Nature and scope of royal title.

These evidences do not bear out the theory that private property in land was held inviolable and that all pretension by the Crown to such right was denied in the clearest possible terms,[2] nor the supposition that the king was the owner of the soil only in the sense that he was entitled to a tithe on produce.[3] It is admitted that Medhātithi explains Manu, VIII. 39 in that manner and

[1] A Faridpur Copper-plate Inscription of the 6th or 7th century assigns to the king $\frac{1}{6}$ of price according to the law in land sales (dharmaṣaḍbhāgalābhah). See Indian Antiquary, 1910.

[2] K. P. Jayaswal : Modern Review, Aug., 1913. For the same view see Hindu Polity, II, pp. 174 ff.; P. N. Banerjea : Public Administration in Ancient India, p. 179.

[3] Mrs. Rhys Davids : *loc. cit.*

Megasthenes, Fa-hien and Hieuen-Tsang who were impressed by the prevalence of the royalist theory readily connected with it king's right to levy specific branches of revenue from the land. But the very fiscal term *bhāga* or *rājabhāga* which denotes king's regular and legitimate share as opposed to controversial and additional imposts on land produce, would indicate a partnership of title between the peasant and the king. And there are indigenous proofs that the king's title was given a wider meaning. Else how could it persist on tax-free lands and on villages of which revenues were assigned and which assignment he retained the right to abrogate? Whether the ownership was actually divided between the cultivator and the Crown [1] (the former of course being the major partner in day to day affairs) or both were absolute legal owners on different interpretations of the law, or the king's powers were only regalian rights [2] is only a difference of phraseo-

[1] After examining at length the opposite views, a Mysore scholar follows the conclusion of F. W. Thomas (Camb. Hist, Vol. I, p. 475) that the king was proprietor of land in so far as he was entitled to revenue and could replace the defaulting cultivator from his holding. He adds: "In other words it was a sort of perpetual lease held on the annual performance of an obligation. For all purposes including alienat on the lessee is the owner and considers himself as such, and the lessor has the right of only demanding performance of the obligation. But once the lessee fails to do his duty, the lessor's ownership asserts itself." M. H. Gopal: Mauryan Public Finance, p. 62.

Thus according to the author the basis of the land system was the same as now. In support of this deduction he has cited the authority of the Arthaśāstra where it is allowed that the king may confiscate lands from those who do not cultivate them and give to others (II. 1). But it is overlooked that the instruction is with reference to newly settled or colonised lands which undoubtedly were Crown lands. It may also be noted that although forcible collection is not rare, the eviction of free-holder and the realisation of revenue by distraint of land as exists in British India is hardly met with in ancient times whether in works of law or in more reliable records of inscriptions or popular literature. (Not so in Southern India. Hultzsch: South Indian Inscriptions, Vol III, Pl. I, No. 9.) On the other hand, as shown above, the conception of a more extended royal right is in evidence in many quarters.

[2] See Ghoshal: *loc. cit.* Strictly regalian would be only such rights as are conferred by Mann's rule that a cultivator who negligently allows his crops to be destroyed is liable to a fine of 10 or 5 times the value oft he king's revenue (VIII. 243)

logy. The fact remains that the cultivator's right to his patrimony was limited, the limitation varying in degrees in different places and periods and according to different legal opinions.[1]

Crown lands.

Apart from the ill-defined and general rights of the king over all land, he had large tracts—fallow, cultivable or rich in natural resources—held directly under his ownership, from which he made his charitable or religious bequests.[2] From the Arthaśāstra's advice regarding colonisation of waste land (janapada-niveśaḥ) it would appear that virgin and unclaimed land was king's property (II. 1). It is ordained that such reclaimed land shall be given to tax-payers only for life (karadebhyaḥ kṛtakṣetrāṇyaikapuruṣikāṇi prayacchet) or *during the time they may take to prepare them for cultivation* : if cultivation is neglected, such land shall be taken and given to others. Besides getting taxes, the king is to exercise his right of ownership in these lands with regard to fishing, ferrying and trading in vegetables in reservoirs or lakes (matsyaplava harītapaṇṇānāṃ setusu rājā svāmyaṃ gacchet). From these lands plots the most productive may be

and by the Arthaśāstra's injunctions that the king should supersede or fine negligent cultivators and enforce the cultivation of a second crop in emergencies (V. 2), and that a tax-payer should sell or mortgage his field only to a tax-payer and the owner of a *brahmadeya* to another such beneficiary (III. 10). These rights are logical extensions of the royal right to land revenue.

1 R. G. Basak (*loc. cit.*) is inclined to believe that there was a gradual advance from popular ownership of earlier days to royal ownership in later times, *i.e.*, from about the 5th century onwards. But such a generalisation appears to be too risky in view of the discordant note of source materials and the assertion of royal claim seen as early as in the Brāhmaṇas and the Pali canon and in a more outspoken manner in the Arthaśāstra and in the Śāntiparva Mahābhārata.

2 Like the king the Queen Consort and the Queen Mother also had their own estates out of which gifts or assignments of revenue could be made (Asoka, M.P.E., IV; Hathigumpha Inscription of Khāravela's Chief Queen). Epigraphic records to this effect abound from a later time. On the occasion of Rāma's consecration 1,000 villages were assigned to Queen Kauśalyā for the maintenance of her refugees (Rām. II. 31. 22).

given to performers of sacrifices, spiritual guides, priests and those learned in the Vedas as *brahmadeya* lands exempted from taxes and fines (adaṇḍakarāṇi). Government officials shall also be endowed with lands which they shall have no right to alienate by sale or mortgage (vikrayādhānavarjjaṃ).

The Arthaśāstra's testimony, supplemented by available sources is that the Crown lands consisted of (1) homestead and cultivated land reverting to Crown by various processes, (2) unoccupied waste, both fallow and cultivable, recovered for settlement or colonisation, (3) reserve forests, (4) mines including salt-centres which were government monopoly (*cf.* Mbh. XII. 69. 29; Karle and Nasik Cave Ins.; Pliny. XXXI. 7. 39)[1], (5) treasure trove or *nidhi*, (6) waters.

Partnership of rights and title between Crown, community and cultivator in ordinary land excepting land under sole authority of Crown and community.

Thus the king was in absolute ownership of a large part of the soil. Of the rest he was partially the titular owner and to some extent real. Roads and parks, irrigation tanks and canals, the village pond, the mote-hall and pasture land were public property within the rural unit. Of public ownership of cultivated land evidences are more meagre but that does not rule out the possibility of its existence. The peasant freeholder enjoyed his patrimony hereditarily with rights of alienation by gift, sale or mortgage subject to an elastic royal right of interference which, however, did not go unresented when it was extended to the right of confiscation. The recipients of royal land except those of the *brahmadeya* had a still more limited title over their plot. They held land under the king's sufferance and were merely tenants-at-will. Indivi-

[1] The growth of large states and empires hastened the conversion of mines and forests into royal domains. "In the days of small states these belonged to nobody, but when these were conquered by the Magadha king all intervening territories in addition to forests and other unclaimable natural sources passed to the dominion of the conqueror."—N. C. Banerji, Economic Life and Progress in Ancient India, Vol. I, p. 283.

dual ownership was also diluted with a certain measure of communal oversight in parts where the old tribal collectivism survived. Outside these categories fell the land dedicated to the ownership of gods or temples as well as large tracts of no man's land and *terra incognita* consisting mostly of mountains and forests penetrated only by robbers, caravans and beasts and by herdsmen only in the fringe.[1]

* * *

Big and small estates.

While at the advent of Buddhism, rural economy of India "was based chiefly on a system of village communities of land owners,"[2] the primitive equality in distribution of landed wealth was gradually dissipated with the slackening of communal control and ascendancy of individual rights. From the time of Buddha and even earlier, we come across isolated large estates side by side with small decaying farms. In the *suttas*, the Brāhmaṇa Kāsibhāradvāja is found working his extensive field with 500 ploughs and a gang of hirelings (Sutn. I. 4; *cf.* Sn. I. 171; Jāt. II. 181). In the Suvaṇṇa-kakkaṭa Jātaka, Bodhisatta "settled down and worked 1,000 *karīsas*[3] in a district of Magadha to the north-east of the village" Sālindiya—his native village on the east of Rājagaha (III. 293). Estates of the same measure, worked by means of bondsmen and hired labour hands, are seen in other Jātaka stories (IV. 276 f., 281). Here the landowner with a wealth of 800 millions is a familiar figure (asitikoṭivibhavo kuṭumbiko, IV. 370, etc.), typical of whom is Sujāta of Benares, who lodges in his park and ministers to 500 ascetics (V. 465). Such big plot-holders are also

[1] The Arthaśāstra indicates that pastures, plains and forests (vivītamālavana) are not subject to individual ownership (III. 10). According to Uṣanas places of pilgrimage were also nobody's property along with hills and forests (V. 16).

[2] Mrs. Rhys Davids: *loc. cit.*

[3] According to Childers' Pali Dictionary, S. V. *ammaṇam* a *karīsa* would be about 8 acres.

termed *gahapati* in Pāli literature, literally the *pater familias*, sometimes only a substitute for the generic *Vaiśya* but actually indicating the agricultural magnates as the *seṭṭhi* conveyed the industrial magnate.[1] The Brāhmaṇa *gahapati* frequently appears in the Jātakas as owner of property worth 800 millions. It would perhaps be no wild presumption that the gifts of *brahmadeya* or rent-free land imposed by priesthood on temporal authority with cajoles and threats (Āpast. II. 10. 26. 1; Manu, VII. 83 ff.; Yāj. I. 314; Mbh. XII. 343. 18; XIII. 62), sometimes deviated from the avowed purpose of maintaining an order dedicated to religious service (Dn. XII. i. 1; Mn. 95) and conduced to the concentration of land in the hands of secular Brāhmaṇas who are so prominent by their landed wealth in folk literature although in didactic pieces cultivation of land is assigned exclusively to Vaiśyas.

Agricultural indebtedness.

Side by side with the *gahapati* or *kuṭumbika* or the *Vaiśya* according to Sanskrit nomenclature is observed the toiling cultivator struggling against starvation, managing his plot single-handed or with his sons only (Jāt. I. 277, II. 165, III. 162, IV. 167, VI. 364; Rām. II. 32 30; Mbh. XII. 177. 5 ff.; Jacobi: J.S. II. 347). The Gāmaṇicanda Jātaka offers (II. 300) the case of a tiller who had to run the plough by borrowing a neighbour's team of oxen. This petty cultivator is indicated by the word *kināsa* in Sanskrit works as counterpart to the big *Vaiśya* or *kuṭumbī*. The Jātaka evidences throw some light on an important aspect of the relation between these two divergent types of farmers. A *kuṭumbika* is often seen to make a journey on cart to distant villages for collecting debts, sometimes accompanied by his wife (II. 341, III. 107, IV. 45). In one case he is seen attaching a cart of a defaulter

[1] Of course agricultural and industrial pursuits were very often combined by these lords and a *seṭṭhi-gahapati* like Anāthapiṇḍika is no rarity.

in satisfaction for what was due to him (III. 66). It appears that the big farmer carried on a lucrative money-lending business in villages not always without abuse. It is of course the small farmer who ran into debt in times of scarcity and sometimes losing his plot whether under extortion or from want turned a destitute vagrant and offered himself for hire in the rich man's estate.[1]

Safeguard of big and small estates: no privileges based on land.

But whatever might be the inequality of landed property between the different classes of peasants it did not foster the isolationist mentality and the deplorable nemesis of agriculture as we see in the present day. No stigma was attached to labour. The Indian yeomanry put their hand to the plough along with their men as much as their less fortunate brethren. They were not attracted by the luxuries of the town to leave their prosperous farms to go to ruins under the care of indifferent subordinates. The small farmer as well was never squeezed out of existence under the remorseless pressure of a superior economic caste standing in haughty segregation. Nor did large estates carry with them any political or social privileges except those naturally conferred by wealth. "There was among Indo-Aryans little of the feudal tie between land and lord with lordship over the land-tillers which made broad acres a basis for nobility in the West."[2] It is for this reason that landed wealth in ancient India never developed into the exorbitant power and influence of the Roman patriciate, the French baronage and the Moslem Jaigirdar. Legally the big landowner and the small husbandman stood on an equal footing and, over each at the top, the king retained a residual power which was both legal and real.

[1] See *infra*, Bk. VI, Ch. II. *Cf.*, the plea of C. V. Vaidya on the effects of widespread usury upon the ryot class. Epic India, p. 219.

[2] Mrs. Rhys Davids: *loc. cit.*

CHAPTER III

The Village Lord

The *Gāmabhojaka*. Recipient of revenue; absentee lord. Origin and evolution; benefits without responsibility. Perquisites. Judicial function. Powers. Democratic representative or bureaucratic agent? Transition from popular headship to leisurely landlordism or official hierarchy.

Between the king and the peasant there intervened in Indian land system a powerful class of intermediaries somewhat analogous to, but far from identical with the modern landlords. The Jātakas contain meaningful references on the duties and powers of the *gāmabhojaka* who played a most important part in India's rural economy. Other Pali works and the Arthaśāstra mention *en passim* the *gāmabhojaka*, the *gāmika* and the *gāmaṇi* presumably refering to the same figure. These few but weighty remarks, pieced together, lead to certain broad probabilities which ill accord with the theory given currency in many quarters that he was a typical product of the free institutions and corporate life of the ancient village system.

The *gāmabhojaka*.

The village lord was not the owner of the soil and in this respect differs from the Zemindar. He was authorised to enjoy the revenues to which the king was entitled and which accordingly he could delegate to any person of his choice; and this delegation was accompanied with nceessary powers. The lord was neither an administrative official of the village nor a communal head. He frequently appears in the rôle of an absentee lord who dwells in a town not necessarily in

Recipient of revenue: absentee lord.

close proximity and periodically visits his *bhogagāma*.[1] In the *paccupannavatthus* of the Jātakas Anāthapiṇḍika often goes to supervise the affairs of his village leaving his house at Sāvatthi (I. 365, 412, 441). Sometimes the absentee lord is pre-occupied with mercantile pursuits and the village is an additional source of income possibly unearned, where he goes only to realise his dues and debts traversing a long journey on cart (I. 413, V. 164).

Development of the institution : revenues without administrative functions.

Wherefrom were these ownerships derived and what was the process of their evolution ? The earliest trace of this type of landlord villages is found in the Taittirīya Saṃhitā where it is told in connection with the performance of certain sacrifices by a person hankering for a village (grāmakāma) how the gods concerned 'bestow him creatures led by the noses' (II. 1. 1. 2), how they 'present his relations to him and make the folk dependent on him' (II. 1. 3. 2) and how they enable him to hold the mind of his peers (II. 3. 9. 2). These cryptic expressions mean if anything that the village lordships were acquired in the first instance by individual exertion and afterwards received the seal of royal confirmation. The Jātakas belie throughout the tradition embodied in the Śatapatha Brāhmaṇa (XIII. 7. 15) and recalled in the Mahābhārata (XIII. 154.1 ff) that land must not be given away even on the plea of a sacrificial fee. In the Epics the earth no longer reprimands kings for her transfer and even wants to go over to Brāhmaṇas. In the Jātaka tales recipients of royal bounties

[1] The rendering of *bhogagāma* as Zemindary as followed in Cowell's translation of the Jātakas is misleading. There is a gulf of difference between the modern and mediaeval zemindary estates and the villages assigned for *bhoga* or *bhojana* apart from the fundamental point of proprietorship, as shown at the beginning of the next chapter. Nor is the word 'headman' an apt substitute for '*bhojaka*.' The *paṭel* and *lambardar* are as distant from the *bhojaka* as is the zemindar, judged by their respective functions and capacities.

are not always Brāhmaṇas and the donations of villages are almost invariably accompanied by the conventional phrase "yielding a hundred thousand a year" (sata-sahassutthānaka, I. 420, II. 403, III. 229, V. 350, 371). In the Mahāummagga Jātaka, Mahosadha on his way from Uttarapañcāla to Vedeha sends men to receive the revenue of the eighty Kāsi villages which king Cūḷaṇī had given him (VI. 463). The grantee in this and similar occasions when he is a town-dweller appears to be out of touch with village administration except so far as is necessary for collection of revenue. It is likely that he obtained not the administration[1] but the revenues of the village, *i.e.*, benefits without responsibility; and as the big money-lender he may have asserted his furtive power still further in his rural preserves not always with happy results. Instances of pious men like Anāthapiṇḍika are fortuitous and there is little reason to believe that his charitable acts were dictated by any customary obligation implicit in ownership.

[1] In the Dīgha and Majjhima nikāyas there is a stock passage which seems to indicate *prima facie* that the royal grants to the *mahāsālas* carried with them administrative power. "Now at that time so and so the Brāhmaṇa was dwelling at such and such place, a place teeming with life with much grassland and woodland and water and corn (sattussadaṃ satiṇakaṭṭhodakaṃ sadhāññaṃ), on a royal domain granted him by so and so the king as a royal gift *with power over it as if he were the king*" (rājabhoggaṃ raññā dinnaṃ rājadāyaṃ brahmadeyyaṃ, Dn III. i. 1, IV. i. 1, XII. i. 1, XXIII. 1; Mn. 95). The 'fief' (?) from the description seems to be not a settled village but a large tract of irrigated and cultivated soil with adjoining fenland and pasture fit for animal farming; and if Buddhaghosa's alternative explanation of 'rājabhoggaṃ' as 'what is for king's enjoyment' is accepted, the concluding phrase permits the interpretation that the usufructuary right and titular ownership of the king were transferred to the assignee along with the land. The analogy between Lohicca's domain at Sālavatikā and Pasenadi's kingdom of Kāsi and Kosala is drawn upon the usufructuary right and ownership which are common to both. The story of the Majjhima 95 in no way indicates that Canki was master of the village of Opasāda and its Brāhmaṇa community, but that he was only the owner of a large plot of land. The testimony of the Arthaśāstra as well implies that *brahmadeya gifts* were *gifts of rent-free lands* and not of *villages* carrying for the donees revenues alone; and there is no ground to associate political and administrative responsibility with these lands.

Perquisites.

The village lord is not necessarily—nay he is rarely—the mainspring of the *gāma's* corporate life and collectivist enterprise. In this respect he differs from the *jeṭṭhaka*s of the industrial *gāma*s or of the trade-guilds. In the Kulāvaka Jātaka Bodhisatta is the moving spirit of the sturdy *gāma* life and the *bhojaka* is put to the thought "when these men used to get drunk and commit murder and so forth, I used to make a lot of money out of them not only in the price of their drinks but also in the fines and dues they paid" (ahaṃ pubbe etesu suraṃ pivantesu paṇātipātādīni karontesu cāṭikahāpaṇa divasena c'eva daṇḍabalivasena ca dhanaṃ labhāmi); and he brought a complaint to the king on false charges against Bodhisatta and his flock (I. 199 ff.).

These few words read with the allusion to a pious lord in another place who stopped the sale of strong drink in his estate (IV. 115) lead to a presumption that the *bhojaka* either himself maintained breweries in the village, those crime-centres and plague-spots of rural life, or he enjoyed the excise dues thereon whether within or outside the revenue transferred by royal assignment. The fines undoubtedly went to his pocket. For he adjudicated rural cases. He is seen to try a dispute and fine a fisherman's wife and then to tie her up and to beat her to realise the fine (I. 483). To a question why a certain *bhojaka* had fallen from better days a king replies: "That village lord used once to deal justice even-handedly, so that men were pleased and delighted with him; and in their delight they gave him many presents (bahupaṇṇākāram āhariṃsu). This is what made him handsome, rich and honoured. Now he loves to take bribes (lañcavittako hutvā), and his judgment is not fair; so he is poor, miserable and jaundiced. If he judges once again with righteousness he will be again as he was before. He knows not that there are kings in the land. Tell him that he must use

The lord's justice.

justice in giving judgment (dhammena aṭṭaṃ vinicchinituṃ, II. 309).

A sharp demarcation between the legitimate dues and the illegal gratifications of the *bhojaka*. But a judge who can accept presents from litigants without any sense of wrong must be prone to count these tips among his dues as much as the judicial fines and to allow his decisions to be bought all the more when these are not assisted by a jury or a folk-moot of any sort [1] and when there appears to have been no appeal against them. The vaunted prerogative of interference claimed by the king was certainly no common occurrence in those days of disorder and insecurity, of decentralised government and undeveloped communication. [2] It was asserted only on grave issues or when the king's revenue was at stake. Else it would be prudent to let the sleeping dogs lie.

[1] The village affairs discussed in the public hall bore on civic amenities, co-operative labour, state of crops, etc., but probably they did not as often include judicial matters except perhaps in the republics and a few villages. It may be admitted that in some self-governing villages the assemblies had a parallel jurisdiction although it is difficult to be limited from the *bhojaka*'s (see *infra*, p. 54). In the foregoing passages the *bhojaka*'s justice is undivided. The Arthaśāstra ordinance of a fine of 24 *paṇas* for a *bhojaka* who expels from a village anyone except a thief and an adulterer (III. 10) presumes untrammelled exercise of his judicial powers. There is no sufficient data for the assumption that in Maurya times he carried on the village administration and judicial business in consultation with the *grāmavṛddhas* or elders. For this view see Thomas : Camb Hist., Vol. I; Raychaudhuri : Political History of Ancient India, 4th. Ed., pp. 239 f.

[2] The evidences of the Kulāvaka Jātaka and of the Gāmaṇi-caṇḍa Jātaka just quoted, leads a scholar to think that ' administration of justice was one of the essential links that bound the scattered villages to the central organisation of the state " and that in this matter final authority rested with the king. He relies further on the custom referred to in the latter by which anyone could challenge a disputant to come to the king's officer by picking up a potsherd or stone. But the village concerned is not a *bhogagāma*. Such central control in normal administration of justice in rural areas under influential lords goes against the cumulative evidence of the Jātakas and the possibilities of the times. See B. C. Sen : Journal of the Department of Letters. C. U., Vol. XX, p. 107.

Without doubt the *gāmabhojaka* was a big man of opulence and position whose wrongs could not be held in check by any lesser authority than the king. He (gāmasāmiko) could assemble all the villagers by an order at a short notice (sabbe sannupatantūti) by means of a crier (āṇāpako, Mil. 147). In the Kulāvaka Jātaka referred to above, we find him for once heavily chastised by the king for falsely bringing grave charges of treason against the whole body of villagers. He has power to prohibit slaughter of animals for sacrifice within his area (IV. 115). He dares to commit adultery with a *gahapati*'s wife and when caught and thrashed by the husband, none other than Bodhisatta would have ventured on such short methods of exacting 'damages,' expostulates saying that he is the village lord (II. 135). He is a greedy fellow always after the belongings of his neighbours (Sn. I. 60). Elsewhere he conspires with brigands to carry off the taxes collected for the king: and here for the second time we see him feel the heavy hand of an overlord (I. 354).

Powers

The last instance furnishes a valuable clue to the clarification of the *bhojaka*'s position. Here he is designated as an *amacca* or official appointed by the king and entrusted with the collection of his revenue from certain villages. Then how is he a *gāmabhojaka* or devourer of village revenues? The most probable answer is that he is the *bhojaka* of a village which is given by the king for his enjoyment as remuneration for his office. This is in agreement with the injunctions of the Arthaśāstra, of Manu and of the Mahābhārata. In the first, grants of land to king's officers without the right of transfer form part of the revenue administration (II. 1) while the other two lay it down that the lord of 10 villages is to be remunerated with 1 *kula* of land (land cultivable with 12 oxen) of 20 villages with 5 *kulas*, of 100 villages with a village and of 1,000 villages

Democratic representative or bureaucratic agent?

with a townlet (śākhānagara) (Manu, VII. 119; Mbh. XII. 87.6-9). The strength of a solitary evidence may not suffice to allow the conclusion that the *gāmabhojaka* of the Jātaka stories bore this uniform character. The position of the royal chaplain (purohita) and of the high treasurer (mahāseṭṭhi) like Anāthapiṇḍika, whom we often find in enjoyment of *bhogagāmas* (III. 105; IV. 473, 484; VI. 463) was undoubtedly analogous. As for other cases, whether he was king's nominee or elected by the rural constituency or whether he held a hereditary post it is impossible to ascertain beyond dispute. While the Jātakas and the Pali canon bear no trace of hereditary landlordship in later inscriptions lands and villages are often made over as hereditary bequests. In the Mahāsutasoma Jātaka "lordship of a single village" (ekagāmabhojanaṃ) is spoken of in contrast with the "office of commander-in-chief and similar posts" (senāpatiṭṭhānādīni, V. 484), the suggestion being that the lord was a king's officer. There is no example in the birth-stories or any contemporary evidence to warrant the conclusion that he was the "elected chief of the village community." [1] That he stood in certain relations with the king is attested by many passages (IV. 310). The *gāmaṇi* is much concerned with the king's favour or disfavour (IV. 310). In the Cullavagga the *gāmaṇi* Maṇicūḷaka is in close touch with

[1] For this view see Fick: Die Sociale Gliederung im Nordöstlichen Indien zu Buddhas Ziet, pp. 105 f.; cf. Rhys Davids, "There were no landlords. And the great mass of the people were well-to-do peasantry, or handicraftsmen with land of their own, both classes ruled over by *local headmen of their own selection*" (Buddhist India, p. 102). In the case of the latter there are positive evidences that the position of the *gāmajeṭṭhaka* in industrial villages was hereditary (*infra*, Book II. Ch. V). A. S. Altekar draws attention to a Mathurā Inscription of the first century A.D. (Ep. In. I. 11) where a lady is mentioned as wife and daughter-in-law of two *grāmikas*,—a fact possible only when the office is hereditary. While the succession of a son on the retirement of an incumbent is in no way extraordinary, this solitary instance cannot be accepted as pointing to a general rule. The Jātakas nowhere testify to the "hereditary office" propounded by the author. See A History of Village Communities in Western India, p. XIV.

royal attendants in the Chamber (XII. 1.4. An; IV. p. 326). As noticed above he could seek justice in king's court whenever there was trouble in his affairs. It is probable that he discharged certain vague undefined functions as an intermediary between the king and the freeholders.

Thus the village lord is *persona grata* with the king as with the villagers. He is apparently the sole and final judge of the small village causes when domiciled within his locality. The king's revenue is assigned to him by royal writ. The judicial fees and fines and the returns of liquor houses or excise dues are among his perquisites to which bribes and presents form a lucrative addition. He is the agricultural bank *par excellence*. He may have had other incomes lawful or otherwise,[1] for his assets are in cases assessed at 800 millions. In one of these he is the king's chaplain and hoards up the sum apart from his office (purohitaṭṭhāṇena saddhim asitikoṭidhanaṃ chaddetvā, (IV. 484), presumably from the *bhogagāma* which he visits from time to time (IV. 473). The multimillionaire Anāthapiṇḍika too often beats the record and regales in his park thousands of ascetics. Given due allowance for the tendency of folk-tales towards exaggeration, these figures show that the village lord might occasionally rise to the topmost rung of the economic ladder and constitute a plutocracy with the Brāhmaṇa and *seṭṭhi* magnets who basked in the sunshine of court and whose wealth is often estimated in the same fabulous figures.

Whether absorbed in the luxuries and money transactions of urban life or settled in his rural preserve, the lord has little to do with the communal life of the village and he owes no responsibility either to the king or to a village

[1] The terms 'gāmabhojana' and 'bhogagāma' suggest not usufructuary title over land to the exclusion of cultivators but enjoyment of all possible revenue derivable from the village. *Cf.* "Those (articles) which the villagers ought to furnish daily to the king, such as food, drink and fuel, the lord of one village shall obtain". Manu, VII. 118.

council for rural welfare. In the numerous famine scenes we invariably miss him. Once only he is found giving an old ox to hungry cultivators under the grip of scarcity on condition of repayment after two months from the next harvest (II. 135) and this must be regarded as part of his ordinary lending business than of a benevolent distribution of dole. [1]

Transformation of the peoples' man to an official or a leisured grandee.

In the Vedic texts village headmen (grāmaṇi, grāmika) are styled *Rājakartṛ* and *Ratnin* aiding in the consecration of the king among certain other functionaries and are consulted by the king along with his ministers. The Mahāvagga gives the important reference that the *gāmikas* of Bimbisāra 80,000 in number, used to be summoned in a great assembly (V. 1.3.). In those days when kingship had not yet outgrown the tribal stage, the village chiefs were communal representatives and exerted a wholesome check on royal absolutism. But later records which synchronise with the growth of a centralised monarchy fortified by a bureaucratic machine, strike a different note. The periodical assemblies of *gāmikas* seem to have fallen into disuse with the rise of Maurya imperialism : they gradually sank down from the headship of autonomous villages to sleeping lords with irresponsible powers and vested privileges or were transformed into king's officers and absorbed into an official hierarchy. The Jātaka stories exhibit them in both these colours. Even as early as in the Upaniṣads the king is found appointing *adhikṛtas* over *grāmas* (Praśna-Up. III. 4) ; such appointment tallies with

[1] The Arthaśāstra exhorts villagers to accompany the *grāmika* by turns whenever he " has to travel on account of any business of the village " (grāmārthena grāmikaṃ vrajantaṃ upavāsāḥ paryāyeṇā 'nugaccheyuḥ, III. 10). Nothing can be inferred either way from this vague statement. From evidences already adduced it may be argued *a fortiori* that this business was personal (*i.e.*, related to his own income) rather than corporate and administrative.

the conception of civil polity and paramount sovereignty implied in the honorific *Samrāṭ*. The *gāmikas* of Bimbisāra, be they elected or nominated, took orders and instructions from a controlling monarch (diṭṭhadhammike atthe anusāsitā). In the Arthaśāstra the *grāmikas* are subordinates to the *gopas*, *sthānikas* and still higher officers. The bureaucratic system is perfected in the law-codes (Āpast. II. 26.4.5; Viṣ. III. 7-15; Yāj. I. 337) and Manu lays down a detailed official gradation. The *grāmikas* appointed by the king are not to take cognizance of crimes and decide according to their free will but report all cases to lords of ten villages, they in turn to the next superior officers and so on (VII. 115-117; Mbh. XII. 87. 3 f.). In the Śukranītisāra the chief is a king's deputy (II. 343) intoxicated by drinking the vanity of office (II. 227). In the Śaka and Gupta inscriptions as well, side by side with prolific land charters issued to royal favourites without any corresponding service derived in return, the *grāmikas*, *bhojakas*, etc., are found fitted into an elaborate framework of civil administration. Thus the upholder of popular rights and duties who loomed large in Vedic and early Buddhist social economy is no longer the bulwark of free village corporations and fades out into a leisurely lord or is stereotyped into an official automaton.

CHAPTER IV

Associate Life in the *Gāma*

The soul of village life. Public works, the *sāla*, collective charity, educational endowments, religious bequests, economic co-operation. Industrial villages. Communal amusement—the *samāja*. Evolution from tribal autonomy to the concept of corporation and democracy.

Taking into consideration his powers and functions from every point of view, the advent of the *bhojaka* whether as an official or as a non-official cannot be held to have been a welcome feature in India's village economy.[1] But she was spared the baneful conclusion of the feudal order—exaltation of landlords into a parasytic nobility and reduction of peasants into serfdom. The *bhojaka* had no proprietory rights over land, no seigniorial rights conferred with royal deeds, the so-called rights of confiscation, eviction, escheat, etc., or of arbitrary levies like the *salāmī*, *ābwāb*, *bheṭ*, *begār* or the *bovine*, *banalité*, *péage*, *gabelle*, monopoly of the dove-cote and so on.[1] The peasantry lost none of their rights on their freehold under a royal charter: they only gave the tithe due to the king to another man. Nor were perhaps their estates liable to summary sale or attachment for arrears of revenue. The periodical oppression and illegal exactions which they had to bear with could not reach the inner spring of rural life and sap its vitality. It lay deeper in the healthy spirit fostered by the tribal community, of discipline, fellowship, liberty and public conscience

[1] Inscriptions show that the immunities of royal assignments were much extended in later time.

among the villagers which outlived the chequered career of monarchical despotism and bureaucratic imperialism.

Public works

The working of the communal ideal which kept the countryside pulsating with the exuberance of life is seen in Vedic literature embedded in the tribal feeling of the clan or *viś*. The Jātakas, the earlier Smṛtis and the Arthaśāstra reflect the further stage of its growth and interesting characteristics. It seems that the sweeping influence of Buddhism with its principles of liberty and equality gave a powerful impetus to the ideal of communal harmony and co-operation. The graphic and elaborate details of the Kulāvaka Jātaka are more than a utopia of priestly doctrinairism. The scene is a Magadha village of 300 families or *kulas* :—

"One day the men were standing in the middle of the village transacting its business. They too doing good works along with him (Bodhisatta), used to get up early and emerge with razors, axes and clubs in their hand. With their clubs they rolled out of their way all stones lying on the four highways and other roads of the village; they cut down the trees that would strike against the axles of cars ; they smoothed the rough places, built causeways, dug water-tanks, built a hall; they showed charity and kept the Commandments."

"Te ca timsa kulamanussā ekadivasaṃ gāmamajjhe ṭhatvā gāmakammaṃ karonti.—Te pi ten'eva saddhiṃ puññāni karontā kāless'eva vuṭṭhāya vāsipharasumusalahatthā catumahāpathādīsu musalena pāsāṇe ubbattetvā pavattenti yānānam akkhapaṭighātarukkhe haranti visamaṃ samaṃ karonti setum attharanti pokharaṇiyo khaṇanti sālam karonti dānāni denti sīlam rakkhanti " (I. 199).

This observance of moral law and civic duties discharged under communal guidance and discipline are the vaunted spell, safeguard and strength of the villagers, —*manto ca parittañ ca vaddhin cā'ti* (200).

They are given by the king the village, the elephant and the *bhojaka* as slave for reward. Then they built a large hall at the meeting of the four highways. Even women are very keen to participate in this corporate enterprise.

"They had benches put up and jars of water set inside, providing also a constant supply of boiled rice. Round the hall they built a wall with a gate, strewing the space inside the wall with sand and planting a row of fan-palms outside."

"āsanaphalakāni santharitvā pānīyacātiyo ṭhapetvā yagubhattaṃ nibandhiṃsu sālam pākāreṇa parikkhipitvā dvāraṃ yojetvā anto pākāre vālukam āharitvā bahi pākāre tālapantiṃ ropesuṃ."[1] (201).

The hall was completed with the construction of a flower and fruit garden and a lotus-pond.

The Mahāummagga Jātaka hints at the manifold purpose served by the public hall or *sāla*, the throbbing heart-centre of the village organism. Bodhisatta as a boy collects subscriptions from the playmates and gets a hall built in the eastern suburbs (*pācinayavamajjhaka*—later referred to as a *gāma*) of Mithilā with special apartments for ordinary strangers, destitute men, destitute women, stranger Buddhist monks and Brāhmaṇas, foreign merchants with their wives, all these with doors opening outside (vahimukhāni). A public place for sports (kīḷamaṇḍalam), a court of justice (vinicchayam), a convocation hall (dhammasabhaṃ); beautiful pictures, "a tank with 1,000 bends in the bank and 100 bathing ghats" (sahassavaṃkaṃ satatitthaṃ pokharaṇiṃ) covered by lotuses and bounded by a park, and an almshouse (dānabhattam) gave completion to the building scheme (VI. 333).

[1] *Cf.* the rest-house of Pāṭaligāma where the *upāsaka*s invited Buddha and his fraternity and strewed its floor with sand, placed seats in it, set up a waterpot and fixed an oil lamp (āvasathāgāraṃ santharitvā āsanāni paññapetvā udakamaṇikaṃ patiṭṭhapetvā telapadīpam āropetvā, Mv. VI. 28,2; Ud. VIII. 6.)

This is only the execution of the corporate rural ideal in a larger and perfected scale. The village *sāla* is thus a shelter for the stranded, an asylum for foreign visitors, an inn for travellers.[1] For the villagers themselves, it is the centre for recreation, administrative affairs and religious discussion. Last but not least, here is organised the collective charity.

Collective charity.

For this specific purpose the villagers and townsfolk are often seen to combine. According to the *paccupannavatthu* of the Susīma Jātaka, the people of Sāvatthi were used to practise charity by isolated families, or by grouping together into associations (gaṇabandhanena vahu ekato hutvā) or by clubbing together into streets (vīthisabhāgena) or by collection of subscriptions from among all the citizens (sakalanagaravāsino chandakaṃ saṃharitvā, II 45). The Kalpadruma Avadāna attests how the magnets of Sāvatthi gave a united front against the incursion of famine on their less fortunate brethren. The people of Rājagaha followed suit and used to combine for purpose of almsgiving. The subscriptions were raised in money or in kind. Here as in Sāvatthi, apparently this was the general custom in all self-governing areas, on any dispute a division was called and the voice of the majority prevailed (II. 196). Probably this was an imitation of the *yebhuyyasikā* or decision by majority vote as laid down by Buddha in the Vinaya Piṭaka (Cv. IV. 9, 14. 24) on the procedure of the assembly of the Saṃgha.

Educational Establishments.

Analogous to the charitable works were the educational establishments maintained by the individual or collective aid of the people. The Losaka Jātaka narrates that Bodhisatta ran an academy of 500 poor Brāhmaṇas at Benares and the

[1] *Cf.* the *āvasathāgāra* or village rest-house in Mv. VI. 28.2. and Dn. XVI. i. 20. Here rice-meal is supplied to travellers.—Vin. pātimokkha, pācittiya, 31. These 'obsultries' were not less frequently built by private munificence.

townsfolk supplied meals to poor lads and had them taught free (tadā bārāṇasīvāsino duggatānaṃ paribbayaṃ datvā sippaṃ sikkhāpenti). The villagers offer a miniature replica of the municipal institution: for Mittavindaka is paid by the residents of a *paccantagāma* to teach them what was true doctrine and what was false (presumably on the strength of his reference as a pupil of Bodhisatta) and given a hut to live in at the entrance of the village (gāmavāsino 'amhākaṃ susāsanaṃ dussāsanaṃ āroceyyāsīti 'mittavindakassa bhatiṃ datvā taṃ gāmadvāre kuṭikāya vasāpesum). But Mittavindaka's evil star brought the king's wrath on the village and the villagers after holding a conference drove him out with blows (I. 239). Very similarly another group of villagers paid a logician (takka-paṇḍita), and settled him at village entrance in a hut to teach them lucky and unlucky seasons (suyuttaṃ duyuttaṃ, I. 296). In other places villagers give their quota in the form of eatables for the upkeep of a sylvan school in the vicinity (III. 537) or for the maintenance of a learned preceptor (II. 72). Individual villagers (IV. 391) or houses or *kulas* (I.318) sometimes treated teachers and students in banquets.

Religious bequests.

Closely akin to the charitable and educational works, the religious bequests were another channel in which the associate enterprise of villagers found vent and expression. In one case we see them putting off under one pretext or another the construction of a cell for a Brother who had paid for it (I. 215). But inscriptions on the votive offerings of the Sānchi Topes (which are placed in the 3rd century B.C.) are living illustrations of this side of village activity. Here we have—

Vejajasa gāmasa dānam (Tope I, No 17)
Padukulikāya gāmasa dānam (II. 1)

Asvavatiya gāmasa dānam (I.215)
Chunivamoragiri gāmasa dānam (II. 49)
Nāsikakanaṃ Dambhikagāmasa dānam
(Nasik Cave In. 20. VI)[1]

rendered by Senart as 'gift of the village of Dambhika of the Nasik people' and by Bhagwanlal Indraji as 'gift of a village by inhabitants of Nasik.'

Gifts were also made from among restricted associations, committees (*goṭhi*) or families (*kula*) :

Gift of the Bauddha *goṭhi* from Dhamavaḍhanana (I. 25,26)
,, ,, Barulamisa *goṭhi* ,, Vedisa (I. 51)
,, ,, Vākiliyas ,, Ujjein (27)
,, ,, Kula of Dhamutara (I.276)
,, ,, sons of Disāgiri from Puruvida (I. 290)
,, ,, —Subhagā, Pusā, Nāgadata, Sagharakhita, inhabitants of Kuraghara (I.375).[1]

That the villagers did not content themselves by merely making over endowments and setting up temples is proved by the significant institution of the *goṣṭhi* which is explained by Bühler as a Committee of trustees in charge of a temple or of charitable institutions. Here the people sent their representatives to manage their endowments and guide their religious observances.[2]

The entertainment of Buddha with his Fraternity by the faithful which became a general custom in the Gangetic provinces was performed sometimes by individuals, sometimes by families, sometimes by *gāmas* and even whole clans. A single family might make a house to house collection of food materials (Jāt. II. 85, Mv. VI. 37) or all the villagers might come forward (*ibid.*, 28.2; 33.1). The Mallas of Kusināra even make

[1] For further instances of this nature see Amarāvati inscriptions, E. I. XV. 18. Also Bāṛhut,—Kaṛahakaṭa nigamasa dānaṃ.

[2] Bhattiprolu Inscriptions.

compacts that whoever does not join the reception shall be fined and that the members sh uld regale the Saṃgha by rotation (*ibid*, 36). Sometimes it was the turn of a section or assembly (pūga, Cv. V. 6.2; 26; VIII. 4.1). The corporate unity and homogeneity of faith among the villagers facilitated the conversion of villages *en masse* by Buddha repeatedly claimed in the Pali canon.

Economic co-operation.

The villagers were closely knit together by economic bonds of diverse sorts. They maintained a common neatherd to take charge of and graze their cattle in the adjoining pasture or forest (Jāt. I. 194, III. 149; An. I. 205; Ṛv. X. 19) on pay[1] or on a share of the dairy produce which was standardised by specialists at 1/10 (Arth. III. 13; Nār. VI. 2-3; Yāj. II. 194). Traces of collective farming are not wanting and it would not be extravagant to conjecture that the *gāmakhetta* in which the several plots were demarcated by irrigation canals, was cultivated under collectivist initiative (Vṛ. XIV. 25, Arth. II. 10; Jāt. II. 109). The casual reference in the Jātakas to the ploughing festival (vappamaṃgala, IV. 167, VI. 479), a great annual ceremony when the King held the plough along with the peasants,[2] conjures up a cheerful associate life and a full realisation of the community of agricultural interests. That the village formed a compact self-centred unit is indicated by the Smṛti emphasis on village boundary and the frequent Pali reference to the village gate (gāmadvāra, Cv. V. 24. 1; Jāt. I. 239, V. 441; Mil. P. 365, etc.). The kings recognised the economic entity of a village and treated it as such. Vāśiṣṭha characterises it as corporate unity and speaks of collective fine imposed on it (III. 4). The Jātakas have many allusions to kings raising the tax of a

[1] This, according to Nārada, is a heifer annually for tending 100 cows, a milch cow for 200 and the right to milk all the cows every 8th day (VI. 10).

[2] See S. Hardy : Manual of Buddhism, p. 150.

village or exacting fines from it as a whole (I. 234, 239; III. 9).

Gāmakiccaṃ.

In the Mahā-assāroha Jātaka as in the Kulāvaka Jātaka, the 30 inhabitants of a *paccantagāma*, here in Kāsi, "gathered together very early in the middle of the village to transact its business" (te pāto va gāmamajjhe sannipatitvā gāmakiccaṃ karonti, III. 8). When the village tax was increased the man who was the cause of the trouble was jointly induced by the villagers to go and see the unknown horseman and they provided him with the presents (paṇṇākāraṃ) he required for the visit.

The quotations amply clarify what were the *gāmakammaṃ* or *gāmakiccaṃ* to deliberate over which all the villagers assembled in the central hall. These comprised judicial functions,[1] municipal work like irrigation, roadmaking, etc.; humanitarian and charitable activities subsidising academic foundations; sacrificial performances, pious invitations and religious endowments with the formation of boards of trustees; examining the state of crops and incidents of general interst Rural problems loomed large and from here started the 'marches' and deputations to the *bhojakas* or higher authorities urging relief against famine (Jāt. II. 135, 367; V. 193; VI. 487), beasts, robbers (Jāt. V. 459), *yakkhas* (Jāt. V. 22) and similar pests. Sometimes grave decisions were reached in this

[1] This is conjectural. The *sabhā parisa, rājakula* and *pūga* are given as assemblies which examine witnesses (Mn 41, 111). Later Smṛtis (Yā., Nār. Vṛ.), substitute *gaṇa, śreṇī*, and *kula* for the first three. The *sabhā* and the *gaṇa* fit in with the village assembly. There is also the express reference that a Brāhmaṇa must not take the food offered by those who are punished by a *gaṇa* or a village (gaṇagrāmābhiśastanāṃ. Mbh.: XII 37 30). In the Jātakas we have the solitary reference to the *vinicchayaṃ* (VI. 333) as part of the *sāla*, whereas the *bhojaka* appears as the habitual judge of village causes enjoying fees and fines. He is more an official than a popular personality and has little association with the democratic rural apparatus (see *Supra*, pp 43 ff.) Did the *bhojaka* hold the pleas of the crown and the village *sabhā* meet only to enforce common law and corporate obligations under the sanction of social ostracism?

village council which infuriated peaceful masses into bloody revolt to pull down the instruments of autocracy and tyranny which infringed their traditional rights and interests sanctified as common law.[1]

Industrial villages.

The industrial and professional *gāma*s of the Jātakas exhibit a closer bond and homogeneity than the agricultural *gāma*s. We have a fishing village of 1,000 families (kulasahassavāse kevaṭṭagāme) in Kosola of which the 1,000 fishermen used to go out in a body with their nets (I. 234). In the kingdom of Kāsi, a smith's village of 1,000 houses (kammāragāma) was organised under a head (jeṭṭhaka, III. 281). Near Benares on the two sides of the Ganges were two villages of hunters (nesādagāma) with 500 families in each and each organised under a chief (VI. 71). Benares also offers the example of a village of carpenters (vaddhakigāma) with 500 members who organised into a body under a head, plied their trade and received wages together and led a common livelihood (I. 18).[2] Similar references there are to villages of salt-makers (lonakāra, Mn. 128, Jāt. III. 489), basket-makers (naḷakāra, Mn. 99), robbers (cora, Jāt. I. 297, IV. 430), actors (naṭa,—see Bühler's note in E.I. I. 43), caravan-guards, Brāhmaṇas, *caṇḍāla*s and outcasts. This isolation

[1] Instances of popular revolt against misrule are not wanting in the Brāhmaṇas and the Jātakas where they sometimes expel or even execute their princes together with unpopular officials. The fear is portent in the Arthaśāstra (VI. 1), Manu (VII 111) and Śukranīti (IV. 7 §38-39) all of which issue solemn warnings to the king against this grave retribution of tyranny. In the Anuśāsana-parva, Mahābhārata, armed revolt against and deposition of unprotecting sovereigns is definitely enjoined upon subjects (61 32 f.). The Ceylonese chronicles state that the kings of Magadha from Ajātaśatru to Nāgadāsaka being all parricides the people banished the dynasty and raised the *amātya* Śiśunāga to the throne. The people of Taxila revolted against Aśoka for official maladministration who sent prince Kunāla to restore order and good government (Raychaudhuri : Political History of Ancient India, 4th edn , pp. 302 f.). See also Jāt. I. 326, III. 514, VI 156, 493 ff.

[2] It is not to be assumed, however, that every such village with localised trade formed a close corporation (Jāt. II. 405, IV. 207, V. 337).

of crafts and professions and their concentration in fixed areas gave birth to the medley of castes and sub-castes which, formerly a more or less priestly hypothesis, now began to harden into rigid social partitions on the basis of occupations tightened with the bonds of heredity, endogamy and exogamy, rules of the table, etc. The corporate unity, combined with localisation of industry, tended towards a narrowness and exclusivism whose dour consequences we are suffering for generations and centuries from the past.[1]

The evidences of the Jātakas are fully corroborated in the Śāstra literature. In a rule of the Arthaśāstra (III. 10) it is presupposed that villagers may collectively employ a cultivator (karṣaka) on contract advancing wages and food and drink (*cf.* Yāj. II. 193), or a hireling for a sacrificial performance (prahavaneṣu). The village collectively appropriates the fine imposed on a breach of the contract. It also appears that it was the compulsory duty of every villager to co-operate in the preparation of a public show (prekṣāyāmanaṃśadaḥ na prekṣeta) and in beneficial works of public utility (sarvahite ca karmaṇi) on pain of fine calculated at double the aid due from him. A person undertaking a public concern must be similarly obeyed by all on pain of fine, Brāhmaṇas and even superior folk not excepted (*cf.* Yāj. II. 191; Viṣ. V. 73). Villages might also undertake the combined performance of a sacrifice. The chapter is closed with the quotation of a verse:

"Those, who with their united efforts construct on roads buildings of any kind beneficial to the whole country and

[1] N. Banerji throws out a plausible explanation of the rise of industrial *gāmas*. His plea is that originally the industrial population in each village catered to the requirements of the agriculturist as was the case with most villages in Pāṇini's time (VI. 2. 62.; V. 4. 95). With the increase in demand of their wares, they freed themselves from the tutelage of agricultural interest and withdrew to places where they had better facilities for pursuing their occupation without let or hindrance. Economic Life and Progress in Ancient India, Vol. I, p. 212.

who not only adorn their villages but also keep watch on them shall be shown favourable concessions by the king."

"Rājā deśahitān setūn kurvatāṃ pathi saṃkramāt
Grāmaśobhāśca rakṣāśca teṣāṃ priyahitaṃ caret"

Compulsory participation of villagers in a co-operative undertaking involving expenditure and profits is also dwelt upon (II. 1).

In the Dharmaśāstras the king is directed to exile a man who violates the agreement of the corporate unit of village or locality (Manu, VIII. 221; Vṛ. VIII. 9; XVII. 5). The extensive functions of municipal bodies are given by Vṛhaspati (XVII. 11-12):—

Sabhā-prapā-devagṛha-taṭāgā'rāma-saṃskṛtiḥ
Tathā'nātha-daridrāṇāṃ saṃskāro yajanakriyā
Kulāyanaṃ nirodhaśca kāryam asmābhiraṃśataḥ
Yannaitallikhitaṃ samyak dharmyā sā samayakriyā

Thus the municipalities not only undertook sacrifices and building and irrigation works but also communal charities on behalf of the indigent and relief of the afflicted in times of famine and other national calamities ('kulāyananirodhaḥ' is explained in the Vīramitrodaya as 'kulāyana-durbhikṣādi apagama-paryantasya dhāraṇam'). Elsewhere it is directed that the funds of public associations may be properly spent on behalf of the helpless and the decrepit (XVII. 23).

This is only a matured form of the communal village life manifested in the *gaṇa*s of the lawgiver's time.[1]

Communal amusement.

The corporate village life expressed itself in no less pronounced manner in a lighter and festal mood. It has been shown by a German scholar that the Vedic *sabhā* served as the modern club-house after the closure of its business.[2] Later

[1] For '*gaṇa*' used as corporate rural or municipal assembly, see R. C. Majumder: Corporate Life in Ancient India, 2nd ed., p. 138.

[2] Zimmer: Altindisches Leben, pp. 172 ff.

the *samāja* assumed a similar rôle. It had a fixed site (Mbh. XII. 69. 11; Jacobi, Jaina Sutras, II. p. 117) where it organised dances, songs, music, recitations, acrobatic feats and conjuring tricks (Dn. XXXI. 10; *cf.* Cv. V. 2.6).[1] The *pekham* in the Dīghanikāya, I. i. 13 is explained by Buddhaghoṣa as *naṭa-samajjā*. The Jātakas use the term as fairs in general (I. 394; III, 446. 541). Among the variety performances of the *samajjā* were combats of elephants, horses, buffaloes bulls, goats, rams, cocks and quails; bouts at quarter-staff, boxing, wrestling, sham-fights, roll-calls, manoeuvres, revues, etc. (Dn. I. i. 13; Jāt. III. 541. Introductory story of Pācittiya 50, Vin. IV. 107). The Vinaya passages show that at these food was provided as well as amusements. These platforms Aśoka used to propagate his *dhamma* by showing the people the spectacles of the *vimānas, hastins*, etc. (R. E. IV). The description of the *goṣṭhis* by Vātsyāyana (K. S., Ch. IV) embodies a more unbridled vein of hilarity and amusement (not at the sacrifice of enterprises of public benefit for that matter) and is a contrast to the puritan denunciation of fairs and fair-fans in the Buddhist Suttas (Dn. I. i. 13; XXXI. 10; Cv. I. 13.2; V. 36).

From tribal autonomy to corporation and democracy.

Sanskrit works and inscriptions profusely deal with local units, the democratic bodies that governed them and the popular clubs and committees under the various and not strictly distinguished apellations of *śreṇī, gaṇa, jāti, pūga*, etc.; of *sabhā, samiti, nikāya, pariṣad, samūha*, etc.; of *goṣṭhi, samāja*, and so on. These bodies had their laws held sacrosanct, they enjoyed autonomy in their affairs, administered judicial and municipal functions, had their funds and finances and sometimes even minted coins in

[1] Rhys Davids suggests that these may have been "survival from exogamic communistic dancings together."—Dialogues of the Buddha. *Naṭas* and *nartakas* figure prominently in *utsavas* and *samājas* conducive to the well-being of the state in the Rāmāyaṇa, II. 67.10; 100.44.

their name (Basārh seals).[1] The Śākyas, Licchavis and similar republican clans who held their deliberations in the *santāgāra*, exhibit in fullness the original communal brotherhood. The assemblies of heads of families as seen in the Jātakas and of elders as manifested in the Smṛtis and the Arthaśāstra reflect the earliest stages of the growth of tribal communities. The testimony of later Smṛtis (Vṛhaspati, Nārada, etc.) and of inscriptions not only south Indian demonstrates that these early nebulous institutions later evolved into well-defined structures and functional divisions and the full-fledged idea of corporation.[2] The original tribal autonomy was replaced by a democracy with its constitutional conception and implication fully understood.

[1] An elaborate catalogue of these institutions and their respective functions is given in Radhakumud Mukherji's Local Self-government in Ancient India.

[2] See E.I. I. 20, XIV. 14, XV. 7.

CHAPTER V

Pastoral Life and Animal Preservation

Cultivation of livestock a universal pursuit. Pastoral magnates. Forest pens. The herdsmen. Animals reared. Royal monopoly of elephant and horse.

Protection of fauna. Ethical and economic view of protection. No proscription on the score of sacredness or impurity of animals. Deification of cow a later development.

As land was plenty and as much of it as desired might be acquired by means of an axe and a spade, it remained the chief and most ostensible means of livelihood for the people and Megasthenes rightly observed that the mass of them were tillers of the soil. This is not to mean, however, that they were exclusively dependent on cultivation. The villagers pursued a variety of cottage industries which sometimes formed the economic basis of village organisms.[1] Agriculture, cattle-rearing, trade and usury constituted the fourfold *vārttā* or pursuits open for the amassment of fortune. Of these, cattle-rearing is in the Epics as important and universal an occupation as farming (Rām. II. 67.12; 100.45; Mbh. II. 5.79; 13.2; XII. 88.28). Manu thinks it derogatory to a Vaiśya not to keep cattle, the auxiliary of agriculture (IX. 327), for, "when the Lord of creatures created cattle, he made them over to the Vaiśya, and a Vaiśya must never wish—'I will not keep cattle'." (328). Almost *verbatim* this is repeated in the Śāntiparva (60. 22,25) and it is added that "if a Vaiśya wishes to tend cattle no one else should undertake that task."

Cultivation of livestock a universal pursuit.

[1] See *Infra*, Book II, Chs. III-V.

This is one more and a glaring instance of how the priestly caste-theory was sought to be foisted on society against an overwhelmingly current practice and a warning to the historian against indiscriminate use of the Śāstra data. In every sort of available literature not excepting the very Mahābhārata there are teeming records that live-stock and animal farming were the business of no particular section or group or of agriculturists at that. The kings themselves, the so-called Kṣatriyas, led the way and cattle-wealth was the mainstay of their household finances, whether it be of the emperor of Kośala (Ram. II. 100.50) or of the princeling of Kāsi (Jat. I. 240). Besides horses, elephants, cows, sheep and goats, they maintained buffaloes, camels, asses, mules, swine and dogs for a variety of purpose (Arth. II. 29). In the Dhūmakāri Jātaka the high-bred (vāseṭṭho) Brāhmaṇa is a goat-keeper (III. 401). All the seventy families in a Brāhmaṇa hamlet on the slopes of the Gṛdhrakūṭa mountains near Rājagṛha took to cattle-breeding as the sole means of livelihood (Ch. Dhp., Beal's Tr., p. 64), The *seṭṭhis* or the merchants of the metropolis were no exception (Jāt. I. 388) ; and Megasthenes' third caste who " lead a wandering life and live under tents " (Str. XV. i. 41) consists of herdsmen and hunters, evidently the nomadic aboriginals[1] who went under the brand of Śūdra or Mleccha according to priestly caste denomination. The universality of cow-keeping and cattle trade is manifest in the common use of cows as a standard of value and medium of exchange in the transitional stages between barter and money transactions.

[1] Such Bohemians are seen on the marches of Benares purveying with animal trade in Jātaka, IV. 289. According to Sanskrit works the *ābhīras* were pastoral tribes who inhabited the lower districts of the North-West as far as Sind. The Periplus (41) notes that " the people pastured there very many cattle."

Thus animal husbandry was among the systematic occupations of all classes of people—from the pedigreed royal race down to the despised gipsy tribes, and it was a respectable profession not unbecoming a young grandee (kulaputto, Mn. 13). For some it was the sole profession, for others it was a supplementary income with agriculture which was their habitual support. Of the former, some maintained extensive farms and rose to the highest rung of the economic ladder as pastoral magnates akin to the multi-millionaire (asītikoṭidhanam) agricultural and industrial lords. Dhaniya, the son of a *seṭṭhi* in Vedeha lived on cattle-farming (goyuthaṃ nissāya jīvati, Paramatthajotikā on Sut. I. ii), and owned no less than 30,000 heads of cattle, of which 27,000 were milch cows (tiṃsamattāni gosahassāni honti sattavisatisahassa gavo khīram duyhanti, *ibid.*) and worked a gang of slaves and hirelings in his establishment (*ibid.*). The lucid details of the Dhaniya-sutta interestingly set forth how he prided in his earnings, in his luxuriant meadows for pasture, in his cows and calves and bulls as lords of the herd and had his calves kept in stockade with stakes driven in strong and bound with ropes of *muñja* grass. The *gahapati* Meṇḍaka enjoyed a bigger farm which had to be managed by as many as 1,250 cow-keepers (aḍḍhatelasāni gopālakasatāni, Mv. 34.19). The kings of certain states like Virāṭa of Matsya ranked with this class and in the Arthaśāstra's conception of their economic rôle, they appear as foremost pastoral lords maintaining a host of employees in charge of classified herds according to their productivity (II. 29).

Pastoral magnets.

Apart from the professional animal farmers, every villager used to keep a few animals for draught purposes or for dairy or meat supply to his own household. The village maintained herdsmen in common on pay or on a share of produce, who grazed them in the pasture and forest, brought them back every evening and counted out

to the several owners (An. I. 205; M. Dhp. Com. I. 157, *cf.* Ṛv. X. 19. 3 f.)

Forest pens.

The herdsmen, whether they be independent farmers or under the employment of others, are often found to tend the herd in the forest and keep them there in a pen. The goatherd Brāhmaṇa Dhūmakāri took a great flock of goats, made a pen in the forest, had a smoking fire to keep away gnats and lived on milk and the like tending his goats (mahantam ajayutham gahetvā araññe vajaṃ katvā tattha ajā thapetvā aggiñ ca dhumañ ca katvā ajayuthaṃ paṭijagganto khīrādīni paribhuñjato vasi. Jāt. III. 401). An abandoned mountain enclosure (giribbaja) was deemed a safe resort for their goats by certain goatherds (Jāt. III. 479). A neatherd is seen to go from his habitat to tend cattle in their sheds (gokulesu) in the forest (Jāt. III. 149). A *seṭṭhi* had a herdsman who, when the corn was growing thick, drove the cows to the forest, kept them there at a shieling and brought the produce from time to time to the master (Tass'eko gopālako kiṭṭhasaṃbādhasamaye gāvo gahetvā araññaṃ pavisitvā tattha gopallikaṃ katvā rakkhanto vasati seṭṭhino ca kālena kālam gorasam āharanti, Jāt. I. 388).

The illuminating phrase *'kiṭṭhasambādhasamaye'* gives a clue to why the herds were taken to and kept in forests in spite of great inconvenience and constant threat from wild beasts and cattle-lifters. Vast expanse of arable land stretched around the homestead land of the village. Beyond that was pasture land interspersed with wild tracts or dense forest infested with the denizens. To leave the multitudinous flocks and herds to graze near about the verdant *kedāra* would be dangerous for the harvest despite all the attention and watchfulness of a few herdsmen. They had, therefore, to be taken and kept away in the distant woods whence it would be troublesome for keepers and dangerous to the crops to

bring them home every day.[1] This contingency, of course, did not arise in places where there were extensive pasture lands outside the *khetta* or where the herds were comparatively few to manage.[2] Again, from the instances cited above, it appears that the forest *vaja*s were temporary sheds, for after the harvest the cattle is brought back and left in the bare field to graze.

The herdsman.

This custom illustrates what a grave responsibility and thankless job was the herdsman's. The depredation of lions and tigers (Jāt. I, 388, III. 149, 479; Dn. XXIV. 2.5; Arth. II. 29; Mbh. VII. 1.24, 95.23) was not the only menace to prevent; much more troublesome to cope with was the perpetual interference of thieves. Cattle-lifting was a universal crime indulged in equally by the smallest pilferer (Jāt. I, 140, IV. 251, VI. 335) and by the suzerain emperor of Jambudwīpa (Mbh. III)[3] and such was its magnitude that the author of the Arthaśāstra was exasperated to laying down that thieves of cattle and abettors are to be put to death (II. 29).

Apart from protection against brutes and thieves, herdsmen had other responsibilities classified into 11 qualities in the Buddhist *sutta*s calculated to bring success in looking after the herd and in promoting its increase. The competent man (*i*) has knowledge of form (rupaññu), (*ii*) has an eye for marks (lakkhaṇakusalo), (*iii*) gets out ticks (āsāṭikaṃ sāṭetā), (*iv*) dresses sores (vanaṃ paṭicchadetvā), (*v*) smokes out the lairs (dhūmaṃ kattā), (*vi*) knows about fords (titthaṁ jānāti) and (*vii*) watering places (pītaṃ jānāti) and

[1] It is for this reason that a cowherd who wishes to remain in the village (grāmakāma) should be as scrupulously avoided as a king who does not protect, a preceptor who does not teach or a priest who does not know the scriptures, Mbh. XII. 57.45.

[2] The pasture ground with a goatherd's banian tree on the bank of Neranjarā was no wild tract but an open space.

[3] *Cf.* Mbh. I. 215; Ep. In. VI. 16. B; VII. 4.

(*viii*) roads (vīthiṃ jānāti) and (*ix*) pastures (gocarakusalo), (*x*) does not milk dry (sāvasesadohī) and (*xi*) tends with special attention the bulls that are the sires and leaders of the herd (te usabhā gopitaro goparinayakā te atirekapujāya pujetā hoti, Mn. 33, An. V. 350). The Arthaśāstra rule requires of him the knowledge to treat cow diseases and ford them safely (II. 29). The knowledge of *titttham* is further illustrated in the Majjhima nikāya (34) where a man courts disaster to his herd in trying to drive it across the Ganges where there was no ford (presumably there was miry or steep bank, strong current or a cataract or whirling pool), and another safely drove it across. Here as well, preference is given to the sires and lords of the herd.

The Arthaśāstra wants the best herd to be entrusted for a fixed wage (vetanopagrāhikaṃ) for otherwise they may be spoiled by overmilking. Herds of the next grade are surrendered for a fixed amount of dairy produce (karapratikara), *viz.*, 8 *vārakas* of ghee per year which the owner will receive. Only the useless and abandoned lot (bhagnotsṛtakam) is given for a share of dairy produce which is fixed at 1/10 (II. 29). There is a touch of realism in the joke flung at Nāgasena by a Brother that he was carrying his canonical lore for the benefit of others just as the herdsman tends cows while others enjoy the produce (seyyathā pi ..... gopālako gāvo rakkhati aññe gorasaṃ paribhuñjati, Mil. p. 18). Truly, the herdsman's was not an enviable job.

Domestic animals.

To turn now to the different species domesticated and their economic utility. In the Mahābhārata is given that lion, tiger, boar, buffalo, elephant, bear, and ape are the seven wild animals (āraṇyāḥ); and cow, goat, sheep, man, horse, mule and ass are seven domestic animals (grāmyāḥ, VI. 4. 13 f. Bengal text). Of the former group, boar, buffalo and elephant are found to be reared. These animals were very often cultivated by single species. We come across, for example, not only the *gopālaka*

and *ajapāla* but also the *piṇḍāraka* and *sukaraposaka* (Arth. II. 29; Dn. XXIII. 25).[1] The camel and the dog are conspicuous in royal stables and kennels[2] and the fowl noise about the village farmyard. The ducks are not seen in domestic animalry. Cow, buffalo, goat and sheep were reared for dairy (gorasam) as well as for meat supply and skin. Swine and fowl were meant entirely for consumption. The ox alone drew the plough. The bull, mule, ass and camel were used for draught[3] and could be let out on hire by owners (Str. XV. i. 41; Jāt I. 195). The dog assisted herdsmen to reconnoitre grazing forests (Arth. II. 29) or guarded royal apartments (Jāt. I. 175) or served as hunting accomplices to the king (Jāt. IV. 437) or nomadic huntsmen (Jāt. VI. 528). The horse and elephant were employed according to their varied nature for draught, riding and war. Animals used for draught purposes were generally castrated and sometimes their horns were cut off (Mbh. XII. 15.51). The beasts, wild and domestic yielded a large variety of animal produce, *viz.*, skin, claw, horn, hoof, plume, tusk, wool, etc.

Royal monopoly of elephant and horse,

Megasthenes says that the elephant and horse were royal monopoly (Str. XV. i. 41 ff.). In the Mahāvagga elephants and horses are said to be elements of royalty (rājangam [*sic*], VI. 23. 10 f. *cf.* Mil. p. 192; Mbh. XIII. 102.13). The testimony of the Jātakas

[1] The varieties of animal flesh were also disposed of from separate stalls in the market place and different sets of stockists and butchers throve on them; *e.g.*, the cattle-butcher (goghātako), sheep-butcher (orobhiko), pig-sticker (sūkariko), fowler (sākuntiko), deer-stalker (māgaviko), etc., Mn. 51. *cf.* Iguana-trapper (godhaluddako) in Jātaka I. 488. Rhys Davids observes the absence of any custom of breeding cattle for the meat market (Buddhist India, p. 94). Against this may be noted the frequent reference to the slaughter house (suna, parisunam).

[2] The mention of dogs in royal household is frequent in the Rāmāyaṇa. Alexander received 150 dogs as present from king Sôpeithês (Str. XV. i 31).

[3] On rare occasions also horse and elephant (Arth. II. 30 ff; Mbh. V. 132. 21; Pliny. VI. 22; Solin, 52. 6-17; Arr. XVIII).

(assā nāma rājabhogā, III. 322) and of the Arthaśāstra favours this view. Medhātithi's note on a text of Manu is concurrent, on the basis of which Bühler argues that the taming and sale of elephants used to be a royal monopoly.[1] This was quite in the fitness of things in view of the great extent to which victory in war depended on these two animals, particularly the latter. But to assume a cast-iron rigidity at all times and in every state would be going beyond the mark. According to Arrian a woman could sell her chastity at no price below an elephant (XVII. *cf.* Str. XV. i. 43). Certainly no mere joy-ride is meant. Elsewhere Greek writers testify to elephants being used by certain peoples for hunting, for ploughing and for riding (Pliny, VI. 22; Solin. 52. 6-17; Arr. XVII). In the Kulāvaka Jātaka, villagers are given an elephant by the king. In the Mahābhārata elephants and horses sometimes appear among royal presents at sacrifice (VII. 57; 68.31; XIII. 103.25). The *seṭṭhi*'s son, Soṇa Koḷivisa of Campā had retinues of seven elephants (*i.e.*, each of the seven was a lord with a number of dames attached to it,—as explained by Buddhaghosa, Mv. V. 1.29). Of course, these are instances outside a general principle followed by Indian royalty and there is no question that the horse and elephant were *rājangam* or *brutes royales*.

Protection of fauna: *ahiṃsā*.

The rich Indian fauna for which Greek writers have a chorus of praise was consciously preserved against destruction and annihilation despite the rapid progress of Aryan exploration and the clearance of primeval forests. The principle of protection and promotion of animal wealth received a dynamic impetus from the ethical principle of *ahiṃsā* or inviolability of all forms of life which was popularised but by no means invented by

Buddha and Mahāvīra.[1] Its origin is traced in the Vedic teachings and the earliest Smṛtis. Manu wants ascetics to walk always carefully scanning the ground "even with pain to his body" and prescribes atonement for animals killed without intention (VI. 68 f.). In the Śāntiparva not only killing of birds and animals is marked out as sin (35.28, 36.34, 165.56 f.) but also all sorts of cruelty and physical oppression are severely indicted (261.37 ff.; XIII. 23.73, XIV. 28.16 ff.). The "three long fasts"[2] which were observed by Buddhists with great *eclat* in the days of Yuan Chwang's visit and during which no slaughter of animals was allowed because Indra was believed to be carrying on a searching inspection of popular conduct, show that these were originally a popular rather than a Buddhist institution.[2] Indian folk-lore abounds with such idealised stories of animal-love as those of the prince who flung his body from a mountain peak to relieve a starving tigress with her cubs, of a king who gave his pound of flesh to a hawk in order to save a fugitive pigeon and prince Jīmutavāhana who offered himself to be devoured by Garuḍa for a *nāga*'s sake,—all of which formed a common heritage for canonical books of orthodox and heretical sects. The same moral is deftly inserted in the prelude of the Rāmāyaṇa where the sight of a stricken bird and a wailing mate stirred the feelings of an illiterate sage finding vent in spontaneous metrical effusion which heralded the great Epic.

The Sanskrit literature,—the early Epics with their naïve simplicity and later *kāryas* in their ornate style,

[1] Mark the parallelism in the following verses:
Sukhakāmāni bhūtāni yo daṇḍena vihinasti
attano sukham esāno pecca na labhati sukhan: Dhp. 131
Yo 'bhimsakāni bhūtāni, hinasti ātmasukhecchayā
sa jīvamśca mṛtaśca na kvacit sukham edhate: Manu, V. 46
Ahimsakāni bhūtāni daṇḍena vinihanti yaḥ
ātmanaḥ sukham icchan sa pretya naiva sukhī bhavet: Mbh. XIII. 113.5.
Watters: Yuan Chwang. Vol. I, pp. 304 f.

portray the working of the doctrine of *ahiṃsā* in the *āśrama*s or sylvan retreats of venerable saints where birds and beasts were protected from injury and stayed in perfect harmony with men. In the Rāmāyaṇa such a safe resort was the arbour of Mātaṅga where shedding of blood was sacrilegious, to be terribly avenged. In the Mahābhārata occurs the legend of Duṣmanta who steps into Kaṇva's hermitage in an orgy of animal slaughter and is immediately transported from an atmosphere of panic and fury to one of calm and concord where monkeys, bears, elephants, tigers and snakes live unharmed with holy ascetics and *kinnara*s. Such descriptions in the Epic *ākhyana*s approximate to actual life and are remarkably immune from poetical fancy and artistry which is displayed in later sophisticated literature written under court influence or for the edification of a refined and hyper-sensitive public.[1] Even the Arthaśāstra, a work that certainly does not err on the side of religiosity, affirms that all creatures are protected in a forest set apart for religious pursuits (II. 2).

That later poets revelled in depictions however artificial indicates that the idea of peace and amity in the animate world had, apart from any speculative tenet, an æsthetic and sentimental appeal among the people for whom they catered. This and the effect of meat diet on human constitution led to a general aversion for animal food among those Brāhmaṇas who observed the code. Instances are rare in ancient literature of pious Brāhmaṇas taking flesh except on ceremonial functions or after worship of the manes. The Rākṣasa Ilval could not bait the Brāhmaṇas with mutton unhallowed by the *mantra*s or without dedication to ancestors (Rām. III. 11. 57). The law-givers emphatically interdict it unless taken in conformity with the law, *i.e.*, after Vedic rites and

[1] *Cf.* Kālidāsa's Śakuntalā, Act I, and Bāṇa's Harṣacaritam, the scene of Divākaramitra's forest academy.

sacrifices, under the threat of unexpiable sin and eternal perdition (Viṣ. LI. 59-78; Manu, IV. 38-52; Yāj. I. 180 f.).

Protection from economic view.

But the doctrine or sentiment of *ahiṃsā* could not arrest animal carnage,—among the Brāhmaṇas for sacrifice, among the ruling classes for sport and among the lay public of all grades for food and articles of luxury and use—such as skin, feather, bone, horn, hoof, etc. (Jacobi : J. S., I. p. 12). In the Mahābhārata a long lecture on the virtues of *ahiṃsā* and abstention from meat-diet (XIII. 115 f.) is followed by exceptions made in favour of sacrifice and hunting for the royal race. Of Brāhmaṇical protests against animal sacrifice there are only faint traces and even these half-hearted and conditioned apologies may have been inspired under Buddhist influence (Mbh. XII. 264; 338. 4 ff; XIV. 91). The law-givers legislated for the guidance of Brāhmaṇas alone. Manu even allows a Brāhmaṇa to adopt the calling of a butcher (māṃsavikrayin, III. 151) in exceptional circumstances. Buddha himself allows fish and flesh to his disciples on the three conditions of not having seen, heard or had suspicion (Mv. 31. 14; Mn. 55). Of checks against destruction of animals for the above purposes there are only meagre evidences. The social stigma attached to the professional hunter and purveyer in flesh (niṣāda, kirāta, heḍḍaka, luddaka) in the Epics and the Jātakas may have been a partial safeguard and Megasthenes' observation of hunters "who alone are allowed to hunt" (Str. XV. i. 41) probably reflected the general relegation of hunting profession to those degraded castes.[1] An anecdote in the Mahābhārata tells how Yudhiṣṭhira spared the remnant of the fauna in a forest where the Pāṇḍavas lived by hunting and repaired with his party to the Kāmyaka forest abounding

[1] Apart from the despised classes who took to hunting as a means of livelihood, sport as an enjoyment is found confined to kings and chieftains. We hardly come across agricultural and mercantile classes indulging in it; and if and as soon as they take to it for living they get the brand of degradation.

in wild life (II. 256). To save animals from death at the altar, Buddha's voice was no doubt effective for a time. Restrictive measures were taken by strong monarchs under Buddhistic influence—such as Aśoka and Harṣa. But these were directed only against unnecessary cruelty and wanton slaughter and they did not dare to interfere in consumption of animal food as such nor did they attach in their injunction any special sanctity on animal life.

Strabo's remark on Megasthenes' authority that the Brāhmaṇas "eat flesh but not that of animals employed in labour" (XV. i. 59), whatever truth it may contain, reflects at any rate a sound economic sense which in some quarter regulated animal diet. The ordinances of Aśoka himself are not purely altruistic. He is solicitous for the food, comfort and medical treatment of cattle as of men (R. E. II; P. E. VII) and he boasts of having conferred various benefits on bipeds and quadrupeds, on birds and aquatic creatures even to the "boon of life" (a pāṇadakhiṇāya, P. E. II). But in his famous abstinence ordinance where the following animals are declared inviolable—*suka* (parrot), *sālika* (maina), *aluna* (?), *cakravāka* (ruddy goose), *haṃsa* (wild goose), *nandimukha* (a kind of bird), *gelāta* (?), *jatuka* (bat), *ambakapilika* (queen ants), *dali* (terrapin), *anathika maccha* (jelly fish), *vedaveyaka* (?), *gaṃgapuputaka* (?), *saṃkujamaccha* (skate-fish), *kaphata sayaka* (porcupine), *pamnasasa* (squirrel ?), *simala* (?), *saṃḍaka* (wild bull), *akapinda* (iguana?), *palasata* (rhino), *seta kapota* (white dove), *gāma kapota* (domestic dove), he adds the significant clause "which is neither useful nor edible" (ye paṭibhogaṃ no eti na ca khādiyati, P. E. V). That the spirit of the edict is not less economic than altruistic is further proved by the forest law—"forests must not be burnt either uselessly or in order to destroy living animals." Other prohibitions are against pregnant and milch goats, ewes and sows with young ones below six

months and against the preserves in fishing ponds and elephant parks on the three *caturmāsīs*, on the Tisya full moon during three days, *viz.*, the 14th, the 15th and the first *tithi* and unfailingly on every fast day. Feeding of live animals with live animals, caponing of cocks, castration of bulls, goats, dams, boars and other livestock on certain days and branding of horses and bullocks on the same days are forbidden. The keynote of these regulations is the checking of cruel practices and preservation of the different species, and if the emperor's heart ever yearned for total abstinence all he could do was to set his own example by rigorously curtailing meat-diet in his own kitchen (R. E. I.).

The author of the Arthaśāstra is fully aware of this risk of unscrupulous drainage of animal resources and lays down practical rules for their protection. Animal produce engages his attention as much as other forest produce (II. 17). His list of inviolable birds echoes Aśoka's edicts and betrays equal care for the protection of the wild fauna against extermination (II. 26). With this view again, he gives directions for the comfort, health and safety of the livestock. Elaborate rules of dietary are framed for the guidance of the superintendents of cattle, horses and elephants with reference to their age, maternity, nature of work or use derived from them. The details of stable construction are worked out with vigilant eye to the comfort and sanitation of the beasts. A host of attendants and paraphernalia are assigned to the horse and elephant stables—trainers, feeders, cooks, watchers, grooms, vets, drivers, binders, sweepers, and so on (II. 29-32).

The preservation of the four-footed, feathered and finny races is sought with assiduous care in other rules of the economist. For this specific purpose the *abhayāraṇya* is set apart and none are allowed to "entrap, kill or molest deer, bison, birds and beasts protected thereunder." One-sixth

of live animals shall be let- off in forests under state protection. Discrimination is made, moreover, in the amount of fines against the killing of innocuous creatures that do not prey upon others (II. 26). Young elephants (bikka), elephants that would breed (mugdha), tuskless elephants, diseased elephants and elephants suckling cubs (dhenuka) comprise the immunity list formed to ensure perpetuation of the prized stock (II. 31).

Greek writers testify to the prevailing practice of letting off young and old elephants and those of weak constitution in the forest from the haul (Str., XV. i. 41, 43; Arr. XIV). Elephants are reserved in special forests (nāgavana) and for the killing of an elephant one pays with his life (Arth. II. 2). Grooms and drivers are threatened with fine at the slightest breach of rules inculcated for their comfort. "Leaving as much as is equal to twice the circumference of the tusk near its root, the tusks shall be cut off once in $2\frac{1}{2}$ years in the case of elephants born in countries irrigated by rivers (nadīja) and once in 5 years in the case of mountain elephants" (II. 32). The reason for this jealous attention is given as—"It is on elephants that the destruction of an enemy's army depends" (VII. 11).

In the case of domestic creatures, needless cruelty and victimisation is guarded against. Animals are to be slaughtered for flesh only in the *abattoir* (parisunam) on pain of fine (II. 26); the rule seems to have been observed in current practice according to the evidence of the Pali canonical works. Cruel pastimes among herdsmen such as bull-fighting stand outlawed (*cf.* Jāt. IV. 250). Fines are enjoined for neglecting nasal perforation in proper time for stringing draught beasts to the yoke. Milking of cattle is allowed twice a day during the rains and the autumns, but in the dry winter and summer seasons only once on pain of the cowherd losing his thumb. Once in six months sheep and other animals shall be shorn of their wool (II. 29).

Stud bulls, bulls let out in the name of village deity (grāma-devavṛṣāḥ) and cows within ten days of calving are exempt from penalisation for trespass. Trespassing beasts from reserve forests "shall be brought to the notice of forest officers and .....driven out without being hurt or killed." Ropes and whips only are to be used in case of stray cattle and any injury to them incurs the penalty for assault (III. 10). Livestock is protected along with other properties of a householder by laws of torts. "For causing pain with sticks, etc., to minor quadrupeds, one or two *paṇas* shall be levied; and for causing bleeding to the same, the fine shall be doubled. In the case of large quadrupeds not only double the above fines, but also an adequate compensation shall be levied (III. 19).[1]

The importance of the protection of animal trade is fully realised. In assessing the toll dues on merchandise, bipeds and quadrupeds are placed in the scale of maximum preference along with other commodities the duties of which are charged between $\frac{1}{5}$ and $\frac{1}{25}$ of value. The *gopa* or village accountant is entrusted not only to keep a register of citizens but also of bipeds and quadrupeds in a village. The spies are likewise deputed to ascertain the total number of men and beasts (II. 35).

Sacredness or impurity of animals.

It is interesting to note that in early Indian literature, secular or sacred, no consistent attempt is made at proscription on the score of sacredness or impurity attached to particular beasts. The inviolability of cow as a divine creature is not an ancient custom and probably originated in later days of syncretisa-

[1] Manu's scale is :

Fine for killing of large animals, cows, horses, camels, elephants, etc.—500 paṇa
,, injuring small cattle ... ... 200 ,,
,, ,, beautiful wild quadrupeds and birds ... 50 ,,
,, killing donkeys, sheep and goats ... ... 30 ,, (5 māṣa)
,, a dog or a pig ... ... 16 ,, (1 ,,)
VIII. 296-98.

tion with foreign barbarians, crystallising still later when Hindu society was reconstructed on hidebound dogmas and practices. In its rules on cow slaughter, the Arthaśāstra wants the immunity of only calves, milch cows and stud bulls (II. 26). Among Aśoka's list of inviolables "which are neither useful nor edible," is included the "*saṃḍaka*," the phrase is a pointer to the rendering 'wild bull.'[1] In the Vedic, Buddhist and classical Sanskrit literature, there is no dearth of allusions to cow-killing or the taking of cow's flesh. The epithet 'aghnya' occurs in the Ṛg-veda with reference to cattle, but practice is all to the contrary.[2] In the Śatapatha Brāhmaṇa, Yājñavalkya is fond of tender beef (III.

[1] *Cf.* "..... even sheep, they say, run wild there, as well as dogs and goats and oxen, which roam about at their own pleasure being independent and free from the dominion of the herdsmen. That their number is beyond calculation is stated not only by writers on India but also by the learned men of the country ....." Aelian, XVI. 20.

[2] For illustration see Macdonell and Keith : Vedic Index, II, p. 145.

The following verse of the Ṛg-veda is of interest as reflecting the origin of the idea of divinity :

Mātā rudrāṇāṃ duhitā vasūnāṃ svasā-dityānāmṛtasya nābhiḥ
pra nu vocaṃ cikituṣe janāya mā gām-anāgām aditiṃ vadhiṣṭha
8. 101. 15.

The Taittirīya Āraṇyaka adds to this verse :

Pivatūdakam tṛṇānyattu. Om-utsṛjata.

The interpretation of the word 'utsṛjata' by scholiasts of different ages helps us to understand which way the wind was blowing. Jaimini gives the gloss :

tāmupāṣṭāṃ hate pāpmānameva taddhate 'tha yadi gām-utsṛjet-tām-etenaiv 'otsṛjed-gau-rdhenu-rhavyā : Śr. Sūt. (kārikā 15 substitutes '*upāgatām*' for '*havyām*,' making the meaning clearer). So the sacrifice of a dry and old cow with the holy *mantras* amounts to the slaughter of sin. It is lined up with the scape-goat.

The gloss in the Gṛhyasūtra goes :

ṛtvig-ācāryyaḥ snātako rājābhiṣiktaḥ priyaḥ sakhā śrotriyaśceti tebhya ātithyaṃ gāṃ kuryyāt-tām-atithaya iti prokṣet. 1. 12.

Is the cow to be given away to guests or slaughtered for their entertainment? The latter deduction agrees with the similar injunction in Āpastamba Gṛhyasūtra and with Pāṇini's derivation of 'goghna.' Thus even a *snātaka* and a *śrotriya* is not averse to beef.

Compare Sāyāṇa's commentary on 'om-utsṛjata' : 'vadhyām-enāṃ rājagavīm parityajata.' So a dry cow is not to be slaughtered whether at sacrifice or for guests but let go to graze at will. Sāyāṇa represents an age when cow-killing was an anathema.

1. 2. 21). According to Pāṇini 'goghna' means a 'guest' because a cow is killed for him (III. 4. 73). Āpastamba permits the slaughter of a cow at the reception of a guest, at the worship of the manes and at nuptial celebrations (Gṛhyasūtra, I. 3. 9; *cf.* Śat. Br. III. 4. 1. 2; Manu, V. 41; Vāś. IV. 8; Sāṃ. II. 16. 1; Viṣ. LXXX. 9; Yāj. I. 19). In the beginning of Act IV of Bhavabhūti's Uttararāmacarita a heifer is stated to be slain by Vālmīki in honour of Vaśiṣṭha's visit to his *āśrama*.

In the Buddhist works the 'goghātaka' is a familiar figure and his profession, according to the Dasabrāhmaṇa Jātaka was widely followed by straying Brāhmaṇas (IV. 361 ff.). Slaughter of ox for flesh was very common (Śut. III. viii. 7; Jāt. II. 50, 135; VI. 111.) and there were special slaughter-houses for beef (gāvaghātanaṃ, Mv. V. 1. 13). Even cows did not necessarily find exemption (An. IV. 137; Ch. Dhp., p. 60; Āpast. I. 5. 17. 30). The *suttas* present this very unedifying spectacle at the most prominent place of the town or village; "As the cattle-butcher or his apprentice, when he has killed an ox or cow, displays the carcase piecemeal at the crossing of the four highroads as he sits" (goghātako vā goghātakantevāsi vā gāviṃ vadhitvā cātumahāpathe vilaso paṭibhajitvā nisinno assa, Dn. XXII. 6; Mn. 119).

It rather appears that beef was the commonest of flesh consumed. Similarly there were no strictures laid on grounds of impurity. Swine and fowl often figure in animal husbandry of the lay and clerical folk even in Sacred Books. Aśoka's exemption of pregnant and mother sows indicates that there was no ban on the use of bacon or ham. In the Mahāparinibbāna Sutta Buddha is offered a dish of pork[1] by Cunda the artificer's son (also Ud. VIII. 5). Like the

[1] If *sukaramaddava* is not fungus. See Rhys Davids' note in Questions of Milinda, I. p. 244.

cattle-*abattoir*, there was the swine-*abattoir* (sukarasunam, Mv. VI. 10. 2) and the pigsticker (sukariko) was the dealer in ham in the market as the *goghātako* purveyed beef. In the Rāmāyaṇa as well pig and fowl appear as appetising food in the menu of a feast arranged by as good a saint as Bharadvāja (II. 91. 67, 70). In the Chinese Dhammapada a Brāhmaṇa is taking fowl without the least sense of wrong (p. 150). In the Milinda a remarkable cock-lore is evinced (pp. 366 ff.). The testimony of the Jātakas (I. 197) and of the Arthaśāstra (V. 2) is identical. Indeed, oxen, goats, fowls and pigs are the choice animals slain in sacrifice to gods (Jāt. I. 259, IV. 364; Dn. XXIII. 31). In a Vinaya list of unpalatable and inedible food to which the people fell only in famine, occur elephant, horse, dog and snake (Mv. VI. 23, 10 ff.). Fowl, swine and cow never come in the list of animals and birds forbidden even for the Brāhmaṇa's table (Śat. Br. I. 2. 1. 8; Ait. Br. II. 1. 8; Āpast. I. 5. 17. 29 ff; Manu, V. 11, 18; Yāj. I. 172, 176; Mbh. XII. 37. 24-26). It is only as late as in the Si-yu-ki that beef and ham are classed among non-edibles (Watters', p. 178).[1]

Protection and deification of cow.

From the Vedic times however and throughout the Smṛtis and the Epics there was a vigorous attempt for the prohibition of cow slaughter and protection of the invaluable cattle-wealth: but of deification of cow there is hardly any strong evidence. In the Rāmāyaṇa cow-killing (IV. 34. 12; Mbh. VII. 17. 31; 73. 27) and milching a cow just delivered (II. 75. 54) are sins. In the Mahābhārata the good old days are mournfully recalled when the Vaiśyas fed with

[1] High-crested cocks born of Vṛtra's blood (śikhaṇḍāḥ) occur as non-eatable to the twice-born and the initiated in the Mahābhārata, XII. 281. 60. In view of the evidences adduced and the composite character of the Śānti-parva, this may be supposed to be a later priestly interpolation, or reflection of a local custom. Of course tame cocks and pigs occur in an exhaustive list of animals prohibited for the Snātaka Brāhmaṇa in Gaut. XXIII. 5 and Manu XI. 157.

care all cattle that were lean and never milked kine as long as the calves drank only the milk of their dam (phenapāṃśca tathā vatsān na duhanti, I. 64. 22). "Does not milk dry" is a favourite analogy on judicious taxation by kings. Among the glories of Cedi is that lean cattle are never used for draught but are well-fed and fattened (I. 63. 11) and it is only in the dark days of *kali* that men will employ cows and one-year-old calves for drawing the plough and carrying burdens (III. 189. 27). The reason for this solicitude is that the cow is the foremost of all quadrupeds as surely as the Brāhmaṇa is among the four castes (VI. 123. 34; XII. 11. 11). Hence Skanda is appointed leader of divine hosts for the well-being of cows and Brāhmaṇas (gobrāhmaṇahitāya ca, III. 228. 23; XII, 21. 18; Baudh. II. 2. 4. 18).

But cattle is the chosen victim for sacrifice in large scale (I. 74. 130). In king Rantideva's kitchen 2,000 cows and 2,000 other animals are killed daily and the meat distributed so that the fat of these animals form the river Carmaṇvatī (III. 207. 8 f; VII. 67. 5; XII. 29. 123; XIII. 66. 43). The reason for this is thus given:

"'The sacred fire is fond of animal food'—this saying has come down to us. And at sacrifices, animals are invariably killed by regenerate Brāhmaṇas and these animals, being purged of sin by incantation of hymns, go to heaven."

agnayo māṃsakāmāśca ityapi śrūyate śrutiḥ |
yajñeṣu paśavo brahmaṇ vadhyante satatam dvijaiḥ |
saṃkṛtāḥ kila mantraiśca te' pi svargam avāpnuvan ||

III. 208. 11 f; *cf.* VII. 67. 4; Manu, V. 40-42; Vāś. IV. 7; Viṣ. LI. 59. 78; Yāj. I. 180 f.

Aelian describes with the characteristic bluntness of a foreigner this pious benefaction of the animal race on the part of the priesthood;

"In the country of the Indian Areianoi there is a subterranean chasm [1] down in which there are mysterious vaults.....Hither the Indians bring more than thrice 10,000 head of cattle of different kinds, sheep and goats and oxen and horses; and every person who has been terrified by an ominous dream, or a warning sound or prophetic voice, or who has seen a bird of evil augury, as a substitute for his life casts into the chasm such a victim as his private means can afford giving the animal as a ransom to save his soul alive." (XVI. 16.)

Obviously there were two contradictory forces at work. The utility of cow was appreciated but its slaughter for greed was not checked any more than the goat is spared to-day from an understanding of the value of its milk. That the cow was the foremost of creatures was the very reason why it should be sent over to propitiate the gods. Buddha's spirited denunciation of sacrificial rites voiced the necessity of cow-protection on economic grounds. He rebuked the silliness of Brāhmaṇas who had fallen from their older virtues and taken to the evil practice of cow-sacrifice. (The Brāhmaṇas were, by the way, never opposed to cow-sacrifice; the fictitious allusion is meant only to emphasise the sermon.) Knowing that cows are our benefactors like our parents and givers of food and strength the Brāhmaṇas of old abstained from cow-killing:

"Yathā mātā pitā bhātā aññe vā pi ca ñātakā:
gavo no paramā mittā yāsu jāyante osadhā
annadā valadā c'etā vaṇṇadā sukhadā tathā
etam atthavasaṃ ñātvā nassu gāvo haniṃsu te"

—Sut. II. vii. 13 f.

At the instance of Brāhmaṇas of a later date the king sacrificed many hundred thousand cows to the gods (*ibid.*,

[1] Obviously the sacrificial pit. *Cf.* Jāt. I. 300.

25). The result was that while formerly there were 3 diseases, they now multiplied to 98 (*ibid.*, 28).

Without doubt Buddha was no man to deify cows. The utility of cow is the motive behind the inviolability preached in didactic works. The cow was no fetish of the Indo-Aryans as the Horus or Set was of the Egyptians.[1] If the cow is sometimes found held sacred and adored, the explanation is to be sought in this utilitarian principle rather than in deification (*cf.* Mbh. XIII. 51. 26 ff; 69. 8). The injunction that touching a cow with feet is sin (Rām. II. 75. 31; Mbh. VII. 73. 30; XIII. 93. 117; 126.28 ff.) is to be read with the crimes indicted for cruelty to cows. This utilitarian feeling ultimately led to the abolition of cow-sacrifice and the fitter use of cow in gift (Mbh. XIII. 66.44).[2] The farthest point toward the sacredness of the cow is noticed in a Jātaka passage. An auspicious bull all white (sabbaseto maṃgala usabho) belonging to the *gāmabhojaka* is killed by snake-bite and the villagers "all ran together weeping, honoured the dead with garlands and buried him in a grave" (sabbe ekato va āgantvā kanditvā taṃ gandhamālādīhi pujetvā āvāṭe nikhaṇitvā, IV. 326). But such honour is bestowed on the horse and the elephant in no less outspoken manner. The *maṃgalahatthi* (1. 320) is even more prominent than

[1] There is a similitude in the evolution of the cult of the Apis and Mnevis bulls, the representatives of the gods Ptah and Ra in Egypt where these animals were deified and venerated in the Saite age of national decline and the deification of bull, the animal of Śiva, during the foreign subjection of Hindu states. The Śiva with his bull is represented in the coins of the Kuṣāṇas and Scytho-Sassanian kings and in a coin of Śaśāṅka, king of Gauḍa. But it is for the first time and as late as in a coin of the Huna Mihiragula that a bull-emblem of Śiva is seen with the legend 'jayatu vṛṣaḥ' on the reverse. For reference see D. R. Bhandarkar: Lectures on Ancient Indian Numismatics, p. 18.

Did the deification of the cow originate in Indian source and of the bull come from foreign source?

[2] This statement in the Anuśāsanaparva with a lengthy homily of 18 chapters on the greatness of cow is most probably a later interpolation reflecting a time when cow-sacrifice was on the wane. For later, in this very *parva*, gift of beef to the *pitṛs* is enjoined (88. 7).

the *maṃgala usabha* and has, moreover, the virtue of bringing rain against draught (VI. 487 ff. Cp. Kurudhamma-C). The *hatthimaṃgala* or elephant festival is a common affair in the Jātakas. A king used to honour an elephant by having its stall perfumed with scented earth, coloured hangings put round a lamp with scented oil, a dish of incense set there, a golden pot set on its dunghill, coloured carpet spread on its stand and royal food of many choice flavours (Jāt. III. 384. *Cf.* IV. 92). A highbred elephant of the *mleccha* king Śālva was frequently worshipped (supūjito) by Dhṛtarāṣṭra's son (Mbh. IX. 20. 3). A horse is seen honoured by a king exactly in the manner of the elephant just referred to (Jāt. II. 291). In the Bhārata war, war-horses are bathed and garlanded (VII. 112. 56). A colt installed as horse of state is sprinkled with ceremonial water (Jāt, II. 287). "During the period of the *cāturmāsya* and at the time when the two seasons meet waving of light shall be performed thrice. Also on new moon and full moon days, commanders shall perform sacrifices to *bhūta*s for the safety of elephants" (Arth. II. 32). "Horses shall be bathed, bedaubed with unguents and garlanded twice a day. On new moon days sacrifice to *bhūta*s and on full moon days the chanting of auspicious hymns shall be performed. Not only on the ninth day of the month *āśvayuja*, but also both at the commencement and close of journeys as well as in the time of disease shall a priest wave light invoking blessings on the horses" (*ibid.*, 30).

These silly rites performed to ward off evil spirits were nevertheless meant to safeguard the interests of state, to protect the sinews of war against all sorts of danger and not to appease animal divinities held in superstitious veneration or fear. They were indispensible in war and sport as the cow was the prized supplier of milk, curd, butter and ghee. If it was sin to touch the animal with feet, here worked the

same Indian psychology which deters the workman from kicking his tool. The cow's udder, the sheep's wool, the elephant's tusk are all subject to protection laws against the cupidity of improvident owners. This sense of utility of animal labour and animal produce accounts for the culture of animal lore and the improvement of veterinary science to which Aelian (XIII. 7), Aśoka and the Arthaśāstra are outstanding but not the only witnesses. The theoretical background of animal preservation in ancient India was the theological doctrine of *ahiṃsā* and the economic doctrine of protection. The tribal totems of primitive communities among other races which hardened into fetishes or exalted gods of cities or 'nomes' and enjoyed inviolability on grounds of sacredness even when the clans passed beyond the totem stage, were foreign to the Indo-Aryans whose rituals rose beyond animistic level and were fixed on elemental and astral divinities from the earliest traceable times.

CHAPTER VI

FORESTRY

Protection of flora. Sylviculture. Pleasure parks and religious retreats Reserve forests. Strategic and economic value of forests.

Forest legislation.

While clearance of forests and exploration and settlement of new areas was growing apace with the progress of Aryan penetration towards the east and south, a conscious attempt was made to prevent wholesale destruction of forests and of the wild flora and fauna therewith. Buddha and Mahāvīra issued ordinance for the protection of plant life as much as of animal life (Mv. III. 1-3; Jacobi, J. S. II. p. 357). This agrees with the immunity accorded to all forms of life in the sylvan retreats of saints and ascetics consonant to the tenet of *ahiṃsā*[1] and with the injunction of the Arthaśāstra on the inviolability of all creatures mobile and immobile (pradiṣṭā-bhaya sthāvara-jaṃgama)[2] in the *abhayāraṇya* or forest set apart for religious pursuits (II. 2). Aśoka promulgated an edict that "forests must not be burnt either uselessly or in order to destroy living beings" (P.E. V), probably an echo of Buddha's ordinance upon the *bhikkhus* upon a complaint from the people not to set woods on fire (Cv. V. 32.1). In

[1] In an interesting discourse a sage argues the thesis that trees have life, sense perceptions and the capacity to feel pleasure and pain—the kernel of Sir Jagadis Chandra Bose's discovery. Mbh. XII. 184. 10 ff. *Cf.* Manu on plants: antaḥsaṃjñā bhavantyete sukhaduḥkhasamanvitāḥ.

[2] *Pradiṣṭābhaya*—"whose immunity has been ordained." Shamasastri's rendering, "made safe from the dangers of" is plainly inadmissible.

Manu cutting green trees for firewood involves loss of caste (XI. 65). In the Mahābhārata it is laid down that to cut down a tree of the forest is a sin (XII. 32.14; 36.34; *cf.* Viṣ. V. 55-59) and setting fire to woods as well as to *āśramas*, villages and towns is classed as equal to the sin of Brāhmaṇicide (XIII. 24.12). According to the Arthaśāstra one setting fire to timber or elephant forests shall be thrown into fire (IV. 11).

Sylviculture in the Epics.

The Epics offer hand in hand illustrations of great schemes of colonisation and deforestation and of preservation of forests and sylviculture under the solicitous care of the state or community to maintain a perpetual supply of specific products. The prodigious road-making endeavour from Ajodhyā to the bank of the Ganges *en route* the Daṇḍaka forest involved a large scale clearance of wild tracts (Rām. I. 80); and the great fortnight-long conflagration of the Khāṇḍava may have been the Epic version of another magnificent colonial scheme (Mbh. I. 230; *cf.* Jāt. II. 358). Instances of opposite nature are not rare A Candana forest in southern India yielding a large variety of the aromatic was protected by the *gandharvas* (Rām. IV. 41. 41). In Sugrīva's honey-park (madhuvana) none could drink honey or take fruits without special permission. The forest officer Dadhimukha was appointed with a retinue of guards (vanapāla) to look to its upkeep and protection. The *vānaras*, overjoyed at the discovery of Sītā, trespassed into the forest and drank up all the honey, ate up the fruits and destroyed the combs, flowers and foliage. The superintendent with his men interfered but they were defied by the intruders and in the altercation which followed had the worse of it. He went to Kiṣkindhyā and reported to his lord but Sugrīva took hint that Sītā must have been traced and gave orders that the *vānaras* might disport in the forest as they pleased (Rām. V. 61-63).

The forests served a manifold purpose. Those which were owned by kings or private individuals (vana, dāya) were frequently in the nature of pleasure parks, occasional haunts for the owners to disport with their ladies. At the same time these afforded a retreat for the spiritual quest of those whom they might permit. Buddha frequently came to stop at the Isipaṭana deerpark (Migadāya)[1] in Kāsi and there delivered his discourses. Three of his disciples lived in the Sāla forest of Gosinga and when Buddha was about to enter, the keeper (dāyapāla) intervened and asked him not to go in and disturb the three *kulaputtas* who were living there for their soul's good (attakāmārūpā viharanti, Mv. X. 42; Mn. 31, 128). The Jātakas are familiar with park-keepers in charge of reserve forests which are nevertheless open to the settlement of ascetics (IV. 18, 298, 405; V. 465). These resorts, however, were more in the nature of gardens than forests and the plea for their reservation was less economic than religious and recreative. The Jetavana and the Añjanavana at Sāvatthi, Jīvaka's *ambavana* at Rājagaha and the *ārāma* of Visākhā Migāramātā were merely gardens where religious occupation was combined with pleasure and no forest as the epithet *vana* may suggest.

Pleasure parks and religious retreats: in Buddhist works.

The forest in its real sense was not the *vana* but the *araṇya*[2] which came under the purview of economic legislation. The Arthaśāstra displays an advanced knowledge of forest economy and a keen interest for forest conservancy. Forestry commands the author's attention on three grounds and he accordingly divides forests into three classes,—game forests, produce forests and elephant forests (II. 6). The game forests (mṛgavana) are set apart for sport, the favourite royal pastime and for the

Reserve forests: in the Arthaśāstra.

[1] See Rhys Davids' note in the Dialogues of the Buddha, Bk. I, p 223.

[2] The word *vana* is used in both the senses of a park and a forest, while *araṇya* exclusively conveys the meaning of a wild tract.

supply of animal produce, among which are skin, bone, bile, sinew, teeth, horn, hoof and tail (II. 17). Of more importance are produce forests (dravyavana) which are the source of such materials as are necessary for building forts, conveyances and chariots (VII. 14). Foremost, however, are *hastivanas* for it is on elephants that the victory over an enemy depends. The king is required to keep in repair timber and elephant forests and to set up new ones (II. 1). The forests reserved for breeding of elephants are given special attention (II. 2).

Military value of forests.

The Arthaśāstra gives preference to elephant forests for the fighting value of the animal. It lays down, moreover, that "a forest containing a river is self-dependent and can afford protection in calamities," *i.e.*, as a frontier defence in case of war. Hence a king who promotes such forests overreaches his rival (VII. 12). A village with a forest and a river in the border appears as a covetable gift also in the Mahābhārata (pratyāsanna-vanodakam, VIII. 38).[1] On the one hand, the river and the forest act as natural defences. On the other they help irrigation, conserve moisture and humidity and supply food-stuff and other materials. The forest has thus a double utility; and to the author of the Arthaśāstra the economic objective of forest conservancy is not secondary but only co-ordinate to the military and strategical view-point.

Forest produce.

Forest products (available in the dravyavana) are divided into several groups (varga): strong timber (sāradāru), bamboo type (veṇu), of creeper class (vallī), fibrous plants (valka), plants yielding rope-making material (rajjubhanda), plants yielding leaves for writing material, plants yielding flowers productive of dyes, group of medical herbs (auṣadhavarga),

[1] *Cf satiṇakaṭṭhodakam* in Pali literature which perhaps conveys the same sense.

poisonous drugs and fruits (viṣavarga). A catalogue of flora is incorporated under each heading. Animal produce, minerals, charcoal, bran, ashes, menageries of beasts, firewood[1] and fodder (*kāṣṭhatṛṇa* may also mean wattle and thatch, *i.e.*, building material) also find enumeration (II. 17). With a view to procuring these varieties of forest produce one or several forests shall be specially reserved (II. 2). "The superintendent of forest produce (kupyādhyakṣa)[2] shall collect timber and other products of forests by employing those who guard productive forests (dravyavanapālaiḥ). He shall not only start productive works in forests but also fix adequate fines and compensations to be levied from those who cause any damage to productive forests except in calamities" (II. 17).

The pursuit of the Arthaśāstra's ideal would lead gradually to the conversion of forests—which were no man's property—into state monopolies. But this was attended with serious difficulties and the state lacked sufficient resource to master them. The aboriginal fowlers and hunters, who had no land to cultivate and no arts to pursue, had the forest as the source of their living.[3] The forest was also infested and sometimes practically dominated by robber-bands of whom the Jātaka narratives are so full. The civil authority was far from competent to deal with these freebooters and ensure security to caravans and travellers, not to speak of dispossessing them of their sylvan haunts (Jāt. I. 437). The very name of the redoubtable Angulimāla made the Magadha king—the conqueror of Kāśī and Vaiśālī—tremble in fear even in the presence of Buddha.

[1] In the Jātaka stories town and village folk are often seen gathering firewood from adjacent forests.

[2] In a Pallava grant of Śivaskandavarman there is reference to forest officers (āraṇādhikata) Ep. In. I. 1.

[3] A forester (vanacarako) collects wares produced in forest (araññe upajjanaka-bhaṇḍaṃ ādāya) and disposes in the city. Jāt. III. 150.

CHAPTER VII

Agricultural Products

Fertility of the soil. The cereals. Single, double or triple harvest. Fruits. Vegetables. Sugarcane. Fibrous crops. Miscellaneous.

The Greek writers burst into exuberant praise of the fertility of Indian soil[1] and favourable climatic condition and river-system while describing the multiple agricultural products of the land.

Greek testimony: fertility, food crops.

"In addition to cereals there grows throughout India much millet.....and much pulse of different sorts, and rice also, and what is called 'bosporum,' as well as many other plants useful for food, of which most grow spontaneously. The soil yields, moreover, not a few other edible products fit for the subsistence of animals, about which it would be tedious to write.....Since there is a double rainfall in the course of each year, one in the winter season, when the sowing of wheat takes place as in other countries, and the second at the time of the summer solstice which is the proper season for sowing rice and 'bosporum' as well as sesamum and millet——the inhabitants of India almost always gather in two harvests annually.....The fruits, moreover, of spontaneous growth, and the esculent roots which grow in marshy places and are of varied sweetness afford abundant sustenance for man. The fact is, almost all the plains in the country have a moisture which is alike genial whether it is derived from the rivers, or from the rains of the summer season which

[1] Some of them made an exception of the plains, *i.e.*, of Sind. The Greek encomium applies best to the Punjab valley and the Ganges doab.

are wont to fall every year at a stated period with surprising regularity" (Diod. II. 36).

The record of Greek writers is substantially corroborated by the testimony of indigenous works. Rice (sāli) was the staple food of the people and accordingly it was the chief of agricultural products (Str., XV. i. 53 f.; Pliny, XVIII. 13; Mil., p. 182 f.). A large variety of the grain is met with. The *kurumbhaka* is a sort of pedigree rice fit for king's fare (Mil. p. 251), and so also is the *kumudabhandikā* which is grown in Aparānta in one month (p. 292). Among the commoner and coarser varieties are found the *kaṅgu* (Mil., p. 267), red rice (rattasāli, Jāt., V. 37), *kalāmā* (J. S., II, p. 374), *kodrava* and *pulaka* which like garlic and onion cannot be offered in the *śrāddhas* (Mbh., XIII. 91, 38) and *sāmāka*, *nīvāra*, *cīnaka* and *taṇḍula* (Jāt., III. 142; V. 405; *syāmā* in Mbh., XII. 271, 4). Of the other food crops wheat (godhūma) and barley (yava) were the commonest. Pulses of the bean or phaseolus group were widely grown, *e.g.*, *mugga*, *māsa*, *vaṭaka* (Mil., p. 267), *kalāya* (Sut., III. 10; Arth., II. 24; Mbh., XIII. 111, 71), etc. There were different species like *khuddakarāja*, *mahārāja*, etc., under each head (Jāt., V. 37). Other kinds of pulse grown were *caṇa* (oat), *masura* (lentil), *śaivyā* (millet?) and *priyaṅgu* (panic. Arth., II. 24). The different kinds of oil-seeds cultivated for oil-extraction or sauce were sesamum (tila), mustard (sarsapa), linseed (atasi)—in order of generality, besides the castor oil seed which grew without care. A variety of other food crops are named which remain unidentified (nispāva, ālisanda, elamiccha. J. S., II, p. 374).

Cereals.

The Greek writers also affirm that India has a double rainfall and the Indians generally gather two harvests. Megasthenes witnesses the sowing of wheat in early winter rains and of rice, 'bosporum,' sesamum and millet in the summer solstice

Sowings and harvests.

(Diod. II, 36). Eratosthenes adds further to the winter crops, *viz.*, " wheat, barley, pulse and other esculent fruits unknown to us " (*cf.* Str., XV. i. 13).[1] The Arthaśāstra evinces not only thorough acquaintance with these two harvests (II. 24 ; V. 2) but even with a third. A king is instructed to march against his enemy in Mārgaśīrṣa (January) in order to destroy his rainy crops and autumnal handfuls (vāssikaṃ cāsya śasyaṃ haimanaṃ ca muṣṭim[2] upahantum), in Caitra (March) to destroy autumnal crops and vernal handfuls (vāsantikaṃ ca muṣṭim), and in Jyeṣṭhamūla (June) to kill vernal crops and rainy season handfuls (IX. 1). Thus there were three crops —one sown in rainy season and garnered before Māgha, another sown in autumn and garnered before Caitra and a third sown in spring and stored by Jyaiṣṭha.[3] Elsewhere the Arthaśāstra catalogues the crops of different seasons. Paddy, *kodruva*, sesamum, panic, *dāraka* and *varaka* are sown in the first season (pūrvavāpāḥ), *mudga*, *māsa* and *śaivya* are sown in the second season (madhyavāpāḥ), *kusumbha*, lentil, *kuluttha*, barley, wheat, *kalāya*, linseed and mustard are sown in the last season (paścādvāpāḥ, II. 24.)[4] The Milinda

[1] In a descriptive passage of the Rāmāyaṇa *śāli*, *godhūma* and *yava* are seen waiting for harvest with the advent of winter. (III. 16. 16 f.) But wheat and barley are winter or *rabi* crops sown in October and gathered at the end of May. Ploughing in autumn is seen in Sn. III. 155.

[2] *Muṣṭim*.—probably the handful of seed grains just sown and sprouting in the field. *Śasyaṃ* must be the crops reaped and garnered.

[3] *Cf.* Barley " ripened in summer being sown in winter, rice ripened in autuom being sown in the rains, while beans and sesamum ripened in winter and the cool season. " Tait. Sam , VII. 2.10.2.

[4] The *pūrvavāpāḥ* and the *paścādvāpāḥ* of the Arthaśāstra agree with our *kharif* and *rabi* crops respectively. Seasonally the *kharif* is the *vāssikam* and the *rabi* is the *haimanam* of the list in Bk. IX, Ch. 1.

It is stated in the Śāntiparva that during the idealised reign of Pṛthu, 17 kinds of crops were grown for the *yakṣas*, *rākṣasas* and *nāgas* (59. 124). It may be noted that the list of the Arthaśāstra also just amounts to 17 varieties of cereals. The Bṛ adāraṇyaka Upaniṣad which goes back much earlier enumerates only 10 varieties of cultivated (grāmya) grains, VI. 3. 13.

speaks as well of a third monsoon (pāvussako) besides the regular rains of late summer and early winter (p. 114). The three monsoons of course did not uniformly visit every part of the country each year; and whether a locality grew one or two or three crops depended on rainfall, climatic conditions and character of the soil.

In many places the food crops as well as edible fruits and vegetables grew spontaneously without tillage. To the Greek observers these phenomena seemed strange. The description of the forest scenary in the Epics (Rām. III. 16. 16 f; Mbh. III. 157. 44 ff, IX. 37. 58 ff.) and the Jātakas (V. 37 f, 405) frequently go at length over the crops and fruits growing in wild areas without human labour.

Fruits.

The forests yielded a large variety of edible fruits—mango, pomegranate, jack, banana, date, *vilva*, *kapittha*, rose-apple, jujube, mascot, cocoanut, palm,—these being the commonest and best. Vines, dates and palms were specially grown in the Punjab and the North-West Frontiers. Pāṇini speaks of Kapiśā as the premier vine-growing district of India (also Str. XV. i.8). Plantains as big as elephant's tusks and jack-fruits as big as water-jars are hyperboles to impress the abnormal growth of the fruits. Many of the arboreal products were unknown to the Greeks as they confessed. It is equally difficult for us to identify the various names found in descriptive texts and some of the fruits enumerated may have now gone into extinction (Mbh. III. 157. 44 ff; IX. 37. 58-61; Jāt. V. 405, VI. 527 f.; Āyāraṃgasutta II. i. 8. 1).

Green crops.

Cultivation of vegetables was a pursuit apart from the growing of cereals. "The esculent roots which grow in marshy places and are of varied sweetness," belong to this category. In a forest scene, convolvules, cucumber, pumpkin, gourd and other creepers are found in a luxuriant tangle (tipusa-elāḷuka-lābuka-kumbhaṇḍa vallivanāni, Jāt. V. 37). These green crops were

gathered by villagers from the forests and disposed of in the market-place (I. 412). Sometimes these were grown with care. Bodhisatta once earned his living as a kitchen-gardener by growing pot-herbs, pumpkins, gourds, cucumbers and other vegetables (I. 312). A false ascetic similarly cultivated vegetables, pot-herbs and runners in a king's park and vended them to dealers (IV. 445). Between the town and the countryside the green-grocers (paṇṇikaṃ, harīta-paṇṇikaṃ) had a good volume of business (II. 180, IV. 445; Cv. X. 10. 4 : Baudh. III. 2. 5f).

Sugar-cane.

Cultivation of sugar-cane and the growth of sugar-industry was a notable feature of Indian economy. Diodorus is struck by the great heat and abundant moisture which combine to "ripen the roots which grow in the marshes and especially those of the tall reeds" (II. 36). These "tall reeds" were probably grown in the rich alluvial lands, e.g., in the Ganges Doab where Arrian locates the river Oxymagis or Ikṣumatī which finds mention also in the Rāmāyaṇa (I. 70.3).[1] A grove of sugar-cane of the size of areca-nut tree (pūga-rukkhappamāṇaṃ ucchuvanaṃ) occurs in the forest scene of the Jātakas (V. 37).

Fibrous crops.

Among fibrous crops the chief was cotton—"the trees in which wool grows" (Eratosthenes) of which reference in the Jātakas is most common. It was richly grown as now in Surāṣṭra or Kathiawad (Peri. 41). Herodotus describes it as a wool, better than that of sheep, the fruit of trees growing wild in India. Jute and silk of different varieties were also cultivated with care the former being confined mainly to Bengal as now. From about the dawn of the Christian era the latter had a powerful competitor in Chinese fabrics. The growth of flax (khomaṃ)

[1] The Utd. Provs. are still the foremost cane-producing province in India. Statistical returns for 1903-4 show 1,700 sq. miles as against 1,000 in Bengal and 500 in the Punjab. Imperial Gazetteer, Vol. III. p. 39.

and hemp (sānaṃ) was also widely known (Dn. XXIII. 29; Mbh. XII. 86. 14; Str. XV. i. 13). Pliny attributes to India several edible spices and plant perfumes—spikenard, cinnamon, pepper, ginger, myrrh, etc. (XII. 7.)—we may add, sandal and others.[1] Narcotic drugs like opium, tobacco, etc., and tea and coffee are not found. The main forest products, besides fruits and crops and vegetables "of spontaneous growth," were gums, resins (sarjjarasam), drugs, dyes, lac, tumeric, cutch and myrobolans (āmalaka).[2] The cultivation of lac was particularly wide. Applied in varied industries, it provided maintenance for a large section of urban and rural population.

Vegetables and sowing grounds.

According to the Arthaśāstra sea-beaches and river-banks (lands beaten by the foam,—phena-ghātaḥ) are suitable for growing creeper-yields (valliphalam, *i.e.*, gourd, pumpkin, etc.), moist-land (parivāhantāḥ) for long pepper, grapes and sugar-cane, (pippalimṛdvīkā-ikṣuṇāṃ), the vicinity of wells for vegetables and roots (kūpa-paryyantāḥ śākamūlānāṃ), low grounds (hariṇīparyyantāḥ—the commentary explains as the dried bottom of pools) for green crops (haritakānāṃ). The marginal furrows between rows of crops (pālyolapānāṃ) are to be utilised for growing a variety of plants and herbs of perfumery, materia medica, etc. The manures known to the Arthaśāstra are dung and bones of cows, minute fishes and milk of *snuhi* (Euphorbia Antiquorum, II. 24).

Rotation of crops was known from very early times, by fallowing (Rv. VIII. 91. 5f.) and by sowing different crops alternately (Tait. Sam. V. i. 7.3) so that the soil is not impoverished (Yuktikalpataru, 41 f.).

[1] The location of these products and traffic upon them are treated in Bk. II. Ch. IV.

[2] See *supra*, Ch. VI.

CHAPTER VIII

Famine and Irrigation

Megasthenes on famine. Growth of famine. From prayer to action.

Preventive measures. Drought and flood,—irrigation. Double harvest. Wholesome laws of war. Live pests and their remedies. Blights.

Ameliorative measures. Agricultural loans, relief-works, famine insurance fund. King's responsibility, People's responsibility.

Comparison of ancient and modern famine problems.

Megasthenes on famine.

Diodorus, on the authority of Megasthenes describes India as a land of perennial plenty of which the secret lay in its admirable irrigation and river-system, a double rainfall, natural fertility of the soil and wholesome war-practices. "It is accordingly affirmed that famine has never visited India and that there has never been a general scarcity of the supply of nourishing food" (II. 36).

Without doubt the assertion is too categorical. It would now be unnecessary labour to call piles of evidence to run it down. Instead of taking the statement itself too literally, the sociologist and historian may turn with profit to the causes for plenty adduced by the foreign observer. Examined in the light of these and checked by the cumulative evidence of indigenous literature it boils down to the facts that in the last quarter of the 4th century B.C. there was no famine in Magadha worth the name[1] and that famine had not yet

[1] Reference has been made by a scholar to a Jaina Inscription in Śravaṇa Belagoḷa in Mysore which records a tradition that in the time of Candragupta Maurya a Jaina saint prophesied a 12 year calamity or famine in Ujjainī and that Candragupta in dismay abdicated and followed the saint (M. H. Gopal : *op. cit.*). Before giving credence to this piece of evidence, three points should be noted; (1) as pointed out by Fleet, 'vaiṣamya' should better be rendered as 'difficulty' than 'famine' (Ep. In. IV. 2),

grown into a major agrarian problem and its rigours did not approximate to contemporary conditions of Greece far less to existing conditions of India.

Famine in early Buddhist literature.

The earliest famine cry echoed in the Ṛg-veda reflects a patriarchal society with primitive methods of irrigation afflicted by periodical droughts but with an abundant reserve of flora and fauna to fall back upon. Instances furnished by the oldest Buddhist records are apparently parochial and of short duration. Famines (dubbhikkha) are referred to associated with cities and a 'heavy mortality' pithily appended, but the accounts are rare and brief. Famine-stricken people are pictured as taking the flesh of elephant, horse, dog and snake (Mv. VI. 23. 10ff.), animals which appear among the normal diet of other racial groups. Elsewhere the people of Vesāli are seen praying to the *bhūtas* for relief against drought and plague (Sut. II. i) and the description of the havoc occurs only in the commentator's introduction of centuries later. A common test of famine affliction is that people fed not the whole congregation as was customary but only select *bhikkhus* by ticket (Cv. VI. 21. 1). Etymologically the word 'dubbhikkha' (when even alms are scarce) does not connote heavy mortality and the early Pali accounts are a far cry from the harrowing details of later literature.

In the Jātakas.

The Jātakas show how famine stories were finding place in popular imagination and folk-lore. "For the space of three years he (Sakka) stopped rain from falling in the kingdom of Kāsi and the country became, as it were, scorched up, and no crops came to perfection" (V. 193 f.). At Kosala once there was a drought

(2) it is at least 800 years later than the time it professes to record, (3) it is coloured by priestly motive and the duration of the calamity,—recalling the conventional Epic figure, suggests it to have been a legendary version of a minor drought, if it is at all to be credited with any degree of accuracy.

so that crops withered and water gave out in tank and pool and "fishes and tortoises buried themselves in the mud"[1] (I. 331). Elsewhere the people of Kalinga are said to have taken to robbery under the stress of famine (VI. 487). Another Kāsi famine was so severe that even crows had to quit the land for men had no food to spare for them (II. 149). The intensity and proportions assumed may also be gauged from the reference that pestilence may follow in its wake (II. 367).

In the Epics.

A potential stage in the spread and intensification of famine was the destruction of the primeval forests, the great natural reservoirs of rain which "kept the fruit of the summer's rain till winter, while the light winter rains were treasured there in turn till the June monsoon came again."[1] The Epics offer glimpse of extensive schemes at work of colonisation and deforestation (Rām. II. 80; Mbh. I. 230 ff., IX. 41. 14, X.10.5) which in course of their progress extended the rigour, recurrence and area of scarcity to make it a calamity of first magnitude.

The *ākhyāna* portions of the Epics which generally represent later strata on the original themes show acquaintance with this problem in an aggravated form. A famine compelled the sage Viśvāmitra to abandon the land and his wife who was maintained by Mātanga then a hunter (Mbh. I. 71. 31). Droughts continued for many years at a stretch (vahuvārṣikī) extending up to ten or twelve, have found indelible impression in public memory. The Rāmāyaṇa alludes to a hermitess who created fruits and roots and caused the Jāhṇavī to flow when the earth was parched by a ten-year drought (daśavarṣān-yanāvṛṣṭyā-dagdhe loke niraṇaram, II. 117. 9 f.). The Kuru famine in Samvaraṇa's reign was the result of a twelve

[1] Washburn Hopkins, *op. cit.*, p. 281.

years' drought (anāvṛṣṭi-rdvādaśavārṣikī)[1] to which even animals and trees had to succumb and the capital looked like a city of ghosts (Mbh. I. 175. 38-46). Another twelve years' drought in the regions about river Saraswatī caused great affliction to the *ṛṣis* (IX. 51. 22 ff.). But the most doleful description of a twelve years' drought in the Epics runs as follows :

Not even dew-drops could be seen what to speak of clouds. Lakes, wells, and springs were dried up. The assemblies and charity foundations suspended their business. Sacrifices were in abeyance. Agriculture and cattle-rearing were given up. Markets and shops were abandoned. Stakes for binding sacrificial animals disappeared. Festivals died out. Everywhere heaps of bones were seen and cries of creatures heard. The cities were depopulated, hamlets burnt down. People fled from fear of one another or of robbers, weapons and kings. Places of worships were deserted. The aged were turned out of their houses. Kine, goats, sheep and buffaloes fought and died in large numbers. The Brāhmaṇas died without protection. Herbs and plants withered. The earth looked like trees in a crematorium. In that dreadful age when righteousness was at an end, men bereft of senses in hunger began to eat one another (vabhramuḥ kṣudhitā marttyāḥ khādamānāḥ parasparam,— XII. 141. 13 ff.).[2]

These figures and depictions, legendary as they are, conjure up protracted droughts and famines afflicting backward areas[3] and taking a heavy toll of life. The good old

[1] Seeing the context as it is, it is pedantic nonsense to suggest for the phrase the meaning "the drought that comes once in every twelve years."

[2] The concluding phrase may mean that the people took to plunder and rapine on the goods of others and not actually to cannibalism. Moreover as it is a 12 years' drought and at the transition from *tretā* to *dwāpar* a good margin may be left for priestly padagogy. There is a similar though less elaborate picture of a *vahuvārṣikī* drought coming as nemesis of *kaliyuga* and prelude to the cosmic deluge (III. 187. 65ff.).

[3] Like the arid plains of Sind and Rajputana. From Epic and Jātaka evidences, the Kuru land appears as notorious for famine.

days when there was no fear of hunger (kṣudhābhaya), when rains showered in due time and the produce was juicy (kālavarṣī ca parjanyaḥ śasyāni rasavanti ca) had gone for ever and remained only to be recalled with mournful yearning (Mbh. I. 68. 8-10).

In the Arthaśāstra and the Dharmaśāstras.

The Arthaśāstra catalogues fire, flood, pestilence, famine and *maraka* as providential calamities (daivapīḍaṇam, VIII. 4). It may also be observed that Kauṭilya's teacher who spoke from experience of an earlier regime thought pestilence as a graver catastrophe than famine, and he is controverted by his illustrious pupil to the effect that the evils of pestilence are localised and remediable, of famine countrywide (sarvadeśa-pīḍaṇam) and costly to life (prāṇināmajīvanāy 'eti). The legal injunction as well on the inviolability of *strīdhana* is relaxed in case of famine when the husband may consume it without obligation to refund (III. 2; Yāj. II. 143). Manu slackens the caste rules on food, etc., during famine and allows inferior callings to be pursued by higher orders (X. 97). In the law-codes famine or hunger became one of the recognised causes of slavery.

From prayer to action.

Thus with the clearance of forests, increase of population and rise of socio-economic partitions, famine became a major agrarian problem before the dawn of the Christian era: and princes and peoples turned after bitter travail from fast and prayer to mechanical devices against drought and flood. Though irrigation is not unknown in the Ṛg-veda (X. 68. 1; 99. 4; 25; 93. 13), its hymns dilate less on plucky and gallant struggle with nature than on prayers and magic directed to Indra the raingiver (III. 8; VIII. 118. 55; X. 42). Coming down to the Atharvan poet we find him also praying that the sun, lightning and excessive rain may not ruin his crop and devise charms for the same purpose (VII. 11, IV. 15, VI. 128). Passing on to the

earliest Buddhist literature, a gradual change in outlook is marked,——when states and peoples awaken to action. By careful diagnosis of the causes of famines and injury to crops, they begin to explore specifics and apply preventive and remedial measures instead of trusting over-much on the humour of the gods.

Irrigation : in Pali works and Epics.

The typical herald of famine in those days was drought, and its only redress is planned irrigation. In Buddha's time the *khetta*s of Magadha were intersected by a network of canals and ridges,—rectangular and curvilinear which marked the boundaries of arable plots[1] and which resembled a patchwork robe (civara) such as is prescribed by Buddha as a pattern for the order being the least covetable thing (Mv. VIII. 12. 1-2). Watering projects were undertaken by specialists who "conducted the water as they pleased" (udakaṃ hi nayanti nettikā, Dhp. 80, 145; Therag. 19, 877).[2] The operations were designed to regulate the inflow and outflow of water in the *khetta*s after the sowing (udakan atinetabbaṃ.....atinetvā ninnetabbaṃ, Cv. VII. 1. 2, *cf.* V. 17. 2). The canals and tanks were apparently dug by co-operative effort and for co-operative irrigation (Jāt. 1. 199 f, 336 : V. 412). In the Epics is manifest the sense of royal responsibility in the matter. "Are large and swelling lakes excavated all over thy kingdom at proper intervals without agriculture being in thy realm entirely

[1] Literally—"divided piecemeal (accibandhaṃ—Buddhaghosa's note 'caturassakedarakabaddhaṃ' is insufficient. A raywise division would not help distribution of water) and in rows (palibandhaṃ—Buddhaghosa has 'āyamato ca vittharato ca dīgha mariyādabandhaṃ') and by external ridges (mariyabandhaṃ—Buddhaghosa gives 'anatarantarāya mariyādāya mariyādabandhaṃ') and by cross boundaries (singhāṭakabandhaṃ—Buddhaghosa explains 'mariyādaṃ vinivijjhitvā gatatthāne singhāṭakabandhaṃ. Catukkasaṇṭhānanti attho')".

[2] "The *nettikās*, to judge from the commentary and from the general purport of the verse, are not simply water-carriers but builders of canals and aqueducts who force the water to go where it would not go by itself"—Maxmüller's note in the Dhammapada, S. B. E. series.

dependent on the showers of heaven?" So says Nārada to Yudhiṣṭhira in his discourse on administrative principles (kaccid rāṣṭre taṭāgāni pūrṇāni ca vṛhantī ca : bhagaśo viniviṣṭāni na kṛṣi-*r*devamātṛkā, Mbh. II. 5.77.). Rāma eulogises the land of Kośala as *adevamātṛkaḥ*, i.e., relying on irrigation and not on rainfall (Rām. II. 100. 45) and the Arthaśāstra uses the same epithet to describe the qualities of a good country (VI. 1). The advance made in irrigation may be imagined from the anecdote that when a teacher sent his pupil to stop a breach in the water-course of a certain field, the latter had to lie down to stop the flood and prevent vital injury to the crops (Mbh. I. 3). The position is confirmed by a parable the implication of which is that guards were employed at the vital spots of embankments, the rupture whereof would cause a great flood and damage.[1]

In the Arthaśāstra.

But the Jātakas and the Epics do not shed off the belief in the dispensation of Sakka or Indra who held the key to their garner from heaven. Lawbooks of post-Christian compilation encourage irrigation enterprises by kings and peoples with the lure of divine reward (Viṣ. XCI. 1 f, 9 ; Vāś, XVII. 8 ; *cf.* Vṛ. XIV. 23). The Arthaśāstra marks the evolution of a completely economic outlook. Except for a formal chanting of Vedic *mantra*s (II. 24), the author concentrates on various precautionary measures among which the largest attention is given to irrigation. In Buddha's time irrigation contrivances hardly excelled the old Vedic mechanisms ; water was drawn by means of the lever,[2] the bullock-team[3] or the wheel and axle[4] (Cv. V. 16. 2). The Arthaśāstra evinces a

[1] The king should be vigilant at danger-gates as at the dam of a large waterwork—āpaddāresu yuktaḥ syāj-jalaprasravaneṣviva, Mbh. XII. 120. 8.

[2] *tulaṃ*.

[3] The reading differs between 'karakaṭaka,' 'karakaṭanka' and 'karakaḍaka.' Buddhaghosa explains—'vuccati goṇe vā yojetvā hatthehī va gahetvā dīgha vaṭṭādīhi ākaḍḍhanayantaṃ.

[4] *Cakkavaṭṭakaṃ*, Buddhaghosa's note—'arahattaghaṭiyantaṃ' is not clear.

mature engineering skill. Great caution and experience are required of the cultivator in order to use properly its irrigation projects (II. 9). The offender who breaks the dam of a tank full of water (udakadhāranam setum bhindatah) shall be drowned in that very tank (IV. 11, Manu, IX. 279). Its irrigation methods by means of mechanical contrivances and air power are corroborated in a later Pallava plate[1] and in the Śukranītisāra (II. 320-24). The costly and perfected water-works necessitated the levy of a graduated water-rate (udaka-bhāga) and the testimony of the Śukranīti is concurrent (IV. ii. 227-29). But if such works are dug by peoples themselves, nothing should be charged until they realise profit twice the expenditure (Arth. III. 9; Śuk. IV. ii. 242-44). This provision laid down with slight variation by two outstanding treatises on political economy separated by at least nine hundred years is a most eloquent testimony to tradition and its influence on sociological development in ancient India.

In inscriptions.

Later epigraphic records supply copious illustrations of magnificent state enterprises. Instances in early inscriptions are few and far between. Still we do not altogether lack examples of private initiative for sinking wells and reservoirs under royal encouragement. The Ara inscription of Kaniṣka II alludes to "a well dug by Dasafota...for the welfare of all beings" on which the king threw a lac as a religious gift. An Andhra inscription of Sri Pulumāyi's reign (identified by Sukthankar with Pulumāyi II) speaks of a well sunk by a *gahapatika* (Ep. In. XIV. 7, 9). As a protagonist of irrigation schemes, the Mauryas do not stand on Aśoka's Edicts alone. They took a vigorous interest in the irrigation of the country-side. Megasthenes enumerates a class of officers distinguished from those entrusted with the administration of

[1] Ep. In. V. 8.

the city and of the military, who "superintend the rivers, measure the land, as is done in Egypt, and inspect the sluices by which water is let out from the main canals into their branches, so that everyone may have an equal supply of it" (Str. XV. i. 50). The Junagadh Rock Inscription of Rudradāman states how the Sudarśana lake excavated by the governor of Candragupta Maurya, restored and adorned with conduits by Asoka's governor, had subsequently an enormous breach and was dried up; and "when the people in their despair of having the dam rebuilt were loudly lamenting" (punaḥ setubandha-nairāsyāt hāhābhutasu prajāsu), the Śaka prince undertook the reconstruction in the teeth of ministerial opposition with a large outlay of capital and furnished the lake with a "natural dam, well-planned conduits, drains, and means to guard against foul matter."[1] The dimensions of the dam (420 cubits × 420 cubits × 75 cubits) give an idea of the vastness of the reservoir, and this was constructed by the Mauryas even in an outlying province. King Khāravela of Kalinga claims to have similarly strengthened the embankments of springs and lakes with a large expense,—in the famous inscription of Hathigumpha. And Rudradāman was not the solitary instance of his line in magnificent irrigation enterprises. A Sanchi inscription of the 3rd century A.D. records the excavation of a well by a Śaka chief (mahādaṇḍanāyaka) of perennial water-supply for all (salilaḥ sarvādhigamyaḥ sadā); and an inscription of the 2nd century in Kathiawad says that a general (senāpati) of the time of the Kṣatrapa Rudrasiṃha caused a well to be dug and embanked in the village of Rasopadra for the welfare and comfort of all living beings (sarvasatvānāṃ hita sukhārtham).[2]

[1] Ep. In. VIII. 6. Cf. Cv. V, 17.2 for similar contrivances.

[2] Ep. In. XVI. 16 f.

Irrigation and flood.

The irrigation schemes provided not only against drought but also against flood and excessive rainfall. Though flood figures in Vedic prayers, among the *daivapīḍanams* of the Arthaśāstra and among the *ītayaḥ* of the Mahābhārata (V. 69.17), as enumerated in the Purāṇas[1] as forerunner of famine, it is overshadowed by drought in all sorts of literature. In those days, when the river system had probably its natural flow and was not silted up as now, flood did not pay an annual visit with the monsoon. In the Jātakas there is a solitary case of grains being washed away in the rainy season but obviously the *khettas* were not flooded, for " the corns had just sprouted " (sassānaṃ gabbhagahaṇakālo jāto) and the villagers expected a fair harvest if they could hold on for two months (II. 135).[2]

In the introduction to the Mahāsupina Jātaka is narrated how at the sign of desired rain " men shall go forth to bank up the dykes with spade and basket in hand " (purisesu kuddālapiṭakahatthesu āḷiṃ bandhanatthāya nikkhantesu—I. 336). The implication is same in the Mahābhārata simile recalling the uselessness of closing the embankments after the water is let out (gatodake setubandho —VIII. 86.2). The Rāmāyaṇa allegorically refers to dykes releasing rain water (praṇālīva navodakam—II. 62.10). In the Milinda the *khettas* are seen provided with sluices (mātikā) to bring in water and embankments (mariyāda) to keep the water in (P. 416). The control over inflow and outflow of water appears in the irrigation process of the Vinaya passage quoted above. It seems that the ditches cut across the embankments raised around the plots, to be fed from tanks, wells and rivers in case of drought, to let out surplus water during excessive rainfall, and in times of rain

[1] These are six calamities of husbandry, *viz.*, drought, flood, locust, rat, bird and foreign invasion.

[2] Flood is referred to in Mv. III. 9. 4; Mn. 28; Mil. P. 277.

after prolonged drought the gaps in the embankments were sealed up to hold the water for the sun-burnt plots almost exactly as peasants do to-day.

But freaks of nature were not conquered by the mechanic's art. To illustrate the superiority of Providence over human effort, Kṛṣṇa cites to Arjuna the case of artificial watering schemes (āsekam) which cannot effectively counteract the havoc of drought. As a matter of fact, human ingenuity is only a mark of the precariousness of life. It develops though always beaten, with the growth of the problem which it is called upon to answer; and hence it is that the history of Kashmir between the 8th and 10th centuries simultaneously present the miraculous engineering feats of Śakuna and Suyya as well as the most harrowing tale of death from flood and famine bequeathed by our antiquity.[1]

Two harvests.

Of course the Indians gathered two harvests annually and this is not told by foreigners alone.[2] The Milinda even speaks of a third monsoon (pāvussaka ?) in the year besides the rainy season proper and the early winter-rains (p. 114). The Arthaśāstra recommends as a last resource for taxation the compulsory raising of a second crop by the cultivators (V. 2). After a meteorological dissertation it charts the crops in order of the quantity of rains required for each and instructs cultivation of scheduled crops with a forecast of the rains (prabhūtodakam alpodakam vā śasyam vāpayet, II. 24).

Belligerent laws.

The peculiarly Indian belligerent custom which removed another prolific source of famine, in deference to which hostile parties spared husbandmen and cultivated land as

[1] Rājataraṅgiṇī, V. 271-77.

[2] Diod. II, 36; Str. XV. i, 13. *Cf.* 'karmodakapramāṇena kedāram haimanam graiṣmikam vā śasyam sthāpayet.'—Arth. II, 24. ' pubbaṇṇa paraṇṇāni ca vapantā,' Jāt. I. 339.

inviolable[1] and "neither ravage an enemy's land with fire, nor cut down its trees," struck the Greek visitor,—for in the Hellenic world and in every land and in every age, famine has followed in the trail of a civil war or an international war of attrition. An international law, however, depends for its observance in the last resort on the good sense and enlightened self-interest of states. And it will be too much to think that in ancient India all the princes and statesmen were far-sighted enough or guided by humane principles. In fact, foreign invasion is included in the Purāṇic list among the enemies of crops and the Machiavellian author of the Arthaśāstra would not spare an enemy's corn-fields when strategical considerations urged such a measure (IX. 1). Destruction of enemy's crops (vīrudhaśchedana, śasyaghāta) is repeatedly enjoined also in the Śāntiparva as a maxim of *rājadharma* (59. 49; 69.38; 103.40; 120.10). But these exceptions must always be allowed in international code and the Greek testimony need not be totally dismissed solely on the score of the latter.[2] There are no historical instances of native forces who "devastate the land and ruin the crops of their enemies." In the Rāmāyaṇa is related how the *vānara* host marching to Laṃkā along the Eastern Ghats kept the cities and countryside (janapada) at arm's length out of fear for Rāma's terrible discipline (VI. 4.38). A Pāṇḍya inscription of the 9th century A.D. preserves an agreement entered into by local chieftains with the headman of a village or a group of villages, by which the former solemnly undertook when they and their retainers were fighting, to avoid inflicting any injury upon villages or their property and promised to pay compensation of 100

[1] Husbandmen are exempt from fighting and other public services. They are inviolable even in time of war; "being regarded as public benefactors are protected from all injury." Diod. II, 40: Str. XV. i. 39-41, 46-49.

[2] Washburn Hopkins, *op. cit.*, p. 247.

panams for any injury to a cultivator and 500 *panams* for the destruction of every village.[1]

Other factors occasionally aggravated scarcity or destroyed crops over a small area. Depredations of live pests called for serious attention. The Atharvaveda prepares spells for the extermination of vermins and insects (IV.50, 52). The Chāndogya Upaniṣad tells that locusts (mataci) blighted the face of the Kuru land by ruining its crops so that a sage had to move to a neighbouring country along with his wife and live on sour gruel (kulmāsa, I. 10. 1-3). Locusts (śalabhāḥ) swarming upon a corn-field appear in Epic similes (Rām. VII. 7.3; Mbh. VIII. 24.22). Gobhila prescribes sacrifices at molehills to the king of moles (ākhurāja,—Gṛhyasūtra, IV. 4.34). In the Arthaśāstra rats figure as a veritable nuisance for which no better remedy is devised than rearing of cats. Birds, beasts and thieves caused much annoyance and necessitated the employment of field-watches of which the Jātakas contain many examples. In one case a plot entrusted to a watchman is ravaged by parrots before his nose (IV. 277; *cf.* V. 336). The peasants are constantly preoccupied against the forays of deer-herds in harvest time (I. 143, 153, 154; IV. 262). The fowlers and hunters rendered a social service by the destruction of these pests and if Megasthenes' evidence is to be credited, they received in Maurya India a subsidy of grain from the king for the salutary job (Str. XV. i. 41). Corns might be destroyed by hailstorm (aśmavṛṣṭi, Rām. III. 34.39; karakavassaṃ, Mil. p. 308). A corn disease called *setaṭṭhikā*[2] (blight) sometimes spoiled rich rice-fields, as another called

Livepests, blights, over-population.

[1] Report on the Progress of Epigraphy in Southern India, 1914-15,—quoted in Havell's Aryan Rule in India, p. 221.

[2] A borer pest (pāṇako) which blights the head of paddy unable to get the sap, Commentary.

mañjeṭṭhikā exterminated sugar-canes (Cv. X. 1.6; An. IV. 279) and caused famine and mortality (dvihitikā setaṭṭhikā salākāvuttā, Vin. III. 6.15, 87; IV. 323; An. I. 159; Sn. IV. 323; dussassaṃ setaṭṭhikaṃ salākavuttam, An. I. 160). Over-population may have occasionally caused shortage of food for which the Arthaśāstra prescribes reclamation and colonisation of waste lands[1] (svadeśā-bhisyandavamanena, II. 1); but this factor bore no analogy to the present population problem which is accentuating unemployment, starvation and want all the year round.

Agricultural loan.

Proceeding from the prayers and spells of the Vedas and the fasts and moral vows of the Jātakas we discern in later literature the evolution of a medley of precautions and cures from a strenuous grapple with the food problem,—ranging from pettiest nostrums to the most effective relief-schemes. The passage quoted above from Nārada's admonitions continues: "If the food or seed-grains of the agriculturists fall short, do you grant with kindness loans unto them at the rate of 1 p.c.?"

Kaccinna bhaktaṃ vījañca karṣakasyāvasīdati
Pratyekañca[2] śataṃ vṛddhyā dadāsyṛṇam anugraham
Mbh. II. 5. 78.

In the Arthaśāstra agricultural loan advanced by the king is called *āpamityaka* and its accounts are supervised by the Treasurer (II. 15). The king shall also distribute seeds and provisions gratuitously in famine (vījabhaktopagraham)[3] or he may inaugurate relief works in forts and

[1] The Śāntiparva exhibits the recognition of the reclamation and fertilisation of waste land as among the highest duties of a king (Nīlakaṇṭha explains '*bhūsaṃskāram*' as '*bhuraḥ sampanna śasyatvam.*' 65.2).

[2] Variant *pādakañca*. This would make the interest 25 p.c. instead of 1 p.c. But according to the commentator, the former is the annual rate, the latter the monthly rate.

[3] *Cf.* Jātaka IV. 132, where a king distributes food money (bhattavetanam) in the city "without least neglect to any body."

set up irrigation schemes. Doles may be given from either his own reserve fund, or from the amassed store of the rich who must be mercilessly taxed (karṣaṇam) and despoiled (vamanam, IV. 3). This idea of progressive taxation of higher income and expropriation of hoarded wealth in a national crisis, so curtly asserted in the Arthaśāstra, does not stand in isolation in Indian political economy. The administrative theory embodied in the oft-quoted dictum that the king is the devourer of the rich (Mbh. III. 2. 39; Rām. I. 53. 9f; Jāt. III. 302) when applied by a judicious ruler could take no other form. This communistic doctrine, although dangerous in a rapacious or irresponsible hand, nevertheless conduced to partial equalisation of wealth and modification of hardship by distributing it over the whole society.

Loans of provision and gratuitous relief were distributed by royal, private or corporate endeavour. A fragmentary and mutilated *terra cotta* inscription found in Mahāsthān records the order of a Maurya prince to the Mahāmātra of Pundranagara directing the latter to help famine-striken *samvaṃgiyas* with loans in cash (gaṇḍaka) and corn (dhānya) which they are to repay in better days to the royal treasury.[1] The Sohgaura Plate, supposed to be an early Maurya document by K. P. Jayaswal and by Fleet records an order of the Mahāmātras of Śrāvasti to the effect that certain store-houses (koṭhagalāni) at Triveṇī, Mathurā, Cañcu, Modāma and Bhadra are to be opened to cultivators in seasons of distress.[2] In the Gahapati Jātaka, the villagers obtained an ox for loan from the *bhojaka* on condition of paying in kind from the next harvest (II. 135). In the Kalpadruma Avadāna, the rich men of Śrāvasti collectively

[1] Ep. In. XXI. 14. This sense however is gathered by D. R. Bhandarkar with some diffidence. B. M. Barua draws out a completely different meaning, Indian Historical Quarterly, Vol. XX.

[2] Ep. In. XXII. 1.

undertook to feed the famine-stricken. The charity foundations of the pious rich, royal and private, frequently described in the Jātaka stories and the inscriptions had a pressing job for amelioration.

A healthy policy of embargo on food grains as an emergent measure is indicated by Medhātithi who cites the instance of crops during famine to illustrate Manu's rule against the exportation of articles forbidden by the state to be taken out of the country (VIII. 399). As a last resort the Arthaśāstra suggests the migration of the population *en masse* to a land of rich harvest or where water is available (IV. 3; VII. 4; XIII. 1).

Agricultural policy : famine insurance.

The surest guarantee against famine inculcated by every shade of thought upon rulers as the first lesson of statecraft, was an enlightened revenue policy. The protection that was the king's duty in return for the *ṣaḍbhāga* was not only protection of life and property, but ensuring the harvest and insuring against famine. In Rāma's administrative discourse to Bharata it is one of the basic principles of statesmanship to subsidise cultivators for their prosperity (teṣāṃ guptipanhāraiḥ kaccit te bharaṇaṃ kṛtam, Rām. II. 100. 48). In the Dīghanikāya a chaplain advises a king that the proper approach towards diminution of crime is not taxation and punishment but subsidising cattle-rearers and farmers with fodder and seed-corn (V. 11). The forts that are found in the Epics stocked with wealth and all sorts of food grains served a double purpose of defence of the realm against mortals and against gods. A passage in the Nītivākyāmṛtam of Somadevasūri enjoins by implication that the king should accumulate grain as a safeguard against famine (VIII. 6) and the Arthaśāstra explicitly directs the king to earmark half the store collected by him for an insurance fund against public calamities (arddham āpadartham janapadānāṃ sthāpayet, II. 15.).

King's responsibility in famine

An interesting sidelight on the prevailing mode of ventilating grievances and the idea of royal responsibility and attitude during famine is thrown by certain typical passages of the Jātaka stories. When the crops fail from drought, the victims flock to the capital, gather in the palace courtyard and make a row or wait in deputation. The king appears on the balcony and is accosted for drought. He gives sympathetic hearing to the spokesmen, dismisses the hunger-marchers with assurances and observes fasts and the moral code which however do not avail. Although the stories end in inevitable anticlimax,—practising of *kuru* piety, breaking of an ascetic's virtue or a white elephant ultimately causing rainfall (II. 367ff, V. 193f, VI. 487), they testify to an exalted conception of trusteeship which was less vaunted but more observed than India's present masters. A king agrees to lend his daughter for the breaking of an ascetic's virtue and bringing rains. "Thus for the protection of his realm did he talk with his daughter even of such things as should not be uttered and she readily acceded 'very well'."

Evaṃ sā dhītara saddhim akathetabbam pi rāṭṭhaparipālanaṃ nissāya kathesi. Sā'pi 'sādhū' 'ti sampaṭicchi.

The origin of the idea of king's responsibility is in the conception that rain is produced by sacrifice (Yajñād bhavati parjanyo, Mbh. VI. 27. 14). The king protects sacrifices, sacrifices please gods and the gods give rain (I. 41. 29f, VII. 55. 42). Hence there are no rains and no harvests in a kingdom without king (I.105.44; Rām.II. 67. 9) or with an absentee king (Mbh. I. 175. 38ff) or of which the king violates the code of piety (III. 110) even to the extent of delivering a refugee to a foe (V. 12.19). It is however not always merely sacrifices and abstract piety but good administration in the concrete manifested in benevolent and non-partisan administration, protection from internal pests and foreign

foes, irrigation works and judicious revenue policy that act as safety valve against famine and its precursors (II. 13. 12, 33.5). This realistic notion is implied in the grouping of famine and pestilence with robbers who make favourite haunts of misgoverned kingdoms (VII. 95.25). At any rate the association of sovereign responsibility with public calamities had a firm and ubiquitous hold on popular mind [1] so that it was high tribute to a king's administrative ability and a token of divine favour on him to affirm that in his reign there was no famine.

Denunciation of unrighteous rule in sacred books, Brāhmaṇical and Buddhist, was no doubt a priestly fabrication intended to hold the contumacy of kings under a threat to good government. But since unjust taxation is the most notorious violation of the divine law, the theory no longer remains a clerical myth but becomes an economic fact. When Buddha prophesied famine as nemesis of unrighteous rule, he emphasised that kings would be "crushing their subjects like sugar-canes in a mill" (ucchuyante ucchugaṇṭhikā viya manusse pīḷentā), a choice and oft-quoted imagery (Jāt. I. 339, II. 240). Instances are there of rulers who impoverished their subjects with fleecing demands. To guard against this danger, economists and law-givers of all schools and denominations standardised the land revenue at $\frac{1}{6}$ of the produce (or profit?) to be maintained with some elasticity considering the taxable capacity of the tenants and the needs of the state. The author of the Arthaśāstra in his unscrupulous search for means to fill the royal exchequer, does not forget to warn emphatically against collecting a tax which is not ripe, *i.e.*, which shall spoil the very source (V. 2), and to prescribe remissions (parihāram) of cultivators' taxes in emergency (II. 1). This legal injunction was

[1] A much later Tamil piece detailing the onerous obligations of sovereignty, proclaims that the king "is to blame if the rains fail." See S. Krishnaswami Aiyengar, Ancient India, p. 69.

meant to be observed during drought (Mbh. XIII. 61.25). The fact that they paid only a tax on produce or profit and no rent on land eliminated a fruitful source of oppression and enabled them to tide over a crisis unencumbered by an additional burden from above.

Peoples' responsibility.

If the king had to maintain a high standard of personal conduct to keep off famine, that does not mean that the people had a free licence. The gods might suspend the rains owing to the unrighteousness of the people (An. I. 160; II. 75) or for the negligence of the Brāhmaṇical rites (Ch. Dhp. p. 111). On the obverse pious men may call a downpour from the sky by their observances (Mil. p. 120). Famine could never visit Śākadwīpa because people were virtuous there (Mbh. VI. 11. 10f). The piety of Arundhatī dispelled a terrible twelve years' drought (IX. 48. 40).

Ancient and modern famine.

Thus the ancients suffered under and fought gamely against the arch-peril of food-crops. Amidst the diversity of time and local conditions, famine conditions were broadly the same due to the somewhat uniform land revenue system and administrative maxims, and to the absence of communication, large scale industrialisation and overpopulation. The frequency and rigour of famine, despite the harrowing details with which they are at times enlivened—these must be read with proper discount for popular and poetical love for magnifying memorable incidents,—differed materially from modern conditions.[1] The severe outbreaks of scarcity in ancient

[1] For opposite view see Washburn Hopkins, *op. cit.*

After drawing up a laborious list of famines from ancient literature beginning from Vedic texts, a scholar derives that 'famines were far more frequent and destructive in former centuries than at present' (p. 242). To appraise the *dvādaśavārṣikī* and *vahuvārṣikī* famines of the Epics at their face value and give them the credit of sober historical narratives is simply preposterous. It might be noted that even 100 years' droughts figure in Indian literature (Bhāgavatam, 7. 23.22). See P. N. Ramaswami, Early History of Indian Famines, in *Indian Antiquary*, Vol. LII.

times were incorporated as object lesson in tradition and folklore because they were exemplary visitations from Heaven coming at long intervals to punish the accumulated vice of princes and peoples; while even fifty years from now, it was ascertained by examination extending over 110 years that an extreme famine—be it noted, of such mortality as was perhaps totally unknown in ancient India,—in one Indian province or locality may be expected once in 50 years and that drought, followed by acute distress, comes by routine once in 11 or 12 years.[1] As for the alertness of state and people for redress the pet phrase of 'oriental stoicism' is more appropriate to modern times than to remote antiquity. Excavation of irrigation canals under corporate initiative like the 'Anderson Khāl' of Brahmanbaria was not unique but habitual affair. The ideas of remission of taxes and advance of loans which did not dawn until 1880 to the Indian Government,[2] throve with Indo-Aryan economists earlier than the Christian era; and so did the scheme of famine insurance fund which was taken up by our rulers as late as about the close of the last century,[3] and then left again as a dead letter.

So in a way, Megasthenes stands vindicated against the charge of mendacity. Famine as we know it, was unknown to our early ancestors, famine nurtured in our country by over-assessment of holdings, costly administration, over-population, insufficient irrigation work and the vagaries of a river system which stand in need of control by means of canals and embankments.[4] But even these do not account for the dislocation of the old agrarian system and the ruin of the cultivator. Thanks to the modern tenancy legislations

[1] Madras Administration Report, 1885. Vol. II, pp. 470 f.
[2] Report of Indian Famine Commission, 1880.
[3] Report of Indian Famine Commission, 1900.
[4] R. C. Dutta : Famine and Land Assessment in India.

the ryot has lost three protective girdles which he enjoyed in the past,—the laws and customs that prevented alienation of holdings; assessment at a share of the produce or profit[1] of cultivation whether in crops or cash which implies *ipso facto* no crop no tax; and limitations to usury imposed by tradition and sacred law. Obliged to pay the rent and fixed tax in money whatever be the state of harvest and price of crops he is easily drawn into the coils of the money-lender and sells or mortgages his land whenever the crops fail. This process has led to progressive pauperisation of the ryot, sucked his staying power and is rapidly reducing him to a serf bound down for wage or share of produce in his own patrimony alienated to his landlord or moneylender and leaves him under the grip of perennial famine.

[1] See *infra*, pp. 119 ff.

CHAPTER IX

LAND REVENUE AND ALLIED CHARGES

The social contract. Canons of taxation,—certainty; convenience.

King's share—*bhāga*. Of produce or of profit? Cadastral survey. Assessment in cash or in grains?

Additional revenues—surtaxes, *kara*, corvée, benevolences. Royal domains. Cattle-tax. Royalties. Miscellaneous imposts. Revenue-free lands. Transfer of revenue Jāigir system? Remission and reduction of revenue.

Weaknesses of the revenue system. Emergency laws. Exemption to Brāhmaṇas.

Working of the revenue system. Moderate and oppressive taxation.

Rôle of the state in rural economy. The budget. Heads of expenditure—public works, poor law, famine relief, law and order, sacrifices, bounties. Divergence between theory and practice in the revenue system.

The origin of land revenue is as old as the origin of state. Even in the early Vedic period, the Indo-Aryan polity was sufficiently organised to collect regular taxes called *bali* which apparently consisted of contributions from agricultural produce and from the stock of cattle paid by the villagers at certain specific rates.[1] In post-Vedic works we have for the first time classified lists of the sources of king's revenue together with the customary rates of each. They, moreover, approach the modern European thought in consciously formulating general rules and maxims of taxation as well as the principles of application of special taxes. The fundamental concept of taxation seen in early Dharmasūtras is that the king is entitled to a tax for the service of protection.[2] This theory is based upon a corresponding conception of contract between the ruler and his subjects. The theory of social contract as given in Manu and the Śāntiparva (67.23ff)

The social contract

[1] Ghoshal: Hindu Revenue System, pp. 9f.

[2] Gaut. X. 27; I. 10. 18. 1; Vāś. I. 42; Viṣ. III. 28.

allows the king 1/50 of animals and metals and 1/10 of grain with the fairest maiden, military service and 1/4 of merit. Although the Arthaśāstra considerably raises the amount as is its wont—*viz.*, to 1/6 of grains and 1/10 of merchandise, certain features are common in this story of the traditional origin of kingship. First, the people submit to a voluntary or self-imposed tax, the rate being fixed by themselves. Secondly, the taxes are given to the chosen king as wages for ensuring protection and prosperity. Thirdly, the king is answerable to subjects for violating the principles of just punishments and taxes.

The law-books do not show any further evolution of public control of raising and appropriation of money. But they provide moral sanctions. The writers on law and polity countenanced no uncertainty in the assessment of king's dues and left no room for arbitrary collection at least in normal times. Even what seems to be most high-handed and oppressive from modern standpoint was sought to be justified by reference to authorities who defined every tax with laborious precision. Every tax-payer knows what he has to pay and no ruler can impose anything beyond only lawful taxes. Over-collection by officers is not connived at. "Whoever doubles the revenue eats into the vitality of the country" and punishment is enjoined for the traducer (Arth. II. 9; Śuk. i. 617f). Kinds and assessments of taxes and appropriation of money were considered to be fixed for ever by the Divine Law violation of which was anathema and meant grave public discontent.

Canons of taxation: certainty.

Thus the early Indian taxation system was not stranger to the canon of certainty. It was equally alive to the other modern canon of taxation, *viz.*, convenience. A set of rules formulated in Manu (VII. 128, 139, 170f), the Śāntiparva (87. 17f) and the Arthaśāstra (II. 1) embodies the recognition that state

Convenience

revenues ultimately depend on the production of wealth by individuals so that whatever injures the latter is bound to react on the former, that while taxation subserves the essential needs of the state, it involves a diminution of the peoples' wealth so that the statesman's task is to reconcile the needs of the state with the interests of the subjects. This point is cleared up by the same authorities by means of a host of analogies from nature (Arth. V. 2; Manu, VII. 128f; Śp. 71.16ff; 87.20ff; 88.4ff). The king should resemble the leech which sucks blood gently without causing pain to the victim; the florist who plucks flowers but leaves more of them in the garden for future supply and not the coal-merchant who burns all trees outright; the bee which does not sip all the honey of the flower at a time; the cow-herd who does not pierce the udder of the cow with the hope of a capital milk-supply; the mouse which nibbles the heels of a sleeping man with its sharp teeth so gradually that the wound is imperceptible. The essence of these metaphors is that taxation should not sap the productive source but leave a decent producer's surplus, that taxes should be levied or increased by easy instalments and not in a lump or by jumps, and that these should be raised at a time and place convenient for the subjects,—all these as much on economic as on political grounds.

The main item of land revenue is the customary share of agricultural income indifferently termed *bhāga* or *bali* levied on ordinary revenue-paying lands. Manu fixes it between 1/6, 1/8 or 1/12 according to the quality of the soil (VII. 130).[1] Gautama raises the lower limit to 1/10 (X. 24). Śukra's schedule gives 1/6, 1/4, 1/3 and 1/2 acccording to the nature of soil, rainfall and irrigation facilities (IV. ii. 227-30). It is noticeable that there is a gradual rise from the moderate

[1] The scale cannot have been meant for the varying needs of the state for which a different schedule is given elsewhere (X. 118). The scholiast's note on Gautama X. 24 removes all doubt on the point.

traditional rate of 1/10. The Arthaśāstra in its characteristic fashion substitutes 1/6 for the customary 1/10 in the story of the beginning of kingship (I. 13). This rate had a wide currency and a firm hold on legal mind, so much so that the king was addressed with the familiar sobriquet '*ṣaḍbhāgin*' (Arth. II. 15; Baudh. I. 10. 18. 1; Vāś. I. 42; Viṣ. III. 22. Pārāsara. II. 14; Nār. XVIII. 48; Śp. 69.25; 71.10). But elsewhere the Arthaśāstra significantly recommends upland (sthala) and lowland (kedāra) to be entered separately in the field-register of the *gopa* and enjoins a threefold gradation of villages after the manner of Gautama and Manu upon the revenue officer (samāhartṛ, II. 35; *cf.* Śuk. IV. ii. 220f). This together with a similar reference in Book V, chapter 2, indicates that differential rates for different classes of soils are intended. The Agnipurāṇa again mentions rates between 1/6 and 1/8 for different kinds of paddy crops (223.26f). Thus the assessment varied according to the quality of land and the nature of the crop: the *ṣaḍbhāga* was only a traditional or average rate, not the fixed or universal rate, in this respect resembling somewhat the 'tithe' in European fiscal terminology.

This fairly high rate of 1/6 or 16·6 p.c. has been adversely compared to the present rate which is estimated between 7 to 10 p.c.;[1] and the view that assessment of holdings falls much lighter in British than in ancient India has been upheld not only by Anglophils and modern administrators but also by scholars in oriental studies[2] But was taxation really fixed at as high an average as 16·6 p.c. in ancient India? It has been scarcely supposed that while in British India the rate of 7-10 p.c. is assessed on gross produce, the old average rate of 16·6 p.c. was most probably levied on profit. Kullūka explains Manu VII. 130 in the sense

Share of produce or of profit?

[1] Imperial Gazetteer, IV. p. 217.

[2] Washburn Hopkins: *op. cit.*; M. H. Gopal: *op. cit.*

that the share is to be estimated on the increase upon the capital employed (mūlyādhikyoḥ mūlyādadhikayoḥ). Medhātithi and Govindarāja are concurrent and Nandana is even more explicit. "In every case the share is on profit made after deducting expenses (sarvatra vyayavyatirikta-lābhaviṣayā bhāgakalpanā)." [1] In the Śāntiparva it is enjoined that taxes should be fixed not on gross income but after examination of incomes and expenditure (120.9).

An analysis of Śukra's maxims corroborates the presumption. As the first postulate of good agriculture it is stated that "that agriculture is successful which yields a profit twice the expenditure (including government demand—rajabhāgādivyayatā) after duly considering the variations in actual produce from good, middling or bad lands. Anything less than that inflicts suffering on the people" (IV. ii. 2).

Thus 1/8 of the produce must cover incidental expenses and land tax and hence the land tax must be much less than 1/2, 1/3 or 1/4 of gross yield.

As a rider to this may be read the injunction that "the king should demand no taxes from those people who undertake to dig canals, tanks, wells, etc., or bring under cultivation new lands until they realise a profit twice the expenditure" (IV. ii. 242-44; *cf.* Arth. III. 9).

Thus the tax must be fixed on profit and this profit must be at least twice the expenditure in case of lands under new enterprise.

Baden Powell observes a "primeval simplicity" in ancient land revenue assessment. "Being a share of the gross produce there was no question of any complicated calculation of the cultivator's profit or the cost of production, nor about the relative value of land, or the productiveness of the season. Whatever the land produced, little or much was heaped on

[1] Haradatta, however, understands Gautama X. 24 as implying the share of gross produce.

the threshing floor and the king's officer superintended its division in kind."[1]

But this primitive simplicity is not traced in the systems of Manu, the Arthaśāstra and the Śukranīti. They all presuppose a careful gradation of land, survey and measurement, calculation of outturn as well as expenses per unit of land and so forth. On the other hand they never testify to a system of sharing crop at the threshing floor known as *batai*.

Cadastral survey

The periodical survey and measurement of land of which we have concrete evidences in the Pali works[2] and Megasthenes (Str. XV. i. 50) is a direct challenge to the notion of primitive simplicity of sharing gross produce. The most obvious explanation of this cadastral survey (besides the necessity of keeping a record and settlement of boundary disputes) is this. Cultivators might extend their plots by acquisition of new land. In that case the cost of production per unit of land would be less and profit per unit greater. Accordingly the state would have a higher share. And so *vice versa*. The state would after the survey, calculate possible expenses in each plot and after the harvest, collect the share duly deducting for the estimated expenditure on behalf of the cultivator. The stories of the Kurudhamma Jātaka (II. 376ff) fully satisfy this explanation. The pious hesitation of the surveyor that the king or the farmer will be loser if the stick of the measuring rope is pitched on this or that side of a crab-hole situated just at the boundary of a field reflects that the king's share was guided by the measurement. In other words measurement was followed by a revision of assessment obviously on a calculation of the

1 Land Revenue in Bengal, p 35.

2 King's officers come to a village to take a survey of fields,—khettappamāṇa gahaṇāṭṭhāya, Jāt IV. 169. Sāmantasaṃvohāre or surveyers (Aṅ. III. 76),—rajjudaṇḍehi bhūmippamāṇe gāhake saṃvohāre (Com.), *i.e.*, those who hold the office of measuring the ground with rope and rod,

expenses—since there seems to have been no graduated tax on property. The *seṭṭhi* who repents plucking a handful of corn from his field when he had still to pay the king's *bhāga*, apparently indicates that the land revenue was realised by the method of appraisement of the standing crops which is now known as *kānkut*. The measurement of the king's share of the crops at the door of the royal granary under the supervision of the *doṇamāpaka* does not conflict with the theory above, since the sharing may have been done after leaving aside the measured amount to meet the expenses of the tax-payer.

The simple method of division of produce would preclude all complications about cost of production or relative value of land: whereas we find in the Arthaśāstra and the Smṛtis not only stringent rules about leaving a good producer's surplus but also a classification of soil on the basis of fertility and differential assessment on the same. The fact of the matter is that the king's share did not necessarily mean a fixed share. It was determined by considerations of fertility of the soil and by the needs of the state or of the cultivator. When the state was in difficulty it would go up, when the cultivator was in want, it would come down, the rebate being reduced to complete remission in extreme cases. The system of measurement and survey and differentiation of soil according to productivity also indicates that land revenue assessment was not permanent but revised at intervals although a constant revision was not necessary as at present when the land revenue being assessed and paid in fixed cash the increase or decrease in the yield of a plot is not immediately reflected by a corresponding increase or decrease of the state's revenue.

Payment in cash or in grain?

The complex revenue system of the Smṛtis and of the Arthaśāstra has even led a scholar to advance the drastic theory that the state took the land revenue in money and not

in crops.[1] The arguments given are: (1) the revenue of an ordinary village is stated to be 1,000 silver *karṣa*s in the Śukranīti, (2) measurement and grading of land is not required in division of produce, (3) the system of taking share on net profits is opposed to the division of produce, (4) remission of taxes is also an institution of money economy and not of the division of produce.

As for the first point, it is seen in earlier books than the Śukranīti that an advanced conception of government required the keeping of an elaborate record of the state's estimated income under various heads. This necessitated computation of the consolidated income in terms of cash in each revenue area. In the Jātaka tales villages are often described as *satasahassuṭṭhānika, i.e.*, yielding a revenue of 100,000 a year. But this very literature definitely shows that the king took his share in grains. The second and third contentions are already answered. As regards the fourth, there is no reason why remission of taxes should be inconsistent with division of produce. Only in the case of total failure of crops the question would arise. But we have no such instances of relief in dire famine. Remission in famine meant remission during scarcity or bad harvest (Arth. II. 1; Mbh. XIII. 61. 25) presumably when the producer had a bare surplus over expenditure.

On the other hand there are direct instances in the Jātakas and the Epics of payment in grains. In the Śānti-parva the king is directed to enrich his treasury with swollen corn (koṣṭhāgārañca te nityaṃ sphītairdhānyaiḥ susaṃvṛtam, 119. 17). As will be presently seen, even in the Smṛtis there are categorical references to revenue levied in grains from agricultural land.

[1] Balkrishna: Hindu Taxation System, Indian Journal of Economics, Vol. VIII.

The *bhāga* is the main item of land revenue, the regular, customary and legitimate share of the king on agricultural produce in ordinary revenue-paying land. But the king frequently claimed additional imposts in the nature of *ābwābs* indicated in most of our literature by the generic term *bali*. Shamasastri, Vincent Smith[1] and F. W. Thomas[2] understand *bali* to be a religious cess. In the Arthaśāstra it appears as a particular tax in a long list under the head of '*rāṣṭra*' or countrypart (II. 6, 15) and is explained by Bhaṭṭaswāmī as a local tax of 1/10 or 1/20 above the regular 1/6. Five of the commentators on Manu VIII. 307 explain it as the regular 1/6 of grain share and only Nandana—the sixth, regards it as indicating all taxes—normal and additional. In the wider sense '*bali*' appears in the Vedas[3] and sometimes in the Jātakas (II. 17 ; III. 9 ; IV. 109, 169). Elsewhere in the Jātakas *bali* is a term for only additional and oppressive cesses (I. 199, 339 ; V. 98).[4] In the Milinda *bali* is referred to as an emergency tax from which the four chief ministers (mahāmattā) are free (p. 146). In the Rummindei Pillar Inscription of Aśoka it is used exclusively in this narrow sense. The text goes,—'Lummini gāme ubalike kate aṭhabhāgiye ca'— 'made the village Lummini free of *bali* and paying an eighth share.' The *bali* or additional tax was remitted and the regular 1/6 or 1/4 as it might have been, reduced to 1/8.

Additional taxes: *bali*.

Thus under the term '*bali*' were grouped certain irregular demands of the king on agricultural land. In fact, the evolution of the Indian taxation system is a reflex of the growth of king's powers and functions and of his consequent

[1] Inscriptions of Aśoka—Rummindei P. In

[2] J. R. A. S., 1909, p 467.

[3] Macdonell and Keith : Vedic Index II, 62

[4] The phrase 'bali-pīḷitā' is instructive. There is no reference to oppression in connection with the *bhāga* or grain-share.

demands on the people's purse. In the story of the traditional origin of kingship we hear only a fixed share in grain and animals. This accords with the old Vedic custom. Next comes a grading of land and differential assessment together with the king's claim to certain irregular imposts. Of both of these there is positive evidence in the Maurya period. The materials gleaned from the Śāstras and the Jātakas may be verified by comparision with these and other objective data.

Megasthenes on land survey.

Megasthenes observes a class of country officers (agronomoi) who "superintend the rivers, measure the land as is done in Egypt and inspect the sluices, by which water is let out from the main channels into their branches" and who "collect the taxes" (Str. XV. i. 50). The purport of the phrase "as is done in Egypt" is thus elucidated by Strabo:

"This exact and minute sub-division is necessitated by the constant disturbance of boundaries caused by the Nile in its inundations in which it adds (to some) and takes away (from others), alters shapes and destroys the other signs by which the property of one can be distinguished from that of another, so that it (the land) has to be remeasured repeatedly."

Thus it is most likely that the Maurya officers mentioned above were concerned with the measurement and supervision of alluvial deposits for revenue purposes as the lands bordering the great Bengal rivers have frequently to be surveyed now-a-days for revenue assessment and for the settlement of boundary disputes. If Bühler's identification of the Rājukas[1]

[1] *Cf.* Rājuka and *rajju*—the survey-tax of the Arthaśāstra. Hultzsch makes the following illuminating observation on the expansion of the functions of the original surveyor to those of a civil official of the rank of Aśoka's Rājuka.

"The Rājuka originally 'held the rope' in order to measure the fields of the ryots and to assess the land tax. Thus the word became the designation of a revenue settlement officer, just as in British India the chief administrative officer of a district is still called 'collector' because his special duty is the collection of revenue." Corpus Inscriptionum Indicarum, Vol. I, p. xli.

of Aśoka with the *rajjuka* or *rajjugāhaka amacca*[1] of the Jātaka stories be correct and if both may be aligned with the *agronomoi* of Megasthenes, it would point not only to an organised system of land survey as hinted in the Arthaśāstra but also a realisation of the great schemes of the Arthaśāstra to keep a record like the Domesday Book of William the Conqueror.

On *bhāga* and *bali*.

As for additional cesses besides the fixed share the testimony of the Rummindei Edict is supported by Megasthenes' account. Apropos the cultivators, Diodorus says that besides the land tribute they pay 1/4 of the produce to the king (II. 40). Thus there are two taxes, one the regular *bhāga* and another the irregular *bali* which is fixed at 1/4.[2]

The next stage of progress in the land revenue system and royal pretension is seen in the Junagadh Rock Inscription

[1] Much earlier than the time when the Jātaka *gātha* and commentary were composed, the original surveyor had acquired the position of the 'driver of the chariot of state.' The *rajjugāhaka amacca* is the holder of the reins of government as well as holder of the rope of survey.

[2] M. H. Gopal who takes it as axiomatic that the Arthaśāstra is not only a contemporary work with Megasthenes, but that it details the actual conditions of Maurya administration, makes a hypothetical statement that the extra 1/4 seems to have been the irrigation cess or *udakabhāga* of the Arthaśāstra which varies in that work between 1/3 and 1/5 of produce, 1/4 being presumably the common rate. Thus one presumption is piled upon another. The extra impost of 1/4 may be identified *a fortiori* with the *bali* of the Lummini village, the precise nature of which must remain unknown until further light is available from new materials. *Op. cit.*

By following a different line of argument Ghoshal comes to the conclusion that Megasthenes' 1/4 was the only and regular share of the grain produce obtained as land revenue by the king. He follows a revised translation of Diodorus by a German scholar who substitutes the phrase 'in the absence of a special arrangement' for McCrindle's 'besides the land tribute.' Now what may possibly be implied by paying 1/4 of produce in the absence of special arrangement? Here again the Arthaśāstra is called to assistance. The king's share may rise if he lends cattle and implements. But is there any provision in the Arthaśāstra of the king lending cattle and implements to *free-holders* as distinguished from royal tenants? The affirmation of the scholar, that the emergent rate of the Sutras and of the Arthaśāstra was the normal rate of land revenue under the Mauryas, is an edifice built on shifting ground and no supplementary evidence is available to buttress it. *Op. cit.*, pp. 168-70.

of the Śaka Rudradāman belonging to the 2nd century A.D. While the main heads of land revenue were *bhāga* and *bali*, it was exceptional nobility on the part of the Mahākṣatrapa that he reconstructed the Sudarśana lake out of his own treasury without burdening his subjects with oppressive taxes like *kara*, *viṣṭi* or *praṇaya*. All these surtaxes find mention in the Arthaśāstra which, in this respect corresponds to Śaka Mālwa more closely than to Maurya Pāṭaliputra.

Kara

The *kara* and the *piṇḍakara* appear in the Arthaśāstra among the additional cesses in the list of *rāṣṭra* or country-revenue. The *kara* seems to be an annual tax on property. The *piṇḍakara* is defined by Bhaṭṭaswāmī as a tax levied on a whole village in lump and collected annually in kind. The *kara* and *pratikara* occur also among certain other charges outside the formal scheme of classification, charges which the *samāhartā* raises from the village and is required to enter separately in the 'pipe-roll' (II. 35). Manu also recognises *kara* as an additional tax (VIII. 307). Of course, like the *bali*, the *kara* also became a generic term and was applied by many to denote taxes all and sundry.

Viṣṭi

The *viṣṭi* is impressed labour. Labour tax was of two kinds (Arrian, XII). There was the labour paid in lieu of grain or cash by poor people (siṃhanika) which the Arthaśāstra thinks may be used by the state in its factories (II. 15). Manu allows this concession to Śūdras, craftsmen and artisans (X. 120), and Arrian testifies that the two latter classes paid their taxes by labour (XII). While this tax in the form of labour was a concession to payers, the *viṣṭi* was a form of coercion, the additional and coerced labour from freemen which amounted to gratuitous performance of public or royal services (Gaut. X. 31; Viṣ. III. 32; Manu, VII. 138; Arth. I. 4, VIII. 1, X. 1; Mbh. XIV. 95. 39). In the Arthaśāstra it appears in

the list of special charges along with *kara* and *pratikara* (II. 35) paid by villagers and is expected to be entered by the *gopa* in his register of houses, probably to be assessed on a principle of rating according to houses.

For what specific purposes was the corvée employed and how it fell on the subjects? The Arthaśāstra wants labour to be impressed in state workshops in a staff of sweepers, weighers, measurers, slaves, etc. (X. 4). There is also provision for employing it in tillage of royal domains (II. 24). In the Mahābhārata it is wanted to be exacted from artisans only with payment of food as unto kine and asses (XIV. 95. 39). The Jātaka stories give graphic pictures of how it actually worked.[1] The people of Kāsi had to serve their king's fiat who was passionately fond of hunting and forced his subjects to beat the deer forest to the neglect of the cultivation of their farms (I. 149f). In the introductory portion of another story the gloomy prophesy is made when needy kings "shall set the whole country-folk to work for them;—for king's sake shall the oppressed folk, leaving their own work, sow early and late crops, keep watch, reap, thresh and garner, plant sugar-canes, make and drive sugar mills, boil molasses, lay out gardens and orchards. And as they gather in all the diverse kinds of produce to fill the royal garner, they shall not give so much as a glance to their empty barns at home."

Te evaṃ duggatā sabbe janapade attano vapakamme karessanti upaddutamanussā sake kammante chaḍḍetvā rājūnaṃ ñeva atthāya pubbaṇṇa paraṇṇāni ca vapantā rakkhantā layantā maddantā pavesantā ucchukhettani karontā yantāni vāhentā phāṇitādīni pacantā pupphārāme phalārāme ca karontā tattha tattha nipphannāni pubbaṇṇādini āharitvā rañño koṭṭhāgāram eva pūressanti attano gehesu tucchakoṭṭhakesu olokentāpi na bhavissanti. I. 339.

[1] It is wonderful that Rhys Davids finds no trace of forced labour in Buddhist literature. Buddhist India, p. 49.

Thus would the cultivators be impressed to work the farms of impoverished rulers leaving their own lands to decay. Of course this prognostication would materialise in days of moral disorder that would sweep the earth and not in normal times. But that the *viṣṭi* was a potential source of oppression bears no doubt. The Arthaśāstra warns against its tyrannical exaction from agriculture (II. 1). Like the *bali* this objectionable form of exaction gave a tool to misgovernment and forms one of the legacies handed down to our own day (begār) on worse hands than the king's.

Praṇaya

The *praṇaya*[1] or benevolences are most probably emergency revenues resorted to for the replenishment of depleted treasury by the enhancement of standard rates. The Arthaśāstra falls back on this remedy in a financial crisis and wants it to be levied from cultivators (karṣaka), dealers and craftsmen (vyavahārin) and animal breeders (yoniposaka), the only exemptees being owners of *brahmadeya* land (V. 2). The benevolence on cultivators is assessed at 1/4 of grains but rises according to the quality of the soil up to 1/3 while in Manu the highest rate of emergency tax on agriculture remains 1/4 (X. 118). The *praṇaya* was beyond doubt another handle given to oppression and avidity.

Royal domains

Further details on the revenue system, at least as it prevailed in the time of the Mauryas, is obtained by fragmentary accounts of Megasthenes which bear comparison with evidence from other literature. The principal source of income after the regular *bhāga* was the output or revenue from royal demesnes. That the king had large estates of his own is clear from all accounts. In the Arthaśāstra's conception of polity the administration of royal farms is entrusted to a special

[1] Kielhorn explains it as a contribution nominally voluntary (given from affection) but which people feel constrained to make. Ep. In., VIII. 6.

superintendent (II. 24). These might be collected either by the direct agency of state officers or under their superintendence by tenants. In the first case the superintendent is to work the estates by means of slaves, free labourers and convicts. But obviously the crown lands were large in proportion to labour supply. Hence fields may also be leased out to cultivators on attractive terms. If they have their own animals and implements they get half their harvest and if they work with royal capital and implements, their share is 1/4 or 1/5 of produce.[1] The collective output of royal farms is called *sītā* and tops the list of land revenue and cognate charges treated under the head of *rāṣṭra*.

We have already noticed the Jātaka testimony to royal domains worked by free labour. Grants of land from king's estates appear in the title deeds of the Śātavāhanas recorded in the Karle and Nasik caves. The observation of Strabo on the strength of Megasthenes that the cultivators work the land for hire getting a fourth part of the produce (XV. i. 39) had long been a puzzle to historians and was dismissed as anachronistic with the version of Diodorus on the rate of assessment (II. 40). It has been, however, recognised of late that while Diodorus speaks of cultivators in ordinary revenue-paying lands, Strabo deals with cultivating tenants in royal demesnes who did not give but *obtained* 1/4 of produce for hire.[2]

Closely related or analogous to the agricultural produce or share thereto from crown lands was the state's income from (1) reserve forests, (2) mines and salt-centres,[3] (3) state establishments of livestock, (4) sale or loan of grain.

The *paśu* or tax levied on cattle was a regular tax which fell upon the pastoral wealth as the *bhāga* fell upon

[1] Note that while tenant-cultivators in crown land obtain 1/4 or 1/5 of produce, their compeers in ordinary private land are entitled to only 1/10 (Arth. III. 13; Yāj. II. 194: Nār. VI 2. 3). In Viṣṇu the share is 1/2 (LVII. 16).

[2] Ghoshal: *op. cit.*, p. 168ff. Gopal: *op cit.*, p. 55.

[3] Mines, pearls and salt were royal monopoly. Pliny, XXXI. 7; Karle and Nasik Cave Inscriptions: Mbh. XII. 69. 29; Arthaśāstra, II. 12.

agricultural wealth. Megasthenes notes that the nomadic herdsmen paid their taxes in cattle to the Mauryas (Arr. XI). The Jātaka stories notice its oppressive exaction (II. 240). In the Arthaśāstra the contributions required to be entered separately in the 'pipe-roll' are paid in *dhānya, paśu, hiraṇya, kupya, viṣṭi* and so forth. The Smṛtis are familiar with the contribution in cattle and assess it at the low rate of 1/50.[1] This is probably a levy of amount or value upon the agricultural livestock of cultivators. The commentator to a Jaina text understands charges on domestic animals to mean taxes on sales thereof payable in kind or in cash; traces of both these customs are seen to have survived down to the Moslem and British periods.[2]

Cattle tax

Presents or royalties form another head of income derived from villages as well as towns.[3] The *utsanga* in the Arthaśāstra is, according to Bhaṭṭaswāmī, what is paid by inhabitants of the city and country part on the occasion of some festive event such as the birth of a prince. The Jātakas have a story that the people of Kāsi brought a *kahāpaṇa* apiece for a newborn prince's milk-money (khīramūlam) which the pious king did not want to keep but the people pressed and left back (IV. 323). The Jātakas offer many instances of presents which are brought to the king (paṇṇākāra, VI. 42, 342) on the occasion of his coronation (chattamaṃgaladivase, III. 407f) or even when approaching him with a petition (II. 166). Strabo writes that during the hair-washing ceremony of the king the people vied with one

Presents

[1] The Agnipurāṇa gives a schedule of contributions from villages very similar to the Smṛtis; but in the cases of *paśu* and *hiraṇya* it makes a big jump from 1/50 to 1/5 or 1/6. The Arthaśāstra schedule is: Fowl and pig—1/2, Inferior animals—1/6; cow, buffalo, mule, ass and camel—1/10.

[2] For references see Ghoshal: *op. cit.*, p. 60.

[3] The custom of the king getting presents from his subjects comes down from Vedic times. See Zimmer: Altindisches Leben, p. 166.

another in making him rich presents (XV. i. 69). The Mahābhārata, besides furnishing similar instances, speaks of voluntary contributions (dakṣinā) made by the people to the king for performing sacrifices for public welfare (XIII. 61. 24). All these offerings, literally voluntary, were really the tribute paid by fear to power and might or tips for the acquirement of specific favours and could hardly differ from the *bheṭ* or *nazarānā* exacted from poor tenants by social magnificoes with indirect pressure over large parts of India to-day.

Miscellaneous imposts in the Arthaśāstra.

The Arthaśāstra and the Smṛti works present a lot of similar imposts on land or from village parts which with the present state of our resources cannot be verified by positive data and can at best be taken as indicator of the progress of early Indian financial speculation. The list of *rāṣṭra* or revenue from country part supplemented by references elsewhere in the Arthaśāstra consists of 14 items. Among these *sītā, bhāga, bali, kara, piṇḍakara* and *utsanga* are already dealt with in comparison with other evidences. The *senābhakta* is explained by Bhaṭṭaswāmī as "the king's dues of oil, rice and the like payable at the time of the marching of the army as prevalent in specified countries." The *aupāyanika* is an unspecified contribution or present. The *pārśva* is a super-tax collected on excess profit, a marginal revenue like the land-cess in British India. The *kauṣṭheyaka* is tax on land below tanks, lakes and other sources of water built by the state. The *parihinaka* is compensation for damage done by cattle possibly in crown lands.

The other three fiscal terms have long presented much difficulty to scholars, *viz.*, the *rajju, cororajju,* and *vivīta.* The *rajju* literally means 'rope' or measuring tape of the land survey. In the technical fiscal sense it apparently refers to a unit of measure applied for purpose of cadastral

survey; and to cover the cost of operations a revenue was realised from the parties concerned like the cost of settlement in our times. The *corarajju* is rope for binding thieves and *vivīta* is pastures. From an examination of the functions of the *vivītādhyakṣa* and the *corarajjuka*,[1] the jurisdiction of both extending outside village limits, it would appear that these comprised fees levied from villagers for the tracking of criminals, the escorting of caravans and the protection of cattle. So while *rajju* is the survey or settlement tax, the *corarajju* and *vivīta* are police taxes.

The Arthaśāstra advocates a measure which amounts to the claim of the state to the unearned increment on land. During the sale of land and buildings by public auction the increase over the regular price together with the usual tithe belonged to the state (spardhayā mūlyavarddhane mūlyavṛddhiḥ saśulkā koṣaṃ gacchet, III. 9). The same rule applies to other goods (II. 21).

The method of land revenue assessment and collection in the Arthaśāstra throws further light on certain additional incomes to the treasury, which may not be scrupulously legitimate and above reproach. The superintendent of the treasury is to increase king's receipts by underhand means (upasthāna)[2] in the process of collection. The taxgatherers are to practise certain profitable sleights of hand. Then, there is remarkable difference in the balance and weights used for king's receipts and those in general use (II. 19). Lastly there is a *vyāji* or compensation fee levied above the measured share on certain liquids like oil, etc.

The Smṛti works (Gaut., X. 25, 27; Manu, VII. 130, X. 120; Viṣ., III. 24f) and the Agnipurāṇa detail certain

[1] Officers called *cauroddharaṇika* and revenue called *cauroddharaṇa* are seen in later inscriptions. Ep. In., XII, 8, 18; XVII. 17. The vivītādhyakṣa is to examine passports and guard the pasture grounds which are opened between two dangerous places (bhayāntareṣu), II. 34.

[2] Paryuṣitaṃ prārjitaṃ, II. 15,—recovery of arrears.

miscellaneous contributions raised from villages. These constitute roughly the following schedule : (1) *Paśu* and *hiraṇya* = 1/50 (1/5 or 1/6 according to Ap.), (2) Roots, fruits, flowers, medical herbs, honey, meat, grass, firewood, scents, flavouring substances, leaves, skins, wickerwork, stonework, clarified butter etc. = 1/6.[1]

In Smṛtis

The term *hiraṇya* has not yet been solved to satisfaction. In the Arthaśāstra it occurs in the list of different forms of payment (dhānya, paśu, hiraṇya, kupya, āyudhīya, viṣṭi and so forth) which the *samāhartā* is required to enter separately in the 'pipe roll' (II. 35). The suggestions that it was a tax on the hoard of gold, or on income, levied in gold currency are rejected by Ghoshal on the following grounds. (1) From its occurrence in the above-mentioned sources along with cattle and roots, fruits, flowers, etc., it appears to belong to the group of taxes on agricultural and industrial products. (2) In the land-grants it is conjoined with *bhāgabhogakara* and with *dhānya* both of which constitute king's customary grain-share. (3) It is improbable for a state as contemplated in the Smṛtis to draw part of its normal revenue from gold. By referring to conditions prevailing in Moslem India before the reforms of Todar Mal, he explains *hiraṇya* as "a tax in cash levied upon certain special kinds of crops as distinguished from the tax in kind which was charged upon the ordinary crops."[2] The reason given,—that such crops are difficult to divide is not very clear and convincing, and fails to account for the inordinate discrimination in the share demanded by the king for the two classes of crops, *viz.* 1/50 for one and 1/6 for the other.[3]

[1] Haradatta reads the passage in Gautama and Viṣṇu as indicating 1/60 which is improbable.

[2] *Op. cit.*, p. 62.

[3] Of course so far as the Agnipurāṇa rate is concerned there is no such discrimination.

As regards the contribution of 1/6 from roots, fruits, flowers, etc., a host of parallels may be drawn from later and recent conditions.[1] Meat, honey and clarified butter comprehend the pastoral and farming occupations of villagers while earthenware, stoneware and wickerwork comprise the whole range of cottage manufactures. So, no branch of villagers' income, agricultural or industrial, is to escape the rigorous and all-pervasive fiscal system of Manu, Viṣṇu and Gautama.

Devolution, confiscation, fine and bribe.

The heads of income from land and village wealth may be concluded with the enumeration of devolutions, confiscations, fines (daṇḍa) and bribes (lañcaṃ). Treasure trove and intestate or ownerless land reverted to crown (Jāt. I. 398; III. 299; IV. 485; VI. 348; Sn. I. 89). The assets of the rich people who sometimes took to asceticism with whole families without leaving an heir, formed a lucrative income for the state. Fines and confiscations are dangerous weapons in the hand of poor and unscrupulous kings; although in the Śāntiparva it is strictly reminded that they are intended " to create terror and not to replenish the treasury " (122. 40), there is no safeguard to control their application. Kings could also sell their judgments and favours and receive illegal gratifications (Jāt. II. 170ff), as much as their councillors and officials.

Revenue-free lands

A large amount of revenue was lost to the state under the arrangement by which considerable portions of land were allowed to be held free of revenue or the revenue therefrom were transferred to be enjoyed by private persons. Of the assignment of rent-free land from royal domains and of revenues from particular villages, the Karle and Nasik cave inscriptions and the Jātaka stories offer plenty of instances. In the Arthaśāstra

[1] Ghoshal : *loc. cit.*

the *samāhartā* is required to enter such revenue-free lands (pārihārika) into his roll. Elsewhere a distinction is drawn between taxable (karada) and tax-free (akarada) persons as well as villages. These assignments and exemptions might be granted either unconditionally or in return for specific services. To the former category belong mainly the *brahmadeya* lands. In the Arthaśāstra the immunity of such property is enjoined even when benevolences and irregular taxes may be raised from all property, during emergencies (V. 2). Another class of revenue-free land in the Arthaśāstra is the *ātithya* explained by Bhaṭṭaswāmī as "lands granted to the judicial officers for the purpose of alms-giving and such other pious acts" (II. 20).[1] The forest produce is also declared to be free from any impost (V. 2). Except for the king's reserve forests, the wild tracts were regarded according to all authorities as no man's land. The immunity is evidently extended to forest-dwellers and adjacent villagers whom we find in popular stories gathering firewood and forest produce without interference.

Transferred revenue; Jāigir System.

Among the land held free of revenue (or the revenue of which is assigned) in exchange of specific service to the state belongs principally the land assigned to king's officers in lieu of remuneration.[2] Grants without the right of sale or mortgage to the superintendents, accountants, *gopas*, *sthānikas*, vets, physicians, horse-trainers and messengers form part of the revenue administration in the system of the Arthaśāstra (II. 1). According to Manu (VII. 119) and the Śāntiparva (87. 6-8), the lord of 10 villages is to be remunerated with 1 *kula* of land (land cultivable with 12 oxen), of 20 villages with 5 *kulas*, of 100 villages with 1 village and of 1,000 villages

[1] *Cf.* the *inām* or *mu'-afi* under Moslem rule.

[2] *Cf.* Jāt. I. 354; Ep. In., XV. 6f; XVIII. 22; Yuan Chwang, Vol. I. p. 176; South Indian Inscriptions.

with a townlet. The point of difference between the two testimonies is that the Arthaśāstra, unlike Manu and the Mahābhārata, contemplates not only rural administrators but other officials, higher and lower, as recipients of such grants and that it explicitly restricts the right of grantees to mere usufructuary possession. In the Arthaśāstra the grants of land to the *adhyakṣas* are made in addition to a cash salary of 1,000 *paṇas*. Although a distant resemblance is marked between this arrangement and the Moslem Jāigir System, it must be noted that the Arthaśāstra discountenances encouragement of colonisation by grant of villages (V. 3) which is the substance of the latter. But the arrangements of the Arthaśāstra foreshadows the Moslem custom through more than one institution. The class of villages which enjoy immunity on condition of military service (āyudhīya) is analogous to that form of Jāigir which involved the assignment of revenue for the maintenance of troops.[1]

Remission or reduction of revenue.

Apart from exemption from taxation granted in perpetuity, certain lands and villages enjoyed remission or reduction of revenues for a season or more. Remission of taxes for relief of cultivators during bad harvest is inculcated in the Arthaśāstra (II. 1) and the Mahābhārata (II.61.25). The Arthaśāstra (III. 9) and the Śukranīti (IV. ii. 242-44) also enjoin the same measure for improvement and extension of agriculture. Remission or reduction of taxation was conceded as occasional favour to a village, town or district

[1] The essential difference of the earlier institution from the Jāigir System are that (1) the right of the grantees were restricted to usufructuary enjoyment without hereditary rights and rights of ownership, (2) and that the grants did not carry with them transfer of executive power. Although in Manu and the Śāntiparva, the mere usufructuary possession of the grants is not as pointedly mentioned as in the Arthaśāstra the same implication is there, since it is wanted that the remuneration village of the *śatādhyakṣa* must be within the jurisdiction of the *sahasrādhyakṣa* for otherwise as Nīlakaṇṭha annotates, he may tax oppressively.

(Jāt. IV. 169; Rummendei P. E.; Khāravela's Hathigumpha In.[1]) inasmuch as a village or a specified area might suffer an increment of revenue by way of punishment or from royal fiat (Jāt. III. 9).

Doctrine of Emergency.

The works on law and polity which punctiliously elaborate sound principles of taxation took a dangerous move when they proceeded to lay down speciál rules for emergency. Now in all ages and in all climes the doctrine of necessity has overlept its bounds and become a convenient euphemism of tyranny and avidity. In ancient India emergency revenues might be raised either by the enhancement of standard rates or by the imposition of wholly irregular demands. The levy of *praṇaya* advised by the Arthaśāstra is the increment of standard rate to 1/4 of grains in case of cultivators, rising up to 1/3 according to the quality of the soil. In Manu the highest rate of emergency tax on agriculture remains 1/4. The scale of *praṇaya* from animal-breeders is fixed in the Arthaśāstra at 1/2 of cocks and pigs, 1/6 of small animals and 1/10 of cows, buffaloes, mules, asses and camels. Besides these a host of forceful and fraudulent practices are enumerated with brazenfaced chicanery which it would be sickening to relate. The teachings on *rājadharma* in the Śāntiparva give *carte blanche* to the king. The rule that taxation should be mild is for normal times. In times of distress a Kṣatriya may forcibly take what he can from the rich and commits no sin by oppressing his subjects for filling the treasury (130. 24ff; Śuk. IV. ii. 2; Somadeva Nītisāra, XXI. 14). Necessity knows no law is an accepted maxim of Indian financial speculation which gave a free hand to extortionate and fleecing demands of which descriptive accounts are not rare.

[1] "rājaseyaṃ saṃdaṃsayaṃto sava-kara-vaṇa anugaha-anekāni satasahasāṇ visaṭati pora-jānapadaṃ."

For a state entitled to 1/6 of net produce and a lot of additional taxes, why this nightmare of depleted treasury and nervous search for income? It was because there was a big crack in the massive fabric of the Indian taxation system through which leaked out a major share of the state's legitimate dues. We have seen that private lands were fast concentrating in the hand of Brāhmaṇas—regular and secular.[1] Now we find that on the reverse of the Machiaevellian emergency rules the self-same books lay down an equally unsound financial maxim which exempted Brāhmaṇas as a class from taxation on the strength of their astonishing pretensions. Vāśiṣṭha expressly exempts Brāhmaṇas, particularly learned ones (I. 42f ; XIX. 23) from any exaction on the ground that they render spiritual service to the state and the attendant material welfare. The same statement occurs in Manu (VII. 133). Viṣṇu as well forbids taxes to be raised on Brāhmaṇas because they pay their tax in virtuous acts (III. 26f). Āpastamba accords the same privilege to learned Brāhmaṇas (II. 10.26.10) and Ṛhaspati follows in the same strain (XVII. 3). According to the Śantiparva the Brāhmaṇas are to enjoy immunity even when the doctrine of necessity may encroach upon the fundamental rights of property. Megasthenes himself notes that in Maurya India the Brāhmaṇas and philosophers paid no taxes (Str. XV. i. 32). Aśoka was not the only monarch to distribute unstinted largesses on these two classes (REs. V, VIII, IX). The Jātakas and the Śātavāhana Inscriptions offer further concrete instances how kings in recurring fits of pious generosity made over the revenues of entire villages to Brāhmaṇas, religious and worldly. Even the Arthaśāstra which treats politics as an independent branch of knowledge apart from

Exemption of Brāhmaṇas.

[1] See *supra*., pp. 35f.

the canon, cannot free itself from this halter of uneconomic piety. Besides the reference to *brahmadeya* lands and to the exemption from *praṇaya*, etc., it accords the priests of royal entourage the highest grades of salary along with the Crown Prince, the Queen Mother and the Queen Consort (V. 3). Not only is the Brāhmaṇa to be exempt from taxation but a king has no claim to the former's property even on the failure of heirs (Gaut. XXVIII. 41f; Baudh. I. 5. 11. 15f; Vāś. XVII. 84-87; Viṣ. XVII. 13f; Manu IX. 188ff; Arth. III. 5). The same authorities lay down the general rule that the Brāhmaṇa who finds a treasure trove keeps the whole of it while other persons who come to the same luck must make it over to the king: and why? Because the Brāhmaṇa is the lord of everything! (Manu VIII. 37; Yāj. II.31). The effect of these rules on royal exchequer and consequently on the fiscal system may well be imagined when it is observed how sedulously gift of land to Brāhmaṇas was encouraged (Āpast. II. 10.26.1; Viṣ. III. 81-84; Arth. II. 1f; Agni-p. 223. 14; Mbh. XII. 343. 18, XIII. 62) and how kings vied with one another in this pious feat and vaingloriously recorded their unstatesmanlike bounties (Aśoka Edicts, Karle and Nāsik Cave Ins., Khāravela's Hathigumpha In.).

The argument may be put forth that the foregoing privileges accrued not to all Brāhmaṇas but only to *śrotriya*s or those who performed the sacrifice and studied the Vedas thereby proving useful to society. The Śāntiparva indeed carefully demarcates pious Brāhmaṇas who are to be exempted, from secular Brāhmaṇas who are to be fleeced with taxes and forced labour (76. 5-11; 77. 2f). But is there any universally recognised hallmark of piety? The Pali literature, especially the Jātakas, show that the recipients of *brahmadeya* gifts of land were not always devoted spiritualists (*cf.* Sut. II. 7). Even if it be accepted that wealth and privileges poured upon *bona fide* religious persons and

orders, history has abundant proof that such a constant outflow corrupts even the purest recipient and works his ruin. At any rate, the state became the poorer and had to lay its fingers in the pockets of the toiler.

Working of the system.

It remains to be observed how this elaborate revenue system actually worked and how the people fared under it. As the system was not built upon rigid and inflexible regulations, it had a fair measure of elasticity which might be construed for both good and bad purposes. Hence under certain rules it rose to the lofty Smṛti ideal that the king gets the revenue only for the service of protection and spends every penny beyond his own wages for public good; while in the other extreme bankrupt profligates like Louis XV blackmailed their subjects sometimes breaking the economic backbone of the state.

Did the Maurya taxation system fall very lightly on the people? There is one reading of Diodorus' familiar passage which would fix the king's grain share at the high rate of 1/4. Leaving aside this controversial piece of evidence and the still more unsound logic that the Arthaśāstra—supposed to be the work of Candragupta's iron chancellor, is at its wit's end in search of revenues, it appears that extensive public and building works, wars and missionary propaganda had to be met from the people's pocket barring a large class of Brāhmaṇas. And in the tyranny of imperial officers which drove province after province into revolt under the later Mauryas, undue exactions must have had a conspicuous share.[1]

Śātavāhana and Śaka

The Śātavāhana king Gautamiputra Śātakarṇī claims to have "never levied nor employed taxes but in conformity to justice" (N.C.I, 2.i). The Śaka Rudradāman is similarly proud of the distinction that he did not oppress his subjects with *kara*, *viṣṭi* or

[1] See Raychaudhuri: *op. cit.*, pp 302 ff.

praṇaya and remained content with *bhāga, bali* and *śulka*. In the background of these vaunts we faintly discern pictures of oppressive and unlawful demands by less considerate rulers. And such pictures are presented in the Jātaka stories.

Oppressive taxation

The tax-collectors (niggāhaka) were an overzealous lot and became a byword for importunate demand (IV. 362). In the Śāntiparva it is admitted that they sometimes collect tax unfairly or actuated by lust and avarice from persons piteously praying for mercy—thereby destroying the king (yadā yuktyā nayed arthān kāmād arthavaśena vā : kṛpaṇaṃ yācamānānāṃ tadrājño vaiśusaṃ mahat, 91.25). The Arthaśāstra (II.9) and the Śukranīti (i. 617f) lay severe strictures on over-collection. But these people took their cue from their masters whom the same authors give an ample latitude. In the Bhuridatta Jātaka it is stated in a verse that tax-gatherers ordered by the king plunder the wealth of cultivators like robbers without fear :

akāsiyā rājūhi vanusiṭṭhā
tad assa ādāya dhanaṃ haranti
te tādisā corasamā asantā.....VI. 212.

They (balisādhakā) eat the cooked food of tax-payer, or kill a calf for skin, all at their sweet will (V. 106). A king is said to have drained his country of its gold by his exactions (IV. 224 ; *cf.* III. 319). Another by raising fines, *ābwābs*, cattle-tax (?) and cash levies crushes his subjects like sugar-canes in a mill (daṇḍa-bali-jaṃgha [1]-

[1] Rouse fails to make out its meaning and after much hesitation falls upon 'mutilations' (of legs). This is out of place in a list of revenues and discords with 'gahaṇena.' On the other hand the use of *jaṃgha* for animal (like the English 'head' for man) is not unknown. In the Arth. II. 35 there is an instruction on spies to ascertain the number of men and beasts (*jaṃghāgra*) in each family as well as their income and expenditure with a view to fix assessment of taxes. The commentary on 'jaṃghāgra' runs thus : jaṃghāśabdena pādacāriṇo lakṣante kulasambandhināṃ pādacāriṇāṃ dvipada catuṣpadānām agram iyattaṃ. 'Jaṃgha' is used in the sense of animal also in Jāt. VI. 34.

kahāpaṇādi gahaṇena ucchuyante ucchuṃ viya janam pīḷesi. II. 240). A gloomy picture of relentless extortion is drawn up as part of the great moral disorder that would prelude the nemesis.

"Kings shall be amassing wealth by crushing their subjects like sugar-canes in a mill and by taxing them to the utmost. Unable to pay the taxes the people shall flee from village, town and the like and take refuge in the borders of the realm."

ucchuhante ucchugaṇṭhikā viya manusse pīḷenta nānāppakārehi balim uppādetvā dhanaṃ ganhissanti manusse balipīḷitā kiñcidātum asakkontā gāmanigamādayo chaḍḍetvā paccantaṃ gantvā vāsaṃ kappessanti. I. 339.

The kingdom of Kampilla was deserted by the people for oppressive taxation. Men betook to the forest with their families. Others remained indoors at night but on day-break fled to forests fencing their houses with thorn branches. "By day they were plundered by king's men, by night by robbers."

balipīḷitā raṭṭhavāsino puttadāre ādāya araññe migāviya cariṃsu gāmatthāne gāmo nāma nāhosi manussā rājapurisabhayena divā gehe vasitum na sakkonti gehāni kaṇṭakasākhāhi parikkhipitvā aruṇe uggacchante yeva araññaṃ pavissanti divā rājapurisā vilumpanti rattiṃ corā. V. 98 f.

In the Śāntiparva there is the warning that the king is to see that the agriculturists of the kingdom do not leave it through oppressive taxation (P. Ray, I. p. 299). The rules of the Arthaśāstra presuppose the same contingency (VII. 5.). Thus there were cases when the insatiable greed of kings ruined the whole country-folk and rendered the prosperous country-side into depopulated deserts.[1]

[1] In South Indian inscriptions there are interesting evidences of organised no-tax campaign by cultivators against such unlawful exactions. Government Epigraphic Report, 1918, p. 168.

Truly, the king is '*viśāmattā*'—the devourer of subjects!

Surplus or balanced budget?

These instances of oppressive taxation lead to another question—whether ancient states used to accumulate large surpluses or they presented a balanced budget. Opinion inclines to the former view.[1] Indeed, the systematic realisation of $\frac{1}{6}$ of produce and the additional imposts would automatically keep large surpluses. But it has been seen that there are reasons to suppose that the 1/6 was probably raised not on produce but on profit. Again why is so much preoccupation with the depleted treasury and provision for almost unlimited emergent taxes if there were no deficits? The numerous cases of oppressive exaction show further that these measures had to be taken recourse to whenever war, sacrifices or megalomaniac bounties shook the poise. The Mahābhārata narrates a story that the *ṛṣi* Agastya went to wealthy kings in quest of money but finding income and expenditure evenly adjusted, even that redoubtable anchorite had to return empty-handed from all quarters (III. 93). The possibility of huge surpluses was also counteracted by the big volume of transferred revenue and revenue-free lands and by the manifold heads of expenditure over departments to which the state extended its activities.

Sphere of the State

Regarding the sphere of action of the state, it has been remarked, "A policy of non-interference was recognised as the ideal policy of the state, the functions of which were ordinarily restricted to 'the irreducible minimum,' *viz.*, the protection of life and property and realisation of revenue for the proper execution of that duty."[2] Not only is the policy

[1] Ghoshal: *op. cit.*; Gopal: *op. cit.* The political maxim in the Mahābhārata is that the expenditure should never exceed $\frac{3}{4}$ of the king's income. II. 5. 70-72.

[2] R. K. Mukerji: Local Self-government in Ancient India, p. 3.

adumbrated in the Arthaśāstra a clear contradiction of this position : the complicated system of taxation developed by the Indo-Aryans is in itself an antithesis of the *laissez-faire* doctrine and a strong evidence of the multifarious duties of the state. The Indo-Aryan state was not a mere police state guarding person and property although that was the original term of the social contract. As in the case of the heads of income, the study of heads of expenditure reveals the state in both its opposite aspects,—in solicitous care for the people whose welfare it holds in trust and reckless squanderings on vainglorious exploits and pseudo-religious practices in the name of public good. We are concerned here only with those heads which unfold the position of the state touching rural economy.

Public works and buildings.

Public works of diverse sort formed the main channel of expenditure and engaged the chief attention of a benevolent state. Erection of almshouses (dānasālā) at important centres of the towns is a regular feature of the Jātaka stories and from here food was daily distributed to the indigent throughout the kingdom (I. 262, II. 367, III. 129, 470, IV. 355, 402, VI. 484). Some kings took interest in the construction of rest-houses for travellers (āvasathāgāra) in villages or in trunk roads at intervals.[1] Free dispensaries for men and for beasts were opened by Aśoka all over his Empire (R.E. II; P.E. VII). Canals, tanks and wells for drinking and irrigation purposes and other irrigation constructions were frequently undertaken. Works of building and repair for artistic, commemorative or propagandist purposes were an acknowledged sphere demanding the state's resources in which Aśoka, the Sungas and the Kuṣāṇas took special interest. Colonisation, road-making, town-planning and reclamation of virgin lands

[1] See Ep. In., VIII. 8-10. iv, 12.v.

were other features of absorbing interest subsidised or undertaken by the state (Arth. II. 1; Jāt. V. 35, 511).

Poor law

An organised system of poor relief was demanded by the paternal conception of government (Gaut. X. 9ff; Arth. II. 1). In the Mahābhārata it is repeatedly extolled as a feature of good government. It seems that in several states the decrepit and imbecile, the stranded widow and orphan were maintained at state expense (V. 30. 40f; *cf.* Arth. II. 1, 23) or provided with home, clothes and food (XII. 42. 11, 59. 54, 71. 18, 86. 24). Āpastamba enjoins the same activities upon the king on behalf of outraged women (II. 10. 26. 22f).

Famine relief

Collateral with the working of the poor law were the provision for famine relief and subsidisation of agriculture. The Arthaśāstra wants the king to advance cash, corn and cattle to the cultivator (V. 2f). Usavadāta claims to have distributed stems of cocoanut trees in villages for cultivation, 1,000 in one and 32,000 in another.[1] During famine an enlightened government had an arduous time. Provision booths were thrown open, test works started under the direction of capable officers, loan and gratuitous relief were distributed in doles.[2] Similar relief measures were launched by benevolent governments against fire, serpents, tigers, epidemic diseases, etc.[3]

Restitution of stolen property.

Another item of expenditure pressed home by the lawgivers, would, if given effect to, prove a heavy drain on the treasury. From the king's duty of protection against theft restitution of stolen property follows as a matter of course. Compensation to the loser from royal treasury in the case of

[1] Ep. In., VIII. 8-10. iv-12. V.

[2] See *supra.*, pp. 109ff.

[3] C. V. Vaidya : Epic India, p. 221.

non-recovery of stolen goods is accordingly inculcated by jurists (Gaut. X. 47 ; Viṣ. III. 66f ; Manu, VIII. 40; Yāj. II. 36. Śp. 75. 10; Arth. III. 16, IV. 12). Āpastamba wants to make officers pay for the loss (II. 10. 26. 8 ; Yāj. I. 272). Akbar followed the regulation when he made the *kotwāl* responsible for the loss and liable to compensation (Āini. II. p. 42). No concrete evidence of such practice during our period is however available. Generally speaking there was no constitutional obligation although deserving cases might receive the king's consideration and move his heart.[1]

Sacrifices and bounties

There were other and less pleasing features of revenue appropriation. Sacrifices often highly expensive are prescribed for the birth of an heir to the crown, for rainfall, for victory in war, and for all and sundry purposes going in the name of welfare of the state. Resources which might well be invested in nation-building activities were thrown into the Sacred Fire or devoted to the propitiation of a large class of professional priesthood who had little part in the productive forces of the land. The words of Buddha as preserved in the Pāli canon frequently castigate them as a class of parasites who encourage sacrificial rites and animal-killing only with a view to fill their stomach and their pocket. Land, cattle and coins flowed in uninterrupted stream to them on the plea of sacrificial fee. The figures of the Epics even on a modest estimate stagger modern conceptions of public finance. The king of Kampilla who in the Jātaka story is seen to drive his folk to the forest by oppressive taxation, propitiates a tree god by offering annually 1,000 pieces (*cf.* V. 217). Sacrifices and worships were not the only channels for throwing out public money on unproductive purposes. The

[1] A. S. Altekar is too bold to assert on the strength of a parallel injunction in the Arthaśāstra (IV. 13) that these were not mere pious wishes but " actual facts in real polity."—A History of Village Communities in Western India, p. 60

king often indulged in megalomaniac bounties not only upon monks and Brāhmaṇas but whosoever might take his fancy.

Theory vs. practice

So it is time to revise the pet patriotic theory that the king was bound hand and foot by the Śāstras within a narrow compass of financial rights and the people had their chests and barns amply safeguarded against royal robbery. Equally shifting are the grounds of the apologists for British administration who try to establish that the king,—'devourer of the folk' had,—besides the high normal rate of 16·6 p.c. of harvest,—unlimited powers of taxation over his 'eminent domain.' As far as theory goes the Indian revenue system stands unbeaten in the history of ancient races for its soundness, impartiality within a large sphere, elasticity of rates, safeguards against misuse of public money and elaborate techniques to meet complex needs and exigencies. But theories may be regarded more in breach than in observance, and the best theories are liable to the worst constructions. The king is the semblance of Indra who sucks water from the earth and returns it in beneficent rains which preserve life and growth. A king might well imitate the former characteristic and lose sight of the latter; and it makes a difference of heaven and hell if public good which is the *sine qua non* of taxation, is ignored. Hence in India, as in every country we have side by side Augustus and Nero, Hammurabi and Sardanapalus, Henry IV and Louis XV, only with this difference that the Satan quotes the gospel as vigorously as the saint and constructs out of it a plausible brief to put up his monstrous case. And a section of Brāhmaṇ-hood who struck the Mephistophelian bargain with the state which gave them exemption from revenue in exchange of paying a share of their piety, was always at hand to give their blessing to any measure that conciliates priestly pretensions with omnipotent sovereignty.

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PREFACE

More than three years have passed since the publication of the first volume. The reasons for the delay are too obvious to need explanation. New materials on the subject must have appeared during this interval. I fully realise that there was scope for correction and improvement in both the volumes. But as a Security Prisoner I had no access to necessary material nor to any useful help. Readers will kindly accept this apology for errors and omissions.

As in the earlier volume my thanks are due to the journals which published much of the contents of this book, to the C. U. Press which printed this through the most painful and difficult times, to friends and professors who helped and encouraged me, particularly to Profs. H. C. Raychaudhuri, M.A., Ph.D. and B. M. Barua, M.A., D.Lit., for whose kindness I have no words.

RAJSHAHI CENTRAL JAIL,
July, 1945.

ATINDRANATH BOSE

CORRECTIONS

Page	*Line*	*Printed*	*Should be*
ii	18	Therigāthā	Therīgāthā
ix	20, 29	Therig	Therīg
xiii	33	eralier	earlier
xiv	5	geneology	genealogy
xvi	28	*latifandia*	*latifundia*
45	25	magnets	magnates
51	16		
75	34f	5 māṣa, 1 māṣa	omitted
82	2	draught	drought
85	14	Ajodhyā	Ayodhyā
91	28	autuom	autumn
120	17	1/8	1/3
166	34	Mahaummagga	Mahāummagga
200	33	or	of
211	27	Malles	Mallas
232	9	śruṭi	śrenī
281	13	Śukarnīti	Śukranīti
299	12	shipper	skipper
320	17	imports	imposts
327	8	stonework	stonework,
346	7	magnets	magnates
375	16	functionery	functionary
379	21	ādesam	adeśam
396	34	redering	rendering
407	32	yono	yona
409	6	came	come
411	5, 12	Theri	Therī
,,	32	jṇāyikehi	iṇāyikehi
413	9	ecstacy	ecstasy
,,	34	*op. cit.*	*op. cit.*, p. 199.
415	32	Therig.	Therīg.
416	,,	sandāl	sandal
430	14	pamūkha	pamukha
436	32 f	Vājaseneyi-	Vājasaneyi-
438	5	seem	seems
451	33	māghaviko	māgaviko
459	4	aerobat	acrobat
480	6	The	Two

CHAPTER I

The City

City-building among non-Aryans and Aryans. Growth of urban settlements. Science of town-planning, the *vāstuvidyā* and the *śilpaśāstra*. Divisions of the science.

Origin of cities. Growth from one village; amalgamation of several villages. Advantage of natural resources; important trade routes; strategical and sanitary importance; sea coast, places of pilgrimage and seats of learning. Military necessity. Traces of origin in city plan.

The planned city. Principles observed in planning. Solidarity and entity of the city. Difficulties of expansion.

The six great cities. (1) Campā, (2) Rājagaha, (3) Sāvatthi, (4) Sāketa (Ayodhyā), (5) Kosāmbi, (6) Bārāṇasi, (7) Vesāli, (8) Mithilā, (9) Kapilavastu, (10) Ujjeni, (11) Takṣaśilā—history, natural advantages, remains and plan, (12) Puṣkalāvatī, (13) Kampilla, (14) Dantapura, (15) Mathurā, (16) Dwārakā—plan, (17) Indraprastha, (18) Śākala, (19) Pāṭaliputra—history, description, (20) Tosali, (21) Śrīnagarī, (22) Kānyakubja, (23) Nālandā, (24) Paṭala.

The townships. Seaports. (25) Koruka, (26) Bhārukaccha, (27) Surpāraka, (28) Barbaricum, (29) Tāmralipta.

Social significance of city plan. Medium of artistic, religious and national expression. Educative force.

Long before Aryan migration, the non-Aryan settlers of India specialised in city-building. Remains of their art are seen in Mahenjo-daro and Harappa with characteristically modern amenities like masonry drains and regular streets and baths. The Aryans were primarily an agricultural and pastoral people but whether they had come or not from the cities of Mesopotamia and Iran, they might not have been strangers to the city life. Without being good builders they could not possibly conquer the land from the original settlers who knew the use of fortified cities. Hence though Vedic and Brāhmaṇical cultures are essentially rural, a natural consequence of the consolidation of the Aryan tribal system into large states and kingdoms was the growth from the village

City-building—non-Aryan and Aryan.

settlements into large cities planned on the same principles in which the different village units clustered around the royal palace or citadel. The Epics present a large number of cities in the reader's horizon, dotted all over northern India from Assam to Afghanistan. When Megasthenes visited India " the number is so great that it cannot be stated with precision " (Arrian, X). The Indian tract alone subdued by Alexander is reported by his companions to have contained as many as 5,000 towns, none less than Cos. (Pliny, VI. 17).[1]

The science : *vāstuvidyā* and *śilpaśāstra.*

The science of town-planning is so ancient in India that its origin is lost in antiquity. The treatise on *vāstuvidyā* and *śilpaśāstra,* the Mānasāra, the Mayamata, the Yuktikalpataru, the Devi-Purāṇa and works on political science like the Arthaśāstra and the Śukraniti all testify to its remote origin. The patronymic Viśvakarmā—the architect divine, apotheosised master-builders like Maya, Tvaṣṭar and Manu, the mythological genealogies attributed to them,[2] the position of the master-builder as high-priest or sacrificial expert, all confirm the supposition.[3] These and the position of the expounders of the science also prove that the social status of the civic architect was not low. The Mayamata avers that blue blood ran in his veins (abhijātavān)[4]

[1] The list was probably compiled from hearsay including every township or defensive outpost raised to hold the surrounding area in check.

[2] Viśvakarmāprakāśa, Ch. I.

[3] Some of the metal workers and carpenters of South India still retain the epithet ' ācārya ' as their caste distinction. See Havell : Aryan Rule, p. 128.

It is suggested that he descended in social estimation at least in the time of the Mahābhārata since Maya, the builder of Yudhiṣṭhira's council house is spoken of as a *dānava* being a non-Aryan; this possibly implies that the science having deteriorated among the Aryans there was a lack of competent experts among them. The supposition is far-fetched. The non-Aryans being more advanced in the technique an expert of their race might well be summoned in preference to one from the Aryan stock See B. B. Datta : Town Planning in Ancient India, p. 14.

Treatment of the subject.

The subject of town-planning is discussed under certain heads in the Mānasāra and the Mayamata which signify its perfection. These are (*a*) examination of soil (bhūparikṣā), (*b*) selection of site (bhūmisaṃgraha), (*c*) determination of directions (dikpariccheda), (*d*) division of the grounds into squares (padavinyāsa), (*e*) the offerings (valikarmavidhāna), (*f*) planning of villages and towns (grāmavinyāsa, nagaravinyāsa), (*g*) buildings and their different storeys (bhūmividhāna), (*h*) construction of gateways (gopuravidhāna), (*i*) construction of temples (maṇḍapavidhāna), (*j*) construction of royal palaces (rājaveśmavidhāna). It will be noted that the construction of Dvārāvatī under the direction of Kṛṣṇa answers to these plans and procedures (Devi-P., Viṣ. P., ch. 58).

Origin of cities: 1. From expansion of villages.

The towns were generally grown out of villages. The plan of the Indo-Aryan town fairly reproduces on a grander scale the plan of the village. Thus the terms *gāma* and *nigama* are often indifferently used. The following story about the origin of the Kuru city of Kammāsadamma is illuminating. "He (Bodhisatta) had a vast lake constructed near the Banyan tree and transported thither many families and founded a village. It grew into a big place supplied with 80,000 shops. And starting from the farthest limits of its branches he levelled the ground about the roots of the tree and surrounded it with a balustrade furnished with arches and gates; and the spirit of the tree was propitiated. And owing to the fact of the village having been settled on the spot where the ogre was converted, the place grew into the *nigama* of Kammāsadamma" (Jāt. V. 511). The difference between a *gāma* and a *nigama* is thus one of degree.

A self-contained village with a surrounding wall was not of course likely to undergo urban transformation. More possibly the cities grew out of several hamlets originally clustering around a market place.[1] Or from the advantages of some natural resources,—a mine, a bed of flint, a layer of clay, a village might specialise in an art and acquire more than local importance.[2] More frequently, villages on trade routes soon flourished into cities. The earliest Indo-Aryan settlements were planted on the valleys of the Indus and the Ganges which were the great arteries of commerce in Northern India. The riparian cities had moreover great advantage from military and sanitary points of view. Important connexions of overland routes had more commercial facilities. Hence villages and towns are said to be situated on the cross-section of numerous paths and bye-paths (Dn. XIII. 10). The city of Taxila, it will be seen, was favoured with all these advantages. Such a town with the additional favour of a sea-coast obtained the designation of *pattana* or seaport which is defined as "a town abounding in articles imported from other islands alive with all classes of people, a land of commercial transactions in the shape of sale and purchase, replete with jewellery, precious stones, money, silk cloths, perfumery and the like, situated in the vicinity of a sea-coast."[3] It is important to note that these littoral settlements are referred to as *pattanagāma* in the Jātakas carrying an older tradition. In course of time when they became full-fledged sea-ports serving as thriving

2. Amalgamation of villages: natural resources, trade-routes.

[1] *Cf.* the cities of Saptagrāma or Satgaon, Caturgrāma or Chittagong, Pentapolis or 'five cities' (Ptolemy, 2. 2). Mark also the suffixes in modern city names like Cox's bazar, Bagerhat, Lalmanirhat, Narayanganj, Raniganj, etc.

[2] *Cf.* Golcunda with its diamonds, Agra with its marble works, Dacca with its silk and so on, and modern factory towns like Jamshedpur, Asansol, etc.

[3] Mayamatam, 10. 55-57. In popular parlance a river port also is *pattana*. Jāt. I. 121.

outlets for foreign transactions, the *gāma* was dropped and they became cities *par excellence* (panyapattana ; Arth. II. 16).

3. Sacred city and University towns.

A divine sanctuary or a sage's nook sometimes became the nucleus of urban settlements. With the ingress of pilgrims and students, shops and resthouses were in demand. Gradually a magnificent sacred city or university town came into being, possibly chosen later for the seat of government by secular authority.[1]

4 Military necessity.

But Indo-Aryan cities like the Anglo-Saxon boroughs of old arose primarily out of a military necessity. To resist invasions or to consolidate conquests it was incumbent to build fortified outposts at important strategic points linking together the military roads maintained by the state. Because of constant internecine warfare, it was hard for a purely commercial town to exist. Hence every town was protected by walls fitted with watch-towers and girdled with ditches. The gates were closed at night and sentries kept post throughout the day. In the Vedic literature the word for the city is ' pur ' which means ' fort ' or ' rampart.' In the Arthaśāstra a city appears with the appellation of *durga, i.e.*, ' difficult to penetrate,' fortified with strong defence and other arrangements to resist attack. Its description in the Brahmavaivarta Purāṇa, Kāmandakīya Nītisāra and the Arthaśāstra is strikingly like that of a military encampment. The city of Pāṭaliputta was originally built by Ajātasattu to resist the powerful Vajjis (Mahāparinibbāna Sutta). The city fort was surrounded by a number of suburbs (Jāt. VI. 330 f.) where the kings and the high officials repaired when they wanted to take a pleasure jaunt.

[1] *Cf.* Kanchi and Taxila.

These different circumstances of their origin explain the diversity in character of Indian cities. There were *pattanas* or sea-ports. There were *nigamas* or market towns situated on trade-routes.[1] There were *vihāras* or university towns, temple cities, forts with bastions and battlements termed *durga*. A medley of other names are given in the *śilpa-śāstras*, *viz.*, *nagara*, *rājadhānī*, *kheṭa*, *kharvaṭa*, *śivira*, *senāmukha*, *skandhāvāra*, *sthānīya*, *droṇamukha*, *kotma-kolaka* and so on. The cities also varied in shape—square or rectangular, circular or elliptic, lotus-like or bow-shaped each having technical appellations for its variety, and each with the peculiar planning of streets and distribution of public places and buildings.[2]

Diverse types of cities.

Thus quite promiscuously, village settlements might outgrow their rural framework and attain to urban importance. Despite their natural growth, at certain stages they underwent the skill of a scheming technician. For example, to provide for increasing population and traffic, to improve the defences and broaden the streets, the ruler had to call for the civic engineer (sthapati). Besides there are detailed instructions laid down in the *śilpaśāstras* and concrete instances in other literature, of cities founded with a deliberate planning at the very inception. The rules for the guidance of the builder demanded the preparation of maps indicating density of population in different parts, allocation of sites for castes and professions, distribution of residential, business and industrial areas, of parks and squares with space. When improving or extending existing towns he has to make his project without violently dislocating the existing order and with a

The planned city : principles of planning.

[1] Literally, 'nigama' means a 'trade-route.'

[2] See Dutt : Town Planning in Ancient India, Chs. VIII, XI.

consideration for temples, buildings and water-works of importance. As soil specialist he has to survey the ground for its fertility, solidity and mineral resources; if the city is on river or on sea he has to study the probability of diluvion or erosion. He has to survey general traffic, sewage and water-supply, strategic points of offence and defence, folks in the neighbourhood, trees and plants suitable for culture and verdal beautification and all possibilities for the sanitation and aesthetics of the city. This would meet the demands of current political concepts. The capital ought to have the advantages of the hills, plains and seas, command vegetable, animal and mineral resources and be a centre of quick commercial activity. It should be on river bank if not on sea-shore, surrounded by walls (prākāra) and ditches (parikhā) with four gates in four directions, provided with wells, tanks and pools, good roads and parks in roads, and well-constructed taverns, temples and inns for travellers (Śukranīti, I. 425-33). This is not an idealistic utopia but clearly recalls the numerous city descriptions given in Pali and Sanskrit works. Indian architecture further lays down technical instructions as to road-making, *e.g.*, that they should be like the back of a tortoise, *i.e.*, high in the middle and sloping towards the sides where they are provided with drains and that they should be regularly watered and gravelled and repaired every year (I. 531- 37).[1]

The real was not at all out of this standard. The lay-out of Indian cities from the far off Śākala in the Punjab to the distant Campā in Anga is realistically set forth in popular stories with minute details.

[1] The necessity of watering roads and keeping them clear was fully realised. The streets of Ayodhyā were regularly watered. Dropping filth on king's highroad is to be fined with 2 *kārṣāpaṇas* and the filth immediately removed by the offender. Manu, IX. 282.

"Just as the architect of a city, when he wants to build one, would first search out a pleasant spot of ground, with which no fault can be found, even with no hills or gullies in it, free from rough ground and rocks, not open to the danger of attack. And then when he has made plain any rough places there may still be on it, he would clear it thoroughly of all stumps and stakes, and would proceed to build there a city fine, and regular, measured out into suitable quarters, with trenches and ramparts thrown out around it, with strong gateways, watch towers and battlements, with wide squares and open places and junctions (where two roads meet) with clean and even highroads, with regular lines of open shops, well-provided with parks and gardens and lakes and lotus ponds and wells, adorned with many kinds of temples to the gods, free from every fault . . . And in course of time that city might become mighty and prosperous, filled with stores of food, peaceful and glorious, happy, free from distress and calamity, the meeting place of all sorts and conditions of men. Nobles, Brāhmaṇas . . . all these coming to take up their residence there, and finding the new city to be regular, faultless perfect and pleasant....."

Yathā..... nagaravaḍḍhakī nagaraṃ māpetukāmo paṭhamaṃ tāva samaṃ anunnatam-anoṇataṃ asakkharapāsāṇaṃ nirupaddavam-anavajjaṃ ramaṇīyaṃ bhūmibhāgaṃ anuviloketvā yaṃ tattha visamaṃ taṃ samaṃ kārāpetvā khāṇukaṇṭakaṃ visodhāpetvā tattha nagaraṃ māpeyya sobhanam vibhattaṃ bhāgaso mitaṃ ukkiṇṇa-parikhapākāraṃ daḷhagopur-aṭṭāla-koṭṭakaṃ puthu--caccara-catukkasandhi singhāṭakaṃ suci-samatala-rājamaggaṃ suvibhatta-antarāpaṇaṃ ārām-uyyana-taḷāka-pokkharaṇī-udapāna-sampannaṃ bahuvidha-devaṭṭhāna-patimaṇḍitaṃ sabba-dosavirohitaṃ..... atha taṃ nagaram apareṇa samayena iddham bhaveyya phītaṃ subhikkhaṃ khemaṃ samiddhaṃ sivaṃ anītikaṃ nirupaddavaṃ nānājana samākulaṃ..... taṃ nagaraṃ

vāsaya upagatā nānāvisayino janā navaṃ suvibhattaṃ adosam-anavajjaṃ ramaṇīyaṃ taṃ nagaraṃ passitvā..... (Mil. 330 f; *cf.* 34, 1 f.)

The city of Indraprastha laid out by Maya for the sons of Pāṇḍu, the city of Dvārāvatī reconstructed by Viśvakarmā under the orders of Śrīkṛṣṇa are concrete instances of such planned cities which were no promiscuous growth. Another picture gives :

"Behold..... a city furnished with solid foundations and with many gateways and walls and with many pleasant spots where four roads meet. Pillars and trenches, bars and bolts, watch-towers and gates.....

"See various types of birds in the roads under the gateways.....

"See a marvellous city with grand walls, making the hairs stand erect with wonder, pleasant with banners upraised, and with its sands all of gold,—see the hermitages divided regularly in blocks, and the different houses and their yards, with streets and blind lanes between.

"Behold the drinking shops and taverns, the slaughter house and cooks' shops and the harlots and wantons..... the garland weavers, the washermen, the astrologers, the cloth merchants, the gold-workers, the jewellers.

"Crowds are gathered here of men and women, see the seats tiers beyond tiers..... See the wrestlers and the crowd striking their doubled arms, see the strikers and the stricken....." (Jāt. VI 276.)

Municipal extension.

The walls and ditches of the city with its belt of stately trees presented the town a solidarity and corporate entity and prevented the mushroom growth of clumsy outskirts about them. But these defensive works stood on the way of easy expansion. This might be one of the subsidiary reasons which led to the later exclusion of the untouchables and pariahs outside the city gate. The commonest method of town extension,

as in the case of Dvārāvatī, was to dismantle the old walls, fill up the moats and erect a new boundary. As this was expensive and laborious, sometimes a ward or sub-town was built adjoining the wall of the main city which occasionally equalled in eminence or even eclipsed the original one. The city of Puri is supposed to have once possessed such a sub-town the ruins of which are still existing. Kāveripaddinaṃ is said to have been originally divided into the two parts of Maruvur Pakkam and Paddini Pakkam.[1] Giribbaja and Rājagaha probably offered a similar instance.

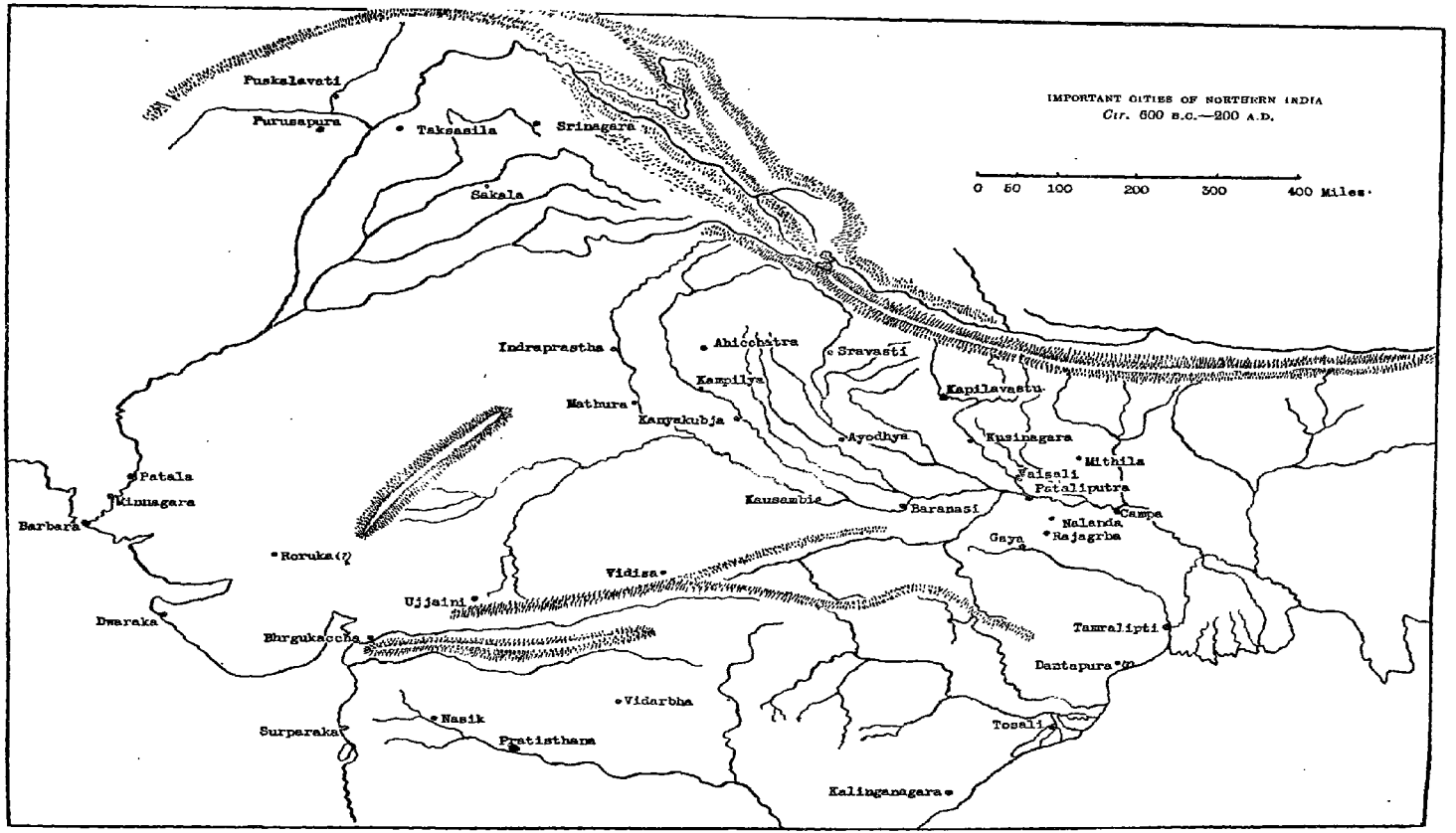
'Six great cities.'

At the time of Buddha, the six great cities of India (that is to say, the provinces which are now the United Provinces and Bihar) enumerated in contrast to a *khuddakanagara* or *sākhānagara* were Campā, Rājagaha, Sāvatthi, Sāketa, Kosāmbi and Bārāṇasi which were in Ānanda's estimation proper places to receive his Lord at the time of *nibbāna* (Mahāparinibbāna Sutta).

1. Campā.

Campā was the capital of Anga, the country to the east of Magadha. Its site is discovered at modern Bhagalpur. It lost its independence to Magadha under Bimbisāra which appears to have never been regained. According to Hemchandra's Sthavirāvali and Pariśiṣṭaparva, after Bimbisāra's death Ajātasatru made Campā his capital, but his son shifted to the newly built city of Pāṭaliputra (Canto VI). In the Anuśāsanaparva it is said that the city was surrounded by groves of Campaka trees (42). The Jātakas represent it as equipped with gates, watch-towers and walls (dvāraṭṭālakapākāra, VI. 32). Hiuen Tsang witnessed these walls and the vestiges of the mound on which they stood are still existing surrounded by a ditch on three sides and by the Ganges in the north. It

[1] V. Kanakasabhai Pillai : The Tamils 1800 years ago, pp. 24 f.


IMPORTANT CITIES OF NORTHERN INDIA
Cir. 600 B.C.—200 A.D.
0 50 100 200 300 400 Miles
Puskalavati
Purusapura
Taksasila
Srinagara
Sakala
Indraprastha
Ahicchatra
Sravasti
Kampilya
Mathura
Kanyakubja
Kapilavastu
Ayodhya
Kusinagara
Mithila
Vaisali
Pataliputra
Kausambic
Baranasi
Campa
Nalanda
Rajagrha
Gaya
Patala
Minnagara
Barbara
Roruka(?)
Vidisa
Ujjaini
Dwaraka
Bhrgukaccha
Tamralipti
Dantapura(?)
Vidarbha
Nasik
Surparaka
Pratistharna
Tosali
Kalinganagara

was a sacred place for both the Buddhists and the Jains. The Buddhist works mention an artificial lake excavated by Queen Gaggarā with groves of Campaka trees on its banks where wondering monks used to reside in the time of Buddha. It appears as a flourishing city in the Jaina work Campaka-śreṣṭhi-kathā which enumerates among the castes and crafts of the town—perfumers, spice-sellers, sugarcandy-sellers, jewellers, tanners, garland-makers, carpenters, goldsmiths, weavers, washermen, etc.[1] In the Daśakumāracarita, Campā is seen abounding in rogues.

2. Rājagaha.

Rājagaha, modern Rājgir, was in Buddha's time not only the capital of Magadha but the spiritual metropolis of India. Innumerable folk-lores, personal reminiscences of Buddha and his faithfuls, and spiritual discourses are associated with this place in the canon. It comprised of the hill fortress of Giribbaja surrounded by five hills and the later town of Rājagaha proper built by Bimbisāra at its northern foot. According to the Mahābhārata the old Rājagṛha or Giribrajapura was ruled by the legendary king Jarāsandha (II. 21) who was killed by Bhīma in a hefty duel. The fortifications of Giribbaja and Rājagaha, still extant, are $4\frac{1}{2}$ and 3 miles respectively in circumference.

3. Sāvatthi.

Sāvatthi, in Buddha's time was capital of Kosala under king Pasenadi. It is identified by Cunningham with Saheth Maheth on the Nepal border on the banks of the Rapti then known as Aciravatī. It is traditionally associated with a great many Buddhist legends and folk-tales. Out of the 498 Jātakas 416 are said to have been recounted by Buddha at this place. The famous lay devotee Anāthapiṇḍika hailed from here and here he purchased the Jetavana where a *vihāra* was built. As the birthplace of two Tirthankaras, the place

[1] MM. Haraprasad Sastri : Catalogue of Sanskrit Manuscripts.

was sacred to the Jainas too as Candrikāpurī or Candrapurī. It was a great emporium whence caravan started with 500 cartloads of wares (Jāt. IV. 350).

4. Sāketa or Ayodhyā.

Sāketa was another important Kosala city and sometimes its capital (Mahāvastu, I. 348; Jāt. III. 270). Its site has been discovered in the Unao district of Oudh. Its identification with Ayojjhā is doubted by Rhys Davids, for both are mentioned as existing in Buddha's time. The present city of Ayodhyā is according to him at a corner of Sāketa. "They were possibly adjoining, like London and Westminster."[1] But in the Rāmāyaṇa and in Kālidāsa's Raghuvaṃsa Sāketa has been explicitly called the capital of king Daśaratha although that position is habitually attributed to Ayodhyā. The city must have had two names which are indiscriminately used both in Pali and Sanskrit.

Ayodhyā is unimportant in the Pali canonical works and is not observed in the Mahābhārata. In the Rāmāyaṇa, it buts in with the full grandeur of a metropolis. Situated on the banks of the Sarayu, it was a well-fortified city, protected on the other sides by a deeply excavated moat kept continually filled with water, 12 *yojana*s in length and 3 *yojana*s in breadth. Daśaratha multiplied its habitations (purim āvasayāmāsa). The city had fine wide streets full of traffic, symmetrically arranged, regularly watered and occasionally strewn with full-bloomed flowers. It had massive gates, was intersected with small crossways (suvibhaktāntarāpaṇam), equipped with mechanical contrivances and arms (sarvayantrāyudhavatī), inhabited by all sorts of mechanics (sarvaśilpī) provided with dramatic parties (bahūnāṭaka saṃghaiśca saṃyuktām), fitted with parks and mango-gardens and encircled by a line of big Śāla trees.

[1] Buddhist India, p. 39.

The fronts of its buildings were harmoniously arranged (suniveśita-veśmāntām). It was frequented by merchants from different countries and garnered with paddy and rice (I. 5. 9 ff). It had the auspicious shape of a bow, the string being along the river (Kālikā Purāṇa, 84, 237 f).[1] Sāketa is referred to as Sagoda by Ptolemy (2.25).

5. Kosāmbi.

Kosāmbi was capital of the Vatsas or Vaṃsas (Jāt. IV. 28; VI. 236) on the Jamunā. Its king was Udayana whose elopement and marriage with Vāsavadattā, the princess of Avanti form the theme of a dramatic legend. "It was the most important *entrepôt* for both goods and passengers coming to Kosala and Magadha from the south and west."[2]

6. Bārāṇasi.

Bārāṇasi, situated at the confluence of the Ganges and the Gumti (Mbh. XIII. 30) was the capital of Kāsi which, at the time of Buddha, formed part of the kingdom of Kosala. It was a seat of Buddhist learning and philosophy, remains of which are scattered at Sarnath. But when Hiuen Tsang visited the city, "there were twenty Deva temples, the towers and halls of which are of sculptured stone and carved wood. The foliage of trees combines to shade (the sites), while the pure streams of water encircle them." Like Taxila it later attained the fame of a university town. Although at the time when the Jātakas were composed it was a centre of learning of some standing (I. 436, 447, 463; III. 537), students had to travel all the way to Taxila from Benares for the higher courses of *sippas* and *vijjās*. At that time it was a great centre of industries (I. 98) and a big and prosperous city, 12 *yojanas* in extent (II. 402)—pākāraparikkhepo

[1] In the Mānasāra and the Mayamata this design of a village or town is called Kārmuka.

[2] Rhys Davids : *loc. cit.*

dvādasayojaniko hoti, idaṃ assā antarabāhiraṃ pana tiyojanasatikaraṭṭham (I. 125).

7. Vesāli.

Ānanda's list is far from exhaustive; and even in Buddha's time, in the Madhyadesa itself, the cradle of his faith, there were other cities which could claim rank with the aforesaid ones. Vesāli, the capital of the Vajjis, a powerful confederation of republican tribes was situated in the Muzaffarpur district (Basarh) on the left bank of the Gandak (Rām. I. 4). It is said to be three *yojanas* north of the Ganges and five *yojanas* from Rājagaha (Com. on Sut. II. 1). The Jātakas aver that in Buddha's time it was a highly prosperous city (paramasobhaggapattam) encompassed by a triple wall each a *yojana* distant from the next, having three gates with watch-towers (I. 504). According to the Mahāvagga, "at that time (Buddha's) Vesāli was an opulent (iddhā), prosperous (phītā), populous (bahujanā) town, crowded with people (ākiṇṇamanussā), abundant with food (subhikkhā). There were 7,707 storeyed buildings (pāsāda), 7,707 pinnacled buildings (kūṭāgāra), 7,707 pleasure grounds (ārāma), 7,707 lotus ponds (pokkharaṇi)" (VIII. 1). The prosperity was no doubt eclipsed by Pāṭaliputra when Ajātasatru annexed the land of the Vajjis to Magadha and built the new city to hold them under subjection.

8. Mithilā.

In the same district of Muzaffarpur has been located the city of Mithilā (Janakpur), capital of Videha, said to have been seven *yojanas* in extent (circumference ? sattayojane mithilānagare, Jāt. III. 365, IV. 315, VI. 246). It was undoubtedly a big and opulent city, for at its four gates there were four *nigamas* or wards called the East Town (pācinayavamajjhaka), the South Town, the West Town and the North Town each inhabited by wealthy merchants (seṭṭhi, anuseṭṭhi, VI. 330 f). In the Mahaummagga Jātaka it is said that a king dug three moats round it,—a water-moat, a mud-moat and

a dry-moat.[1] The great Videhan king Janaka ruled in this city.

According to a long versical narrative, Mithilā was spacious and splendid (visālaṃ sabbatopabhaṃ), divided into well-measured blocks (vibhattaṃ bhāgaso mitaṃ) having many walls and gates (bahupākāratoraṇaṃ), strong towers and palaces (daḷhamaṭṭālakotthakaṃ), intersected by big roads (suvibhattaṃ mahāpathaṃ), laid out with shops at regular intervals (suvibhattantarāpaṇaṃ), thick with traffic of carts and chariots (gavāssarathapīḷitaṃ) beautified with parks and gardens (ārāmavanamāliniṃ) (Jāt. VI. 46 ff). The account of the Mahābhārata is closely similar. The city was ruled over by Janaka and "adorned with the flags of various guilds." It was "a beautiful town resounding *with the noise of sacrifices and festivities*," "*furnished with* splendid gateways, abounding with palatial residences." "Protected by walls on all sides, it had many splendid buildings to boast of. That delightful town was also filled with innumerable cars. Its streets and roads were many and well laid and many of them were lined with shops. And it was full of horses and cars and elephants and warriors. And the citizens were all in health and joy and they were always engaged in festivities" (III. 206. 6-9.).

9. Kapilavastu.

Kapilavastu was the headquarters of the Sākyas another republican tribe, and the birth-place of Buddha. It comprised of several villages or wards, of which one was Lummini, where Buddha was born and which is identified with Rummindei where Aśoka's Pillar Edict records the commutation of *bali* and reduction of *bhāga* to 1/8 for the villagers. Kapilavastu is located in Gorakhpur district on the border of Nepal and the United Provinces from archæological discoveries and

[1] The Arthaśāstra enjoins three ditches round a city (II. 3). The Devī-Purāṇa says that the number should be according to the requirements of the ground (72. 28).

from the distances given from other known places, *viz.*, 60 *yojanas* from Rājagaha, 50 from Vesāli, 6 or 7 from Sāvatthi, and so on. It had a central mote-hall (santāgāra) where deliberations and administrative business were carried on.[1]

10. Ujjeni.

Ujjeni or Ujjainī, the Ozene of the Periplus, was the capital of Avanti, one of the seven sacred cities of the Hindus, ruled in the time of Buddha and Bimbisāra by Caṇḍa Pajjota, whose son Vidudhaba massacred the Sākyas at Kapilavastu for deceitfully giving a slave-girl in marriage to his father. Under the Maurya administration, this was a provincial headquarter. Ptolemy notes that it was the capital of Tiastenes (Chastana). The famous Vikramāditya having expelled the Scythians and established his power over the greater part of India made this city his capital. At the time of the Periplus, it was an important mart linking the northern countries to the sea-port of Barygaza. Fa-hien refers to it as a flourishing university town.

11. Takṣaśilā.

Takṣaśilā (Pali—Takkhasila), the reputed centre of Brāhmaṇical learning flourished much earlier from the time of Buddha. It is profusely referred to in the Pali canonical literature and men of eminence like Pāṇini the grammarian, Jīvaka the physician and Cānakya the politician claimed this as their *alma mater*. The foundation of the city is ascribed by the Rāmāyaṇa to Bharata who is said to have placed his son Takṣa as king there (VII. 114, 201). Literally the word means "hewn stone" and Wilson thinks that the city might have been built of stone instead of brick or mud as were most other cities of India. Presumably it grew to be the capital of Gandhāra (Jāt. I. 217). Its king Omphi

[1] For the legendary origin of Kapilavastu, see S. Hardy ; Manual, pp. 133 ff.

submitted to Alexander when he invaded it. Under the Mauryas it remained a viceregal centre, a large city and governed by good laws (Str. XV. i. 28). After them it was successively the capital of the Bactrian, Saka and Pahlava kings. Arrian describes the city as great and wealthy (V. 8) and as the most populous that lay between the Indus and the Hydaspes. Strabo tells the same thing and with Hiuen Tsang praises the fertility of its soil (XV. i. 17, 28). The latter notices its springs and water courses which account for this fertility. Pliny calls it a famous city, and states that it was situated on a level where the hills sank down into plains. Near the middle of the 1st century A.D. Appollonius of Tyana and his companion Damis are reported to have visited it and Philostratos the biographer described it as being about the size of Nineveh, walled like a Greek city and the residence of a sovereign. The city was "divided into narrow streets with great regularity" reminding the travellers of Athens. There was also a garden, one stadium long with a tank in the midst filled with cool and refreshing streams. Outside the wall was a beautiful temple of porphyry, wherein was a shrine round which were hung pictures on copper tablets representing the feats of Alexander and Poros (Priaulx's Appollon., pp. 13 ff).

Its natural advantages.

The valley in which the remains of Taxila lie, is a singularly pleasant one, well-watered by the Haro river and its tributaries, and protected by a girdle of hills; on the north and east by the snow-mountains of Hazra and the Murree ridge, on the south and west by the well-known Margalla spur and other lower eminences. "This position on the great trade-route which used to connect Hindustan with Central and Western Asia, coupled with the strength of its natural defences, the fertility of the soil, and a constant supply of good water,

readily accounts for the importance of the city in early times." [1]

Its ruins and plan.

The remains of the city are distributed into three distinct sites within three and half miles of each other, *viz.*, Bhir mound, Sirkap and Sirsukh. This fact, characteristic of many other ancient towns reveals important socio-political developments. Firstly, there was the need of expansion of old towns and the convenient way was to start with a suburban townlet adjoining the borders than to expand by demolishing old parapets and dumping up the ditches. But the change was more often brought forth by military than by civic requirements. Many of the oldest cities were moving camps of kings; and the site from which a king shifted became a deserted city. For a conqueror to use this as capital was against the rules of politics apparently because its ins and outs were known to enemy agents. Hence he had to found his own capital which was conveniently done at the neighbourhood of the old site.

These ruins also afford a clear glimpse into the old city plan. "The city of Sirkap shows several large blocks of dwellings, separated one from the other by narrow side streets. . . The unit of their design is the open quadrangle surrounded by chambers (catuḥśālā) and this unit is repeated two, three or four times according to the amount of accommodation required by the occupants, the small rooms fronting on the streets being usually reserved for shops. The walls were constructed either of rough rouble or diaper masonry." [2] About its construction and material prosperity, the Rāmāyaṇa writes that the twin cities of Taxila and Puṣkalāvatī were rich in treasures and embellished with gardens; characterised by intensive commerce, great

[1] Marshall : Guide to Taxila, pp. 1 f.

[2] *Ibid.*, pp. 70 f.

concourse of people, shops, symmetrically arranged in rows on both sides of the main thoroughfares; beautified with splendid shrines and massive trees; so that it took five years to build the cities (VII. 114).

12. Puṣkalāvatī.

Like Taxila, the city of Puṣkalāvatī or Puṣkarāvatī is claimed to have been founded by Bharata and placed under the rule of his son Puṣkala.[1] It was the western capital of Gandhāra. It is placed in the district of Charsadda on the river now called Landai which Alexander crossed by constructing a bridge (Str. XV. i. 27). He besieged and reduced the city and set up his protegé there (Arrian, Anab. IV. 22). It stood on important trade routes from Bactria to Barygaza (Peri. 47) and to Pāṭaliputra. The city is also noticed by Ptolemy (I. 44) and by Arrian as a very large and populous city (Indica, I.).

13. Kampilla.

Kampilla (Kampil in Farukkabad district), was the capital of the northern Pañcālas on the northern bank of the Ganges (Jāt. V. 98). In the Mahābhārata however it appears on the bank of the Ganges but as the capital of south Pañcāla, which became the seat of king Drupada after he was defeated by Droṇa's pupils (I. 138. 73 f) while Ahicchatra (in Rohilkhand) was capital of north Pañcāla.

14. Dantapura.

Dantapura is referred to as capital of Kalinga (Jāt. II. 367, IV, 230; Dn. II. 235; Mah. III. 361). It is the same as Pliny's Dandaguda, the town of the Calingoe. Tradition ascribes the name to the tooth relic of Buddha preserved there. This was obviously a later ascription after the name was already in

[1] The historicity of these two eponymous heroes is doubtful. As Taxila may well have owed its name to its stone-built houses, so Puṣkalāvatī may have been so named due to its attractive lotus-ponds.

vogue from some other origin.[1] The name may have been derived from the elephant-tusk or ivory for which Kalinga was famous (Arth. I. 2). The city has been identified by Cunningham with Rājamāhendri, and by others with Puri. It may more plausibly be placed at Dantan on the Kasai in Midnapore district. At the time of Khāravela the capital was removed farther south where the new city of Kalinga (Mukhalingam and adjacent ruins in the Ganjam district) was built and a settlement of 100 masons was created free from revenue, obviously for further beautification of the city (Hathigumpha In.)

15. Mathurā.

Mathurā (a little south of modern Mathura) on the Jumna, the capital of the Śūrasenas was the reputed birth-place of Kṛṣṇa and the scene of his juvenile adventures. In Buddha's time it is barely mentioned while in the Milinda it is reported to be one of the famous places in India (331). Hence "the time of its greatest growth must have been between these dates."[2] Pliny knows the city. Arrian knows it as a great city and Ptolemy as 'the city of the gods.' This is a cogent observation for under the Kuṣāṇas it became the seat of Jaina religion and learning and dotted with numerous sculptures and votive inscriptions. The Uttarakāṇḍa of the Rāmāyaṇa records that Śatrughna founded it after slaying Lavaṇa, that it stood on the Jamunā the shape of a half-moon,[3] that its land was fertile and productive, that its shops teemed with merchandise, that its buildings were reconstructed and parks and squares laid out and that it flourished with brisk business transactions carried out by merchants from

[1] *Cf.* how under the influence of Buddhist legends Takṣaśilā (hewn rock) became Takṣaśira (severed head) and Adicchatra (Adi's parasol) became Ahicchatra (parasol of snake's hood).

[2] Rhys Davids : Buddhist India.

[3] *Cf.* Ayodhyā and the Kārmuka design. *Ardhacandra* is not crescent.

different countries (83. 9 ff).[1] The Harivaṃsa confirms the same report stating that it was like a half-moon along the Jamunā, that it was rich in gardens and groves (udyānavana-sampanna) and decorated with ramparts and turrets (chayāṭṭālaka keyūraḥ) (Viṣṇuparva, ch. 54). "It was sufficiently famous for the other Madhurā in Tinnevelly first mentioned in the Mahāvaṃso to be named after it."[2]

16. Dwārakā.

Dwārakā or Dvārāvatī said in the Mahābhārata to have been founded by Śrīkṛṣṇa by renovation of the old sea-coast city of Kuśāsthalī is perhaps of later growth like Mathurā. Yule and Lassen have identified this with the Baraca of the Periplus and Barake of Ptolemy (I. 94) on the tip of the Kathiawad Peninsula the gulf whereof was very difficult for navigation (40). The Harivaṃsa describes the construction of the city in great details. When Śrīkṛṣṇa communicated his plan to the chief architect Viśwakarmā, he suggested a further extension for the accommodation of the citizens. Śrīkṛṣṇa proceeded withhis own and realised his error after a few years. A new scheme was initiated and the municipal area extended to 12 *yojana*s × 8 *yojana*s. Old walls were dismantled and old ditches dumped. The surrounding area was cleared and prepared for the extension. Śrīkṛṣṇa gave instructions that building plots were to be properly spaced, triangular and quadrangular 'islands' were to be created on the crossways and other suitable spots; the main thoroughfares were to be measured up, the orientation of buildings ascertained. Thus ordered, the Yādavas selected the site, measured up the boundary lines, divided the plots and on an auspicious day made offerings to the presiding deities of the *vāstu*. Then

Its plan.

[1] The Jainas thus appear as a mercantile community even in the early Christian centuries.

[2] Rhys Davids: Buddhist India.

Kṛṣṇa reiterated his instructions and laid special stress on the establishment of temples. The orders were carried out and special sites reserved for trees. The original city had its traffic mainly through lanes and bye-lanes (rathyā-koṭi-sahasrāḍhyā). In the enlarged city there were eight main roads—four latitudinal, four longitudinal—surrounded by a boulevard. Sixteen public squares were erected at the sixteen cross-sections.[1] The city was bedecked with reservoirs of pure water troughs and sheds for drinking water, parks, orchards and gardens. Fortifications were built and ditches excavated around it which looked as wide and deep as the river Ganges. Defensive weapons and missiles were stored in large number (Viṣṇuparva, chs. 58, 98).

The veracity of these minute details may be doubted with regard to the city of Dwārakā, but by no means with regard to the general principles of town-planning. The building of the Kuru township of Kammāsadamma as described in the Jātaka story and already quoted, reflects the same principles in their original and nebulous form. The *śilpa-śāstras* develop the same principles into a civic science and the builders of an age of progressive urbanisation gave effect to them with ingenious additions to meet the military, economic, religious, sanitary and aesthetic requirements of the times. Such radical reconstructions as described in the Harivaṃsa and in the theoretical works also presuppose a large control on private owners, more extensive than any modern improvement trust can boast of. No private interest was allowed to stand on the way against what was conceived as a public necessity.[2]

Control of Municipal authorities.

[1] Thus Dvārāvatī had six longitudinal streets including the boulevard while Calcutta can boast of at most five;—*viz.*, Circular Road, College-Wellesley Street, Chitpore-Chowringhee Road, Strand Road.

[2] The Śukranīti says that private ownership should not be allowed in towns. Plots of ground were allotted to persons during their life-time only for laying out gardens and erecting houses thereon. Ch. II. ii. 421-24.

17. Indraprastha.

As Dwārakā was built by the divine architect Viśwakarmā under the orders of king Śrīkṛṣṇa, so the city of Indraprastha was constructed by the demon Maya at the requisition of king Yudhiṣṭhira. At the site cleared by the conflagration of the Khāṇḍava forest, on the banks of the Jamunā arose the stately city defended with sea-like ditches and sky-scraping parapets and adorned with gates, towers and palatial buildings. There was a fine lay-out of large thoroughfares. There were magnificent houses, pleasant retreats, fine museums, artificial hills, numerous tanks brimming with water, beautiful lakes fragrant with lilies and lotuses, and lovely with varieties of birds, many charming parks and gardens with tanks at the centres and numberless fine ponds (Mbh. I. 217). Ptolemy notices this city as Indabara (I. 49).

18. Sāgala.

Sāgala or Śākala identified by Fleet with modern Sialkot in the Lahore division is said to have been the capital of Madra (Jāt. IV. 230). It was ruled over by the Madra king Śalya, the brother of Pāṇḍu's wife who participated in the Bhārata war (Mbh. II. 32). It was also ruled over by king Aśwapati, father of Sāvitrī (Matsya Purāṇa, ch. 206). Cunningham says that it was Alexander's Sangala which is known to have offered him a stout resistance, although the position disagrees with that assigned by Alexander's historians.[1] It was the capital of the Greek king Demetrius after his expedition from Bactria and of his successors down to Dionysius. It is referred to as Euthydemia by Ptolemy (I. 46). It undoubtedly rose to the acme of its glory under king Menander. The Milindapañho opens with a full-throated description of the Yona city which is quoted at the beginning of this Book and which substantially recalls the

[1] Arrian and Curtius have noted that this was to the east of the Ravi whereas Śākala according to the Karṇaparva was to its west.

picture of Dwārakā and elaborates upon those of Vesāli, Indraprastha and other cities.

19. Pāṭaliputra.

With the city of Pāṭaliputra we pass the quicksands of legends and folklore and tread on firmer historical ground. The stages of its evolution are not shrouded in the midst of Epic and Purāṇic traditions. In the earlier Pali literature, supposed to be contemporary of Buddha, it is referred to as Pāṭaligāma. But it had great strategic and commercial value, situated as it was on the confluence of the Ganges and the Son (Erannoboas or Hiranyavahā) one of its largest tributaries. It was near to the land of the Vajjis whose capital Vesāli was conquered by Ajātasattu. Hence the Magadhan king deputed his astute ministers Sunīdha and Vassakāra to convert it into a fort in order to hold the Vajjis in check (Mv. VI. 28; Jātakas). His successor Udayin removed from Rājagaha to this new city. Thenceforth Pāṭaliputra remained the holder of imperial tradition under the successive dynasties of Saiśunāga, Nanda, Maurya, Sunga, Kaṇha, Andhra and the Gupta. After the Guptas Kanauj competed with it and finally it was completely overshadowed by the parvenu. When Fa-hien visited it, it was still like "the work of genii beyond the power of human skill." But in Hiuen Tsang's time all that remained of the splendid metropolis were heaps of debris and an insignificant village consisting of about 200 or 300 miserable houses. The city thus, after a shining career of roughly 900 years sank within a century to the oblivion from which it arose in the brief space of a few decades.

According to Megasthenes, Palibothra was the greatest city in India, the shape of a parallelogram, 80 stadia along the river and 15 stadia in breadth, encompassed with a wooden wall (the remains of which have been unearthed and preserved), pierced with loop-holes for the discharge of arrows, crowned with 570 towers and 64 gates, which was

surrounded by a ditch 600 feet wide and 45 feet deep for defence and for receiving the sewage of the city. The royal palace situated in the centre, surpassed the splendour of Susa and Ecbatana (Str. XV. i. 35 f, Arrian, 10). Obviously it attracted from all northern India its overland and river-borne trade. It is recorded from the mouth of Buddha that as far as Aryan people resort, as far as merchants travel, Pāṭaliputra will be the premier city, a centre for the interchange of all kinds of wares (yāvatā Ānanda, āryaṃ āyatanam yāvatā vanippatho idaṃ aggana-garaṃ bhavissati Pāṭaliputtaṃ puṭabhedanaṃ, Dn. XVI. i. 23). The 'prophecy' was evidently interpolated in a day when Pāṭaliputra was no longer a fishing village but the unrivalled metropolis of Magadha.

20. Tosali.

Tosali has been decisively located with the finding of the name in the Aśoka inscriptions on the Dhauli rock. Vestiges of a larger city have been discovered not far from the site of the monument and it is almost certain now that this was Aśoka's capital in the province of Orissa. It probably continued to be so till the time of Ptolemy who called it a metropolis but wrongly placed it to the east of the Ganges thus misleading Lassen to locate it somewhere in the province of Dhakkā. The city stood on the margin of a pool called Kośala-Gangā and probably hence the compound Tośala-Kośalakas in the Brahmāṇḍa-Purāṇa (ch. 51) as suggested by Wilford.

21. Śrīnagarī.

Kalhāna the chronicler of Kashmir says that the city of Śrīnagarī in Kashmir was built by Aśoka which was most important on account of the 96 lacs of houses resplendent with wealth (Rāj. I. 104). Cunningham identifies this with the present village of Pandreṣṭhān (Purāṇādhiṣṭhāna or old capital) on the right bank of the Vitastā some 3 miles above modern Srinagar.[1]

[1] For discussion on Cunningham's views see Stein's note on Rāj. I. 104, translation.

22. Kānyakubja.

Kānyakubja or Kanauj was a leading city in Pañcāla during the period of early Buddhism. According to Rhys Davids it was the capital of the second or southern Pañcāla.[1] Its remains have been traced 65 miles WNW. from Lucknow. It is referred to by Ptolemy as Kanogiza on the course of the Ganges (2.22) and as Kanagora in Prasiake (I. 53). It is mentioned in Patañjali, the Mahābhārata and the Rāmāyaṇa, the last recounting the Purāṇic story that Vāyu transformed here the 99 daughters (kanyā) of its king Kuśanābha into hunchbacks (kubjas) for scorning him.

23. Nālandā.

Nālandā, of which the relics have been discovered in the village of Bargaon, 7 miles to the north-west of Rājgir, is referred to in the Majjhima as a stronghold of the Jainas or Niganthas, a rich and populous city (iddhā, phītā, bahujanā, ākiṇṇamanussā). From the ruins it appears to have been surrounded with noble tanks on all sides. But situated as it was close to the city of Rājagṛha—it is actually described as a suburb of Rājagṛha (Kalpasutra, p. 122), it apparently did not flourish until about the beginning of the Christian era.[2] It is not known from when dates its rise as the foremost university town in the East taking the mantle from Taxila as we find in the records of Hiuen Tsang and I-tsing.

24. Paṭala.

Paṭala, says Arrian, was situated at the head of the Delta where the two great arms of the Indus dispart. This indication would have sufficed for its identification but for the fact that the river very often changed its course shifting its point of bifurcation. Arrian says that Paṭala was the greatest city

[1] Buddhist India.

[2] Bālāditya who lived at the end of the first century A D. is reported to have built the great temple at Nālandā. Rajendralala Mitra: Buddha Gaya, p. 247.

in the parts of the country about the mouth of the Indus. It figures conspicuously in the history of the Macedonian invasion. In its spacious docks Alexander found suitable accommodation for his fleet which had descended the Indus. Seeing its fine commercial and strategical situation he strengthened it with a citadel, and made it a military centre for controlling the warlike tribes in its neighbourhood. In Sanskrit Paṭala means 'the trumpet flower' and Cunningham thinks that the Delta may have derived its name from its resemblance to the shape of a flower.

The small cities.

As opposed to these opulent cities were sorry little suburb towns beset with jungle (khuddaka-nagaraka, sākhānagaraka, ujjaṃgala-nagaraka) like Kuṣinārā the city of the Mallas unfit as a place where the holy Buddha could attain *nirvāna*. Similar were the Malla townships of Pāvā and Anupiyā, Kiṭāgiri of Kāsi, Koli, Sajjanela and Halidda-vasana of the Koliyas, Āpana of Anga, Haṃsavati near the Sākya and Thullakoṭṭhika near the Kuru country.

Sea-ports.

Apart from these inland cities there were sea-ports or *paṭṭanas* whose main importance was commercial and which served as gates to India's seaborne trade. Although the major part of India's foreign trade was diverted to the extensive seaboard of the south, the coasts of Bengal, Orissa, Kathiawad and Sind had their ports which exchanged cargo with all countries from Rome to Java and Cambodia. One of the earliest of

25. Roruka.

these was Roruka later known as Roruva, the capital of Sovīra (Jāt. III. 470; Dn. II. 235; Div. p. 544). It is not exactly located but must have been somewhere on the eastern coast of the Gulf of Cutch. It has been identified by some with Ophir or Sophir where Solomon's vessels had traded. Caravans

arrived here from all parts of India including Magadha.

26. Bhārukaccha.

Bhārukaccha or Bhṛgukaccha or Barygaza of the Greeks was on the site of modern Broach the sea-port of the kingdom of Bhāru (Jāt. IV. 137) which may have flourished after the waning of Roruka out of importance (Div. pp. 544 ff). Sūrpāraka was the

27. Sūrpāraka.

capital of Aparānta or Northern Konkan.[1] It has been satisfactorily identified with the Ophir to which Solomon sent his ships hired from the Tyrians. Supārā had such a coastal situation that western traders crossing the ocean under the monsoon would naturally direct their course thither. The name Supārā is almost identical with that of Ophir when it takes an initial 'S' becoming Sophara as in the Septuagint and Sofir which is the Coptic name for India.[2] Bhārukaccha and Suppāraka were the great ports of the Andhras and Sātavāhanas and contributed to their phenomenal wealth. The Periplus refers to another sea-port on the western coast, *viz.*,

28. Barbaricum.

Barbaricum (Barberei—Ptolemy, 1. 60), the port of the Scythian metropolis of Paṭala and Minnagara (38) or, according to Sanskrit, of Barbara country. It also refers to the great eastern emporium of Tāmralipta (modern Tamluk) situated at the mouth of the Ganges. It is also mentioned by Ptolemy (Tamalitês, 1. 73) and in the Mahābhārata and the Purāṇas. From this port Vijaya is said to have sailed for and conquered Ceylon.[3]

29. Tāmralipta.

So far for the Indian cities known over the globe for their phenomenal wealth and luxury all of which have

[1] R. G. Bhandarkar : History of the Deccan, III, p. 9.

[2] Many Biblical authorities locate Ophir on the Arabian coast of the Persian Gulf, the Indian names for the products showing only that the place was a trading centre with India.

[3] For the trade of these countries, see *infra*, Bk. III, Ch. V.

sunk down to non-entity and some to oblivion with amazing rapidity leaving behind nothing but the name and dilapidated bricks to recall their glory. The list is far from comprehensive for our space and period. It is impossible to disentangle the identity and origin of the innumerable cities from their mythic cobwebs. But the foregoing account may help to give a general picture of cities of which there is a marked uniformity over the differences of time and place, and of the various conditions of their development, *viz.*, military, demographic, industrial and commercial. The city architecture also brings forth the social life of town dwellers. The richer people, the military and mercantile magnates resorted to cities in large numbers and at their behests the artists poured their skill on public buildings to give expression to the happy life, the traditions and ideals of their masters. They decorated the temples, *stupa*s and caves with relief sculptures presenting pictorially the soul-stirring episodes from the career of Rāma, Buddha, Hanumat, Kṛṣṇa, Śiva, Viṣṇu and other divine or sacred lives. The epics, legends and folklores of the land were an inexhaustible store of material for these artistic, religious and martial expressions. These impulses combined with the national ideal which, blazoned forth from the public buildings inculcated humanising and ennobling sentiments. The mute walls and colonnades of these buildings were thus great educative agents disseminating national culture. Besides being the nurseries of corporate ideals and military and artistic endeavours Indian cities were great schools of nationalism in its most liberal and comprehensive sense. It was this characteristic which gave a peculiar stamp to Indian civic life and gave Indian cities its distinctive mark of individuality which evoked the wonder and admiration of their visitors.

Social significance of town-planning.

Educative influence of towns.

CHAPTER II

The Municipal Corporation

The village and the town. No sharp cleavage. Distinction. Simplicity and uniformity *vs.* complexity and diversity.

Extension of co-operation. Charitable and religious activities. Aldermen. Municipal administration,—bureaucratic and democratic control. Municipal functions.

The corporate person. Public places and civic amenities.

Town, product from village.

As explained in the previous chapter, the town was an automatic, organic growth from the village. This is proved not only by the plan of the city or village given in the *śilpaśāstras* and the external features like gates, walls and public works in the description of both; methods of local government, public institutions and popular customs as seen in the *pura* or *nigama* are mostly logical developments from those in the *gāma*.

Social divergence.

There was no complete cleavage between the town and countryside. But the antiquity of the Sanskrit words '*paura*' and '*jānapada*' show that a distinction had appeared early. In the Jātakas *janapadā* and *negamā* are often compounded (III. 513, IV. 262, 449; V. 221, VI. 15; Mil. 121). To the townsfolk the village churl, the man from the *dehāt* was a different social category although relations were not always bad. We come across matrimonial transactions between the two parties sometimes successfully performed (Rājagahaseṭṭhi attano puttassa janapadaseṭṭhino dhītaraṃ ānesi, IV. 37) and on other occasions broken down when the parties

(nagaravāsino, janapadavāsino) fell to abusing each other (I. 257). Trade transactions were also there :—Sāvatthi-nagaravāsī kīr'eko kuṭumbiko ekena jānapadakuṭumbikena saddhiṃ vohāram akāsi (II. 203).

Economic disparity.

The essential difference was in the economic structure of towns and villages. The villages were the productive units of the country given to tillage and small handicrafts. The towns were centres for distribution and exchange, of big business and industrial combines where, besides its own wealth, the wealth of the country accumulated and attracted in its turn learning and culture as well as luxuries and parasite professions like stage-acting, dancing, singing, buffoonery, gambling, tavern-keeping and prostitution. The more sophisticated, luxurious and heterogeneous habits of the town are therefore apparent. This is clearly brought forth in the Arthaśāstra chapter on Janapadaniveśaḥ or foundation of villages. No guilds other than local co-operative guilds are allowed entrance into them. Nor are there to be public halls (śālāḥ) for disport and pleasure. Actors, dancers, singers, music-players, buffoons (vāgjīvanas) and bards (kuśīlava) are not allowed to enter for profit and disturb the work of villagers who being helpless are always bent upon their field (nirāśrayatvāt grāmāṇāṃ kṣetrābhiratatvāt, I. 1). The jealous attempt to guard agriculture against the corrupting diversions of the town shows clearly that there was a deep-seated difference and loss of contact in town life and country life, thanks to which Megasthenes observed that "husbandmen themselves with their wives and children live in the country and entirely avoid going into town" (Diod. II. 40).

But the transition was gradual; and not all the wholesome features of the *gāma* were lost in the process. The best part of it was the translation of the rural associate life to a civic consciousness and to the idea of a municipal corporation with all its legal consequences.

In its corporate life and co-operative activities the *nigama* is a replica of the *gāma* described above.[1] Only we find the spirit of co-operation extended from the village whole to the streets and wards of the municipality. "That the street is a kind of club, the very architecture, with its verandas and stone-couches bear witness to."[2] This co-operative effort was the mainspring of philanthropic and religious activity. Street corporations (vithisabhāgena), municipal wards and sometimes all citizens collectively at Sāvatthi and at Rājagaha (ganabandhanena bahu ekato hutvā, sakalanagaravāsino chandakam saṃharitvā) were active in the entertainment of Buddha and the Brethren (Jāt. I. 422, II. 45, 196, 286). "On this occasion all the inhabitants had made such a collection of all necessaries; but counsels were divided, some demanded that this be given to the heretics, some speaking for those who followed the Buddha.....then it was proposed to divide on the question and accordingly they divided; those who were for the Buddha were in the majority."[3] We have noticed the *goṭhi* of the Sanchi and Bhaṭṭiprolu inscriptions meaning thereby a committee of trustees in charge of a temple[4] or of charitable institutions. "At Benares free education and board were voted by the town to penniless lads" (Jāt. I. 239, 451). We find a market town where a great deal of rice was distributed by ticket and special meals were given (eko nigamagāmo tattha bahūni salākabhatta pakkhika-bhattāni atthi, Jāt. II. 209). Service of humanity was placed in the fore-front of the

Corporation of towns, streets and wards.

Benevolent works.

[1] Book I, Ch. IV.

[2] Sister Nivedita: *Civic and National Ideals.*

[3] The whole procedure is described in detail in its application to the Saṃgha in Cv. IV. 9. 10. 14.

[4] The communal tradition of public worship of gods expenses being met by local subscriptions survive to-day. Of course the holy ground of the temple was not open to the pariah.

municipal programme. Charitable dispensaries and hospitals meant for the poor and the helpless are observed and described in detail by Fa-hien in several cities of the eastern countries.

Aldermen; administration of public funds.

This and other aspects of corporate activity and the growth of the corporation as a legal body are hinted at in a Jātaka verse and lucidly explained in the commentary. Although this comes with reference to the *pūga* a corporate body which cannot be strictly identified with a town corporation, it can be taken as fairly indicative of the functions of the latter since the *pūga* was not exactly a craft-guild and represents a synthesis of larger interests as happen to exist side by side in towns.[1] They appear in hell in a fiery pit who raise a loan on behalf of the corporation and under false pretences misappropriate the money.

> Ye keci pūgāyatanassa hetu
> sakkhiṃ karitvā iṇaṃ jāpayanti, IV. 108

Commentary:—Okāse sati dānam vā dassāma pūjaṃ vā pavattessāma vihāraṃ vā karissāma saṃkaḍḍhitvā ṭhapitassa pūgasantakassa dhanassa hetu, Jāpayantīti taṃ dhanaṃ yathārucim khāditvā gaṇa-jeṭṭhakānaṃ lañcam datvā asukaṭṭhāne ettakaṃ vayakaraṇaṃ gataṃ asukaṭṭhāne amhehi ettakaṃ dinnan ti kuṭasakkhiṃ datvā taṃ iṇaṃ jāpayanti vināsenti.

Thus the *pūga* can raise money for charity, for public worship or to raise a monastery. The aldermen who were in charge of these funds had to give accounts of expenditure under different heads. If these people were purchased by bribe and public money misappropriated under false pretences perdition was in store for the offender. The lawgivers were aware of this abuse. "Whatever loan," says

[1] See *infra*, p. 232.

Kātyāyana, "raised for public purposes is consumed or employed for one's self should be restored by him."

Gaṇamuddiśya yat kiñcit kṛtyarṇaṃ bhakṣitaṃ bhavet
ātmārthaṃ viniyuktaṃ vā deyaṃ taireva tad bhavet
(*Cf.* Viṣ. V. 167; Yāj. II. 187).

About the aldermen or members of a town corporation (*negamā*) the Bhaṭṭiprolu Inscription (No. 8) enumerates twenty-one even giving their names.[1]

They obviously have their counterpart in the *grāmavṛddhas* of the Arthaśāstra. But the Bhaṭṭiprolu Inscription certainly points to a fuller municipal life in the town than in the village. And this is corroborated with additional data by Megasthenes' account about Pāṭaliputra. "Those who have charge of the city are divided into six bodies of five each." The first looks after everything relating to industrial arts, the second to care of foreigners, the third to registration of births and deaths, the fourth to control of trade, the fifth to sale and auction and the sixth to collection of tithe. Collectively they attend to matters of "general interest, as the keeping of public buildings in proper repair, the regulation of prices, the care of markets, harbours and temples" (Str. XV. i. 51). The picture of course appears to be one of complete official control and not of a self-governing body. But the executive machinery with departmental divisions and standing committees in charge of each and with its collective functions was presumably evolved from pre-imperial days and was a general characteristic of big metropolitan cities described in the preceding chapter.

Municipal administration of Pāṭaliputra.

It may also be presumed that whenever the imperial control was withdrawn, the same machinery was continued under democratic direction. The later Smṛtis lay down high qualification,

Bureaucratic and democratic control.

[1] E. I. II. 25.

viz., good lineage, knowledge of the Vedas, self-control, administrative acumen, purity of body and mind and freedom from avarice for the executive officers of the assembly who are called *samūhahitavādinaḥ* and *kāryacintakāḥ* (Vṛ. XVII. 9; Yāj. II. 191). The power of appointing and of punishing them was exercised by the municipal body (Vṛ. XVII. 17-20). When not under the direct authority of a strong king, the autonomous or semi-independent municipality developed a police and military force of its own to defend against attacks either from within or from without, *i.e.*, from robbers and rogues who must be repelled by all (Vṛ. XVII. 5 f; *cf.* Nār. III. 4, X. 5). Sometimes they became powerful enough to take the offensive, make marauding expeditions and harass kings (Vṛ. XIV. 31f.; Arth. V. 3).

Municipal functions.

Archæological evidence affords a glimpse into the other functions of the municipal body. At Nasik, under Scythian rule, the terms of a royal endowment or of a private endowment with investment in a guild bank were publicly announced (srāvita) in the town-hall (nigamasabhā) and then duly registered (nibaddha) (Nasik Cave In. 12. v; 15. viii). The corporations had their seals and sometimes issued coins in their name. Marshall discovered a seal-die of terra cotta at Bhita near Allahabad with the legend 'Śāhijitiye nigamaśa' assigned to the 3rd or 4th century B.C. on palaeographic grounds at the foundation of a house which he thinks to have been the office of the *nigama*.[1] Four sealings bearing the legend '*nigama*' or '*nigamaśa*' in Kuṣāna characters have also been found there and a fifth with the legend '*nigamasya*' in northern Gupta characters. Similar seals have been discovered at Basarh (Vaiśālī) belonging to the time of Gupta emperors. Four coins have been discovered

[1] Annual Report of Archæological Survey, 1911-12, p. 47.

at Taxila bearing the legend '*negamā*' in the reverse and a certain name in the obverse, presumably of their royal or popular heads. The characters are Brāhmī and Brāhmī-Kharoṣṭhī pointing to not later than the 3rd century B.C.[1] It may be noted here that the Visuddhimagga says that some *naigamas* and *gāmas* could issue money (XIV).[2]

The Basarh seals throw more light on municipal development in a later age. Members and leading functionaries of the body (prathamakulika) are referred to. The towns were ruled over by powerful economic interests like *śresthi*, *sārthavāha* and *kulika* who appear with their names in the seals. They appear with ruling powers over the *viṣaya* in the Damodarpur Copper Plate inscriptions. With their growing economic importance, craft-guilds and trade-guilds settled in the *nigamas* under the Gupta Empire took control of town administration.[3]

Thus in its constitution and function the municipality appears with a complexion strikingly modern. As noted in the previous chapter, the radical reconstructions which towns had often to undergo presuppose a rigid municipal authority on property-owners to which the Improvement Trusts of the present day are hardly a parallel. The Śukranīti even denies private ownership in towns providing only for allotment of plots during one's life. The books of

[1] Cunningham : *Coins of Ancient India*, p. 69 and Pl. III.

[2] D. R. Bhandarkar : Carmichael lectures, 1918, p. 176.

[3] Many scholars understand *nigama* of these seals and coins to be guilds and not corporations. D. R. Bhandarkar finds no authority for this (*op. cit.*, pp. 170 ff.). R. C. Majumdar makes a compromise and concludes : "There were powerful guild-organisations with ruling authroity in various cities of India during the Gupta period." Corporate Life, p. 45. So far as the *gāma* of the Visuddhimagga is concerned, we shall see that in an industrial village, the guild and the corporation were the same body. The same identity should occur in many *nigamas* which very often were only an evolution from the *gāma* mustering several organised industries instead of one; and a *pūga* or composite guild being a federation of several organised industries is hardly different from a *nigama*. For more and later instances of mercantile interests being the civic authority, see E. I. I. 20; XIV. 14.

Nārada, Bṛhaspati and Yājñavalkya recognise the legal idea of corporate person with powers of standing in a law-court, owning property, contracting loan, etc. In public works and civic amenities, ancient towns even compare favourably with modern towns. Among public places, the Śāntiparva enumerates a market, a field for athletics, a hall of the nobility, a pleasure garden, a garden, the assembly of officials and the council (69). To these may be added the public rest-house with the attached tank. There was the town-hall—the *sabhā* or *nagaramandira* or the more primitive council tree at the crossroad. Parks and gardens were sometimes laid out on the banks of pure water reservoirs in which aquatic plants were reared to enhance the charm. These were fitted with shades, baths, bowers, cradles and pedestals. There were public wells and water-sheds (prapā) at the junction of roads. There were triangles and squares on the cross-section of roads. Every ward or municipal division was endowed with these civic amenities to relieve congestion and ensure air and light. The numerous city descriptions in Indian literature revel in glorifying these in detail. The very climatic conditions of the tropical country fostered outdoor life and civic spirit under clear air and cloudless skies.

Corporate person.

Public works and Civic amenities.

CHAPTER III

Industrial Products : Specialisation of Arts and Crafts

India an industrial country. Industries in towns and villages: Dionysius.

Mining and minerals. Mineralogy. Metal-workers. The Blacksmith, his art. The Goldsmith, his art. Fees for metal-workers.

Animals and animal produce. Industries from animal produce. Ivory work. Fisheries.

Perfumery; sandal. Textile industries. Textile luxuries. Toilets and other luxuries. Miscellaneous crafts. Specialisation and division of labour.

House-building—the carpenter, his craft; the architect; the stone-cutter; the painter.

The washerman and dyer. Other industries. Adaptability of Indian craftsmen. The Municipal market. State and municipal control.

Mechanisation of industries. Mechanical devices and power.

Agricultural country?

The long-standing notion that India has all along been primarily an agricultural country was dispelled many years ago by the scholarly thesis of R. C. Dutt. It is now well-known that India was the home of arts and crafts, that her specialised industries found an appreciative market throughout the known ranges of the globe, that she was rich in raw materials for industrial production and that many of her finished goods would compare favourably with her modern compeers in aesthetic value.

Industries : urban and rural.

The towns no doubt favoured the concentration and perfection of the industrial arts. But these had an almost equally important rôle to play in rural and in national economy. Literally every house was a centre of some small industry. And side by side with the agriculturist innumerable industrial professions cropped up in the countryside to cater

to the needs of the people and add to the total productive wealth of the nation.

Dionysius, the poet of "The Description of the Whole World," supposed to belong to the 3rd century A.D., gives a brief and beautiful glimpse into Indian industries from long-range perspective. "They (the Indians on the other side of the Indus) are variously occupied—some by mining seek for the matrix of gold, digging the soil with well-curved pickaxes; others ply the loom to weave textures of linen; others saw the tusks of elephants and varnish them to the brightness of silver; and others along the courses of mountain torrents search for precious stones—the green beryl, or the sparkling diamond, or the pale green translucent jasper, or the yellow stone or the pure topaz, or the sweet amethyst which with a milder glow imitate the hue of purple."

Mining and metals.

India had abundant mineral resources and her people knew full well to exploit the mines. In the words of Diodorus, she "has also under ground numerous veins of all sorts of metals, for it contains much gold and silver, copper and iron in no small quantity, and even tin and other metals which are employed in making articles of use and ornament, as well as the implements and accoutrements of war" (II. 36). Strabo, although he dismisses as a fable the story told by Timagenes that showers fall of drops of copper which are swept together, cites the more credible statement of Megasthenes "since the same is the case in Iberia, that rivers carry down gold dust, and that a part of this is paid by way of tribute to the king" (XV. i. 57). Similarly on the testimony of Gorgos, the miner, he believes in the existence of gold and silver mines in mountains but is misled to state that "the Indians being unacquainted with mining and the smelting of ores[1] do not know their own wealth,

[1] This is distinctly referred to as early as in the Rg-Veda, V. 9. 5; VI. 3. 4.

and therefore traffic with greater simplicity" (30). In a Jātaka verse, a list of minerals includes iron (ayo), copper (loham), tin (tipu), lead (sīsam), silver (rajatam) and gold (jātarūpan) (*cf.* Dn. XXIII. 29). The Arthaśāstra list of metals gives iron (kālāyasa), copper (tāmra), ? (vṛtta), bronze (kāṃsya), lead (sīsa), tin (trapu), mercury (vaikṛntaka) and brass (ārakūṭa). The Jātaka stories also testify that these mines, mostly under state monopoly, were worked by convict labour (*cf.* Arth. IV. 8).

Mineralogy.

The Arthaśāstra, in the chapter on Ākarakarmāntapravartanam, evinces a great development in the science of mineralogy (sulbadhātuśāstra). Mines were discovered and exploited in plains and in mountain slopes. Large varieties of alloys, processes for extracting metals from ores, the chemical test of metallic substances on acid and alkaline matter are all treated in detail. That these were the acquisition of an earlier age from that of the author of the Arthaśāstra is evident from the simile in the Jātaka verse—"like verdigris removed by acid,"—*ambilena paharitvā tambamalam* (III. 344); *ambiladhotaṃ viya tambamalam* (V. 95).[1] Drawing a more elaborate analogy, Buddha explains: "When master Kassapa, that ball of iron, with its lambent and gaseous concomitants, is burning and glowing with heat, then it is lighter, softer, more plastic, but when, without those lambent and gaseous concomitants, it is cool and quenched, it is then heavier, more rigid, less plastic" (Dn. XXIII. 17).

Smith.

After the knowledge of metals and of their properties was acquired, the smith's trade was divided and specialised on the basis of different metals. In a Milinda list of crafts in a town we

[1] *Cf.* Buddhaghosa's note on 'khura-sipāṭikaṃ,' *i.e.*, powder prepared with *sipāṭika* gum to prevent razors from rusting, Cv. V. 27. 4.

have reference to workers in gold, silver, lead, tin, copper, brass and iron separately (suvaṇṇakāra, sajjhakāra, sīsakāra, tipukāra, lohakāra, vattakāra, ayakāra). By far the commonest and most important from the point of view of village economy were the blacksmiths, the workers in iron and steel. They were generally grouped in exclusive settlements of their own,[1] and people came from the neighbouring villages to have razors, axes, ploughshares and goads made (vāsi-pharasu-phāla-pācanādi, Jāt. III. 281 ff). A more elaborate list of their handicrafts gives razor, axe, spade, augur, hammer, instrument for cutting bamboos, iron weapon, grass-cutter, sword, iron staff, peg and three-pronged iron fork (vāsi-pharasu-kuddāla-nikhādana-muṭṭhika-veḷugumbhacchedana-satthi-tiṇalāyana-asi-lohadaṇḍa-khanuka-ayasiṃghāṭaka, V. 45).

The Blacksmith.

It is difficult from this distance of time to assess their workmanship at its true value. In the Jātaka story just referred to (III. 281 ff), we are told about the exploits of a youthful prodigy. He "took iron of the best kind and made one delicate, strong needle which pierced dice and floated on water: then he made a sheath for it of the same kind and pierced dice with it." Seven such sheaths were made enclosing one upon another, even the last capable of being mistaken as the needle. The strength of the needle is demonstrated by piercing an anvil with it and letting it float on water. We do not know what allowance is to be made for the Bodhisatta factor. The human element is left in the lurch by the pedagogic conclusion of the story: "How he made them is not to be told, for such work prospers through the greatness of Bodhisatta's knowledge."

Workmanship.

[1] There was also the itinerant smith who carries his furnace wherever he is called to go—*kammārāṇaṃ yathā ukkā anto jhāyati no bahi*, Jāt. VI. 189.

There are other evidences of the high excellence of the blacksmith's art which stand on more solid ground. For, it must be remembered that he not only supplied tools to the cultivator, the gardener, the carpenter, the wood-cutter and the grass-mower, he also armed the military. It was on him that the king depended for victory in war. Megasthenes notices this twofold function of the smith (Diod. II. 41) and the protection given to this class by the Maurya state. They received subsidy from the royal exchequer and were exempted from paying taxes. Causing injury to their eye or hand (which disabled them to pursue their craft) meant death for the offender. The sedulous cultivation of the art of killing and of its implements led to the unique metallurgical development as reflected in the chapter on the Superintendent of Armouries in the Arthaśāstra (II. 18), and in the great battle episodes of the Mahābhārata.

The goldsmith.

The goldsmith from the nature of his trade seems to have settled in the town where he could cater to the demands of fashion and luxury of the richer folk, and he is not found settled in exclusive villages like the blacksmith in the *kammāragāma* (Jāt. V. 424 com.; Dn. II. 88; Mil. 331; Rām. II. 83. 15; Mathura In. E. I. II. 14). His was a highly specialised art. The author of the Arthaśāstra contemplates a separate superintendent over the craft, treats gold and silver separately from other metals and deals with various fineries like ornamental work, setting jewels, thread-making, etc. (II. 12 f.). The skilled smith executes an exquisite gold image to the order of a king (Jāt. V. 282). He is seen refining gold from the bed of river Jambu in a crucible, working it to a brilliant polish so that, laid on a yellow cloth, it diffuses its sparkling radiance around (nekkhaṃ jambonadaṃ dakkhakammāraputta ukkāmukhe sukusalasampahaṭṭhaṃ paṇḍukambale nikkhittaṃ bhāsati ca tapati ca virocati ca, Mn. 120; An. I. 181). The silversmith, blowing

off the filth from his metal, is also a common figure (Sut. 962; Dhp. V. 239). Much of jewellery has survived and is amply represented in the bas-reliefs to show the shape and size of ornaments (*cf.* Rām. I. 16; II. 9; III. 49, 51, 52, 54).

Fees for metal working.

The Arthaśāstra specifies the fees for metal-workers. They were required to manufacture gold and silver coins, 1 *māṣa*[1] is the fee for the manufacture of a silver *dharaṇa*, 1/8 portion for manufacture of a *suvarṇa*. Fees rise according to the skill of the worker. Fees shall be 5 p.c. or 1/20 for manufacture of articles from copper, brass, *vaikṛntaka* and *ārakūṭa*. 1 and 2 *kākaṇi*s are fees for manufacturing an article of a *pala* in weight of lead and iron respectively (IV. I. Munich MS.).[2]

Animal produce.

The hills and forests of India were rich in animal resources sufficient to draw the attention of Megasthenes, and to provide materials for a complete treatise by Aelian. In the forests held under its monopoly, the state had a lucrative income from these products. In the primeval forests which were no man's property, the hunter and fowler plied their trade selling flesh for eating to the townsfolk or the hide, claws, teeth and fat when he happened to bag a lion (Jāt. I. 387; III. 152). According to the Arthaśāstra, the skin (carma), bone (asthi), bile (pitta), gut (snāyu), tooth (danta), horn (śṛnga), hoof (khura) and tail (puccha) are useful commodities derived

[1] Of silver. This means 1/16 of value, 1 *dharaṇa* being 16 *māṣa*s in weight.

[2] The Śukranīti assigns the goldsmith 1/30, 1/60 or 1/120, according as the workmanship is excellent, mediocre or inferior; 1/240 in the case of a bracelet (*kataka*) and 1/480 for mere melting The grades of the silversmith are ½, ¼, ⅛ according to quality of work and 1/16 in the case of a bracelet. The fee is ¼ for copper, zinc and *jasada* metal; ½, 1, 2, or 8 times in case of iron (IV. vv. 653-59). Thus Śukra's law is more equitable giving more weight to workmanship and less to the value of the metal worked upon.

from the lizard, the *seraka* (?), the leopard (dwīpī), the porpoise (suṃsumāra), the lion, the tiger, the elephant, the buffalo, the yak (camara), the rhinoceros (? sṛmarakharbga) and the gayal (gavaya) as well as from other animals, birds and reptiles (II. 17, 29).

Industries.

The skin disposed of by the hunter went to the tanner and cobbler and fed their industry. The wool and the feather, after the necessary processes of carding and cleaning, were used by the skilled weaver for the production of warm clothing. But the more important trade flourishing upon animal produce was that of the ivory-carver. He could carve out any shape out of ivory as the potter out of clay or the goldsmith out of gold (Dn. II. 88). The material yielded into diverse forms and shapes as for example bangles and trinkets (valayādīni, Jāt. I. 320 f, II. 197), and " a living elephant's tusk was worth a great deal more than a dead one's " (Jāt. I. 320 f; *cf.* Arth. II. 2). In the Atthasālinī these artisans are sketched as " tightly swathed in one garment, their heads covered with another, their limbs besprinkled with ivory dust, making various forms out of ivory," so that a king riding his elephant in state " being pleased with their skill, might say, 'how clever are these masters who can do such things' " and even wish he might be one of them (135).

Pearl-fishery.

Fishing was probably confined to the rivers and lakes and the depths of the sea seem not to have been explored by the northerners to a very appreciable extent. A casual simile in the Jātakas of course refers to the throwing of a net in the sea (samuddamatthake jālam khipanto viya, III. 345); but in the Jātakas a river is often indiscriminately spoken of as a *samudda* (I. 227 ff; IV. 167 f.; VI. 158). In the Śāntiparva, going into the depth of the ocean is among the *vārttās* (samudraṃ vā viśantyanye, 167. 33). The treasures (ratana) beneath

the ocean are enumerated as *muktā* (pearl), *maṇi* (crystal), *veḷuriya* (beryl), *saṃkha* (shell), *silā* (quartz), *pavāla* (coral), *rajata* (silver), *jātarūpa* (gold), *lohitanka* (ruby) and *masāragalla* (cat's eye) (An. IV. 199). Pearl-fishery was a flourishing industry in Ceylon and in the Tamil countries. Writing about it, Pliny says that like bees swarms of oysters were led by clever and flitting ones. If they are netted, others are easily caught. " They are then put into earthen pots where they are buried deep in salt. By this process the flesh is all eaten away, and the hard concretions, which are the pearls, drop down to the bottom " (IX. 55). The tortoise shell which figures in the Periplus (17) as an important export from India may be a southern product and so also the beaded pearls of Sītā's head tiara which are claimed to have been raised from the sea (bārisambhavaḥ, Rām. V. 40. 8).

Perfumery.

Perfumery was a highly specialised art (Jāt. VI. 335). The commonest perfume was sandal. The wood was rubbed into a paste, or oil was extracted out of it which was used along with aloe (akalu) as toilet (II. 181; III. 160, 512; V. 156, 302; VI. 144). There were several varieties among which *gośīrṣa*, red sandal and that produced in Dardara are enumerated in the Kalpasutra (100; *cf.* Arth. II. 11). Flower-scents were extracted and used to perfume crude sesamum oil (Mbh. VII. 279. 14 f; 299. 14). Many other varieties of aromatics were cultivated and gathered which figure prominently in the Periplus and classical writers among the exports of India to the Roman world. Chemical compounds of different scents were also known (sabbasaṃhāraka, Jāt. VI. 336) and the art embraced the knowledge of enbalming and preserving dead bodies (Rām. VII. 88. 2-4). Despite the attempt to stigmatise his profession in certain quarters as appropriate to mixed castes (Mbh. XIII. 23. 48)

the perfumer's (gandhika) art had a good demand among the rich and fashionable people and consequently commanded respectability (Jāt. VI. 336; Rām. II. 83. 12ff; Mathura In., Karle Cave In.)

Textile industries.

The habits of luxury equally encouraged the textile industries. Megasthenes observes that the main attention of the fashionable was in dress and the medallions and relief sculptures in Barhut, Sanchi, Sarnath and Amaravati amply bear out his observation. The Jaina Ācārāngasutta mentions several varieties of cotton and fur stuff (II. 5. 1. 4 f). The Mahāvagga enumerates among textile goods *khomaṃ* (linen), *kappāsikaṃ* (cotton), *koseyyaṃ* (silk), *kambalaṃ* (woollen garments), *sāṇaṃ* (hemp) and *bhangaṃ* (hempen cloth) (I. 30. 4). A further elaboration is made upon these, *viz.*, *sāṇaṃ*, *sāṇasuttam* and *sāṇiyo*, *i.e.*, hemp, hempen thread and hempen cloth, *khomaṃ* and *khomasuttaṃ*, *i.e.*, flax and linen thread; *kappāsikadussaṃ* and *kappāsikasuttaṃ*, *i.e.*, cotton cloth and cotton thread (Dn. XXIII. 29). That spinning and weaving were separate industries is evident from the Milinda (331) and the Rāmāyaṇa (II. 83. 12 ff.) lists of crafts and professions (An. III. 295). The texture of these was sometimes so fine that the down on the gourd was coarse in co nparison (.....cīvarāṇi dhāremi daḷhāni yattha lūkhāni alābulomasāni, Mn. 77).

Textile luxuries.

Silk was of course the commonest luxury. Carpets were made of the finest fibre cloth (varapotha-kattharaṇaṃ, Jāt. VI. 280) or with soft variegated squirrel skins (muducittakaḷandaka, Jāt. VI). Of blankets and woollen stuff there were many varieties, *e.g.*, dyed or embroidered blankets (citrān kambalān) (Rām. II. 70. 19) and those spotted with lac dye (IV. 28. 24). In a long list of luxury goods to which the Brāhmaṇas are addicted, have been enumerated the *gonako* (rendered by Rhys Davids as goat's hair coverlets with very long fleece),

cittakā (patchwork counterpanes of many colours), *patikā* (white blankets), *paṭalikā* (woollen coverlets embroidered with flowers), *tulikā* (quilts stuffed with cotton wool), *vikatikā* (coverlets embroidered with figures of lions, tigers, etc.), *uddalomi* (rugs with fur on both sides), *ekantalomi* (rugs with fur on one side), *katthissam* (coverlets embroidered with gems), *koseyyam* (silk coverlets), *kuttakam* (carpets long enough for sixteen dancers), *hatthattharam* (elephant housings), *assattharam* (horse rugs), *rathattharam* (carriage rugs), *ajinappaveṇiṃ*, *kadalimigapavarapaccattharaṇam* (panther or antelope skins), *sauttaracchadaṃ ubhatolohitakūpadhānaṃ* (couches covered with canopies or with crimson cushions at both ends) (Dn. I. i. 15; *cf.* XVII. ii. 5; Mv. V, 10. 13).[1] Blankets were made also of human hair (kesakambalam),[2] of horse's tail (vālakambalam)[3] and of feather of owl (ulumapakkham) (Dn. VIII. 14, XXV. 8; Mn. 12; An. I. 181, 286). Blankets, fibrous garments and cotton fabrics with their specialities and sources of supply figure in the Arthaśāstra as well-known industrial products (II. 11). Megasthenes observed that Indians put on robes worked with gold and precious stones, and flowered garments of the finest muslin (Str. XV. i. 53-56).

Other luxuries.

Among other articles of luxury were "high and large couches," *e.g.*, the *asandi* (moveable settees, high and six feet long)[4] and the *pallanko* (divans with animal figures carved on the supports) (Dn. I. i. 15; An. I. 181; Mv. V. 10. 3; Jāt. I. 108); couches of ivory, wood, gold or silver (Sn. III. 146), mirrors, eye-

[1] See Sumangalavilāsinī on Brahmajālasutta 9, and the translations of Rhys Davids.

[2] See Sumangalavilāsinī. *Cf.* Ajito kesakambala. *Cf.* Manu XI. 93.

[3] Rhys Davids: *Dialogues*, p. 231, fn. 3.

[4] "It is there (Sat. Br. III. 35. 105) said to be of common sorts of wood and perforated; which probably means that the frame was of wood and the seat was of interlaced cane or wickerwork," *ibid.*, p. 11, fn. 4.

ointments, garlands, rouge, cosmetics, bracelets, necklaces, walking sticks, reed cases for drugs, rapiers, sunshades, embroidered slippers, turbans, diadems, whisks of yak's tail and long-fringed white robes (Dn. I. i. 55; An. I. 181). "They wear shoes made of white leather, and these are elaborately trimmed, while the soles are variegated....." (Arrian, 16).

Miscellaneous crafts.

Lac was widely cultivated and a flourishing industry thrived upon it. It was used mainly as a dye and for anointing their feet by women (Therag. 459). Apiary or bee-culture was well-known (Arth. II. 15; Rām. V. 61-63). The classical writers also give prominence to a host of edible spices, herbs, medicines, stones, dyes, resinous gums, etc., as peculiar Indian products which had a monopoly of Arabian and Roman markets (*cf.* Mv. VI. 1 ff.).

Specialisation.

How far division of labour and specialisation in industry was achieved is shown by the splitting off of the art of arrow-making from the smithy. A fletcher (usukāra) straightening or bending his arrow is a very common reference (Dhp. 33, 80; Mbh. XII. 178. 12). He heats an arrow in a pan of coal, wets it with sour rice-gruel and closing one eye, looks with the other while he makes the arrow straight (usukāro angārakapalle usuṃ tāpetvā kañjikena temetvā ekaṃ akkhiṃ nimīlitvā eken'olokento ujuṃ kāroti, Jāt. VI. 66). From the Milinda list of crafts practising in a town it would appear that the art of arrow-making, while being separate from that of the smith (cundā) was separate even from the manufacture of bows (dhanukāra) and of bow-strings (jiyakāra) apart from any ornamental work thereupon.

The same was the case with carpentry. While the art or the *vaḍḍhaki* covered all woodcraft in general, the *tacchaka* (planer) and the *bhamakāra* (turner) specialised in modes of woodwork (Mv. I. 56, 396; Dhp. 80).

The Pali literature throws much light on the craft of the *vaḍḍhaki*. The Jātakas have an illuminating passage about a settlement off Benares. "They would go up the river in a vessel, and enter the forest, where they would shape beams and plans for house-building, and put together the framework of one-storey or two-storey houses, numbering all the pieces from the main post onwards; these then they brought down to the river bank, and put them all aboard; then rowing downstream again, they would build houses to order as it was required of them; after which when they received their wage, they went back again for more materials for the building, and in this way they made their livelihood" (II. 18).

The Carpenter: house-building.

Te nāvāya uparisotaṃ gantvā araññe gehasambhāradārūni koṭṭetvā tatth'eva ekabhūmika-dvibhūmikādi-bhede gehe sajjetvā thambhato paṭṭhāya sabbadārūsu saññaṃ katvā nadītīraṃ netvā nāvaṃ āropetvā anusotena nagaraṃ āgantvā ye yādisāni gehāni ākaṃkhanti tesaṃ tādisāni katvā kahāpaṇe gahetvā puna tatth'eva gantvā gehasambhāre āharanti. Evaṃ tesaṃ jīvikaṃ kappentānaṃ.....

The passage gives valuable clues to the condition of the industry. Wood was plenty and it was used on a large scale for house-building.[1] The carpenters who are in this

[1] There is little doubt that during the period of our study timber was largely used for constructions in the Gangetic provinces (Jāt. III. 157, 317; IV. 153, 159; Mv. III. 8). It was used to build the palaces and fortifications of Pāṭaliputra, although the Arthaśāstra disapproves of such use as fire finds a happy abode in wood. Conditions may have been different farther west, for the Milindapañho, composed by a western writer, says that in the eastern districts (puratthimesu) houses were built of combustible material like thatch and wood and were dangerous in case of fire (pp. 43, 47. 224), indicating thereby that the western countries used other and non-combustible materials. In this respect the distinction between towns and villages should be noted. The village huts were built chiefly with wattle (kaṭṭha), withies (valli), grass (tiṇa) and clay (mattika) Mn. 28, Mil. 43; Mbh. XII. 261. 7) but the application of brick, stone and cement along with wood is testified to (Cv. V. 11. 6; 14. 3; 16. 2; 17. 2; VI. 3. 3f, 10; 17. 1). Arrian draws the distinction that cities on river banks or sea-coasts "being meant to last for a time" mainly consisted of woodworks, while those on "commanding

case a firm of building contractors resided in proximity to the sources of their raw-materials, *i.e.*, to forests. At the same time they must be within easy reach of the town where they have to receive and execute orders; and the river afforded the most convenient facility for transport. Accordingly the settlement was made on a river bank, midway between a town and a forest. They brought wood from the forest, worked the pieces at home, and carrying them downstream fitted them in the place required.

His craft.

Besides houses the carpenters took contracts for bedstead (mañcam), chair (pīṭham), etc., *i.e.*, furnitures in general (Jāt. IV. 159). A Brāhmaṇa carpenter 'gained his livelihood by bringing wood from the forest and making carts' (IV. 207). Chariot-making and ship-building came within the purview of his trade and called for considerable skill in wood-craft. He is seen plying his trade with hatchet, adze, chisel, and mallet (vāsipharasūnikhādanamuggare) and the measuring line (kālasutta) (Jāt. II. 405; IV. 344) which he draws out at length or winds up short (Dn. XXII. 2) or which he puts round a log of wood with black dust to guide his saw (tacchako kālasuttaṃ anulometvā rukkhaṃ tacchati, Mil. 413). He bends a log of wood (dārun namayanti tacchakā, Dhp. 145) and discarding soft parts of the wood takes the hard parts" (pheggum apaharitvā sāram ādiyati, Mil, 413) as obviously in the case of ebony of which the outside is soft and inside hard.

The architect.

The carpenter was not the only agency engaged in house-building. The building of a king's palace was the venue of as many as eighteen manual arts (Jāt. VI. 427). Among them the foremost place was that of the architect[1] who is skilled in divining

situations" were built of brick and mud. The reminiscence of the former practice survives now in Burma which is still rich in forests and timber.

[1] For the workmanship of the civic architect see *supra*, Ch. I.

good sites (vatthuvijjācariyo, II. 297, IV. 324) and who is sometimes "endued with great intelligence and well-versed in the knowledge of laying foundations, a *sūta* by caste, well-acquainted with the Purāṇas,"—

> sthapatir buddhisampanno vāstuvidyāviśāradaḥ
> ityabrabīt sūtradhāraḥ sūtaḥ paurāṇikastadā
> —Mbh. I. 51. 15.

The stone-cutter.

The stone-cutter was his accomplice (pāsāṇakoṭṭaka), an expert in quarrying and shaping stone (pāsāṇe uppāṭetvā koṭṭeti) and capable of hollowing a cavity in a crystal (Jāt. I. 478 f). Innumerable archeological finds testify to the growth of his craft. He made flights of steps leading up into a house and laid foundations for the woodwork of which the upper part was built. He carved pillars and bas reliefs. He faced a tank with stone-lining and equipped it with steps and balustrade (Cv. V. 17. 2; Rudradāman's Junagadh Rock In.). And he did finer work such as making a crystal bowl or a stone coffer, excellent specimens of which have been discovered in the Sakiya tope, and chiselling exquisite works of sculpture on topes and temples.

The painter.

To the work of the architect, carpenter and stone-cutter, the painter (cittakāra) gave the finishing touch. The clay and woodwork of houses was covered with fine *cūṇam* plaster on which the painter painted frescoes (Cv. VI. 17. 1; Sum. 42, 84; Vin. II. 151; IV. 47, 61, 298; Mil. 331). But the painter's like the sculptor's art was not the handmaid of architecture because of the facts that the chisel and the brush had a free berth in frescoes and mural decorations and that accordingly they are treated in the Śilpaśāstras in subsidiary sections of the Sthāpatyaveda. Painting flourished as a finished and independent art. A passing reference in the Mṛcchakaṭika, Act I, gives a glimpse of the painter at work. "I who used

to sit in the inner courtyard and was fed on highly favoured sweets ..... with a hundred pans around me, like a painter surrounded with paint-pans, from each of which I touched a bit and pushed back .....''. About the working in his mind with the outer operations, the Atthasālinī speaks in greater detail, "In painting, the painter's masterpiece (caraṇa)[1] is more artistic than the rest of the pictures. An artistic design occurs to the painter of masterpieces—that such and such pictures should be drawn in such and such a way. Through this artistic design there arise operations of the mind (or artistic operation) accomplishing such things as sketching the outline, putting on the paint, touching up and embellishing. Then in the picture known as the masterpiece is effected a certain central artistic figure. Then the remaining portion of the picture is completed by the work of planning in mind as, 'above this figure let this be; underneath, this; on both sides, this.' Thus all classes of arts in this world specific or generic are achieved by the mind. And owing to its capacity thus to produce a variety or diversity of effects in action, the mind, which achieves all these arts is itself artistic like the arts themselves. Nay, it is even more artistic than the art itself, because the latter cannot execute every design perfectly. For that reason the Blessed One has said 'Bhikkhus, have you seen a masterpiece of painting?' 'Yea Lord.' 'Bhikkhus, that masterpiece of art is designed by the mind. Indeed, Bhikkhus, the mind is even more artistic than that masterpiece."[2]

The washerman or dyer.

The dyer and washerman (rajaka) was probably the same person but different from the dye-manufacturer (rangakāra) (Mil. 331; Dn. II. 14; Mn. 56; Rām. II. 83. 15; Manu, IV. 216). He knew how to remove the dirt of a cloth without destroy-

[1] Vicaraṇacittaṃ,—com. Sn. III. 151. A show-piece selected for exhibition by an itinerant artist.

[2] *Cf.* Sn III. 151

ing the dye (Mbh. XIII. 91. 2). He gave the dye of blue, yellow, red or saffron (mañjeṭṭha) to a piece of cloth after cleansing it properly (Mn. 7 ; An. III. 230). Regarding his terms of business, the Arthaśāstra lays down that he shall be fined 12 *paṇa*s for selling, mortgaging and letting out for hire others' clothes. Clothes merely to be cleaned are to be returned within 1 to 4 nights, clothes which are to be given thin colouring (tanurāgaṃ) 5 nights; those which are to be made blue 6 nights; those which are to be made as red as flower, lac or saffron or those which require much skill and care 7 nights (puṣpa-lākṣā-mañjiṣṭhā-raktaṃ guruparikarma-yatnopacāryaṃ jātyaṃ vāsaḥ sapta-rātrikaṃ). Otherwise charges will be forfeited (IV. 1. Munich MS.).

Other industries.

Among other specialised crafts were those of the florist or garland-maker (mālākāra, Dn. II. 14; Mn. 56 ; Jāt. III. 405 ; Mil. 331), of the manufacturer of sugar and sugar-candy (Str. XV. i. 37), of the oil-presser (tailika, tilapisaka, Manu. IV. 84 f ; Mbh. XII. 174. 25, XIII. 90; Nasik Cave In. 15. vii), of the salt-maker (loṇakāra, Mn. 56, 128; Jāt. III. 489), of the curry-maker and provision-vendor (odanika, III, 49 ; āḷārikā sūdā, Mil. 331 ; bhojanadātṛ, Arth. IV. 8) making a luscious display of his stuff (nānāggarasānaṃ dibbabhojanānaṃ bhājanāni pūretvā odanikāpaṇaṃ pasāretvā, Jāt. I. 397), and of the tailor (tunnavāya, Jāt. VI. 366 ; Mil. 331) who used a thimble or finger-protector (paṭiggaho) when sewing (Cv. V. 11. 5). Among the poorer crafts were those of the woodcutter (kaṭṭhahārakā, Mil. 331; Str. XV. i. 50) and the grasscutter (tiṇahāraka, Mil. p. 331) who works with sickle (asitaṃ), ties the bundles with a rope (tiṇa-bandhanarajjum) to a pole (kājan) and sells them in the city (Jāt. III. 129). Thera Kappaṭakura who in his young days supported himself going about clad in rags, pan in hand, seeking for rice grains (kura), when grown up maintained

himself by selling grass which he reaped in the forest (Paramatthadīpani on Pss. 199 ff).

Adaptability of craftsmen.

Strabo speaks disparagingly not only about the mining activities of the Indians, but also about their industrial propensities in general. "They do not pursue accurate knowledge in any line, except that of medicine; in the case of some arts, it is even accounted vicious to carry their study far, the art of war, for instance." Presumably his authority derived the information from the priestly denunciation of all manual pursuits. For elsewhere he himself quotes Nearchus speaking of the remarkable adaptability of native craftsmen. They saw sponges used by the Macedonians for the first time and immediately manufactured imitations of them with fine thread and wool dying them with the same colour. They quickly picked up other Greek articles such as scrapers and oil-flasks used by athletes. For writing letters they used species of fine closely woven tissue. A study of the plastic arts amply bear out that the Indians had their own designs and ideals, but these did not stand in their way of quickly mastering foreign ideas that commended.

The city bazar.

Among urban crafts the Milinda and the Rāmāyaṇa lists include jewellers (maṇikārā), rope-makers (rajjukārā), comb-makers (kocchakārā); arms-makers (śastropajīvinaḥ), makers of fancy-fans from peacock feathers (māyurakāḥ), those living on *krakaca*s (krākacikāḥ), borers of pearls, etc. (vedhakāḥ), *rocakāḥ* (?) and nector-makers (sudhākārāḥ) (*cf.* Rām. III. 90). Brewery and distillery, pottery, wicker-work and leather-work[1] complete the general picture of industrial economy. The town bazar presenting an imposing array of flower shop (pupphāpaṇaṃ), perfumery (gandhāpaṇaṃ), fruit

[1] These industries are treated in more detail in Bk. V, Ch. III and Bk. VI, Ch. IV.

shop (phalāpaṇaṃ), pharmacy of antidotes (agadāpaṇaṃ), medical stores (osadhāpaṇaṃ), stores of ambrosia (amatāpaṇaṃ), jewellery (ratanāpaṇaṃ) and stores of all other sundry merchandise (sabbāpaṇaṃ) (Mil. 332) was the general sight in all cities and not in the Indus Valley alone. In the Maurya state it was necessary to employ civil officers to superintend the occupations of artisans like wood-cutters, carpenters, blacksmiths and miners. Of the six bodies of the municipal board of Pāṭaliputra, the very first "look after everything relating to the industrial arts" (Str. XV. i. 50). Competition, unfair dealings, deceitful practices against customers, smuggling and cornering, evasion of state revenues and municipal tithes, all these evils of a thriving industrial life demanded interference of the state as far as it could extend its hand. The Arthaśāstra, the great exponent of this school, makes a clean sweep of laissez-faire practices and seeks to inaugurate a rigorous state control to which even Friedrich List offers no parallel.

State and Municipal control.

How far Industry was mechanised is a difficult problem for study. There is little evidence of the use of power like those of air, water or electricity, if the stories of flying vehicles and miraculous arms in the Epics are dismissed as legendary. It cannot be ascertained what sort of engine (yantra) was fitted in the boat which Vidura built to help the Pāṇḍavas escape from the lac house (Mbh. I. 143. 5). Nor can the mythical element be sifted out from the feats of a Bodhisatta mechanic who builds a house with "eighty great doors and sixty-four small doors which all by the pressure of one peg closed, and by the pressure of one peg opened"; and with "some hundreds of lamp-cells also fitted with machinery, so that when one was opened all opened—and when one was shut all were shut" (Jāt. VI. 432). But there is little doubt about a considerable progress in mechanical devices, applied

Mechanisation ?

to various industries, as for example, evinced in the chapter on Armoury Superintendent in the Arthaśāstra (II. 18). The commentaries on the art of mechanical engineering (mahāyantrapravartana) in Manu (XI. 64)[1] are informative in this respect. They go severally as "constructing dams across rivers in order to stop the water" (Medh., Gov. and Kull.), "making machines for killing great animals such as boars" (Nār.) or "making great machines such as sugar-mills" (Nandana).

Applications of machines.

From these explanatory notes and copious other evidences it appears that mechanical contrivances were called for by the great irrigation projects undertaken to combat flood and drought, by armaments and techniques of warfare and by machines like the sugarcane-presser (Jāt. I. 339; II. 240),[2] the oil-presser (Mbh. XII. 174. 25; Manu IV. 84 f), the water-pump or hydraulic engine (odayantra, Nasik Cave In. 15. vii) and the loom with its shuttle and wheel and spokes (Cv. V. 28. 2; Mbh. 1. 3. 144). The devices of a double water-strainer and fitter (Com. on 'daṇḍaparissāvanaṃ' and 'ottharakaṃ', Cv. V. 13. 3) and of a door with poles turning about on a socket (V. 14. 3; VI. 3. 7) were common things. The fictions of Nala bridging the sea between the Cape and Ceylon and of Maya raising a picturesque town on the site of a forest cannot be altogether divested of reality. The great monoliths of the Maurya epoch estimated at about 50 tons each and their transport and erection at such

[1] This craft and the superintendence of mines and factories are branded low. It seems that mechanisation and heavy industries were deprecated by the orthodox and priestly class then as now. A *snātaka* is not to accept present from an oil-presser and an oil-press is as bad as ten slaughter-houses (Manu. IV. 84 f.). Of course very few handicrafts were exempt from stigma. See *infra*, Bk. VI. Ch. IV.

[2] It may be noted that the Indians knew the preparation of sugar-candy which was foreign to the Greeks and appeared like "stones dug up which are of the colour of frankincense and sweeter than fig or honey" (Str. XV. i. 37).

distant places as Topra near Umbala, Sanchi in Bhopal and the Nepalese Terai are no mean engineering feats. If the lion capital of Sarnath is a testimony to Maurya craftsmanship these are standing monuments of mechanical development.

CHAPTER IV

INDUSTRIAL GEOGRAPHY

Geographical distribution of industries.

Animals. Horse—northwest. Elephant, ivory—east. Skins—north, northwest.

Food crops. Herbs, roots and gums; malabathrum, spikenard, nard, costus, lycium, bdellium. Aromatics; sandal, aloe.

Dyes. Grape wine—Afghanistan.

Minerals. Gold—three varieties, ant-gold; Tibetan mines. Other centres. Silver. Copper. Other metals. Rock salt—Ormenus Range. Diamond. Precious stones—south.

Pearl-fishery—south. Sea-fishing—south.

Textile industry—Benares, Bengal, other centres. Cotton. Wool. Silk.

Tabulated list of industries and sources of supply.

Many of the natural and industrial products described in the preceding chapter were scattered over all parts of the country. But some were specialities of particular localities from where they were distributed to others.

The horse.

The forests and mountains abounded with wild animals and birds. The horse and the elephant were prize animals in great demand with kings and nobles. The best breed of these were not to be found everywhere. Of the former, the Arthaśāstra ascribes the best to Kamboja,[1] Sindhu, Āraṭṭa[2] and Vanāyu;[3] and

[1] Stein places it in eastern Afghanistan (Rāj. I. p. 136), some farther north identifying with Pamir Badakshan (Pt. Jaychand Narang Vidyalankar: Bhāratīya Itihāsa kī Rūparekhā, pp. 470 ff). Raychaudhuri, on the basis of Mbh. VII. 4 5. identifies it with Rājapura or Rajaori (between the Jhelum and the Chenab)—Political History, p. 125 f. The latter is strengthened by the appearance of the synonymous adjunct *nadīja* and by the use of *jalaja* or herbs of water for trapping horses.

[2] See fn. 1, next page.

[3] Suggested conjecturally (*a*) to be Arabia both being famous for horses, (*b*) to be Van or Urartu from philological similarity, but Van was never noted for its horse, (*c*) placed in the N. W. Frontier by the Padmapurāṇa (Svarga, Adi. Ch. III.)

the middlings to Bālhika,[1] Pāpeya,[2] Sauvīra,[3] Taitala,[4] the rest being ordinary (II. 30). In the Jātakas and in the Mahābhārata, the Sind variety comes foremost (Jāt. I. 178, 181; II. 166; III. 338; Dhp. 322; Mbh. VI. 91. 3 f; VII. 43.2) along with the Kāmbojas or those of the river-country (Jāt. IV. 464; Kambojakā jalajen' eva assaṃ, V. 445; Mbh. VII. 36. 36; VIII. 38. 13; XII. 36. 14; Kāmbojānāṃ nadījānāṃ, VI. 91. 3 f). Āraṭṭa (Mbh. VI. 91. 3 f) and Vanāyu (VI. 36. 36; VIII. 38. 13) also figure as famous sources of supply, the latter of the white-coloured breed. Bālhika appears (VII. 36. 36) in the list as well as Mahī[5] and Parvatīya[6] (VI. 91. 3 f.; VII. 36. 36) and the trans-Himalayan region around Lake Mānasa where Arjuna obtained as tribute during his *digvijaya* many of the species called *tittiri* and *kalmaṣānmaṇḍūka* (II. 28. 6). In general the source for pedigree steeds was the north-western regions including Sind, the Punjab, the North-West Frontier and Afghanistan. The north-west has been traditionally associated with this trade; the horse-dealers from Uttarāpatha[7] bring their animals for sale to Benares (Jāt. II. 31. 287); horses of various species are among the tributes brought to Arjuna by the northern monarchs (Mbh. 28.

[1] Identified by Lassen with Balkh or Bactria. But references in the Mahābhārata assign it to the Punjab as synonymous with Madras, Āraṭṭas and Jārtikas. On this basis (and Mbh. VIII, 44) it is placed west of the Ravi, the Madra city of Śākala being located there.

[2] Pāpa ? There are two Pāpas or Pāvas, one in Gorakhpur, the city of the Malles and another in Bihar.

[3] Northern Gujarat.

[4] Taitila is Kalinga *according to Monier Williams.*

[5] Is it river Mahī, north of the river Narmadā,—the Mophis of Ptolemy and Mais of the Periplus? There is another river Mahī, tributary of the Ganges in Saran district, one of the five rivers frequently enumerated in Buddhist literature.

[6] This seems to be Ptolemy's Parautoi (17. 3) and Parsyetai (18. 3) and on his reference, is placed in the west and middle of Paropanisadai, or southern and eastern sides of the Hindukush. Have the Aśvakas which is the Aspasioi of Alexander's historians through the Iranian form Aspa (=horse) located in the hill country north of the Kabul anything to do with its supply of horses?

[7] It included the Punjab, Kashmir, the N. W. Frontier and part of Afghanistan.

18 f.), and this is among the chief articles of merchandise coming to the plains along the trade-routes from the Himalayas (Arth. VII. 12).[1]

The elephant.

As for elephants, the Arthaśāstra says that those of Kalinga, Anga, Karūśa[2] and Prācya are best; of Daśārṇa[3] and western countries of middle quality; of Surāṣṭra[4] and Pañcajana[5] of low quality (I. 2). In the Kuru war men of Anga are found specialised in elephantry (Mbh. VIII. 22. 18) and the battle episodes have many references to the effect that Prāgjyotiṣa of Bengal (or Assam?) was rich in elephant (VI. 100. 13; VII. 26) of a quality unequalled in the Kuru and Pāṇḍava armies. So, as the best stallion came from the west, the best elephant was supplied from the east, from the forests of Orissa, Bhagalpur and Bengal while those of the great Daṇḍaka forest, *i.e.*, in the south-east of the Vindhyas, of further west and of Gujarat were comparatively inferior.

Ivory.

The settlements near about these forests must have supplied ivory and specialised in ivory works. According to the Periplus "the region of Dosarena yields the ivory known as Dosarenic" (62). It may not be wild to conjecture the origin of the name Dantapura,[6] the capital of Kalinga to the same flourishing industry. Ivory-workers are seen pursuing a

[1] These quarters still supply the finest breed of horses for the army and the races.

[2] Pāṇini assigns it in the Deccan (IV, i. 178). In the Viṣṇupurāṇa the Kārūśas are placed along with the Mālavas along the Pāripātra mountains in the west. In the Matsya (114. 46-48) they are said to be dwellers of Dakṣiṇāpatha along with the Aṭavyas, Savaras, Pulindas, Vindhyapuṣikas, Vaidarbhas, and Daṇḍakas. Thus Karūśa is in the skirts of the western Vindhyas.

But Karūśa here seems to be an eastern country. According to Bhāgavata it is another name for Puṇḍra (X. 66) which is more appropriate here.

[3] In the Central Provinces.

[4] Kathiawad.

[5] Ābhīra—Monier Williams. Literally 'land of the five peoples.'

[6] The ascription of the name to Buddha's tooth relic is a later invention. See *supra*, p. 172.

prosperous trade in Benares (Jāt. I. 320 f.; II. 197), in Ayodhyā (Rām. II. 83. 12 ff.), in Vedisā (Bhilsa—Sanchi In.) and in the Tamil countries (Peri. 56) obviously with materials imported from the above-mentioned sources.[1]

Skins.

The sources for horses listed above appear also as sources of animal skins. The varieties given in the Arthaśāstra (II. 11) are mostly assigned by the commentator to the Himalayan borders and skins are among the wares purveying in the plains from the Himalayan route (VII. 12). Arjuna obtained skins during his promenade in north Harivarṣa (Mbh. II. 28. 16). The northern Kirātas brought this as tribute to the Kuru king among other Himalayan products (II. 52 10 f.). Deer-skins and skins of Ranku deer were presented to Yudhiṣṭhira by the king of Kamboja (II. 49. 19) and by the Bālhikas (II. 51. 26), *i.e.*, from the Punjab.

Food-crops.

About the distribution of food-crops information is meagre. In the Periplus, Abiria (Ābhīra in Gujarat) is a fertile country yielding wheat and rice, sesame oil and clarified butter (41). This is confirmed by the further reference to these as the major articles of export from Barygaza, the seaport nearest to the Ābhīras (14, 31, 32). But there is abundant evidence that wheat and rice and many other cereals were grown over almost any part of the country.[2]

References to sugarcane come mostly from the Madhyadeśa through which flows the river Ikṣumatī or Oxymagis, *i.e.*, the United Provinces or the Ganges doab which, according to the report of 1931 produced 51·7 p.c. of the total cane crop of India.

[1] This craft is now practically confined to Mysore, Travancore, Delhi and Murshidabad follow in order.

[2] See Bk. I. Ch. VIII.

In the classical works, India has been noted as the chief producer of aromatic or medicinal herbs, roots and resinous gums. Prominent among this group are nard which "holds the first place among unguents" (Pliny, XII. 26); costus, an aromatic root; myrrh, another medicinal and aromatic gum; cardamum, a medicinal herb; spikenard, a fragrant herb made into oil or ointment; macir, the red bark of a large root used for medicine (Pliny, XII. 16); pepper, ginger and malabathrum used as condiments.

Herbs, roots and gums.

According to Ptolemy, the best malabathrum or cassia leaf is produced in Kirrhadia (2. 16), a town near the eastern coast of Bengal.[1] It was brought down to the port of Tāmralipti for export (Peri. 63). An interesting study is given how the Besatae, a Tibeto-Burman tribe of the Himalayas, transacted in silent trade in their malabathrum with the people of This (China) (65). It was grown also in the interior of the Tamil countries reaching the ports of Tyndis, Muziris and Nelcynda for export outside (56).

Malabathrum.

Spikenard is generally discovered in the same regions, *i.e.*, in the north-west and the north-east as well as in Malabar (56).[2] In order of its source its varieties are termed Caspapyrene (*i.e.*, of Kaśyapapura),[3] Paropanisene (of Paropanisadai or the Hindukush) and Kabolitic (of Kabul) (48). According to Strabo, the land of Gedrosia (southern Beluchistan) produced aromatic plants, particularly spikenard and myrrh which Alexander's army used for tent-roofs and beds (XV. ii. 3). On the other hand the famous Gangetic spikenard

Spikenard.

[1] Lassen places it between Chittagong and the mouth of the Arakan river,—Ind. Ant., III, pp. 235-37. Malabathrum (tejpāt) is now obtained in Sylhet, Assam, Rangpur and the valleys of the Himalayas.

[2] Malabar is now the chief source of edible spices.

[3] Stein identifies this with Kashmir, Cunningham with Multan.

came from the Himalayas to the ports of Tāmralipti and of the far south (56, 63).

Costus, lycium, nard and bdellium.

Costus, lycium, nard and bdellium were exported from the port of Barbaricum at the mouth of the Indus (39). This, Sind or regions farther north, may be the "upper country" from where costus and bdellium were carried through Ozene to Barygaza (48). Nard grew abundantly in the country of Gedrosia (Arr. Anab. VI. 22).

The distribution of medicinal and aromatic plants cannot be properly studied from the classical authors alone who wrote with knowledge of the seaports serving as outlets of these wares and with partial ignorance of the interior. The indigenous literature which are more reliable on this point scarcely go into details and when they do, it is difficult to identify Indian names with foreign. There are notices on

Scents.

scents in general terms. The Jaina Kalpasutra refers to scents of Turushka or Turkestan (100). In the Kuru war the fighters from Andhra are said to be used to rub powdered scents on their body (Mbh. VIII. 12. 16). About sandal there is more detailed information. The Arthaśāstra observes several varieties all

Sandal.

of which, according to the commentary, are specialities of Kāmarūpa or Assam barring only a few, *viz.*, the Aśokagrāmika which belongs to Ceylon, the Daivasabheya which is of a city and subjacent hill in Western India producing the lotus-scented (padmagandhi) species and the Kāleyaka which is the product of Svarṇabhūmi[1] (II. 11). Philastratos of Lemnos, biographer of Appollonius of Tyana (*cir.* 172 A.D.), writes that on the banks of the Hyphasis (Beas) "grew the trees from which unguent was procured with which bride and bridegroom were anointed, that Venus might be propitious to their nuptials." Another primary source was the

[1] Suvarṇabhūmi is Burma or Sumatra. See *infra*, Bk. III. Ch. V.

Malaya hills. A verse in the Rājanighaṇṭu, an Ayurvedic work, says that the sandal produced in Beṭṭa mountain near the Malaya hill is called Beṭṭa. This is obviously Mount Bettigo of Ptolemy (1.22) which is the southern portion of the Western Ghats. This sandal of the Malaya hills and the sandal and aloe of the Dardara hills [1] were exploited by the Cholas and the Pāṇḍyas (Mbh. II. 52. 33 ff).

Aloe.

Sandal, aloe, and other perfumes were produced by the people of the Bengal coast called the Mleccha tribes (Mbh. II. 30. 27), in the land of Benares (kāsikacandana, Jāt. V. 302; An. I. 145; Mil. 348), in Barbaricum of the lower Indus (barbarika—Dhanvantarīya Nighaṇṭu, Rājanighaṇṭu), the variety which is white and scentless and among the Kirātas of the north-western Himalayan slopes (Mbh. II. 52. 10 f.) who recall the Kirhadai of Ptolemy. It reached down to Barygaza to be shipped to the ports of the Persian Gulf (Peri. 36).[2]

[1] *Cf.* Kalpasutra, 109. Pargiter suggests it to be the Nilgiris.

[2] The list envisages a wide distribution of *candana* besides in Mysore and Malabar where sandalwood is now confined. The soil and climate of these latter are naturally fitted for the growth and in former times these led all other places as appears from several evidences (binā malayam anyatra candanam na vivardhate—Amarakoṣa; Raghu, IV. 51; Pañcatantra, I 42; Kāvyamīmāṃsā; the Tamil epic Cilappatikaram). The earlier growth of *candana* in other places than these which in the botanists' opinion do not offer the requisite geological and climatic environments may be explained by either of two circumstances: firstly, soil conditions may have changed or proper attempts may not have been made in these days to cultivate sandal in those places; secondly, *candana* may not be quite conterminous with sandal proper. It undoubtedly implied scented varieties absolutely unrelated to the Santalum Album as the Mysore sandal is called for which the Indian term is *pītacandana*. The *raktacandana* and *kucandana* are completely different species and are now grown in many places. It is not improbable that several scented woods went under the general name of *candana* the meaning of which was narrowed down culminating in course of time in the Santalum Album Linn.

There is another possibility. Some of the places mentioned, particularly Assam and the land of the Kirātas, may have been the route along which sandal came to India from China.

For the discussion whether Santalum Album was an indigenous plant or an exotic one naturalised in India from the Timor islands see C. E. C. Fischer: Where did the Sandalwood Tree Evolve? Jour. Bom. Nat. His. Soc., Vol. XL. No. 8.

Dyes.

Of plants made into dyes there were many. Those like lac and *kusumbha* flower were common articles over India. So probably was indigo (Pliny, XXXIII. 4), which was exported outside from Barbaricum (Peri. 39).

Varieties of spirituous liquor are mentioned, *e.g.*, the *soma* juice, the *vāruṇi*, etc. But the best perhaps was the grape wine from the vines of Kapisā (Afghanistan) (Pāṇini, IV. 2. 99; Arth. II. 25).

Gold.

Among metals, gold is the most common occurrence. Herodotus writes, "There is abundance of gold there, partly dug, partly brought down by the rivers, and partly seized by the manner I have described" (III. 106). The first is the gold obtained from mines. The second is alluvial gold or gold dust carried down by certain rivers presumably from their bed or from their rocky source. The third category, the ant-gold celebrated by all classical writers from Herodotus to Pliny and noticed in the Mahābhārata was in fact nothing but mine gold. About this Strabo gives the following account:

Ant-gold.

"Among the Dardai, a great tribe of Indians, who inhabit the mountains on the eastern borders, there is an elevated plateau about 3,000 stadia in circuit. Beneath the surface there are mines of gold, and here accordingly are found the ants which dig for that metal. They are not inferior in size to wild foxes. They run with amazing speed, and live by the produce of the chase. The time when they dig is winter.[1] They throw up heaps of earth as moles do at the mouth of the mines. The gold dust has to be subjected to a little boiling. The people of the neighbourhood, coming secretly

[1] "The miners of Thek Jalung .. . .prefer working in winter..... .....as the frozen soil there stands well and is not likely to trouble them much by falling in." J.R.A.S., Vol. 39, pp. 149 f.

with beasts of burden carry this off. If they come openly the ants would attack them and pursue them if they fled, and would destroy both them and their cattle. So, to effect the robbery without being observed, they lay down in several different places pieces of the flesh of wild beasts, and when the ants are by this devise dispersed, they carry off the gold dust. This they sell to any trader they meet with while it is still in the state of ore, for the art of fusing metals is unknown to them" (XV. i. 44).

Arrian quotes Nearchos having seen many skins of these animals in the Macedonian Camp (15; *cf.* Pliny, VI, XI. 31). These mythic ants, equipped with horns, "not inferior in size to wild foxes," gifted with "amazing speed" and living upon chase, capable of destroying men and their cattle have not been satisfactorily identified. The most plausible theory advanced so far is that the whole is a confused and mythic version of the mining operation of the Tibetans who dug in winter, whose ferocious black-and-tan coloured mastiffs guarded dwellings and mines as even now and whose pickaxes were grafted by hearsay as horns on the animals.[1] Whatever the identity of these ants it cannot be doubted that there were gold mines in Dardistan or the Tibetan highlands or farther west in the Himalayan tracts. During the sacrifice of Rājasūya the people of Meru and Mandara,[2] *i.e.*, of modern Garhwal, brought to Yudhiṣṭhira heaps of gold measured in jars and

Tibetan and Himalayan plateau.

[1] See Indian Antiquary, Vol. IV. pp. 225 ff. where arguments are adduced to prove that "the gold-digging ants were originally neither, as the ancients supposed, real ants nor as so many eminent men of learning have supposed, larger animals mistaken for ants on account of their appearance or subterranean habits, but Tibetan miners whose mode of life and dress was in the remotest antiquity what they are at the present day."—McCrindle: *Megasthenes*.

[2] Mandāra is in Bhagalpur district, 35 miles south of Bhagalpur (Mbh. XIII. 19; III. 162. 164). But Meru, the "mountain of Gold" of the Purāṇas stood at the centre of the trans-Himalayan tract of Ilāvṛta, *i.e.*, in Garhwal, in whose neighbourhood must have been another Mandāra.

raised from underneath the earth by ants (pipīlikaṃ nāma uddhṛtaṃ yat pipīlikaiḥ). The Kirātas of the north-western Himalayas brought along with other articles of tribute gold of great splendour procured from the mountains (Mbh. II. 52. 10 f). Because of the reputation of this gold along the upper courses of the Indus among the westerners, the Indus has been supposed to be one of the four rivers of Paradise in the Book of Genesis, *viz.*, the Pishon, "which compasseth the whole land of Havilah where there is gold; and the gold of that land is good." [1]

Other sources.

There were other sources of the metal. The author of the Periplus heard that there were gold mines near Tāmralipti or Tamluk and that there was a gold coin called *caltis* (63). Schoff suggests that this might have been the gold of the Chotanagpur plateau, 75-150 miles west to the mouth of the Ganges.[2] Rivers like the Son (from *svarṇa* or *suvarṇa*) known as Erannoboas or Hiraṇyavahā,[3] carried alluvial gold in considerable quantities. The so-called Mleccha tribes of Bengal brought gold as tribute to Yudhiṣṭhira (Mbh. II. 30. 27). Further east was the island (or land) of Suvarṇabhūmi and Suvarṇadwīpa identified with Burma or preferably with Sumatra,[4] owing its name to its gold mines (suvarṇa-rūpaka-dwīpaṃ suvarṇākaramaṇḍitaṃ, Rām. IV. 40. 30).[5] Pliny states that extensive gold mines were operated on the

[1] Havilah is identified with Mānasa-sarovara.

[2] Where many old workings along with the outcrops of the veins have been discovered.

[3] The Son is referred to as Hiraṇyavāha in Bāṇa's Harṣacaritam.

[4] The alternative Suvarṇadwīpa is a strong support for Sumatra (*cf.* Yavabhūmi and Yavadwīpa for Java) which has always been noted for its abundance of gold. In popular parlance the name however went for the East Indian islands including Burma and Malay. See R. C. Majumdar: *Suvarṇadwīpa.*

[5] Pliny is more sceptic. "Beyond the mouth of the Indus are Chryse and Argyre (identified by Yule with Burma and Arakan) rich, as I believe in metals. For I cannot readily believe, what is asserted by some writers that their soil is impregnated with gold and silver" (VI).

other side of Mount Capitalia (Abu) (VI).[1] The heavy tribute paid in 360 talents of gold dust annually by the Indian satrapy of the Persian Empire, *i.e.*, the country west of the Indus (Herodotus, III. 97) may have been obtained from the northern mountains or from some local centre. But gold was far more plentiful in the south than in the north (Arth. VII. 12). Pliny mentions gold on the Malabar coast obviously coming from the mines of Mysore.[2] And "from Megasthenes we learn that Taprobane is more productive of gold than India itself" (VI. 22).

Silver.

To some of these sources silver is attributed along with gold. As "gold is very abundant among the Dardae" so is "silver among the Setae" (Sāta or Sātaka near the Dāradas) (Pliny, VI). In Pliny's work silver mine is spotted along with gold near Abu.[3] According to Ptolemy Ceylon had mines of gold, silver and other metals (4. 1). The Bengal tribes brought silver as well as gold to the Pāṇḍavas. In Greek Arakan went as the silver country.[4] Sugrīva's search party in the east came across the land of silver mines (bhūmiñca rajatākaram, Rām. IV. 40. 23)[5] and farther east the island of Rūpakadwīpa, thus strongly refuting the scepticism of Pliny whether there were gold or silver mines in far eastern regions.

[1] On this authority, Cunningham places Pliny's Oraturoe south of this region, on the Gulf of Cambay and identifies it with Sophir or Ophir of the Bible from where the Tyrian navy carried away gold and precious stones in the days of Solomon. For other identifications of Sophir or Ophir, see *supra*, pp. 175 f.

[2] The quartz reefs of Kolar are now the source of 98 p. c. of India's total gold supply.

[3] The only silver mines now known in India.

[4] Probably a transliteration of an ancient Burmese name for Arakan. "There are no silver mines in Arakan and considering the geological structure of the country, it is almost certain there never were any." V. Ball: Presidential Address to the Royal Geological Society of Ireland, Mar. 19, 1883.

[5] The northern Shan States of Upper Burma now supply much of India's silver requirement.

Other metals.

On the whole silver seems to have been a much rarer metal than gold. In Indian and foreign literature, particularly in Pali works, reference to it is far less common than to the latter.[1] The sources of other metals of lesser value are referred to even less frequently for obvious reasons. They were not worth bringing as precious tributes to propitiate conquering monarchs nor would they interest foreigners concerned with trade transactions or whose primary source of knowledge was trade relation. In using our authorities these underlying motives which detract from their completeness should always be borne in mind.

Copper.

The Periplus notices copper among the exports from Barygaza (36). The source is not known. The metal is not extensively worked at present. But formerly it was smelted in large quantities in South India, Rajputana and at various parts of the outer Himalayas where a Killas-like rock persists along the whole range and is known to be copper-bearing in Kulu, Garhwal, Nepal, Sikkim and Bhutan.[2] Schoff supposes that this might also be European copper of the Parthian Empire re-shipped to the West.

Rock salt.

There were rocks yielding salt. "There are mountains also formed of native salt as, for instance Ormenus in India where it is cut out like blocks from a quarry and is continually reproduced, whence a greater revenue accrues to the sovereign of the country than they derive from gold and pearls" (Pliny, XXXI. 7). "In the territory of the Sopeithes there is a mountain

[1] Mrs. Rhys Davids : J. R. A. S., 1901.

[2] Watt : *Commercial Products of India*, p. 401. Remains of old excavation and exhausted mines are found in several places near about Darjeeling and Jainti, in Bargunda, Manbhum and the Santhal Parganas, in Singbhum where the deposits are said to have been exploited by the Seraks or lay Jains about or before the Christian era, in Tamkhan of the Indore state, in Harpat Nag of Kashmir, in Nellore of Madras, in the Narnul district of Patiala and in Rajputana, Sikkim, etc.

composed of fossil salt, sufficient for the whole of India" (Str. XV. i. 30). This salt-range extended westward from the Hydaspes (Jhelum) towards the Indus.[1] The Arthaśāstra assigns rock salt to Sind (Saindhava, II. 15).

Diamond.

The Arthaśāstra enumerates diamonds of several varieties the sources of which are attributed by the commentary to Vidarbha (sabhārāṣṭraka), Kośala (madhyamarāṣṭraka), Kāśī (Kāśmaka) and Kalinga (indravāṇaka) (II. 11). Within Kalinga falls Ptolemy's "Mouth of the River Adamas" (I. 17) or Diamonds, which, observes Yule, was in all probability the Sank branch of the Brāhmaṇī from where diamonds were got in the days of Mogul splendour. And near about Vidarbha was probably "Kosa, where are diamonds" (1. 65) which is located by Lassen on the upper Varadā in the neighbourhood of Baital. A third source was "the Sabarai, towards the Ganges in whose country diamond is found in great abundance" (I. 80) identified by Cunningham with the Savaras or Suars and placed by Yule farther north in Dosarene towards Sambhalpur.

Precious stones.

But according to the Arthaśāstra itself, diamonds and precious stones were a speciality of the south rather than of the north (VII. 12). In the Periplus it is stated that from the interior of the Tamil countries diamonds, transparent stones and sapphires were brought down to the seaports of Tyndis, Muziris and Nelcynda to be shipped to Arabia and Rome (56).[2] These

[1] McCrindle: *Ancient India as described in Classical Literature*, on Strabo, V. ii. 6.

[2] There are still alluvial workings of diamond (*i*) in the valley of the Mahanadi in Bihar and Orissa with a westward extension into the Central Provinces and an outlying area to the north in the valley of the Koel, a tributary of the Son; (*ii*) in Central India, conglomerates extending for a distance of about 60 miles with the state of Panna in the centre; (*iii*) in the southern districts of Anantapur, Bellary, Cuddapah, Karnool, Kistna and Godavari.

stones were a speciality also of Ceylon (61). In the north "the rivers which produce precious stones are the Akesines (Chenab) and the Ganges" (Pliny, XXXVII. 13). There were centres farther north since the kings there brought these lucrative tributes to Arjuna along with horses. (Mbh. II. 28. 18 f.). According to the Arthaśāstra the mountains of Malaya (the Western Ghats, south of the Caveri), the Vindhyas and the Strīrājya [1] are sources of *vaidūrya* (beryl) and other gems (II. 11). The southern Vindhyas or the Satpura and the northern part of the Western Ghats [2] must have been the Vaidurya chain or the Orondian mountain of Ptolemy, stated in the Mahābhārata to have been crossed by the Pāṇḍavas in their pilgrimage from Vidarbha to the Narmadā. Turquoise and lapis lazuli were exported from Barbaricum (Peri. 39). Agate and Carnelian were transported from Ozene (Ujjein, 48) and Carnelian in great quantity from Paethana (Paithan on the Godavari, 51) and from other inland sources (49), possibly Mount Sardonix (Satpura range) which supplied sardonic stone, *i.e.*, a species of Carnelian (Ptolemy, I. 20).[3]

Pearl-fishery.

Like the mines and the mountains the sea was exploited for extraction of wealth. Pearl-fishery was a foremost industry in the south. The straits between the Pāṇḍya kingdom and Ceylon were its chief centres and these two states made a lucrative profit from this trade. "The water of the Tāmraparṇī which is famed all the earth over for the pearls which the wives of the feudatories in his army, while they mirthfully bathed in the stream, dropped into it from the breaking girdles on their hips, behold, even to this day that water affords a

[1] The Himalayan country of Garhwal and Kumaon.

[2] Raychaudhuri : *Studies in Indian Antiquities*, p. 131.

[3] The same difficulty with regard to identification of Indian and foreign names occurs here as in the case of aromatics. See *supra*, p. 215.

livelihood to the Pāṇḍya chief" (Nagpur Stone In. of the Mālava rulers, 1104-5 A.D.).[1] "The southern ocean full of rolling waves, the shores of which were shining with the multitude of rays of numerous pearls dropped from shells struck and broken by the trunks of excited elephants resembling whales....." (Kendur Pl. of Kīrtivarman II, Saka Sam. 672).[2] All the varieties of pearl mentioned in the Arthaśāstra are specialities of Pāṇḍya and Kerala countries and of Ceylon (II. 11; VII. 12). In the Periplus, Ceylon on the one shore (61) and Colchi (Kolkai) of the Pāṇḍya kingdom and Argara (Uraiyūr) of the Chola figure as centres of pearl-fishing.[3] Ptolemy mentions pearl-fishery in the Kolkhic Gulf (1. 10), *i.e.*, in the Gulf of Manar in south Tinnevelly. Pliny quotes Megasthenes to the effect that Taprobane produced pearls of greater size than India (VI. 22).

In the north.

The north also gave pearls though of inferior quality and smaller size. The northern centre was the Bengal coast from where the *mleccha* tribes paid to Bhīma tributes of gems, pearls (maṇimauktika) and valuable corals (vidrumaṅca mahādhanam, Mbh. II. 30. 27). That pearls were fished near about the port of Tāmralipti and gathered there for export is also affirmed in the Periplus (63). Pliny ascribes the trade also to Perimula (VI. 54) placed in the western coast somewhere near Bombay or in Simylla.

Sea-fishing

Apart from pearls, sea-fishing was the main occupation of the Ceylonese. "All their energy is devoted to catching fish and the monsters of the deep; for the sea encircling the island is reported to

[1] E. I. II. 13.

[2] E. I IX. 28.

[3] In the south pearl-fishing seems to have been a state monopoly. The Periplus says that Colchi was worked by condemned criminals and regarding Argara, "at this place and nowhere else are brought the pearls gathered on the coast thereabouts." The Nagpur Inscription is also a pointer. See *supra*, fn. 1.

breed an incredible number of fish....." (Aelian, 16. 2. 22). Ceylon and the Tamil countries made use of tortoise-shell (Peri. 61, 56) as well as other shells (śaṃkha, Arth. VII. 2) which they supplied to the north and abroad to the West.[1]

Textile fabric : Benares.

In textile industry, the north was leading against the south (Arth. VII. 12). The choicest stuff were of Benares and Bengal. The fine muslin of Kāsi (kāsikasucivattha, kāsikāni vatthāni) is a common reference (Jāt IV. 352, V. 377, VI. 47, 144 ; Mil. 1). A familiar simile is the Benares muslin of delicate finish on both sides, blue (or yellow, or red or white) in colour, blue (or yellow, etc.) in appearance, and reflecting blue (or yellow, etc.) (vattham Bārāṇaseyyakaṃ ubhatobhāgavimaṭṭhaṃ nīlaṃ nīlavaṇṇaṃ nīlanidassanaṃ nīlanibhāsaṃ, Dn. XIV. iii. 29 ; XXIII. iii. 1 ; Mn. 77, An. V. 61 f.). It is pleasant to handle (sukhasamphassaṃ), of great worth (mahaggham), of good colour (vaṇṇavantaṃ) and a treasure to be laid up in a scented casket (An. I. 248). Kāsi is in the list of places which produce the best quality of cotton fabrics (Arth. II. 11, Sn. V. 45). According to the commentator of the Mahāparinibbāna Sutta, the texture was so fine that it absorbed no oil and hence was used to cover the body of the deceased Buddha. There were extensive cotton fields in the neighbourhood from which the yarn was spun (Jāt. III. 286). The silk-fabric of Benares still carries this reputation.

Of Bengal

The Bengal spinners and weavers produced muslins of the finest sort called Gangetic which were brought down to Tāmralipti for export (Peri. 63), the traditions of which were maintained by the famous muslins of Dacca, Santipur and Farashdanga down

[1] Northern traders voyaging from Barygaza brought tortoise shell also from Socotra.

to the advent of British traders. In the Arthaśāstra list, Vaṅga (Eastern Bengal) was the source of cotton fabrics and blankets. Puṇḍra (Northern Bengal) and Suvarṇakuḍya[1] supplied blankets and fibrous garments (patrorṇāḥ); the latter were obtained also in Magadha (II. 11). Among the presents received by Bhīma from the *mlecchas* on the coast of Bengal were fine cloths and blankets (cāruvastrāṇi, kambalam, Mbh. II. 30. 27). Sericulture was known somewhere near about, for the eastern party sent from Kiṣkindhyā came across the land of worms yielding silk thread (bhūmiñca koṣakārāṇām, Rām. IV. 40. 23).[2]

The north was another source, chiefly of woollen clothes.[3]

The north: Wool

As a source of blankets, the Arthaśāstra mentions Nepal (II. 11; Manu, III. 234 f.) and the Himalayan regions in general (VII. 12). The king of Kamboja sent to Yudhiṣṭhira as tribute blankets of finest texture along with deer skins (Mbh. II. 49. 19) including those of sheep's wool, fur of mice and other animals living in holes and of the hair of cats all inlaid with threads of gold :—

aurṇān vailān vārṣadaṃśān jātarūpapariṣkṛtān
prāvārajīnamukhyāṃśca kāmbojaḥ pradadan bahūn.
51. 3.

The Bāhlikas presented numerous blankets of woollen texture manufactured in Cina,[4] numerous skins of Ranku deer and clothes prepared from jute and others from the threads of insects :

pramāṇa-rāga-sparśādyān bāhlīcinasamudbhavaṃ
aurṇañca rāṅkavañcaiva paṭajaṃ kīṭajantathā.
51. 26.

[1] ?

[2] Is it Assam? Attempts have been made to identify this with China.

[3] The Punjab, Kashmir and Tibeto Himalayan ranges still carry the tradition.

[4] This is not China proper but Tibeto-Mongoloid races, or people vaguely acknowledging Chinese suzerainty in the north-west.

In north Harivarṣa Arjuna obtained finest clothes and silks (28. 16). The cloth produced in the Sivi country,[1] of which the choicest suit of king Pajjota of Avanti was made (Mv. VIII. 29), was a known luxury favoured in the palace.[2]

Other sources.

The Arthaśāstra list is completed with Madhurā (of the south),[3] Aparānta (Konkana),[3] Kaliṅga, Vatsa (city of Kauśāmbī)[3] and Mahīśa (Māhiśmatī)[3] for the best stuff of cotton fabrics. Of these Aparānta and Māhiśmatī are corroborated in the Periplus which deals with the same countries while speaking of Barygaza, Ozene and Abiria. From Barygaza were shipped westward, mallow cloth, yarn, silk cloth and cotton cloth, the broad type called *monache*[4] and that called *sagmatogene*[5] (6, 14, 31, 32; 49). Ujjainī was one of the centres of production of these textiles transported to Barygaza (48). In Abiria, a very fertile country, cotton was extensively cultivated and cloth made therefrom of coarser sort (41). But a sheep-rearing, pastoral people as they were (41), the Ābhīras produced blankets of better stuff of which they brought various kinds as present to king Yudhiṣṭhira. Cotton cloth and silk yarn were exported also from Barbaricum (39), probably the produce brought down from the north.

[1] From the testimony of Fa-hien and Hiuen Tsang who makes the (Su-ho-to) the scene of the classic story of king Uśīnara giving his flesh to save his fugitive pigeon, it would appear to be in Gandhāra or Swat valley (Beal's Records, p 206). But from the Sibipura in Shorkot Inscription Vogel places it in Shorkot in Jhang district below the junction of the Jhelum and the Chenub. It may be the Siboe of Strabo (Iboe-Diod, Sobii-Curtius) and Śivapura of Pāṇini said to belong to the northern country. Cunningham places it in Lower Beas in Jullundhar district. A branch of the Sibis migrated to Mewar where they had their capital Jetuttara (Vessantara Jāt.; Jattaraur, Alberuni : *India*, I, p. 302).

[2] *Siveyyakaṃ dussayugaṃ*. Buddhaghosa gives two explanations of which the latter, more plausible, is " a cloth woven from yarn which skilful women of the Sivi country spin."

[3] Commentary.

[4] Mīnākṣī ?

[5] ?

Madhurā of the Arthaśāstra is also confirmed. The silk cloth of the Tamil ports of Nylcynda, Tyndis and Muziris were inland produce (56). Muslin, mallow cloth and much ordinary cloth were carried from Tagara to Barygaza (51). The Cholas and the Pāṇḍyas brought to the Pāṇḍavas fine cloth inlaid with gold (Mbh. II. 52. 33 ff.).

* * *

The countries and their specialised commodities so far as they may be ascertained from the above may be arranged thus in tabular order :—

COMMODITY	COUNTRY (Ancient names)	COUNTRY (Modern equivalents)
ANIMALS		
1. Horse	*Sindhu, Kāmboja, Iraṭṭa, Vanāyu*, Bālhika, Sauvīra, Lake Mānasa, Pārvatīya.	*Sind, Punjab, N. W. F. P.* N. Gujarat, Mansarowar, S. E. of Hindukush.
2. Elephant	*Prāgjyotiya, Karūśa, Anga Kalinga*, Daśārṇa, Surāṣṭra.	*Bengal, Bhagalpur, Orissa*, S. E. of Vindhyas, Kathiawad.
ANIMAL PRODUCE		
3. Ivory	Daśārṇa, Dantapura, Kāśī, Ayodhyā, Vidiśā, Tamil countries.	S. E. Vindhyas, Dantan (Midnapore ?), Benares, Oudh, Bhilsa, Mysore.
4. Skins	*Himalayan borders*, N. Harivarṣa, Nn. Kirātas. Kāmboja, Bālhika.	*N. W. of Himalayas, Hindukush*, Punjab.
FOOD CROPS		
5. Rice, Wheat, Sesame	Ābhīra	Coast of S. Gujarat.
HERBS, ROOTS, GUMS.		
6. Malabathrum	Kirrhadia, Besatae, Tamil	Rangpur (?), Tibeto-Burma, Tamil countries.
7. Spikenard	Kaśyapapura, Paropanisadai, Kabul, Gedrosia, En. Himalayas.	Kashmir, Hindukush, Kabul, S. Beluchistan, En. Himalayas.
8. Myrrh	Gedrosia	S. Beluchistan
9. Nard	Gedrosia, N. of Barbaricum	S. Beluchistan, Sind (?)
10. Costus, Lycium, Bdellium.	N. of Barbaricum and of Ozene	Sind and regions farther north (?)
PERFUMES		
11. Scents	Turuska, Andhra	Turkestan, Andhra
12. Sandal	*Kāmarūpa*, Bengal coast, Suvarṇabhūmi, Kāśī. Hyphasis, Nn. Kirātas, Daivasabhā, Aśokagrāma, *Malaya & Dardara Hills.*	*Assam*, Bengal, Sumatra, Benares, the Beas, N. W. of Himalayas, Ceylon, *Mysore.*

COMMODITY	COUNTRY	
	(Ancient names)	(Modern equivalents)
PERFUMES		
13. Aloe	Bengal coast, Nn. Kirātas, Dardara Hills	Bengal, N. W. of Himalayas, Nilgiris.
DYE		
14. Indigo	N. of Barbaricum	Sind (?)
WINE		
15. Grape wine	*Kapisā*	*Afghanistan*
MINERALS		
16. Gold	*Dardai, Meru*, Mandara, Northern Kirātas, Upper Indus, Havilah, near Tāmralipti, Erannoboas, Suvarṇabhūmi, E. of Mt. Capitalia, *Malabar, Taprobane.*	*Tibet, Garhwal*, N. W. of Himalayas and Hindu Kush, Chotanagpur (?), the Son, Sumatra, Rajputana, *Malabar, Ceylon.*
17. Silver	Setae, E. of Mt. Capitalia, Bengal, Rūpakadwīpa, Ceylon.	Tibet, Rajputana, Chotanagpur (?), Sumatra, Ceylon.
18. Copper	(exported from) Barygaza	S. India, Rajputana, Himalayan range.
19. Rock salt	*Mt. Ormenus*, Sindhu	*Range between Jhelum and Indus.*
20. Diamond	Vidarbha, Kośala, Kāśī, Kalinga, Sabarai, Tamil.	Berar, Oudh, Benares, Orissa, Sambhalpur (?), Tamil.
21. Stones	Akesines and Ganges, N. of Himalayas, Strīrājya, *Vindhyas*, Ozene, Paethana. *Malaya, Tamil, Ceylon.*	Chenab and Ganges, Garhwal and Himalayas, *Vindhyas* and *Satpura, Wn. Ghats, Ceylon.*
FISHERY		
22. Pearl	*Pāṇḍya, Taprobane, Bengal coast*, Simylla.	*S.E. coast of Tamil, Ceylon, Bengal coast.*
23. Coral	Bengal coast	Bengal coast
24. Sea-fishing, tortoise and other shell.	Tamil, Ceylon	Tamil, Ceylon
TEXTILES		
25. Cotton cloth	*Śivi, Kāśi, Vanga, Puṇḍra*, Magadha, Kalinga, Vatsa, Aparānta, Māhiśmatī, Ābhīra, Madhurā, Chola, Pāṇḍya.	Shorkot, *Benares, E. & N. Bengal*, Bihar, Orissa, Maharastra, Tanil.
26. Blankets	*Vanga, Puṇḍra, Nepal*, N. W. Himalayas, *Kāmboja*, Bālhika, Ābhīra.	*E. & N. Bengal, Nepal*, N. W, Himalayas, *Punjab*, Balkh (?), Maharastra
27. Silk	*Silk land of East*, Bālhika, N. Harivarṣa, Tamil.	*Assam* (?), Balkh (?), N. Himalayas, Tamil.
28. Jute and fibrous cloth.	*Puṇḍra*, Magadha, Bālhika	*N. Bengal*, Bihar, Balkh (?).

The list is no doubt incomplete, defective and lacking valid confirmation in many cases. There were innumerable thriving industries outside this small range which cannot be localised for lack of materials. The compilation, tentatively made from vague and scrappy literary notices may not be correct in every detail. But the facts of localisation and specialisation stand out; and for certain industries at least, *e.g.*, the muslin of Bengal, the pearls of Pāṇḍya and Ceylon, the sandal of Mysore and Assam, the gold of Tibet, Garhwal, Malabar and Ceylon and the fleet-footed horse of Sind and the Punjab, evidences are almost unimpeachable. The catalogues of the Arthaśāstra and the Sabhāparva alone, from which many items have been omitted in this chapter, give the modern economist ample food for thought over the magnitude of lost arts and industries exhausted mines and forests, exterminated flora and fauna and defertilised agricultural land.

CHAPTER V

ORGANISATION OF INDUSTRIES

Guild organisation. *Śreṇī* and *pūga*. Origin of combination. Stages: Vedic, Pali and Epic.

Organisational structure. (*a*) Localisation of industries. Theory; practice—in town, in village. (*b*) Leadership: the *pamukha*, the *jeṭṭhaka*. (*c*) Heredity of occupation. Exceptions, the *antevāsi*—rules. (*d*) Guild laws: evolution; regulation of investments and dividends, of contracts; sanction against delinquency; judicial power.

Finances. The balance sheet. Public works.

Relation with civil power. Paternal care. Arbitration of disputes: the *bhaṇḍāgārika*. Guardianship? The guild militia, a thorn.

The organised crafts.

Functions and powers. Flag. Coins. Seal. Control of Municipal power. Receiver of deposits and executor of endowments. Mobility. Cultural life. Independent development. Disintegration.

The guild.

Tools and mechanical power are not the sole means for the production of wealth. It requires organisation, combination and laws regulating business. The progress of Indian arts and crafts depended in no small degree on the organisational genius of the people. The industrial combines in ancient India have generally been termed 'guilds' as they bear a close resemblance to those prototypes of mediaeval Europe.

Śreṇī.

Sanskrit works use many words with references to local bodies, the distinction between which is not precisely defined. Generally, however, the terms *śreṇī* and *pūga* go for industrial and commercial guilds.[1] Kaiyaṭa and Tattvabodhinī explain *śreṇī* in Pāṇini (II. i. 59) as an assembly of persons following a common craft or trading in a common commodity (ekena śilpena paṇyena vā ye jīvanti teṣām samūhaḥ śreṇī). The com-

[1] And sometimes *gāma*, *nigama*, *gaṇa*, *saṃgha*, *samūha*, *samiti*, etc.

mentators on Manu (VIII. 41) and Nārada (I. 7) explain it nearly in the same sense, but in the Arthaśāstra, *śreṇī* is either a guild of workmen (II. 4) or a military clan (VII. 16) or communities like those of Kāmbojas, Surāṣṭras and Kṣatriyas who subsist by agriculture, trade and military service. So the *pūga* is a craft or trade guild according to the commentators of Nārada (X. 2) and Yājñavalkya (II. 31). But both Vīramitrodaya and Mitākṣarā distinguish it from the *śruṭī* as an association of persons of different castes and occupations while *śreṇī* is a more limited assembly of people of same craft or occupation though possibly of different castes.

Pūga.

As Vṛhaspati points out, anarchy and insecurity in business were the earliest impulse to combination (XVII. 5 f.). The danger came not only from the conditions of the market but also from the severity of the civil law in regard to certain crafts.[1] In fact guild life is the characteristic of an advanced stage of economic progress when "the individual mechanics, artisans or traders have sufficient business instincts developed in them, and have achieved sufficient success in their several businesses to appreciate the necessity of organising themselves into a community for the purpose of promoting their individual and collective interests."[2] The idea of organising on co-operative basis was inherent in the division of castes and allocation of functions. The Vaiśyas were called *gaṇasya* in distinction from the Brāhmaṇas and Kṣatriyas as co-operation was necessary for acquiring wealth (Bṛ. Up. 1. 4. 12 and Śankara's Com.). Within the Vaiśya or commoner caste the emergence of traders as a distinct body

Urge to union.

[1] *E.g.*, the laws of the Arthaśāstra on gold and silversmiths. *Cf.* Manu—"But the king shall cause a goldsmith who behaves dishonestly, the most nocuous of all thorns, to be cut to pieces with razors." IX 292. In Viṣṇu guilds of metal-workers and of smiths of gold and silver are pre-eminent.

[2] R. K. Mukherji : *Local Self-government in Ancient India.*

from agriculture and cattle-rearing signifies a further stage in this progress.

Development.

The plea of Geldner and of Roth for the existence of guilds in Vedic literature has been keenly disputed. But the words *śreṣṭhin* and *śraiṣṭhya* used in Vedic texts[1] would appear from their contexts to mean 'headman of a guild' and 'his position of primacy.' For more positive evidence of institutional growth we have to look to a much later age. "As the Buddhists placed the warrior-caste before the priest-caste and gave unrestricted freedom to the third estate, it is not wonderful that guild-life is characteristic of a Buddhistic environment."[2] Early Pali literature is full of references to guilds and heads of guilds are of the highest social position. They are great householders always represented in the social set of kings and princes. References in the Epics and in subsequent records, epigraphic and literary, are equally informative. In the Śāntiparva it is fully realised that the *gaṇa* when united, acquires great wealth by the strength and prowess of its constituents (arthaścaivā'dhigamyante saṃghātabalapauruṣaiḥ, 107. 15).

Localisation of industries: in theory.

In the origin and consolidation of guilds four important factors had their part. It has already been seen that certain industries were specialised at certain places. Within the same district or town again each industry tended to be localised at a particular area of its own. The Arthaśāstra ordains that merchants trading with scents, garlands, grains, and liquids (gandha-mālya-dhānya-rasapaṇyāḥ) are to settle in the eastern quarter of a town. Traders in cooked rice, liquor and flesh (pakkānnasurāmāṃsapaṇyāḥ) and prostitutes

[1] For references see Macdonell and Keith, *Vedic Index*.

[2] Washburn Hopkins: *India Old and New*, p. 171.

(rūpajīvāḥ) to the south. Artisans manufacturing worsted threads, cotton threads, bamboo-mats, skins, armours, weapons and gloves and the Śūdras to the west (ūrṇāsūtra-veṇucarmavarmaśastrāvaraṇa-kāravaḥ). Smiths and workers in precious stones (lohamaṇikāravaḥ) find place with the tutelary deity and Brāhmaṇas in the north (II. 4).) The Agnipurāṇa makes a totally different allocation except for the prostitutes and for the religious people. The goldsmiths are to be in the south-west corner of the town; the professional dancers and musicians and the harlots in the south; the stage-managers, the carriagemen and fishermen in the south-west. Those who deal in cars and chariots, weapons and cutlery in the west; liquor merchants, officers and employees in the north-west; religious people in the north; fruit-vendors in the north-east. This is in the outermost circle. In the inner blocks are the military, the civilians and the *élite* of the town. The Mayamata gives a more complicated plan. To the south—a little to the sides should be the weavers, to the north wheelwrights or carters (cakriṇām). The outermost sites are divided into several blocks reserved for (*a*) fish, meat, dry food and vegetables, (*b*) staple food, (*c*) basins and pottery, (*d*) brass and bronze, (*e*) cloth shops, (*f*) rice and paddy, (*g*) tailoring; salt and oils, (*h*) perfumeries and flowers, all serially arranged intervening residential sites. Along the roads within the boulevard are assigned stalls of jewels and precious stones, gold, clothes, drugs and condiments like *mañjiṣṭhā*, pepper, pipal, ginger, honey, ghee, oil, medicines, etc. In ports or in trade marts stalls are not to be inter-residential but more compact, set up in continuous rows on either sides of the highway, to secure economic efficiency (Ch. 10, ll. 154-83). In a different order of planning artisans and manual workers are placed in the outermost zone of the city; to the east or north—potters, barbers and other craftsmen; to the north-west—fishermen; to the west—butchers; to the north—

oilmen ; to the south-east or north-west—architects ; further off—washermen ; one *krośa* (2 miles) off from the east—sweepers (Chs. 9, 29).

In practice.

Plans differed in theory and in practice. But there is no doubt that industries and occupations tended to be segregated from one another partly under the same circumstances which lead to the localisation of modern industries. In the towns of the Madhyadeśa we come across the ivory-workers' street (*dantakāravīthiṃ* in Benares, Jāt. I. 320 f. ; II. 197), the lotus street (*uppalavīthiṃ* in Sāvatthi, II. 321), the washermen's street (rajakavīthiṃ, IV. 82), the street of the Vessas (vessānāṃ vīthiyā, VI. 485), the weavers' quarter (tantavitataṭṭhānaṃ, I. 356 ; pesakāravithi, DhpA. I. 424) and a street in the caterers' quarters (odonikagharavīthiyaṃ, III. 49). As in the town people with the same industrial pursuit flocked in a specified street or quarter, in the countryside, they congregated in the same village settlement and formed a more developed organisation. A carpenter's village with 500 or 1,000 families is often seen in the frontier of the state of Kāsi or in the outskirts of the city of Benares (kāsiraṭṭhe...paccantagāme bahū vaḍḍhakī vasanti, I. 247 ; kulasahassanivāso mahāvaddhakigāmo, IV. 159 ; II. 18, 405 ; IV. 207). There was a weavers' village near Benares under a headman (Dhammapāla's Com. on Therig, Pss. 157 ff.) and a smith's village of 1,000 houses (sahassakuṭiko kammāragāmo, III. 281) is also referred to. Brāhmaṇas formed similar villages for their scholastic and religious activities (VI. 514 ; Mn. 41, 150).[1] The craftsmen purveyed their goods to the people of neighbouring towns and villages or executed orders from them jointly or severally (Vṛ. XVII. 11).

[1] For villages of fishermen, hunters, thieves, *caṇḍālas*, *veṇas*, *naḷakāras*, etc., see *infra*, Bk. V. Ch. III, Bk. VI, Ch. III.

After localisation the next factor was leadership. The localised industry, the *gāma* or the *seṇi* was frequently organised under a leader called *jeṭṭhaka*. We hear of *jeṭṭhaka*s of carpenters, smiths, weavers, garlandmakers (III. 405) as well as of other inferior crafts and of mariners, thieves, caravan-guards, etc. Fick surmises that his office was hereditary and honorary, based on skill rather than on age. He is prominent in royal court (III. 281, V. 282) and rich and of great substance (III. 281). He seems to have combined the functions of the village headman, the village syndic and the president of the local guild.

The *jeṭṭhaka*.

The third factor was heredity of occupation. From the frequent use of the suffixes *kula* and *putta* after a craft name, it would appear that a family stuck to the same craft the father handing down to his son his capital, credit and accumulated experience. Later, during the period of the later law-books (Manu, etc.), with the development of trade transactions "the significance and inner compactness deepened, and being similar to the castes on account of the traditional organisation and the hereditariness of membership, they gradually got....., as certain rules and customs with reference to marriage and interdining were developed, the appearance of real caste, till they finally became the modern trading classes." [1]

Heredity of occupation.

But occupation was not always rigidly determined by heredity or caste. This is proved by the copious literary references particularly in the Pali canon to the master and the pupil, the *ācariya* and the *antevāsi* in an establishment where the latter undergoes a course of apprenticeship under the former in an art which he chooses to pursue in future.

Ācariya and *antevāsi*.

[1] Fick : *Die Sociale Gliederung*, p. 179.

His rôle is not always that of a learner,—for sometimes he excels his master in skill (Jāt. V. 290 ff.). It is very often that of an assistant or a servant akin to the worst conditions of wage labour.[1]

Terms of apprenticeship.

From Nārada's rule it seems that the period of apprenticeship was very similar to the condition of bondage. A youngman desirous of learning a trade was free to do so. He lived with a master, worked for him and was fed and taught by him (also Vṛ. XVI. 6). Like a slave by his master he should be treated as a son.[2] He might not be made to do any other work than the one he was learning. The master might compel the apprentice's return if he ran away. In case the apprentice learns the craft more quickly than stipulated in the contract, the time left over shall be his master's and all the profit derived from the apprentice during that period shall accrue to his master (also Yāj. II. 187). It follows that he was bound down for a given length of time and that the advantage from his work was wholly his master's. If agreed upon in advance he might be rewarded with a fee on attaining proficiency, but he should continue to work for his master till the stated time was up (V. 16-21).

Guild laws: evolution.

The last and the strongest factor binding the constituencies as a close homogeneous unit was the operation of the guild laws. The evolution of these laws may be traced back roughly to the first six centuries before the Christian era in the form of conventions taking shape. The tendency is indicated in two rules of Gautama. "Laws of districts,

[1] In fact Nārada treats them in the same chapter along with hired servants and slaves.

[2] *Cf.* Mv. I. 32 1, where Buddha says that the *ācariya* ought to consider the *antevāsika* as a son, the *antevāsika* should consider the *ācariya* as a father. He exhorts the *bhikkhus* to live the first ten years in dependence on the *ācariya*. Of course the rule relates to education in sacred lore and not in a craft.

castes and families, when not opposed to sacred texts, are an authority" ; and "ploughmen, merchants, herdsmen, money-lenders and artisans (are also authority) for their respective classes" (XI. 20 f.; Vāś. I. 17, XIX. 7). While Gautama is an advocate of local usage and law of caste, Manu reckons guild laws as on par with those of castes and localities. A king should settle the laws only after a careful examination of the laws of castes, districts, guilds (śreṇī) and families (VIII. 41 ; Yāj. I. 360 f.; Nārada, X. 2). Vṛhaspati goes farther to enjoin that the king must approve of whatever the guilds do to other people in accordance with their rules whether that is cruel or kind (XVII. 18).

Apportionment of shares and liabilities.

These rules were meant to regulate distribution of profits and liabilities, investments and dividends among the members. According to the Arthaśāstra, guilds of workmen (saṃghabhṛtaḥ) and those who carry on co-operative work (sambhūya samutthātāraḥ) shall divide their earnings (vetanaṃ) either equally or as agreed upon among themselves (III. 14). The rules of Nārada and Vṛhaspati on *sambhūya samutthānam* or joint transaction of business are more elaborate and relate to trade guilds as well as to craft guilds. The partners must share all legitimate expenses of business such as those incurred by (*a*) purchase and sale of merchandise, (*b*) provision for necessary travelling, (*c*) wages of labourers, (*d*) realisation of dues, (*e*) freight, (*f*) care of treasures (Nār. III. 4 and Vivādaratnākara's com.). The loss, expenses and profit of the business are to be shared by each partner according to the share contributed by him to the joint stock. A partner is responsible for any loss due to his want of care or any action without the assent or against the instructions of his co-partners (Nār. III. 5 ; Vṛ. XIV. 9). Similarly he is entitled to a special remuneration for special profit gained through his individual action (Nār. III.

6 ; Vṛ. XIV. 10). The master craftsman is entitled to a double share of the profits. So also the head of an engineering firm building a house or a temple or digging a tank (Vṛ. XIV. 29).

Rules of contract.

The guilds took contract for work. The Arthaśāstra lays down its rules or terms between the transacting parties (III. 14). Rules of contract bear also on the internal affairs of a guild. Vṛhaspati says that a contract executed by one is binding on all (XIV. 5). The rule of the Arthaśāstra is that a healthy person who deserts his company (of contract artisans) after work has been begun shall be fined 15 *paṇas* ; for none shall of his own accord leave his company. One found to have stealthily neglected his share of work shall be shown mercy for the first time and given proportional work anew with promise of proportional share in earnings. For neglecting again and going elsewhere he shall be thrown out of the company (pravāsanam). For a glaring offence (mahāparādha) he shall be treated as condemned (duṣyavad-ācaret, III. 14). The Dharmaśāstras do not show the same leniency. According to Nārada and Vṛhaspati he who disobeys the laws or injures the joint stock is to be banished. A member who fails to implement an agreement entered into by his association is to be banished and his property confiscated. According to Yājñavalkya dishonesty is punished by expulsion from the guild and forfeiture of share in the profits. A disabled partner may, however, appoint a substitute to do his part of the work (II. 265).

Sanction.

Judicial authority.

The threat of expulsion for indiscipline and dishonesty was the sanction of the guild laws. Accordingly the association had complete judicial authority over its members. Vṛhaspati says that the partners are to be judges and witnesses in deciding their own disputes (XIV. 6). These disputes do not

necessarily relate to affairs of business, they might be strictly personal. Later law books emphasise the jurisdiction of local, popular courts like the *kula*, *śreṇī*, *gaṇa* and *pūga*—graded in ascending order of superiority (Nār. Intr. 7; Vṛ. I. 28-30; Yāj. II. 30). This juridical power is recognised in the Buddhist literature. A man may be tried by his guild (pūgamajjhagato, Mn. 41, 114). Its interference is invoked to settle differences between the members and their wives (Vin. IV. 226). In the Suttavibhanga it is forbidden to ordain the wife of a member unless his guild had sanctioned it. This rigid control over the affairs of a well-knit corporation was exercised by an executive body of two to five persons presumably with a presiding head which also supervised the affairs of smaller associations (Vṛ. XVII. 10).

Funds: earnings and expenditures.

The finances of the guild consisted of individual earnings and contributions, fines and confiscations on delinquent members, king's subsidy (Vṛ. XVII. 24) and profits from executions of orders (Yāj. II. 190). Good profits accrued from the investment of the deposits which the guilds received from the king and the public as banks.[1] They might in their turn earmark a part of their capital to be set aside as safe deposit. The Arthaśāstra prescribes on this point that those who can be expected to relieve misery, who can give instructions to artisans, who can be trusted with deposits, who can plan artistic work after their own design, and who can be relied upon by guilds of artisans may receive the deposits of guilds. The guilds shall receive their deposits back in time of distress.

Arthyapratikārāḥ kāruśāsitāraḥ sannikṣeptāraḥ svacitta-kāravaḥ śreṇīpramāṇā nikṣepaṃ gṛhṇīyuḥ. Vipattau śreṇi nikṣepaṃ bhajet. IV. I.

[1] For the banking activity of the *śreṇī* see *infra*, Bk. IV, Ch. II.

The incomes were distributed as (*a*) dividend among members, (*b*) charity, (*c*) fresh investment.

deyaṃ niḥsva-vṛddhāndha-strī-bāl'-āture-rogiṣu
santānikādiṣu tathā eṣa dharmaḥ sanātanaḥ
tato labhyeta yatkiñcit sarveṣāmeva tatsamam
ṣāṇmāsikaṃ māsikaṃ vā vibhaktavyaṃ yathāṃśataḥ
Vṛ. XVII. 23 f.

The Smṛti rules find positive illustrations from life. Four Benares weavers plied their trade jointly and used to divide their earnings in five shares, keeping four for their own and disposing of the fifth for charity.

Bārāṇasiyam pesakārā ekato hutvā tena kammena laddhakaṃ pañca koṭṭhāse katvā cattaro koṭṭhāse paribhuñjiṃsu pañcamaṃ gahetvā ekato va dānaṃ dadiṃsu.
Jāt. IV. 475.

Benevolent public works and religious contributions received equal attention. Among the votive offerings at Sanchi one is attributed to the guild of ivory-carvers. A cave inscription in Junnar records the gift of a seven-celled cave and of a cistern by the *śreṇī* of corn-dealers.[1] A Gwalior Inscription (876 A.D.) records a temple-grant by a town where guilds of oil-millers (tailikaśreṇī) and of gardeners (mālikaśreṇī) levy a toll among themselves and assign it to the temple.[2]

Guild *vis-a-vis* the state : guardianship.

The guilds while enjoying an autonomous life stood in close relation to the civil authority. The legal masters enjoin a paternal and fostering care to be extended to industrial combinations. Not only must the king respect the guild laws but must also see that members thereof followed their own laws (Yāj. I. 361 ; Viṣ. III. 2; Nār. X. 2). To enforce observance of these laws and compacts among members

[1] Bühler and Burgess : *Arch. Sur. W. Ind.*, IV. 10

[2] E. I., I. 20.

the king may resort to the penal sanctions of fine and banishment (Manu, VIII. 219-21; Viṣ. V. 168; Yāj. II. 192). In the case of a dispute between a guild and its head, the king shall arbitrate and he shall restrain when a whole guild boycotts a member from hatred (Vṛ. XVII. 19-20). He subsidises a guild when necessary. He receives appeal against its disposal of a law-suit. He has the prerogative of taxing it to his pleasure.

Disputes and arbitration.

The Jātakas offer several instances of guild-disputes (II. 12, 52; IV. 43; VI. 332). The source of these quarrels is nowhere disclosed. That there might be more than one guild of the same craft at one place, *e.g.*, the two weavers' guilds at Govardhana (Nasik Cave Ins.) may lead to a vague surmise. To remedy this state of affairs, a king is said to have inaugurated the office of the *bhaṇḍāgārika* who carried with it "the judgeship over all guilds" (sabbaseṇināṃ vicaraṇatthāya, IV. 43) and "whose function possibly referred to a supervision of the goods made or dealt with by a guild or guilds and not only to the king's exchequer."[1]

Other relations.

The king's rôle of guardianship is reflected in many other references. He collects all the guilds (sabbaseṇiyo) along with his subjects to demonstrate his almsgiving (Jāt. IV. 49). He assembles the four castes, the eighteen guilds (aṭṭhārasa seṇiyo) and his army for a procession to receive his son (VI. 22). Among ministers, officials and notables are the chiefs of the guilds (śreṇimukhyāḥ) who are ordained by Bharata to come out and greet Rāma on his return from exile (Rām. VI. 129. 4). The king was in intimate touch with the *jeṭṭhaka* and probably this was the agency through which he exercised his powers of oversight.

[1] Mrs. Rhys Davids: *Cambridge History*, p. 107.

Guild militia : threat to civil power.

But the guild was not always the submissive ward. As a necessary corollary to its political power and autonomous life and from the need to defend its treasures the *śreṇī* came to form a militia and possess military power enough to be a perpetual worry to the king. Prince Duryodhana when defeated in the hands of the Gandharvas was ashamed of returning home and meeting his relatives, priests and heads of guilds (gaṇamukhyāḥ, Mbh. III. 248. 16). The Arthaśāstra is at its wit's end to keep them under subjugation and to destroy them by sowing seeds of discord. In the Śāntiparva their power is reckoned as equal to that of the army; their heads must be 'talked over' by spies when the king would subdue another kingdom; they are 'supported by union' and the king is especially warned not to tax them too heavily, lest they become disaffected, which is considered as a grave calamity (107. 10-32).

The organised crafts.

In the land where and in the time when the Jātaka stories took shape there were eighteen industries which were organised into guilds (aṭṭhārasa seṇiyo, I. 267, 314; III. 281; IV. 411; VI. 22). Four of these are especially mentioned, *viz.*, carpenters (vaḍḍhaki), smiths (kammāra), leather-dressers (cammakāra) and painters (cittakāra) (VI. 427). Among craft guilds Vṛhaspati enumerates those of goldsmiths, silversmiths, workers in other base metals (kupya), carpenters, stone-dressers (saṃskartā) and leather-workers (XIV. 27). The Nasik Cave Inscriptions refer to the guilds of weavers, of potters (? kularika), of workers with water-pumps (odayantrika) and of oil-millers (tilapiṣaka) (12. v, 15. vii). A Mathura Brāhmī Inscription of Huviṣka's time records the existence of a *rāka* (?) guild and a guild of flour-makers (samitakara).[1] The Junnar Buddhist Cave Inscriptions

[1] E. I., XXI. 10.

similarly speak of one of bamboo-workers (vasakāra) another of braziers (kasakāra) and a third of corn-dealers (dhamñika).[1] The collective gift of the ivory-workers at Vedisā (Sanchi Ins. C. 189) probably indicates that these artisans formed a *śreṇī*. Later inscriptions and inscriptions from the south add copiously to the list.

Powers and functions.

The autonomy and entity of the guild was as much legal as real. It had its distinguishing colours (Mbh. III. 2,6. 6). In the preparations made by the royal family and citizens of Mathura to witness the wrestling bout between Kṛṣṇa and Kaṃsa, pavilions were erected for different companies and corporations with flags representing the implements and emblems of the several crafts (svakarma-dravyayuktābhiḥ patākābhiḥ. Harivaṃsa, 86. 5). If the *nigama* of the coins of Taxila and of the Bhita seals refers to town corporations and not to industrial guilds, the Basarh seals of the time of the Gupta emperors show a great advancement in guild activity referring to and giving the names of bankers (śreṣṭhin), traders (sārthavāha) and merchants (kulika), their members and their leaders (prathama-kulika). The civic affairs of the *nigama* were dominated by powerful trade and craft guilds.[2]

General traits: strength & weakness.

The guild served not only as a bank receiving deposits at interest but also as a trustee and executor of endowments. An endowment in a guild bank is reported to be permanent so long as the guild retains its unity even if it moves to a different place.[3] This shows its mobility and organisational perfection and the public confidence reposed in it. The 1,000 families of carpenters in a *gāma* who shifted wholesale overnight in boats and settled in an island in mid-sea is a typical illustration of this mobility (Jāt.

[1] Bühler and Burges: *Op. cit.*, IV. 10, 24, 27.

[2] See *supra*, p. 188.

[3] Fleet: *Gupta Inscriptions*, No. 16.

IV. 159). Another example is a guild of skilled (prathita-śilpāḥ) silk-weavers who migrated from Lāṭa or southern Gujarat into the city of Dāsapura and constructed "a noble and unequalled temple of the bright-rayed sun." After this the members began pursuing different occupations, *e.g.*, music, story-telling (kathāvidaḥ), religious discourses (dharmaprasanga); some remained weavers, others changed into astrologers (jyotiṣa) or warriors (samarapragalbhāḥ) or recluse (vijita-viṣayasanga). Still the corporate organisation was in tact and the temple which had fallen into disrepair was restored by the same guild after a period of thirty-six years from its construction.[1] The larger civic conscience and communal spirit thus stood against the disruptive tendencies of contradictory tastes and occupations. This also shows the extent of intellectual life and culture nursed in a mere craft guild and the amount of independent development and freedom of choice permitted within its scope. But this is not the *śreṇī* of the Jātakas and of the Smṛtis. We miss the team plying their shuttle together, the rules regulating collective contracts for a job, the allocation of shares and dues from a joint-stock. The institution imbibes cultural propensities and develops conflicting tastes in a growing urban atmosphere. It has lost its fundamental character of manual labour and the basic unity grown upon it. The earlier *śreṇī* was an association of capitalist workers serving under the strictest regimentation who could ill afford to pursue the so-called cultures and refinements as means of livelihood. The story of the Mandasor Inscription sets forth the first stage of disintegration of a well-knit craft guild with common economic interests. The process is hidden under the plaster of a higher but loose synthesis maintained only by tradition and personal association.

[1] *Ibid*, p. 86.

BOOK III

TRADE AND COMMERCE

Aññataro duggatakulaputto.....mūsikaṃ gahetvā ekasmiṃ āpaṇe biḷālass' atthāya datvā kākaṇikaṃ labhi. Tāya kākaṇikāya phāṇitaṃ gahetvā ekena kuṭena pānīyaṃ gaṇhi. So araññato āgacchante mālākāre disvā thokaṃ thokaṃ phāṇitakhaṇḍaṃ datvā uḷuṃkena pānīyaṃ adāsi. Te tassa ekekaṃ pupphamuṭṭhiṃ adaṃsu. So tena pupphamūlena punadivase pi phāṇitañ ca pānīyaphaṭañ ca gahetvā pupphārāmam eva gato. Tassa taṃ divasaṃ mālākārā aḍḍhocitake pupphagacche datvā agamaṃsu. So na cirass' eva iminā upāyena aṭṭha kahāpaṇe labhi. Puna ekasmiṃ vātavuṭṭhidivase rājuyyāne bahū sukkhadaṇḍakā ca sākhā ca palāsañ ca vātena patitaṃ hoti. Uyyānapālo chaḍḍetuṃ upāyaṃ na passati. So tattha gantvā sace imāni dārupaṇṇāni mayhaṃ dassasi ahan te imāni sabbāni nīharissāmīti uyyānapālaṃ āha. So gaṇha ayyā ti sampaṭicchi. Cullantevāsiko dārakānaṃ keḷimaṇḍalaṃ gantvā phāṇitaṃ datvā muhuttena sabbani dārupaṇṇāni nīharāpetvā uyyānadvāre rāsiṃ kāresi. Tadā rājakumbhakāro rājakulānaṃ bhājanānaṃ pacanatthāya dārūni gaṇhi. Taṃ divasaṃ Cullantevāsiko dāruvikkayena soḷasa kahāpaṇe cāṭiādīni ca pañca bhājanāni labhi. So catuvisatiyā kahāpaṇesu jātesu " atthi ayam upāyo mayhan " ti nagaradvārato avidūraṭṭhāne ekaṃ pānīyacāṭiṃ ṭhapetvā pañcasate tiṇahārake pānīyena upaṭṭhahi. Te āhaṃsu : " tvaṃ samma amhākaṃ bahūpakāro, kin te karamā " ti. So " mayhaṃ kicce uppanne karissattha " ti vatvā ito c' ito ca vicaranto thalapathakammikena ca jalapathakammikena ca saddhiṃ mittasanthavaṃ akāsi. Tassa thalapathakammiko " sve imaṃ nagaraṃ assavāṇijako pañca assasatāni gahetvā āgamissatī'ti " ācikkhi. So tasso vacanaṃ sutvā tiṇahārake āha : " ajja mayhaṃ ekekaṃ tiṇakalāpaṃ detha, mayā ca tiṇe avikkīte attano tiṇaṃ mā vikkiṇathā " 'ti. Te

"sādhu" 'ti sampaṭicchitvā pañca tiṇakalāpasatāni āharitvā tassa ghare pātayiṃsu. Assavāṇijo sakalanagare assānaṃ tiṇaṃ alabhitvā tassa sahassaṃ datvā taṃ tiṇaṃ gaṇhi. Tato katipāhaccayena tassa jalapathakammikasahāyako ārocesi: "paṭṭanam mahānāva āgatā" 'ti. So "atthi ayaṃ upāyo" ti aṭṭhahi kahāpaṇehi sabbaparivārasampannaṃ tāvakālikaṃ rathaṃ gahetvā mahantena yasena nāvāpaṭṭanaṃ gantvā ekaṃ angulimuddikaṃ nāvāya saccakāram datvā avidūraṭṭhāne sāṇiṃ parikkhipāpetvā nisinno purise āṇāpesi: "bāhirato vāṇijesu āgatesu tatiyena pāṭihārena ārocethā" 'ti. "Nāvā āgatā" 'ti sutvā Bārāṇasito satamattā vāṇijā "bhaṇḍaṃ gaṇhāmā" 'ti āgamiṃsu. "Bhaṇḍaṃ tumhe na labhissatha, asukaṭṭhāne nāma mahāvāṇijena saccakāro dinno" ti. Te tam sutvā tassa santikaṃ āgatā. Pādamūlikapurisā purimasaññavasena tatiyena pāṭihārena tesaṃ āgatabhāvaṃ ārocesuṃ. Te satamattāpi vāṇijā ekekaṃ sahassaṃ datvā tena saddhiṃ nāvāya pattikā hutvā puna ekekaṃ sahassaṃ datvā pattiṃ vissajjāpetvā bhaṇḍaṃ attano santakaṃ akaṃsu. Cullantevāsiko dve satasahassāni gaṇhitvā Bārāṇasiṃ āgantvā.....

Cullakaseṭṭhi Jātaka.

A young man of good family but reduced circumstances.....picked up the mouse which he sold for a *kākaṇi* at a shop for their cat. With the *kākaṇi* he got molasses and took drinking water in a waterpot. Coming on flower-gatherers returning from the forest, he gave each a tiny quantity of the molasses and ladled the water out to them. Each of them gave him a handful of flowers, with the proceeds of which, next day, he came back again to the flower grounds provided with more molasses and a pot of water. That day the flower-gatherers, before they went, gave him flowering plants with half the flowers left on them; and thus in a little while he obtained eight *kahāpaṇas*.

Later, one rainy and windy day, the wind blew down a quantity of rotten branches and boughs and leaves in the king's pleasaunce, and the gardener did not see how to clear them away. Then up came the youngman with an offer to remove the lot, if the wood and leaves might be his. The gardener closed with the offer on the spot. Then this young apprentice repaired to the children's playground and in a little while got them by bribes of molasses to collect every stick and leaf in the place into a heap at the entrance to the pleasaunce. Just then the king's potter was on the look out for fuel to fire bowls for the palace, and coming on this heap, took the lot off his hands. That day the young apprentice by selling the wood obtained sixteen *kahāpaṇa*s as well as five bowls and other vessels. Having now twenty-four *kahāpaṇa*s in all, a plan occurred to him. He went to the vicinity of the city-gate with a jar full of water and supplied 500 mowers with water to drink. Said they, "you have done us a good turn, friend. What can we do for you?" "Oh I'll tell you when I want your aid," said he; and as he went about, he struck up an intimacy with a land-trader (?) and a sea-trader (?). Said the former to him, "To-morrow there will come to town a horse-dealer with 500 horses to sell." On hearing this piece of news, he said to the mowers, "I want each of you to-day to give me a bundle of grass and not to sell your own grass till mine is sold." "Certainly," said they, and delivered the 500 bundles of grass at his house. Unable to get grass for his horses elsewhere, the dealer purchased our friend's grass for a thousand pieces. Only a few days later his sea-trading friend brought him news of the arrival of a large ship in port; and another plan struck him. He hired for eight *kahāpaṇa*s a well-appointed carriage which plied for hire by the hour, and went in great style down to the port. Having bought the ship on credit and deposited his signet-ring as security, he had a pavilion pitched hard by and said

to his people as he took his seat inside, "when merchants are being shown in, let them be passed on by three successive ushers into my presence." Hearing that a ship had arrived in port, about a hundred merchants came down to the cargo, only to be told that they could not have it as a great merchant had already made a payment on account. So away they all went to the young man; and the footmen duly announced them by three successive ushers as had been arranged beforehand. Each man of the hundred severally gave him a thousand pieces to buy a share in the ship and then a further thousand each to buy him out altogether. So it was with 200,000 pieces that this little apprentice returned to Benares.

CHAPTER I

Development and Organisation of Trade

Trade a natural sequel to industry. The different trades. Market-place.

The small trader or hawker. Big traders: caravan. Correspondents. Wholesale and retail trade.

Corporate organisation. Partnership and guilds.

Trade methods. Speculation. Transaction on credit. Advertisement and publicity. Depression. The successful vendor.

The *seṭṭhi*: his fabulous wealth. Stores. His relation with king; with fellow merchants and citizens. Hereditary office? Assignee of tolls His unofficial rank. Administrative function. Benevolent work.

Trade follows industry.

Trade is a natural sequel to industry. In the wake of a *sippa* must follow *vohāra*. For an industrial product must as a matter of course look for a market for its disposal. Such markets and such transactions are necessary concomitants of any industrial effort and occur in the earliest stages of economic life. With the specialisation of industries and their localisation in particular places whether in a whole country or in a village or in a small street of a town, this commercial intercourse multiplies in proportion. The horse-producing Sindhu and the cloth-manufacturing Kāśī are brought into the same intimate economic relationship as were formerly the animal-breeder and weaver plying their trade side by side in the same village. Exchange of goods bound down the whole land of India, particularly the north, in a close economic unity to which even Rome, Egypt, Arabia, Persia, China, Indonesia and farther East were brought into brisk commercial intercourse.

Stockists and shops.

Between the producer and the consumer stood the stockist and the middleman. The vendor stocked various goods from producers in his shop for sale. We know of grain merchants (dhaññika)

who kept double-mouthed sample-bags (ubhatimukhā mutoli) to keep samples in of various sorts of grain (Dn. XXII. 5). Merchants traded in diverse article like fruits, herbs, sugarcane, honey, ointment, planks of wood, tooth-brush and smoking-pipe (Jāt. IV. 495). Among traders, practising in a town are dealers in cloth (dussika), in perfumes (gandhika), groceries (paṇṇika), fruits (phalika), and roots (mūlika) (Mil. 331, 262). Tulādhāra, the trader lived by selling juices (rasa), scents (gandha), barks and timbers, herbs, fruits and roots[1] (Mbh. XII. 261. 2). The shops were set up in rows on the two sides of the main thoroughfares or around the market place (singhāṭaka, gāmamajjha, bhaṇḍa-bhājanīyaṃ thānaṃ) with a tendency for shops of the same wares to group together forming a special bazar of their own.

The hawker.

Shops were not always stationary. They might be moving. In the Jātakas the hawker is a common sight. A merchant goes about from village to village hawking goods on a donkey's back (vāṇijo gadrabhabhārakena vohāraṃ karonto vicarati, II. 109 ff.). A petty hawker shouts with his wagon in the middle of the village (gāmamajjhe) with "buy my cucumber, buy my cucumber" (I. 205). A grocer's daughter (paṇṇikadhītā) hawks jujubes in a basket "buy my jujubes, buy my jujubes" (badarāṇi gaṇhatha badarāṇi gaṇhathā'ti, III. 21). Sometimes these people evince a higher sort of business intelligence. Two potters apportion two streets in the same town between themselves to eliminate competition and peddle their pots from door to door (I. 111).

[1] The producer and the dealer are not always clearly distinguished. *E.g.*, the *gandhika* may mean one who prepares scents as well as one who stocks and sells them. So an *odonika* is both a caterer and a distributor of foodstuffs.

Big trader : caravans.

Besides these small traders there were big merchants who collected huge cart-loads of wares from their centres of production and sent them to distant countries where they might be sold at a higher price. The Jātakas are full of references to caravans or long lines of two-wheeled bullock carts such as is represented at Bharhut in the scene of the purchase and gift of the Jetavana. Their strength is given at the conventional figure of 500 wagons under a leader (satthavāha, I. 98, 368, 377, 404; III. 200, 403; V. 164, 471). "The carts struggled along slowly, through the forests, along the tracts from village to village kept open by the peasants. The pace never exceeded two miles an hour. Smaller streams were crossed by gullies leading down to fords, the longer ones by cart ferries."[1] Regarding one of these an interesting piece of information is given. A great caravan of one thousand carts (mahāsakaṭosattho sakaṭasahassaṃ) was going from the East country to the West country. Wherever it went it consumed swiftly straw, wood, water and verdure (tiṇokaṭṭhodakaṃ haritakavaṇṇaṃ). Now in that caravan were two caravan-leaders each commanding one-half of the carts.[2] Thinking that wherever we go we consume everything—they divided the caravan into two equal portions and equipped with food and provender started separately (Dn. XIII. 23; *cf.* Jāt. I. 98).

Correspondents.

The trade magnates had "correspondents" in big and opulent cities with whom they disposed of their goods wholesale. A correspondent and friend of Anāthapiṇḍika at the border sent 500 cart-loads of local wares to barter in the shop of the Sāvatthi merchant. The people were hospitably received, lodged and provided with money for their needs,—and given goods

[1] Rhys Davids : *Buddhist India*, p. 98.

[2] So the unit of 500 under the charge of one *satthavāha* remains in tact.

in exchange. A return despatch from Anāthapiṇḍika was summarily refused with insults by the border correspondent for which however he was paid back in his own coin during the next offer from him (Jāt. I. 377).

Wholesale and retail trade.

The wholesale dealers distributed the wares to retail dealers on a commission or share of the profit. The rules of the Arthaśāstra on retail sale seem to be based on the assumption that the latter did not purchase the goods and sell them in better terms to derive a middleman's profit. They were rather agents or salesmen of wholesale dealers, possibly representing several at a time. The Arthaśāstra lays down: "Retail dealers selling the merchandise of others at prices prevailing at particular localities and times shall hand over to the wholesale dealers as much of the sale proceeds and profit as is realised by them. Rules of sealed deposit shall apply here. If owing to distance in time or place there occurs any fall in the value of the merchandise, the retail dealers shall pay the value and profit at that rate which obtained when they received the merchandise."

Vaiyyāvṛtyakarā yathādeśakālaṃ vikrīṇānāṃ paṇyaṃ yathājātamūlyamudayaṃ ca dahyuḥ. Śeṣamupanidhinā vyākhyātam. Deśakālātipātane vā parihīnaṃ sampradānakālikena argheṇa maulyam-udayaṃ ca dahyuḥ.

"This rule does not hold good for servants selling their masters' wares. Such merchants as belong to trade guilds or are trustworthy and are not condemned by the king need not restore even the value of that merchandise which is lost or destroyed owing to its inherent defects or to some unforeseen accidents. But of such merchandise as is distanced by time or place, they shall restore as much value and profit as remains after making allowance for wear and tear of the merchandise."

"Sāṃvyavahārikeṣu vā prātyayikeṣvarājavācyeṣu bhreṣopanipātābhyāṃ naṣṭaṃ vinaṣṭaṃ vā mūlyamapi na dadyuḥ.

Deśakālāntaritānāṃ tu paṇyānāṃ kṣayavyayaśuddhamūlyamudayaṃ ca dadyuḥ. Paṇyasamavāyānaṃ ca pratyaṃśaṃ. III. 12.

Elsewhere it is given that the trader should calculate the daily earnings of middlemen and fix that amount on which they are authorised to live; for whatever income falls between sellers and purchasers (*i.e.*, brokerage) is different from profit.

Yannisṛṣṭam upajīveyuḥ tadeṣām divasasañjātaṃ saṃkhyāya vaṇik sthāpayet. Kretṛ-vikretro-rantarapatitam ādāyātanyaṃ bhavati. IV. 2.

This is obviously the agent's commission which is to be fixed by the trader to a rate likely to give an enterprising middleman quite a decent income.

Corporate organisation : partnership.

Corporate organisation as developed in industries did not progress as far in commerce. With regard to industries guild organisation was the order of the day, with commerce it was an exception, it being generally pursued individually and independently. Partnership was of course not uncommon. Vidura quotes an adage to king Dhṛtarāṣṭra that concerns of wealth should not be pursued alone (Mbh. V. 33. 50). Two merchants from Sāvatthi trade with their wares in 500 cart-loads from the East country to the West country and come back to Sāvatthi with a lucrative profit.

Sāvatthivāsino hi kuṭavāṇijo ca paṇḍitavāṇijo ca dve janā pattikā hutvā pañcasakaṭasatāni bhaṇḍassa pūretvā pubbantato aparantaṃ vicaramānā vohāraṃ katvā bahulābhaṃ labhitvā Sāvatthiṃ paccāgamiṃsu.

They then set down to divide the returns (Jāt. II. 167). Similarly two merchants from Benares dispose their wares in the country districts in partnership (dve janā ekato vaṇijjaṃ karontā laddhalābhā). They fall to quarrel over the share of the proceeds, one claiming share of a half on the strength of equal investment in stock-in-trade,

another two-third on the score of superior acumen. The former wins (I. 404).

But of the *seṇi*, *gāma* and *pūga* there is hardly any reference. In the Karle Cave is recorded a gift by the *gāma* of traders (vaniya-gāmasa) from Dhenukākaṭā, but nothing is known about its nature or constitution.

Guild.

Trade guilds seem to be conceived in the rules of Gautama (XI. 20 f.) and in the prognosis of the Arthaśāstra that traders unite to raise prices like modern corners and make a profit of cent per cent (VIII. 4). But as has been already seen individual tradesmen entered into similar compacts for mutual interest from their inherent business instinct, and these show at best an appreciation of the community of commercial interests. Instances of co-operation are not rare. Parties of mariners voyaging by the same vessel under a *jeṭṭhaka* may have chartered it in concert (Jāt. II. 128; IV. 138 ff; V. 75; VI. 34). Parties in a caravan were brought together for purposes of safety through long forest journeys and accepted the leadership of the *satthavāha* for guidance as to halts, watering, precautions against brigands and beasts, routes, fording, etc.[1] "Subordination was not however always ensured (Jāt. I. 108, 368; II. 295; III. 200), and the institution does not warrant the inference of any further syndicalism among traders." As regards commercial organisation, Mrs. Rhys Davids' statement stands substantially correct: that there is "no instance as yet produced from early Buddhist documents pointing to any corporate organisation of the nature of a guild or Hansa League."[2] Later literature gives undisputed evidences of such leagues. For example, in the Śukranīti "a *sāmayikapatra* or business deed is one which individuals frame after combining their

[1] For example the merchants in a party of 1,000 under the two leaders in Dn. XXIII. 23. See *supra*, p. 255.

[2] Cambridge History, p. 211.

shares of capital (svadhanāṃśa) for some business concern (vyavahāra) (II. ll. 627 f.). The reason for the somewhat later development of commercial combines was probably that trade was still a wandering profession while industrial organisations depended largely upon settled relations and ties of neighbourhood.

Speculation.

Trade in the Jātakas is very often speculative. A young man picks up and sells a dead mouse and by successful dealings works up the capital to become rich. The last transaction is in a ship's cargo which he holds and disposes at 200,000 pieces (I. 120-122). The outlay being 1,000 the profit is 20,000 p.c. 100, 200 and 400 p.c. are the profits at which caravan masters barter their wares (I. 98 ff., 109; IV. 2). A boy begins with a humble stock-in-trade, voyages to Suvaṇṇabhūmi with some other merchants in a ship and makes enough money to recover his paternal kingdom (VI. 34).

Trade methods.

Indications to the development of commerce may be had from the prevalence of several trade practices. Business deeds or documents recording a description of the property purchased and the price paid for it were known among merchants (Vṛ. VIII. 7; *cf.* Śuk. III. 378 f.). Big deals were made on credit. The speculating young man bought the cargo of a ship on credit giving his signet ring as security. Sale by public auction after notification is witnessed by Strabo (XV. i. 50-52)[1] and in the Arthaśāstra (II. 21). Merchants advertised their goods by singing their praise themselves (vāṇijā viya vācasanthutiya. Com: yathā vāṇijo attano bhaṇḍassa vaṇṇam eva bhanati, V. 425) or through an agent, *e.g.*, the hostess of a travelling tailor (tunnavāya)

[1] Vincent Smith has corrected the reading to sale after having the royal seal (Asoka).

who on his behalf gives publicity to his profession in the village (amma vīthisabhāgānaṃ ārocehī'ti, sā sakalagāme ārocesi) so that in one day 1,000 pieces were earned (VI. 366). Political crises had their repercussions on business transactions. After Rāma's exile the business of Ayodhyā suffered under general depression and shops remained closed for several days (Rām. II. 48. 36 f.; 71. 41).

The successful shopkeeper.

The application, judgement, cleverness and 'connexion' of the successful shopkeeper (pāpaṇika) are interestingly discussed (An. I. 116 f.; *cf.* Mn. II. 7; Vin. I. 255). He is shrewd (cakkhumā), knowing his goods (paṇiyaṃ jānāti): this article bought for so much and sold for so much, will bring in so much money, such and such profit (idaṃ paṇiyaṃ evaṃ kītaṃ evaṃ vikkayamānaṃ ettakaṃ mūlaṃ bhavissati ettako udayo ti). He is clever (vidhūro), skilful in buying and selling goods (kusalo hoti paṇiyaṃ ketuñ ca vikketuñ ca). He inspires confidence (nissaya-sampanno), inasmuch as wealthy people seeing his stability give him credit. Possessed of these three characteristics, a shopkeeper in no time attains greatness and increase of wealth (tīhi angehi samannāgato pāpaṇiko na cirass' eva mahantattaṃ vā vepullattaṃ vā pāpuṇāti bhogesu).

The *seṭṭhi*: his wealth.

Despite the absence of the guild system, that there was a certain organisation in urban business is apparent from the rôle of the *seṭṭhi*. The words *śreṣṭhin* and *śraiṣṭhya*, used in the Vedic literature would appear from their contents, to mean 'headman' and 'his position of primacy.'[1] Later, in Pali literature the *seṭṭhi* conveys the idea of one of the upper bourgeoisie, a great merchant or commercial magnate

[1] Macdonell and Keith: *Vedic Index*.

who sends his caravan from *pubbanta* to *aparanta* or ships his cargo across the high seas. In a more technical sense the *seṭṭhi* was the head of this trading class, a wealthy and popular magnate who, like the rural *bhojaka* and the industrial *jeṭṭhaka*, stood in close relation to the king. His wealth is computed at the conventional figure of 80 crores (Jāt. I. 345, 444, 466; II. 331 ; III. 56, 129, 300; IV. 1, 255; V. 382). He stocked huge quantities of grain in his granaries (I. 467) obviously to dispose in scarcity on advantageous terms. With his big capital he employed small craftsmen and benefited by their labour (seṭṭhiṃ nissāya vasantassa tunnakārassa tunnakammena jīvissāma, IV. 38). The *seṭṭhi* of Rājagaha is competent to pay 200,000 *kahāpaṇa*s as medical fee (Mv. VIII. 16).

Leader of merchants.

The compound Rājagahaseṭṭhi is a pointer to the fact that the richest merchant of a town or village, the *seṭṭhi par excellence*, discharged certain specific functions and had a unique position with respect to others. In the inscriptions of the Sanchi tope the *seṭṭhi* of a village is in several instances mentioned without his proper name, while the *gahapati* appears with his name and sometimes village as well.[1] His was a position of authority over the fellow traders. During his dedication of the Jetavana, Anāthapiṇḍika, the chief *seṭṭhi* of Sāvatthi was attended by 500 *seṭṭhi*s.

Between king and merchants.

Through this leader the king maintained his contact with the mercantile community. In this capacity of a go-between the *seṭṭhi* filled one of the highest offices of state (seṭṭhiṭṭhāna, Jāt. I. 120ff.; III. 418; V. 382; seṭṭhitā, Mahāvaṃso, p. 69). The *gahapati*, one of the seven jewels (ratanam) of a king is explained by Buddhaghosa as *seṭṭhi-gahapati*.

[1] The *seṭṭhi*, who appears with his name and place in the Karle Cave In., is an ordinary merchant, not the chief *seṭṭhi*.

This official is often seen waiting upon the king (rājupaṭṭhānaṃ gato, III. 19 ; rājupaṭṭhānaṃ katvā, IV. 63). His relation is sometimes informal and personal. A king desirous of renouncing the world is supplicated by his parents, wife, children, the commander-in-chief, the *seṭṭhi*, and the people. The *seṭṭhi* offers him his accumulated fortune and requests him to stay (V. 185).

Position with citizens.

The rich business lord probably led the co-operative efforts of merchants in his town and was very popular with his community. Presumably this popularity and influence with his community and with the people at large was the reason for his selection into king's service. The *seṭṭhi* of Rājagaha does good service both to the king and to the merchants' community (ayaṃ kho seṭṭhigahapati bahūpakāro rañño c'eva negamassa ca, Mv. VIII. 16). A *seṭṭhi* in office is honoured both by the king and by citizens and countryfolk alike (rājapūjito nagarajanapadapūjito, V. 382). When the princes and queens fell victim to a king's furore the citizens uttered not a word ; but when the *seṭṭhi*s were seized for execution, the whole city was troubled and the people went with their relatives and begged for mercy (VI. 135).

Hereditary office ? Social rank.

The *seṭṭhi* therefore was not a civil official in the sense the *senāpati* or the *amātya* was. As an intermediary, he was half an official and half a popular figure. As an official he was selected by the king on the basis of his wealth and influence (Jāt. I. 120-22). But as the son generally succeeded to his father's trade (II. 64, 236 ; seṭṭhānuseṭṭhīnaṃ kulānaṃ puttā, Mv. I. 9. 1.) and inherited his wealth and influence, the office of the *seṭṭhi* nominally selective, tended to be hereditary. The sixth descendant of a *seṭṭhi* is found continuing in the post of his forefathers (Jāt. V. 384). There is little to distinguish between social rank

and civil office in this respect.[1] The two were co-existent and a *seṭṭhi* fallen in social position was little likely to continue in the king's grace ; nor would the king make an alternative selection when the son of the retired official was fit to take the mantle.

Administrative functions.

The specific functions of the *seṭṭhi* as a civil official is nowhere clearly defined. A king by his decree makes a gift of the East market town to a merchant (pācinayavamajjhaka gāmam rājabhogena bhuñjā'ti) and makes the other thousand merchants his subordinate (sesaseṭṭhino etass'eva upaṭṭhākā hontu, VI. 344). There is hardly any authority to render *seṭṭhi* as 'treasurer'[2] for which the Pali word is *bhaṇḍāgārika*. He may have assisted the king in framing his financial policy and advised him on the methods and rates of assessment on big business. He carried the king's orders to his fellow merchants and presumably was responsible for their execution. As emoluments for his services, the tolls, taxes and customs dues of a particular business area might be assigned to him. Sometimes he was assisted by a second (anuseṭṭhi, Jāt. V. 384 ; Mv. I. 9. 1) from his own class. He had little to do with the king's treasury.

Municipal power.

With the growing industrial and commercial life of the town, the *seṭṭhi* rose into power and prominence and came to play a new rôle. As leader of the most important urban class and as a civil official of the highest rank he was the hot favourite to be entrusted with municipal administration,—to be promoted to the *viṣaya*-council or even to the position of Lord Mayor. The Basarh seals and the Damodarpur and Paharhpur Inscriptions throw sidelights into the civic functions of

[1] *Cf.* ".... ....it would seem that the rank of *seṭṭhi* was hereditary, and this is confirmed by the later literature; but this applies to the social rank only, and not to the office." Rhys Davids : *Vinaya Texts*, I, p. 102.

[2] In the translation of the Jātakas under Cowell's editorship.

the *seṭṭhi*. This is nothing strange for the head of a class who, like the upper bourgeoisie of the national-democratic age in Europe, were at the forefront of every liberal movement and set the example of unstinted charity. The hoarded crores of Anāthapiṇḍika, emptied for the alleviation of the miseries of the poor and for the propitiation of the Saṃgha, the great *caitya* cave at Karle and similar costly gifts at Kanheri, Mathura and Sanchi give a glimpse into the means and ways by which they attained to their phenomenal power and popularity.

CHAPTER II

PRICE AND MARKET

Free bargain : haggling. Price quotations. Customary rates and indeterminate price. Price-fixing. The court-valuer. Price regulation. Statute-fixed prices. Cornering and inflation of price. Proportion between big and small trade. Standard of living.

"And because they first bargain and afterwards come to terms (the priest and the king over the *soma* juice in terms of cow-payment) therefore, about any and everything that is for sale here, people first bargain and afterwards come to terms." (Śat. Br. III. iii. 3. 1-4.)

Free bargain : haggling.

This practice of a "free bargain" unregulated by law and custom was widely prevalent up to the beginning of the 6th century B.C. Prices were determined mostly by haggling, sometimes climbing up from a single *kahāpaṇa* to 100 or 1,000 (Jāt. III. 126 f.). "The act of exchange between producer or dealer, and consumer was, both before and during the Jātaka age, a 'free' bargain, a transaction unregulated by any system of statute-fixed prices. Supply, limited by slow transport and individualistic production, but left free and stimulated, under the latter system, to efforts after excellence on the one hand and to tricks of adulteration on the other,..... sought to equate with a demand which was no doubt largely compact of customary usage and relatively unaffected by the swifter fluctuations termed fashion."[1]

Price quotations.

The statement may be best examined in the light of some available price quotations which may be arranged into the following schedule :

[1] Mrs. Rhys Davids : J.R.A S., 1901, p. 875.

COMMODITY	PLACE	PRICE	REFERENCE
ANIMALS			
Slave—male or female	...	100 *kahāpaṇa*	Satena kītadāsa, Jāt. I. 224; satakītadāsī, III. 343.
Slave—king's son	...	1,000 gold *nikkha*	VI. 547.
A serviceable ass	Mithilā	8 *kahāpaṇa*	VI. 343.
Oxen—1 pair	Benares	24 ,,	II. 305.
An average horse	,,	1,000 ,,	II. 306.
A thoroughbred foal	,,	6,000 ,,	II. 269.
A team of chariot horses	Mithilā	90,000 ,,	VI. 404.
A nice plump dog	...	1 ,, +a cloak	II. 247.
A dead mouse	...	1 *kākaṇi*	I. 120.
EATABLES			
Meat for a chameleon	Mithilā	1 *kākaṇi*—½ *māsaka*	VI. 346.
A fish		7 *māsaka*	II. 424.
A jar of spirits	Benares	1 *kahāpaṇa*	I. 350.
Ghee or oil—a small modicum	Sāvatthi	1 ,,	Vin. IV. 248 f.
Dinner dish for royal horse	Benares	100,000 ,,	I. 178.
Royal dinner dish	,,	100,000 ,,	II. 319.
CLOTHING			
Nun's cloak—1	Sāvatthi	16 *kahāpaṇa*	Vin. IV. 256.
A robe for a court lady	,,	1,000 ,,	II. 24.
A Sivi robe	,,	1,000 ,,	IV. 401.
A robe of Kāsi muslin	Vedeha	100,000 ,,	Satasahassagghanikam kāsikavattham, III. 11; VI. 403, 450.
Shoes or sandals—each pair according to quality	Sāvatthi	100-1,000 ,,	IV. 15.
Jewelled housings of a royal elephant	...	2,000,000 ,,	VI. 488.
Tailoring repairs: a day's earnings in a village	Benares	1,000 ,,	VI. 366.

COMMODITY	PLACE	PRICE	REFERENCE
ORNAMENTS			
An ornament of a *seṭṭhi*'s wife	Sāvatthi	100,000 *kahāpaṇa*	III. 435.
Gold necklace fitted with sandalwood	Sivi	100,000 ,,	VI. 480; I. 340.
Gold wreath of a *seṭṭhi*'s wife	...	1,000 ,,	Sahassagghanikam kāñcanamālam, II. 373
MISCELLANEOUS			
Sandal perfume (quantity?)	...	100,000 *kahāpaṇa*	Satasahassagghanikam candanasāram, II. 373.
Garland, perfume and spirits: for day-labourers	Benares	½ *māsaka* + ½ *māsaka*	III. 446.
A bundle of grass	Benares	1 *māsaka*	III. 130.
Merit of a pious act	Sāvatthi	200-500 *kahāpaṇa*	I. 422,
HOUSE AND FIELD			
A play-hall for 1,000 boys worked by voluntary labour	Mithilā	1,000 *kahāpaṇa*	VI. 332.
A monastic cell		500 ,,	pañcasatam vihāram, Mn. 52.
A field (measurement?)	Nasik	4,000 ,,	Nasik Cave In.
JOURNEY AND TRANSIT			
Hire of carriage per hour	Benares	8 ,,	I. 121.
Fording of 500 carts hiring a bull	Benares	1,000 ,,	I. 195.
Fee for a forest convoy	,,	1,000 ,,	II. 335; V. 22, 471.
Ferry toll for			
1 empty cart	Brahmarṣi	1 ,,	Manu, VIII. 404.
1 man's load	(Kuru,	½ ,,	
1 animal and	Pañcāla,		
1 woman	Matsya,	¼ ,,	
1 man without load	Śūrasena)	⅛ ,,	
FEES, PENSIONS AND SALARIES			
Teacher's honorarium (for a whole course)	Taxila	1,000 *kahāpaṇa*	I. 205; II. 47, 278; IV. 38; V. 128.
,, ,,		7 *nikkha* (insufficient)	IV. 224.
Actors'—to tour a whole country	Benares	1,000 *kahāpaṇa*	III. 61,
Doctor's—for curing *seṭṭhi*'s wife	Sāketa	16,000 ,, + 2 slaves, a carriage and horses	Vin. I. 272.

COMMODITY	PLACE	PRICE	REFERENCE
Doctor's—for curing a *seṭṭhi*	Rājagaha	20,000 *kahāpaṇa*	Mv.
Court-valuer's for each testing	Bhārukaccha	8 ,, (insufficient)	IV. 138.
Chief Courtesan's—1 night	Benares	1,000 *kahāpaṇa*	III. 435, 59 f, 475; IV. 248 f.
,, ,,	Vesāli	50 ,,	Mv. VIII. 1.
,, ,,	Rājagaha	100 ,,	Mv. VIII. 3.
Chief Courtesan's salary	...	1,000 ,,	Arth. II. 27.
Snake-charmer's windfall—1 day	...	1,000 ,,	IV. 458.
Hire of an assassin	...	1,000 ,,	V. 126.
Archer—capable of exhibition shooting—1 year	Benares	100,000 ,, (274 *kahāpaṇa* daily, too high)	II. 87.
,, ,, 1 fortnight	,,	1,000 *kahāpaṇa* (67 Ks. daily, normal)	I. 357.
,, ,, 1 day	,,	1,000 *kahāpaṇa* (too high)	V. 128.
Tracker of footsteps	Benares	1,000 *kahāpaṇa*	III. 505.
A coolie—1 day		1—½ *māsaka*	III. 326.
Pension for courtiers and Brāhmaṇas—1 day	Anga	100 *kahāpaṇa*	Mn. 94.
		500 ,,	
		1,000 ,,	
Salary of royal Officers: Grades—1 year or month	...	48,000 ,,	Arth. V. 3.
		24,000 ,,	
		12,000 ,,	
		8,000 ,,	
		4,000 ,,	
		2,000 ,,	
		1,000 ,,	
		500-60 ,,	
Spies: grades—	...	1,000-250	
Messenger—for 1 *yojana*	...	10 ,,	
Messenger for 1 *yoj.* above 10 up to 100	...	20 ,,	
Superintendent of stables	...	10,000 ,,	Mbh. III. 57. 6.

Customary rates and indeterminate price.

A few customary rates are quite apparent, *e.g.*, 100 *kahāpaṇas* for a slave, 100,000 for a gold necklace or costly jewellery, 1,000 for a hall, for a course of learning or for a visit to the chief courtesan, 67 coppers a day for a skilful archer is

quite fair but the figures of 274 or 1,000 are pretty high to excite the jealousy of other officers. Similarly 8 coppers for each valuation is contemptuously refused as a 'barber's gift' by a price expert. But except for a few items like these it is hazardous to theorise on the basis of the Pali canonical data. Figures are often hyperbolic and wrecklessly exaggerated. Fancy prices are quoted for articles of royal consumption irrespective of their real valuation. The price for a horse or mare may range from 1 *kahāpaṇa* to 100,000. A pair of shoes presented to Buddha may worth double the cost of building a *vihāra* and while sandal-perfume may sell at the rate of 100,000, a pair of water-carriers may plan their merry-making with garland, perfume and spirits with a purse of 1/16 of a *kahāpaṇa*. Prices varied not only in localities and with the ingress and egress of the commodity. It depended to a great extent on the fancy of the customer and on the need and bargaining capacity of the parties.

Fixed price.

But better business principles than unrestricted bargaining were just beginning to dawn. For certain commodities and in certain quarters the advantages of a fixed price were growingly realised. When two merchants were bound for the same destination with their caravan, it was for the foolish merchant to gloat over 'fixing his own price' and anticipate his competitor. The wise Bodhisatta chose to go after him thinking "haggling over prices is killing work; whereas I following later shall sell my wares at the price already fixed" (agghaṭṭhapanaṃ nāma manussānaṃ jīvitā voropanasadisaṃ, aham pacchato gantvā etehi ṭhapitagghen'eva bhaṇḍam vikkiṇissāmi, Jāt. I. 98).

The court-valuer.

The beginning of price fixation is in the institution of the court-valuer (agghakāraka, agghāpanika, Com. Therag. 20, 393 ff.; Jāt. I. 124). He settled the price of goods ordered for the palace.

He stood between the dilemma of offending the king with too high a rate and of driving away the tenders by excessive cheapening. In making an estimate he had to consider the fancy and liberality of his master. His decision was liable to revision by the king (II. 31) and he himself was not immune from bribes and baits (I. 124-126). In spite of these drawbacks the system conduced to set up certain standard rates. The office of the court-valuer was also gradually transformed into that of a price-expert or into a ministry or board of price control for the whole market. The municipal bodies of the Mauryas regulated prices (Str. XV. i. 50). In the Arthaśāstra it is ordained that the price-expert shall, on consideration of outlay, quantity manufactured, amount of toll, interest on outlay, hire and other expenses, fix the price of merchandise with due regard to its having been manufactured long ago or imported from a distant country.

Deśakālāntaritānāṃ tu paṇyānāṃ prakṣepaṃ paṇyanispattiṃ śulkaṃ vṛddhimavakrayaṃ vyayānanyāṃśca saṃkhyāya sthāpayet argham arghavit, IV. 2.

Statutory price and price control.

Statute-fixed prices appear first in Manu and in the Arthaśāstra. According to the Arthaśāstra a profit of 5 per cent over and above the fixed price of local commodities and of 10 per cent on foreign produce will be fixed. Merchants who raise the price or realise profit even to the extent of ½ *paṇa* more than the above in the sale or purchase of commodities shall be fined 5 *paṇas* in case of realising 100 to 200 *paṇas* (tataḥ paramargham vardhayatāṃ kraye vikraye vā bhāvayatāṃ paṇaśate pañcapaṇāddiśato daṇḍaḥ, IV. 2). In Manu, the king is to settle prices publicly with the merchants every fifth or fourteenth day, fixing "the rates for the purchase and sale of all marketable goods" after consideration of their expenses of production (VIII. 401 f.).

Cornering and inflation.

With growing commercialisation new economic factors arose to set the legal price at nought. Against the big business and monopoly concerns the royal statute was of little avail. It is confessed in the Arthaśāstra that "traders unite in causing rise and fall in the value of articles, and live by making profits cent per cent in *paṇa*s or *kumbha*s" (vaidehakāstu sambhūya paṇyānām utkarṣopakarṣaṃ kurvānāḥ paṇe paṇaśatam kumbhe kumbhaśatam ityājīvanti, VIII. 4). To meet this evil, "merchants who conspire either to prevent the sale of merchandise or to sell or purchase commodities at higher prices shall be fined 1,000 *paṇa*s" (vaidehakānāṃ vā sambhūya paṇyam avaruddhatām anargheṇa vikrīṇatām krīṇatāṃ vā sahasraṃ daṇḍaḥ, IV. 2). Yājñavalkya also imposes the highest amercement "for traders combining to maintain price to the prejudice of labour and artisans, although knowing the rise or fall of prices" or "to obstruct the sale of a commodity by demanding a wrong price, or for selling it" (II. 249 f.). Viṣṇu ordains the same punishments for a company of merchants who prevent the sale of a commodity by selling it under its price, and for those of a company who sell an article for more than its worth (V. 125 f.). "The sale or purchase should be conducted at the price which is fixed by the king, the surplus made therefrom is understood to be the legal profit of traders."

That these well-meaning efforts of the state were lost upon the designing merchants is further proved by the fact that the state itself fell in line with the same tactics. As owner and controller of vast state manufactures, the king was to corner the goods and raise prices by artificial means to increase the profit. "That merchandise which is widely distributed shall be centralised and the price enhanced. When the enhanced rate becomes popular, another rate shall be declared."

Yacca paṇyaṃ pracūraṃ syāt tadekīkṛtyārgham āropayet. Prāpte'rghe vā'rghāntaram kārayet, II, 16. The state is also to take freely the advantage of the rise in prices of its merchandise due to bidding among buyers (krayasaṃgharṣe, II. 6).

Thus the state in the conception of the Arthaśāstra plays well the part of the scheming cartel. The transition from free bargain to cornering and price inflation accompanied the growth of large industries and business in the commercial cities, which kept customers at their mercy.[1] And since the old law still prevailed that a price once fixed holds good, fair or unfair, that a transaction cannot be revoked (Ṛv. IV. 29. 9),[2] it weighed more heavily on the customer than on the seller. The saving grace of the system was that it bears no comparison with the modern American parallel in the sphere of its influence. Almost the whole of rural areas and a large part of urban business were outside the sinister hold of monopolists. Small trade still controlled a big share of the country's business and they in turn were freely exploited by the customers as well as by the big businessmen.

Big and small trade.

In a free market dominated to a great extent by the 'fish-ethics' and with the fragmentary and biased data as presented, it is impossible to estimate the cost of living of any class of people with regard to a particular time and place with any approximation to accuracy. We have no price figures for the basic commodities of consumption, none for the staples like wheat, barley or rice. Prices were always and everywhere fluctuating and to make the confusion worse

Standard of living.

[1] A very early evidence of how fodder grass is cornered by a speculator is in Jātaka, I. 121.

[2] *Cf.* the transaction of the Jetavana. Later legists qualify this rule. Vṛ. XVIII. 5; Nār. IX. 2 f.

confounded the coins, *viz.*, the *paṇa* or the *kārṣāpaṇa*, the *māṣa* or the *māṣaka* varied in their exchange value from place to place. Only the names of metallic tokens are found to be universal; their ratios are not uniform, their metallic contents differ and hence their purchasing power even for the same actual price. We may only just compare without dogmatising the status of a water-carrier who plans his festive mirth with 1 *māṣaka* or a grass-cutter who sells his bundle for the same price with the weaver of Kāśī whose fabric sells with the king at a fancy price if not exactly at the round number 100,000 *kahāpaṇa*s.

CHAPTER III

The Metric Systems : Disorder in Market

Fluidity of weights and measures. Standard weights. Linear measures. Square measures. Fluctuation between places and times.

Dishonest dealings. False scales, coins, and measures. State as an exemplar. The malpractices and fines. Adulteration. The sinister buyer. From chaos to order.

For commodities sold by weight and measurement, price was a still more indeterminate factor. For like coins, weights and measures varied in their standards and ratios from place to place.

Standard weights.

References are very common in Pali and Sanskrit literature and inscriptions to standard weights like *pala*, *droṇa*, *āḍhaka*, *prastha*, *khāri*, *etc.*, in the measurement of foodcrops and other eatables. A few tables are available giving their metric relations.

Table I

4 māgadhakapattha	=1 kosalapattha	4 kuḍumba	=1 prastha
4 kosalapattha	=1 āḷhaka	4 prastha	=1 āḍhaka
4 āḷhaka	=1 doṇa	4 āḍhaka	=1 droṇa
4 doṇa	=1 māṇikā	16 droṇa	=1 vāri
4 māṇikā	=1 khāri		
		20 droṇa	=1 kumbha
		10 kumbha	=1 vaha

—Paramatthajotikā on Sut., p. 128

—Sārattappakāsinī on Sn. I. 150 —Arthaśāstra, II. 19

TABLE II

10 guñja	=1 māṣa	10 māṣa or 5 guñja	=1 suvarṇamāṣa
10 māṣa	=1 karṣa	16 suvarṇamāṣa	=1 suvarṇa or karṣa
10 karṣa	=1 padārdha	4 karṣa	=1 pala
10 padārdha	=1 prastha	88 gaurasarṣapa	=1 dharaṇa
5 prastha	=1 āḍhaka	20 taṇḍula	=1 vajradharaṇa
20 armaṇa	=1 khārikā		

—Arthaśāstra, II. 19.

8 rati =1 māṣā

10 māṣā =1 suvarṇa

—Śukranīti, II. 775-78.

Buddhaghosa's table corresponds very fairly with that of the Arthaśāstra. In the Mahābhārata, the *prastha* is a small measure of barley made up of 4 *kuḷava*s (XIV. 89. 32). The small *prastha* of Magadha may well be equated with the *kudumba* or *kuḷava* and the *khāri* with the *vāri*. The table of the Śukranīti differs conspicuously, 1 *āḍhaka* being equal to 5 *prastha*s instead of 4, and 1 *khāri* equal to 160 *āḍhaka*s instead of 64. But then the Śukranīti is a much later work and it itself admits that " these measures differ with countries."

The second table of the Arthaśāstra, collated with the Smṛtis (Manu, VIII. 134-37 ; Viṣ. IV. 7-10), stands as

5 guñja, kṛṣṇala, rati or gaurasarṣapa =1 māṣa

16 māṣa =1 karṣa[1]

4 karṣa =1 pala

Now 1 *guñja* seed or *rati* weighs about 1·75 grains

∴ 1 pala = 1·75 × 320 grains or 560 grains

[1] According to the Arthaśāstra 88 *gaurasarṣapas* instead of 80 make the weight of a *dharaṇa*, *i.e.*, one *karṣa*. The margin may be explained by the fact that according to the Arthaśāstra, *i.e.*, in the place of its composition, the weight of the white mustard seed was slightly below that of a *guñja* seed.

The ratio between the *pala* and any of the standards in Table I is nowhere given except for a somewhat confusing statement in the Arthaśāstra that

> 200 palas=1 droṇa of royal dues (āyamānam).
> And 187½ palas=1 droṇa of royal sales (vyavahārikam).

If the *vyavahārika droṇa* is the standard *droṇa* of Table I, then the *āyamāna droṇa* in which the royal incomes are measured is appreciated by 6·4 per cent. Conversely if the *āyamāna* is the real *droṇa* then the measure used for disposal of king's merchandise is depreciated by 6·25 per cent. [1] Thus

> 1 droṇa āyamāna = 200 palas = 560 × 200 grs. = 16 lbs.
> 1 droṇa vyavahārika = 187½ palas = 560 × 187·5 grs. = 15 lbs.

If the Arthaśāstra clue is accepted, 1 *droṇa* equates roughly either with 8 srs. or with 7½ srs. The shot is not very wide of the mark since during Rāma's prosperous reign cows are said to be yielding 1 *droṇa* of milk each (droṇadughā, Mbh. XII, 29. 58) and 8 srs. is an extraordinarily high but by no means impossible yield for a good cow. 1 *āḍhaka* on this assumption is about 2 srs. and 1 *prastha*, ½ a seer. The proportion between the *āḍhaka* and the *prastha* does not discord with that in a Mathura inscription of Huviṣka's time where an endowment is made to provide the destitute with a daily allowance of 3 *āḍhaka*s of groat (saktu), 1 *prastha* of salt, 1 *prastha* of *saku* (?) and 3 *ghaṭaka* and 5 *mallaka* of green vegetables (haritakalāpaka). The proportion between salt and groat works out at somewhat less than 1 : 12, allowing a portion of salt for the vegetables. [2]

[1] Such manipulation with metric units to raise the margin of king's profit is freely acknowledged in the Arthaśāstra.

[2] *Cf.* the Muṇḍeśwarī Inscription of Udayasena in Shahabad district of the early 7th century where is recorded a grant of 2 *prasthas* of rice and 1 *pala* of oil to the god Maṇḍaleśwara. On our computation, assuming 200 *pala*=1 *droṇa*, 2 *prastha*=25 *pala* and the ratio between oil and rice is 1 : 25, which is quite satisfactory. But the oil may also have been meant for illumination.

The surmise may therefore be hazarded that the following weight standards, more or less uniformly, prevailed in the Ganges valley in the centuries near about the Christian era :

TABLE I

4 kuḍumba or kuḷava or māgadhaprastha (=1/8 sr.)				=1 prastha (=1/2 sr.)
4 prastha	...	...	...	=1 āḍhaka (=2 srs)
4 āḍhaka	...	...	...	=1 droṇa (=8 srs.)
16 droṇa	...	...	...	=1 khāri or vāri (=128 srs.)

The smaller units, on the basis of the Śāstra data may be compiled into :

TABLE II

5 guñja, kṛṣṇala, rati or gaurasarṣapa (=1·75 grs.)				=1 māṣa (8·75 grs.)
16 māṣa	...	...	...	=1 karṣa (140 grs.)
4 karṣa	...	...	...	=1 pala (560 grs.)
12·5 pala	...	...	...	=1 prastha (1 lb.)

None of these agree with their corresponding names in the Śukranīti. But Śukra saves us by saying that not only these measures differ with countries but even their ratios vary for particular commodities. For example, in the case of an elephant's value 5 *rati*=1 *māṣa* quite in agreement with our Table II. Several other weights are cursorily referred to in the Pali works and in the inscriptions, *e.g.*, the *ammaṇa* (Jāt. V. 297 ; Mv. IV. 1. 19 ; Mil. 102),[1] *acchera* (Jāt. V. 385),[2] *pasata* (Mv. VIII. 11),[3] *nālika* (Sn. I. 81), *ghaṭaka* and *mallaka* in the Mathura Inscription. With the present state of our knowledge these names remain elusive to us.

1 *Armaṇa* of Sanskrit.

2 *Cf.* Marathi 'acchera' =¼ seer.

3 =2 *pala* according to Sanskrit lexicographers.

Linear measures.

Linear measures are less perplexing. The only available list is that of the Arthaśāstra and it is self-explanatory in several details, besides in certain portions, being corroborated by the Śukranīti. It goes (II. 20) :—

TABLE III

8 paramāṇu ...	...	...	=1 rathacakraviprud
8 rathacakraviprud	...	...	=1 likṣā
8 likṣā ...	...	...	=1 yūkāmadhya ('01 in.)
8 yūkāmadhya ...	...	...	=1 yavamadhya ('09 in.)
8 yavamadhya ...	...	...	=1 angula ('75 in.)
4 angula ...	...	...	=1 dhanurgraha (3 in.)
8 angula ...	...	...	=1 dhanurmuṣṭi (6 in.)
12 angula ...	...	...	=1 vitasti or chāyāpauruṣa (9 in.)
14 angula ...	...	...	=1 śama, śala, parivaya or pada (10·5 in.)
2 vitasti ...	...	...	=1 āratni or prājāpatya hasta (18 in.)
2 vitasti+1 dhanurgraha ...		...	=1 hasta in measuring balances, cubic measures and pasture lands (21 in)
2 vitasti+1 dhanurmuṣṭi ...		...	=1 kiṣku or kaṃsa (24 in.=2 ft)
42 angula ...	...	...	=1 kiṣku of sawyers & blacksmiths, used in measuring camp grounds (2ft. 7·5 in.)
54 angula ...	...	...	=1 hasta for measuring timber forest (3 ft. 4·5 in.)
4 āratni ...	...	...	=1 daṇḍa, dhanu, nālika or pauruṣa (6 ft.)
108 angula ...	...	...	=1 gārhapatya dhanu measuring roads and fort walls.
			=1 pauruṣa measuring sacrificial altars (6 ft. 9 in.)
6 kaṃsa ...	...	...	=1 daṇḍa measuring *brahmadeya* land (12 ft.)
10 daṇḍa ...	...	...	=1 rajju (60 ft)
2 rajju ...	...	...	=1 parideśa (120 ft.)
3 rajju ...	...	...	=1 nivartana (180 ft.)
3 rajju + 2 daṇḍa	...	...	=1 bāhu (192 ft.)
1,000 dhanu ...	...	...	=1 garuta (or krośa, com.) (1 mi. 240 yds.)
4 garuta ...	...	...	=1 yojana (4 mi. 960 yds).

The metric equivalents in English are made on the assumption that 1 *hasta* or cubit=18 in. This gives $\frac{3}{4}$ in. for the *angula* or the breadth of the mid-joint of the middle finger of an adult man. The breadth of a barley corn is slightly less than ·1 in. and of a louse ·01 in. At the longer end of the table, a *daṇḍa* or the ascetic's rod, a *dhanu* or the archer's bow and a *puruṣa* or the full-grown average man is 6 ft. high. The relations between the *angula, vitasti* and *āratni* and that between the *garuta* and *yojana* stand certified by Moggallana's Abhidhānappadīpikā. In the Śukranīti equations are cursorily thrown in from two different scales which may be compiled into the following :

Śukranīti (I. 387-414)		Arthaśāstra
Brahmā	Manu	
8 yavodara=1 angula	5 yavodara =1 angula	8 yavamadhya =1 angula
24 angula =1 kara	24 angula =1 kara	24 angula =1 hasta
4 kara =1 daṇḍa	5 kara =1 daṇḍa	4 hasta or āratni=1 daṇḍa
25 daṇḍa =1 nivartana	25 daṇḍa =1 nivartana	30 daṇḍa =1 nivartana
25 nivartana=1 parivartana	25 nivartana=1 parivartana	
5,000 kara =1 krośa (2 pari.)	4,000 kara =1 krośa	4,000 hasta =1 garuta or krośa

It will be observed that for measures below the *daṇḍa* the Brahmā scale agrees with the Arthaśāstra but above the *daṇḍa* its *nivartana* is less by 20 cubits and its *krośa* longer by 1,000 cubits. The proportion between the cubit and the *krośa* is the same in Manu and the Arthaśāstra, and between the *angula* and the cubit, same in all the three scales.

The *āratni* prevailed as far as in the land of Kuru and in the Punjab. It is mentioned in the Mahābhārata (VII. 176. 19) and in the Milinda (85). The Yona king could clear 8 *āratni* with a jump, *i.e.*, 12 ft.—quite an average record for a good athlete. The *yojana*, as derived from applied tests from references in Pāli literature, appears however as

a somewhat longer distance than 4½ miles obtained from the Arthaśāstra.[1]

Square measures lead again into a hopeless maze. The Arthaśāstra gives no tables for these and the only available data are a few cryptic expressions in the Śukranīti (I. 386-417).

Square measure.

768 yavodara (Brahmā) } =(area of) 1 daṇḍa
600 yavodara (Manu) }

625 daṇḍa =1 nivartana

1 bhuja or side of a parivartana=25 daṇḍa

1 parivartana of cultivable land= 4 bhuja (a square with each side=25 daṇḍa) =625 daṇḍa (sq.)

2,500 parivartana or
25,000,000 sq. cubits =1 krośa

Strangely, 768 or 600 *yavodara* which= 1 linear *daṇḍa* is also=1 sq. *daṇḍa*, while 1 sq. *nivartana* (25 daṇḍa)²= 625 sq. *daṇḍa*. As a square measure the *parivartana* works out to be the same as the *nivartana*. But on what calculation 1 *parivartana* equates with 10,000 sq. cubits and 2,500 *parivartana* with 1 sq. *krośa* remains unknown. No clues are available elsewhere to resolve these mysteries. The only accountable and intelligible equation of this table is that

TABLE IV

1 sq. nivartana
(or possibly) 1 sq. parivartana } =625 sq. daṇḍa=25 daṇḍa × 25 daṇḍa

But even this square *nivartana* does not correspond with the Arthaśāstra's linear *nivartana* inasmuch as it is 30 and not 25 *daṇḍa*. The square *nivartana*, on the basis of different linear systems works out to

[1] See the tabulated list in Rhys Davids : *On the Ancient Coins and Measures of Ceylon*, p. 16.

Brahmā	Manu	Arthaśāstra
25 daṇḍa × 25 daṇḍa	25 daṇḍa × 25 daṇḍa	30 daṇḍa × 30 daṇḍa
= 100 kara × 100 kara	= 125 kara × 125 kara	= 120 hasta × 120 hasta
$= \frac{1800 \times 1800}{144 \times 9}$ sq. yds.	$= \frac{2250 \times 2250}{144 \times 9}$ sq. yds.	$= \frac{2160 \times 2160}{144 \times 9}$ sq. yds.
= 2500 sq. yds.	= 3906·25 sq. yds.	= 3600 sq. yds.
= ·5165 acre.	= ·8071 acre.	= ·7438 acre.

This *nivartana* is very commonly used in land measurements particularly in the Nasik charters. In one of the Gadval Plates of Vikramāditya I (674 A.D.)[1] a village is said to be measuring 50 *nivartana* which according to Table IV works out to 25·825 or 40·355 or 37·19 ; acres or between 1/25 and 1/16 of a sq. mile. Other measures are found to be in use outside those in the Śukarnīti's table. In the Gupta and Vākāṭaka inscriptions *bhūmi* is the current measure about which no clue is given. In the Ganesgaḍ Plate of Dhruvasena I (Baroda, Gupta era 207), the *khaṇḍa* is a measure of land, 8 *khaṇḍas* containing 300 *pādāvarta* which is explained by the commentator on the Kātyāyana Śrauta Sūtra as square foot.[2] But inscriptions from Kathiawad dating in the 6th century[3] give the measurement of cultivable fields as 180, 120 and 130 *pādāvarta*, of a pond (vāpī) as 32 *pādāvarta* and of irrigation wells as 16 and 12 *pādāvarta* showing that the measure was much larger than a square foot. Thus the *pādāvarta* like other square measures varied in different times and places. The *khaṇḍa* is a piece of land in which a *khaṇḍuga* of seed (Gadval Plates ; Inscriptions of early Ganga kings in Mysore) is sown. The *khaṇḍuga* is an unknown standard but there are other known standards of weight applied to land measurements ; *e.g.*, fields in which 1, 2 or 3 *khāri* or 5,...14 *droṇa* of seed are sown.[4]

[1] E. I., X. 28.

[2] E. I., III. p. 323. fn. 3.

[3] E. I., XI. 5. 9.

[4] Also 1 *kulya*,—in the Almora district assigned to the 6th or 7th century. E. I., XIII. 7 B.

Dishonest dealings ran rampant in the market and false scales, false weights and false measures were the most convenient methods. The glorious days are worth yearning for when merchants did not sell articles with false weights and measures (kūṭamānaiḥ, Mbh. I. 64. 22), a practice characteristic of the damned Kali age (III. 187. 53; XII. 228. 70). *Tulākūṭa* and *mānakūṭa* are in the list of disapproved gifts (Mil. 279; *cf.* Viṣ. LIV. 15). Gotama abstains from cheating with *tulā*, *kaṃsa* and *māna i.e.*, with scales, coins and measures (Dn. I. i. 10; An. II. 209; V. 205 f.: Sn. V. 474.). In a more comprehensive list, the Śukranīti enumerates,—"Deceit by means of false weights and measures, false and counterfeit coins, unscientific medicinal extracts and other preparations, passing off of base metals for genuine and high class things and food adulteration, all these channels of dishonest transactions are to be checked" (I. 590-92).

False scales, coins and measures.

According to the Arthaśāstra the state itself is to derive some profit by using different weights and measures from those current in the market, *i.e.*, higher ones for royal purchases and levies and lower ones for sales of royal merchandise. But the same work, while setting up a bad example in the state, enters into long philippics against the subjects and prescribes a fine of 200 *pāṇa* for those who cause to a merchant or purchaser the loss of even $\frac{1}{8}$ of a *paṇa* by substituting with tricks of-hand (hastadoṣeṇācaratalḥ), false weights and measures or other kinds of inferior articles (tulāmānāntaram arghavarṇāntaraṃ vā dhārakasya māpakasya vā). The class of merchants who lead in these underhand methods are the goldsmiths adopting false balances (tulāviṣama), removal (apasāraṇa), dropping (visrāvaṇa), folding (peṭaka) and confounding (pinka) with several ingenious tricks described in detail under each head (II. 14). Another

Control of unfair business.

practice was to pass bad articles as good ones. "The sale or mortgage of articles such as timber, iron, jewels, robes, skins, earthenware, threads, fibrous garments (valka), woollen clothes (romamayaṃ) as superior though they are really inferior (jātamityajātaṃ) shall be punished with a fine eight times the value of the article" (*ibid.*, Yāj. II. 245f.). "The sale or mortgage of inferior as superior commodities (sārabhāṇḍam ityasārabhāṇḍam), articles of some other locality as produce of a particular locality (tajjātam ityatajjātam), adulterated things (rādhāyuktam), deceitful mixtures (upādhiyuktam), dexterously substituted articles to those just sold (samutparivartitam) shall be punished with a fine of 54 *paṇa* and shall make good the loss." "Those who conspire to lower the quality of works of artisans, or to obstruct their sale or purchase shall be fined 1,000 *paṇa* (kāruśilpināṃ karmaguṇāpakarṣam ājīvaṃ vikrayaṃ krayopadhānaṃ vā sambhūya samutthāpayatāṃ sahasraṃ daṇḍaḥ)."[1] "Adulteration of grains, oils, alkalis, salts, scents, and medicinal articles with similar articles of no quality (dhānya-sneha-kṣāra-lavaṇa-gandha-bhaiṣajya-dravyāṇāṃ samavarṇāpadhāne) is fined with 12 *paṇa*s."

Adulteration.

Adulteration was very common in business dealings. Yājñavalkya repeats (II. 244) the injunction of the Arthaśāstra and Ṛhaspati lays down: "A merchant who conceals the blemish of an article which he is selling, or mixes bad and good articles together, or sells (old articles) after repairing them, shall be compelled to give the double quantity (to the purchaser) and pay a fine equal (in amount) to the value of the article" (XXII. 7, 13). Manu censures adulteration of grain (XI. 50). In the Jātakas it is a current malpractice (I. 220) and

[1] The worst offence in business transactions is to combine into a conspiracy to drive away from the market a competitor by unfair disparagement of his produce or by blocking his sales and purchases. Com.

those who mixed good grain with chaff and sold it to a buyer are presented as Tantalus in hell.

Ye suddhadhaññaṃ palāpena missaṃ
asuddhakammā kayiṇo dadanti VI. 110

The dishonest customer.

Sometimes the haggling buyers beat the seller in a sinister bargain in the market place, and are hooked like fishes in purgatory in consequence of their misdeed.

Ye keci santhānagatā manussā
agghena aggham kayam hāpayanti
kuṭena kuṭaṃ dhanalobhahetu
cannaṃ vāricaraṃ vadhāya VI. 113

Com.—agghena agghanti, taṃ taṃ aggaṃ lañcam gahetvā hatthiassādīnaṃ vā jātarūparajatādīnaṃ vā tesaṃ tesaṃ saviññāṇakānaṃ aviññānakānaṃ aggham hāpenti itaraṃ paṇṇāsaṃ tehi saddhiṃ vibhajitvā gaṇhanti.

Thus not only the buyer and the seller but sometimes also the middleman or the price expert has his share of the spoils in a market dominated by unscrupulous pursuit of wealth.

The market: from chaos to order.

There could not be any clearer proof of straying into unfair business than the heavy fines imposed by statesmen and law-givers and the damnation of Kali or threat of perdition held out before the public by those who stood for ethical values even in the pursuits of gain. It is because of this widespread anarchy that Manu has to confess that pursuits of trafficking and usury are by themselves a mixture of truth and falsehood (satyānṛta, IV. 6). Traces of order were however emerging here and there. Every market had its standard weights and measures as evident from the current lists of names, though they fluctuated from place to place and time to time introducing an element of chaos in

inter-*janapada* commerce. The Arthaśāstra conceives of a Superintendent of Commerce (paṇyadhyakṣa) to supervise weights and measures and prevent deception with false weights and scales (II. 14). Of the Maurya Empire little is known about the function of " the great officers of state " who " have charge of the market " ; but about the fourth body of the municipality of Pāṭaliputra it is definitely said that it superintended trade and commerce, its members having charge of weights and measures (Str. XV. i. 50).

CHAPTER IV

Overland Trade and Trade Routes

Inland trade, The five road systems. (1) North-south : Pratiṣṭhāna-Śravasti, Ancillary routes, Ujjayinī-Bhṛgukaccha-Ṭagara. (2) Southwest-southeast : Bhṛgukaccha-Kauśāmbi-Tāmralipti. (3) East-west : Pāṭaliputra-Puṭaka. (4) East-northwest : Campā-Puṣkalāvatī. (5) Southwest-northwest : Bhṛgukaccha-Puṣkalāvatī. Central Asiatic routes. Insecurity.

Road-making and maintenance. Transit. River-routes. Dangers of overland trade. Police,—civil and mercenary. Difficulties of caravan journey. The motive force of gain.

Inter-*janapada* trade.

The semi-anarchical business conditions did not stand in the way of inter-state commerce. The self-sufficiency and isolation of *gāma*s and *janapada*s were broken by active trade and long highways of commerce intersecting between them. The specialisation and localisation of particular industries in particular *janapada*s were sufficient urge for exchange of their products stimulated by a free market in which profit to the tune of 400 per cent. was not an unexpected hit. Long lines of caravan plied along the cross-country roads linking into a common market the horse of Sind, the wool of the Himalayas, the muslin of the East and the pearl of the South.

The road systems.

The main overland routes resolve into five systems, linking the middle Ganges valley (*a*) with the upper Godavari valley and the south-western coast, (*b*) with the lower Ganges valley and the eastern coast, (*c*) with the Sindhu and the Indus delta, (*d*) with the Indus valley and Gandhāra, (*e*) linking the south-western coast with Gandhāra. Each of these systems had extensions to distant foreign countries to the east and to the west, the first and second by sea, the third and fourth by land, the fifth by land on one side and by sea on the other.

(1) *North-south* : Pratiṣṭhāna-Śrāvasti.

The central route of the first system is what was followed by the pupils of Bāvari accurately described in the Suttanipāta,—*i.e.*, from Patiṭṭhāna of Aḷaka to Māhissati, Ujjenī, Gonaddha, Vedisā, Vanasabhaya, Kosāmbi, Sāketa, Sāvatthi, Setavya and Kapilavatthu. Southward from Kapilavatthu and within the middle Ganges valley this route was extended to Kusinārā, Mandira, Pāva the city of wealth, Vesāli of Magadha and to the beautiful Rock Temple (Pāsānika Cetya), the destination of the party (Vv. 1011-13). It went farther south to Pāṭaligāma (later Pāṭaliputta), Nālanda Rājagaha and probably Gayā. During his last ministering tour from Rājagaha to Kusinārā, Buddha crossed the Ganges at Pāṭaligāma and made eleven haltings besides that at Vesāli, at *gāma*s and *nagara*s (Dn. II. suttanta XVI. 81 ff). Parts of this high-road are noticed elsewhere, *e.g.*, that (addhānamagga) from Kusinārā to Pāvā (Jāt. VI. 19; Dn. XVI. iv. 26) and that between Sāketa and Sāvatthi (Mv. I. 66.1) traversed by king Pasenadi of Kosala in relays of seven carriages (Mn. 23; Sn. IV. 373). Probably the great road-construction between Ayodhyā (Sāketa) and the Ganges *en route* the Daṇḍaka forest described in the Rāmāyaṇa (II. 80) covered part of this trunk road.

Ancillary routes : Ujjayinī-Bhṛgukaccha-Ṭagara.

The main route had its branches and off-shoots. The *niṣāda* country located in the north of Avanti at the foot of the Vindhyas had its connecting roads with Kośala and Vidarbha (Mbh. III. 61. 21-23) and with Cedi[1] (64. 131) along which caravans are found plying. The first must have converged with the great Ujjayinī-Ayodhyā road and the other two were possibly linked with this through Ujjayinī. But the foremost ancillary routes of the Pratiṣṭhāna-Śrāvasti

[1] Located by Pargiter on the bank of the Jumna, south-east from the Chambal towards Kaṛwi. Its capital Śuktimatī is identified some where near Banda.

system were those connecting its northern and southern portions to the great western seaport of Bhārukaccha. According to the Periplus much cotton cloth was brought down to Barygaza from the metropolis of Abiria called Minnagara or the city of the Sakas (*i.e.*, Ujjayinī) (47). From Ozene "are brought down all things needed for the welfare of the country about Barygaza and many things for our trade: agate and carnelian, Indian muslin, and mallow cloth, and much ordinary cloth" (48). In the south Bhārukaccha was connected by means of cart tracks with the Godavari road leading to Pratiṣṭhāna and Ṭagara. "There are brought down to Barygaza from these places by wagons and through great tracks without roads (because of the hills) from Paethana carnelian in great quantity, and from Tagara much common cloth, all kinds of muslin and mallow cloth and other merchandise brought there locally from the regions along the sea-coast (Eastern coast)" (51). These western extensions of the main road became busy with traffic after Bhārukaccha eclipsed Roruka as the chief outlet of Indian goods for the western world.

(2) Southwest-southeast: Bhṛgukaccha-Kauśāmbi-Tāmralipti.

The terminus of the eastern route was the seaport of Tāmralipti. It met the Pratiṣṭhāna-Śrāvasti road at Kauśāmbi *via* Gayā and Bārāṇasi. Traders seen on journey from Benares to Ujjein must have taken this course (Jāt. II. 248). There was much traffic by boat also along the Ganges through the riparian cities of Campā, Pāṭaliputra and Bārāṇasi (Jāt. II. 112; IV. 5-17, 159; VI. 32-35). The muslins of Vanga, Puṇḍra and Kāśī reached Ujjayinī along these land and river routes to be exported abroad from Bhārukaccha. The Tāmralipti road and the lower Ganges must have had feeding routes opening up the interior of Bengal. There is very little concrete evidence of the overland trade to the east of Campā and Tāmralipti.

(3) East-west : Pāṭaliputra-Paṭala.

The east-west route ran between Pāṭaliputra and the mouth of the Indus after the city had acquired imperial eminence. It had a nucleus between Magadha and Sovīra from earlier times (VVA. 336, 370) possibly reaching Roruka the old seaport situated somewhere on the gulf of Cutch.[1] This is the connecting road from *pubbanta* to *aparanta* through which merchants are frequently seen plying in the Jātakas. Between Kosāmbi and Bārāṇasi it converged with the Kosāmbi-Tāmralipti road. Beyond that its exact course is not known.[2] From the Delta it continued through Iran to the west. Horses from Sind and from Iran (Kosmas—quoted in McCrindle) were imported along this road to the Gangetic cities.

(4) East-northwest : Campā-Puṣkalāvatī.

The royal road from Pāṭaliputra to the north-west frontier is specifically mentioned by Megasthenes (Str. XV. i. 11). The main body of this road existed long before the rise of the Maurya Empire, in the palmy days of Videha linking Mithilā with Gandhāra and Kashmir (Jāt. III. 365). Passing through the city of Ariṭṭhapura and possibly the Pañcāla city of Kampilya (VI. 419, 463), it crossed the Madra city of Śākala (Mil. 16 f.) and met Taxila and Puṣkalāvatī in Gandhāra. To the south-east it extended from Mithilā to the Anga city of Campā (VI. 32) thus linking up the farthest east to the north-western borders of India.

Further details and haltings of this Campā-Mithilā-Kampilya-Śākala route may be gleaned from the course taken by the messengers from Kośala to Kekaya in the Rāmāyaṇa. Starting from Ayodhyā along river Mālinī flowing between the country of Aparatāla in the west and the *janapada* of Pralamba in the north, they forded the

[1] Cunningham locates this in Alor of Sind.

[2] The *addhānamagga* between Mathurā and Verañjā was probably a part of this system (An. II. 57); the location of the latter is not known.

Ganges at Hastināpur, traversed the Pañcāla country and proceeded westward through the heart of Kurujāṃgala. They next crossed the river Śāradaṇḍa, entered the city of Kulingā, left behind the twin villages named Tajuvibhavam, crossed the river Ikṣumatī, passed through the region of Bālhika along rivers Vipāsā, Śālmalī, etc., to the city of Girivraja,—capital of Kekaya (II. 68. 12ff).[1] This is the same road stretching between Pāṭaliputra and Kājaṃgala at the foot of the Himalayas which a *seṭṭhi* with 500 wagons is seen crossing (Mil. 16 f.). Horse-dealers from Uttarāpatha travelled by this road to Benares (Jāt. II. 31, 237). The Himalayan products of skin, wool, edible spices, precious stones and gold bound for the plains, took this road by its northern branches.

(5) Southwest-northwest: Bhṛgukaccha-Puṣkalāvatī.

The fifth and the last road system of the north connected Bhṛgukaccha with Gandhāra. The earliest reference to this is in the Periplus where it is found extended up to Puṣkalāvatī (47) whence it had further connexions with Kaśyapapura or Kashmir, Paropanisus or the Hindukush, Kabul and Scythia, bringing the spikenard of these places for export through Barygaza (48). The exact course of this Bhārukaccha-Puṣkalāvatī road is not known.

From Puṣkalāvatī to Middle East.

The east-northwest and the west-northwest road systems met at Puṣkalāvatī and thence they converged to proceed through the Pamirs to Bactria. Raw silk, silk yarn and silk cloth thus found their way from China through Bactria to Barygaza and to Damirica by way of Ganges (64). From Bactria the road coursed through Central Asia to the west. "People have been conveyed from the Oxus through the Caspian into the Cyrus and Indian merchandise can be brought by land to Phasis in Pontus in five days

[1] Bharata takes a shorter route through the countryside and wild regions presumably because he was in a hurry.

at most" (Pliny, VI. 17). Aristoboulos also avers "that large quantities of Indian merchandise are conveyed by the Oxus to the Hyrcanian (Caspian) Sea and are transferred from thence into Albania by the Cyrus and through the adjoining countries to the Euxine" (Str. XI. vii. 3). This north-western route leading from Gandhāra to the Middle East was much preferred to the western route from Indus through Persia to the Levant. In the first quarter of the second century B.C. the Greek invasion from Bactria through the Kabul valley to the Jumna and a century later the Śaka invasion from Seistan into the country of the lower Indus took these routes in the north-west and entrenched into a position commanding the great central Indian routes from Ujjayinī.

Insecurity of the Bactrian route.

The north-western route beyond Puṣkalāvatī, because of these constant war and tribal movements, was not very hospitable to international trade. The caravan traffic of these regions was not regular but incidental, subject to depredation of savage tribes. It was much reduced by Parthian wars in the first century A.D.[1] giving a tremendous impetus to seaborne trade from Barygaza. The road to China was equally unsafe until the subjugation of Turkestan by that empire. "The land of This is not easy of access; few men can come from there and seldom" (Peri. 64).[2] With the rise of the empire of Kaniṣka,

[1] "The Parthians had done what they could to control and organise it and to levy tribute on the Roman merchants, but they had not controlled it to the eastward. The existence of a unified power (from 45 A.D. under Kadphishes, I) in the Indus valley and Afghanistan made possible a regular trade from the Ganges to the Euphrates. The rapid growth of such trade is indicated by the coinage of the Yueh-Chi kings in India (struck in imitation of Rome)"—Schoff, p. 187.

[2] For land-routes between China and India, see Schoff, pp. 268 ff. Regarding Indo-Chinese trade he observes, "With the rise of the Kushan dynasty in the north-west and their relations towards their former home in the Chinese border it was natural that the communication by the Turkestan routes should increase. While the military success of China did not begin until 73 A.D., it is known that the Chinese Emperor

trade with Mesopotamia and China became more secure and active.

Road-making and maintenance.

The trunk roads were taken care of and ferries maintained (Mv. III. 20 f.) by the successive *janapadas* through which they passed or where they occurred. Bridges are nowhere mentioned. There were shady trees on both sides of the roads, wells for drinking water to which Emperor Aśoka gave much attention (R. E. II ; P. E. VII),[1] relays of horses of carriages for travellers at intervening stations and rest-houses (āvasathāgāra) or choultries set up by the charitable millionaires or by village or municipal bodies. In the Maurya Empire they were marked with signboards noting turnings and distances at intervals of 'ten stades' (Str. XV. i. 5:). The Rāmāyaṇa gives a graphic picture of a bold road-making project. Soil-specialists, surveyors and carpenters were requisitioned, road-guards posted at places under construction. Forests were cleared, trees planted in sparsely vegetated places by the highway, ditches filled, hills levelled, tanks excavated and picturesque cities built on both sides of the road (80).

River routes : dangers of inland trade.

A fair part of the inland trade was carried along the rivers of the Ganges and the Jumna and the large number of tributaries descending into them from the Himalayas and the Vindhyas. Boats plied for hire. Sometimes they ran express. Where a water-course could be availed of, the land-route was generally dispensed with. It was preferred

Ming-Ti (who ruled from 58 to 75) introduced Buddhism into China by the invitation of two Indian Sramaṇas, Kāśyapa Mātanga and Bhārana, who arrived in 67 A.D. (Takakasu, Introduction of I-t-ing, p. xvii). Before such an invitatio there must have been considerable activity on the part of the missionaries, then as now the forerunners of commerce." P. 275.

[1] "..... mankind has been blessed with many such blessings by the previous kings as by me."

to sail down from Benares to Tāmralipti despite the caravan-route (Jāt. IV. 15-17). Probably the water-routes were comparatively safer, easier, sometimes quicker and hence less expensive. The roads penetrated through hills and forests which were favourite resorts of beasts, robbers (Jāt. III. 403) and Yakkhas (III. 200). A caravan straggled in a forest by beasts and robbers is a choice analogy (vyāla-taskara-saṃkīrṇe sārthabīnā yathā vane, Mbh. IX. 3. 13). A caravan of seafaring merchants on their way to sea, while resting in a mountain cave is attacked and exterminated by an infuriated elephant (XII. 169. 1). In the unsettled civil conditions of the times there was no check to these depredations. The Maurya police for a time must have improved the conditions a little and here and there wise statesmanship, alert of the importance of import and export trade came into grips with the problem.[1] But the measures touched only the fringe when effective communications were lacking and whole tribes had to depend on a marauding life. The situation gave rise to the typical institution of the age. Bands of caravan-guards cropped up on the same lines as robber gangs under the command of a *jeṭṭhaka* settling at the entrances of forests and hiring themselves out to passing caravans for safe escort.

Police: civil and professional.

Bodhisatta pañcapurisasataparivāro aṭaviārakkhikesu jeṭṭhako hutvā aṭavimukhe ekasmiṃ gāme vāsaṃ kappesi. So bhatiṃ gahetvā manusse aṭaviṃ atikkameti. Jāt. II. 335.

A wealthy Brāhmaṇa travelling from the East to the West (*i.e.*, by the road between the Ganges valley and the Indus delta) with 500 wagons hired a convoy who lived at

[1] *E.g.*, in the Arthaśāstra the office of the *corarajjuka* whose function includes the escorting of caravans and tracking of robbers,—a tax being levied for the policing on those who benefited by it.

the entrance of the forest at 1,000 pieces. They were defeated and the Brāhmaṇa taken away by a man-eating monster. The men rose and gave a chase to preserve the sanctity of their contract and recovered their paymaster at the peril of their life (V. 471). Another caravan-leader who hired guards for the same amount (aṭavipālanaṃ sahassaṃ datvā) through a forest was in the same way faithfully defended by the warders against an ogre (V. 22).

A caravan journey was beset with other and more numerous difficulties. These are lucidly set forth in the Jātaka stories :

Difficulties of caravan journey.

A caravan merchant when about a night's journey from his destination, after supper relieved the caravan of the surplus wood and water. The pilot sat in the front cart. "But so long had he been without sleep that he was tired out and fell asleep, with the result that he did not mark that the oxen had turned round and were retracing their steps. All night the oxen kept on their way, but at dawn the pilot woke up, and, observing the disposition of the stars overhead shouted out, 'Turn the carts round! turn the carts round!' And as they turned the carts round and were forming them into line, the day broke. 'Why, this is where we camped yesterday,' cried the people of the caravan. 'All our wood and water is gone, and we are lost.' So saying, they unyoked their carts and made a laager and spread the awning overhead; then each man flung himself down in despair beneath his own cart" (I. 108).

Impetus of gain.

The *aparanta* and the Gandhāra routes had to traverse the arid lands of Sind and Western Rājputana. In crossing the desert the caravans are said to travel only in the night and to be guided by a 'land-pilot' (thala-niyyāmaka), who just like mariners, kept the night route by astronomical observations (I. 107). The traders knew no obstructions. They nego-

tiated hills, forests and deserts, defied all predators human, animal and ethereal—not from any spirit of blind adventure but from the love of gain. No wonder they bartered their goods for three or four times their value. The unprotected civil condition reacted on the market. It fits well with free bargain and speculative business.

CHAPTER V

Seaborne Trade and Trade Routes

Growth of maritime trade. Ship-building industry. Tonnage of ships. Freight charges. Professional crews and pilots. The compass and the crow. The seaport or *pattana*.

India in international trade. Mesopotamia; the Euphrates route; Iran,—imports and exports. The Mediterranean or Nile route; Arabia, Socotra, Berbera, Arab monopoly in Red Sea; Egypt, development of Egyptian trade, Indo-Egyptian trade routes. Arab-Roman rivalry. Roman Empire, Indian goods in Roman market, exports and imports. Indo-Roman trade curve.

The Southern trade. The Tamil countries and Ceylon. Burma and Indonesia.

History of foreign trade. The Mauryas. The Śakas. The Andhras, Kalingas and Vangas. The Kuṣāṇas.

Dangers of the sea. Stories of shipwreck. The tidal bore at Cutch and Cambay. Piracy, the Konkan coast. The motive force of gain.

Development of maritime trade.

While inland trade moved mainly along roads and rivers, foreign trade was carried across the seas. Evidences of bold sea-voyages come from the earliest literary references of the Ṛg-veda.[1] The early Smṛti works while laying these under severe strictures for Brāhmaṇas, only show the futile attempt to arrest a practice which had come to stay. Baudhāyana prescribes loss of caste to transgressors (samudrasaṃyānam, II. 1. 2. 2) and Manu excludes them from entertainment at the *śrāddhas* (III. 158). But the former admits: "Now the customs peculiar to the North are, to deal in wool, to drink rum, to sell animals that have teeth in the upper and in the lower jaws, to follow the trade of arms, to go to sea" (I. i. 2. 4), a clear evidence of the commercial activities of the people of Sind and the Punjab across the Indian ocean. Expert

[1] For references see R. K Mukherji: *Indian Shipping*, pp. 53-55.

voyagers (samudrayānakuśalāḥ) are recognised in Manu's code as respectable enough to be authorised to fix the rate of interest on money lent on bottomry (VIII. 157) [1] apparently no stigma attaching to them. In the Rāmāyaṇa a boat in mid-sea loaded with heavy cargo is an apt metaphor (IV. 16. 24; V. 25. 14). Sugrīva gives instructions to his emissaries, sent in search of Sītā to include islands, mountains and sea-ports in the quest (samudramavagāḍhāṅśca parvatām pattanāni ca, IV. 40. 25). In a verse of the Dīgha merchants are known to "have crossed the ocean drear, making a solid path across the pools" (ye taranti aṇṇavam saram setum katvāna vasijja pallalāṃ, XVI. i. 34). In the Anguttara voyages lasting for six months are well-known facts (presumably with haltings) made in ships which could be drawn up on shore in winter (An. IV. 127). The Jātaka verse is sufficiently familiar with "a ship full-rigged for distant seas" to use it as a metaphor (III. 478).

Ship-building.

To meet the demands of sailors, ship-building had to be cultivated as a separate industry. Qualities of wood were investigated, technicalities of construction were perfected and the art was studied as a separate branch of science. The Yuktikalpataru, a Sanskrit work on certain industrial products of India, makes an elaborate classification of ships of different size and shape giving technical names to each and their parts and quotes from a lost earlier work of Bhoja on the various qualities of wood used. In the Rāmāyaṇa, Guha's boats are fitted with massive bells and banners, well-piloted and well-knit (yuktavāhāḥ susaṃhatāḥ, II. 89 17) quite fit to meet the billows and the blasts. During Alexander's invasion, the Xathroi ran huge dockyards and supplied to the invader galleys of 30 oars and transport vessels (Arr. Anab. VI. 15).

[1] Nārāyaṇa and Nandana give a different rendering of the verse.

The Mauryas kept the industry a state monopoly and expert builders were maintained as state servants not allowed to take private orders (Str. XV. i. 46).

Tonnage.

The vessels were sufficiently big and strong to carry a heavy cargo. Guha's flotilla carried besides men, chariots, horses, bulls and carts although elephants had to be swam across. The fleet supplied to Alexander by the ship-builders on the Hydaspes whose strength is computed differently by the Greek writers between 800 and 2,000, accommodated 8,000 troops, several thousand horses and vast quantities of supplies. The ship which took prince Vijaya to Ceylon had 800 passengers according to the Mahāvaṃso (Turnour's, 51). The fresco presentation at Ajantā of his landing shews horses and elephants carried in these boats. In the Jātakas the tonnage is given at 500 (II. 128) and 1,000 (IV. 159) passengers, or 7 caravans with beasts (VI. 30 ff). In the Sāṃkha Jātaka a rescue vessel at sea measures 8 *usabha*×4 *usabha*×20 *yatthika*.[1] According to Pliny the tonnage is 3,000 *amphorae* (cub. ft. of water) or 75 tons.

Freight.

There were big ship-owners who kept their vessels at ports and took merchants with their wares to their destination charging a freight for the transit (yathā.....sadhano nāviko paṭṭane suṭṭhu katasumko mahāsamuddaṃ pavisittā, Mil. 359). Manu lays down the freight charges along rivers but says that there is no settled rate for the seas (VIII. 406) showing that here also free bargain reigned supreme and that regulation was futile. Sometimes there were joint owners resembling a shipping agency, and Manu lays a law that they are collectively responsible for the damage caused by their fault to passengers' goods (VIII. 408 f.). In the Arthaśāstra as well, which provides for the hiring

[1] Nothing is known of these linear measures.

out of state vessels to merchants and to fishers of pearls and conch-shells, there is a similar law that hire charges are to be remitted and losses made good if the ship foundered from their own defect (II. 28).[1] According to Megasthenes the Maurya admiralty let out its ships on hire to professional merchants (Str. XV. i. 46) bringing a lucrative income to the treasury above the regular port dues and customs duties.

There were expert professional pilots who lent themselves for hire to shippers or to merchants. In the great seaport towns were organised guilds or crews under a shipper (niyyāmakajeṭṭhaka) who took charge of vessels at the requisition of sea-going traders and plied their calling from father to son (Jāt. IV. 137). It is not known whether the ancient pilots were acquainted with the mariner's compass. The Pali word 'maccha-yantra' has been supposed to be for that instrument and a round device at the prow of a ship in a Borobudur sculpture has been identified to it. For ascertaining directions the mariners observed the stars at night. They took direction-giving crows (disākāka) on board, and like the ancient Phœnicians and Babylonians, let them off when they lost sight of land. The coast was found in the direction taken by the bird (Jāt. III. 267). That this practice was devised from very early times is apparent from the passage of the Ṛg-veda, I:— "Varuṇa, who knows the path of the birds flying through the air he, abiding in the ocean knows also the course of the ships." This is referred to as a very ancient practice in a well-drawn parable:

Crews and pilots.

The compass and the crow.

"Long long ago, sea-faring traders were wont when they were setting sail on an ocean voyage, to take with them a

[1] It is wrong to call it a law of marine insurance since reparation does not cover damage due to accident.

land-sighting bird. And when the ship got out of sight of the shore they would let the land-sighting bird free (tiradassiṃ sakenaṃ). Such a bird would fly to the East, and to the South and to the West and to the North, to the Zenith and to the intermediate points of the compass (anudisaṃ). And if anywhere on the horizon it caught sight of land, thither would it fly. But if no land, all round about, were visible, it would come back even to the ship." (Dn. XI. 85; An. III. 367).

Pliny testifies to the prevalence of the custom in the South. "In making sea-voyages the Taprobane mariners make no observation of the stars and indeed the Greater Bear is not visible to them, but they take birds out to sea with them which they let loose from time to time and follow the direction of their flight as they make for land." (VI. 22).

The *paṭṭanas.*

Ships set sail from the *paṭṭana* or *paṭṭanagāma*, generally a sea-port but sometimes also a river port having direct access to sea. The Malabar and the Koromandel coasts were dotted with such sea-ports catalogued with their busy traffic in the Periplus (51ff). In the north, the most flourishing sea-port was Bhārukaccha "in the kindom of Bhāru" (Jāt. IV. 137) on the estuary of the Narmadā. A little south of it was Sūrpāraka "formed by the ocean in the south" at Kaśyapa's command to accommodate Paraśurāma after he had exterminated the Kṣatriyas (Mbh. XII. 49. 67). A third north-western sea-port figures large in the Periplus named Barbaricum at the mouth of the Indus. More ancient than these was Roruka, later known as Roruva, the capital of Sovīra (Jāt. III. 470; Dn. II. 235; Div. p. 544). Its exact location is not known but must have been somewhere on the Gulf of Cutch.[1] The Jātakas mention another

[1] Cunningham, however, identifies this with Alor in Sind.

western port named Karambiya (V. 75) about which no further information is available. What Bhārukaccha was in the West, Tāmralipti was in the East. It commanded the mouth of the Ganges and from there the eastern sea-borne trade of the rich *janapadas* on the valleys of the Ganges and the Jumna. There must have been other prosperous sea-ports on the delta of the Ganges and the Mahanadi serving as the outlets for the specialised industries of Bengal and Orissa. But the overseas trade beyond Tāmralipti both to the East and to the South is a sealed book to us.

Indian states in a world family.

About the beginning of the Christian era Indian shipping was sufficiently expanded to reach all the known ranges of the commercial world. The Periplus is an eloquent testimony to the far-reaching western trade[1]; China and its silk begins to be prominent in Indian literature from this time and the Milindapañho, a contemporary work, avers that the ship-owner getting rich with freights paid in a sea-port, embarks in the high seas and sails to Bengal, Malay, China, Gujarat, Kathiawad, Alexandria, Koromandel coast and the East Indies or to any other place where the ships congregate.

'sadhano nāviko paṭṭane suṭṭhu katasuṃko mahā-samuddaṃ pavisitvā Vangaṃ Takkolaṃ Cīnaṃ Soviraṃ Suraṭṭhaṃ Alasandaṃ Kolapaṭṭanaṃ Suvaṇṇabhūmiṃ gacchati aññaṃ pi yaṃ kiñci nāvāsañcaraṇaṃ'—359.

The earliest trade communication in the west was with Mesopotamia. Keneddy makes out the case for Babylonian

[1] ".....in the age of the Periplus, the merchants of the country round Barygaza traded to Arabia for gums and incense, to the coast of Africa for gold, and to Malabar and Ceylon for pepper and cinnamon and thus completed the navigation of the entire Indian ocean." Vincent : *Commerce of the Ancients*, Vol. II, p. 404.

commerce from Bhārukaccha and Sūrpāraka at the latest before the 7th century B. C.[1] Connecting the sea-voyage references in the Ṛg-veda with the appearance of the word *sindhu* for muslin in a Babylonian list of clothes, Sayce establishes this trade with the Indus valley as early as 3,000 B. C.[2] Later on, this trade diverted mainly to the Dravidians since the Indian names naturalised in the west were Tamil—not Sanskrit or Pali. The Mesopotamian trade is directly referred to in a Jātaka story where traders from India dispose of a crow and other wares after strenuous higgling (III. 126 f.). Elsewhere the name of Baveru or Babylon is conventionally thrown in into tales of shipwreck without any particulars. Evidently the sea-route to the Euphrates was still too strenuous to afford regular communication.

Mesopotamia.

Indo-Mesopotamian commerce had three routes,—a sea-route along the coasts of Sind, Gedrosia and Iran, another a mixed water and land-route from Gandhāra and Bactria along the Oxus and across the Caspian and the Black seas and a third overland route from Sind through Iran. Iran was thus the highway of Indo-Babylonian trade—the sea-route passing through its territorial waters, the land-route through its soil. It figures in India's commercial horizon from much earlier times than the 7th century B. C. A route across the high seas between India and its coasts is supposed to have existed in the days of Buddha from the Chinese legend embodied in the Dīpavaṃsa relating the founding of a colony from Ceylon on the Persian Gulf. Through the eastern campaigns of Cyrus (558-30 B. C.) the Medo-Persian kingdom was brought into more or less direct contact with India. Probably the Indus valley had a favourable balance

Euphrates route: Iran.

[1] Early Commerce between India and Babylon, J.R.A.S., 1898.

[2] Hibbert Lectures.

of trade in the 5th century B. C. with Persia and other countries so as to enable it to pay Darius every year 360 Euboic talents of gold dust working out to 9 tons and 5 cwts.

Imports & exports.

In the days of the Periplus coastal voyage from Broach to the Euphrates was a regular affair of merchants. To the ports of the Persian Gulf, *viz.*, Apologus and Ommana "large vessels are regularly sent from Barygaza loaded with copper and sandal-wood and timbers of teakwood and logs of blackwood and ebony." From these ports "there are exported to Barygaza and also to Arabia, many pearls, but inferior to those of India;[1] purple,[2] clothing after the fashion of the place, wine,[3] a great quantity of dates, gold and slaves." The trade which at present centres at Bahrein has almost the same list of imports and exports.

Nile route : Arabia.

As the approach to the Euphrates lay through Persian waters, so the way to the Nile and the Mediterranean led through the Arabian. Agatharcides (177 B.C.) quoted by Greek writers, describes Sabaea (Yemen) as holding the monopoly of the Indian trade. From the great marts of Muza (Mokha), Cana (Bir Ali) and Moscha (2 mi. east of Taka) on the southern coast, Arab ship-owners and sea-farers traded with the Somali coast and with Barygaza "sending their own ships there" in competition with the Egyptian Greeks (Peri. 21, 27). They brought from Damirica and Barygaza cloth, wheat and sesame oil and if the season was late they wintered at the harbour of Moscha exchanging those Indian goods for frankincense "which lies in heaps all over the Sakhalitic

[1] "This is said still to be the case, the Bahrein pearls being of a yellower tint than those of the Mansar fisheries, but holding their lustre better, particularly in tropical climates, and therefore always in demand in India." Schoff.

[2] A dye extracted from various species of fishes. Schoff.

[3] Date wine and grape wine. Schoff.

country" (32). An important halting place between India and Arabia was Dioscorida or Socotra, the island of all races and the centre of international trade not far from the time of Abraham. Egyptians, Arabians, Africans and Indians from the gulfs of Cutch and Cambay met here to exchange their cargo and settle colonies so that at the time of the Periplus the inhabitants were a "mixture of Arabs and Indians and Greeks." The voyagers from Damirica and Barygaza "bring in rice and wheat and Indian cloth, and a few female slaves; and they take for their exchange cargoes a great quantity of tortoise-shell" (30, 31).[1]

Socotra

Beyond Socotra and Arabia, the Mediterranean route passed along the Somali and Berber coasts. In the Periplus Malao (the Berber country) is described as a great intermediary mart between India and Egypt. ".....From the district of Ariaca across the sea, there are imported Indian iron and steel, and Indian cotton cloth; the broad cloth called *monakhê* and that called *sagmatogênê*, and girdles, and coats of skin and mallow-coloured cloth; and a few muslins and coloured lac" (6). Other imports were Indian copal [2] and macir [3] (8). "And ships are also customarily fitted out from the places across this sea, from Ariaca and Barygaza, bringing to these far-side market-towns the products of their own places; wheat, rice, clarified butter, sesame oil, cotton cloth and girdles, and honey from the reed called *sakkhari*. Some make the voyage especially to these market towns, and others exchange their cargoes while sailing along the coast." (14).

Berbera.

[1] Dioscorida is a corruption from the Sanskrit 'Dwīpa Sukhādhāra'—'the island abode of bliss.' For further associations of the island with India and survivals of Indian influences see Schoff, pp. 133 ff.

Kankamon. Pliny says it is a dye, *Dioscorides* an exudation used as incense.

[3] An aromatic and medicinal bark.

"The important thing to be noted here is that these agricultural products were regularly shipped, in Indian vessels, from the Gulf of Cambay; that these vessels exchanged their cargoes at Cape Guardafui and proceeded along the coast, some southward, but most westward; and that according to 25, Ocelis, at the entrance to the Red Sea was their terminus, the Arabs forbidding them to trade beyond. Between India and Cape Guardafui they apparently enjoyed the bulk of the trade, shared to some extent by Arabian shipping and quite recently by Greek ships from Egypt; on the Somali coast they shared the trade in an incidental way; and they received their return cargoes at Ocelis and shared none of the Red Sea trade, which in former times the Arabs of Yemen had monopolised, but in the days of the Ptolemies the Egyptians had largely taken over."[1]

Arab monopoly at Red Sea.

After Zanzibar the next objective was Egypt. Strabo quotes the story of Posidonios how a certain Indian alone in a ship, picked up by the coast guard of the Arabian Gulf, related that he had started from the coast of India but lost his course and reached Egypt alone, all the companions having perished with hunger. Thereafter he headed a trading mission sent by the Egyptian prince Euergetes II to India "with a good supply of presents, and brought back with him in exchange aromatics and precious stones, some of which the Indians collect from amongst the pebbles of the river, others they dig out of the earth, where they have been formed by the moisture, as crystals are formed with us." On the return journey of a second voyage he was again carried away by the winds above Ethiopia and thrown in unknown regions (II. iii. 4).

Egypt.

[1] Schoff.

Development of Indo-Egyptian trade.

It appears that a voyage between India and Egypt was a risky affair and very rarely undertaken. In Strabo's day Rome had explored the world of Arabian and Indian commerce. "The entrance of a Roman army into Arabia Felix under the command of my friend and companion Aelius Gallus and the traffic of the Alexandrian merchants whose vessels pass up the Nile and the Arabian Gulf to India have rendered us much better acquainted with these countries than our predecessors were..... I found that about 120 ships sail from Myos Hormos to India, although in the time of the Ptolemies scarcely any one would venture on this voyage and the commerce with the Indies" (II. v. 12). The route of the Alexandrian commerce in his day is also given. "It (merchandise) is brought down from Arabia and India to Myos Hormos, it is then conveyed on camels to Coptus of the Thebais, situated on a canal of the Nile and to Alexandria" (XVI. iv. 24).

Indo-Egyptian routes.

Combining the testimony of Strabo and the Periplus the Indo-Egyptian route appears to be from Alexandria along the Nile up to Coptus, thence by camel to Myos Hormos, the cluster of islands now Jifātin. From Myos Hormos or Berenice the ships sailed down the Red Sea to Mouza and thence to the watering place of Okelis at the Straits. They made a coastal voyage as far as Cana leaving behind Eudaimon or Aden. From Cana some ships sailed to Barbaricum or to Barygaza, sometimes halting at the island of Dioscorida or Socotra, others sailed direct for the ports of Limyrike (Malabar Coast). From Aromata or Cape Guardafui another route led straight to Malabar. Pliny describes how the Indian route was shortened by successive discoveries through the love of gain, so that "at the present day voyages are made to India every year" (VI. 23). The last and the most

important of the series was the discovery of the monsoon ascribed to Hippalus (Peri. 57).

Arab-Roman rivalry.

But he did a still greater thing, *viz.*, freeing the Roman Empire from Arabian monopoly of the Eastern trade by tracing it to its source. The commercial bond between India and Arabia which had lasted at least for 2,000 years and probably much longer was beginning to break under the impact of Rome. With the conquest of Egypt and the establishment of the Axumite Kingdom, the Ptolemies systematically pursued the policy of cultivating direct communication with India and freeing Egypt from commercial dependence on Yemen. There are significant facts bearing testimony to this change. The survival of Arabian control is noticed in the Roman knowledge of cinnamon bark as a product of Somaliland, an Arabian tributary. But cinnamon leaf which was brought later into commerce was known (malabathrum, 56, 65) as an Indian and Tibetan product. The 'small vessels' from Mouza to the Nabataean port (19) may be contrasted with the large vessels (10) that traded from Mosyllium to Egypt. Yemen was still wooed with gifts and embassies by Rome (23) but the policy of appeasement was soon abandoned. "It was no part of the Arab policy, whether Homerite, Minaean or Nabataean to let Rome cultivate direct relations with India, and as the Empire expanded stronger measures were necessary. Fifty years later than the Periplus, Trajan had captured Petra, and Abyssinia was being subsidised to attack Yemen."[1]

Roman trade: Exports to Rome.

Pliny in whose time Indian Trade was at its highest mentions several Indian imports very often stated with the price at which they were sold at Rome. These may be collected in the following list.

[1] Scheff.

Exports to Rome	Value	Reference
Silk—Chinese and Indian. It became a craze with society girls and was too fine to keep their modesty	Worth weight in gold	XI. 26; XXI. 8
Pepper—	6 dinarii per lb.	,,
Long pepper (adulterated with mustard)	15 ,,	,,
White pepper	7 ,,	
" Both pepper and ginger grow wild in their respective countries and here we buy them by weight like gold and silver "	...	XII. 8
Lycium	...	,,
Macir	...	,,
Sugar—more esteemed than the Arabian product	...	,,
Ebony—two varieties, one ordinary, one precious. Imported after the Asiatic conquests of Pompey the Great. Egypt was a competitor	...	XII. 8, 9; *cf.* Virgil: Georgics, II. 116f.
Bdellium—Arabia, Media and Babylon were competitors	3 dinarii per lb.	XII. 9
Costus	5 ,,	XII. 12
Nard	100 ,,	,,
Amomum grape	60 ,,	,,
Crumbled grape	49 ,,	,,
Cardamum—a medical harb ...	3 ,,	,,
Scented Calamus—not properly identified by naturalists. Arabia and Syria were competitors ...	...	XII. 22
Indigo—a recent import	17 ,,	XXXIII. 4; XXXV. 6
Crystals—the Indian kind is best in the East	...	XXXVII. 10
Amber, diamond, beryl—highly prized among Indians	...	,,
Opal—India had a monopoly ...	...	,,
Sardonyx, onyx of inferior varieties ...	...	,,
Carbuncle—Carthage was a competitor	...	,,
Sandastros—Arabia was a competitor	...	,,
Callaina, jasper, amethyst, pæderos, obsidian, zoroniscos	...	,,

" Thus completing her glory as being the great producer of the most costly gems " (XXXVII. 10) and being " of all countries the most prolific of them " (XXXVII. 13).

The list is not exhaustive. In the Periplus the exports from Barbaricum—most of which found their way to Rome are costus, bdellium, lycium, nard, turquoise, lapis lazuli, seric skins, cotton cloth, silk yarn and indigo (39). From Barygaza were sent across spikenard from the Ganges, costus, bdellium, ivory, agate and carnelian, pebbles, lycium, cotton cloth of all kinds—the *monakhe* and the *sagmatogene*,

silk cloth, mallow cloth—a coarse fabric, yarn, long pepper "and such other things as are brought here from the various market towns" (49). Besides this there was the rich export trade of the Tamil ports (51 ff). Among the imports of Barbaricum were "a great deal of thin clothing, and a little spurious," figured linens (polymita) of Egypt and Babylon, topaz of the Red Sea island from Egypt, the red coral of the western Mediterranean—one of the principal assets of the Roman Empire in its eastern trade, storax, frankincense from Arabia, vessels of glass, silver and gold plate and a little wine. Into Barygaza were brought wine, Italian preferred, also Laodicean and Arabian; copper, tin and lead—largely for Saka coinage; coral and topaz; thin clothing and inferior sorts of all kinds; bright-coloured girdles a cubit wide;[1] storax; sweet clover—used for making chaplets, perfumes and medicine; flint glass; realgar (sandarake);[2] antimony; gold and silver coin, "on which there is a profit when exchanged for the money of the country";[3] and ointment, but not very costly and not much. And for the king there were brought into those places very costly vessels of silver, singing boys, beautiful maidens for the harem, fine wines, thin clothing of the finest weaves and the choicest ointments. Thus Indian imports consisted chiefly of tin, lead, glass, amber, steel, coral, coarse clothing, topaz and storax and frankincense from Arabia while her exports were iron, skins, wheat, rice, butter, oil, sugar, silk and muslin, wool and furs, wood, tortoise shell, pearls, large variety of drugs, dyes, aromatics,

Imports.

Balance of Indo-Roman trade.

[1] Probably for the Bhils who worked the carnelian mines then as now. Schoff.

[2] Red sulphide of arsenic, used for medicine.

[3] "The profit on the exchange was due to the superiority of the Roman coinage to that of India, which latter was still crude, of base metal (bronze or lead), for which even the bullion (copper, tin and lead) was imported." Schoff.

edible spices and precious stones. The balance of trade was completely in India's favour. In vain Pliny raised his voice against the heavy exploitation of his country's wealth: "At the very lowest computation, India, the Seres and the Arabian peninsula drained from our empire yearly 100 million sesterces,[1] so dearly we pay for our luxury and our women (XII. 18).

The trade curve.

To make a brief *resumé* of the history of the Indo-Roman trade. Prior to Emperor Augustus the western trade was carried on mainly by way of Egypt through the ports of Berenica and Myos Hormos to Alexandria. The bulk of this trade took the sea-route. The trade was at its highest between Augustus and Nero in the first century A.D.—stimulated by the discovery of the monsoons. Spices and perfumes, pearls and precious stones, silks and muslins were the favourite Indian wares in Roman market. The chief of these exports were spices and precious stones as appears not only from Pliny but also from the discovery of Roman coins from the sources of supply of these commodities.[1] Between Nero and Caracalla (217 A.D.) there was a lapse. Instead of luxuries there was a limited trade in necessaries such as cotton fabrics and the trade was mainly with the north where Roman coins of this period have been found.[2] This decline coincides with a reaction in Rome to plebian habits against the luxury and dissipation of the higher classes,—the case for which Pliny advocated so strongly.

Southern trade: Ceylon and Tamil countries.

The fact of the southern and eastern trade does not appear with so much glamour and detail. The objectives of southern trade were the Tamil countries and Ceylon carried from Bhārukaccha and Sūrpāraka in the west and from Tāmralipti

[1] Equivalent to £ 70,000.

[2] See Sewell: *Roman Coins Found in India*, J.R.A.S., 1904 pp. 591ff.

and the ports of Bengal and Kalinga in the east. The exploration of the island of Ceylon and its conquest is ascribed to prince Vijaya from Bengal on the very day when Buddha attained *nirvāṇa*.[1] In the Jātakas Ceylon is known as the *nāga* island, *i.e.*, the island inhabited by people called the *nāga*s or dragons. It lay on the route from Bhārukaccha to the East Indies (III. 188). Mariners from Benares, plying down the Ganges, sail and touch at this island (*ibid*). The Tamil countries were reached both by land and by sea. On the way from the northwest coast to the East Indies was Manimekhalā [2] the divine name of Tamil, famous in the north for its efficient shipping. In stories of shipwreck of northern voyagers, the divinity comes to rescue with magic ships of titanic size (8 *usabha* × 4 *usabha* × 20 *yaṭṭhika*) with three masts and bedecked all over with sapphire, gold and silver (IV. 15ff. VI. 25). The tradition at least shows that the southerners were more expert sea-farers and their ships were more seaworthy and of larger size. The Periplus also testifies that the Colas and the Pāṇḍyas sent their wares to the Ganges in large ships called Colandia. Their ports were visited in turn by ships "from the north"—evidently from the Ganges and Bengal. From Tamil literary evidence (Paddinappalai, 1-.0) it appears that from the North were exported to the Cola market of Kāveripaddinam, horses,—sent from Sind and the Punjab, gold and precious stones from the northern mountains, and coral from the eastern seas.

Burma and Indonesia.

The main outlet of northern merchandise for the South and the East was Tāmralipti (Tamluk). Some of its wares were even shipped to the West. "Through this place are brought mala-

[1] The story of the Ceylonese chronicles is half mythic and half historical and the date is absolutely unreliable. All that we may conjecture is that it is a pre-Maurya episode.

[2] See Krishnaswami Aiyangar : *Manimekhala in its Historical Setting*.

bathrum (from the eastern Himalayas), Gangetic spikenard (the true spikenard from the Himalayas) and pearls, and muslins of the finest sorts, which are called Gangetic" (Peri. 63). It was the nearest seaport for approaching Pegu, Malay, Sumatra, Java, Cambodia and even China and Japan by sea. In the Jātakas, Suvaṇṇabhūmi—a generic name for the East Indian islands, is the regular field of mercantile adventure. Unlike the traders of the Gulf of Cambay who dealt with the Western world, the mariners of Andhra, Kalinga and Bengal did not rest with sending their cargo to the markets of Indonesia. They made bold enough to embark across the seas and colonise *en masse*. Traces of their adventure survive in the remnants of Indian civilisation widely scattered over Burma, Malaya, Sumatra, Java and Cambodia—the farthest outpost of ancient Indian culture. The history of these momentous maritime exploits—full of life and vigour, and eloquent of strong socio-economic forces let loose in the mother-country, is entirely a lost story—lost like the great sand-buried cities of Khotan.

History of foreign trade : The Mauryas.

In the third century before Christ, the Maurya Empire stands among an international family with Syria, Egypt, Cyrene, Macedonia and Epirus, cultivating diplomatic relations and sending missionaries to preach the gospel of Dhamma (R.Es. II, XIII). Centuries of international trade had built up the highway for this political and religious intercourse. The influx of foreigners in the metropolis was so great at the time of Megasthenes that the municipal board had to set apart a committee to take care of them. The generals in the company of the Macedonian conqueror were struck by the din of the great dockyards of the Punjab tribes. The Mauryas were astute enough to monopolise this industry and maintain a strong admiralty employing its fleet both for naval and commercial purposes.

The Sātavāhanas.

The Sātavāhanas who were in possession of the western ports of Bhārukaccha and Sorpāraga and who equipped them with quadrangular rest houses (catuśālāvasadhapratiśrayapradena, Nasik C. I. 10. iv) must have pursued a vigorous commercial policy. The Kanheri Caves executed in their time contain sculptural representations of voyages through sea. They maintained a regular service of pilotage in the rough waters of Cambay (Peri. 44-46). The Periplus gives a passing glimpse into how great a part this commercial interest played in the affairs of state. Sandares,[1] who ruled over the prosperous trading communities of the western sea-board took possession of Kalliena (Kalyāṇa) formerly belonging to the House of Sarganes the Elder (Śātakarṇi), subjected its trade to the severest restrictions, so that if Greek vessels entered its port even accidentally, they were seized and sent under escort to Barygaza—evidently the seat of paramount power (52). Presumably it was an attempt to divert the overseas trade of Kalyāṇa and centralise it at Bhārukaccha.

The Andhras, Kalingas and Vangas.

The Andhras were veteran sea-farers pursuing their trade from the eastern coast. Even their coins belonging to the second and the third centuries A.D. bear the device of ships "full-rigged for distant seas." The Colas, the Kalingas and the people of Vanga, Puṇḍra and Samataṭa were their rivals in eastern trade. The kings of Vanga had powerful naval forces and are said in Kālidāsa's Raghuvaṃśa to be trusting in their ships.

The Kuṣāṇas.

Under Kaniṣka, when the Kuṣāṇa and the Roman empires marched almost contiguous, Roman trade was at its highest. References to Romaka in the Mahābhārata and in the astronomical *siddhāntas* originate from this period. Rome was alive to the import-

[1] *Sādhana*—says Lassen.

ance of Yueh-Chi alliance against the Parthians and Sassanians and as controller of the great overland trade-route through Afghanistan between the East and the West. "How close was the friendship is shown in A.D. 60 by the Roman general Corbulo escorting the Hyrcanian ambassadors up the Indus and through the territories of the Kushans or Indo-Scythians on their return from their embassy to Rome."[1]

Perils of the sea.

Yet the sea was full of danger (samuddo anekādīnavo) and it was love of gain that inspired man to defy them. In a mother's estimation as regards her son intent on a voyage, these risks far outweighed the expected returns (Jāt. IV. 2). Shipwreck is a common catastrophe in the Jātakas (II. 103; III. 26; V. 75). The vagaries of the weather and of the waves were not sufficiently explored. Shipwreck is often due to planks giving way (Jāt. VI. 34; bhinna-naukānivārṇave, Mbh. VIII. 2. 20) caused by cataracts or tidal bores or by running a hidden rock or coming in the field of a magnetic rock,[2] as for example the Maināk which earned a notoriety in the Epics for its heavy toll of merchant men. When dangers go out of control, men fall into myths. Accordingly the sea, due to insufficient acquaintance, became associated with mythical horrors and for their counterpart, with mythical charms. It is infested with goblins and monsters and *nāgas* devouring shipwrecked persons and it abounds with gold, diamond and nector, the very elixir of life (Jāt. II. 127 ff.; III. 345; IV. 139 ff.; Mbh. I. 20-22).

[1] R. K. Mukherji, *op. cit.*, p. 139.

[2] This possibly is the reason why cane-fibres instead of iron strips were used to join the planks; An. IV, 127. Hare renders 'vettabandhanabaddhāya' as 'rigged with masts and stays.' The explanation of Buddhagosa does not allow this rendering.

The Gulfs of Cutch and Cambay.

Even in the days of the Arthaśāstra ocean traffic was far more dangerous than land traffic (II. 16 and Com.). And these dangers were not all imaginary. The Periplus gives a realistic insight into them. The gulfs of Cutch and Cambay were great danger zones. "Those who are drawn into the Gulf of Baraka (Dwārakā) are lost; for the waves are high and very violent, and the sea is tumultuous and foul, and has eddies and rushing whirlpools. The bottom is in some places abrupt, and in others rocky and sharp, so that the anchors lying there are parted, some being quickly cut off, and others chafing on the bottom" (40).

A glimmering glimpse is obtained why the ancient seaport of Roruva goes out of the picture and Barbaricum, farther west and north, comes as a parvenu.

Due to the extreme intensity of ebb and flow in the Narmadā, entrance and exit of vessels in Bhārukaccha were very dangerous to the inexperienced. The Periplus vividly describes the vagaries of the tidal bore (45 f.). Because of the difficulty of navigating in the Gulf of Cambay and the mouth of Narmadā, the state maintained a regular service of pilotage, under which incoming vessels were met at least 100 miles down from the port. "Native fishermen in the king's service, stationed at the very entrance in well-manned large boats..... ...go up the coast as far as Syrastrene, from which they pilot vessels to Barygaza. And they steer them straight from the mouth of the Bay between the shoals with their crews; and they tow them to fixed stations, going up with the beginning of flood, and lying through the ebb at anchorages and in basins. These basins are deeper places as far as Barygaza, which lies by the river about 300 stadia up from the mouth" (44).

The coastal route of Arabia was discarded as unsafe (20). The story of Posidonios repeated by Strabo is another concrete instance of the perilous nature of a long sea voyage.

Not all the perils came from nature. The arch-peril of maritime commerce was piracy. The myths of man-eating sea-monsters in the Jātakas may be traced to this source. For the name of *nāga* applies to both a pirate and a monster. According to the Kashmirian poet Kṣemendra, these *nāga* pirates were active in the Eastern waters in the days of Aśoka. Traders waited upon the Emperor and complained that all their ships and treasures were plundered by these people and that if the conditions ran as they were, they would change their pursuits resulting in fall of revenue (Bodh. Kalp., Pall. 73).

Piracy.

The worst piratical rendezvous in the Indian ocean was the Konkan coast, entrenched in its numerous creeks and bays which afforded safe harbourage to their cruisers. They fed upon the richly freighted merchantmen that frequented this place. According to Ptolemy the Pirate Coast extended from the neighbourhood of Simylla (Chaul, 23 mi. S. of Bombay) to Nitra (Mangalor) (1. 7). The Periplus (53) and Pliny refer to the pirates who infested this place and the latter adds that merchant vessels from Egyptian ports carried as a precaution companies of archers on board. In Ptolemy's time these pirates felt the strong hand of the state. The father of the Red Chera destroyed "Kadambu of the sea coast" and thus the coast was freed from their depredations between 80 and 222 A.D. But Arab-Berber predators still dominated African and Arabian coasts, "men of piratical habits, very great in stature and under separate chiefs for each place" (Peri. 16, 20). Such was the nuisance and havoc they created, that the author of the Arthaśāstra has to enjoin that pirate ships (himsrikā) are to be destroyed at sight (II. 28).

Konkan coast.

So the vision dawns before our eyes of ancient Indian mariners even from the Vedic times braving unknown perils across fathomless depths and under limitless skies. The Indian teak excavated at Ur

The urge for gain.

in Sumer, the Indian frescoes worked at Borobudur in Java, the Indian inscription at the Horiuzi temple in Japan give an inkling of the magnitude and duration of their exploits.[1] As the roads between Puṣkalāvatī and Tāmralipti hummed with cracking wheels, the roaring waves of the Indian ocean were broken by the rythmic splashes of oars, the very emblems of patient and persevering search for gain gingered up by an unconquerable spirit of adventure. We feel our sojourn in a world of reality, a material world of the stock and the bourse where *artha* fulfils its great destiny in human life—where empires come to measure arms to secure commercial advantage, where overseas trade paves the path for conquests of Dhamma and conquests of arms, where the merchant, the missionary and the military march one after another in an automatic cycle,—all originating from the much derided mercantile gospel 'yathārtham labhate dhanam'—'profit according to investment.'

[1] Compare the present deterioration in Indian shipping. The share of Indian companies is 13 p. c. of coastal traffic and 2 p.c. of ocean-borne trade of India while formerly, both were entirely Indian.

CHAPTER VI

State Levies and State Control on Commerce

Intervention of State. Taxation of commerce.

Practice : the *śulka*; protection; moderation; reduction and remission; assignment of toll receipts, subsidy and loan. Realisation of toll, suppression of smuggling. State monopolies. Control by the Sakas, protection. Control by the Mauryas, rigorous and drastic.

Theory : principles of assessment. The *sannidhātṛ*. Encouragement of import. The charges. The *śulka* or toll rates. The *dvāradeya* or gate due. The *varttanī* or road cess. Realisation of dues and suppression of smuggling. The *praṇaya* or benevolence The *rājakariya* or forced labour. Port dues. Monopolies. Price-fixing. Control of buying and selling. From free to regulated economy.

Intervention of State.

As trade and commerce expanded and became the strongest economic factor in urban life it called forth in an increasing measure the intervention of the state. Its first concern was of course to derive a revenue from the new income; its next, to monopolise those trades and industries which yielded best profits or which affected vital interests of state. The exercise of these very rights drew it into further and further interference. The evils of competition, unfair dealings, deception of customers, smuggling and deleterious machinations of big business all combined to intensify the anarchy in the commercial world. The state was faced with the growing problems of restoring order. For on the stability of the market depended the stability of its finance.

Revenue from the new income.

Assessment of commercial wealth was run on the same lines as assessment of agricultural produce. It was the same principles of taxation applied to the different *vārttā*s. The same social contract of protection and payment between the sovereign and the subjects is the theoretical basis of

both the systems. The same moderation in assessment and realisation of revenue is the prescribed canon in both. The state had its own commercial concerns as it had its agricultural land and cattle. Toll dues were occasionally remitted and sometimes transferred as in the case of land revenue. Lastly the doctrine of emergency was a convenient tool in the hand of the state for the best use and worst abuse.

The *śulka* for protection.

As the *bhāga* was the customary revenue on land, the *śulka* was the toll on merchandise levied for the protection it received from the state (Mbh. XII. 71. 10).[1] Among the vauntings of a king how he stands above his kin is "You know Uposatha, merchants coming from many a realm prosper here and I look to their welfare and protection."

atho pi vaṇijā phītā nānāraṭṭhāto āgatā
tese me vihitā rakkā evaṃ jānāha Uposathā'ti.
Jāt. IV. 135.

In a kingless country, merchants from afar with a varied cargo cannot safely cross the roads.

na-arājake janapade vaṇijo dūragāminaḥ
gacchanti kṣemamaddhvānaṃ bahupaṇyasamacitāḥ.
Rām. II. 67. 11.

From Nārada's admonition to Yudhiṣṭhira it would seem that the king was not only to treat merchants with consideration in his capital and kingdom but also see that buyers or his officers in the zeal to encourage import did not tempt merchants with high hopes or false pretexts to bring their goods (Mbh. II. 5. 115).

[1] In the Ṛg-veda *śulka* means price. Muir traces the sense of tax in a passage in the Atharva Veda, III. 29. 3. See Macdonell & Keith: *Vedic Index*, Vol. II, p. 387.

Moderation.

Protection and encouragement of commerce meant that taxation did not fall heavy on dealings of exchange. Moderation is the keynote of Indian financial speculation. "Let him not cut up his own root (by levying no taxes) nor the root of other (men) by excessive greed; for by cutting up his own root (or theirs) he makes himself or them wretched" (Manu, VII. 139). "Let him also lay just duties on other marketable goods according to their intrinsic value without oppressing the traders" (anupahatya, Baudh. I. 10. 18. 15). An admonition in the Jātaka elaborated in the commentary shows how the king's exchequer fails as a result of excessive taxation of citizens engaged in buying and selling transactions (ye yuttā kayavikkaye, V. 243). Nārada warns Yudhiṣṭhira that it should be his anxious care to see that only such dues as prescribed in the canon (yathoktam) and no arbitrary imports are realised from the merchants who come to his territories from distant lands impelled by the desire of gain (Mbh. II. 5. 114).

Reduction and Remission.

Moderation sometimes urged reduction or complete remission of tolls and duties. The birth of an heir to the throne was a suitable occasion for such a gesture. On the occasion of Mahāvīra's birth prince Siddhārtha released customs, taxes, confiscations and fines (Jaina Kalpasutra, 102). Rare products useful for the interests of state might be freed from duties to encourage their import. Kosmas writes from the sixth century that the king of Sielediba (?) imported his horses from Persia and the traders supplying were exempt from customs dues. Toll receipts might be transferred like any other revenue. The king might make a bequest of them to whoever might please his fancy (Jāt. VI. 347).[1] Or

Assignment of toll receipts.

[1] The Inscription of Dhavala of Hastikuṇḍi at Bijapur assigns ¾ of the toll proceeds to Jina and ¼ to a temple *guru*. Verse 17.

sometimes the king might choose to pay his officers by the assignment of the receipts as would appear from Nārada's speech (yathoktam avahāryanti śulkaṃ śulkopajīvibhiḥ).

Subsidy and loan.

An enlightened commercial policy did not stop at moderate assessment and remission. It sometimes encouraged trade and industry by direct subsidy. The state gave not only civil but also economic protection. Pursuant to the financial maxim that mitigation of want will increase revenue, a chaplain advises a king whose realm is harassed and harried by dacoits that taxation or punishment are not the right redress. "Whoever there be in the king's realm who devote themselves to cattle and the farm, to them let his Majesty give food and seed-corn. Whoever there be in the king's realm who *devote themselves to trade, to them let his Majesty give capital.* Whosoever there be in the king's realm who devote themselves to Government service (rāja-porise) to them let his Majesty give wages and food" (Dn. V. II). Peace and order depended on the prosperity and satisfaction of subjects all around and the lesson is constantly harped upon to bring round errant kings. Nārada's admonition to Yudhiṣṭhira suggests the subsidisation of merchants and craftsmen as a healthy state policy (Mbh. II. 5. 71). King Siddhārtha's concessions to his subjects on the occasion of Mahāvīra's birth included cancellation of debts implying the same benevolent practice of advancing loans to agriculture and business.

Realisation of toll dues : smuggling.

A city officer fixes the toll for merchants (vāṇijānaṃ suṃkāni, Jāt. IV. 132). As regards the rates no evidence is forthcoming. The tolls were collected on incoming goods at the four gates of the city (catūsu dvāresu suṃkaṃ, VI. 347) at the customs house (suṃkatthāna, Vin. III. 4; Mil. 359)[1]

[1] *Cf.* the *maṇḍapikā* or customs house in later inscriptions like the Grant of Sivaskandavarman and the Baijnath Praśasti.

attached to each gate. Collection was strict and for an attempted evasion the whole wagon was seized by the government. This is elaborated in the commentary on Buddha's parable in the Anguttara nikāya of 'the payer of taxes on merchandise' (sumkadāyikam eva bhaṇḍasmiṃ, I. 53). "Just as one liable to pay duties on goods he has bought and 'smuggled through the customs' is overwhelmed by his guilty act, and it is he who is the guilty one not the Government, not the Government officials.....He who smuggles goods through the Customs House is seized, cart and all, and shown to Government..."

State monopolies.

The most lucrative industries, those which commanded the best market abroad or those which involved the vital interests of the state, were kept under its monopoly. Medhātithi illustrates Manu VIII. 399 by citing saffron in Kashmir; fine cloth and wool in the East; horses in the West; precious stones and pearls in the South; and elephants everywhere. We have already seen that horses and elephants, particularly the latter, were very often royal preserves.[1] As for pearls the Periplus says that the fishery at Colchi was worked by condemned criminals and regarding Argaru "at this place and nowhere else are brought the pearls gathered on the coast thereabouts."[2] In the Śāntiparva (69. 29), the Arthaśāstra (II. 12) and the Karle and Nasik Inscriptions mines and salt centres appear as state monopolies. According to Pliny, from the salt-range of Ormenus between the Indus and the Hydaspes, "a greater revenue accrues to the sovereign of the country than they derive from gold and pearls" (XXXI. 7)[3]. The mines and fisheries were profitably worked by the state by means of free convict labour. Sometimes the state extended its

[1] See Bk. I. Ch. V.

[2] *Cf.* E. I., II. 13—Nagpur Stone Inscription.

[3] Reminiscences of such monopolies are observed in the royal monopolies in manufacture or sale of salt, sugar, tobacco, matches, etc., in many of the Indian Native States.

control over the whole foreign trade and strictly regulated the distribution of imports as for example the Scythians of the west in the first century A.D. "The ships lie at anchor at Barbaricum but all their cargoes are carried up to the metropolis by the river to the king" (Peri. 39). Sandares (?) who conquered Kalyāna subjected its trade to severe restrictions and diverted the Greek trade to Bhārukaccha, his chief trade mart (52).

State control under the Śakas.

The Śakas not only controlled the overseas trade. They gave it necessary protection. They made Bhārukaccha a safe harbour against the extreme vagaries of the tidal bore at the estuary of the Narmadā by engaging native fishermen "in well-manned large boats" to steer safely the incoming vessels (Peri. 44-46). The kings had to protect overseas trade against the depredations of pirates a function which the father of the renowned Red Chera so eminently fulfilled by subduing the Kadambas in the Konkan coast. Aśoka could not brush aside the complaints of the eastern traders suffering under the marauding activities of the Nāgas, although his methods of redress were different.

In the empire of Candragupta, trade both internal and external, received the vigilant attention of the state and of the municipalities. Without going into details, Megasthenes gives a very precise information on the nature of municipal control. "Of the great officers of state, some have charge of the market....." and then of the municipal bodies in Palibothra, "....The members of the first look after everything relating to the industrial arts." The second attend to foreigners, the third register births and deaths "with the view not only of levying a tax,[1] but also in order that births and deaths among both high and low may not escape the cognizance of government. The fourth class superintends trade and

Under the Mauryas.

[1] A poll tax ?

commerce. Its members have charge of weights and measures, and see that products in their season are sold by public notice. No one is allowed to deal in more than one kind of commodity unless he pays a double tax. The fifth class supervises manufactured articles, which they sell by public notice. What is new is sold separately from what is old, and there is a fine for mixing the two together. The sixth and the last class consists of those who collect the tenths of the prices of the articles sold. Fraud in the payment of this tax is punished with death.....In their collective capacity they have charge.....also of matters affecting the general interest, as.....the regulation of prices, the care of markets, harbours and temples" (Str. XV. i. 50).

Thus false weights and measures were reduced, adulteration checked, prices kept in eqilibrium, the underhand machinations of the black market brought under control, smuggling and evasion of king's dues[1] dealt severely. The control was no doubt rigorous and drastic; but nothing short of extreme measures could resolve the prevailing anarchy in the business world.

Theories: principles of assessment.

The Arthaśāstra and the Dharmaśāstras dilate further the principles and rates of assessment. The *śāstra* data by themselves cannot be accepted as authoritative evidences of actual economic conditions. But they reflect the progress of financial thinking and the growing complexities and recurring crises in the market which kings were called upon to deal and on which law-givers had to formulate their views.

"After (due) consideration the king shall always fix in his realm the duties and taxes in such a manner that both he himself and the man who does the work receive their

[1] The 'tithe' is not to be taken literally but in the more elastic sense in which it was used in the West.

due reward" (Manu, VII. 128). The Śukranīti enjoins that a duty is levied only when the buyer or seller is a gainer (IV. ii. 218 f.). "Having well considered (the rates of) purchase and (of) sale, (the length of) the road, (the expense for) food and condiments, the charges of securing the goods, let the king make traders pay duty."

Vikrayaṃ krayam adhvānaṃ bhaktaṃ ca saparicchadaṃ
Yogakṣemaṃ ca samprekṣya vaṇijāṃ kārayet karāṇ

Manu, VII. 127; Mbh. XII. 87. 13.

The tax on internal industries, the Śāntiparva continues, is fixed after taking into account the outturn, receipts and expenditures and the state of the arts—utpattiṃ dānavṛttiṃ ca śilpaṃ samprekṣya cāsakṛt.

In the Arthaśāstra the *sannidhātṛ* realises commercial dues as the *samāhartṛ* collects agricultural dues. This officer is to observe the fluctuations in demand and in the prices of internal products and foreign imports so that the scale of duties might be revised periodically. Import of foreign goods is to be encouraged. Foreign merchants coming by water or by land are to be favoured with remission of taxes so that they may keep some margin. (Parabhūmijaṃ paṇyam anugraheṇā' vahayet. Nāvika-sārthavāhebhyaśca parihāram āyatikṣamaṃ dadyāt). They cannot be sued for debts (II. 16).

The *sannidhātṛ*.

These are concessions under special circumstances. The payments that a visiting merchant habitually makes are :

1. Śulka—toll or customs dues,
2. Vartanī—road cess,
3. Ativāhaka—conveyance cess,
4. Gulmadeya—levies at military stations, presumably for protection agaist brigandage,
5. Taradeya—ferry charges,

6. Bhakta—subsistence to the merchant and his followers,
7. Bhāga—share of profit.

—II. 16, 35

Toll rates.

The toll covers both ingress and egress (niṣkrāmyaṃ praveśyaṃ ca śulkam) of merchandise—external (bāhyam, *i.e.*, arriving from country parts), internal (ābhyantaram) or foreign (ātithyam). The scheduled rates of import duty are:

1.	Common goods	1/5 of value.
2.	Flower, fruit, vegetables, roots, bulbs, *pallikya* (?), seed, dried fish and dried meat	1/6 ,,
3.	Conch-shells, diamonds, jewels, pearls, corals and necklaces	to be fixed by experts acquainted with time, cost and finish.
4.	Fibrous garments (kṣauma), cotton cloths (dukula), silk (krimitāna), mail armour (kankaṭa), sulphuret of arsenic (haritāla), red arsenic (manaśśilā), vermilion (hinguluka), metals (loha), colouring ingredients (varṇadhātu), sandal, aloe (agaru), pungents (kaṭuka) ferments (kiṇva), dress (āvaraṇa), wine, ivory, skins (ajina), raw materials for *kṣauma & dukula*, carpets (āstaraṇa), curtains (prāvaraṇa), products yielded by worms (krimijāta) and wool of goat and ship	1/10 to 1/15 of value.
5.	Cloths (vastra), quadrupeds, bipeds threads, cotton, scents, medicines, wood, bamboo, fibres (valkala), raw	

hides (carma), clay pots, grains, oil (sneha), soda (kṣāra), salt, liquor (madya), cooked rice	1/20 to 1/25 of value.

The rate of 1/6 for group 2 is repeated in the Agnipurāṇa and in the Smṛtis (Gaut. X. 27; Manu, VII. 130-32; Viṣ. III. 24f.)[1] with further additions in the list, *viz.*, medicinal herbs, honey, grass, firewood, scents, spices, leaves, skins, wickerwork, stonework clarified butter, etc. On cattle (paśu), the import duty is not 1/20 or 1/25 but 1/50 and so also on gold (hiraṇya).[2] Import of gold is encouraged for obvious reasons. The standard rate on imports as well as on all sales is also much lower than 1/5. The king is to take 1/20 of the profits upon the value fixed on each saleable commodity by experts in the settlement of tolls and duties and of prices (Manu, VIII. 398; Gaut. X. 26). This of course excepting grain and applies to both Vaiśyas and Śūdras (Manu, X. 120).[3] The Śukranīti gives another schedule.

Minerals:	Gold, gems, glass and lead	...	1/2 of profit
	Silver	...	1/3 ,,
	Copper	...	1/4 ,,
	Zinc and iron	...	1/6 ,,
Grass, wood, etc.		...	1/3, 1/5, 1/7, 1/10, 1/20 of profit—IV. ii. 233-38.

Clearly the author of the Arthaśāstra, an economist statesman, is a much more rigorous protectionist than the

[1] Haradatta reads the passage in Gautama and Viṣṇu as indicating 1/60 which is improbable.

[2] According to the Agnipurāṇa 1/5 or 1/6. For the meaning of '*hiraṇya*' see *supra*, p. 134.

[3] This according to the rendering of Nārāyaṇa and Nandana. Medhātithi, Govindarāja, Kullūka and Rāghavānanda give a different interpretation, *viz.*—on the profits of gold and cattle the king may take in necessity 1/20 instead of 1/50 if the commodity *values more than 1 kārṣāpaṇa. The former is more acceptable for* X. 120 and VIII. 398 both refer to all commodities except grain while VII. 130 to cattle and gold only.

law-givers of the canon. It should be observed moreover that while the assessments of the former are made on value, those of the latter are charged on profit which falls much lighter on the traders.

According to Viṣṇu the import duty is generally fixed at 10 p.c. (III. 29; Baudh. I. 10. 18. 14) and the export duty at 5 p.c. of the price of the articles (III. 30). The rate of duty reflects the high rate of profit derived by traders.

Within the *śulka* the Arthaśāstra includes another charge, *viz.*, the gate dues (dvāradeya) which are 1/5 of toll and which may be remitted if circumstances necessitate such favour (dvāradeyaṃ śulkapañcabhāga anugrāhikaṃ vā yathādeśopakāraṃ sthāpayet). Commodities shall never be sold where they are produced (II. 22).[1]

Road cess.

The *vartanī* is realised by the *antapāla* or boundary officer. He is a police officer giving protection to caravans at the danger zones of the borders. Kauṭilya's teacher is very sceptic of the

[1] From much later inscriptions come toll-lists existing in practice and not in ideas alone.

2 *palikā*s from every *ghaṭakakūpaka* of clarified butter and oil
2 *viṃsopaka*s per mensem for every shop
50 leaves from every *chollikā* of leaves brought fromo utside the town.
—Alwar, 960 A D. (E.I., III. 36).
1 *rūpaka* for each 20 loads (*pravahana* or *poṭha*) carried for sale
1 *rūpaka* on each cart filled (whether going from or by the village)
1 *karṣa* for a *ghaḍā* at each oilmill
13 *chollikā*s of betel leaves by the Bhaṭṭas
pellaka-pellaka (?) by the gamblers
1 *āḍhaka* of wheat and barley from each *araghaṭṭa* (well with water wheel)
5 *palas* for *peḍḍā*
1 *viṃsopaka*, for each *bhāra* (2000 palas ?)
10 *palas* from each *bhāra* of cotton, copper, saffron, gum resin, madder, etc.
1 *māṇaka* for each *droṇa* of wheat, mung, barley, salt, *vāla* and such other measurable objects.
—Bijapur inscription of Dhavala of Hastikuṇḍi, vv. 8-16; 940 A.D.
But the list is of little use without the knowledge of the coins and measures.

veracity of this incumbent: he kills traffic by allowing thieves and taking taxes more than due. His illustrious student however holds that the officer encourages traffic by welcoming import (VIII. 4). But the suspicion is lurking; for he is to make good whatever is lost or stolen from merchants within his jurisdiction. A road cess also exists in the fiscal conception of the Śukranīti although it goes under the general name of *śulka* (IV. ii. 213)[1]; but it is more strictly a *road cess* as opposed to a police tax. "For the preservation and repair of roads, he should have dues from those who use the streets" (258).

Realisation.

"After carefully examining foreign commodities as to their superior or inferior quality and stamping them with his seal, he (the *antapāla*) shall send the same to the Superintendent of Tolls" (vaideśyaṃ sārtham kṛtasāraphalgubhāṇḍavicayanam-abhijñānaṃ mudrām ca datvā preśayedadhyakṣasya). At the toll-gate of the city, the merchants have to give their whereabouts, amount of cargo, etc. Twice the toll has to be paid for no seal, 8 times for counterfeit seal. For falsifying the name of merchandise (nāmakṛte) $1\frac{1}{4}$ *paṇa*s have to be paid for each load (sapādapaṇikaṃ vahanam dāpayet). Attempts at smuggling and escape of toll dues are met with heavy fines. In case of bidding the enhanced price goes to the treasury along with the toll (II. 20).

Hence commodities for sale shall not be let off without being weighed, measured or numbered (dhṛto, mito, gaṇito vā). Import of weapons (śastra), armours (varma), *kavaca*, *loha*, *ratha*, *ratna*, *dhānya*, and *paśu*[2] is forbidden and leads to forfeiture of merchandise (*ibid*).

[1] "The *śulka* is levied on goods in market place, streets and mines."

[2] The ban on the import of armaments and accoutrements is intelligible but not so on *loha*, *ratna*, *dhānya* and *paśu*. The first two of these even occur in the customs schedule of II. 22.

Smuggling.

The injunction of Manu, Viṣṇu and Yājñavalkya against smuggling is identical. "He who tries to avoid the toll by buying or selling at improper time (*i.e.*, at night, etc.) or by falsely enumerating his goods shall be fined eight times the amount of duty" (Manu, VIII. 400). According to Viṣṇu the evader shall lose all his goods (III. 31). The king is to confiscate the whole property of a trader who exports goods of which the king has a monopoly or the export of which is forbidden (399; Viṣ. V. 130; Yāj. II. 261). The law of forfeiture thus applies to the entrance of goods laid under a ban as well as to the exit of goods under an embargo.

The Arthaśāstra lays down that the toll of inferior commodities shall be fixed and exemptions considered by experts (II. 20). Manu lets off small dealers with some trifle to be paid annually as tax (VII. 137).

Praṇaya.

The scale of *praṇaya* or benevolence levied to replenish a depleted treasury by king's officers is 1/6 of cotton, lac, flax, barks, wool (rauma), silk (kauśeya), medicines (? kauṣaya), flowers, fruits, vegetables, firewood, bamboo, flesh and dried flesh (vallura); ½ of ivory and skin (dantājina). A license has to be obtained for sale of these articles. Internal dealers pay a fixed tax at the following rate:

In gold, silver, diamond, precious stones, pearls, corals, horses, elephants	50 *karas*
In cotton threads, clothes, copper, brass, bronze, perfumes, medicines, liquor	40 *karas*
In grains, liquids (rasa), metals (loha), carts (śakaṭa) ...	30 *karas*
In glass and skilled artisans (mahākāravaḥ)	20 *karas*
Inferior artisans and animal-rearers (? vardhakipoṣakāḥ) ...	10 *karas*
In firewood, bamboos, stones, earthen pots, cooked rice (pakkānna), vegetables (haritapaṇyāḥ)	5 *karas*
Dramatists and prostitutes (kuśīlavā rūpajīvāśca)	½ their wages

—Arth. V. 2

Rājakariya.

Forced labour was another item which fell on all occupations. "Mechanics and artisans, as wellas Śūdras who subsist by manual labour, he (the king) may cause to work (for himself) one (day) in each month" (Manu, VII. 138; Gaut. X. 31; Vāś. XIX. 28; Viṣ. III. 32). The merchants may obtain commutation of *rājakariya* by selling one article every month to the king at discount rate (arghāpacayena, Gaut. X. 35).

Port dues.

Foreign ships touching at a port has to pay port dues to the *nāvādhyakṣa*, an officer resembling the port commissioner of our times. Duties are remitted for cargo spoilt by water in a sea-beaten boat (Arth. II. 28).

Monopolies.

The state monopolies according to the Arthaśāstra are mines, salt centres and probably shipping. Mines involving small capital outlay are worked by the government itself. Otherwise these are leased out for a fixed share of the output or for a fixed rent (II. 12). The state also runs large industries like weaving mills under its own capital and management.

Price-fixing.

Since toll rates are fixed on the estimated value or profit of merchandise, prices have necessarily to be fixed. And fixed price requires fixed weights and measures. Hence, "let (the king) fix (the rates for) the purchase and sale of all marketable goods, having (duly) considered whence they come, whither they go, how long they have been kept, the (probable) profit and the probable outlay. Once in 5 nights, or at the close of each fortnight, let the king publicly settle the prices for the (merchant). All weights and measures must be duly marked and once in six months let him re-examine them" (Manu, VIII. 401-03). The interval depends on the variability in price of goods.

Control of buying and selling.

Authorised persons alone shall collect as middlemen grains and other merchandise. Otherwise they will be confiscated by the Superintendent of Commerce (dhānyapaṇyanicayāṃścānujñātaḥ kuryuḥ; anyathā nicitameṣāṃ paṇyādhyakṣo gṛhnīyāt, Arth. IV. 2). This seems to be to eliminate competition, speculation and hoarding. Again, " whenever there is an excesssive supply of merchandise, the Superintendent shall centralise its sale and prohibit the sale of similar merchandise elsewhere before the centralised supply is disposed of. Favourably disposed towards the people, shall merchants sell this centralised supply for daily wages,"—(paṇyabāhulyāt paṇyādhyakṣaḥ sarvapaṇyānyekamukhāni vikrīṇīta. Teṣvavikriteṣu nānye vikrīṇīran. Tāni divasavetanena vikrīṇīran anugraheṇa prajānām. *Ibid*). This means a warehouse and clearance sale under state control and if customers competent to pay are not forthcoming, the goods may be disposed of for bodily labour.

From free to regulated economy.

This is how the law-giver and the economist met new contingencies. The derivation of a revenue from the new income was their primary concern but this required order in business. From fixation of the toll they are led to fixation of prices, of weights and measures. With increasing facilities given for protection, charges multiply. With the increasing complexities of the market, the state comes to grip with new problems. It must liquidate speculation and hoarding, break monopolies and corners, dissolve glut and scarcity and maintain the equipoise between dealers and customers. It must in short inaugurate a regulated instead of a free market. Indian economic theory thus parts company with Adam Smith and Turgot and falls in line with the rigorous totalitarianism of Friedrich List.

BOOK IV

BANKING AND CURRENCY

Sidhaṃ vase 42 Vesākhamase rāño Kṣaharātasa kṣatrapasa Nahapānasa jāmātarā Dīnīkaputrena Uṣavadātena saṃghasa cātudisasa imaṃ leṇaṃ niyātitaṃ data cānena akṣayanivi kāhāpaṇasahasrāni trini 3000 saṃghasa cātudisasa ye imasmiṃ leṇe vasantānaṃ bhavisati civarika kuśāṇamūle ca ete ca kāhāpaṇā prayutā Govadhanavāthavāsu śreṇisu kolīkanikāye 2000 vṛdhi paḍikaśata aparakolīkanikāye 1000 vadhi pāyūnapaḍikaśata ete ca kāhāpaṇā apaḍidātavā vodhibhojā ete civarikasahasrāni be 2000 ye paḍike sate eto mama leṇe vasavuthāna bhikhunaṃ vīsāya ekīkasa civarika bārasaka yā sahasra prayutaṃ pāyūnapaḍike śate ato kuśaṇamūla.....ete ca sarva srāvita nigamasabhāya nibadha ca phalakavāre caritratoti bhūyo nena dataṃ vase 41 Kātikaśudhe panarasa puvāke vase 45 panarasa.....niyutaṃ bhagavatāṃ devānaṃ brāhmaṇānaṃ ca karṣāpaṇasahasrāṇi satari 70,000 paṃcatriśaka suvarṇa kṛtā phalakavāre caritratoti.

—Nasik Cave Inscription

Success! In the year 42, in the month of Vesākha, Uṣavadāta, son of Dīnīka, son-in-law of king Nahapāna, the Kṣaharāta Kṣatrapa, has bestowed this cave on the Saṃgha generally; he has also given a perpetual endowment, three thousand—3000 *kāhāpaṇa*s, which, for the members of the Saṃgha of any sect and any origin dwelling in this cave, will serve as cloth money and money for outside life; and those *kāhāpaṇa*s have been invested in guilds dwelling in Govadhana,—2000 in a weavers' guild, interest one *pratika* (monthly) for the hundred, (and) 1000 in another weavers' guild, interest three quarters of a *pratika* (monthly) for the hundred; and those *kāhāpaṇa*s are not to be repaid, their interest only to be enjoyed. Out of them, the two

thousand—2000— at one *pratika* per cent. are the cloth money; out of them to every one of the twenty monks who keep the *vassa* in my cave, a cloth money of 12 (*kāhāpaṇas*). As to the thousand which have been invested at an interest of three quarters of a *pratika* per cent. out of them the money for *kuśaṇa*.....and all this has been proclaimed (and) registered at the town's hall, at the record office according to custom.

Again the donation previously made by the same in the year 41, on the fifteenth of the bright half of Kārtika, has in the year 45, on the fifteenth.....been settled on the venerable gods and Brāhmaṇas, *viz.*, seventy thousand—70,000—*kārṣāpaṇas*, each thirty-five making a *suvarṇa*, a capital (therefore) of two thousand *suvarṇas*. (This is registered) at the record office according to custom.

CHAPTER I

MONEY-LENDING AND CREDIT

Productive industries and unproductive business. From money to money-lending. Business loan. Famine loan. Instruments of credit: pledge, surety. Bond of debt; acquittance. Rate of interest; discriminating and differential rates; accumulation; forfeiture and moratorium. Illegal rates, condemnation of usury. Inheritance of debt and credit. Repudiation and debt suit. Service and slavery for default. Forcible realisation. Punishment for unpaid debt. Insolvency. The debtor's plight.

Unproductive business.

Trade, the third of the *vāttās* was followed by the fourth, *viz.*, usury. With the growth of trade,—the primitive agricultural and pastoral economy, inclusive, of course of small cottage industries, is modified under the stress of currency and credit. Money introduces itself as a new factor in the market, increasingly asserting its place in exchange, and fostering under its protective wings the speculative trader. Beside agriculture and cattle-rearing and other productive industries appears the art of making money simply by clever buying and selling or by lending one's hoarded wealth to others at interest. This means a partial breakdown of the self-sufficient agricultural-cum-industrial village and accentuation of economic disparity between the classes.

Business loan.

Transactions of credit were fairly established by the post-Vedic times when 'business' was well on foot. These did not begin with money. The owner of the land and merchandise might hire them out to enterprising people for a share of profit (Jāt. VI. 69; IV. 256; V. 436). There is the oft-quoted simile that a man sets up a business contracting a loan (iṇaṃ adāya;

com. : 'taking goods on interest'), that his business succeeds so that he is not only able to pay off the old debt he had incurred but there is a surplus over to maintain a wife (Dn. II. 69; Mn. 39). In a more elaborate parable wealthy *gahapatis* and their sons seeing a shop-keeper shrewd, clever and resourceful, competent to support his sons and wife and from time to time to pay interest to money loaned, offers him wealth saying: "master shop-keeper, take this money and trade with it, support your sons and wife, and pay us back from time to time."

.....gahapatī vā gahapatiputtā vā aḍḍhā mahaddhanā mahābhogā te naṃ evam jānanti—ayaṃ kho bhavaṃ pāpaṇiko cakkhumā ca vidhūro ca paṭibalo puttadārañ ca posetuṃ amhākañ ca kālena kālaṃ anuppadātun ti. Te naṃ bhogehi nimantanti—ito samma pāpaṇika bhoge karitvā puttadārañ ca posehi amhākañ ca kālena kālaṃ anuppadehī ti. An. I. 177.

In the Arthaśāstra, interest on stock, *i.e.*, loan invested for business (prakṣepa) is fixed at one-half of profit, payable every year, and accumulable up to a sum twice the principal (mūlyadviguṇaḥ) (III. 11). According to the Śāntiparva the share for capital is as high as 6/7 (85·7 p.c.) and even 15/16 (93·75 p.c.) of the profit (60.25). The rule however seems to apply only between a capitalist employer and hired hawker contracted on a profit-sharing basis.

Business apart, there were of course cases of borrowing and lending in cash and kind to be repaid with interest. Agricultural loan was an early practice of enlightened statesmanship and in famine doles were given to the indigent gratuitously or on terms of repayment at harvest.[1]

Instruments of credit.

Debts might be secured or unsecured. The creditor might demand a surety for payment or a surety for appearance. For clearance of unpaid debt the heir of the former was liable, not of the latter (Manu, VIII. 159 f.; Viṣ. VI, 41;

[1] See *supra*, pp. 108*f*.

Vṛ. XI. 41). Big commercial deals were made on credit on the security of a signet ring (Jāt. I. 121). The debtor's daughter might be taken as slave to secure against accumulated interest (No. 436). The pledgee of course did not acquire proprietory right on the pledge (ādhi) which was ruled by the laws of deposit. It was to be reconveyed when the debt was paid up (Arth. III. 12; Yāj. II. 58 f.) unless it was lost without the fault of the holder (Gaut. XII. 42). A productive pledge (*i.e.*, usufructuary mortgage) is never lost to the debtor even in case of default (Arth. III. 12; Yāj. II. 58 f.; Manu, VIII. 143; Viṣ. VI. 5) and it cannot be given away or sold under any circumstances.[1]

There was considerable use of the instruments of credit. Merchants sometimes transacted between themselves on credit without any security. "Many traders borrowed money from him (Anāthapiṇḍika) on their bonds—to the amount of 18 crores; and the great merchant never called the money in" (bahū vohārūpajivino pi 'ssa hatthato paṇṇe āropetvā aṭṭhārasakoṭisaṃkhaṃ dhanaṃ iṇaṃ gaṇhiṃsu, Jāt. I. 227). But all loans secured or unsecured had to be confirmed by means of a written bond or agreement of debt (karaṇa. Manu, VIII. 154 coms.; Vṛ. VIII. 11; iṇapaṇṇaṃ) which the creditor (iṇāyika) had to present to the debtor when asking for any payment (Jāt. IV. 262). The city god of Sāvatthi instructs a fairy to realise Anāthapiṇḍika's bad debt in the following manner: "Take the semblance of his agent . . . repair

Bond of debt.

[1] Governing a pledge and the two parties in it, the Arthaśāstra lays down: "In the absence of the creditor or mediator, the amount of the debt may be kept in the custody of the elders of the village and the debtor may have the pledged property redeemed, or with its value fixed at the time and with no interest chargeable for the future, the pledge may be left where it is. When there is any rise in the value of the pledge or when it is apprehended that it may be depreciated or lost in the near future, the pledge may, with permission from the judges (dharmastha), or on the evidence furnished by the officer-in-charge of pledges, sell the pledge either in the presence of the debtor or under the presidency of experts who can see whether such apprehension is justified (III. 12).

to their houses with the bonds in one hand and pens in the other and say,—"Here is the acknowledgment of your debt—pay up the gold *kahāpaṇa*s you owe."

tvam tassa āyuttakavesaṃ gahetvā . . . ekena hatthena paṇṇaṃ ekena lekhaniṃ gahetvā tesaṃ gehaṃ gantvā . . . idaṃ tumhākaṃ iṇapaṇṇaṃ . . . tumhehi gahitakahāpaṇāni detha (Jāt. 1. 230).

For every payment the creditor must always give the debtor a receipt and an acquittance on clearance. Otherwise he must pay interest to the debtor as he had obtained previously (Nār. I. 114 f.; Vṛ. XI. 66).

Rates of interest.

The just and normal rate of interest is laid down by law-givers as $1\frac{1}{4}$ per cent. per month or 15 p. c. per annum (Manu. VIII. 140; Vāś. II. 51; Baudh. I. 5. 10. 22; Nār. I. 99; Vṛ. XI. 3; Arth. III. 11). In Gautama the rate is 5 *māṣa*s a month for 20 *kārṣāpaṇa*s (XII. 29). If the ratio as laid down by commentator Haradatta, *viz.*, 1 *kārṣāpaṇa*=20 *māṣa*s is accepted then the rate works out perfectly to 15 p. c. per annum. But on the basis of Manu's equivalence, *i.e.*, 1 *kārṣāpaṇa*=16 *māṣa*s (VIII. 134-36) the rate is 18·75 p. c. per annum. Persumably the rate is higher in the earlier Sūtra work and Haradatta, a very late commentator modified the scale of equivalence only to adjust the Sūtra rate to the more common rate of the later Smṛtis.

Discriminating and differential rates.

According to the commentators Nārāyaṇa, Rāghavānanda and Nandana and according to Yājñavalkya (II. 37) the rate of 15 p. c. is for debt secured by a pledge. For unsecured loans the rates are 2, 3, 4 or 5 in 100 according to the *varṇa*s :

i.e., for Brāhmaṇa debtor	...	24 p.c. per annum.	
,, Kṣatriya ,,	...	36 ,,	,,
,, Vaiśya ,,	...	48 ,,	,,
,, Śūdra ,,	...	60 ,,	,,

—Manu. VIII, 141f; Vis. VI. 7; Nār. I. 100.

Differential customary rates are given also in the Arthaśāstra, but not on the basis of caste discriminations. Apart from the just rate (dharmyā) of $1\frac{1}{4}$ p. c. per month, these are 5, 10 and 20 respectively :

i.e., the commercial rate (vyavahārikī) is	...	60 p.c. per annum.
the rate prevailing in forests (kāntārakānāṃ) is	...	120 ,, ,,
the rate among sea-traders (sāmudrānāṃ) is	...	240 ,, ,,

—III. 11.

Special forms of interest are compound interest (cakravṛddhi)[1]; periodical interest (kālavṛddhi) in which the interest is to be paid with the principal within a fixed period[2]; stipulated interest (kārita), *i.e.*, exceeding legal rate; corporal interest (kāyika) which is payable with bodily labour either of the debtor or of a pledged animal or slave;[3] daily interest (śikhāvṛddhi) and the use of a pledge (bhogalābha) when no interest is claimed (Gaut. XII. 34 f.; Manu, VIII. 153; Nār. I. 102-4; Vṛ. XI. 4-11).

Accumulation.

Interest can accumulate only up to a sum equal to the principal, after which it ceases (Gaut. XII. 30 f.; Arth. III. 11). But usury was growing ahead, and later law-givers have to adjust their rules accordingly. Manu has: 'Interest payable with the principal shall never exceed the sum, or in the case of grain, fruit, wool or hair and beasts of burden, four times the loan, (VIII. 151). Subsequent law-books speak in more and more elastic terms. In some countries loan grows to twice the principal; in others 3, 4 or 8 times. Gold may grow to twice; grain to thrice; clothes to four times; liquids octuple; interest on women and cattle may grow up to their

[1] This form of interest is prohibited in the Arthaśāstra (III. 11).

[2] 'If a large or small interest is taken on condition that the loan is to be repaid on a certain date, and that, in case of non-payment, it is to be trebled or quadrupled, that is called periodical interest'—Haradatta.

[3] See Manu, VIII. 153 Coms.

issue (Viṣ. VI. 11-15; Nār. I. 106 f.). According to Vṛhaspati gold grows to twice; clothes and base metals thrice; grain, edible plants, cattle and wool four times; pot-herbs five times; seeds and sugarcane six times; salt, oil and spirits eight times (XI. 2).

Forfeiture and moratorium.

No interest accrues for a pledged loan where the pledge yields profit (Gaut. XII. 32; Manu, VIII. 143; Viṣ. VI. 5; Yāj. II. 58; Arth. III. 12) nor such a pledge (*i.e.*, a usufructuary mortgage) can be given away or sold for default. If the pledge is misused, the creditor forfeits the interest and has to pay the price (Manu, VIII. 144; Viṣ. VI. 6), for un-authorised use he forfeits half the interest (Manu, VIII. 145). The pledge must be reconveyed when the debtor is ready, *i.e.*, when he pays up (Arth. III. 12). A moratorium of interests is prescribed for persons engaged in long sacrifices (dīrghasatra), diseased, living in teachers' place, minor (vālam) and pauper (asāram) (Arth. III. 11) as well as for a person for whom it is physically impossible to pay, *e.g.*, an imprisoned man (Gaut. XII. 33 and Haradatta). Payment of debt cannot be refused by the creditor but may be kept in others' custody free of interest. Debts neglected for ten years except in the case of minors, aged persons, diseased, involved in calamities, sojourning abroad shall not be received back (daśavarṣopekṣitamṛṇamapratigrāhyaṃ, III. 11).

Usury.

The strict injunctions of the Śāstras against violation of legal or customary rates together with the growing elasticity of the rules show that the practice shaped the theory rather than theory the practice. The Arthaśāstra (III. 11) and Yājñavalkya (II. 61) think that the welfare of state requires a strict security of lending transactions and prescribe fine for transgressors. Manu forbids six special forms of interests (VIII. 153). While in earlier books moneylending is tolerated (Gaut. X. 6, XI. 21) it is condemned in later

works in emphatic terms (Vāś. II. 41 f.; Baudh. I. 5. 10. 23-25; Manu, III. 153, 165, 180) obviously because it degenerated into usury.[1]

Inheritance of debt and credit.

A debt unlimited by time is bequeathed to sons, grandsons or lawful heirs or joint partners of debt (sahagrāhinaḥ pratibhuvo vā, Arth. III. 11; Gaut. XII. 40). A debt is inherited down to three generations not to the 4th (Viṣ. VI. 27 f.; Nār. I. 4; Vṛ. XI. 49). Debt contracted for the benefit of a united family must be discharged by the members even if they have separated afterwards (Manu, VIII. 166; Viṣ. VI. 36; Nār. I. 13). A husband is responsible for his wife's borrowing, not a wife for her husband's except in the case of herdsmen, hunters, vintners, dancers and washermen who live and earn with their wife (Arth. III. 11). According to Viṣṇu however, the husband and son is not to pay the debt of his wife or mother except in the case of herdsmen, hunters, etc. (VI. 32, 37). Money due by a surety, a commercial debt, a bridal fee (śulka), debts contracted for spirituous liquor or in gambling, and a fine shall not involve the sons of the debtor (Gaut. XII. 41). For clearance of unpaid debt the heir of a surety for payment is liable, not of a surety for appearance (Manu, VIII. 159 f.; Viṣ. VI. 41; Vṛ. X. 41). From the Jātakas it appears that dues were inherited also on the creditor's side. It is for a deceitful debtor (dhāraṇako) to refuse to pay to the creditor's son on the creditor's death (IV. 45). Another vicious set ruined a merchant family (seṭṭhikula) by repudiating their debts. "……Those who hired their land or carried on merchandise for them, finding out that there was no son or brother

[1] The Śāstra rules are plainly the reason why Aelian rushes into the statement : "The Indians neither put out money at usury, nor know how to borrow. It is contrary to established usage for an Indian either to do or to suffer a wrong, and therefore they neither make contracts nor require securities" (V L. iv. 1).

in the family to enforce the payment, seized what they had in hands [1] and ran away as they pleased."

Ye pi nesaṃ khettaṃ vā bhātā vā iṇaṃ codetvā gaṇhanto nāma n'atthīti attano attano hatthagataṃ gahetvā yathārucim palāyiṃsu, VI. 69.

Repudiation & debt suit.

Of course repudiating a lawful debt is condemned and the perjurer becomes an outcast (vasalo, Sut. 120). For disputed cases, debt suits were resorted to. The bond was the most effective document, besides which there must be more than one witness, and at least two acceptable to both parties. A debtor cannot be sued simultaneously for more than one debt by one or two creditors (nānārṇasamavāye tu naiko dvau yugapadabhivadeyātāṃ anyatra pratiṣṭhamānāt) excepting in the case of a sojourner who is to pay in the order of borrowing. (Arth. III. 11).[2]

Payment by service and slavery.

A recognised form of payment both of principal as well as of interest was by personal labour (kāyika) and the creditor could claim this as a right if the debtor failed in his stipulation (Mbh. XII. 109. 18). Manu of course, qualifies this rule with the clause—"unless the debtor is of superior caste to the creditor" (VIII. 177) which may well correspond with practice if for 'caste' is substituted 'power and position.' The creditor might even take the defaulting debtor or any of his wards into slavery as happened in the case of Isidāsi who was carried away by force in lieu of debt and accumulated interest (Therig. 444).[3]

[1] Cowell and Rouse render 'hatthagatam' as 'what they could lay their hands upon, which should certainly be revised as above.

[2] These rules give the lie direct to the remark of foreign memoirists: "Among the Indians one who is unable to recover a loan or a deposit has no remedy at law. All the creditor can do is to blame himself for trusting a rogue" (Meg. Fr. 27C. Nicol. Damasc. 44; Stob. Serm. 42).

[3] For enslavement from debt, see Bk. VI. Ch. I.

Realisation : force.

On the legality of force in realisation of debt, law-givers are of two opinions. In Āpastamba it is reprobated for a creditor to sit with his debtor hindering him from fulfilling his duties and thus forcing him to pay (I. 6. 19. 1). But force is approved in Manu (VIII. 49), Viṣṇu (VI. 18 f.) and Vṛhaspati (XI. 55). The creditor might employ an agent to realise debt by showing the bonds (Jāt. I. 230).

Plight of insolvent debtor.

Turning from legal quibbles to actualities and realities of the situation, it may be observed that the debtor being the poorer and weaker party always stood at a disadvantage with the creditor irrespective of their castes. In the Anguttara nikāya it is frankly admitted that if the debtor is poor he may be put to jail for any trifle ranging from 100 down to ½ *kahāpaṇa*, but not so if he is rich and powerful (I. 251). The imprisonment was preceded by severe humiliations and hecklings. One gets into debt in straits and when the interest falls due (kālābhataṃ vaḍḍhiṃ) and he is a defaulter, the creditors press him (codenti), beset him (anucaranti), dogging his footsteps and vexing him, throwing mud at him in public or in a crowd and doing like things that cause pain (ātapa-ṭṭhapana, etc. Com.) and at last bind him (bandhanti) (An. III. 352). Creditors are known as heckling and pressing debtors for payment at very daybreak (Sn. I. 171). A debtor, though a Brāhmaṇa is pressed so hard by the creditors that he goes into the forest to commit suicide (Jāt. VI. 178). Another insolvent asks his creditors to appear with their bonds only to commit suicide in their presence (IV. 262). Such a terror they were that a whole settlement of defaulting carpenters shipped off overnight in an unknown voyage (IV. 159). No wonder, it is a bliss to be without debt (An. II. 68). The man who cooks his own humble pottage but is free from debt (aṇṇī) is the happiest man on earth (Mbh. III. 311. 115).

CHAPTER II

BANKING

Hoarding. Deposit and its laws. Origin of banking,—economic influence. Corporate banks. Industrial banks. Fixed deposits and endowments in guild banks Real property as deposit. Rate of interest on fixed deposits. Security and stability. Ubiquity of banks Comparison between the North and the South.

Hoarding.

As has been seen, usury was disreputable; and it was not always easy to recover a loan. Hence to lend one's hoarded money at interest was not preferred by all. Safety, rather than profit, was the prime consideration for many. They buried gold or coins underground, generally in a forest or in river bank (I. 227, 277, 323) or in some other lonely place. Huge amounts,—of the description of 18, 30, or 40 crores thus remained in the custodianship of the Earth though not as safely as the depositors expected. For kings and robbers were always vigilant over these troves and a flood or erosion might sweep away all traces of the buried treasure.

Deposit : its laws

An honest depositary was more reliable than a clod. Rules on deposit adumberated in the Smṛtis show that to receive and properly discharge a deposit from a known person was a very common institution. The laws of debt either apply *ipso facto* to deposit or the rules governing deposit are formulated on the same lines as the rules of debt and pledge. The Arthaśāstra also states that the laws of debt apply to deposits (upanidhi). In case of foreign invasion, natural calamities and accidents the depositary is not answerable for loss. Otherwise a used or lost deposit is not only to be requited but a fine is to be fixed (III. 1). The Jātakas are familiar with this practice. Treasures could be deposited in good

faith to a person and to misappropriate it was penal (I. 375; II. 181). A depositary who spends a cash of a thousand pieces, compounds by giving his daughter to wife to the depositor (III. 342) or with the same amount (VI. 521).

Origin of Banking.

Thus, much before the Christian era were developed the two pre-requisites of banking, *viz.*, the practices of lending money at interest and depositing property for safety. The former was morally retrograde because it had a definitely economic import and smacked of selfishness and avarice. The latter suffered under no moral stigma and the depositary even acquired virtue by acquitting himself unselfishly. These two institutions, ethically antagonistic but economically akin, fused into one under the dominating demands of the market. The honest and virtuous depositary found it worth while to lend the deposit to businessmen for interest, disregarding what moralists might say of him. The depositor in his turn claimed a part of the interest so derived. The latter thus obtained an interest from his deposit and the former an interest from its further investment. Thus deposits became safe. The depositor and the depositary met each other's demands, and so the depositary and the businessman in search of capital. And none had to stand on virtue, each had his returns in cash.

Corporate Banks.

This development is clearly indicated in the statement of the Arthaśāstra that the rules of *upanidhi* 'deposit' apply to *nikṣepa* (investment) (III. 11). That is, if one receives an investment he has to discharge his obligations in the same manner as if he receives a deposit simply on good faith. Of course individuals were not often competent to accept such obligations. It was the guilds and corporations who received deposits and lent them to business thus functioning as banks. This also is illustrated in the Arthaśāstra where it elaborates its unscrupulous revenue-making devices. "King's agents

disguised as merchants may borrow from corporations bar gold and coin gold for various kinds of merchandise to be procured from abroad" (samāje vā sarvapaṇyasandohena prabhūtaṃ hiraṇyasuvarṇamṛṇaṃ gṛhṇīyāt) and pretend to be robbed the same night (V. 2). Transactions of borrowing and lending are intimately associated with merchants and manufacturing activities and big magnets are attracted by the banking facilities even in an uncultivated tract of country (VII.11).

Guild Banks.

Since deposits were invested in business, it was most profitable for the joint-stock concerns to receive them. The middleman's share could thus be dispensed with. Banking thus became an appendage of other business.[1] The industrial guilds became banks *par excellence*. The Arthaśāstra permits them to receive deposits (IV. 1). Ancient inscriptions present them in the fullest of their activity.

Endowments and Bank deposits.

Here they appear not only as banks but also as trustees and executors of charitable endowments. Capital amounts were received as fixed deposit never to be repaid. Interests were paid in kind to the beneficiaries of the endowment. Thus a weavers' guild at Govardhana received 2000 *kāhāpaṇa*s from King Uṣavadāta and out of the interest gave 12 *kāhāpaṇa*s (bārasaka) as cloth money to each of the twenty monks who kept the *vassa* in the Nasik Cave. Another 1000 *kāhāpaṇa*s were invested in another guild for money for *kuśaṇa* on behalf of the same monks (Nasik C. I. 12.v). Similarly by the lay devotee Viṣṇudattā the Sakāni, "..... for the well-being and happiness of all beings, in order to provide medicine for the sick of the Saṃgha of monks of

[1] It remained so under the great Śeṭhs and Shroffs down to the end of the 18th century when the Company traders first opened independent banks, *viz.*, the Bengal Bank and the General Bank of India.

whatever sect and origin dwelling in this monastery on Mt. Triraśmi, a perpetual endowment has been invested for all time to come with the guilds dwelling at Govardhana, *viz.*, in the hands of the guild of *kularika*s (potters?), one thousand—10 0—*kārṣāpaṇa*s, of the guild of *odayantrika*s (workers with hydraulic machines or water-pumps) two thousand, of the guild of.....five hundred—500—, of the guild of *tilapisaka*s (oil-pressers)....." and all this proclaimed and duly registered in the record office of the town hall (15. vii). By another, a pious merchant, " has been given as a perpetual endowment one hundred —100— *kāhāpaṇa*s in the hands of the Saṃgha, out of this a cloth money (civarika) of 12 *kāhāpaṇa*s is to be given to the ascetic who keeps the *vassa* here " (17. viii). In a Mathura Inscription of Huviṣka's time, a lord makes an endowment depositing to the *rāka* (?) guild 550 *purāṇa*s and to the flour-makers' guild (samitakaraśreṇī) 550 *purāṇa*s out of the monthly interest whereof 100 Brāhmaṇas should be served daily and the destitute and hungry according to a prescribed schedule.[1]

Real property as deposit.

The guild banks received not only cash deposit. They accepted immovable property like a corn-field. They managed the property and assigned an interest out of its income. A Junnar Buddhist Cave Inscription records the investment of money with the guild of *vasakāra*s (bamboo-workers) and the guild of *kāsākāra*s (braziers) just on the same lines as the endowments of Nasik and Mathura. Another records the investment by a lay devotee—a member of the guild of *koṇācika*s, of the income of a field at Veḍālikā for planting *karañju* trees and of another field for planting banyan trees.[2]

[1] E. I. XXI. 10.

[2] Bühler and Burgess : *Archaeological Survey of Western India*, IV. 24, 27

Interest on fixed deposit.

The rate of interest on fixed deposit, *i.e.*, where "……those *kāhāpaṇa*s are not to be repaid, their interest only to be enjoyed," is according to Nasik 12. v., 1 *pratika*[1] monthly for the 100 when the deposit is 2000 *kāhāpaṇa*s and $\frac{3}{4}$ *pratika* monthly for the 100 when the deposit is 1000 *kāhāpaṇa*s. Thus,

the interest on fixed deposit of 2000 is 12 p.c. per annum
" " " 1000 " 9 p.c. " "

Nasik 17. viii. corroborates the former rate but the deposit is much less, only 100 *kāhāpaṇa*s. The rate in the Mathura Inscription is much higher. The interest on 1100 *purāṇa*s[2] is sufficient to enable 100 Brāhmaṇas to be served daily and the destitute and hungry according to a fixed schedule. Probably the rates differed from place to place and from time to time and sometimes even in the same place and time according to the credit of the banks. In any case it was lower than the customary rate of 15 p.c. per annum of ordinary lending transactions because of the better security afforded to depositors. "The low rate of the interest in fact is an index at once of the security and stability of the banks, their efficiency, permanence and prosperity which attracted to them even royal deposits and benefactions."[3]

Universality of banks: *cf.* North and South.

The execution of the objects of the endowments required much extra-professional skill, *e.g.*, planting trees, providing medicine, supplying ghee and the like. Big deposits were distributed over more than one bank obviously with a view to additional security. The banking operation of guilds and businessmen was not confined to any particular place and

[1] *Pratika* seems to be the same as *kārṣāpaṇa* as Bühler thinks. This is however refuted by Senart, E. I., VIII. 8.

[2] Silver coin, not copper *kārṣāpaṇa*.

[3] R. K. Mukherji: *Local Self-Government in Ancient India*, p. 98.

time after its beginning which is traced back to the Christian era. The Gupta inscriptions record similar benefactions of deposits (akṣayanīvī) of which the interest alone was appropriated for charity on behalf of *bhikṣus* and the capital kept in tact. D. B. Spooner who discovered no less than sixteen specimens of a seal at Basarh from Gupta times bearing the legend 'śreṣṭhi-nigamasya,' is led to remark: "Banking was evidently as prominent in Vaiśālī as we should have expected it to be judging from the notice in Manu to the effect that the people in Magadha were bards and traders."[1] But the South led the West and the East in these activities. There are profuse South Indian Inscriptions of grants providing for sacred lamps at shrines sometimes received in kind according to the convenience of the donors and trustees. The point of difference between the Northern and Southern inscriptions is that the rate of interest of the latter is a bit higher ranging between 12·5 and 50 p.c. while that of the former is between 9 and 12 p.c.[2]. In South India moreover such deposits were received not only by industrial guilds but also by village unions who invested the deposit in public works.[3]

[1] *Annual Report of Archaeological Survey*, 1913-14, p. 122.
[2] R. K. Mukherji: *Op. cit.*, pp 118f.
[3] Hultzsch; *South Indian Inscriptions*.

CHAPTER III

Exchange and Currency

Origin of currency. Barter. Standard media of exchange. Transition to currency. Foreign or Indian origin? Foreign coins and their influence, Persian *siglos*, Roman *aureus* and *denarius*. Barter holds ground.

Development of currency. 'Circulating monetary weights.' Metric divisions. Attestation: punch-marks,—by traders, by local government, Local character of coin-types.

Metallic contents of currency. Gold, Silver, Copper,—the standard *kārṣāpaṇa*, the tokens of *kārṣāpaṇa*, fluctuating relations. The exchange ratio,—gold and silver, gold and copper, fluctuating relations. Other metals.

State monopoly of currency? Private coinage. State regulation. Debasement of coins. The *rūpasutta* or science of currency and coinage.

Barter.

The evolution of currency, by ushering in Credit and Banking changed the face of the economic world. But it was a slow and long process. The primitive method of exchange was virtually confined to barter. As late as in Dharmasūtras and the Pali canon it is a very common practice (Cv. VI. 19. 1). Gautama (VII. 16 f.) and Vāśiṣṭha (II. 37 f.) permit this on special commodities. A potter barters his wares for rice, beans (mugga) or pulse (kālāya) (Mn. 81). The system prevails in as small scale as obtaining a meal for a gold pin (Jāt. VI. 519) or in as big scale as between 500 wagons and wares of corresponding value (Jāt. I. 377).

Standard media of exchange.

From barter of goods the next stage was to use certain commodities of general value as standard media of exchange. The earliest and commonest of these were the cow and rice. The medium of course varied according to the class within whom it circulated. Among the military class horses suited better. The tribute proceeds of a day are estimated at above the value of 1,000 horses (Mbh. III.

195. 9) and a teacher's fee is measured as 800 steeds of the best breed (V. 106. 11). Slaves, rice and other food grains were similarly used (Jāt. I. 124 f.; Mil. 341). Pāṇini, besides mentioning *kaṃsa*, *śūrpa* and *khārī*, *i.e.*, grains of these measures, testifies to the circulation of *go-puccha* or cow's tail (V. 1. 9) and of *vasana* or pieces of cloth of definite value (V. 1. 27).

Evolution of exchange and currency.

The media of exchange and their replacement by a metallic currency depends on the stage of social evolution. Since this was not uniform among all communities and in all localities the means of exchange necessarily varied even at the same time. Skins of game animals were the most suitable media for the nomadic and hunting aboriginals. For pastoral tribes like the Ābhīras domestic animals like the cow and not their skins are the appropriate measures of value. In the agricultural stage, agricultural products, particularly the staple corn come to be used as currency. As commerce develops diverse articles such as garments, coverlets and goatskins become circulating media (Av. IV. 16). Metals and shells, first worked into ornaments, turn into media of exchange and then into units of currency. The former stage was reached though on a very limited scale and within limited circles at the time of the early Vedic literature. The latter and the final stage is seen for the first time in the Vinaya,—the 11th and 12th Bhikkhuni Nisaggiya Rules and the Cullavagga.[1]

Currency : Foreign or Indian origin?

These and many other evidences refute the theory of foreign origin of Indian metallic currency propounded by Keneddy and Smith. It has been held that "introduction into India of the use of coins, that is to say, metallic pieces of

[1] Māsakarūpassa, V. 8. 2; XII. 1. 1. "It is evident from the use of the word 'rūpa' here that stamped pieces of money were known in the valley of the Ganges as early as the time when the Cullavagga was composed." Rhys. Davids : *Vinaya Texts*, foot-note.

definite weight authenticated as currency by marks recognised as a guarantee of value, may be ascribed with much probability to the 7th century B.C. when foreign maritime trade seems to have begun."[1] Now foreign maritime trade began much earlier, and the earliest *kārṣāpaṇa* coins found in India bear no evidence of foreign influence. On the existence of an independent Indian coinage in the 5th and 4th centuries B.C. Rapson argues :—(*a*) the square Indian form cannot be traced to the round-shaped Western coinage, (*b*) the square coin was so firmly established in *cir.* 200 B.C. that it was imitated by the earliest Greek settlers, *viz.*, Demetrius, Pantalion and Agathocles, (*c*) and it is represented in the sculptures of Bodh Gaya and Barhut. Thus native coins were in circulation along with the Persian *sigloi* in the Achemenian period.[2]

Influence of foreign coins : Persian *siglos.*

Of course Smith is true so far as with the growing trade and other contact with the West, foreign coins circulated in India and influenced the native coinage. Since gold in relation to silver had a higher value abroad than in India,[3] foreign merchants exchanged their silver for Indian gold. This accounts for the large number of silver coins found in India. The Persian *sigloi* thus circulated freely in Indian satrapy (*cir.* 500-331 B.C.) and this is confirmed by the adoption of the Persian weight standard for their silver coin by the Bactrian princes in India "with the object of bringing the Graeco-Indian silver coinage into relation with the Persian coinage, in such a way that two Greek hemidrachms of about 40 grains might be the exact equivalent of a Persian *siglos* of 80 grains."[4]

[1] Imperial Gazetteer, II. 135.

[2] J. R. A. S., 1895, pp. 869-71.

[3] See *infra.*, p. 363.

[4] Rapson, *op. cit.*, pp. 867 f.

Roman *aureus* and *denarius*.

In the days of the Periplus, among the imports to Barygaza are "gold and silver coin, on which there is a profit when exchanged for the money of the country" (49). "The profit on the exchange was due to the superiority of the Roman coinage to that of India, which latter was still crude, of base metal (bronze or lead) for which even the bullion was imported."[1] The Roman *aureus* and *denarius* were current throughout western India and strongly influenced the Kuṣāṇa and Kṣatrapa coinages. The *dināra* appears as a current coin and finds its place in later Smṛtis (Vṛ. X. 14 f.) and epigraphic records. The Yueh Chi Kings in India struck their coins in imitation of Rome so that "to the present day ancient drachmae are current in Barygaza, coming from this country (Bactria) bearing inscriptions in Greek letters and the devices of those who reigned after Alexander, Apollodotus and Menander" (Peri. 47). After the conquest of Kabul, Kadphises I imitated the coinage of Augustus and Tiberius (14-38 A.D.). When Roman gold of the early Emperors began to pour into India in payment for her merchandise and as the Roman coin was accepted throughout the commercial world at that time, the advantages of a gold currency and of the Roman standard weight were realised. For the facility of trade Kadphises II struck and issued the orientalised *aurei* on a large scale, agreeing in weight with their prototypes and not much inferior in purity.

Continuation of barter.

Thus metallic currency, born and brought up in the soil, was influenced by foreign coinage. But money regulated only a part of the business of the land. Traffic by barter held its ground all through.[2] When a dog is bought for a

[1] Schoff. But gold and silver currency was known in India from much earlier times.

[2] It still prevails in this country. It is wrong for Rhys Davids and Mrs. Rhys Davids to hold that "the older system of traffic by barter had entirely passed away never to return." *Buddhist India*, p. 100; *Cambridge History*, p. 217.

kahāpaṇa and a cloak (Jāt. II. 247) and a doctor is paid with 16,000 *kahāpaṇa*s together with two slaves, carriages and horses (Vin. I. 272), we find barter and money exchange at the same breath both among the high and the low. At the time of the Milinda, in the land of the Punjab, "in a trader's shop oilseed and peas and beans can be either taken in barter for a small quantity of rice or peas or beans or bought for a small price decreasing in order according to requirement."

Āpaṇikassa āpaṇe tila-mugga-māse partittakena pi taṇḍula-mugga-māsena appakena pi mūlena upādāy' upādāya gaṇhanti, 341.

Barter was known even in foreign trade as late as in the age of the Antonines. "Traders to India tell us that the Indians give their own wares in exchange for those of the Greeks without employing money, even though they have gold and copper in abundance." (Pausanius, III. xii. 3.)

'Circulating monetary weights.'

Currency, in its first stage, was a metallic medium of exchange of standard weight. Rhys Davids says, "Coins may, I think, be legitimately used in two senses, firstly, of pieces of metal bearing the stamp or mark of some person in authority as proof of their purity, and of their being of full weight; and secondly, of pieces similarly stamped, but thereby acquiring a value beyond that of an equal weight of metal (by the mark or stamp implying a promise to receive the coin at a higher than its intrinsic value) . . . . Now there was a time in India, before coins in either of these senses were struck, when mere pieces of bullion without a stamp at all, or merely with some private stamp, were used as money—that is as a medium of exchange, and the word *kārṣāpaṇa* . . . . may mean either coins proper of the weight of a *karṣa* or only such pieces of metal of that weight. The latter was almost certainly its original meaning

both in Sanskrit and Pali . . . ."[1] Quoting the views of Thomas, Rhys Davids agrees in the conclusion that "'True coins in our modern sense' are not mentioned in any Indian work certainly pre-Buddhistic, but 'circulating monetary weights,' were in use long before."[2] In that stage metals had to be weighed in scales and given for a purchase. There were different standards for the different metals of gold, silver and copper. But all these standards start from a fixed weight, *viz.*, that of the *raktika* or red seed, or of the *kṛṣṇala* or black seed of the *guñja* berry approximately about 1·8 grains. These standards are—

Gold		Silver		Copper	
5 *kṛṣṇala* or *raktika*	= 1 *māṣa*	2 *kṛṣṇala*	= 1 *māṣaka*	80 *kṛṣṇala* or *raktika* or *kākaṇi*	= 1 *kārṣāpaṇa*
16 *māṣa*	= 1 *suvarṇa*	16 *māṣaka*	= 1 *dharaṇa* or *purāṇa*		
4 *suvarṇa*	= 1 *pāla* or 1 *niṣka*	10 *dharaṇa*	= 1 *śatamāna*.		
10 *pāla*	= 1 *dharaṇa*.				

— Manu, VIII. 134-37; Viṣ. IV. 7-13; Vṛ. X. 14 f; Nār. Ap. 58.

Punch-marks: by shroffs and local authorities.

The metallic pieces of fixed weight, which thus got into the market, became the first coins. The merchants or money-changers through whose hands they passed affixed punch-marks to them in recognition of their weight and purity, evidently to obviate the necessity for repeated weighing and testing. Cunningham was the first to resolve these marks on extant coins: "I have a suspicion that several of the symbols may have been the private marks of ancient money-changers. At the present day these men are still in the habit of placing their own particular stamps on the rupees that pass through their hands, so that when any of the coins come back to them again, they know their value without making a second testing."[3] With the growing circulation of

[1] *Numismata Orientalia*: *Ancient Coins and Measures of Ceylon*, p. 3.

[2] *Ibid.*, p. 13.

[3] *Coins of Ancient India*, p. 58.

'monetary weights' and the realisation of their usefulness by the civil authorities, the punch-marks became the affair not of private dealers but of local authorities in a district or town. "The greater exactness of weight and the security against fraud afforded by the imperial coinage and the best of native coinages have rendered the use of the money-changer's private stamp less and less necessary. If then, in ancient times the issue and regulation of the coinage was mainly or exclusively in the hands of the local authorities, the use of these distinguishing marks must have been universal and generally recognised . . . . . ." "The merchants or money-changers, to whom we have attributed the obverse punch-marks, had simply to submit their coins to the chief authority in the district, who rejected such as were deficient in weight or quality of metal, and sanctioned such as were approved by marking them with his official stamp, which may perhaps be identified with the solitary punch-mark so often found in the centre of the reverse. The occasional occurrence of more than one of these reverse punch-marks on a coin is naturally explained by supposing the coin to have passed current in more than one district, and consequently to have been officially tested more than once."[1]

Local character of coinage.

Rapson's inference is corroborated by the passage in the Visuddhimagga which indicates that every place which issued coinage had its own distinguishing mark or marks stamped on it, by observing which the shroff could at once tell from which place any particular coin came. "Discoveries of punch-marked coins with their provenances definitely known.....give rise to the incontestible conclusion that they constitute 'coinages' peculiar to three different provincial towns,—one belonging to Takṣaśilā of North-West India, the second to Pāṭaliputra of Eastern India and the third

[1] Rapson: *Op. cit.*, pp. 872 and 874.

to Vidisā of Central India."[1] Even up to a later stage Indian coins preserved their local types. The great Empires did not enter a homogeneous coinage. "Each of such an empire has, as a rule, retained its own peculiar coinage, and this with so much conservatism in regard to the types and fabric of the coins, that the main characteristics of these have often remained unchanged, not only by changes of dynasty, but even by transference of power from one race to another."[2] In the extended dominions of the Graeco-Indian and Indo-Scythian princes or of the Guptas or of the Hunas, distinct varieties of coins were in circulation in different districts at the same time. The provenance of the coins is sufficient evidence to this fact.[3]

Metallic substances.

The metal so stamped and used differed in the districts. The standards adopted might be gold, silver or copper. After Kadphises II introduced gold coinage in the 1st century A.D., it continued to be the standard money for a long time. The Western Kṣatrapas retained silver currency in Mehoa, Gujarat and Kathiawad. In Besnagar of Eastern Malwa again, all the finds from pre-Mauryan to the Gupta times have been copper *kārṣāpaṇa*s.

Gold coins.

The first to get into coinage was gold. Gold ornaments and jewellery being commonly used as a form of reward or payment, the transition to coinage was easy. A clear example of this

[1] D. R. Bhandarkar : *Ancient Indian Numismatics.*

[2] Rapson : *Catalogue of Andhra and Kṣatrapa Coins*, p. xi. The author cites the instances of Greek Princes Pantaleon and Agathocles retaining the Taxila type, the Scythian Rañjubula retaining the earlier Greek type in Mathura, the Guptas continuing the type established by the Western Kṣatrapas in Gujarat.

[3] The presentation of divinities of different faiths in the coins of Kaniṣka and Huviṣka, *viz.*, Greek, Scythic, Zoroastrian, Vedic and Buddhist gave rise to the theory that those kings were supporters of an eclecticism in religion. Rapson explains this differently. "The natural explanation of this diversity is that these various classes of coins were current in the different provinces of a large empire..... The coins, no doubt, reflect the particular form of religion which prevailed in the district in which they were struck." Rapson : *Andhra and Kṣatrapa Coins*, p. xii. footnote.

is *niṣka* which in the Ṛg-Veda meant a necklet or medallion, in later times became successively a unit of weight of gold and a gold coin. In the Vedic times "a gold currency was evidently beginning to be known in so far as definite weights of gold are mentioned."[1] These are the *niṣka*, the *śatamāna*, the *suvarṇa*, the *pāda* and the *kṛṣṇala*.[2] Pāṇini knows several of these (V. 1) and the Smṛtis cite them as weight standards. Gold coins occur in the Arthaśāstra (II. 14) and in the Jātakas,—*e.g.*, the *nikkha* (IV.460 f. VI.246 f.), the *suvaṇṇa* (VI. 69, 186) and the *suvaṇṇamāsaka* (IV. 106; V. 164). The *kahāpaṇa* also sometimes appears as a gold coin (I. 478). The Sāmantapāsādika says that a *kahāpaṇa* may be of gold, silver or copper.[3] The *hiraññа* while generally indicating bullion in compound with *suvaṇṇa*, sometimes occurs also as gold coin, as for example when Anāthapiṇḍika purchases the Jetavana by paving it with these coins. But there have been no actual finds of gold coins from those early times. "Some thin gold films with punch-marks on them were found in the Sakiya Tope, but these were too flimsy to have been used in circulation as coins."[4]

Silver coins.

Silver was a rarer metal in India. Reference to silver in Buddhist canonical works is much more scarce than to gold and other metals.[5] In fact Buddhaghosa omits silver altogether while defining *rūpiya* as stamped piece of gold, copper and bronze, wood and lac or any of these worked up into ornaments (Vin. III. 239 f.). But there is no warrant to say that "no

[1] Macdonell and Keith : *Vedic Index*, II. 505.

[2] By citing references from Vedic texts, D. R. Bhandarkar attempts to show that these were not mere money weights but definite denominations of coins. *Ancient Indian Numismatics*.

[3] Rhys Davids : *Ancient Coins and Measures*, and IV. 8.

[4] Rhys Davids : *Buddhist India*, p 100
Mrs. Rhys Davids : J. R. A. S , 1901, p. 877.

silver coins were used.''[1] For Buddhaghosa himself admits elsewhere of the existence of silver *kārṣāpaṇas* which figure also in the state mint of the Arthaśāstra (rūpyarūpa,—Com. kārṣāpaṇa, II. 12). If silver was scarce in Indian mines, this was imported from foreign merchants for Indian gold and thus a large number of silver punch-marked coins actually discovered are accounted for. The comparative scarcity of silver explains the depreciation of silver weight standards in the Smṛtis. According to these a silver *dharaṇa* weighs 58 grains to which agree the *kārṣāpaṇa* silver coins actually found. A futile attempt at currency reform is seen in the Arthaśāstra where it tries to bring the metrology of the three metals to the same standard.[2]

Copper coin : the standard *kārṣāpaṇa*.

In the post-Vedic period the *kārṣāpaṇa* emerges as a new class of coin seen for the first time in Pāṇini and the Pali canon. Like the other coins, it at first meant the weight of any metal,—according to extant copper coins, 146 grains. "Hence it probably is that, whereas the unit of current money in Buddhist times was evidently the bronze *kahāpaṇas*, passages are here and there met with which either explicitly refer to gold coins or seem to imply gold, as much as we, for instance, can speak of ' pennyweights ' of gold..... *Suvaṇṇa* and *kahāpaṇa* are distinguished in Jātaka IV. 12. A leaden *kahāpaṇa* is spoken of (Jāt. I. 7). But the identification of *kahāpaṇa* with copper pieces in Jāt. I. 425, 426, and the statement in the Vinaya Commentary (IV. 256) that 4 *kahāpaṇas* = 1 *kaṃsa* (bronze or copper coin) would

[1] Rhys Davids : *loc. cit.*

[2] According to the Arthaśāstra, 88 gaurasarṣapa = 1 māṣa, 16 māṣa = 1 dharaṇa (silver).

,, ,, Manu, 90 gaurasarṣapa = 1 māṣa, 16 māṣa = 1 suvarṇa (gold).

Thus the Arthaśāstra's *dharaṇa* (silver) is less than Manu's *suvarṇa* (gold) by only 32 *gaurasarṣapas* or 1·8 *ratis* (3 grs.),—the degree of error being explained by the fact that the weight of a white mustard seed may slightly vary in different parts of the country. See *supra*, p. 275, table.

alone be sufficient to fix its substance *qua* coin." [1] In Manu and Viṣṇu the *kārṣāpaṇa* is the weight standard exclusively of copper. Throughout the Jātaka stories the copper *kahāpaṇa* is the standard coin in circulation as is shown by the frequent omission of the denomination after the amount whereas other coins are mentioned when intended (Jāt. IV. 378; VI. 96, 97, 332). If these coins do not survive in as much quantity as might be expected it is because it is a more perishable metal than silver and apt to be melted into domestic utensils. The mention of *kārṣāpaṇa* in Manu, Viṣṇu, Yājñavalkya and the Sātavāhana Inscriptions and its discovery in the excavations at Besnagar bring its career down to the 4th century A.D.

Tokens of *kārṣāpaṇa*.

The standard *kārṣāpaṇa* had its token coins. In Pali literature occur the *kahāpaṇa*, half *kahāpaṇa*, *pāda* or quarter *kahāpaṇa*, *māsaka* or 1/16 *kahāpaṇa* and *kākaṇī* or 1/80 *kahāpaṇa* (Vin. II. 294; Jāt. I. 121, 340; III. 448). Even *sippikā* or cowry shells are used as petty coin (I. 426). The Arthaśāstra distinguishes between the standard and token coins as *kośapraveśāyam*, *i.e.*, those which deserve to be received into the treasury, and *vyavahārika*, *i.e.*, those which are current in the market. The tokens are 1/2 *paṇa*, 1/4 *paṇa* (pāda), 1/8 *paṇa* (aṣṭabhāga), 1/16 *paṇa* (māsaka), 1/32 *paṇa* (ardhamāsaka), 1/80 *paṇa* (kākaṇī), 1/160 *paṇa* (ardhakākaṇī) (II. 12). [2] Coins excavated at Besnagar correspond approximately to 146 grains, the weight of a *kārṣāpaṇa* and to its fractions of 1/2, 1/4, 1/8, and 1/16 thus pointing these to be *kārṣāpaṇa* and its subdivisions. [3]

Fluctuation.

The value of the *kārṣāpaṇa* of course changed with the varying value of copper. This is clear from the observation of Buddhaghosa that at the time of King Bimbisāra, at Rājagaha 5 *māsaka*s were

[1] Mrs. Rhys Davids: J.R.A.S., 1901, p. 878.

[2] These minute subdivisions are effected by the mixture of alloys.

[3] Annual Report of Archaeological Survey, 1913-14, pp. 220ff; 1914-15, p. 87.

equal to 1 *pāda* and 4 *pāda*s were equal to 1 *kārṣāpaṇa*, which is corroborated by the Jātaka reference that a 4-*māsaka* piece is of lower value than a *pāda* (III. 448). Buddhaghosa further warns that the *kahāpaṇa* of 20 *māsaka*s is the ancient *nīlakahāpaṇa*,[1] not the Rudradāmaka or *kahāpaṇa* of 16 *māsaka*s. Obviously in the scholiast's knowledge the depreciated standard was adopted and followed from the time of the Kṣatrapa king.

The exchange ratio. Gold : Silver.

Neither was the ratio between gold, silver and copper steady. In a Nasik Cave Inscription, 1 *suvarṇa* is given as equal to 35 *kārṣāpaṇa*s presumably the silver standard otherwise known as *dharaṇa* or *purāṇa*. According to the Arthaśāstra's metrology the silver *dharaṇa* and the gold *suvarṇa* are almost of the same weight and on that basis the ratio between gold and silver is 35 : 1. But as a matter of fact the silver standard was depreciated because of the rarity of the metal and the extant silver coins generally conform to Manu's weight for a *purāṇa* which is about 58 grains. The rate of exchange between gold and silver on the basis of Manu and the Nasik Inscription thus becomes 58×35 : 146; *i.e.*, 14 : 1 approximately, not very far from the present rate. From the Periplus however, Cunningham has shown that gold was to silver as 8 :1 gold being much cheaper in India than in Persia.[2] The same ratio according to the Śukranīti is 16 : 1 (IV. ii. 181 ff.).

Gold : Copper.

The relation between gold and copper presents still more difficulties. According to Vṛhaspati (and Kātyāyana), the weight of a *suvarṇa* or *dināra* is 124 grains and that of a *karṣa* 146·4 grains and 48 *kārṣapanas*=1 *suvarṇa* or *dināra* (X. 14 f.). Thus the exchange rate between gold and copper is 146×48 : 124 or 57 : 1 approximately. Copper is thus almost 20 times

[1] The *kālakahāpaṇa* is noted in Jātaka No. 536.

[2] *Coins of Ancient India*, p. 5.

its present value. This is intelligible when there is no intermediate silver coin between gold and copper as appears under the Kuṣāṇas and the Guptas. The Śukranīti which gives the rate between gold, silver and copper, fixes it at 16 : 1 and 80 : 1 respectively so that gold and copper stand at 1280 : 1. The remarkable variation in exchange rates is explained by the variation in regional distribution of metals whether obtained from native soil or through foreign exchange and by the still infant attempts of business communications to break through regional barriers.

Other metals.

Coins might be of other metals beside gold, silver and copper. The Nidānakathā speaks of lead *kahāpaṇas*. Coins of that metal have been discovered from about the beginning of the Christian era belonging to Strato, Azes and Rañjubula and to the Andhrabhṛtya dynasty. Nickel was traced by Cunningham in the money of the Indo-Grecian kings and it was surmised to have been used by the Kṣudrakas and the Mālavas in the time of Alexander.[1] Potin[2] was used by Vilivāyakura and his successors in the district round about Kolhapur, by the Andhrabhṛtya kings, exclusively in the Chanda district of the Central Provinces and by the Kṣatrapa dynasty founded by Caṣṭana. Buddhaghosa even says that *māṣakas* of wood, bamboo, palm-leaf or lac might pass current if they bore the requisite impression of *rūpa*.

State and private coinage.

From the very nature of its origin it may be presumed that coinage was not a state monopoly. It is wrong to hold that from the earliest times this was the privilege of the state,[3] and Mrs. Rhys Davids is right to assert that "there is no evidence whatever to show that these instruments of

[1] 'White iron.'

[2] An alloy of yellow and red copper, lead, tin and some dross.

[3] D. R. Bhandarkar : *Ancient Indian Numismatics*.

exchange (the Jātaka coins) constituted a currency of standard and token coins issued and regulated by any central authority."[1] Coins, at least in the early stages of their growth, might be struck and issued by individual traders, guilds, municipal bodies and district or central authorities. In theoretical works like the Arthaśāstra, currency is worth being reserved as a state concern. But even here the state goldsmith is to employ artisans to manufacture gold and silver coins from the bullion of citizens and country people (sauvarṇikaḥ paurajānapadānām rūpyasuvarṇamāvekṣanibhiḥ kārayet, II. 14) without charge of any brassage. Only "in getting a *suvarṇa* coin (of 16 *māṣas*) manufactured from gold or from silver, one *kākaṇi* ($\frac{1}{4}$ *māṣa*) weight of the metal more shall be given to the mint towards the loss in manufacture."

Regulation: debasement.

The only way by which the central authority could regulate the currency was by way of the weight of the pieces (Manu, VIII. 403; Vāś. XIX. 13). The Arthaśāstra demands the strict maintenance of the standard weight and severely reprimands lowering by even one *māṣa*. But this was not always possible, and a coin was perforce debased when the supply of its metal fell short. Debasement might be effected either by reducing the fixed weight or by increasing the alloy while maintaining the fixed weight. The former may be the reason of the mutability of weight noticeable in some of the archaeological finds of *kārṣāpaṇa* and its subdivisions. Debasement of gold by means of metallic alloys is known in early Pali literature (upakkilesā, An. III. 16; Sn. V. 92). The Arthaśāstra permits an alloy of 1/4 in copper and of 5/16 in silver with four parts of copper and one part of *tikṣṇa*, *trapu*, *sīsa*, and *añjana*. By assaying 113 extant silver coins Cunningham detected an alloy

[1] Mrs. Rhys Davids: J. R. A. S. 1901, p. 877.

varying from 13·8 to 24·8 per cent. Other methods of debasement were the plating of copper pieces with molten silver practised from as early as 500 B.C.[1] and addition of molten copper to a depreciated silver coin.[2]

The *rūpasūtra*.

The early Indian name of coin is *rūpa* or *rūpya*, apparently derived from the image or impression it carried. The *rūpasūtra* is the science of coinage and currency. In his note on *rūpasutta* (Mv. I. 49. 2), Buddhaghosa says that the learner must turn over and over many *kārṣāpaṇas*. Evidently it was an applied science and much of the knowledge was derived empirically. The shroffs who by observing the stamp marks could at once tell from which place any particular coin came (Visuddhimagga) were versed in the lore. So were the *rūpadarśaka* of the Arthaśāstra and the *rūpatarka* of Patañjali entrusted with the inspection of coins. The science treated of (1) the metallic composition of coins, (2) their shape and technique, (3) their devices and places of manufacture and circulation, (4) the mint, (5) the offices connected with manufacture of coins and regulation of currency, (6) detection of counterfeit coins, (7) and above all making a revenue by inflation and sophistication. The scope and importance of the subject makes it conceivable how it is worthy of serious study not only for a tradesman but also for a prince for the purposes of administration.[3]

[1] J. A. S. B., 1890, p. 182.

[2] J. B. O. R. S., 1919, pp. 16 f. See also Bhandarkar : *op. cit.*, pp. 164 f.

[3] D. R. Bhandarkar; *op. cit.*, p. 166.

BOOK V

OCCUPATION AND EMPLOYMENT

Yathā nu kho imāni bhante puthu-sippāyatanāni-seyyathīdaṃ hatthārohā assārohā rathikā dhanuggahā celakā calakā piṇḍa-dāvikā uggā rājaputtā pakkhandino mahānāgā sūrā cammayodhino dāsakaputtā āḷārikā kappakā nahāpakā sudā mālākārā rajakā pesakārā naḷakārā kumbhakārā gaṇakā muddikā yāni vā pan' aññāni pi evaṃ gatāni puthu-sippāyatanāni—te diṭṭh'eva dhamme sandiṭṭhikaṃ sippa-phalaṃ upajīvanti, te tena attānaṃ sukhenti pīṇenti mātāpitaro sukhenti pīṇenti puttadāraṃ sukhenti pīṇenti mittāmacce sukhenti pīṇenti samaṇabrāhmaṇesu uddhaggikaṃ dakkhiṇaṃ patiṭṭhāpenti sovaggikaṃ sukhavipākaṃ sagga-saṃvattanikaṃ.

Sāmaññaphala Sutta, Dīgha nikāya.

There are Sir, a number of ordinary crafts:—elephant-drivers, horsemen, charioteers, archers, standard-bearers, camp marshalls, camp followers, high military officers of royal birth, military scouts, men brave as elephants, champions, heroes, warriors in buckskin, home-born slaves, cooks, barbers, bath-attendants, confectioners, garland-makers, washermen, weavers, basket-makers, potters, arithmeticians, accountants, and whatsoever others of like kind there may be. All these enjoy, in this very world, the visible fruits of their craft. They maintain themselves and their parents and children and friends in happiness and comfort. They keep up gifts, the object of which is gain on high, to recluses and Brāhmaṇas,—gifts that lead to rebirth in heaven, that redound to happiness, and have bliss as their result.

CHAPTER I

Services and Royal Entourage

Occupations outside the *Vārttās*. King's officers,—*amacca, rājabhogga, rājañña*, 'seventh caste.' The senior *amaccas*,—*senāpati, purohita, mahāseṭṭhi, gandhabba*. The second grade,—*uparāja, rajjuka, vohārika, bhaṇḍāgārika*. The *adhyakṣas*,—of elephants, of horses, of cows; others, animal-doctors. The *agghāpaka* or court-valuer. The *nagaraguttika* or police commissioner. Spies. Clerks. Lower incumbents. The bather and shampooer. Specialists. Artists and technicians.

Bureaucracy of the Arthaśāstra. The grades. Military and espionage service. Benefits. Payment by cash and by assignment of revenue.

The four familiar *vārttās* did not comprise all the occupations of the people. Men had to seek their livelihood beyond the old Śāstric horizon of agriculture, cattle-rearing, trade (including industries) and usury. The palace and the administration developed a crop of offices and servants. A number of independent professions crystallised to meet the complex demands of urban life. Civilisation also produced its scums and dregs, the outlaws and the underworld of society. In a speech to Ajātasattu Makkali Gosāla refers to as many as 4,900 kinds of occupation (ājiva) (Dn. II. 21).

King's officers

The services in the palace and under the state provided a large number of people. The highest officers in government service were the *amaccas* who were generally, though not always recruited from the same family, often the son succeeding the father (amaccakula. II. 98, 125). "The *amaccas* form a class by themselves which is generally hereditary, and in consequence of this hereditary character, to which probably, as in the case of the Khattiyas, a specially developed class-consciousness is joined, possesses a certain though distant resemblance

with a caste." [1] The *rājabhogga*, people in king's pay and service, similarly represent a class wider than the *amacca*, inasmuch as they include also the lower officers. They are mentioned as a class along with Khattiyas, Brāhmaṇas and Gahapatis in the Vinaya (Pātimokkha, Nisaggiya 10) and appear to be synonymous with the *rājañña* (Assalāyana Sutta). In the light of the Pali evidence, Megasthenes is supported while stating the high civil servants as a caste. "The seventh caste consists of the counsellors and assessors of the king. To them belong the offices of state, the tribunals of justice and the general administration of public affairs" (Str. XV. i. 49).

Since administrative arrangements were not uniform in every country and in every age, titles and functions of officers differ. Some of these were common almost everywhere, others were peculiar to a particular state. In the Jātakas the number of *amaccas* is given at the conventional figure of 80,000 with a *senāpati* or commander-in-chief of king's forces at the top (senāpatipamukhāni asitiamacca-sahassāni, V. 178). He also discharges peacetime functions like administration of justice (II. 186; Com. on the Mahāparinibbāna Sutta) and participates in legislation (V. 115). Not a lesser personality was the *purohita* who performs sacrifices (I. 334 ff.; III. 43 ff.; Ait. Br. VIII. 24), explains omens and trains up the heir-apparent (V. 127), a fatherly friend and adviser. He is very often seen in sole mastery of all affairs,—temporal and religious (atthadhammānusāsake, Jāt. II. 105, 125, 173; III. 21, 115, etc.). Along with the *purohita*, the *mahāseṭṭhi* and the *gandhabba* are seniormost officers (issarā, I. 413). The former represented the industrial guilds to the court and assisted the king in framing his

The *amaccas* : senior officers.

[1] Fick: *Die Sociale Gliederung.*

industrial and commercial policy.[1] The *gandhabba* was the chief musician (III. 91). It is unlikely that he was accorded a rank equal to the chaplain and finance minister except with kings having a marked musical taste as for example, Samudragupta or Akbar.

The lesser *amaccas*.

Probably just below the topmost rung was the *uparāja* or governor in a province or district (II. 367). He did not always represent a king; sometimes he was deputed by a republican government as in the case of the Sakiyas and the Koliyas (V. 412 f.). In the Maurya empire, princes of royal family were selected as viceroys of its five provinces and the practice may have been borrowed from earlier times.

The *rajjugāhaka amacca* (II. 367) or *rajjuka* was the survey and settlement officer. In the Arthaśāstra the survey tax is called *rajju* and in the Jātakas the officer appears with the rope for measuring lands. Bühler identifies him with the *rājuka* in Aśoka's inscription on whom Hultzsch observes: "The Rājuka originally 'held the rope' in order to measure the fields of the ryots and to assess the land tax. Thus the word became the designation of a revenue settlement officer, just as in British India the chief administrative officer of a district is still called 'collector' because his special duty is the collection of revenue."[2] Much earlier than the times of Aśoka and of the composition of the Jātakas the original surveyor had become the 'driver of the chariot of state.' The *rajjugāhaka amacca* is holder of the reins of government and of the rope of survey. The *rajjukas* or *rājukas* are probably the *agronomoi* of Megasthenes, the country magistrates who "superintend the rivers, measure the land as is done in Egypt and inspect the sluices, by which water is let out from the main channels into their branches"

[1] For discussion of his functions see *supra*, pp. 262 f.

[2] *Corpus Inscriptionum Indicarum*, Vol. I, p. xli.

and who "collect the taxes" (Str. XV. i. 50). In the Arthaśāstra, the settlement and revenue officer is the *samāhartṛ*.

The *vinicchayāmacca* (Jāt. II. 181, 301) or the *vohārika mahāmatta* (Mv. I. 40. 3; Cv. VI. 4. 9) is the chief justice and law officer. He tries civil suits and settles points of law when asked to give opinion (Jāt. II. 367, 380). In the Arthaśāstra, the judicial officer is the *vyavahārika*.

The head of the treasury is the *bhaṇḍāgārika* and with him went the judgeship of all the merchant guilds (sabbaseṇīnaṃ vicāraṇāraham bhaṇḍāgārikaṭṭhānaṃ nāma adāsi).[1] This is marked as an innovation. "Before that no such office had existed, but there was this office ever after" (IV. 43). Elsewhere this officer figures next in rank to the *senāpati* and higher than *seṭṭhi*. The treasurer or keeper of king's purse is sometimes known also as *heraññika* (III. 193).

The *adhyakṣas*.

There is an inspector of king's jewels (maṇipabhaṃsanaṃ kammam karonto, VI. 383) parallel to the *suvarṇādhyakṣa* of the Arthaśāstra. His function was the testing of jewels for the palace.

Quite respectable but presumably below this second rank, were the *adhyakṣas* or departmental heads of whom the Arthaśāstra enumerates twenty-one. They are not, however, excluded from the purview of the Epics. The *adhyakṣas* of elephants and of horses released their animals from the stables when the Vānaras set fire to the city of Laṃkā (Rām. VI. 75. 27). Nala was appointed superintendent of stables to king Ṛtuparṇa at the pay of 10,000 (Mbh. III. 67. 6).

The *adhyakṣas* presuppose an advanced and complicated administration which is unknown to the mass of Jātaka stories. But so far at least as the elephants and horses

[1] Fick renders "worthy of the regard of all guilds."

are concerned, they give the social and administrative setting in which such offices might develop. They betray a consciousness, no less than the Arthaśāstra, of the utility of these two animals in the service and protection of the state. The *hatthidamaka*, the *assadamaka* and *godamaka* are the trainers of the three animals respectively (I. 505), and the *assagopaka* (II. 301) is the keeper of horses. A short but interesting description is given of how the *hatthidamaka* trains this animal in the arts of war (Mn. 125) and fights king's battles with it (Jāt. II, 413). Arts of catching wild elephants by means of tame ones are also briefly noticed (Mn. 125) which are so elaborately described by Megasthenes and fully known in the Rāmāyaṇa.[1] The sons of these trainers, by dint of specialised knowledge, succeeded to their father's post (Jāt. II. 94, 98, 221; Dn. IX. 32). Elephant-lore (hatthisuttam) and horselore (assasuttam) were cultivated as separate branches of learning (Jāt. II. 46) and specialists in this knowledge bear the honorifics of *hatthācariya* and *assācariya* (I. 413, 444; II. 20, 98). Even the elephant-doctors (hatthivejja) were in king's service, foreshadowing the lengthy dissertations of Megasthenes and Aelian on the diseases of these animals and the specifics and treatment adopted by experts.

The *agghāpaka* or court-valuer, assessed the price of goods ordered for the palace.[2] The *nagaraguttika* or town warden was charged with the arrest and execution of outlaws (III. 59, IV. 289). On receiving a complaint from townsfolk, a king orders him to post patrols at intervals and have the burgler caught (nagaraguttikam

[1] Some elephants strolling in a lotus park saw some men riding on elephants lasso in hand and said "we are less afraid of fire, lasso or other weapons than of these selfish kinsfolk who show the way to trap us to the elephant-tamers" (VI. 16. 6-8).

[2] See *supra*, pp. 269f.

ānāpettā tattha tattha gumbaṃ ṭhapetvā.....III. 436). He was like the Police Commissioner of the modern city. "Judging from the insecurity which on account of frequent mention of robbers and thieves in the Jātakas and other folk-literature must have existed in Indian cities in ancient times, he was no small personage."[1]

Spies.

The police officer of the Jātakas was not assisted by spies. The Jātakas have no department or officers corresponding to the elaborate espionage system of the Arthaśāstra or of the Mauryas,—"the sixth caste," in which "the best and most trustworthy men are appointed" and to whom "is entrusted all that goes on, and of making reports privately to the king" (Str. XV. i. 48).

Clerks.

Less commonly than now, but not unoften the educated young bourgeoisie settled down in clerical jobs of the secretariat. A *kulaputta* makes his living by being a clerk of the signet (muddāya), clerk of accompt (gaṇanāya) or computer (saṃkhāyena)[2] (Mn. 13; Dn. II. 14) or he may be the king's scribe (rājalipikāra, lekhaka, Sanchi Ins.; Nasik C.I., 16. vii; 26, viii; Arth. II. 10). Hence also *muddā*, *gaṇanā* and *lekhā* are among the esteemed arts (ukkaṭṭham nāma sippaṃ) in contrast to the lower ones of basket-maker, potter, weaver, cobbler and barber (Suttavibhanga, Pācittiya, II. 2. 1).

The lower employees.

Below these was a lot of petty officials and mediocrities, *viz.*, the *bandhanāgārika* or the gaoler who figures in an unenviable company of people given to tormenting others (Mn. 51, 60; An. II.

[1] Fick: *Op. cit.*, p. 108.

[2] In the Arthaśāstra, the *saṃkhyāyaka* is among the village officers who may be remunerated with land without power of alienation (II. 1). Cultivation of statistics and numerical methods (saṃkhā, Mil. 59) developed primarily from the need of a crop forecast for assessment purposes.

207; III. 382), the *doṇamāpaka* or corn-measurer, *i.e.*, a tax-collector under the *rajjuka* and presumably the same as the *balipatiggāhaka* and the *niggāhaka* who appear as blackguards of royal extortion[1]; the *sārathi* or driver of king's chariot (Jāt. II. 265, 367); the *dovārika* or the door-keeper (II. 241, 367; Mil. 234, 240, 264; Mn. 56) among whom were door-keepers of the palace and gate-keepers of the city. A palace *dovārika* appears in the unfortunate rôle of being thrashed with blows by a whimsical king every time he went in and out. The city *dovārikas* were four, one at each gate (Jāt. IV. 289) who watched the gates and closed them at night in a particular hour after shouting thrice to warn those who inadvertantly kept out (II. 379). The *dauvārika* who figures in the highest rank of officialdom in the Arthaśāstra must have been some other functionery.

The various petty officials of the civil and military staff cannot be exhausted by enumeration. We have the *chattaggāha* (parasol-bearer) and the *asiggāha* (sword-bearer), personally attending to the king (Jāt. VI. 194). Among people who gain their livelihood in dependence on the king (vañño khattiyassa muddhavasitassa.....rājūpajivine jane) are the *anikaṭṭha* (bodyguard), *pārisajja* (courtiers). *bhaṭa* (soldiers), *balattha* (royal messengers), etc. (Mil. 234, 240, 264). The list may be extended from "the people who enjoy the visible fruits of their craft in this world" *viz.*, the *hatthāroha* (elephantman) *assāroha* (horseman), *rathika* (chariotman), *dhanuggaha* (archer), *chelaka* (standard-bearer), *calaka* (camp marshal), *piṇḍa-dāvika* (camp-follower), *cammayodhina* (warrior in buckskin), etc. (Dn. II. 14). Among menials further below are *āḷārika* (cook), *nahāpaka* (bathman), *suḍa* (confectioner), *mālākāra* (garland-maker) and *rajaka* (washerman) (*Ibid*).[2]

[1] See *supra*, p. 142.

[2] The renderings are Rhys David's.

Toilet, coiffure and shampooing were very common luxuries and hence the barber (sīsapasādhanakappako, Jāt. II. 190 ff.) and the bather (nahāpaka) had a good demand for their services (I. 342). The bathman's art is thus drawn in a parable: "Just as a skilful bathman or his apprentice (nahāpako vā nahāpakantevāsi vā) will scatter perfumed soap-powder (nahāniya cunnāni ākiritvā) in a metal basin, and then besprinkling it with water drop by drop, will so knead it together that the ball of lather, taking up the unctuous moisture, is drenched with it, pervaded by it, permeated by it within and without, and there is no leakage possible ....." (Dn. II. 76). The process of bathing includes shampooing, rubbing oil, bathing with a fine powder and then costly garland, unguents and garments (XXIII. 9; *cf.* XVII. i. 23); Mn. 124; Rām. II. 65. 8; 83. 14).

Specialists.

Sometimes services of specialists were necessary for assisting the military or the police. And they had to be offered a high status and handsome remuneration. Archers (dhanuggaha) capable of exhibition performance are given wages of 100,000 a year (II. 87) and 1,000 *kahāpaṇa*s daily (V. 128)—inequitously high, so as to make the old archers jealous. 1,000 pieces a fortnight was however reasonable at which rate another is taken into royal service and deputed to kill wild animals affecting travellers and to fight battles (I. 357). So a youth skilled in tracking footsteps is appointed by a king at the daily wages of 1,000 pieces (IV. 43).

Artists & technicians.

A good number of artists and artisans were maintained in the palace for beautification, entertainment and more useful works, *e.g.*, the *uyyānapāla* (II. 345) or *ārāmika* (III. 365) or park-keeper who was well posted in the art of gardening and sometimes conceived and worked out royal parks (Rām. VII. 52. 7); the dancers, the musicians, the actors, the bards, the

astrologers, the sooth-sayers, etc., who were maintained with regular allowances in every court. The king had skilled artisans of all varieties for construction of forts, ships, armaments, etc., and for the working of mines, fisheries and other royal industries. The Jātaka commentary says that the king keeps artisans (*e.g.*, vaddhakim) to make instruments necessary for the exercise of *viriya* or for good and bad acts (V. 242). Nārada exhorts Yudhiṣṭhira to give artisans under his employ raw materials and wages with strict regularity.

dravyopakaraṇaṃ kiñcit sarvadā sarvaśilpinām
cāturmāsyāvaraṃ samyak niyataṃ samprayacchasi
Mbh. II. 5. 118.

The services of the Arthaśāstra.

The bureaucracy conceived in the Arthaśāstra is much more elaborate and complex than the small officialdom of the Pali canon. It gives a hierarchical structure with precise classification of officials in order of their salary and rank (V. 3).

The *ṛtvik* (sacrificial priest), the *ācārya* (teacher), the *mantrī* (chief minister), the *purohita* (chaplain) and the *senāpati* (commander-in-chief) are accorded equality with the *yuvarāja* (heir-apparent), the *mātṛ* (queen mother), and the *rājamahiṣī* (chief queen) in the civil list each drawing 48,000 *paṇa*s per annum.

The *dauvārika* (?), the *antarvaṃśika* (superintendent of harem), the *praśāstṛ* (commander), the *samāhartṛ* (collector-general) and the *sannidhātṛ* (chamberlain) are each to draw 24,000.

The *nāyaka* (chief constable), the *paura* (city officer), the *vyavahārika* (judge), the *karmāntika* (superintendent of manufactories), the *mantriparisad* (members of ministerial council), the *rāṣṭrāntapāla* (superintendents of countryparts and of boundaries) along with a prince (kumāra) and a prince's mother (kumāramātṛ),—12,000.

These high scales of salary are fixed with a view to provide against temptation and discontent. " With this they will be loyal and powerful supporters of the king's cause,"—svāmiparibandha-balasahāyā hyetāvatā bhavanti.

Śreṇīmukhyāḥ (army chiefs) and chiefs of elephants, horses, chariots and infantry and the *pradeṣṭāraḥ* (commissioners) get 8,000 each. This is fixed with an eye to allowing them a good following in their sphere (svavargānukarṣiṇo).

The *adhyakṣas* of infantry, cavalry, chariotry and elephantry and keepers of timber and elephant forests (dravya-hasti-vanapālāḥ)—4,000.

The chariot-driver (rathika), the army-physician (anīka-cikitsaka), the horse-trainer (assadamaka), the carpenter (vardhaki), the animal-keepers (yoṇipoṣakāḥ)—2,000.

The *kartāntika* (foreteller), the *naimittaka* (reader of omens), the *mauhūrtika* (teller of good or bad times), the *paurāṇika* (annalist), the *sūta* (story-teller), the *māgadha* (bard), *purohita-puruṣāḥ* (retinue of the priest) and *sarvādhyakṣāḥ* (departmental superintendents)—1,000.

Trained soldiers (śilpavantaḥ pādātāḥ), staff of computers and scribes (saṃkhyāyaka lekhakādivargaḥ), and village officer (grāmabhṛtaka)—500; trumpet-blowers (tūryakāra)—300; actors (kuśīlava)—150; skilled artisans (kāruśilpinaḥ)—120.

Servants in charge of quadrupeds and bipeds (catuspada-dvipada-paricāraka), miscellaneous workmen (pārikarmika), attendants upon royal person (upasthāyika), bodyguards (pālaka), procurers of forced labour (viṣṭivandhaka)—60.

King's playmate (āryayukta), elephant-driver (ārohaka), sorcerer (māṇavaka), miner in mountains (śailakhanaka), all kinds of attendants (sarvopasthāyinah), teacher (ācariya), scholars (vidyāvantaḥ) shall have honoraria (pīyāvetana) ranging from 500 to 1,000 according to merit.

A messenger (dūta) of middle quality shall get 10 *paṇas* for each *yojana* he travels, twice as much when he travels

from 10 to 100 *yojana*s. For spies, schedules vary from 250 to 1,000.

The above list excludes the *gopa*s or census officers and *sthānika*s or revenue officers under the *samāhartṛ*. Their work is inspected by the *pradestṛ*s or commissioners deputed by the *samāhartṛ* (II. 35). The *nāgaraka* looks after the affairs of the capital (II. 36).

Espionage service.

The huge espionage system in the Arthaśāstra's conception of state with its wide ramifications over the whole body-politic is a sad commentary on the moral of the bureaucracy. The higher officers are constantly to be watched with spies lest they stray into sedition and disloyalty and for the dirty job are exploited the lower servants of the household—the *suḍa* (sauce-maker), *ārālika* (cook), *snāpaka* (bather), *saṃvāhaka* (shampooer), *āstaraka* (spreader of bed), *kalpaka* (barber), *prasādhaka* (toilet-maker), *udakaparicāraka* (water-carrier), and *rasada* (juice-maker) (I. 12).

Superintendents of 100 or 1,000 *varga*s (groups of staff) shall regulate the subsistence, wages, profit, appointment and transfer (bhaktavetanalābham ādesam vikṣepaṃ ca kuryuḥ). Officers employed to guard royal buildings, forts and countryparts will never be transferred.

Benefits.

The officials of the Arthaśāstra enjoy the benefits of gratuity, bonus and insurance against sickness. "Sons and wives of those who die in service shall get subsistence and wages. Infants, aged persons or diseased persons related to deceased servants shall also be shown favour. During funeral, sickness or childbirth, the king shall give presentation to the servants concerned."[1]

[1] Karmasu mṛtānāṃ putradārā bhaktavetanaṃ labheran. Bālavṛddhavyādhiścaiṣām anugrāhyāḥ. Pretavyādhitasutikākṛtyeṣu caiṣāmarthamānakarma kuryāt—V. 3.

Payments.

The Arthaśāstra lays down a very healthy maxim with regard to the payment of the officers from the point of view of the state. Although the *adhyakṣa*, the *saṃkhyāyaka*, the *gopa* and the *sthānika* are among the village officials who may be remunerated with land without power of alienation (II. 1), later in the Book, the author is more cautious. "When short of funds, the king may pay with forest produce, cattle or fields along with a small amount of money (hiraṇyam). If he wants to colonise waste land he shall pay in money alone (śūnyaṃ vā niveśayitum abhyutthito hiraṇyameva dadyāt). But if he wants to regulate the affairs of all villages equally, then no villages will be given (na grāmaṃ grāmasajātavyavahārasthāpanārtham, V. 3). The economist-statesman no doubt profited by the experience of earlier days. The baneful practice common in the Jātakas, of paying the high officers of state like the *purohita*, the *senāpati*, etc., with grants of land or revenues from villages, was telling upon its authority and financial security. The effect was no doubt hardly different from the reaction of the Jaigir system on the great Mughal Empire.

CHAPTER II

Independent Professions

Teaching profession.—Centres of learning. Applied education. Fees.
Artistic professions.—Singer and music-player. Actor, troupes. Bards, mimes, etc. Stigmatisation.
Occult professions.—Astrologer. Soothsayer. Palmist, etc.
Miscellaneous.

1. Teaching Profession

Besides the services there were independent professions in which people lived by purveying their skill or knowledge for a fee. Among these the teaching profession was the most respectable though not the most paying. Unlike most others it was a settled profession localised, as in the case of the arts and crafts, in particular cities. Benares was such a centre of learning (Jāt. I. 463). A northern Brāhmaṇa, after learning all the arts becomes a teacher of world-wide fame at Benares and teaches 500 pupils (Bodhisatto udiccabrāhmaṇakule nibbattitvā vayappatto sabbasippe pāraṃ gantvā Bārāṇasiyaṃ disāpāmokkha ācariyo hutvā pañcasate mānase sippaṃ vācesi, I. 436). Sometimes the professor repaired to the forest for the isolation and seclusion it gave to academic pursuits. A world-famed teacher (disāpāmokkho ācariyo) of Benares teaching *sippas* to 500 pupils goes into the forest to avoid hindrances to religious life and to the studies of his pupils and he is supplied free by people of adjoining locality with rice, milch cow and other gifts (III. 537). The passage represents ancient Indian education with its best ideals and most realistic setting. Religious and academic life were inseparable and the teacher in his own person set up the standard of

character and proficiency. The sacred and solemn pursuit of learning was carried in his sylvan nook, at safe distance from the humdrum of the town; and the people made it their duty to feed and subsidise the institution submitting for the purpose to a voluntary education cess.

Education at teacher's house was prone to generate a narrowness and obscurantism among the students. To obviate this and to supplement the theoretical training received, students on their way back after completion of the course travelled through *gāma*s and *nigama*s to gain first-hand knowledge of the applied arts of different times and local customs (sabbasamayasippañ ca sikkhissāma desacaritañ ca jānissāma, III. 238; IV. 39; V. 247, 426).

The collegiate course in Manu ranges from 9 or less to 36 years. The number of pupils in the Jātakas is conventionally given as 500 with each preceptor. Free education and board were sometimes provided for penniless lads by the people of a town (I. 239). Much more reputed than Benares as a university town was Taxila. Prodigies like Pāṇini, the grammarian, Kauṭilya, the economist-politician and Jīvaka, the physician, it claimed in its alumni. In the Jātakas, Takkasilā is a great centre of learning with reputed teachers where pupils went from Benares (I. 317, 356, 510).

The Brāhmaṇic ideal was not to accept any money fee from students (Mbh. I. 64. 20; XIII. 23. 73, 135. 14; XIV. 56. 22; Manu, III. 156, XI. 63; *cf.* Jāt. I. 340). Gifts in kind are however permitted (Manu, II. 245f) besides personal service. The teacher might claim as fee of his pupil his thumb (Mbh. I. 134) or his (teacher's) enemy to be brought captive to him (I. 140). In the Pali works teachers are almost invariably paid in cash with a honorarium conventionally given at 1,000 pieces for a whole course (Jāt. I. 285; II. 47, 278; IV. 38; V. 128; Mil. 10). A pupil who pays his teacher 7 *nikkha*s (of gold) procured by begging after the course is finished, thinks the sum inade-

quate and strains further to procure more (IV. 224). Of course personal attendance was the alternative to money fee. But it is given with the *naïveté* characteristic of the Jātakas that the givers of *acariyabhāga* were 'treated like the eldest son' and taught with great care while the *dhammantevāsikas* were neglected and worked hard (II. 278). Teachers were not always considerate to their pupils (duḥkhābhijño hi gurukulavāsasya śiṣyān parikleśena yojayitum neyeṣa, Mbh. I. 3. 81) and many failed the lofty ideal of sacrifice and renunciation propounded in the Smṛtis.

2. *Artistic Professions*

The musical and artistic professions reflect widely separated social scales. A master singer might rise to the highest position in the court along with a Chaplain and the General. Generally he let himself for hire to the public. Guttila who was born in a musician's family (gandhabbakule) and took up the trade (gandhabbasippa, II. 248), plays his instrument for a fee and thus makes his living (mayaṃ.....gandhabbā nāma sippaṃ nissāya jīvāma, mūlam labhantā vādeyyāma, 254). Mūsila, the musician tries to entertain some traders on journey for hire but failing with his lyre (vīṇā) returns the money (II. 248). Another *gandhabba* hired by some sailors for free passage sings with his lyre (vīṇā, III. 188). Generally he gave his performances at public shows like the drummer (bherivāda, I. 283) and the conch-blower (saṃkhadhamana, I. 284; Dn. XXIII. 19) who made money with their instruments at the public fairs and festivals.

Musicians, like actors, were sometimes travelling troupes staging their exhibitions jointly. Vṛhaspati lays down that the chief musician who beats time (tālajña) should get 1½ share of the rest of the company (XIV. 30). Companies of actors (nartaka) are also noticed in this code. Such a company of *naṭas* was engaged by the courtesan Sāmā with 1,000 pieces to sing among crowds. "There is no place

that you do not visit. Go then to every village, town and city and gathering a crowd around you first of all sing this song in the midst of the people."

tumhākaṃ agamanaṭṭhānaṃ nāma n'atthi, tumhe gāmanigamarājadhāniyo gantvā samajjaṃ katvā samajjamaṇḍale paṭhamaṃ eva imaṃ gītaṃ gāyeyya, Jāt. III. 61.

Elder Tālaputa was born in an actor's family, acquired proficiency at theatres suited to his clan (kulanurūpesu naccaṭṭhānesu) and " became well-known all over India as leader of a company of actors. With a company of 500 women and with great dramatic splendour he attended festivals in village, township and royal residence and won much fame and favour. He was giving performance at Rājagaha (nagaravāsinaṃ samajjaṃ dassitvā) with his usual success " (Therag. 1090ff. Com.). Such a party of actors (śailālaka) lived in Mathurā in the 1st and 2nd centuries of the Christian era whose sons figure as dedicators in a Jaina inscription from that place.[1]

For the actor the professional name was *kuśīlava,—naṭa* or *naṭaka* being the more generic term inclusive of all sorts of artists—the actor, musician, dancer, acrobat and magician. The Arthaśāstra is suspicious that the actors' visits may affect the sobriety and thriftiness of the people. At night they are to stay in a particular place and avoid accepting lavish gifts of desire or causing too much loss to any one (kāmadānamatimātram ekasyātipātaṃ ca varjayeyuḥ). For dereliction, the fine is 12 *paṇas*. They may hold their performances to their liking in accordance with

[1] On this Bühler has the following note in the Epigraphia Indica, I. 43 :

" It is impossible to interpret Śailālaka otherwise than as a synonym of Śailālin which according to Pāṇini, IV. 3. 110 originally was a name of those actors who studied the sūtras of Śilālin and according to the Koshas was used later to denote any actor.....It further shows that play-acting was then, as in the present day, the business of particular families—a fact which may also be inferred from the introduction to several Sanskrit dramas where the *naṭī* is sometimes called the wife of the Sūtradhāra and his brothers are mentioned as actors. In a Jaina story of the clever boy Bharata we hear even of a *naṭagrāma*....."

the procedure of their country, caste, family, profession, copulation and language (kāmaṃ deśajātigotra caraṇa-maithunāvabhāsena namaycyuḥ, IV. 1).

With the actor and the musician, the mime, the bard and the story-teller belonged to the same category. They all maintained a peripatetic living, moved in troupes or individually, gave demonstrations and shows in public gatherings and were accorded the same social status. They moved with their women (Rām. II. 83. 15) and if the Śāstra injunctions are to be believed, had a very low standard of morals. Adultery is permitted to wives of *cāraṇas* (actors and singers according to the Commentary) " for such men send their wives (to others) or, concealing themselves, allow them to hold criminal intercourse " (Manu, VIII. 362; Baudh. II. 2. 4. 3). No wonder the professions are condemned (Mbh. XIII. 90. 11) or assigned to the Śūdra (Arth. I. 3). The *kuśīlavas* (bards, actors, jugglers, dancers, singers and so forth—Medh.) are unworthy of invitation to a *śrāddha* (Manu, III. 155-53); food given by the actor and musician is not acceptable (IV. 210, 214). Actors and teachers of dancing, singing and acting are stigmatised as *upapātakins* (Baudh. II. 1. 2. 13). Public dancers and actors are all condemned (I. 5. 10. 24; Viṣ. XXXVII. 32, LI. 13f; Nār. III. 3; Vṛ. XXII. 3).

3. *Occult Professions*

A large mass of professionals thrived upon the superstition and credulity of the people by the exercise of the occult arts. Even in the court which attracted the best intelligence and talents of the land the services of the *nakkhattajānaka* (astrologer) and the *nemittaka* (reader of omens) are frequently requisitioned to give their studies upon problems (VI. 5). There were also interpreters of dream (supinapāṭhaka, V. 443) and of signs (lakkhaṇa-pāṭhaka, VI. 9) who give bogus readings. The practice of

these pseudo-sciences is damned in the Smṛtis probably because of the superstitions and public deception they encouraged. Among the black list of disreputables are the palmist (Mbh. XIII. 90. 7), the astrologer (Manu, III. 162, Viṣ. LXXXII. 7; Nār. I. 183), the weather-prophet (Nār. I. 183), interpreters of omens and practitioners of propitiatory rites (Vṛ. XXII. 3). The guises of a *kārtāntika* of a *naimittaka* or of a *mauhūrtika* are helpfully taken by spies in the Arthaśāstra (IV. 4; XIII. 1).

Miscellaneous

There were professional wrestlers (mallayuddhakā, IV. 81; mallā, Mil. 331) who fought duels in the ring before the gallery (Jāt. VI. 276). With the *naṭa* the *jhalla*s and the *malla*s (' fencers with sticks or wrestlers and jesters,' Com.) are relegated to the lowest class (Manu, XII. 45). There were bathers who did the customer shampooing and massage with oil; then a good bath with sponge, powder and water and lastly a nice toilet with brush, garlands, scents and dress. There were ferrymen (nāviko) who forded people across a river for a fee (vetanaṃ) which it was foolish to ask for *after* crossing (Jāt. III. 230). A more honourable and skilful profession was archery, the expert hiring himself out for exhibition shooting or for some act of prowess (III. 219 ff; V. 128 ff; Mn. 13; An. IV. 423).

Except for the teacher, the soothsayer and occasionally a good musician or an archer, all these people ranked in the economic scale below the average. Their social position was accordingly adjusted. They performed no direct productive functions in economic society but they supplied amusements and entertainments, the much-needed tonics of laughter, humour, thrill and romance. Further below were other plebeian professions stigmatised in Buddhist and Brāhmaṇical canon, in theoretical as well as in popular literature.

CHAPTER III

Bad Livelihood

Greek observers on public morality.

1. Gangster and thief : tribal bands, ransom gangs, pilferers, cattle-lifting . Gang-laws. Detection and punishment.

2. Hired assasin. 3. Forger. 4. Impostor. 5. Sorcerer.

6. Gambler : gambling and betting. Perils of gambler. Licensing, revenue.

7. Tavern-keeper : drinking and dissipation, liquors. Crime-centres. Revenue.

8. Brothel-keeper.

9. Prostitute : two categories. Fees. Manners and morals. Public estcem. Revenue and espionage.

The underworld and the state.

Megasthenes and the Greek memoirists in the Macedonian army observed Indians to be habitual teetotallers and conspicuous for truthfulness and honesty. "They are not litigious. Witnesses and seals are unnecessary when a man makes a deposit; he acts in trust. Their houses are usually unguarded." In Sind, says Onesicritus, no legal action could be taken except for murder and assault. "We cannot help being murdered or assaulted, whereas it is our fault if we give our confidence and are swindled. We ought to be more circumspect at the outset and not fill the city with litigation" (Str. XV. i. 709, 702).

The report derived no doubt from hearsay, or from a parochial or superficial acquaintance, militates with every piece of Indian evidence, theoretical or popular. It conflicts even with the Greek ambassador's own statement that theft from royal treasury or evasion of toll dues were punished with death. The outlaw and the underworld, anti-social institutions and foul means of livelihood ran rampant as everywhere but under sufficient cover to escape the notice of a casual observer.

1. *Gangster and thief*

In those days of insecurity, the robber was public enemy No. 1. An Aṅgulimāla was alone enough to scare a whole country like Magadha and a redoubtable King like Ajātasattu. A single brigand sufficed to terrorise a whole city (Jāt. III. 59). There were widely varied types in this class ranging from the pettiest pilferer or solitary dare-devil to the highly organised and well-armed gangs.

The bands of freebooters, notorious in the Jātakas, who infested the outlying forests (III. 220; An. I. 69) where civil authority was weak and thrived by plundering passing travellers and caravans were in reality the old settlers of the land who were dispossessed but were intractable enough to submit to the Aryan fold. These half-savage, semi-barbarous tribes—the so-called *mlecchas*, occasionally broke into the settled tracts (paccantagāme) of their neighbours, and from there carried off prisoners for slaves (III. 147; IV. 220).[1] The robbers in a robber village go to the woods to attend to a visiting king (coragāmakavāsino corāpi rañño ārakkhaṭṭhāya araññam eva pavisiṃsu). The chieftain's wife goes about clad in leaves and branches (sākhābhaṅgaṃ nivāsetvā carati, Com. IV. 430 ff). They make human sacrifices to their deity (Therag. 705 ff). These tribal gangs had various methods of plundering people. They practised highway robbery and burglary (panthadubbanasandhicchedādīni karanto jīvikaṃ kappesi, II. 388; panthadūsakā, Mil. 290) or they perpetrated gang actions on whole villages (gāmaghātakā; Mil. 290). Sometimes they gave an ultimatum and worked out the threat if the demand was not met (pūrvakṛtāpadānaṃ pratijñāya apaharantam, Arth. IV. 8). Sometimes they hit upon a novel device which gave them a new appellation (pesanakacorā): when they caught two prisoners interested in one another,

[1] The Afridis of Waziristan offer a modern parallel.

e.g., a father and a son or a teacher and a pupil, they kept one and despatched the other to fetch a ransom (Jāt. I. 253; IV. 115).

Apart from the gangs, there were individual thieves and pilferers in the settled places, people who took to criminal activity from within the town and villages (III. 436, 514; Mn. 13, 129). A thief after breaking into a house in a suburban village flees with his hands full of plunder (eko coro nagaradvāragāme ekasmiṃ gehe sandhiṃ chinditvā hatthasāraṃ ādāya palāyitvā .....III. 33). Cattle-lifting was a chosen line of the small pilferers as well as of the big gangs (I. 140; IV. 251; VI. 335).

The strength of the gangs is conventionally given at 500. Like the industrial arts their trade was organised in village guilds of their own (coragāma) with a ringleader as head (corajeṭṭhaka, I. 297; II. 388; IV. 430). They had their own trade morals, their tribal or gang laws held sacrosanct as the laws of all guilds and races. In a robber village, a cook is rebuked by a loyal and wise parrot for contemning the robber's trade (corakammam, IV. 430ff). The Arthaśāstra lays down that transactions relating to robbery (sāhasa) are valid though done at night (III. 1). Quoting Kātyāyana, Vivādaratnākara says that thieves and robbers belonging to a guild are to divide their booty in the ratio 4:3:2:1 according to ability and if one of the gang is arrested money spent for his release is to be shared by all.

To handle the crime of outlawry, the state and the public had one maxim, not different from that of other ancient civilisations, *viz.*, an eye for an eye and a tooth for a tooth. When the people caught a suspect, rather than let justice have its own course, they preferred to take it in their own hands. They "bind his hands behind his back and lead him to the place of execution scourging him in every public square with whips" (pacchābāhaṃ

bandhitvā catukke catukke kasāhi taḷentā āghātanaṃ nenti, III. 436). Very often the culprit succumbed to this first deal of justice (III. 514). If the man managed to reach the custodians of law and order, ruthless torture was resorted to for extorting confession (I. 384) with the result that innocent people were often victimised. The legend of Māṇḍavya occurring in the Kaṃbadipāyana Jātaka, in the Epics (Mbh. I. 63. 92, 107) and in the Arthaśāstra (IV.8) is a classical case. A thief escaped delivering his booty at the door of the ascetic; the latter, though innocent confessed his guilt from torture and was impaled. Yet an unscrupulous espionage system and relentless torture are enjoined in the Arthaśāstra to deal with these crimes (IV. 5, 6, 8).

After confirmation of guilt, the offender was punished by whipping, mutilation, impalement, death or other ingenious methods of torture gruesome in description (Mn. 13, 129; An. I. 46; II. 122; Sn. II. 128). The customary punishments for a *cora* are uprooting his eyes (cakkhuppāṭanaṃ), impalement on a stake (sūlāropanaṃ), and relieving the trunk of the head (sisacchedanaṃ); and these do not exhaust all (Mil. 166, 185, 197). He may be thrown down from a cliff (corapapāta, Jāt. IV. 151). He may have his hands, feet, nose and ears cut off and drifted down a river in a canoe (II. 117). Death, in any case, was his sure destiny even if the offence was so small as to pick up a parcel from the high road (V. 459). Sometimes the people took not only the first but the final deal of justice with themselves and left a cattle-lifter cutting off his hands and feet (Vl. 335). Megasthenes testifies to this system of torture and death sentence in the Maurya administration and Manu falls in line with the current tradition by prescribing for the thief capital punishment (IX. 270), mutilation or impalement (276f.; Viṣ. V. 136; Nār. Intr. 34; Vṛ. XXII. 17). Only the author of the

Arthaśāstra is enlightened enough to leave provision for fine which ranges from 12 to 96 *paṇa*s according to the value of the articles stolen or robbed (III. 17). The pirate and the cattle-lifter alone do not deserve this leniency and have to pay the highest penalty, such a nuisance they had made of themselves (II. 29).

Was there no relief against the universal application of *lex talionis*? Even in the Jātakas were not unknown better methods of criminal investigation than forcing a suspect to disgorge guilt by torture (I. 384). We have seen a tracker of footsteps in action under a king (III. 505). The Arthaśāstra evinces the knowledge of various scientific processes like study of foot-prints and physical expressions, identification by the smell of body from a piece of rag left at the place of occurrence, etc. (IV. 6). Rāma's precept to Bharata was that a suspect should be convicted only when he is caught in action by the owner or by the police, or after cross-examination, although care should be taken that he did not obtain release by bribe (Rām. II. 57). The practice of impalement of robbers on a stake is referred to in a Jātaka story as "prevalent in those days" (III. 34), implying thereby that there might have been a change for the better when the story was crystallised. And enlightened statesmanship was not lacking like that of the counsellor who advised his king that against lawlessness and brigandage, taxation and punishment were not the right redress; the war has to be waged not against criminals but against the sources of crime, *viz.*, poverty, unemployment and discontent (Dn. V. 11).

2. *Hired Assassin*

Rogues might be hired for murder. Devadatta employed cut-throats (II. 416) and archers (III. 97) for the murder of Buddha. The Arthaśāstra knows such

wretches (IV. 7). The hire charge for an assassination is 1,000 *kahāpaṇa*s (Jāt. V. 126).

3. *Forger*

The forger (pratirūpakāraka, Mbh. XII. 59. 49) practised his evil art with false coins, gold, pearls, gems, etc. The Arthaśāstra evinces a good knowledge of his trade. A manufacturer of counterfeit coins (kūṭapaṇakāraka) may be suspected for frequently purchasing various kinds of metals, alkalis, charcoal, bellows, pincers, crucible, stove and hammers, having his hands and cloth dirty with ashes and smoke or possessing such other accessory instruments.

Yaṃ vā nānālohakṣārāṇām aṃgāra-bhastra-saṃdaṃśa-mūṣikādhikaraṇīvitaṃkamūṣāṇāmabhīkṣṇaṃ kretāraṃ mūṣī-bhasmadhūmadigdhahastavasuliṅgaṃ karmāropakaraṇasaṃ-vargaṃ kūṭarūpakārakaṃ manyeta.

He may be betrayed by a spy getting into apprentice-ship under him. The culprit is to be banished. The same procedure and penalty is prescribed against the dealer of counterfeit gold who lowers its quality with alloy (rāgasyāpahartā kūṭasuvarṇavyavahārī). To utter a counterfeit coin into the treasury entails death sentence, and to deal with it, a fine of 1,000 *paṇa*s (IV. 1, Munich MS.). According to Bṛhaspati forgers of gems, pearls or corals are to be tested by oath or ordeal (X. 1 ; XXII. 14).

4. *Impostor*

Sharpers and swindlers (nekatikā, vañcanikā, Mil. 290) who lived by blackmail were not as rare, nor as easily let off, as Onesicritus would have. A typical one is the robe-tailor (cīvaravaddhako) who cheats buyers by bartering new cloth with rag-made robes which " after the dyeing was done, he would enhance in colour with a wash containing

flour to make a dressing, and rub it with a shell, till he makes it quite smart and attractive " (Jāt. I. 220). Manu is very elaborate on the ferreting out of and dealing with all kinds of cheats, both open and concealed (IX. 257-62). According to the Śāntiparva a sinful wight living by deceit is to be ostracised or killed at sight (109. 23).

5. *Sorcerer*

The impostor appeared under a special garb with his practice of black arts. A typical diviner was Vaṅgīsa, a Brāhmaṇa of Sāvatthi who used to divine by tapping a skull where its former occupant was re-born (Therag. 1209 ff. Com.). The Arthaśāstra narrates various practices of witchcraft and sorcery meant to blackmail the people (V. 2). There was, *e.g.*, the *kuhaka* and the *sambodhanakāraka* who can secure a woman's love with magical charms (IV. 4). Manu punishes sorcery with a fine of 200 *paṇa*s (IX. 290).

6. *Gambler*

Gambling in dice with jugglery and stakes (Jāt. VI. 280ff) was in high favour among all classes and it was the chief pastime in the palace (I. 289f), not excluding a pious king like Yudhiṣṭhira. Besides, there were habitual or professional gamblers (dhuttā, akkhadhuttā) in every city (Dn. XVII, i. 6, 29, 32; Mn. 87). Betting or wager over animal fights, races, etc., was another common custom. A Brāhmaṇa and a merchant bet to the tune of 1,000 pieces over the capacity of a draught bull (Jāt. I. 191f). There is a wager of 5,000 over a duel between a snake and a frog. One of the betters demands and obtains a surety (paṭibhoga) from his opponent (VI. 192). Aelian says that in the ox-race where an ox is yoked to a chariot between two horses, rich men and owners of oxen heavily betted and even the spectators against each other (XV. 8).

The evils of gambling and the deterioration in social status of the addict (of course when he was a small fry) are constantly harped upon by saner counsel. According to a discourse of Buddha the addiction (jutappamādatthānānuyoga) is one of the six channels of dissipating wealth and is accompanied by six dangers. "As winner he (the gambler) begets hatred ; when beaten, he mourns his wealth ; his actual substance is wasted ; his word has no weight in a court of law ; he is despised by friends and officials ; he is not sought after by those who would give or take in marriage, for they would say that a man who is a gambler cannot afford to keep a wife" (Dn. XXXI. 7, 11). The economist's sermon goes : "The same wealth that is won like a piece of flesh in gambling, causes enmity. Lack of recognition of wealth properly acquired, acquisition of ill-gotten wealth, loss of wealth without enjoyment, staying away from answering the call of nature and contracting diseases from not taking timely meals are the evils of gambling." Again, "gamblers always play even at night by lamp-light, and even when the mother (of one of the players) is dead ; the gambler exhibits temper when spoken to in times of trouble" (Arth. VIII. 3). Gamblers and keepers of gambling dens are sources of disorder to the state (Mbh. XII. 88. 14).

To maintain law and order, to check dissipation and deterioration of public morals, state regulation of gambling was called for. The state had further motives, the primary one of drawing a good revenue and accessory purposes like detection of crime. This means that it had its own gambling houses and that it levied from players a license fee, hire charge and share of the wins; it issued license to private dens for a heavy fee and tax on the owner; and it uprooted all unlicensed gambling with a firm hand.

According to the Mṛcchakaṭika, gambling houses (tentaśāla) licensed by the state were a feature of big towns.

In the Arthaśāstra the state itself carries on a lucrative traffic and centralises gambling through a Superintendent (dyūtādhyakṣo dyūtam ekamukhaṃ kārayet). The Superintendent levies 5 per cent. of stakes won, hire for supplying dice and other accessories, fee for supplying water and accommodation and license fee (karmakraya, II. 20). Bṛhaspati approves gambling and bets on prize fights (samāhvaya) with animals like birds, rams, deer, etc., because they serve the purpose of discovering thieves (XXVI. 2f). "The keeper of the gambling house shall receive the stakes and pay the victorious gambler and the king; he shall also act as witness in a dispute, assisted by three other gamblers" (*ib.* 8). Nārada has the same view on these institutions and adds that the keeper shall conduct the contests, pay the stakes won and get a profit of 10 per cent. on the wins (XVII. 1f; *cf.* Āpas. II. 10. 25. 12f; Yāj. II. 199f). As for private-owned dens, since the king is entitled to a share, licensing is necessary (Nār. XVII. 7f; Yāj. II. 201, 203; Śukranīti, I. Vv. 603-608). Only Manu wants gambling (dyūta) and betting (samāhvaya) to be extinguished, root and branch, and the gambler banished from the town (IX. 221-225).

7. *Tavern-keeper*

According to the Greeks the Indian diet was distinguished by the absence of wine which they took only in religious ceremonies; but rice beer was generally drunk (Str. XV. i. 709). The former part is borrowed from legal injunction or from those who observed it, the latter from a more popular practice. The drunkard (soṇḍa) appears in the city side by side with the gambler (Dn. XVII. i. 6, 29, 32) dissipating wealth with the attendant six dangers (XXXI. 7f) and visiting the distiller or tavern-keeper (śauṇḍikāḥ, Rām. II. 83, 15; pānāgārika, Jāt. V. 13)

who prepares and caters a large variety of intoxicating liquors (sura-meraya-majja, Dn. XXXI. 7). The Arthaśāstra enumerates a long list (II. 25). Viṣṇu knows of thirteen, *viz.*, that distilled from sugar; *mādhvī* wine, that from flour, *mādhuka* wine, that from molasses, from the fruits of the Ṭaṅka tree, of the jujube tree, of the date-palm, of bread-fruit tree, from wine grapes, *mādhvīka* wine, *maireya* wine and the sap of cocoanut tree (XXII. 82f). According to Manu, *surā* is of three kinds—that distilled from molasses (gauḍī), that distilled from ground rice, that distilled from *madhuka* (mahuā) flowers (Kullūka) or from honey (Medhātithi) or from flower, honey and grape (Nārāyaṇa) (mādhvī, XI. 95). According to the same commentators, *vāruṇī* is a special quality of *gauḍī* and *mādhvī* (XI. 147). In popular parlance such technical distinctions were not always observed and *surā* and *vāruṇī* appear as of entirely different qualities. "A trader in spirits (vāruṇī-vaṇijo) having prepared fiery spirits (tikhiṇā-vāruṇī) and selling them, having received gold *suvaṇṇas*, etc., a number of people being gathered together (at the shop), he went in the evening to bathe, bidding his apprentice (antevāsika) in these words: "My man, do you, having taken the price (mūlaṃ), give the spirits" (Jāt. I.251).[1] This shows the popularity and dearness of *vāruṇī* especially of the strong brand in comparison with the *surā* which could be bought for a copper coin (I. 350).

The tavern was not only the main attraction for the dissipation of the wealthier classes, it was the breeder of crimes and the favourite haunt of criminals (V. 13). Cut-throats and thieves, after finishing their operations indulge in drinking bouts (II. 417, 427). Two tipplers drug spirits to rob the drunkards (sāvatthiyaṃ surādhuttā sannipatitvā mantayiṃsu, I. 269). With the gambling house, the

[1] See the redering by Mrs. Rhys Davids in J. R. A. S., 1901, pp. 876f. fn, as opposed to Chalmers' in the Cambridge Edn.

brewery appears as a centre of civil disorder (Mbh. XII. 88. 14). Hence sale of liquor is among disreputable professions (295. 5f) and the seller is to be banished by the king from his town (Manu, IX. 225).

As a matter of fact such stern measures were very rarely taken. For like the gambling house, the tavern yielded profit and could be similarly used as a tool for espionage. The village lord who mourns the loss to his perquisites by the abstemious habits of his folk (Jāt. I. 199) may well have taken his cue from the state, and the other who forbids the sale of liquor in his village was a rare one in his class as examplar of Buddhist piety (IV. 115). All the state (or its agents and parallels) did was to restrict or monopolise the traffic. In the Arthaśāstra the state itself is the biggest wine merchant. Others carrying on the trade have to obtain license and pay a heavy toll. Drinking is strictly regulated and is not allowed outside the booths which are set up at big intervals. State shops also serve as auxiliary to the espionage system (II.25). According to the Śukranīti the drinking house has to obtain king's license (I. v. 604).

8. *Brothel-keeper*

With the brewery, the brothel was in happy company with its brood of crimes and criminals (Mbh. XII. 88. 14). The pimp (strīvyavahārī) trading with the virtues of woman (Arth. II. 27 ; kuṇḍāśī, Mbh. XIII. 90. 7) and keeper of dancing girls (vaidehaka, raṅgastrījīvī, Mbh. XII. 37. 31) thrived eminently as parasite professions spreading crime and disease, bringing income to the state and serving as agents of the police.

9. *Prostitute*

The prostitute was the nadir of the underworld in whom all the vices and vicious institutions converged. She might

belong to different scales according as she was the *nagarasobhanā* or *gaṇikā* or as she was a *vaṇṇadāsi* (Jāt. II. 367ff). The former was the chief courtesan, literally 'the beauty of the town,' surrounded by a retinue of harlots in her establishment (Sulasā nāma nagarasobhani pañcasata-vaṇṇadāsi parivārā ahosi, III. 435). The courtesan Kali had a similar retinue (IV. 248). Ambapālikā of Vesāli and Sālavati of Rājagaha belonged to this rank (Mv. VIII. 1-3). The 500 *vaṇṇadāsis* and the 16,000 dancing girls (soḷasahassā nāṭakitthiyo) in the king's suite (III. 365; V. 190, 486) were of the same plebeian category. The Arthaśāstra classifies *gaṇikās* into those attached to royal court and public prostitutes (II. 27).

The customary fee for the chief courtesan of the town is 1,000 *kahāpaṇas* for a visit or a night (III. 59, 435, 475; IV. 248). The Arthaśāstra fixes 1,000 *paṇas* as the salary of the chief courtesan in king's service, probably per mensem. But this is only a conventional sum. Ambapālikā charges 50 for one night and Sālavati 100 (Mv. VIII. 1,3), we do not know whether in silver, gold or copper pieces. At the bottom of the scale, the lowest fee was a piece of betel (tāmbulamattaṃ, II. 309, 379).

Further glimpse is obtained from the Jātakas, into the customs, manners and morals of the ill-famous houses. The fashion in the quarter of Kali was that out of the 1,000 pieces received, 500 were for the women, 500 the hire charge of clothes, perfumes and garlands. The visitors received and put on garments for the night, the next day donned their own and went away.

Tasmiṃ pana gaṇikāghare idaṃ cārittaṃ: ābhataṃ sahassato, pañca satāni gaṇikāya honti, pañca satāni vatthagandhamālāmūlaṃ honti, āgatapurisā tasmiṃ ghare laddhavatthāni nivāsetvā rattiṃ vasitvā punadivase gacchantā nivāsetvā ābhatavatthān'eva nivāsetvā gacchanti. IV. 249.

Another is very strict about her fees. A merchant's son spends on her 80 crores of money, yet one day when he comes empty-handed he is cast out by the neck (III. 475). On the other hand the prostitute had her own codes of professional morality. Her code of honour dictates that after receiving contract from a suitor, she must not go with another for any offer. A prostitute, true to this standard, is an exemplar of Kuru piety and enunciates this in accordance with the ethics of her profession (II. 379). Another had fallen from better days because the lesson was lost upon her. "She used formerly to take a price from the hand of one not to go with another until she had made him enjoy his money's worth, and that is how she used to receive much. Now she has changed her manner and without leave of the first she goes with the last, so that she receives nothing, and none seeks after her. If she keeps to her old custom, it will be as it was before."

Sā gaṇikā pubbe ekassa hatthato bhatiṃ gahetvā taṃ ajīrāpetvā aññassa hatthato na gaṇhāti, ten' assā pubbe bahuṃ upajji idāni pana attano dhammataṃ vissajjetvā ekassa hatthato gahitaṃ ajīrāpetvā va aññassa hatthato gaṇhāti, purimassa okāsaṃ akatvā pacchimassa karoti, ten' assā bhati na uppajjati, na keci naṃ upasaṃkamanti, sace attano dhamme ṭhassati pubbe sadisā va bhavissati, II. 309.

In certain passages, a prostitute's profession appears as the meanest of vocations. One of the class wails: ahaṃ hi nagare pāṭaliputte gaṇikā rūpūpajīvim antimajīvikā (Mil. 122). Sāmā knows that inspite of her rate of 1,000 she is hated for her vile trade (nīcakammaṃ, Jāt. III. 60). But these give a partial view of the social psychology. The reputation of Videha was as much in its 16,000 girls as in its 16,000 villages and storehouses (III. 365; V. 190). The chief courtesan was the pride of the city, the focus

of its aesthetics, as Sulasā was of Bārāṇasi, Ambapālikā was of Vesāli and Sālavati was of Rājagaha.

"There was also the courtesan Ambapālikā who was beautiful, graceful, pleasant, gifted with the highest beauty of complexion, well-versed in dancing, singing and lute-playing, much visited by desirous people. She asked 50 for one night. Through her Vesāli became more and more flourishing."

Ambapālikā gaṇikā abhirūpā hoti dassanīyā pāsādikā paramāya vaṇṇapokkharatāya samannāgatā padakkhimā nacce ca gīte ca vādite ca abhisaṭā atthikānaṃ manussānaṃ paññāsāya ca rattim gacchati tāya ca vesālī bhiyyosomattāya uposobhati. Mv. VIII. 1.

Finding Rājagaha outdone by Vesāli Seniya Bimbisāra installed a beautiful and accomplished girl Sālavati as courtesan, through whom Rājagaha gradually flourished. She charged 100 for one night (*ib.* 3). The chief courtesan of the state, according to the Arthaśāstra, is selected with sole consideration to beauty and accomplishments and she is trained up to all the artistic and musical proficiencies (II. 27).[1]

Of course the state was interested in the traffic. It had use both for the glamorous nymph and for the street girl. They attracted rich men and, with them, business and prosperity. They were employed for sundry purposes. The king of Aṅga enticed the young recluse Ṛṣyaśṛṅga by means of a troupe of courtesans (Rām. I. 11). They formed an important part in the ceremonials. The *gaṇikās* along with ministrels and instrument-players are to go out and receive Rāma on his return from exile (VI. 129. 3). "They shall pay every month twice the amount of a day's earning to the government." Above all they are the most effective agents of the secret police (Arth. II. 27).

[1] The *gaṇikā* of the Arthaśāstra and the Kāmaśāstra resembles very much the Japanese Geisha, the cultured society girl trained in the arts of entertainment.

Such was the vicious circle of outlaws and undesirables of society, the *gūḍhājīvīs* who are to be suppressed with fines, banishment, espionage and torture (Arth. IV. 5, 6, 8). The bandit, the cut-throat, the swindler, the gambler and the debauch were bedfellows of the underworld and their rendezvous were the tavern, the brothel and the gambling den. The oft-quoted trio—wine, women and dice—were centres of crime and civil disorder (Sut. 106; Rām. II. 70. 41; Mbh. III. 13. 7; XII. 59. 60; 88. 14; 93. 17). The civil authority took little pains to wipe out these plague-spots. While crimes of violence (sāhasa) were dealt with a ruthless application of *lex talionis,* crimes of immorality were connived at for the sake of revenue and the vicious purposes of an unscrupulous secret service. The state had yet to learn the chaplain's maxim that crime cannot be controlled by taxation and torture and that institutions thriving upon public immorality undermine the basic fabric of the state.

BOOK VI

SOCIAL PHYSIOGNOMY

Sa kho so, bhikkhave, bālo sace kadāci karahaci dīghassa addhuno accayena manussattaṃ āgacchati, yāni tāni nīcakulāṃ caṇḍālakulaṃ vā nesādakulaṃ vā veṇakulaṃ vā rathakārakulaṃ vā pukkusakulaṃ vā—tathārūpe kule paccājāyati daḷidde apannapānabhojane kasiravattike, yattha kasirena ghāsacchādo labbhati. So ca hoti dubbaṇṇo duddasiko okoṭimako bavhābādho kāṇo vā kuni vā khañjo vā pakkhahato vā, na lābhī annassa pānassa vatthassa yānassa mālāgandhavilepanassa seyyāvasathapadīpeyassa ; so kāyena duccaritaṃ carati vācāya duccaritaṃ carati manasā duccaritaṃ carati ; so kāyena duccaritaṃ caritvā.....kāyassa bhedā param maraṇā apāyaṃ duggatiṃ vinipātam nirayaṃ upajjati : .....

Sa kho so, bhikkhave, paṇḍito sace kadāci karahaci dīghassa addhuno accayena manussattaṃ āgacchati, yāni tāni uccakulāni—khattiyamahāsālakulaṃ vā brāhmaṇamahāsālakulaṃ vā gahapatimahāsālakulaṃ vā—tathārūpe kule paccājāyati aḍḍhe mahaddhane mahābhoge pahutajātarūparājate pahutavittūpakaraṇe pahutadhanadhāññe ; so ca hoti abhirūpo dassanīyo pāsādiko paramāya vaṇṇapokkharatāya samannāgato, lābhī annassa pānassa vatthassa yānassa mālāgandhavilepanassa seyyāvasathapadīpeyyassa ; so kāyena sucaritaṃ carati, vācāya sucaritaṃ carati, manasā sucaritaṃ carati ; so kāyena sucaritaṃ caritvā.....kāyassa bhedā paraṃ maraṇa sugatiṃ saggaṃ lokaṃ upajjati.

—Bālapaṇḍitasutta, Majjhima-nikāya.

A fool, should he become a human being after the lapse of a very long time, he comes into one of the low stocks—caṇḍālas, nesādas, veṇas, rathakāras and pukkusas, he is reborn to a life of vagrancy, want and penury, scarce getting food and drink for his stomach or clothes to his back.

He grows up ill-favoured and unsightly, misshappen, a weakling, blind or deformed, or lame or a cripple; he gets no food, drink and clothes, nor carriage, garlands, scents and perfumes; he misconducts himself in act, word and thought; his misconduct brings him at the body's dissolution after death to a state of misery and woe or to purgatory.....

A wise man, should he become a human being after the lapse of a very long time, he comes into one of the high stocks,—Khattiyas, Brāhmaṇas or Gahapatis, he is reborn to a life of affluence, riches and wealth with abundance of gold and coins of silver, and with abounding substance and abounding possessions. He grows up well-favoured and well-looking, with lovliest complexion, with plenty of food and drink and clothes and carriages and garlands and scents and perfumes; he conducts himself aright in act, word and thought and his right conduct brings him at the body's dissolution after death to well-being and satisfaction in heaven.

CHAPTER I

Slave Labour

Origin : Prisoner of war. Inherited. Born. Purchased. Gift. Mortgaged. Judicial punishment. Apostate. For food. Debtor. Voluntary. By wager. Growth of slavery. Manumission.

Functions : Personal attendance. Domestic service. Industrial establishments. Working for hire. Prostitution of female slaves.

Code of relation. Legal position. Social position.

Actual treatment : Chain and whip, ' Slave's fare.' Run-away slave. Freed slave.

The slave and the slave class. The Ārya slave and the Śūdra slave. Indian and Western slavery.

Origin.

'Dāsa,' the Indian word for a slave is used in the Ṛgveda synonymously with 'dasyu' in the sense of enemies of the Aryans (V. 34. 6; VI. 22. 10; 33. 3; 60. 6; VII. 83. 1; Av. V. 11.3). The *dāsavarṇa* (Ṛv. I. 101. 1; 130.8; II. 12.4; 20.7 ; IV. 16. 13 ; VI. 47. 21 ; VII. 5. 3) and *āryavarṇa* (III. 34. 9) allude to the aborigines and the Aryan invaders with reference to their respective complexions.[1] The difference in religion between the two sets of people is also very frequently noted (I. 33, 4f ; IV. 16. 9 ; V. 7. 10; 42. 9 ; VI. 14. 3 ; VIII. 70.10; X. 22. 7f). These conquered aboriginals must have often been reduced to slavery and hence the new application of the word 'dāsa' in the sense of a slave (VII. 86.7; VIII. 56. 3; X. 62. 10; Av. IV. 9. 8 ; Ch. Up. VII. 24. 2). In the Atharvaveda 'dāsī' is used in this sense (V. 22. 6; XII. 3. 13; 4.9; Ch. Up. V. 13.2; Bṛ. Up. VI. 1.10). "Aboriginal women no

[1] This is sometimes directly mentioned : 'Kṛṣṇa tvac,'– Ṛv. I. 130.8; IX. 41.1 ; 'svitnya,'—I. 100. 18 ; 'ahorātra' as analogous to 'śūdrāryau,' not of course in direct order—Vāj. Saṃ. XXIV. 30. *Cf.* in the Majjhima (93)—'d'eva vaṇṇā ayyo c'eva dāso ca' in the Yono and Kamboja countries.

doubt were the usual slaves, for on their husbands being slain in battle they would naturally have been taken as servants.''[1]

Thus in India, as elsewhere, slavery originated from the earliest laws of war. '' The vanquished is the victor's slave—such is the law of war '' (Mbh. IV. 33.59f).[2] Those made captive under a standard are among the different types of slaves enumerated in Manu, the Arthaśāstra and Nārada (dhvajāhṛta, —Manu, VIII. 415; Arth. III. 13; Nār. V. 27). Prisoners captured in raids are one of the three varieties known in the Vinaya-piṭaka (karamarānito, BhikV-Saṃ. 1.2.1). In the Jātakas brigands are seen harrying a border village and going off with their prisoners (coresu paccantagāmaṃ paharitvā karamare gahetvā gacchantesu, III. 147; IV. 220). In the Mahāsutasoma Jātaka, Sutasoma is afraid that Brahmadatta of Benares would enslave the captured princes.[3]

1. Prisoner of war.

These people, if they happened to survive their master, did not recover their freedom but were handed down to the legitimate heir along with other properties of the master. This is another variety of slave noticed by the law-givers (paitṛka,—Manu; dāyāgata,—Arth., Nār.) and the practice is fully borne out by other evidences.

2. Inherited.

The child born of a female slave in the house of a master became a slave to the same master. This is alluded to as *gṛhaja* or *udaradāsa* in Manu, the Arthaśāstra and Nārada and as *antojāto* in

3. Born.

[1] Macdonell and Keith : *Vedic Index*, Vol. I, p. 357.

[2] In the same vein the Pāṇḍavas speak to the captive Jayadratha in the Vanaparva.

[3] Among the four kinds of slaves enumerated elsewhere appear those driven by fear (bhayā panunnāpi. Jāt. VI, 285). Perhaps in those times and places when and where aggression and brigandage were not uncommon, the weaker people occasionally sought a benevolent and powerful master for protection against ' the laws of the jungle.'

the Vinaya passage. Vidura the king's councillor enumerates this among the four kinds of slaves (amāyadāsa,—Jāt. VI. 285) and he himself is a specimen. The Jātakas give other instances of 'home-born' slaves (I. 452; VI. 110).

4. Purchased.

We came to a later stage of development when slaves could be purchased for money (krīta,—Manu, Arth., Nār.; dhanakkito,—Vin. dhanena kita,—Jāt. VI. 285). In the Jātakas 'satena kitadāsa' is a stock phrase indicating that 100 *kahāpaṇa*s is the conventional price of a slave (I. 224, 299). 700 *kahāpaṇa*s are "enough to buy slaves male and female" (alaṃ me ettakaṃ dhanaṃ dāsidāsamulāya, III. 343).

5. Gift.

Manu and Nārada recognise slavery by gift. In the Vessantara Jātaka an exiled prince gives away his wife and children to a suitor (VI. 546). Such pious demonstrations were undoubtedly rare.

6. Mortgaged.

According to the Arthaśāstra and Nārada one could be pledged or mortgaged to slavery. The state of mortgage continued till the debt was cleared. Of course the sale, gift or mortgage was open only to the rightful owner of a person, *i.e.*, to the master of a slave, to a husband, to a father or to kinsmen of a minor.

7. Judicial punishment.

Perhaps a farther stage is revealed with enslavement by judicial punishment. This practice does not appear in the lists of Vinaya or of the Vidura-paṇḍita Jātaka. Manu refers to it as 'daṇḍadāsa' and the Arthaśāstra as 'daṇḍapraṇīta.'[1] The commentators on Manu explain it as "because one cannot pay a debt or a fine." The Arthaśāstra lays down that a person enslaved by court decree

[1] *Cf.* daṇḍapratikartṛ, II, 24.

shall earn that amount by work (daṇḍapraṇītaḥ karmaṇā daṇḍamupanayet), *i.e.*, the culprit must earn and pay by hard labour the fine he is sentenced to. It is not made clear in any of the two passages whether this service is to be rendered to the state or to the sufferer. This form of penal servitude was certainly temporary expiring as soon as the fine or decree was worked off. But in the Jātakas there are instances of 'life sentence' too. In the Kulāvaka Jātaka a *gāmabhojaka* is reduced to slavery by the king's decree for bringing malicious charges against his people (I. 200). In the Mahā-ummagga Jātaka the king commutes death-sentence of four mischievous councillors and condemns them to slavery (VI. 463).

8. Apostate.

Nārāyaṇa and Nandana extend the *daṇḍadāsa* of Manu to include those who are sentenced to slavery for leaving a religious order. Viṣṇu emphatically declares: "An apostate from religious mendicity shall become the king's slave" (V. 152). According to Nārada such an apostate is never to be emancipated (V. 35; Yāj. II. 183). But we have no concrete instances of such measures in the Jātakas. Obviously these pious rules were difficult to enforce and they reflect only a growing tendency against which the law-givers strove in vain.

9. For food.

Manu and Nārada specify slaves serving for food. Nārada says that this type of slave is released on giving up the subsistence. But this being the condition his status differs very little from the labourer working for hire and paid with food (bhataka). Apparently the status of slavery was sometimes preferred by a pauper to that of a hireling whose position, it will be seen, was sometimes worse than that of his brethren.

It is clear that as want and starvation became acute, people sold their freedom for maintenance. Nārada's list

accordingly includes one taking to bondage for food in time of famine.

From Nārada it appears that a debtor might have had to serve his creditor as slave until the payment of the debt with interest (V. 33). Theri Isidāsī, born as daughter of a poor carter, heavily encumbered with debts, was carried off as slave by a merchant in lieu of interest.

10. Debtor.

kapaṇamhi appabhoge dhanikapurisapātabahulamhi[1] 443
taṃ maṃ tato satthavāho ussannāya vipulāya vaḍḍhiyā[2]
okaḍḍhati vilapantiṃ acchinditvā kulagharassa 444
—Therigāthā

From the commentatorial note on ' daṇḍadāsa ' in Manu it appears that this service might also be exacted *in lieu of* a debt (also Mbh. XII. 109. 18).

Voluntary enslavement is noticed in the Arthaśāstra (sakṛdātmādhatā) and in Nārada. It is referred to also in the Sumaṅgala Vilāsinī (I. 168) and in the Vidura-paṇḍita Jātaka (sayaṃ pi upayanti dāsa). The motives of such self-degradation might be manifold. It might be done as penance (Jāt. VI. 87). It might be done to save somebody else's life or freedom (VI. 135). Evidently such cases were rare.

11. Voluntary.

' Won through wager ' is another kind of slave in Nārada. In the Majjhima nikāya there is a passage which says that a gambler by throwing a low cast with the dice loses son, wife, all his possessions and finally goes himself into bondage (129). One is immediately reminded of the classic (but by no means solitary) instance of Draupadī in the notorious dice contest in the Mahābhārata (*cf.* I. 16. 20).

12. By wager.

[1] iṇāyikānaṃ purisānaṃ adhipatanabahule bahūhi iṇāyikehi abhibhavitabbe. Paramatthadīpanī.

[2] iṇavaḍḍhiyā. *Ibid.*

There might be other ways of reduction to slavery. The Magadhans once under a spell of pestilence are seen offering to be Jīvaka's slave if he cured them (Mv. I. 39). One marrying a female slave becomes a slave according to Nārada.[1] It is interesting to note how with the advance of time and crystallisation of social institutions slavery became more and more institutionalised and its forms and varieties increased. At first, in the Vedic literature it was only the captive in war. The Vinayapiṭaka gives a list of three, th : Vidura-paṇḍita Jātaka in its verse four. In Manu the list is widened to seven, the Arthaśāstra evinces the nowledge of eight varieties leaving others unspecified, and as we come down to Nārada we are presented with a still wider list of fifteen.

13. Miscellaneous growth of slavery.

The rigidity of the institution however did not mean 'once a slave, always a slave.' There were provisions for redemption and manumission was not unknown. A pledge or mortgage was recovered on clearance of debt (Arth., Nār.). One condemned for debt or with fine was free as soon as it was paid or worked off. One enslaved for subsistence or for a stipulated period attained freedom on termination of the condition. The Arthaśāstra enjoins, and the Vessantara Jātaka shows that a slave could be released if somebody paid his price fixed at the time of sale or bequest. The exiled prince who gave away his children as slaves, put a price on them "as one puts a price on cattle" (goṇe agghapento viya taṭṭh'eva ṭhito kumāre agghāpesi). Eventually the grandfather of the children paid their price and procured their immunity (VI. 546f). According to Nārada one who saves his master's life in peril is entitled to liberty (V. 30). One made captive in fight, one won through wager and one voluntarily enslaved

Manumission.

[1] Nārada's list also contains 'one enslaved for a stipulated period' and 'one self-sold.' The significance is not made clear.

are to be released on giving a substitute of equal capacity (Nār, V. 34);[1] the husband of a female slave on parting with his wife (36).

But the commoner means of freedom was voluntary manumission given by the owner as an act of grace. This was open to all the varieties of slaves (Nār. V. 29). A slave girl brings to the housewife the happy tidings of arrival of her son who had turned a recluse and is promised manumission in a fit of ecstacy (Mn. 82). A master freed his slaves on the eve of renunciation (Jāt. V. 313). Kaṭāhaka, the runt way slave was traced but freed by his master (I, 451ff).

Function.

"The work which the slaves had to do was naturally extremely manifold and differed with the social position of the master and the intelligence of the slave."[2] Kaṭāhaka was employed as store-keeper (bhaṇḍāgārikakammaṃ karonto) and Nanda was appointed by his master the guardian of his hidden property on behalf of his son. High-born and accomplished slaves to the king held high offices going up to the position of his councillor. As a rule however the work of the slave was of a lower nature.

Personal attendance.

To take care of the master's household, to attend to his body, to prepare his food and serve the dinner, these were the commonest functions of a domestic slave. The slave Piṅgalā washed the feet of her master and the family before they retired to bed at night and even after that she sat on the door-sill to await the master's pleasure (Jāt. III. 100). With considerable detail, Kaṭāhaka describes the *dāsakammaṃ*,—how he would set the dishes, place the spitoons, look to the drink

[1] A rule the observance of which was very doubtful. *Cf.* the case of Draupadī.

[2] Fick, *op. cit.*

and fetch the fan and how he would minister to the master when he retired (I. 453). Among the 'impure work' which is reserved for slaves according to Nārada is 'rubbing the master's limbs when desired' (V. 7). They served also as bathing attendants (*ib.* 6; Arth. III. 13; Jāt. I. 383).

Domestic service.

Apart from personal attendance, the domestic slave did all other menial work of the household. A very common function of a female slave is pounding and winnowing of rice (I. 248; II. 428; III. 350) and spreading out the rice in the sun (I. 484). He or she is also seen clearing the leavings of food (Nār. V. 6; Jāt. IV. 145); sweeping the yards and stables (Nār. V. 5; Jāt. VI. 138); cleansing the bathing tank (Jāt. I. 484); fetching water (V. 284, 412); going on errands (I. 350).

Industrial and Agricultural establishments.

Generally female slaves were maintained for domestic work. All the cases cited above except Kaṭāhaka (and Jāt. I. 350) were women (also Mn. 82). For outdoor work men were employed. The king's slaves served in the industrial and agricultural establishments of the state (Arth. II. 24) or fought in his array (Rām. II. 84. 7; Jāt. V. 412); private slaves plied in the big and small agricultural estate and industrial enterprise.

Hiring out of slaves.

The institution of slavery was not as innocent as it would appear from the functions of a slave enumerated above. In the Nāmasiddhi Jātaka is a scene of a master and a mistress beating their slave for she had not brought home her wages (ekaṃ dāsiṃ bhatiṃ adadamānaṃ, I. 402). It would appear that the master might let out the services of the slave on hire and thus make a profitable business out of him or her, since the slave had no right to earn and own property. In the *paccupannavatthu* of the Māṃsa Jātaka even the slaves of *bhikkhu*s go to town to get dainty fare for their sick masters (III. 49).

Prostitution of female slaves.

Another evil feature was that the female slaves were very often kept for enjoyment, avowed or surreptitious. Sometimes it is difficult to demarcate them from prostitutes and concubines. In the primitive concepts of social ethics this was the natural destiny for the wives and daughters of one slain in battle or made captive in war. Instances of slave women bearing child to their masters come from the later Vedic literature down to the Arthaśāstra and the Jātakas (Ait. Br. II. 19; Kauṣ. Br. XII. 3; Arth. III. 13; Jāt. IV. 145, 298). The king's female slaves are to serve as bath-room attendants, shampooers, bedding room servants, washer-women and flower garland-makers (snāpaka-saṃrāhak'-āstaraka-rajaka-mālākārakarma dāsyaḥ kuryuḥ, Arth. I. 21). Prostitutes and female slaves incapable of providing enjoyment to king (bhagnabhogā) are to be employed in the stores or kitchen. Female slaves are trained along with royal prostitutes in the arts of entertainment and feminine wiles (II. 27). In the public taverns it was not an extraordinary spectacle to find a *dāsī* with blooming youth and beauty (peśalarūpā) lying in intoxication with her master (II. 25). This was the natural social consequence emerging out of the maintenance of large number of women slaves within the household.[1]

Code of treatment.

The code of treatment of a slave by a master and of reciprocal duties and relations as formulated in didactic pieces is fairly enlightened and high. In the words of Buddha slaves and servants form the nadir (heṭṭhimā dīsā) among the six quarters that the Aryan master has to protect; and (1) he assigns

[1] It might of course happen, although very rarely, that a master gives the status of wife or daughter-in-law to his female slave (Amba-Pv. Com. IV. 12; Therig., 445). On the reverse the Jātakas furnish instances of the master's wife and daughter falling in love with or marrying their male slave.

them work according to their strength (yathābalaṃ kammanta-samvidhānena), (2) supplies them with food and wages (bhatta-vetanānuppadānena), (3) tends them in sickness (gilānu paṭṭhānena), (4) shares with them unusual delicacies (acchariyānaṃ rasānaṃ samvibhāgena), (5) grants leave at times (samaye vossaggena).[1] The slaves and workmen respond to such good ministration in five ways : (1) they rise before him, (2) they lie down to rest after him, (3) they are content with what is given to them, (4) they do their work well, (5) they carry about his praise and good fame. (Dn. XXXI. 27). Aśoka exhorts the proper treatment of slaves and hirelings along with friends and relatives as consonant with *dhamma* (R. E. XIII). According to Manu, the master's duty is to give funeral *piṇḍa* to the sonless slaves and to maintain them when old and weak. The Śūdra, on the other hand, must never leave his master whatever may be his sufferings. He should maintain his master besides his own family when the latter suffers a loss of wealth (dravya-parikṣaye, XII. 60. 35f). He stands in respectable company with parents, brother, children, daughter-in-law and female relatives of his master with whom a Snātaka should never have quarrels (IV. 180). A slave is as one's shadow whose offence the master should bear without resentment as of his brother, wife, son and daughter (IV. 184f). According to the Arthaśāstra those who do not heed the claims of their slaves, hirelings and relatives shall be taugnt their duty (II. 1).

Legal disabilities.

The fundamental fact of the legal position of the slave was his complete loss of *persona*. He was the master's chattel as much as oxen, buffaloes, gold and silver (Jāt. I. 341), or as oxen, gold, garments, sandāl-wood, horses, treasures, jewels, etc. (V. 223). The master had the right to recover him if he ran

[1] Constant relaxation so that they need not work all day, and special leave with extra food and adornment for festivals, etc,—Buddhaghosa, *Cf.* Jāt. III. 435.

away (I. 451, 458) or disposed himself to another master (Nār. V. 40). He had the right to make a bequest of him to another (Jāt. VI. 138). He was just as Vidura, the councillor, describes himself. : " I am a slave from my birth; my weal and woe come from the king, I am the king's slave even if I go to another, he may give me by right to thee. "

Addhā pi yonito ahaṃ pi jāto
bhavo ca rañño abhavo ca rañño
dās'ahaṃ devassa paraṃ pi gantvā
dhammena maṃ māṇava tuyhaṃ dajjā ti,
VI. 285

As will be seen below the master could take the life of his slave with impunity.

A slave can have no property (Manu, XII. 60. 37; VIII. 416f), *i.e.*, he cannot earn money by working for others (adhigacchanti parakarma-karaṇādinā,—Nārāyaṇa). Whatever he earns belongs to his master (Mbh. I. 82. 22ff; V. 33. 63; Nār. V. 41). The doors of the Saṃgha were closed to him (Mv. I. 46). He could not enter an agreement unless authorised (Arth. III. 1). He could not stand as witness except in case of failure of qualified witnesses (Manu, VIII. 66, 70).

Social disabilities.

These legal disabilities do not discord with the idealised relation between a master and a slave outlined above which ignores any right on behalf of the slave. Nor does his inferior social status. In Manu and in the Śāntiparva (242. 20) he appears as an integral part of the master's family, [1] deserving of treatment similar to the members of the household. If a slave sometimes figures in the less respectable company of cows, mares, she-camels, she-buffaloes, she-goats and ewes (of which the issue belongs to the owner of the mother,—Manu,

[1] Also Mbh. V. 23. 15; 30. 39; Jāt. II. 428; III. 167.

IX. 48; *cf.* Jāt. I. 341; V. 223), this is no paradox. For the *magna familia* of the Aryan householder embraced within its fold these domestic animals as much as the slaves. Animals had as much claim to kind treatment as slaves (Aśoka's R. E. XIII) and neither had the social status of the other members of the family. This is shown in characteristic fashion in the Nānacchanda Jātaka. Puṇṇā, the female slave is offered a boon along with the master, the mistress, the son and the daughter-in-law. While they ask for a village, 100 milch cows, a car and ornaments, she for a pestle, a mortar and a winnowing basket (II. 428).

This Puṇṇā receives from her master the epithet—'jammī,' meaning 'the low, contemptible.' 'Thou wilt be a slave,' is a serious form of curse (Mbh. I. 16. 19ff). *Dāsiputta* is a universal term of abuse (Jāt. I. 225; III. 233; IV. 41). King Vidudabha is insulted as the 'son of a slave-girl' even by a slave woman (IV. 145). Children of slave-girls by their masters did not get over this stigma.[1] Mahānāma the Sākya cannot dine with his daughter Vāsavakhattiyā by the slave Nagamuṇḍā. Bodhisatta, as king's chaplain, disports with a slave-girl, but cannot give his family name to the bastard born to him (IV. 298).

Treatment: chain and whip.

The legal and social position of the slave being what it was, his habitual lot was not to be petted and fondled like a foster child. The slave Kaṭāhaka learnt writing with his master and "two or three handicrafts (vohāre) and grew up to be a fair-spoken and handsome youngman' (vacanakusalo yuvā abhirūpo ahosi). Brought up in the refinements of his master's house, he could successfully pose abroad as his master's son. With a master like Bodhisatta such treatment is intelligible, but even with such a master, the slave could not escape the fear that "at the slightest fault

[1] Ait. Br. II. 19; Kauṣ. Br. XII. 8.

he shall be beaten, chained, branded and fed in slave's fare" (tāḷitvā bandhitvā lakkhaṇena aṅketvā dāsaparibhogena pi paribhuñjissanti, I. 451). It is wonderful that Mrs. Rhys Davids finds only two instances of actual ill-treatment in Buddhist literature, [1] the one where a slave tires the temper of her mistress by persistent late-rising and is struck in the head with a lynchpin causing bleeding (Mn. 21); the other where a girl is beaten with rope by her master and mistress for not bringing home her wages (Jāt. I. 402 f). In Buddha's discourse slaves and servants are said to be obeying the inhuman orders of a king harried by stripes and fears (daṇḍatajjitā bhayatajjitā. Mn. 51; Sn. I. 75). "Men acquire men as slaves and by beating, binding and by otherwise subjugating them make them work day and night. These people are not ignorant of the pain that is caused by beating and chains."

Mānuṣā mānuṣāneva dāsabhāvena bhuñjati
Vadhabandha nirodhena kārayanti divāniśam
Ātmanaścāpi jānāti yadduḥkhaṃ vadhabandhane,
Mbh. XII. 261. 38f.

The cruel master in the Vessantara Jātaka ties the hands of the boy and the girl with a creeper and holding it tight beats them and drives them on. "Where he struck them the skin was cut, the blood ran, when struck, they staggered against each other back to back" [2] (VI. 546f). In the Rajjumāla-vimāna (Vimānavatthu) occurs the doleful sketch of a maid-servant who was abused right and left and when she grew up, had a liberal deal of blows and fisticuffs. She was taken by the hair for slaps and kicks. She tried to escape with a shave but it made her lot worse. The mistress was aroused at her tonsured poll.

[1] Camb. His., Ch. VIII, p. 205.

[2] There is a perceptible element of exaggeration to make a perfect villain of the Brāhmaṇa and demonstrate the piety and fortitude of the prince who is a Bodhisatta.

She bound her head with a rope and pulled it down with a wrench whenever it pleased her fancy. The maid was thus nicknamed *rajjumāla*. Weary of her life she thought of deliverance by committing suicide in the jungle which was happily averted. Such apparently was the common lot of slaves as insinuated in Sakka's talk with a maid who would not weep at the death of her master's son. "You must have been oppressed, beaten and abused by him and therefore, thinking he is happily dead, you weep not" (Jāt. III. 167).

Nūna tvaṃ iminā pīḷetvā bādhetvā paribuṭṭhā bhavissasi, tasmā 'sumato-ayan' ti no rodasīti. The same treatment to a *dāsi* is echoed in the commentary on the Uraga-petavatthu, I. 12 :—

Yadi evam tena taṃ poṭhetvā veyyavaccakāritā bhavissasi tasmā maññe sumuttāhaṃ tena matenāti na rodasīti.

In both cases the insinuation is denied and in the Jātaka story, it is said that the young master was full of love and pity for his slave—'te samaggā sammodamānā piyasaṃvāsā ahesum.' But this was a Bodhisatta family and Sakka's words more correctly represent the standard.

The toll of misery did not always end with beating and binding or other ingenious device of torture. A *seṭṭhi*'s daughter is afraid that her father would cut her and her slave lover to pieces if he heard of their liaison (Jāt. I. 120). In the Nāgavimāna we read that the guard of a sugarcane field (ucchupālaka) in the employ of a Brāhmaṇa was clubbed to death by his master for having improvised a hut to accommodate some *bhikkhus* and given them canes to eat.

taṃ sutvā brāhmaṇo kupito anattamano taṭataṭāyamāno kodhābhibhūto tassa piṭṭhito upadhāvitvā muggarena taṃ paharanto ekappahāren' eva jīvitā voropesi (VvA. V. 12).

The servile class (dāsajāti) should be given by their masters used articles and torn clothes no longer fit for wear (adhāryāṇi viśīrṇāni vasanāṃ, Mbh. XII. 60. 33; Jāt. I. 371). Broken rice (kaṇājaka) and sour gruel were their habitual food (An. I. 145). 'A slave's fare' is a common phrase of abuse in the Jātakas (dāsaparibhoga, I. 451; 459). The Arthaśāstra gives a foretaste of this stuff when it says that bad liquor (duṣṭasurā) fit for selling at lower than standard price may conveniently go into the ration of slaves, hirelings or hogs and draught animals (II. 25). The slave was not even entitled to a square meal. He was to get provision in proportion to the work done (yathāpuruṣa-parivāpaṃ bhaktaṃ kuryāt, II. 24; *cf.* Jāt. III. 300).

'Slave's fare.'

That the slave's was not an enviable lot is also clear from the fact that freedom was highly prized [1] and that he sometimes ran away from his master's house (Jāt. I. 451, 458). Even the Arthaśāstra, which is otherwise so liberal, has to admit that a run-away slave forfeits the right of redemption.[2]

The run-away slave.

When a slave was discharged from bondage, no legal or social stigma attached to him any more. The ban of the *saṃgha* was lifted from him (Dn. II, 35). But the mere fact that a slave could earn freedom does not necessarily mean amelioration. If he was competent to settle in a skilled profession it was the better for him. For a poor unskilled person it was into the fire from the frying pan, *i.e.*, either a change of master or service as a labourer for hire.

Freed slave.

As a matter of fact, it was not the status of slavery which was so degrading, the degradation was inherent in the

[1] "Tato nidānaṃ labhetha pāmujjaṃ, adhīgacche somanassaṃ, Mn. 39.

[2] It is strange of Mrs. Rhys Davids to say "we do not meet with run-away slaves." *Loc. cit.*

class which served as drudge to the higher orders. In this light is to be read the injunction of Manu that a Śūdra, even if set free, is not released from servitude—"for who can take away that which is inborn in him?" (VIII. 4-14). This also explains the two sets of rules, seemingly contradictory, in the Dharmaśāstras and in the Arthaśāstra. Those very 'impure works' (sweeping ordure, urine, leavings of food; attending to the master while naked), which Nārada assigns to a slave, are prohibited for him in the Arthaśāstra. While Manu and Nārada countenance no rights of property for a slave, the Arthaśāstra allows him to earn, own and inherit property. Even after his death, his kinsmen have the priority of claim on his property over the the master. Sale and mortgage into slavery are laid under severe stricture. Chastity of a female slave is meticulously guarded not only against the master but against royal officers and every debauch with heavy fine and violation entitles her to freedom (*i.e.*, forfeiture of value on the part of the master,—*mūlyanāśa*).

The slave and the slave-class. Ārya and Śūdra slave.

While Manu declares that a Śūdra is not released from servitude by being set free, the Arthaśāstra rules that an Ārya does not lose his birth-right (āryabhāva) even if enslaved. If it is true that in the latter the Śūdra is not a distinctly separated category from the Ārya as in the former but a part of it, that only indicates that the Śūdra of the Arthaśāstra is not the same class as the Śūdra of Manu. It is remarkable that the liberal rules of the Arthaśāstra are confined to the one and the main chapter (dāsakalpa) and its cursory references elsewhere do not adhere to the same enlightened principles. These latter were applicable to large classes of people who stood between the border lines of the Śūdra and Mleccha groups, *i.e.*, who were neither absorbed within nor kept in complete isolation from the Aryan social organism. The privilege accrued to the upper classes

degraded to slavery, the Āryas proper. The instance of the Vessantara Jātaka is a clear proof of this proposition. The prince, who gives her daughter to slavery, puts a high price on her lest a low-born should pay it and 'break her birth-right' (jātisambhedana kāreyya).

In the Arthaśāstra, the Mlecchas are expressly kept out of the privileges. The suggestion readily occurs that they formed the bulk of slavery. But certainly a Mleccha could not be put into a job which brought him into personal contact with an Aryan master. It appears that Śūdras, *i.e.*, the lowest of the Aryan fold or the aborigines who became an appendage to the Aryan system, supplied the mass of slave labour, not the Mlecchas of whom even the sight and air were reprehensible, nor the upper orders who were occasionally relegated by freaks of fortune. This is why in Manu and in the didactic episodes of the Epics, *dāsa* and *śūdra* go synonymously. This is why 'dāsa' is so often distinctly referred to as a *jāti*, *i.e.*, a class by birth and not a functional group.

The actual condition and life of this class, though not enviable, was better than that of the slaves of ancient Greece and Italy or of the late 'white plantations.' When Megasthenes said that the Indians do not employ slaves, he only brought forth this contrast. Unlike those countries again, the number of slaves in India, though large, was a fraction of the labouring class. The work of degrading manual labour was shared between the slave, the free hired labourer and a host of Mlecchas and *hīnajātis*. Hence in India the basis of economic life was not slavery and the Eastern analogy of the slave of Rome and Sparta in all-round exploitation was not the *dāsa* but the last of the classes mentioned above.

Cf. Western slavery.

CHAPTER II

HIRED LABOUR

Free Labour :—agricultural and pastoral; industrial; mercantile; domestic; miscellaneous. Origin in pauperism. Modes of payment. Degradation and devaluation of labour. Wage and Profit rates. Free contract? Terms of hire. Slave labour and hired labour. The Labourer and the Outcast. Paucity of labour unrest.

In the scale of economic gradation the hired labourer stood just below the slave. Leaving aside the better artisans who were more or less organised in guilds and had the instruments of collective bargaining to secure good terms of agreement, the unskilled 'hands' are found distributed in five categories.

1. Agricultural and Pastoral Labour.

While the small farmer carried on agricultural operations single-handed or with the co-operation of the family, a remarkable division of agricultural labour and employment of operatives in large numbers is noticeable in the big estates of solvent landowners. In the Pali literature they are seen working in diminutive gangs under big merchants and farmers, such as for example under the cattle-magnate Dhaniya of the Suttanipāta (I. 2. Com.) and the agriculturist Kāsi-bhāradvāja in the same work (I. 4; *cf.* Sn. I. 171; Jāt. IV. 276). The Sākya and the Koliya clans appear in the *paccupannavatthu* of the Kunāla Jātaka as working their estates jointly by means of a horde of *dāsa*s and *kammakara*s—bondsmen who had no standing in the corporate body holding a position akin to serfs and villains of feudal society (V. 412).[1] The mass of slaves and hired labour in agricultural work were employed separately for

[1] *Supra*, p. 23.

tillage, field-watching, harvesting, tending and grazing cattle and for dairy production. There were professional ploughmen (kasiṃ katvā jīvikaṃ kappentassa, Jāt. II. 165; bhatiṃ vā kasiṃ vā katvā laddhavibhavānurūpena yagubhattādīni sampādetvā pitaraṃ posesi, IV. 43); field-watchers who had huts built close by the field and had their meals there and dwelt there day and night (Jāt. III. 52; IV. 276; Sn. IV. 195f); and even winnowers of grain available for hire.

2. Industrial Labour.

Hired labour appears side by side with slave labour also in spinning, weaving or other manufactures whether in state establishments or with private owners. Instances of the former are furnished in the Arthaśāstra (II. 23). In a Jātaka story we come across a tailor in the employ of a merchant (seṭṭhim nissāya vasantassa tunnakārassa tunnakammena jīvissāma, Jāt. IV. 38).

3. Mercantile Labour.

The slave and hireling were employed in mercantile and marine labour to hawk the wares of the master or to serve in the deck. A rich Brāhmaṇa sails to Suvaṇṇabhumi with merchandise and slaves and servants (dāsakammakarā) to multiply his wealth (IV. 15); Mittavindaka hires himself out as drudge in a vessel voyaging on deep sea (I. 239; II. 103). In the Milindapañho, a deck labourer in a sea-going vessel thinks in the vein "I am a wage-earner serving in this ship and get my food and wages hereby (bhatako ahaṃ, imāya nāvāya kammaṃ karomi, imāyāhaṃ nāvāya vāhasā bhattavetanaṃ labhāmi, p. 379)."

4. Domestic Labour and 5. Miscellaneous.

The hired man served in menial household work along with the slave in the house of rich merchants and land-owners (Jāt. III. 129). Besides these, were sundry job-seekers without any fixed employment who stood between vagrancy and starvation, who eked out a miserable existence by any chance engagement, whose services might

be requisitioned for a month, fortnight, or even a day (Vṛ. XVI. 9) and who sometimes offered themselves for a particular work apparently with many masters at a time, *e.g.*, the water-carriers (pānīyahārakā) who rear up a street dog (Jāt. II. 246), the water-carrier of the Gaṅgamāla Jātaka (bhatiko udakabhatiṃ katvā) of whom we shall know more anon and Piṅguttara and his associates who clean the road for the king going to disport in the park (VI. 348).

Origin in Pauperism.

The advent of the new labouring class after the slaves is obviously due to economic depression. The origin of slavery was in the right of the strong over the weak,—of hired labour in want and penury. It is only as late as in Pāṇiṅi that we come across this parvenu (vetana, vaitanika, IV. 4. 12). The rules of the Arthaśāstra and of the Dharmaśāstras are an illuminating commentary on the scanty data of the Pali canon and they lead to the unmistakable inference (despite the contrary opinion held in certain authoritative quarters [1]) that living was not easy for all, that want and plenty prevailed side by side and that although people held it degrading to work for hire, the number of persons reduced to such straits was by no means small. There must have been a wide prevalence of pauperism when want and starvation became a factor impelling people to sell themselves to slavery (bhaktadāsa, Manu, XVIII. 415). This same factor explains why inspite of the degradation of hired labour to a lower economic status, its ranks were swelled by perpetual supply from the landless and the destitute.

Modes of payment

The wage-earner was commonly paid in money but he might be paid also in food or in both (Arth. II. 24; Vṛ. XVI. 13; Jāt. IV. 43). Other curious mediums of payment are also mentioned in the Jātakas. In the higher courses of learning the pupils

[1] Rhys Davids : *Buddhist India*, pp. 49ff.

are admitted by teachers for an honorarium or for personal attendance and between the two discrimination is made in favour of the former :

dhammantevāsikā divā ācariyassa kammaṃ katvā rattiṃ sippam uggaṇhanti, ācariyabhāgadāyakā gehe jeṭṭhaputtā viya hutvā sippam eva uggaṇhanti. II. 278.

Veda never told his pupils to perform any work or to obey implicitly his own behests ; " for having himself experienced much woe while abiding in the family of his preceptor, he liked not to treat them with severity."

duḥkhābhijño hi gurukulavāsasya śiṣyān parikleśena yojayituṃ neyeṣa. Mbh. I. 81.

A Brāhmaṇa youth serves a *caṇḍāla* as menial to acquire a charm (Jāt. IV. 200). A girl is taken to service for three years in a family for a scarlet robe (kusumbharattavatthena bhatim karomi, V. 212), and a wife is "obtained after working for seven years in a house" (sattasaṃvaccharāṇi ghare katvā laddhabhariyā, VI. 338). The worker in these cases receives a specified reward for which he has a fancy and accordingly lets his service unconditionally for a period demanded by the master.

Although the subjects of these illustrations must not be classed with ordinary hired labourers and although these illustrations fall outside the ordinary terms of service, they point uniformly to a low valuation of labour. In the popular stories the workers' normal diet is coarse rice-gruel (kummāsa-piṇḍa, Jāt. III. 406) and it never pretends to anything above the *yagubhatta*. In the Mahāummagga Jātaka, a potter's hireling after a full day's work with clay and the wheel, "sat all clay-besmeared on a bundle of straw eating balls of barley-groat dipt in a little soup."

Degradation and Devaluation of Labour.

Mattikaṃ āharitvā cakkaṃ vattetvā mattikamakkhitasarīraṃ palālapiṭhake nisīditvā muṭṭhiṃ muṭṭhiṃ katvā appasūpaṃ yavabhattaṃ bhuñjamānaṃ, VI.—372.

Sutana cannot make both ends meet and thinks, "I get a *māsaka* or a half-*māsaka* for my wages and can hardly support my mother," and he ventures to meet a *yakkha* and certain death for a thousand pieces with which his mother may be provided (III. 326). A pathetic humour pervades the story of the water-carrier who saved a half-*māsaka* in the city-rampart and was so transported by the thought of spending it on a festive day together with another half-*māsaka* saved by his water-carrier wife[1] that he ecstatically ran singing league after league to fetch the treasure under scorching sun rays, "in yellow clothes with a palm-leaf fastened to his ear." The happy pair thus budgeted their savings of one *māsaka*: "we will buy a garland with one part of it, perfume with another, and strong drink with a third" (III. 446).

The average daily income of the workman was, therefore, the smallest copper piece in currency which is far below the living wage. Such pittances of wage are corroborated in the Arthaśāstra which fixes a *paṇa* and a quarter per mensem[2] for agricultural labourers and field-watchers with provisions proportionate to the amount of work done (II. 24). They are not always entitled to a square meal and sometimes the diet actually varies according to labour. The sight of a begging monk coming with full alms-bowl from his house inspires the thought in the *seṭṭhi* that if his *dāsas* and *kammakaras* had got that food he could have more work out of them, and he sighs for the loss sustained (Jāt. III. 300).

[1] Not strictly according to law, for the two had only cohabited (kapaṇitthiyā saddhiṃ saṃvāsaṃ kappesi). A casual word gives a vivid glimpse into the life and social status of these people.

[2] *I.e.*, 20 *māṣakas* a month, or 2/3 *māṣaka* per day. Manu's rate is 1 *paṇa* or 16 *māṣakas* for the lowest menials, 6 *paṇas* or 96 *māṣakas* for the highest, *plus* 1 *droṇa* of grain, *i.e.*, 4 *āḍhakas* or 512 *palas* (Com.) and clothing every 6 months (VII. 126). Thus the daily wages are 1/2-3 *māṣakas* with 1/30 *droṇa* of grain and clothing after 6 months.

Wages might be fixed or variable or they might be assessed at a fraction of the gain. In its regulations on textile labour, the Arthaśāstra lays down that wages are to vary according to the quality and quantity of the yarn produced; only artisans who can turn out a given amount of work in a given time may be engaged on fixed wages (II. 23). Vṛhaspati distinguishes between servants engaged on pay and servants engaged for a share of the gain (XVI. 8). But whatever the mode of payment, wages are uniformly of a low standard. The rates for share of profit are standardized by experts (kuśalāḥ) at 1/10 of crop for the cultivator, of butter for the herdsman and of sale proceeds for the pedlar (Arth. III. 13; Yāj. II. 194; Nār. VI. 2. 3). This astonishingly inequitous rule is somewhat liberalised by Vṛhaspati who entitles a cultivator's servant to 1/5 of the crop *plus* food and clothing or only 1/3 of the crop (XVI. 13).[1] How labour was estimated in proportion to capital is best illustrated in the regulation of the Śāntiparva fixing only 1/7 of produce for the cultivator who borrows the seed from others, the same share being fixed for traders with others' capital (60. 25f). To revert to Nārada's rule, "For tending 100 cows a heifer shall be given to the herdsman as wages every year, for tending 200 cows a milch cow shall be given to him annually and he shall be allowed to milk all the cows every eighth day" (VI. 10). In the Śāntiparva he is allowed the milk of 1 cow for tending 6 kine and 1 pair for keeping 100 (60. 25). And these rates are hardly more lucrative than the profit rate when the grave responsibilities

Wages and Profit rates.

[1] *Cf.* the present rate prevailing in the districts of Western Bengal where the landless cultivator (*khet majur*) gets between 1/3 and 1/2 of produce and the sleeping landowner the rest. In Bihar and Orissa the *kamia* and *halraha* get 1½ srs. of coarse grain for one day's labour and 8-10 *kuṭṭahs* of land with a little additional income in the harvesting season. *Cf.* also the more liberal rule of the Arthaśāstra on behalf of cultivators in crown-lands who obtain 1/4 or 1/5 of produce (II. 24).

of the herdsman tending his cattle in beast and robber-ridden forests are taken into account.

A contract entered into before appointment between the employer and the employee on the wages and the terms of service is frequently dealt with by jurists and politicians.

Free contract ?

This contract, freely agreed to between the parties so often propounded with zest, was no less a fiction than the freedom of contract insisted upon with cant by the anti-trade-unionists of the Victorian age and meant little less than terms dictated by the moneyed master to the destitute toiler with starvation staring in the face whose vocation required no technical skill and who had no organisation like the *seṇi* and the *gaṇa* and no leader like the *jeṭṭhaka* or *pamūkha* to bargain for a higher pay and better working conditions. Labour legislation of the Dharmaśāstras shows that public conscience was not alive to the fundamental inequity in distribution of wealth, because these protective laws were themselves derived from ancient tradition and current usage except for a thin humanitarian gloss which is less perceptible in popular literature reflecting actual conditions of society. The injunction that an " ill-considered and improper " agreement shall not be enforced is only a pious wish, and even if it was ever observed, the proper and standard rate was enough by itself to make the small wage-earner chafe in life.

The field-watcher was liable to a fine or compensation for any loss. The watchman of the Sālikedāra Jātaka to whom were delivered by a Brāhmaṇa farmer 500 *karisa*s of land for a wage, is afraid when the plot is ravaged by parrots, that " the Brāhmaṇa will have a price put on the rice and debit it from my account " (sāliṃ agghāpetvā mayhaṃ iṇaṃ karissati, IV, 276 ff.). Thus the hireling had responsibilities unlike the slave for any injury to his master's chattel or to the job

Terms of hire.

undertaken. Any deficit out of the estimated output from the quantity of raw materials supplied must be made good from the wages—so goes the rule of the Arthaśāstra on textile labour (sūtrahrāse vetanahrāsaḥ dravyasārāt, II. 23). If fines are remitted in special cases considering accident, disease, etc., the loss incurred by the employer must be compounded by extra work (*ibid*). Payment may be withheld if circumstances change since the employment and if workmanship is below the employer's satisfaction (deśakālātipātanena karmaṇāṃ anyathā karaṇe vā na sakāma kṛtamanumanyeta, III. 14; *cf*. Yāj. II. 195). For negligence of work a hired tiller or herdsman is to be flogged (Āpast. II. 11. 28. 2f). A workman who abandons his work before the expiry of the term shall forfeit his whole wages and pay a fine of 100 *paṇa*s to the king (Viṣ. V. 153f). He is responsible for the "implements of the work and whatever else may have been entrusted to them for their business" (Nār. VI. 4). The herdsman is accountable for the damage done by cattle in others' fields (Gaut. XII. 20f; Manu, VIII. 240; Viṣ. XII. 20-26; Yāj. II. 162) and for loss of cattle through the depredation of thieves, robbers, wild beasts, reptiles, diseases and accidents unless he exerts himself timely to prevent the loss—a thing certainly not very easy to establish when the onus of proof remains on him (Arth. II. 29; Āpast. II. 11. 28. 6; Manu, VIII. 232; Yāj. II. 164; Nār. VI. 11-17).

Slave labour and Hired labour.

The economic position and security of these unskilled hands who plied in big plantations or purveyed manual labour from door to door on a short term service was thus in many respects worse than that of the slaves. In the Milinda the *bhatika*s are put among the most degraded sort of workpeople while the *dāsaputta*s stand in best company (p. 331). These latter were at least well-fed like domestic animals. In the Jātaka stories paid servants are not always admitted

to the facilities which slaves commonly enjoy. The amenities of the master's home were not for them. As regards general social status there was little to choose between a slave and a free labourer. A 'hireling' is as much a term of abuse as a 'slave' (Jāt. II. 94). With the slave he is classed with oxen and buffaloes (I. 341).[1] King Yudhiṣṭhira is instructed to exact labour from artisans only with the payment of food as unto kine and asses (Mbh. XIII. 95. 39). His position depended primarily on the master's solvency and sense of humanity and secondarily on his own brawns and brains, as much as did the slave's. A petty craftsman's apprentice had generally a hard lot (VI. 372) with little prospect of mitigation under any circumstances: but with a rich master the position is not necessarily reversed. We have a miserly merchant who grudges the alms to a monk which might be spent for returns over his half-fed labourers and slaves (III. 300) and we have the counterparts in a rich and pious merchant whose labourers are engaged in outdoor work under good living conditions and with a square meal (III. 445f) and in a Brāhmaṇa whose wagemen even give alms and observe fast and moral rules (IV. 50).

Lest workmen should spoil work in hand, the author of the Arthaśāstra forbids indiscriminate sale of liquor to them and in a curious fit of contradiction, a few lines below he gives the economic advice that bad liquor, fit for selling at reduced price, may conveniently be given to slaves and workmen in lieu of wages; or it may form the drink of beasts for draught or the subsistence of hogs.

dāsakarmakarebhyo vā vetanaṃ dadyāt. Vāhana-pratipānaṃ śūkara-poṣaṇaṃ vā dadyāt, II. 25.

The sentiment underlying the bare statement is more eloquent than pages of theorizing and legislation.

[1] Among hired workers, Vṛhaspati classifies the warrior, the cultivator, the porter and the household servant in descending order of status (XVI. 10).

In their social segregation and economic position these people stood on a par with the still lower underdogs of the Indian Society—the *caṇḍālas*, the *pukkusas*, the *veṇas*, the *nesādas*, the *rathakāras*, etc., who settled in villages of their own outside the habitat of the ordinary people. The serving folk as well are sometimes seen to dwell outside the city or village gate as befitted their economic and social position (Jāt. I. 239; III. 446; VI. 348) and acknowledge that indication of social inferiority (V. 441; VI. 156; Mn. V; Mbh. XIII. 22. 22). The localisation and isolation of the free proletariat was not, indeed it could not be, as thorough as in the case of their prototypes,—the *mleccha* and the *hīnajāti*, and they never attained to the community and solidarity of caste in the stricter sense. There are instances of Brāhmaṇas and Gahapatis taking to servile occupations under the chill of adversity (Jāt. I. 111, 475; II. 139; III. 325; Sut., p. 119). But the great mass was evidently composed of the socially degraded classes in whom "the profession of a hired labourer was as much hereditary as the poverty connected with it"[1] and who had hardly any chance of access to a more respectable and remunerative calling.[2] The elements of the upper classes relegated by shufflings of fate were probably equated with them after a short course of levelling process. Thus it becomes intelligible why tradition called it the direst misfortune that a freeman should work for hire in another's land and how the fluctuations of fate of earlier days had a gradual tendency to give way to concentration and perpetuation of poverty in a plebeian caste,[3]—a caste scattered and heterogeneous without the blessings of a communal life.

The Labourer and the Pariah.

[1] Fick: *Die Sociale Gliederung*, p. 195.

[2] There is one instance in the Jātakas where a king honours a hireling with the post of *seṭṭhi* (I. 422).

[3] Note the term 'daḷiddakula' frequently used in the Jātakas.

And it is because this caste did not crystallise into a community and because it was numerically smaller than the superior castes and smaller than the labour population of ancient Egypt, Greece and Rome, that it did not mature into an explosive material seething with perennial discontent under the superstructure of civilisation and material prosperity.[1]

[1] Times have since changed. They are now as scattered, ill-organised, degraded and impoverished as before but their number has immensely multiplied. Together with the under-ryots whose lots are not improved with the successive tenancy laws, they are rapidly growing into an organised menace to the existing social order.

CHAPTER III

Despised Castes and Races

The *hīnajāti*

I. The Caṇḍāla: Origin. Appearance. Arts and professions; corpse-burner, executioner, hunter, magician. Habitat. Social segregation. Social and economic disabilities. General status.

II. The Pukkusa: Origin. Profession. Status.

III. The Nesāda: Origin and identity. Racial and professional stigma. The hunting profession, *luḍḍaka*, *kevaṭṭa*. Methods, equipments and accessories for hunting and fishing. Habitat. Social status.

IV. The Veṇa: Ethnico-professional castes. Status. Craft.

V. The Rathakāra: Origin and degradation. Craft; chariot-building, leather-work. Status.

The *apasada* or mixed castes. Inferior races.

Side by side with the four *vaṇṇa*s constituted by Aryan invaders, the social physiognomy presents a host of despised castes and professions represented by the aboriginal races going under the general brand of *mleccha* or *hīnajāti*. Pāṇini knows them as the class of *aniravasita*s below the Śūdras (2. 4. 10). The Pali literature picks up five of these pariah castes for constant mention. The Suttavibhaṅga Pācittiya enumerates them in contradistinction from the privileged estates of Brāhmaṇa and Khattiya: hīnā nāmā jāti caṇḍālajāti veṇajāti nesādajāti pukkusajāti esā hīnā nāmā jāti (II. 2. 1). These five appear associated in a conglomerate class of outcasts also in other passages (Mn. 93, 96, 129; An. II. 85; Sn. 1. 93; Pug. IV. 19).

The *hīnajāti*.

1. *The Caṇḍāla*

In Indian tradition the *caṇḍāla* has always been the by-word for subjection and contempt. The earliest references are seen in the Yajurveda Saṃhitās and in the Upaniṣads. They show clearly

Origin.

that the *caṇḍāla* was a degraded caste but yield no particulars.[1] Fick suggests that they were originally a tribal body.[2] After the first Aryan invasion the conquerors and the conquered were divided into two broad social categories,—*āryavarṇa* and *dāsavarṇa*. Gradually the *dāsavarṇa* or the defeated aboriginals yielded to numerous sub-castes or classes in a social hierarchy taking positions according to their loyalty to the victors and to the adoption of the foreign culture. Those who remained outside the Aryan social scheme were reduced to a medley of pariahs and under-dogs. Among these outcasts some were ethnic groups, held together by a common race (hīnajāti) humiliated for their despicable callings. The *caṇḍāla* was at the bottom of the ladder. The Brāhmaṇical theory that he is the issue of a Śūdra husband and a Brāhmaṇa wife reveals only a jealous attempt to preserve the purity of the stock against the growing menace of *pratiloma* marriage. If the children of these marriages did really sink down to the status of *caṇḍālas*, certainly that does not explain the origin of the caste and Fick's suggestion seems to be substantially correct.

That the *caṇḍālas* were aboriginal local tribes with their peculiar trades and professions and social customs crystallised later into a caste or community under the rigid isolation forced upon them by the Aryan or Aryanised society is gathered from the bulk of Pali evidences as well as Epic literature.

Appearance.

The Rāmāyaṇa depicts the *caṇḍāla* in the following strain: "with blue complexion, blue robes dishevelled locks, garlanded from the crematory, anointed with ashes from the same and adorned with iron ornaments."

[1] Ch. Up., V. 107; 24.4; Āśv. Gṛ. S., iv. 1; Śāṃ. Gṛ. S., ii. 12; vi. 1, etc. Vājasaneyi-Saṃ. xxx. 21; Tait. Br. iii. 4. 17. 1; Bṛ. Up. iv. I. 22.

[2] *Op. cit.*, 204 ff.

nīlavastradharo nīlaḥ puruṣo dhvastamūrddhajaḥ
cityamālyāṃgarāgaśca āyasābharaṇo'bhavat (I. 58. 10f).

Manu also enjoins that the dress of the *caṇḍāla* should consist of the garments of the dead and that black iron should be their ornament.(X. 51).

In the Mātanga Jātaka he is described as " clad in a bad under-garment of red colour round which a belt is tied; above this a dirty upper garment, an earthen pot in hand " —rattadupattaṃ nivāsetvā kāyabaṇdhanaṃ bandhitvā paṃsukulasaṃghātiṃ pārupitvā mattikāpattaṃ ādāya....(IV. 379).

Manu also adds that he is " distinguished by marks at the king's command" (X. 55) Medhātithi understands these as external marks such as " axes, adzes and so forth used for executing criminals and carried on the shoulder." Govindarāja explains these as " sticks and so forth," Nārāyaṇa as " iron ornaments and peacock feathers and the like." But the more plausible is the explanation of Rāghavānanda, that they are to be branded on the forehead and on other parts of the body.

Arts and Professions.

1. Corpse-burner.

To the *caṇḍāla*s were assigned certain despised professions befitting their rank which they had to pursue hereditarily. The Arthaśāstra fixes their habitat beside the crematorium (pāṣaṇḍa-caṇḍālānāṃ śmaśānānte vāsaḥ, II. 4). Manu (X. 51) and Viṣṇu (XVI. 14) ordain that their clothes must be the mantles of the deceased. The occupation readily suggested by these injunctions is that of burning dead bodies. This was presumably not an independent profession but a compulsive service imposed on them by the state or society at large. Manu says : " In the daytime they may do the work assigned to them by order of the king ; the corpse of anybody who has no relations they must carry out of the house—such is the standing rule " (X. 55). According to the commentary on the Sīlavīmaṃsa Jātaka a *caṇḍāla* is engaged in removing corpses (chavachaḍḍaka-

caṇḍāla, III. 195). He is certainly the corpse-burner (chavadāhaka) who tops the list of despised professions in Milinda (p. 331).

2. Public Executioner.

The cremation of unclaimed dead bodies and those of criminals seem to be an associate function of the equally disreputable job of an executioner. Manu says : " Criminals they shall kill according to the law, by order of the king; the clothes of the criminals, their beds or other ornamental articles they may keep to themselves " (X. 56). Viṣṇu says " A caṇḍāla must live by executing criminals sentenced to death " (XVI. 11). In the Anuśāsanaparva his duty is that of the public executioner (48. 11).[1] In the Arthaśāstra it is laid down that a *caṇḍāla* is to function for whipping a transgressing woman in the centre of the village (III. 3) and for dragging an attempting suicide with a rope along the public road (IV. 7). The idea of employing a *caṇḍāla* for these purposes was to add an insult to the injury inflicted on the culprit.

Hunter.

The *caṇḍāla* is sometimes seen also in the despised rôle of a hunter. In the Śāntiparva, Mahābhārata he is an animal-trapper in a forest (138.23) and pursues his trade with a pack of dogs (138. 114). In the Arthaśāstra occurs a parable which conveys that a *caṇḍāla* usually profits by a fight between a dog and a pig (IX. 2). Manu assigns only dogs and donkeys as their wealth (X. 51). The profession of hunting is assigned to the caste known as *niṣāda* and the *caṇḍāla* is not commonly seen in this rôle. This may have been an occasional or an additional calling. Or the term *caṇḍāla* may have been

[1] *Cf.* a Jātaka sketch of the *coraghātaka* : attano cārittena pharasuñca kaṇṭakakasañca ādāya kāsāyanivāsino rattamāladharo (II. 41, 179). The *caṇḍālas* customarily wear a garland of red flowers (Jāt. III. 30). Their dress and ornaments presumably were not uniform since, according to the Smṛtis they had them as they found them in corpses brought for cremation.

used in a more generic sense covering all pariahs and outcasts among whom the *niṣāda* or animal-killer was one. This is the more probable explanation as we come across other occupations of a *caṇḍāla* which do not fit in with a corpse-carrier or an executioner. One is found to earn living by selling fruits out of season but it should be remembered that he is a Bodhisatta (Jāt. IV. 200). Another is found mending old things (jiṇṇapatisaṃkhāraṇaṃ karoti, Jāt. V. 429). The phrase 'mūlavyasanavṛttīnāṃ' used in Manu with reference to the occupation of a Sopāka Caṇḍāla is explained by Nārāyaṇa and Nandana as those who live by digging roots, *i.e.*, in order to sell them as medicine. The *caṇḍāla* may appear with begging tray in hand (kaḷopihattha, An. IV. 375). In a Jātaka story a king is reduced to caṇḍālahood under the fury of his oppressed subjects (VI. 156). Evidently not the *caṇḍāla* caste but the general status of outcasts or degraded castes is meant.

4. Acrobat and jugggler.

The analysis of the phrase *'caṇḍāla-vaṃsa-dhopanaṃ'* which occurs in the Dīghanikāya (I. i. 13) and in the Cittasambhūta Jātaka is illuminating. Rhys Davids renders it as 'acrobatic feats by *caṇḍālas*.' Rouse as 'the art of sweeping in the *caṇḍāla* breed' and Fick as 'the art of blowing a Caṇḍāla flute.' The annotation of Buddhaghosa in the Sumangalavilāsinī clarifies the cryptic expression. He treats the phrase as a compound of three separate things. 'Caṇḍāla' means 'ayoguḷa-kīḷā,'—a trick with an iron ball, 'vaṃsa' is 'veṇuṃ ussāpetvā kīḷaṇaṃ,' a trick with a bamboo pole (which is balanced on the juggler's forehead or throat while at the other end his pupil is poised. Com. Sn. 168), 'dhopanaṃ' is 'aṭṭhidhovanaṃ.' Here the scholiast refers to a barbarian custom in a certain *janapada* where corpses were not burnt but buried and when decomposed, were dug out; the bones were washed and buried again with balms. The funeral rite was accompanied with drinking bouts and

gusty wailings.—He quotes a passage from the Anguttara-nikāya (V. 216) where the custom called 'dhopanaṃ' is said to be prevailing in Southern India and hilariously observed with feasting, dancing, singing and merry-making. He adds significantly 'Idha ekacce pana indajālena aṭṭhidhovanaṃ dhopanan ti vadanti."

Two things are apparent. Firstly, the custom certainly belongs to some aboriginal tribes particularly inhabiting Southern India and presumably to the *caṇḍālas*. Secondly, 'dhopanaṃ' is a conjuring trick of bone-washing also presumably practised by *caṇḍālas*. The ball-trick and the pole-trick may be acrobatic feats or sleights of hand. What is gathered is that the *caṇḍālas* practised various sorts of magical and acrobatic feats peculiar to their breed (caṇḍāla-kammam). They displayed their art in public shows or on roadside which brought a few coppers from sight-seers.

The reference in the Anguttaranikāya to the custom prevailing in 'southern districts' weakens the comment of Fick that "the caṇḍāla village placed in the Citta-Sambhūta Jātaka in front of the gate of Ujjein and thus to the west of India, may have probably existed only in the imagination of the narrator who carried the narrow conditions of his home over the whole of India."[1] There is nothing to show conclusively that the *caṇḍāla* caste was peculiar to the social organisation in Magadha and Vaṅga because their modern descendants are mostly located there and because Magadha and Videha are referred to by Manu as the land of mixed castes.

The *caṇḍāla* had to remain in strict isolation from civilised contact and at the bottom of the uncivilised society. "But (unlike all other castes) the residences of the *caṇḍālas* should be outside the village"—so ordains Manu (X. 51). "*Caṇḍālas* must live out of the town.....In

[1] *Op.cit.*, p. 204.

this their condition is different (from and lower than that of the other mixed castes)"—so lays down Viṣṇu (XVI. 14). " Endued with a dreadful disposition, he must live in the outskirts of cities and towns " (Mbh. XIII. 48. 1). In the Jātakas the *caṇḍālas* are always seen living outside the city gate (bahinagare, IV. 376, 390; VI. 156) in villages and settlements entirely by themselves (mahācaṇḍālāgamako, IV. 200; caṇḍālagāma, IV. 376, 390; caṇḍālavāṭakaṃ, VI. 156). Fa-hien and Yuan Chwang corroborate the fact that they lived outside the city in their own villages. The latter adds that when they at all entered the municipal area, they had to travel along the left side of the road.

Social segregation.

Elaborate rules of contact fortified the social partition. First and foremost, the rules of the table. The Brāmaṇas of Kāsi who were thrown out of caste " having been made to taste the leavings of a Caṇḍāla " (caṇḍālucchiṭṭhabhatta) for their life, retired in shame to the kingdom of Mejjha (*mleccha*) and lived with the king of that country (Jāt. IV. 376 ff). In Buddha's own words food earned by unlawful means " is like the leavings of a Caṇḍāla "; —the following Jātaka story narrates how a Brāhmaṇa takes the leavings of a *caṇḍāla* under pressure of hunger but later awakes to the disgrace done to his birth, clan and family, vomits out the food with blood and retires into the forest to die forlorn (II. 82 ff). The Smṛtis prohibit touching a *caṇḍāla* by higher castes for which purification by bathing is necessary (Āpas. II. i. 2. 8; Gaut. XIV. 30; Manu, V. 85; Vāś. XXIII. 33; Yāj. III. 30). Hence the wind and water that carry this contact is equally loathsome. Setaketu, the proud Brāhmaṇa pupil loathes the wind that brushes the body of a fellow *caṇḍāla* pupil (Jāt. III. 233). Another Brāhmaṇa in whose locks gets stuck a tooth-stick nibbled by a *caṇḍāla* and carried by river current, reviles and curses the culprit and compels him to move and live downstream

(IV. 376 ff; *cf.* Vin. IV. 203 ff). A parable in the Arthaśāstra shows that "a reservoir of water belonging to *caṇḍālas* is serviceable only to *caṇḍālas*, but not to others....." (Yathā caṇḍālodapānaścaṇḍālānāmevopabhogyo nānyeṣām evamayaṃ. I. 14). Even sight of and speech to them impurify (Manu, III. 239). Āpastamba says: "As it is sinful to touch a *caṇḍāla* so it is to speak to him or to look at him" (II. 1. 2. 8.). A merchant's daughter and a chaplain's daughter wash their eyes with scented water and turn their back at the sight of *caṇḍālas* which brings bad luck. The two creatures are beaten to a jelly by the people who forfeited the expected distribution of free food and liquor due to the evil omen (IV. 376 ff, 390 ff).

Social and economic disabilities.

It is sickening to narrate the multifarious disabilities thrust upon these people to square up their isolation and to perpetuate their subjection and humiliation. "A man who fulfils a religious duty should not seek intercourse with them; their business they should conduct among themselves and their marriages they must contract with their equals. Their food must be given them by somebody other than an Aryan in a broken vessel; at night they shall not go about in the villages or in the towns" (Manu, X. 52 f). A student of the Vedas shall not study in a village where *caṇḍālas* live nor if a *caṇḍāla* is within sight (Āpas. I. 3. 9. 15-17; Gaut. XVI. 19; Vāś. XIII. 11). "If (while reciting the Vedas) they hear noises made by outcasts or *caṇḍālas*, they shall sit silent and fasting during three days" (Vāś. XXIII. 34). They are debarred from standing as witness except in case of transactions in their own community (Arth. III. 11; Manu, VIII. 64; Nār. I. 155). For touching one of a higher order they are to be fined (Arth. III. 19; *cf.* III. 20). For stealing an animal of a *caṇḍāla* the thief is fined only half of the standing rate (IV. 10).

General Status.

Nothing demonstrates more sharply the social status of a *caṇḍāla* than his very frequent classification with a dog (Āpas. II. 4. 9. 5; Gaut. XVII. 24; Vāś. XXIII. 33). A house-holder is to practise charity by throwing food outside the house on the ground for dogs, *caṇḍāla*s, outcasts and crows (Vāś. XI. 9; Manu, III. 92). In the Mahābhārata he stands in the company of cows, elephants, dogs, ravens and vultures (VI. 29. 13; XII. 207. 42 ff). Manu extends the list to pig, cock, ass, camel and all and sundry animals (III. 239; XII. 52). "Raven of ill omen" is the common form of address to him (Jāt. III. 233, IV. 388). But he was not really as well off as these companions. The wind and sight of these animals did not pollute an Ārya, nor were the sacred Vedas profaned at their hearing or by their presence. The *caṇḍāla* was lower than the dog and the crow. In the Smṛti literature the *caṇḍāla* is the lowest of all mortals (Manu, X. 16, 26).

In popular literature "contemptuous as a *caṇḍāla*" has become a proverbial expression. Into the mouth of a young lioness to whom a jackal had made a proposal of marriage the words are put—"This jackal is considered low and wretched among the four-footed animals, similar to a *caṇḍāla* (hīno patikuṭṭho caṇḍālasadiso, II. 6). A Brāhmaṇa designates his adulterous wife as *pāpacaṇḍāli* (IV. 24 f).

The story of the Citta-Sambhūta Jātaka shows with pathetic clarity the mournful lot of these pariahs. Two *caṇḍāla* brothers living outside the city, display their simple arts outside the city gates. By accident and no fault of their own their loathsome sight is caught by two conceited women. They are mobbed almost to death. The thought comes to them,—"all this misery has come upon us because of our birth; we are not allowed to pursue our own trade" (caṇḍālakammaṃ kātuṃ na sakkhissāma). They conceal

their birth and go to study at Taxila. Here again they are exposed by their dialect (caṇḍālabhāsā) and driven out with blows for their audacity of intruding into the knowledge which was the preserve of the upper classes. The story also demonstrates how complete the isolation was—the isolation imposed by all the ingenuity that the priesthood was capable of—"that in the midst of a population speaking an Aryan dialect they preserved even in linguistic matters their racial individuality."[1]

Was there no mitigation for the *caṇḍāla*? It is admitted that Śāstra rules do not reflect truly the actual conditions of society. But in this respect at least the popular stories of the Jātakas show that reality did not go very far from priestly theory. The few Jātaka stories that afford casual relief should be taken with some discount for the subject therein is always a Bodhisatta. In one case he dares to kick a fellow Brāhmaṇa pupil who is defeated in an academic dispute and the action is condoned by the teacher (III. 233). We have seen that the *caṇḍāla* was not at all admitted to the courses of learning. Elsewhere he is served by a Brāhmaṇa for a charm and the Bodhisatta motive comes out in the open when the latter loses it from denying his *caṇḍāla* teacher out of shame. The fitting conclusion is the sermon by a king that a teacher is always to be respected be he a Sudda, Caṇḍāla or Pukkusa (IV. 200 ff). In another story a *caṇḍāla* who is maltreated by a merchant's daughter, lies down in fast for six days at the merchant's doors, obtains the girl for wife and compels her to carry him on her back to his village (IV. 376).[2] Every available testimony goes to show that the fellow would have been flayed or lynched no less than a Negro who would show the same temerity with a Yankee woman a few years ago.

[1] Fick: *Op. cit.*, p. 205.

[2] The apology is expressly given,—"For the resolve of such a man (Bodhisatta)—so it is said, always succeeds."

In a discourse to the Brāhmaṇa Aggikabhāradvāja Gotama cites the instance of Mātaṅga,[1] a *caṇḍāla* who reached the highest fame and went to the Brahmaloka while many high-bred Brāhmaṇas owing to their sinful deeds are blamed in this world and goes to hell after death. Hence not by birth is one a pariah or a Brāhmaṇa, by act one is a pariah or a Brāhmaṇa (Sut. V. 138. 142)

Na jaccā vasalo hoti
Na jaccā hoti brāhmaṇo
Kammanā vasalo hoti
Kammanā hoti brāhmaṇo

But why had he to fall back upon the next world to vouchsafe reward or punishment? The brutal level to which these people were kept precluded any question of their admittance to the centres of learning and enlightenment. The platitudes of the Suttas go down before the hard facts revealed in the Jātaka stories. Of physical tyranny and economic subjection of class by class, history has abundant instances. But it is doubtful whether to the segregation and soul-killing device innovated by the Ārya for a *caṇḍāla* there is any parallel.

II. The Pukkusa

Origin.

Nothing can be definitely said about the origin or the occupation of these people. Even their name is subjected to a wide range of variants. The Bṛhadāraṇyaka Upaniṣad has Paulkasa, the Maitrāyaṇī Saṃhitā spells as Puklaka or Pulkaka (1. 6. 11), the Vājasaneyi Saṃhitā as Paulkāsa (XXX. 17). The Arthaśāstra gives Pulkasa. In the Smṛtis they appear as Pukkasa while the Pali form is Pukkusa consistently. Like the *caṇḍāla* the *pukkasa* of the Smṛtis is a mixed

[1] *Cf.* Jātaka, IV. 376ff.; Manu, IX. 14.48.

caste, but opinions differ about his descent. The Arthaśāstra says that he is the issue of a *niṣāda* on an *ugra* woman (III. 7), Manu (X. 18) and Bodhāyana (I. 8. 11), on a Śūdra woman. According to Viṣṇu (XVI. 5) and Vaśiṣṭha (XVIII. 5) he is born of a Kṣatriya woman by a Vaiśya father, according to Gautama (IV. 19), by a Śūdra father.

Profession : hunting and sweeping.

Viṣṇu ordains that the *pukkasa* must live by hunting (XVI. 9). Manu assigns him "catching and killing of animals living in holes" along with two other mixed castes, *viz.*, *kṣattṛ*s and *ugra*s (X. 49). In the Pali literature he appears in an altogether different rôle. The commentary on the Sīlavīmaṃsa Jātaka explains him as one living by removing flowers (*pupphachaḍḍaka-pukkusa*, III. 195). The *pupphachaḍḍaka* also appears in the Milinda in a circle of despised castes and professions (p. 331). In the Theragāthā his occupation appears to be the removing of faded flowers from temples and palaces. Fick is thus led to state: "I don't believe that the Pukkusas were a special professional class but a race that lived generally by hunting and only occasionally by dirty work, like cleaning temples and palaces." [1] Dhammapāla's commentary, however, throws more light on his functions. Thera Sunīta born as a *pupphachaḍḍaka*, earned his living as a street-sweeper, not making enough to kill his hunger. In early dawn he cleared the street of Rājagaha, collecting scraps, rubbish and so on into heaps, and filling therewith the baskets he carried on a yoke.

Social Status.

Whatever their origin and profession, one thing remains certain,—that they were a despised race whose lot was almost as bad as that of the *caṇḍāla*. In the Bṛhadāraṇyaka Upaniṣad *paulkasa*

[1] *Op. cit.*, p. 206. On the *pukkusa* Rhys Davids says in the Pali Dictionary,—"name of a (non-Aryan) tribe, hence designation of a low social class, the members of which are said (in the Jātakas) to earn their living by means of refuse-clearing."

is the name of a despised race of men along with the *caṇḍāla* (IV. 3. 22). In Manu (XII. 55) and in the Yājñavalkya (III. 20) they are classed with *caṇḍāla*s and various breeds of animals as creatures in whose wombs a Brāhmaṇicide is born. In the Anuśāsanaparva they are the progeny of the *caṇḍāla*s, eat the flesh of asses, horses and elephants, and just like the *caṇḍāla*s wear clothes procured by stripping human corpses and eat off broken earthenware (43. 24). In the Jātakas they are very commonly bracketted with the *caṇḍāla*s. Like that of their bedfellows their sight was unseemly. Elder Sunīta plied his trade in early dawn obviously to escape sight. When Buddha was approaching with his train, finding no place to hide in on the road, he placed his yoke in a bend of the wall and stood as if stuck to the wall. He speaks of himself in the Theragāthā: "Of low family am I, I was poor and needy. Low was the work I did, namely that of removing faded flowers. I was despised by man, held in low esteem and reproved." [1]

Nīce kulamhi jāto 'ham daḷiddo appabhojano ;
hīnam kammaṃ mamaṃ āsi, ahosiṃ pupphachaḍḍako, 620.
jigucchito manussānaṃ paribhūto ca vambhito
nīcaṃ manaṃ karitvāna vandissaṃ bahukaṃ janaṃ, 621.

III. The Nesāda

Origin and identity.

According to the Arthaśāstra and the Dharmaśāstras, the *niṣāda* is the offspring of a Brāhmaṇa on a Śūdra woman. Fick groups him like the *caṇḍāla* and the *pukkusa* among the "ethnic castes" held together by a common race. The derivation of the word (*ni*—down, *sad*—settle) indicates those who have

[1] *Cf.* Oldenberg : *Buddha*, p. 159.

settled down, *i.e.*, the settled aboriginals.[1] As pointed out by Macdonell and Keith,[2] this view of Weber is supported by the fact that the ritual of the Viśvajit sacrifice requires a temporary residence with *niṣādas*, for the *niṣādas* who would permit an Aryan to reside temporarily amongst them, must have been partially amenable to Aryan influence. But the name appears in early Vedic literature also as a general term for the non-Aryan tribes outside the Aryan organisation like the Śūdras; for Aupamanyava (Yāska: Nirukta, iii. 8) took the five peoples (pañca janāḥ) to be the four castes (catvāra varṇāḥ) and the *niṣādas* and the commentator Mahīdhara explains the word where it occurs in the Vājasaneyi-Saṃhitā as meaning a Bhilla or Bhil (XVI. 27; *cf.* XXX. 8).

Caste or profession?

Apparently, the *niṣādas* like the *caṇḍālas* were originally a tribal group that lived mainly by hunting and fishing, the professions which represent the lowest stage of human culture. In India these bore the additional stigma of killing living beings.[3] This stigma and the consequent isolation retarded racial admixture and these people retained their tribal characteristic within the Aryan structure. In the Pali and Sanskrit literature we hear not only of villages and settlements but also of states, kings and armies of *niṣādas*. The legal definition of their origin however shows that the racial isolation gradually slackened under the stress of material circumstances. A Brāhmaṇa youth adopts the occupation of a hunter when he cannot maintain himself by any other art and dwells in a border village or outside city gate (Jāt. II. 200; VI. 170). Among the ten callings of a straying Brāhmaṇa appears the hunter's (IV. 361ff).

[1] Rhys Davids gives in Pali Dictionary 'one who lies in wait.'

[2] *Vedic Index.*

[3] Dūṣitaḥ sarvalokeṣu niṣādatvaṃ gamiṣyati
Prāṇātipātanirato niranukrośatāṃ gataḥ,

Rām. I. 59. 21.

The profession followed by the entire branch of a low race took the shape of a caste when it was reinforced by infiltration from higher caste-orders.

Hunter *par excellence.*

It is not to be supposed that the profession of animal-killing was confined to a specific tribe or caste or that all those who took to it received the stamp of a specific caste-denomination called the *niṣāda*. Manu assigns slaughter of wild animals to the mixed castes of Medas, Andhras, Cuñcus and Madgus, of cave-dwelling animals to Pukkusas, Kṣattṛs and Ugras while reserving killing of fish to Niṣādas (X. 48f). Elsewhere snaring animals is attributed as a supplementary occupation to the mixed caste of Sairandhra (X. 32). Megasthenes' fourth class of population consists of aboriginal herdsmen and hunters—"those who alone are allowed to kill animals," representing a professional class rather than a tribal or caste group. What may be inferred is that these professions were pursued more or less by all aboriginals although the *niṣāda* tribes were hunters *par excellence*, so much so that a professional hunter came to be called a *niṣāda* in popular parlance whatever his tribal origin.

Luḍḍaka and Kevaṭṭa.

The strictly professional name as distinguished from the racial is 'luḍḍaka' for hunter and 'kevaṭṭa' (Sans. *kaivarta*) for the fisherman or boatman. In the Pali works we come across the *vattakaluḍḍako* (Jāt. I. 208, 434; II. 113), the *godhaluḍḍako* (I. 488; III. 107), the *tittiraluḍḍako* (III. 64), the *migaluḍḍako* (II. 153; III. 49, 170, 185) according as the hunter or fowler specialised in stalking a particular beast or bird and purveyed its flesh. The *kaivarta* likewise seems to be a professional and not a tribal name. It does not appear in the Smṛti lists of mixed castes. According to the nomenclature of Manu the caste name corresponding to the fishing profession is *mārgava* or *dāsa* begotten by

a *niṣāda* on an *āyogava* woman (another mixed caste) and "subsisting by working as a boatman whom the inhabitants of Āryāvarta call a *kaivarta*" (X. 34). The *niṣāda* king Guha is seen ready with his flotilla of 500 boats and hundreds of *kaivarta* soldiers in anticipation of Bharata's hostility to Rāma (Rām. II. 84. 8). Within the profession of *niṣāda*, fishing appears as a matter of course, as much as hunting (Mbh. I. 28; Jāt. VI. 71f).

Arts and Appliances.

As these people excelled in bagging the different species of the four-footed, feathered and finny races, their arts, appliances and accomplices differed accordingly. The quail-trapper nets quails by gathering the birds with the imitation of the note of a quail (Jāt. I. 208, 434; II. 113) and the partridge-catcher snares his preys by means of a decoy bird (III. 64).[1] The iguana-trapper goes to the forest to dig out iguanas with spades and dogs (godhābilaṃ bhindanatthāya kuddālaṃ gahetvā sunakhehi saddhiṃ araññaṃ pāvisi. I. 488). The deer-stalker marks the whereabouts of deer from their foot-prints traced from the water-place, sets the toils (migaluḍḍako vaddhamayaṃ pāsaṃ oḍḍetvā agamāsi, II. 153) and bags his victim with sword and spear (asiñ ca sattiñ ca, III. 185). Bows and arrows instead of the snare and the sword or spear were also used (II. 200). For fishing purposes, nets were the commonest instruments while the line (bāḷisiko baḷisena maccha uddharati. Mil. 412; *cf.* Jāt. I. 482; Sn. II. 225f) and the wicker-cage (kumināni, Jāt. I. 427) set in pits and holes of rivers (nadīkandarādisu, II. 238) were also in use. It is not always however that the *nesāda* specialised in killing a particular animal and very often all manners of birds, beasts and fishes came within his pursuit (II. 200; VI. 71f., 170).

[1] Just like his modern prototype. The santhals, kols and other aboriginals still catch partridges and doves by the same artifice.

Settled and nomadic hunters.

The professional hunter of course sells his bag,—beast, bird or fish to the market place in the adjoining city. He may have a modest catch that can be carried on a pole (VI. 170) or there may be a windfall so that he drives a cart-load of venison (III. 49). The hunters probably disposed of their booty to the retailers who ran stalls of different varieties of flesh in the market place.[1] There were also people who did not dispose of their prize but lived upon them direct. "Certain men of the marches (of Benares) used to make a settlement wherever they could best find their food, dwelling in the forest, and killing for meat for themselves and their families the game which abounded there" (IV. 289). This is reminiscent of the accounts of Diodorus and Arrian on the wild nomadic tribes who lived on chase outside human dwellings. As the conquerors appropriated land of the superior grade, the more conservative of the original settlers withdrew to the marches where land offered little attraction to the tiller. Hunting, animal-keeping and free-booting became the occupation of these Bohemians. They were less amenable to Aryan culture and consequently accorded a more dishonourable status than their more settled compatriots.

Habitat.

It is not possible with available data to fix the geographical regions where the hunting and fishing folk were mainly located. Probably they were scattered all over the country, generally grouped in their own villages, situated outside the borders of cities as usual with other despised professions and castes, and generally fitted in a structure of communal economy. They are referred to as plying their nets jointly and as being obedient to one another's bidding (anyonyavaśavarttinaḥ. Mbh. XIII.

[1] Gogbātako, orobhiko, sūkariko, māghaviko, sākuntiko, etc. are butchers in different varieties of flesh and not keepers or hunters of different animals.

50). Elder Yasoja was born at the gate of the city of Sāvatthi in a fishers' village, as the son of the headman of the 500 fishermen's families who fished together in the river Aciravatī (Therag. 243ff). The anglers (bāḷisikā) in another village are in the habit of sharing their prize as it appears from a ruse planned by one of them who had a snag in his tackle and took it to be a big fish :

puttakaṃ mātu santikaṃ pesetvā paṭivissakehi saddhiṃ kalahaṃ kārāpemi, evaṃ ito na koci koṭṭhāsaṃ paccāsiṃsissati (Jāt. I. 482).

Elder Losaka Tissa was born in a fishing village of a thousand families (kulasahassavāse kevaṭṭagāme) in Kosala of which the 1,000 heads went together to fish in river and pool (I. 234). Elsewhere fishing *niṣāda*s are found to live in a remote region in the midst of the ocean (samudrakukṣāvekānte niṣādālayamuttamam, Mbh. I. 28). The fishing tribes of the western countries brought tribute to Yudhiṣṭhira (II. 32. 10). In a Jātaka story are found two villages of hunters near Benares on the two banks of a river each with a chief over its 500 families (VI. 71f). A *nesādagāma* near Benares is very common reference (II. 36; IV. 413; V. 337; Therīg. Com. 291ff) and such villages are seen as early as in the Lāṭyāyana Śrauta Sūtra (VIII. 2. 8).

Von Schroeder suggests indentification of *niṣāda*s with Nysaeans who, according to the Greek memoirs sent an embassy to Alexander when he was in the land of the Aśvakas.[1] The identification however is doubtful. Varāhamihira recognises a kingdom (rāṣṭra) of the *niṣāda*s in the south-east of the Madhyadeśa (Bṛ. Saṃ. XIV. 10). Guha's principality was situated on the banks of the Ganges beyond Kośala with the city of Śṛṅgavera (Rām. II. 50; 83. 19).

[1] *Indien Literatur und Cultur*, p. 366.

Social position.

The *nesāda* was despised both for his profession and for his birth. His was a despicable pursuit (luddācāra khuddācārā'ti, Dn. XXVII. 25). That animal-killing was stigmatised is evident throughout the Jātakas. It is among the ten pursuits of straying Brāhmaṇas. A king asks a hunter to give up his calling and adopt agriculture, trade and usury (IV. 422). A *seṭṭhi*'s son also dissuades a *luḍḍaka* from his profession (III. 51). It is given that these ill-behaved people (dussīlānaṃ miga-luḍḍaka-macchabandhādīnaṃ) receive but do not follow the law (III. 170). In the Mahābhārata a long tribute is paid by Śakra to the *niṣāda* king Nala who is well-versed in all duties, conducts himself always with rectitude, has studied the Vedas. . . , leads a life of *harmlessness unto all creatures*, is truth-telling and firm in his vows and in his house the gods are ever gratified by sacrifices held according to the ordinance. In that tiger among men—that king resembling a *lokapāla* in truth, forbearance, knowledge, asceticism, purity, self-control and perfect tranquility of soul. . . '[1] and so on (III. 58. 8-11). According to the Brāhmaṇical rules, a Śūdra is not allowed to read the Vedas nor to perform sacrifices, not to speak of a *niṣāda*. The picture is unreal and the encomiums may not be taken to suggest that a *niṣāda* who gave up his trade was promoted from his order to higher ranks.

A more realistic account is that of the *niṣāda* king Guha who claims Rāma's friendship and is embraced by the latter. But neither Rāma nor Bharata accepted the food offered by him. Unlike the Vānara and the Rākṣasa allies, this *niṣāda* king does not figure in the sacrificial rites and public jubilations held after Rāma's return from exile to Ayodhyā. The *niṣāda* was a despised creature, both by birth and profession, and stood just above the *caṇḍāla* and the *pukkusa* in the scale of social gradation.

IV. The Veṇa

Professional Castes.

Like the *nesāda*, the *veṇa* and the *rathakāra* were according to Rhys Davids "aboriginal tribes who were hereditary craftsmen in these crafts."[1] Fick describes them as "professional castes" or "non-Aryan races who, although they stood on a higher culture-level than the hunting and fishing races, engaged in branches of profession the practice of which presupposed no acquaintance with metals and their employment and were therefore held in low esteem by the Aryans who worked with iron instruments."[2] The Aryans advancing along the Gangetic plains gave the original settlers names after the material with which they worked. Thus the 'bamboo-worker' and the 'carriage-builder' became names of tribes or castes (jāti).

Degradation.

The *veṇa*, literally, is one working with bamboo reeds. In the Vedas, *veṇu* is mentioned as a reed of bamboo; but *veṇa*, *vaiṇa* or *veṇukāra* are not seen.[3] Apart from the Pali passages referred to above, the *veṇa* appears at the end of the Milinda list of crafts and professions along with the *chavadāhaka*, *pupphachaḍḍaka* and *nesāda*. In a Jātaka verse the *veṇī* is bracketed with the *caṇḍālā* (sic) as a term of rebuke (V. 306). The *veṇukāra* or *velukāra* who goes into the forest with his knife to collect a bundle for his trade (Jāt. IV. 251) is probably another name of the same "functional caste" who ranks in the conventional fashion along with the *caṇḍāla*, *pukkusa* and *rathakāra* in the Lalita Vistara as *hīnakula* in which a Bodhisatta is not reborn (Ch. III).

The tribal craft of these people was working with reeds, *i.e.*, basket-making and flute-making. Dhammapāla

1 *Dialogues of the Buddha*, Vol. I, p. 100.

2 *Op. cit.*, p. 208.

3 In the Arthaśāstra, the *vaiṇa* is the issue of an Ambaṣṭha on a Vaidehaka woman (III. 7).

explains them as a caste working on willows and reeds (veṇiṃ vā ti veṇajātikā vilīvakāra-naḷakārā, PvA, p. 175). The Jātaka commentary on *veṇī* (V. 306) explains it by *tacchikā*,—a carpenter's widow.[1] Probably the original bamboo-working race was not always rigidly identified with its profession. Manu defines the function of the *veṇa* as playing drums (X. 49) while the craft of making baskets and other things with cleft bamboos is ascribed to the *pāṇḍusaupaka* caste originating from the *caṇḍāla* (Mbh. XIII. 48. 26; *cf.* Manu, X. 37).

V. The Rathakāra

Origin and Degradation.

The *rathakāra* or chariot-maker is in the Atharvaveda one of those subject to the king (III. 5. 6) apparently standing as an example of the industrial population. It appears definitely as a caste-name in the Yajurveda Saṃhitās (Kaṭh. XVII. 13; Mait. II. p. 5; Vāj. XVI. 17, XXX. 6) and in the Brāhmaṇas (Tait. I. 1. 4. 8; III. 4. 2. 1; Śat. XIII. 4. 2. 17). In the Yājñavalkya he is the progeny of a *māhiṣya* (Kṣatriya father+Vaiśya mother) and a *karaṇī* (Vaiśya father+Śūdra mother). In later literature he is a caste below the Vaiśya but superior to the Śūdra.[2] He is a functional caste like the *takṣaka* and the *dhaivara*, the carpenter and the fisherman respectively in the Vedic literature, held as inferior to the *ārya* orders. His further deterioration in social esteem is exhibited much later in the Pali texts quoted above. In the Khaṇḍahāla Jātaka he figures in a low series with the *pukkusa* and the *vesa* (VI. 142).[3]

[1] Thus one despised caste is explained by means of another. In the Vedic literature the *takṣaka* or joiner appears in a low role.

[2] Weber: *Indische Studien*, 10, 12, 13. Hillebrandt suggests that the Anu tribe formed the basis of this caste, referring to their worship of the Ṛbhus who are chariot-makers *par excellence*. *Vedische Mythologie*, 3, 152 f.

[3] In the Arthaśāstra, the *rathakāru*'s is a profession prescribed for the mixed caste of Vaiṇya (III. 7), but in the previous chapter, it is a caste-name.

Craft: chariot-building and leather-work.

This *rathakāra* whose very appellation indicates the function of chariot-building, became associated in course of time with a new craft, that of working on leather. Probably this transformation from a comparatively less to a more disrespectable pursuit took place in the Gangetic regions and probably this also explains the consequent deterioration in social status of the caste as seen in Pali literature. In the Majjhima the artisan who is shaping an axle of a chariot (rathassa nemim) is not a *rathakāra* but a *yānakāra* (I. 5). In the Jātaka verses the metaphor occurs twice,—"just as the *rathakāra* cuts the shoe according to the skin" (rathakāro va cammassa parikantaṃ upāhanaṃ, IV. 172; rathakāro va parikantaṃ upāhanaṃ, VI. 51). In the first, the commentary explains *rathakāra* as *cammakara*. The commentary on the Petavatthu also explains *rathakārin* as *cammakārin* (III. 1. 13). But certainly there was no complete overlapping of the two crafts in the same caste, for the *cammakāra* and the *rathakāra* are both mentioned side by side in the Milinda list referred to above.[1]

Social status.

That the two were not identified is also proved by the enumeration of the *cammakārasippaṃ* among the set of despised callings cited in contradistinction from the despised castes. The occupation of a cobbler was held disreputable in all quarters. Manu assigns working in leather to the mixed castes of *kārāvara* and *dhigvaṇa* (X. 36. 49): this *kārāvara* again, is said to be begotten by a *carmakāra* on a *niṣāda* woman (Mbh. XIII. 48. 26).[2] Food offered by the shoe-maker is not to be taken by a Brāhmaṇa (Mbh. XII. 37. 31). Even trading

[1] Cowell and Rouse find a puzzle in this duel function of the Rathakāra and take refuge in the suggestion that he might be the worker of wooden shoes.

[2] According to Manu however, by a *niṣāda* man on a *vaideha* woman.

in iron and leather is censurable (vikrayaṃ lohacarmaṇaḥ, XII. 295. 5 f).

Workmanship.

The leather-worker's was a developed art. He did not make shoes only. He prepared leather-sack holding a hogshead's weight (kumbhakara-gāhikaṃ cammabhastam),[1] leather ropes and straps, shoes "big enough for an elephant," and leather parachute (cammachatta) by means of which a hunter flies down a mountain (Jāt. V. 45 f). He worked shields of 100 layers, of superb workmanship (phalasatam[2] cammaṃ hontīmantī-suniṭṭhitaṃ, VI. 454). He is among the eighteen *seṇi*s of artisans who build a king's dwellings in Uttarapañcāla (VI. 427).

Inferior races.

The conventional Pali list does not certainly exhaust the medley of castes and tribes who either because of their race or for low occupations remained outside the pale of the Aryan culture. Under the general brand of *mleccha* passed the procession of indigenous and foreign barbarians in the Epics,—the Pahlavas, Śakas, Yavanas, Kāmbojas, Kirātas, Cīnas, Hunas and so forth. Sinful races who act like *caṇḍāla*s, ravens and vultures are Andhakas, Guhas, Pulindas, Śavaras, Cucukas and Madrakas in the South and Yaunas, Kāmbojas, Gandhāras and Kirātas in the North (Mbh. XII. 207. 42 ff). The Yonas, Kāmbojas and Gandhāras settled in the North-West Frontier Province. Among the Yona, the Brāhmaṇa and Śramaṇa had no foothold in Aśoka's time (R.E., V.). Among them and the Kāmbojas, it is said in the Majjhima, there were only two castes, *ārya* and *dāsa* (d'eva vaṇṇā ayyo c'eva dāso ca) and where a *dāsa* can be an *ārya* and an *ārya* a *dāsa* (93).

[1] *Cf.* the *cammamāluka* or the leather sack used to carry earth dug out of a tunnel (Jāt. VI. 432).

[2] Phalasatappamāṇaṃ bahukhāre khādāpetva mudubhāvaṃ upanītacammaṃ,—Com.

The Andhras occupied the land beyond the Godavari,—the southern part of the Central Provinces and Nizam's dominions. The Pulindas, though scattered over many provinces appear mainly in the north and north-east of the Andhras (R. E. XIII).[1] The Ābhīras who earned notoriety as a tribe of robbers (Rām. VI. 22. 30 f) infested the western coast south of Guzrat.

In the Arthaśāstra, the *mlecchas* figure as savage, barbarian tribes inhabiting the frontiers (VII. 10, 14; XII. 4). They are associated with criminals (XIII. 5) and the sardonic author finds in them a good recruiting ground for spies and agents provocateurs (I. 12, XIV. 1).

To Megasthenes some of these tribes were reported as pigmies waging war with cranes and partridges; to the author of the Periplus they are savage and cannibal races—the Cirrhadoe the Bargysi, the Horse-faces and Long-faces who inhabited the North or the Himalayan valleys.

Mixed castes.

Apart from these the Smṛtis enumerate as many as fifteen mixed castes (apasada) ascribing some particular infamous occupation to each of them. The elaborate regulations on these mixed castes and their unmitigated denunciation would not have been necessary unless there was a real menace to the purity of the Aryan stock from connubial relations with non-Aryan tribes. Racial admixture was laid under the strictest interdict and the progeny of the violation of Aryan blood, relegated to all sorts of impure crafts and callings, were debased into the lowest stratum of social conformation.

[1] D. R. Bhandarkar : *Asoka.*

CHAPTER IV

Despised Crafts and Callings

The *hīnasippa*. (1) Basket-maker (2) Cobbler (3) Potter (4) Weaver (5) Barber (6) Aercbat (7) Snake-charmer (8) Snake-doctor (9) Physician (10) Miscellaneous (11) Vagrancy.

The Suttavibhanga Pācittiya enumerates the five low occupations as distinct from the five low castes :

Hīnam nāma sippaṃ naḷakārasippaṃ kumbhakārasippaṃ pesakārasippaṃ cammakārasippaṃ nahāpitasippaṃ tesu tesu va pana janapadesu oññātaṃ avaññātaṃ hīḷitaṃ paribhūtaṃ acittikataṃ, etaṃ hīnaṃ nāma sippaṃ. II. 2. 1.

It would seem that for those who made their living by these trades there was no hard and fast line determined by birth. But on the other hand the tendency is very clear for the son to follow the father's craft. The association thus begun and the stigma laid on these crafts resulted in the course of centuries into complete identification of the craft with birth and the crystallisation of thorough-going and hide-bound castes on the basis of particular professions.

1. The Basket-maker and *2. The Leather-worker*

That caste and profession were fast converging and assuming a common border-line is clearly understood from the enumeration of the *naḷakāra* and the *cammakāra* among the crafts after the *veṇa* and *rathakāra* are cited to illustrate caste groups. We have seen the annotator explain *veṇa* as *naḷakāra* (PvA.p. 175). The *naḷakāra* works with *veṇu*

or reeds.[1] So the *rathakāra* and the *cammakāra* are used indiscriminately to denote the leather-worker.

3. *The Potter*

The Potter made earthen pots with clay and the wheel just as in the present day in the villages of India (Jāt. III. 368; Sn. II. 83; Mbh. XI. 3. 11 ff). He made vases with various artistic designs painted on them (Jāt. V. 291). The son generally followed the father's trade (II. 79; III. 376); but the mention of the *antevāsi* and the *ācariyo* in connection with this and similar petty professions implies that these were not necessarily hereditary (Jāt. V. 290 f; Dn. II. 88). The apprentice after learning the art from the master would certainly set up an establishment of his own or succeed to his master's.

The *kumbhakāra* is sometimes seen settled in villages outside city-gates (Jāt. III. 376, 508). But he does not generally appear in very dark colours. The potter Ghaṭikāra is a bosom friend (piyasahāyo) to the Brāhmaṇa Jotipāla, so much so that the two go to bathe together and the former even pulls the latter by the locks as an appeal to go to see Kassapa (Mn. 81).

4. *The Weaver*

The weaver was the *pesakāra* or the *tantavāya* both of which were synonymous (Com. Vin. III. 259). Some sort of corporate life or guild organisation seems to have developed among this profession. We hear of "weavers' quarter" (tantavitataṭṭhānaṃ) in a *nigamagāma* (Jāt. I. 356) and of

[1] Pitāputtā naḷakārā.....gangātīre veḷuṃ upadhārentā, Jāt. IV, 318; naḷakāra-jeṭṭhaka.....puttena saddhiṃ gantvā taṃ veṇugumbaṃ chinditun ārabhi, DhpA.I. 177. *Cf.* Prince Kusa who enlists himself as an apprentice to a *naḷakāra* serving a royal house, makes a palm-leaf fan (tālavaṇṭaṃ) with paintings upon it; Jāt. V. 291 f.; basket-makers weaving a mat—naḷakārā kilañjaṃ cinanti, II. 301.

"weavers' street" (pesakāravīthi) outside a city (DhpA. I. 424). Four weavers in Benares would divide the proceeds of their trade into five shares, taking one each and giving away the fifth in common on charity (Jāt. IV. 475). In the Petavatthu Atthakathā eleven *pesakāras* with a *jeṭṭha-pesakāra* entertain a *bhikkhu* to cordial hospitality (pp. 42ff).

The *pesakāra* is loosely defined as a craft and as a *vaṇṇa* (DhpA. I. 428). He is presented with the *kappaka*, the *naḷakāra* and the *kumbhakāra* in a list of ordinary craftsmen (puthusippāyatanāni) who maintain themselves and their parents and children and friends in happiness and comfort (Dn. II. 14). But his trade was not a lucrative one apparently because of the degradation of his race and craft (lāmakakamma, Jāt. I. 356). A weaver (tantavāya) dwelling outside city (bahinagare) who was spreading the threads (tantaṃ pasāreti) while her daughter moved the shuttle (tasaran vaḍḍheti) even when he was caught with senile decay was considered the poorest man in the city by Mahākassapa (ime mahallakakāle pi kammaṃ karonti, imasmin nagare imehi duggatatarā natthi manne, DhpA. I. p. 424). A *sāmaṇera* (novice monk) who is in love with a weaver's daughter is thus questioned by her parents: "tvam ambe uccākulā ti sallakkhesi. Mayan pesakārā, sakkhissasi pesakārakamman kātun ti ?" The love-lorn monk gallantly retorts: "gihibhūto nāma pesakārakamman vā kāreyya, naḷakārakamman vā, kin iminā ?"; and he obtains the girl and adopts the weaver's trade (VbhA. 294 f).

5. *The Barber*

The barber (nahāpita, kappaka) used to do shaving, hair-dressing, cross-plaiting, shampooing, etc. (massukaraṇa-kesauṭṭhāpana-aṭṭhapadaṭṭhapanādīni sabba kiccāni karoti, Jāt. II. 5). His was a definitely dishonourable status. A court-valuer sneaks at a king's miserly offer to his prognoses as a barber's gift (nahāpitādayo) and resigns (Jāt. IV. 137).

A barber after becoming a *paccekabuddha* addresses the king, his late master by his family name and the crowd is infuriated at such audacity on the part of a low-caste person whose occupation is clearing of dirts (hīnajacco malamajjano nahāpitaputto, III. 453; II. 452). A barber asks his son to give up his ambition for a Licchavi princess as *hīnajacca*. The contrast set forth at the introduction of a story which recounts a similar fancy of a jackal for a lioness significantly reveals the depraved status of a barber; he is the same to a royal family as the jackal to a lion (II. 5).[1]

Was the barber's a more respectable calling in farther west from the Gangetic plains? In the Milinda list of crafts and professions he stands in company with cooks, smiths, florists, bathers, etc.[2] This profession is not stigmatised in the law-books or in relevant passages of the Epics. A Snātaka is allowed food offered by a barber (Manu, IV. 253) but not by other artisans (214-20). Even to-day his position is not very dishonourable and he performs important functions in the family ceremonies of the upper orders.

6. *The Acrobat, Magician* and *Dancer*

Acrobats, dancers and jugglers (naṭa-nartaka) form a class by themselves. Very often these arts were combined in the same persons. They entertained citizens in the *samājas* or festive amusements (Rām. I. 18. 18 f; II. 6. 14; 67. 9ff) or roamed about exhibiting their skill (sippam dassento vicarati, Jāt. I. 430; māyaṃ vidhaṃseyya, Sn. III. 141) on the highroad.

Interesting specimens of this art are given. A man born in a jumper's family (laṃghana naṭaka yoniyaṃ paṭisandhiṃ gahetvā) lived with his pupil on the display of his

[1] The royal barber is occasionally seen in friendly intercourse with the employer (Jāt. I. 137; Vin. VII. 14).

[2] *Cf.* Dn. II. 14.

feat (laṃghanasippaṃ) which consisted in setting up a number of javelins in a row and dance through them (*ibid.*). Elsewhere two magician *naṭas* show their tricks. One of them conjures up a mango tree, climbs it and gets himself chopped to pieces by the slaves of Vessavana. His accomplices join the pieces together, pour water and bring him back to life. The other walks into fire with his troupe and comes out unscathed when the fire is burnt out (Jāt. IV. 324). Another conjurer swallows a sword 33 *angulas* long and of sharp edge, before a gathering (III. 338). The Arthaśāstra explains several magical tricks like fire-walking, fire in water, breaking of chains, acquirement of invisibility, etc., many of these in a sham manner (XIV. 2, 3).

These trades served as a wide channel for the wasting of the rich man's money. In the Sigālovada Sutta (Dn.) the six dangers at a *samajjā* are dancing, singing, music, recitations, conjuring tricks and acrobatic shows (*cf.* Dn. I. i. 13). A prodigal son squanders paternal wealth of 40 crores on drinking, gluttony and debauchery and on jumpers, runners, singers and dancers (laṃghanadhāvanagītanaccādīni, Jāt. II. 431). But it does not seem that this money went to the pocket of the struggling man who was half an artist and half a tramp and who is uniformly portrayed as a wretched and despicable creature. The poor jumper who kills himself in trying to clear five spears instead of four which was within his practice (Jāt. I. 430), the dancer who drinks himself to death with all the earnings by his performance in a fête (III. 507), the impoverished family of acrobats (naṭakakula) reduced to begging (II. 167) are typical representatives of a class living a marginal existence. Presumably the rich gamblers betted in shows run by a parasitic set of people with professional jumpers and sprinters.

In the Milinda list of crafts, the *naṭaka, naccaka, laṃghaka, indajālika,* and *malla* come in a series on the wake of the *māṃsika* and the *majjika,*—the butcher and the brewer,

Practice of dancing involves loss of caste (Manu, XI. 66). The professional dancer is among those from whom a Brāhmaṇa is not to take food (Mbh. XII. 37. 31). Viṣṇu assigns artistic performances like public wrestling and dancing to the *āyogava* caste generated by a Śūdra father on a Vaiśya mother (XVI. 8).

7. *The Snake-charmer*

Like the acrobat, the snake-charmer showed his tricks (ahiguṇḍike sippaṃ kīḷāpenti, Jāt. II. 429) in festivals (ussava) very often with a monkey in his party (II. 267; III. 198; IV. 308). His was a highly developed and well-cultivated art (ahivijjā, Dn. I. i. 21). A Brāhmaṇa learns charms from a world-renowned teacher at Taxila and adopts the profession. He approaches a python (which is a Bodhisatta) with magical herbs and repeating magical spells (dibbasodhāni gahetvā dibbamantaṃ parivattetvā). The reptile feels its ears pierced as it were with burning splinters, its head as though broken by the blow of a sword (kaṇṇesu tattasalākappavesanakālo viyo jāto, mattaho sikhareṇa abhimatthiyamāno viya jāto). He spits upon it eating herbs and repeating charms and raises blisters in its body. The teeth are then broken by the same process and the body of the animal squeezed to weaken it out.[1] Certain physical processes are applied on the serpent evidently for the purpose of wearing out its resistance which is then put into an osier-basket (vallīhi peḷaṃ karitvā).

The snake-charmer earns 1,000 *kahāpaṇa*s by performance in a frontier village and sets out on his trade with a loaded cart and a pleasure-car (Jāt. IV. 456 ff). In the Bhuridatta Jātaka where a similar process of snake-catching

[1] Technical languages are used in this connexion which are difficult to decipher. Paṭṭakaveṭhanan nāma veṭhesi, tantamajjitan nāma majji, nanguṭṭhe gahetvā dussapaṭhiman nāma poṭhesi. Cowell renders 'cloth-wrap', 'rope-rubbing,' 'cotton blow.'

is described and where also the snake is a Bodhisatta, the charmer by showing snake-dance in a single village makes a sum of 100,000 *kahāpaṇas* ; people see with gold coin, gold, garments, ornaments and the like (VI. 185f). He comes to play his snake before the king "just bathed and anointed, and wearing a tunic of fine cloth, and making his attendant carry his jewelled basket" which is placed on a dappled rug (191).

The princely returns which only the feats of a Bodhisatta snake can account for and the position of an artisan performing before royal audience are not the real index of the standard of living of the class. Snake-charming is one of the despicable callings taken up by degenerate Brāhmaṇas (Dn. I. i. 19 ff). The *āhiṇḍika* is among the mixed castes born of a *niṣāda* father and a *vaideha* mother (Manu, X. 37).

8. *The Snake-doctor*

Closely allied to the snake-charmer's was the profession of the snake-doctor for the two are sometimes seen combined in the same person (Jāt. VI. 181). Venom-specialists who can cure snake-bite are a common reference in the Jātakas (III. 496; VI. 585). The means for extracting poison were simples and charms (osadehi ca mantehi ca) with which Bodhisatta, born in a family of snake-doctors (visavejjakule) used to practise (I. 310f; V. 202). The very nature of the profession shows that it was not a lucrative one and the common standard is reflected in the doctor without practice in the village (dubbalovejjo gāme kiñci kammaṃ alabhitvā) who plays a trick on some boys to have them snake-bitten and then to cure them for a fee (III. 202). The infallibility of *mantas* was moreover doubtful. The *mantas* of the venom-specialist Brāhmaṇas prevented the snake Takṣaka from having direct access to king Parikṣit, but the success of his ruse is a sad commentary on their efficacy (Mbh. I. 42). And when Arrian quotes Nearchos that Indians can

cure snake-bites where Greek physicians fail (15), it is not impossible that his authority was merely echoing the Indians' vaunting.

9. *The Physician*

The medical profession ranged from wide pharmacological knowledge to quackery and sorcery. Megasthenes observes both the sides of the picture. He speaks of physicians whose most esteemed remedies were ointments and plasters and who "effect cures rather by regulating diet than by the use of medicines." At the same time he notices "diviners and sorcerers.....who go about begging both in villages and towns" (Str. XV. i. 60).

The renowned Ayurvedic school at Taxila is a tribute to the development of medical knowledge. Jīvaka, the celebrated house-physician to the Magadhan king Bimbisāra, received his education there (Mv. VIII. 6). The ancient teachers of medicology (tikicchakānaṃ pubbakā ācariyā) are thus named : Nārada, Dhammantari (physician of the gods—specialist in snake-bite), Aṅgīrasa (versed in the charm of Atharvaveda against disease), Kapila, Kaṇḍaraggisāma, Atula and Pubba Kaccāyana (Mil., p. 272). The parable of an expert physician and surgeon (kusalo bhisakko sallakatto) who operates upon and treats a septic wound caused by weapon (Mil., pp. 110 ff ; Mv. VI. 1 ff) or a boil (Mil., pp. 149, 353) or who can cure a leper in advanced stage or "give the blind man his eyes" (Mn. 75) exhibits an advanced knowledge of pharmacopœia. But as in all ancient culture groups, medical lore was vitiated with demonology and exorcism (bhūtavijjā, Dn. I. i. 21; bhūtavejjaṃ, Jāt. III. 511). In the introductory story of a Jātaka tale, even in the portion which is supposed to be later composition, a boy is advised to escape from a disease-infected house by digging a hole in the wall as the spirit of disease was supposed to guard the gate but not other parts of the house

(II. 79). Belief in spirits was not the only limitation to the science. The Vijayasutta of the Suttanipāta exhibits some elementary knowledge of anatomy and ends by denouncing love for an impure thing like the human body (*cf.* An. V 110). Here is perhaps a psychological factor which conduced to the relegation of pathology and surgery to the plebeian sciences.

The art of healing was stigmatised (Mbh. V. 38. 4; XIII. 135. 14). Not only is a Brāhmaṇa prohibited from dealing in medicinal herbs (Manu, X. 86-89; Gaut. VII. 9 ff; Āpas. I. 20. 12), he is not to take the food offered by the physician (Manu, IV. 211 ff; Āpas. I. 6. 19. 15; Mbh. XII. 37. 29 ff). Indra opposes the offering of Soma juice to the twin Aświns, for their profession had degraded them to the position of servants (Mbh. III. 124. 12). Manu assigns medical practice to the mixed caste of Ambaṣṭhas (X. 47).

But however stigmatised, for a good practitioner it was not a poor profession, because people do spend for the impure filth of their body. By curing a patient Jīvaka gets 16,000 *kahāpaṇas* and a servant and a maid-servant (Mv. VIII. 13). For curing the chief *seṭṭhi* of Rājagaha, he charges a fee of 100,000 (*ib.* 20). Nor was his status a degraded one. Suṣeṇa the state-physician of the *vānaras* of Kiṣkindhyā (Rām. VI. 101. 43) enjoyed presumably a quite respectable status. There appears to be an air of unreality in the unqualified damnation of the medical practice in the literature of the western districts; in the Gangetic provinces at least, the profession as such probably did not suffer under any stigma. The position of the practitioner depended on his practice as now and ever.

Miscellaneous

The list given above is not exhaustive. In the Śāntiparva appearance in theatres (raṅgāvataraṇa), disguising one-

self in divers forms (rūpopajīvanaṃ), sale of liquor and meat (madyamāṃsopajīvyāñca) are among censured professions (295. 5f). A washerman, one who lives on the income of dancing girls (raṅgastrījīvināṃ), professional panegyrists and gamblers (vandidyūtavidāṃ) and singers and jesters (hāsaka) are among those whose food is forbidden to a Brāhmaṇa (37. 29ff). A Brāhmaṇa is prohibited from selling salt, cooked food, curds, milk, honey, oil, clarified butter, sesame, meat, fruit, roots, pot-herbs, dyed cloths, perfumery and treacle (Mbh. V. 38. 5). To live by purveying lac, honey,[1] meat,[1] and poison is a curse (Rām. II. 75. 38). The Smṛtis also give butchers, meat-sellers, killers and trappers of divers animals, trainers of animals, makers of, and dealers in weapons, smiths, carpenters, weavers, dyers, oil-pressers, ploughmen, artisans, mechanics, architects, superintendents of workers in mines and factories, engineers, washermen, quacks, tailors, shopkeepers, publicans, police-officers, mace-bearers, astrologers, soothsayers, weather prophets, etc., (Manu III. 150.63; IV. 84, 210-20; VIII. 65 f; XI. 64; XII. 45 f; Āpas. I. 6. 14; Gaut. XVII. 17; Vāś. III. 3, XIV. 2 f; Baudh. I. 5. 10. 24, II. 1. 2. 13; Nār. I. 178, 181, 183-85; Vṛ. XXII. 3; Viṣ. XXXVII. 22 f, 32, LI. 8, 10, 13-15; LXXXII. 7, 9). The stigma to some of these was only relative to the so-called religious caste while to others, *i.e.*, where the subject is disqualified as witness, it pointed to an absolute standard by which the economic functions of society would be regulated.

The professions assigned in the law books to the so-called mixed castes were *ipse jure* infamous. Guardianship of the harem is the appropriate function of the Vaidehaka (Com. Manu, X. 47; Mbh. XIII. 48. 10)[2], management of horses and chariots (Manu, X. 47; Viṣ. XVI. 13), or

[1] Trade in honey and meat is censured also in Manu, III. 151 and in Jāt. IV. 361.

[2] According to Viṣṇu "keeping (dancing girls and other public) women and profiting by what they earn" (XVI. 12).

singing encomiums (Mbh. XIII. 48. 10) of the Sūta. The Āyogava is a carpenter (*ib.* 13) or net-maker (*ib.* 20). The Maireyaka manufactures wine and spirits (*ib.* 20).

Evidently no rigid and uniform classification prevailed. The Vinaya passage quoted at the beginning of the chapter indicates that besides the damned five there were other pursuits despised in other countries. Standards varied in countries and among communities. Jealousies and predilections played their part in mutual estimation of races. What was honourable at some place might be dishonourable at another. The whole of half-Aryanised Magadha was low in the eyes of the dwellers in the land of Manu, of the high-browed and sneakish *udicca-brāhmaṇa* keenly sensitive of his pedigree. The Sākyas and the Koliyas regarded each other as barbarous people pursuing customs opposed to their own sense of decency (Jāt. V. 412). There was, further, a host of artisan classes who filled a wide range of middle position in economic condition and social esteem,—always however gravitating towards the bottom,—the smith, the carpenter, the garland-maker, the musician, the actor, the panegyrist, the buffoon, the drummer, the butcher, the brewer, the brothel-keeper and so on.

Vagrancy

Below the great estates of wealth and honour, outside the labouring classes, the despised castes and the despised callings,—the vagrant or the professional beggar completes the social picture. There was no flooded mass of starving unemployed; and to many, beggary was a profitable business. Alms-giving being an acid test of piety, kings and merchants erected big charity-halls in the city wherefrom alms were distributed to thousands of people every day (Jāt. III. 129, 300, 414; IV. 15, 63, 176, 402; V. 383; VI. 97; Dn. XVII. i. 23). Professional beggars multiplied fruitfully under the shelter of indiscriminate charity and we hear

of beggar families (duggatakula, Jāt. I. 238) as much as of an acrobat family or a wage-earning family. But the real problem of poverty was not solved, as it never can be, by *private altruism. There were people with whom begging* was the last trench in the battle for existence. With the disruption of the primitive agricultural and pastoral economy, with the growth of cities and aggravation of famines, in days when men sold their freedom for food, there were many who remained outside the reach of the benevolent and wealthy. The Jātaka verse refers to "those who begged for need" (VI. 502)[1] and it is not an unexpected fate for a disinherited Brāhmaṇa boy, reduced to destitution and beggary, to die helpless on the street (V. 468; *cf.* Therīg. 122 ff).

[1] The commentary goes : vanibbakajanesu kañci ekaṃ pi yācakam mā vihiṭṭhāyittha.

CHAPTER V

Class Basis of Social Economy

The real India. Subjective character of canonical and court literature. Material for peoples' history. Comparative objectivity of popular literature.

Popular religion. Aboriginal fetishism. Aryan elemental gods. Symbolical gods. Growth of sects and rituals. Priesthood. Rise to wealth and power. Official and private bounties. Corruption. Regular and secular clergy.

Kings and military lords. Merchants. Economic background of Buddhist heresy.

Slaves and wage-earners. Economic determinism in social gradation. The parish—his position *vis-a-vis* the Saṃgha. Social contrast.

Class compromise. Immaturity of class consciousness. Lower middle class the centre of gravity. Exploited elements a composite body. Ignorance and subjection of the Śūdra.

India of reality.

As the broad economic motives behind social and cultural growth are unfolded before our eyes, we bid fare to the India of magic and romance, the India resounding with Vedic hymns, Buddhist sermons and Epic saga. The miracles wrought by the prophet, the carnivorous and the graminivorous living in fraternal embrace, the king forsaking *rāṣṭravijaya* for *dhammavijaya*, the *seṭṭhi* spurning his hoard like chaff and taking to *pabbajjā*,—all melt in the horizon and we feel the hard ground of conflicts and struggles under our feet. We explore the economic content of India's great spiritual culture—production and distribution of wealth, formation of classes thereon with interests essentially hostile beneath the external harmony of a priestly social philosophy.

Subjectivity of canonical and court literature.

To ascertain whether *artha* or *paramārtha* was the motive power of the cultural apparatus, it is necessary, first of all, to examine the nature of India's historical material. India produced no Thucydides or Tacitus. It yielded a plentiful

crop of canonists and theoreticians to prescribe the divine law and write sacred texts. They formulated their social doctrines in tune with the Brāhmaṇist scheme of society. Their sacred institutes and canonial literature represent only the Brāhmaṇist scheme of society and not society itself. It has been long proved by Western scholars like Senart,[1] Fick and others that Indian society was never founded on the fourfold functional caste—the *varṇāśrama*—as punctiliously laid down in the Smṛti and didactic literature. Brāhmaṇas are frequently seen to drive the plough, feeding themselves on pork, fowl and beef, living on usury or fighting even better than the so-called Kṣatriyas. The householder, instead of repairing to the forest at the age of fifty, is more often seen to cultivate the two middle *vargas*, — *artha* and *kāma*. A society which observes the priestly injunction that women are gates of hell cannot produce women like Ubhayabhāratī and Maitreyī. The king who is sobriqueted Ṣaḍbhāgin—as the taker of only 1/6 of agricultural produce as taxes—is frequently seen ruining the cultivators with fleecing demands and no less is the same king who is extolled as a veritable god on earth seen to die or leave his kingdom before the fury of his oppressed folk.

Sources for peoples' history.

These social pictures are not found in the Brāhmaṇical sacred books. In fact India's history is not to be traced in these canonical works nor in the panegyrics of *praśastikāras* maintained by kings to blow their trumpet. Even foreign visitors like Megasthenes, Fahien and Yuan Chwang wrote under the influence of these religious motives or of king's court. The pulsating life of the endless mass of humanity that extended between the king's palace and the ascetic's *āśrama* is not felt in court or divine literature. The material for peoples' life is to be sought in peoples' literature. Fortu-

[1] *Les Castes dans l'Inde*.

nately such popular literature is not so wanting for us as genealogical and chronological tables and diplomatic and military records. Of course even this literature could not completely escape the tamperings of compilers with idealistic motives.

Comparative objectivity of popular literature.

The remarkable difference between the canonical literature of Brāhmaṇas and that of Buddhists is that the former's vehicle was a savant's language, the latter's vehicle was a more widely spoken language. Buddhist philosophy and practice exhibit some advance from Brāhmaṇism towards equality and democracy in their monastic organisation and theories of state. This explains why the Pali works give insight into popular life more than the Sanskrit. The social life of commoners in the countryside with their sorrows and pleasures, their feuds and fellowships expresses itself in colourful stories,—in rhymes and verses. These unmotivated, spontaneous effusions reflect clearly the beliefs, manners, customs and means of livelihood of the masses. The stories of the Jātakas are such folk-tales accumulated through centuries, in the lips of the commoner. They are presented by the compiler in a casual, parenthetic manner only with the interpolation of the Boddhisatta motive. Sometimes this motive does not colour the incidents which have absolutely no bearing on the moral. The current of popular literature sometimes fade and dry, showed itself again in works like the Pañcatantra, Hitopadeśa, Kathāsaritsāgara, etc. Even the Purāṇas and the great Epics sometimes afford glimpses into real human life beneath the crust of poetic artistry and idealisation.

Popular religion.

With this literature as our sources we have to appraise the place of religion and the form of religion in the life of the masses. Every religious faith may be divided into two compartments—one

is theology, the other rituals. Theology and philosophy is the concern of saints and logicians; the rites and rituals are the peoples' affair. As in any other country, in India also it is seen that in the early stages of corporate life, man, instead of bravely facing the ordeals of nature, lost his nerves before the unknown; from ignorance came fear, from fear propitiation and deification of the unknowable. Whatever was beyond the ken of knowledge and control became mystic and divine, a ready answer to all queries was available in animism. The only escape from danger was fetish-worship. In stones, in animals, in trees, everywhere the aboriginal Indian tribes scented the existence of gods, demons and fairies ready to pounce upon the unwary.[1] Between these animal and totem divinities of the aboriginal non-Aryan tribes and elemental and astral divinities of the Aryans, there is not much difference. Indra, Agni, Pavana and Varuṇa are symbols of elemental forces beyond human control. The cultivator who had no mechanical devices to cope against the vagaries of the monsoons, fell to propitiating the god of the rains. Unable to grapple with the furies of fire man worshipped Rudra, to stop the onslaught of storms and floods the air-god and the water-god had to be appeased. The professional priest now stepped in to bank upon the superstitious veneration and fear of the people. Between the scared man and the remorseless god, he intervened with the much-needed charms and simples, magics and amulets. Gradually the original elemental gods,—the brood of savage ignorance and folly were nursed into the brains of the intellectual to grow into full-fledged supernatural gods, each symbolising a particular virtue. Rudra, the fire-god became Śiva, haunting the crematorium—the ideal of sacrifice and renunciation. The rain-god became

Non-Aryan.

Aryan.

[1] Ample traces of these are available in the Jātakas and in South Indian literature and inscripiions.

the king of gods—conqueror of demons, the symbol of order and righteous government. Kālī represented power, Viṣṇu love and preservation of life, the custodian of *élan vital*.

Sectarianism and ritualism.

These gods with their respective virtues became the stock-in-trade of different religious sects. The hostility among the Śaiva, Śākta, Vaiṣṇava and Saura were sedulously perpetuated by the man-god who stood between man and god. Rooted in the vested interests of the intermediary, popular religion spread new offshoots. A paraphernalia of rituals and ceremonies, distinctive marks of different sects,—hostility between the faithful and the unbeliever were the crop of this new development.[1] Thus popular rituals which at the beginning of economic struggle was confined to an instinctive devotion begotten of fear, ripened in the course of the rise of a new economic class into multifarious rites and practices, divisions and conflicts.

Of course the works of savants contained the gospel of unity within many, of concord of the divers, of godhead above the gods. But the riddles of theology or speculative knowledge are not our concern. We are concerned only with peoples' rites and peoples' religions which are the direct products of the struggle for existence,—not with that mystic core of religion which is reserved for the wise and the learned.

It is also admitted that there were sages who cast aside wealth and fortunes and spent their life to unravel the mysteries of the universe. In ancient Egypt and Babylon and in Mediæval Europe we see the wealth of the nation accumulated in temples and churches and monasteries, that taking advantage of this wealth and human failings, the priest captured the supreme

The Priesthood.

[1] Inscriptions down from the time of the Guptas and observations of the Chinese pilgrims show the multiplicity of sects and rituals which divided both the Buddhist and Brahmanical communities.

power of the state and to defend this 'divine' property against unbelieving and heretical interlopers, revelled in all sorts of intrigues, bloodshed and treason. It is true that the Indian picture is not blackened with such deplorable savagery practised in the name of religion. But even in this sacred cradle of spiritual culture, the worldly and secular priests far out-numbered the renouncing anchorite,—the *dhammadhvaja, kuṭajaṭila* and *kuhakatāpasa* grew like mush-rooms all around (Jāt. I. 375; II. 406, 447, III. 137, 310, 541; Mbh. XII. 120.8, 158. 18f; Arth. I. 11).

Rise to wealth and power.

The treasury and garner of the monk swelled with the produce of the *brahmadeya* and *devatra* and such like property assigned to him free of taxes. Everywhere Brāhmaṇas are seen enjoying tax-free land to the extent of thousands of *karīṣas*, producing food-crops by means of the ox and the plough and gangs of slaves and serfs and living with the power and splendour of kings.[1] Or sometimes the revenues of whole lots of villages are assigned to the Brāhmaṇas by royal charter, the burden of replenishing these gaps in the royal treasury falls on the rest of the people. For this investment of public money what returns society receives from the average Brāhmaṇa? At most a few couplets of royal eulogy (Jāt. V. 23, 484), the solution of a dream and interpretation of omens (Jāt. I. 272) or performance of costly sacrifices for the propitiation of the gods. To the credulous he sold the privilege of rendering homage to the person of a woman who was believed to have borne a child to Brahmā (Jat. IV. 378). Wealth and social prestige gave him further powers in state and society. The priest became the chief adviser to the king in matters temporal and spiritual (aṭṭhadhammānusāsaka, Jāt. II. 105, 125, 173, 175, 203, 264; III. 21, 115, 206, 317, 337, 400, etc). Sometimes he made his office

[1] Dn. III. i. 1; IV. i. 1; XII. i. 1; XXIII. 1. Mn. 95.

hereditary (Jāt. I. 437). As the sole exponent of canon law he sat in the hall of judgment and extended his power to the wider regions of civil law—of *vyavahāra* and *vinicchaya* and not infrequently traded with his judicial decisions (lañcakhādako, kuṭavinicchayiko, Jāt. V. 1, 228; VI. 131). Sometimes he flattered the conquering zeal of the king so that in the whole of India "he will become the sole king and I the sole housepriest" (ekapurohita, Jāt. III. 159). All the while the recipient of *bhogagāmas* and *brahmadeyas* increasingly invested his wealth in commercial ventures or following the fourfold Vaiśya pursuits of agriculture, cattle-rearing, trade and usury grew into a multi-millionaire (asiti-koṭivibhavo) capitalist interest and basked in the sun-shine of the court. His daily pension from the king amounted to 100, 500 or 1,000 *kahāpaṇas* (Mn. II. 163; Sn. I. 82; Dhp. 204 Com.) He is seen in the role of great magnates sending 500 wagons from East to West (Jāt. IV. 7; V. 471). He is seen to multiply his wealth sailing with cargo and slaves and servants to the Far Eastern Islands (Jāt. IV. 15; *cf.* VI. 208). He is seen to function as king's treasurer (Jāt. I. 439; E.I. IX. 33. iii). As the cult of Mammon grew among the traders in religion, megalomaniac bounties became a fashion with their royal patrons and proteges.

Private and official bounty.

The gifts of *brahmadeya* imposed by priesthood on temporal authority by cajoles and threats conduced to a rapid concentration of land in the hand of secular Brāhmaṇas[1] who are so prominent by their landed wealth in folk literature, although in didactic pieces cultivation of land is assigned exclusively to Vaiśyas. Private munificence vied with the royal. An early Brāhmī inscription in Mathura records a perpetual endowment by a lord out of the monthly interest whereof 100 Brāhmaṇas should be served daily (E.I. XXI. 10). From a single day's

[1] See *supra*, pp. 34f.

itinerary, a Brāhmaṇa begs sufficient money to buy slaves male and female (Jāt. III. 343).

Corruption and abuse.

Nor was the Buddhist *saṃgha* immune from the corrupting influences of gold. The Karle and Nasik Cave inscriptions show how the extravagant bounties of Śaka princes flowed indiscriminately into permanent endowments to Brāhmaṇas and to the *saṃgha*. Kuṣāṇa inscriptions from Mathura tell the same story (E. I. XXI. 10). The Buddhist monasteries are so often found overflowing with gain and honour (lābhasakkāra) 'like five rivers' (Jāt. I. 449; II. 415; III. 126; Dh's Com. on Therīg. 92 ff), which undermine their ascetic purity (Mn. 76, 79). They maintained slaves and servants who begged alms on their behalf (Jāt. III. 49) or served as gardener or went on shopping errands.[1] Female slaves and dancing girls are seen in the Brāhmaṇical (E. I. XIII. 7A) and Jaina temples to serve or perform for gods and their mortal agencies. The superintendent of female temple-slaves enters into the list of temple officials (E. I. XIII. 7A). They "are frequently represented on the Buddhist monuments as exhibiting their art at festivals."[2] Instances are not rare of sages falling from virtue as a result of surfeit from lay people (Jāt. V. 162), nor of people entering into the cloisters for comfort and lucre (I. 311, 340). Parents would choose for their boy the monastic life as the most comfortable means of a livelihood (Mv. I. 49). In the words of Mahāmoggallana himself there was a vast number of deceitful tricksters (saṭhā māyāvino) who took to *pabbajita* not for belief but for livelihood (asaddhā jīvikatthā; Mn. 5). The whole set of disciplinary rules laid down by Buddha throughout the Vinaya-piṭaka reveals in fact a desperate effort to resist the rush of self-seekers and criminals in the

[1] Mrs. Rhys. Davids. J. R. A. S., 1901. p. 863.

[2] Bühler: *Epigraphia Indica*, II. 24.

saṃgha and to stamp out corruption and luxury which public liberality constantly impinged upon it.

Inscriptions in Karle and Nasik Caves, those from the time of Kaniṣka and Huviṣka (E. I., VIII. 17 f) and those in the Sanchi Topes are a sad commentary on the monastic vow of poverty. Out of the 285 votive inscriptions from Sanchi as many as 54 monks and 37 nuns appear as donors. "They must have obtained by begging the money required for making the rails and pillars. This was no doubt permissible, as the purpose was a pious one. But it is interesting to note the different proceedings of the Jaina ascetics who according to the Mathura and other inscriptions, as a rule, were content to exhort the laymen to make donations and to take care that this fact was mentioned in the votive inscriptions." [1]

Brāhmaṇas, regular and secular.

The argument may be put forth that the *brahmadeya* and immunity from revenue accrued not to all Brāhmaṇas but only to *śrotriyas* or those who studied the Vedas and performed sacrifices thereby performing some social duty. The Śāntiparva indeed carefully demarcates pious Brāhmaṇas who are to be exempted, from secular Brāhmaṇas who are to be fleeced with taxes and forced labour. But is there any recognised hallmark of piety? The Brāhmaṇical works themselves show the priests haggling and bargaining for their fee (Śp. 29. 124f; *cf.* Arth. III. 14; Jāt. I. 343; III. 45). They were organised exactly on the lines of industrial guilds and laws are laid down for the division of their earnings (Manu, VIII. 210, 206; Nār. III. 8). The Pali literature, especially the Jātakas, show that the recipients of *brahmadeya* gifts of land as those of *lābhasakkāra* in the Buddhist Order were not devoted spiritualists. Even if it be accepted that wealth and privileges poured upon bona fide religious persons and

1 Bühler, *Epigraphia Indica*, II. 7.

orders, history has abundant proof that such a constant outflow corrupts even the purest recipient and works his ruin. At any rate, the state became the poorer and had to lay its fingers in the pockets of the toiler.

Military lords.

The pseudo-religous caste had not the monopoly of power and privileges. The other estates were aligned with them on identity of interests, known in the Dharmaśāstras as the Kṣatriya and the Vaiśya. Although proofs are lacking of the existence of a group of hereditary military castes under the general name of Kṣatriya, still there is little doubt that there was a class of nobles who cultivated the arts of politics and war and occupied certain high posts of government. With the expansion of the king's family his kinsmen were absorbed in this class as generals, feudatory lords, governors and bureaucrats. Or, in the case of oligarchical tribes like the Śākyas, the Koliyas, the Vṛjjis, the Mallas and later on the Rajput clans, the so-called Kṣatriya caste divided the tribal land among themselves. With land they monopolised political power. Their much-belauded republican government was confined to the *rājakulas*;—the *sāmantas*, *uparājas*, *amātyas* and other underlings enjoyed that much of wealth and power which their masters condescended to spare for them, and the slaves and hirelings who formed the majority in the state cultivated lands, gave their life in battles to defend their master's interests and obtained food and clothing or wages up to or more often below their living.[1]

Mercantile magnates.

Side by side with this class rose the class of merchants; proprietorship of vast landed estates went under the grip of capital. The *śreṣṭhīs* did not stop with sending fleets loaded with cargo to Java, Sumatra and the Eastern Archipelago; they also cultivated

[1] See *supra*, p. 23.

vast stretches of arable land by means of gangs of slaves and hirelings and thereby attained to the topmost rung of the economic ladder, familiar as *asitikoṭivibhavo*. Like the *gāmabhojaka* and the Brāhmaṇa magnates, the *seṭṭhi* accumulated huge quantities of grain which he cornered in times of scarcity and which thus gave him a sinister influence in society. He represents "a crosscut through the ancient system of castes, a plutocracy perpetuating itself as an aristocracy." [1] *The seṭṭhi* and the industrial *gaṇa* were powerful economic interests which had large influence in the policy of the state and which no king dared to defy. From this community was filled up the high post of financial adviser (seṭṭhitthāna) which presumably determined the economic policy and functions of the state and which often tended to be hereditary (Jāt. I. 231, 248; III. 475; IV. 62; V. 384). As owner of eighty crores he is found highly esteemed by king and by citizens and country-folk alike (rājapūjito nagarajanapadapūjito). As Fick says, the *seṭṭhi*, by virtue of his immense wealth, became indispensable to the king, as we find him constantly in his retinue.[2]

Economic background of Buddhism.

As in Europe of the 18th century it is seen that the economic content of democratic movements was the struggle of the rising bourgeoisie to seize power from the grip of the firmly entrenched clergy and nobles, so the ideal of Buddhist republicanism was the replacement of the Brāhmaṇa priesthood by the *seṭṭhi*s and *gahapati*s and their royal allies. Against the Brāhmaṇical pretension to supremacy explicit in the fourfold caste order and asserted in many legends like that of Viśwāmitra, the Kṣatriya aspirant to Brāhmaṇism and that of Paraśurāma, the destroyer of Kṣatriyas twenty-one times all over India, the Buddhist works give precedence

[1] Washburn Hopkins, *India Old and New*, p. 172.

[2] *Op. cit.* p. 168.

to Khattiyas over the Brāhmaṇa, Gahapati and Sudda and very often bursts into vigorous denunciation of the Brāhmaṇas with their sacrificial rites and sordid motives of gain. "The Khattiyas are superior, the Brāhmaṇas are inferior," so says Gotama (Ambaṭṭhasutta, Dn., *cf.* Jacobi: Jainasutras, pp. 225f). "The superior position of the Khattiyas in the Eastern countries and the corresponding decline of Brahmanical influence present themselves to us with irresistible necessity when we study the Pali Literature."[1] "The prevalence of merchants and traders (in the Sanchi Ins.) seems to indicate, what indeed may be gathered also from the sacred books of the Buddhists, that this class was the chief stronghold of Buddhism."[2] The *seṭṭhi* and *gahapati* were the principal tax-paying class[3] and so had their axes to grind against the Brāhmaṇa exemptees swelling with wealth. The economic background of Buddhist heresy is the combination and revolt of the two powerful class interests—the military and the mercantile—against the old monopoly interests of Brāhmaṇa priesthood.

The mercantile interest served the *saṃgha* as lay *upāsakas*, built them *caityas* and *stūpas*, fed them with choice delicacies and rose to power and position. The long feud with Brāhmaṇism at last terminated into a compromise. The *seṭṭhi* and *gahapati* had their position acknowledged and with their purpose served, they let down the Buddhist and shifted their bounties and allegiance to the Brāhmaṇa. Inscriptions from the time of the Guptas record this change.

[1] *Ibid.*, p. 56 and the following pages for references. For the history of the struggle for supremacy between the two classes, R. C. Majumdar: *Corporate Life*, pp. 366-72. Also *infra*, p. 508.

[2] Bühler, *loc. cit.*

[3] Fick, *op. cit.*, p. 79. For the 'marked leaning to aristocracy in ancient Buddhism' see Oldenberg: *Buddha*, pp. 155ff.

Slave and hireling.

Thus the upper classes appropriated national wealth and political power. The slave and the hireling who with their toil built the edifice of civilisation and prosperity remained the deprived and despised underdogs of society. They were employed in gangs for the service of the rich. The slave was like his master's cattle. He had no juristic personality nor property. The male slave is seen to work on hire to feed his master, the female slave is seen to warm his bed. If sometimes they were treated well, it was in the same way as the owner cared for his cattle from his own interest or from prolonged association. The servant working for a wage or for share of profit had not the same luck. In most cases he was denied a living wage and a square meal. This landless proletariat remained at the lowest rung of the economic ladder. The lawgivers and politicians did not spare them the barest amenities of life.

Economic determinism in social hierarchy.

The three aristocratic classes into whose hands concentrated national wealth form the *dwija* group—the impoverished *dāsa* class form the Śūdra group.[1] Of the so-called Brāhmaṇas, Kṣatriyas and Vaiśyas many were impoverished by the shufflings of fate and relegated to the plebeian class. Brāhmaṇas and *gahapatis* fallen from fortune appear as poorest farmers, artisans and hunters. In literature, sacred and profane, they appear with despised callings of quacks, king's orderlies, wood-cutters, petty traders and craftsmen and in every conceivable role. Scions of royal race defeated in battle or dice or victims of court or palace intrigue are seen to be reduced to begging or to slavery. The commercial magnate whose caravan was plundered by brigands or whose cargo was sunk in the ocean had to live by serving others. Mahākacchana illustrates the equality of castes by

[1] Mark the indiscriminate use of *dāsajāti*, *śūdrajāti* and *dāsavaṇṇa*, *śūdravaṇṇa*,

pointing out the uncontroverted fact that any one of the four castes, if he can become rich, may employ another of even superior caste to serve him as slave (Mn. 84; Suk. III. 369-75). Against Senaka's contention that "wise men and fools, men educated or uneducated, do service to the wealthy, although they be high-born and he be base-born," Bodhisatta has to take his stand on the next world to prove the superiority of a poor sage over a wealthy fool (Jāt. VI. 356ff). The cant confession is made in the Mahābhārata that wealth confers family dignity while poverty takes it away (III. 192. 21). Social precedence was thus determined not by birth but by wealth. Thus the priestly caste theory which was sought to be foisted on society broke down under the inexorable pressure of material circumstances and gave place to hostile classes belonging to different economic categories.

The Mleccha.

Aligned with slaves and hirelings was another class,—the low castes and low crafts who under the general brand of *mleccha* were degraded even below the Śūdra. The pariahs pursued arts and trades which the society could not dispense with but which repelled the sophisticated sense of refinement and culture. The Pali works testify that they lived outside the village gate and city gate, *i.e.*, in isolation from civilised society. The habitat assigned them by the lawgivers was the hill and forest or the cremation ground. Tree is to be their shed, iron their ornament and pariah arts their profession (Manu, X. 50; Mbh. XIII. 48. 32). They exposed themselves to any length of corporal punishment if they defiled with their filthy presence the air and water in the vicinity of their superiors. They were denied the great honour and privilege enjoyed by the slaves and serfs, that of serving their masters.

It is true that the door of the *saṃgha* was open to all these people excepting the slaves. But they are very seldom

seen as members of the Order; firstly, because the homeless condition was often a reaction from surfeit of wealth and power which these people were totally denied; secondly, because the poverty and degradation which was their habitual lot did not foster that high enlightenment and spiritual consciousness which actuate monastic zeal. "Judging from their isolated and low position which excludes them from all communion with the Aryan people and as a consequence of this, from all participation in spiritual life the actual existence of such holy men is extremely doubtful."[1] They were at least rare.

Spiritual culture for the *mleccha*.

The pronounced social contrast between the two classes is expressed through the familiar Pali phrases 'mahā-bhogakula' and 'daliddakula,' 'sadhanā,' and 'adhanā,' 'sugatā,' and 'duggatā,' through the lamentations of Gālava (V. 106. 11) and of Yudhiṣṭhira (V. 71. 25f) in the Mahābhārata that one destitute of wealth is a wretch, that there is no virtue for the poor, that wealth is an essential contributory factor to the cultivation of virtue. In the Pali passage quoted at the beginning of this Book, ignorance, low birth, poverty, vice and purgatory form an unbroken chain, while wisdom, pedigree, wealth, virtue and heaven constitute a set of counterparts going together. This is not an isolated passage and recurs almost *verbatim* throughout the canons (Mn. 93, 96; An. II. 85; Sn. I. 93; Pug. IV. 19). Virtue thus tended to be a monopolistic concern of the upper orders with ample leisure and ample wealth; and in the preservation of this leisure and wealth they ultimately made a caricature

Social contrast.

[1] Fick, *op. cit.*, p. 51. 10 among the 259 authors included in the anthology of Theragāthā and 4 out of the 73 in the Therīgāthā come from the ranks of the poor and despised: actor, pariah, fisherman, labourer, slave, trapper, 'poor family,' etc., *i.e.*, about 4·2 p.c. The bulk come from Brāhmaṇas and aristocrats and a few from among the artisans (Paramatthadīpani).

of virtue which poisoned the social organism and led to metamorphosis and decay.

These are not to deny that this social inequality was not as glaring in India as in other ancient cultures. Class differences did not assume those horrible and destructive proportions in India as they did in ancient Rome, Greece and Egypt and later in France and Russia. That implacable hatred between the Patrician and the Plebeian, the perennial and seething disaffection of the helots always ready to burst and explode the Spartan state and the enslavement of the whole people below the Pharaoh with his priesthoods and entourage in the land of the Pyramids,—these scenes are not witnessed in India. It is an interesting subject for investigation why class conflict and class consciousness did not mature in this country.[1]

Class differences in India and elsewhere.

The chief reason is that the zemindary system could not develop in ancient India. The freeholder was real master of his arable and homestead land. The small farmer defrayed his expenses cultivating his own land; in the eyes of law he was equal with the great landowner—the *asitikoṭivibhavo kuṭumbiko* who employed slaves and serfs to cultivate his fields. Generally he had no fear of losing his property except in cases of famine or a natural calamity. Ordinarily he remained in hereditary enjoyment of his patrimony unless he pitted himself against the powerful and defaulted in the payment of revenues. The *gāmabhojaka* was not a zemindar to whom land was farmed; he enjoyed the revenues of and ruling powers in his *bhogagāma* but not ownership and usufruct.[2] The independent small freeholders and craftsmen

Circumstances favouring class compromise: 1. The lower middle class.

[1] Class struggles were rare but not altogether absent though evidences are lacking. The Kaivarta revolt in the reign of Mahīpāla in Bengal is a positive instance.

[2] See *supra*, Bk. I, Ch. III.

may be termed the petty bourgeoisie of ancient India who from the last few centuries are being gradually declassed and levelled with the proletarian mass. This middle class formed the majority distributed over a wide range and this class of lower Vaiśyas held the balance between the Śūdra and Dwija classes. Society was a complex hierarchy and because the centre was heavy, poise was maintained.

2. Exploited class, a composite body.

The second point to note is that the exploited elements in India were never welded into a homogeneous mass with the consciousness of a common class interest. It is seen even now that the Śavara discards the Caṇḍāla as an untouchable as much as he is himself hated as a low caste by the Brāhmaṇa. The exponents of divine will have created and perpetuated this division among the *hīnavarṇas* with masterly skill. The slaves and hired folk too could not combine with the pariahs,—they could not even develop a communal consciousness among themselves. The reason for this is that they were not numerically strong like the slaves in Rome and Egypt and they lived scattered and distributed in different localities. We have no *dāsagāma* or *bhatikagāma* as we hear of *caṇḍālagāma* or *nesādagāma*. The latter lived in villages of their own. The slaves and wage-earners lived with their masters or were scattered in their several sheds. The slaves were not always treated inhumanly and felt the family ties of their masters; so discontent did not spread sufficiently deep for violent action. The wage-earners had no means to organise, no facilities to build guilds and unions like *śreṇī*, *saṃgha*, *pūga*, etc., as the skilled artisans used to do to safeguard their interests. They had no fixity of dwelling and fixity of terms nor any security of service. Standing between vagrancy and starvation, eking out a miserable existence by any chance engagement, this mass of unskilled labour was thrown entirely at the mercy of the employer.

The third reason is that the lower classes were not given access to the secrets of knowledge which gives confidence and voice of protest to the inarticulate. For a Śūdra it is sacrilege to profane the *śāstras* with his inquisitiveness. From the earliest traceable times, these people were kept in dire ignorance. The holy *mantra* was constantly dinned in their ears that their only path to salvation was through service of the higher *varṇas*. Whoever had the temerity to question this authoritarian system or to strike at the closed doors of knowledge had no escape from the inquisitorial vigilance of the Brāhmaṇa and the retribution which it brought. The legend of Śambuka, a Śūdra *hīnavarṇa* who dared to perform Brāhmaṇical rites and who for this inexpiable offence forfeited heavenly bliss though killed in Rāma's hands is only a case in point. The Śūdra and Mleccha were never allowed to think and feel their position on earth.

3. The Śūdra kept in ignorance under threat.

Thus it is that the multi-caste society, compartmentally divided, integrated the parts. The mechanism of class collaboration was a slowly built process. The oldest books hark back to the existence of only one *varṇa*, that of Brāhmaṇa or Deva in the dawning era of generation (Ṛv. 10. 90. 5; 10. 121. 1; Bṛ. Up. 1. 4. 10. 11; Muṇ. Up. 1. 1). This primogenial *varṇa* or uni-caste society existed only during the figment of Satyayuga recalled to emphasise Aryan solidarity and the bliss that was yet to be conquered against the hostile surroundings of the time. The selfsame literature present a two-caste society, emerged, not from a split of the primogenial body but from the impact with another body or race, *viz.*, the Anārya, Dasyu, Śūdra or Asura (Ṛv. 1. 5. 1. 8; 1. 103.3; 1. 117. 21; 1. 230. 8; 3. 34. 9; 5. 28. 4; 6. 22. 10; 7. 6. 3; 10. 22. 7f; Av. 19. 62. 3; 19. 7. 8. 1; Bṛ. Up. 3. 3. 1). This is not class war but a war between two families of races, the aboriginal Asura or

Dāsa on the one hand, the aggressor Deva or Ārya on the other.[1]

The two-*varṇa* war fought for the possession of the heaven, the earth and the seas, for the charms of women, greed of wealth and lust of power, legendised in innumerable *kathās* and *gāthās*, was later attenuated into the esoteric doctrine of struggle beween the soul and the flesh, the sentient and the obtrude, the *sattva* and the *tamas*. This symbolisation of the *devāsura* legend was no doubt an after-thought, inasmuch as the Asuras sometimes beat the wisdom of the Devas and the Devas acquire the secrets from their rivals by methods not very *sāttvic*.[2] The spiritual antitheses of *āryabhāva* and *dāsabhāva* were moulded into the synthesis of *brahmabhāva*,—'sarvé varṇā brāhmaṇā brahmajāśca sarvé' (Sp. 318. 89), 'sarvaṃ khalvidaṃ brahma sarvaṃ brahmamayaṃ jagat' (Ch. Up. III. XIV. 1). But the social antitheses found their synthesis not in monism but in pluralism. The casteless or classless millennium was an idea, never a reality. The two-*varṇa* system gave way to a complex hierarchy, the Ārya ramifying into three *varṇas* which were interwoven into countless sub-castes and mixed castes. The Brahman remained a cosmogonical and an ontological conception, it never became a social entity. It did not regulate the social attitude of the so-called Brāhmaṇas and the privileged classes. The theism of Brahmavidyā accordingly remained at the apex of the social pyramid. The popular religion of polytheistic and pseudo-theistic cults permeated the body and the base.

[1] The Ṛg-veda is replete with references to this protracted socio-caste struggle. "Viśwasmād sīmadhamanīndra dasyūn viśo dāsīrakṛno *r*aprāśastaḥ," 5. 28. 4. Lord Indra! You have deprived these Dasyus of all merits. You have made the Dāsa people blame-worthy. Again,

"Akarmadasyurabhi no amantra *r*anyabrato amānuṣaḥ tvam tasya mitrahan vadhar dāsasya dambhāya," 10. 22. 7f. We are surrounded by Dasyus, averse to incantations, having other vows and dehumanised. Oh killer of enemies! Kill these inflated Dāsas.

[2] *E.g.*, Kaca, son of the divine sage Bṛhaspati, steals the secret of elixir (sañjīvanī vidyā) from the Asura sage Śukra by ingratiating with the latter's daughter.

CHAPTER VI

Material Background of Indian Culture

So the pet patriotic tradition of a super-mundane Indian culture does not stand the test of the scientist. In the process of historical evolution, hard material facts are exposed with crude reality. On scientific analysis the glorified missionary and cultural enterprises beyond the Himalayas and the Bay of Bengal reveal similar social forces as worked behind the European migrations to Africa and Asia in the last century or recent Jewish exodus from Germany under pressure of the Nazis.

The abundant instances of sea voyages in the Jātaka stories all relate to commercial ventures in the Eastern Islands or to even baser economic motives.[1] The early diplomatic exchanges between princes were very often accompanied by the exchange of some rare agricultural or commercial goods. It has been held on good authority that most of the embassies from Tamil kings going with tribute to China were merely trading expeditions on joint account of the ambassadors.[2] The great trek to Java from north-western India was a part of the process of Śaka migration which was stimulated by the anarchical conditions of northern India and by the conversion of the Bay of Cutch into a salt desert accompanied by the diversion of the rivers that watered it. The defeat of the white Huns by Sassa-

[1] One of them narrates how a whole settlement of carpenters consisting of 1,000 families took contracts for houses and furnitures—but after taking a large advance failed to do their job. Harassed by their creditors, they built a ship and slipped off at dead of night with their families into the ocean. IV. 159.

[2] J. R. A. S. 1869. pp. 490 ff.

nians and Turks in the latter half of the 6th century intercepted their retreat northwards. There were military pressures and defeat from the Maukharis of Kanauj. These were followed by the Turkish advance from the north and Arab raids both by sea (637) and through Persia (650-60), the overthrow of the Buddhist Saharais by their usurping Brāhmaṇist minister Chach and his persecution of the Jats,—a series of incidents which explain a steady outflow of north-Indians southward from the ports of Sind and Gujarat which was stimulated by the tradition of Javan prosperity.

Prior to the ninth century from when the decline of Buddhism stimulated large-scale migration of the faithful from Bengal and Kaliṅga to the Eastern Islands,[1] the commercial intercourse of the Buddhist merchants set the stage for missionary undertakings and later for assumption of political supremacy.[2] In the memoirs of Chinese pilgrims the great Bengal emporium of Tāmralipta appears as a conspicuous Buddhist settlement. Indo-Chinese religious intercourse beginning from the 4th century A.D. was preceded by flourishing Indo-Chinese commerce from the 1st century A.D. This commercial and colonising activity as well as religious intercourse simultaneously reached their height in the time of I-tsing who records the itinerary of sixty Chinese pilgrims and bears witness to prosperous Indian colonies in the Archipelago and the East Asiatic coast which served as convenient halting places for missionaries.

So the spread of Buddhism in the far East with Indian art traditions, the *dhammaghosa* and the *dhammavijaya* are ultimately traced to the political and economic circumstances of northern India and neighbouring countries.

[1] Bombay Gazetteer, Vol. I, p. 498.

[2] Col. Phayre : *History of Burma Race.*

The political intercourse between the Caesars and Kuṣāns as recorded by Roman historians is explained by the fact that " their commercial importance as controllers of one of the main trade routes between the East and the West made the friendship of the Kuṣāns or Śakas who held the Indus valley and Bactria a matter of the highest importance to Rome."[1] These commercial transactions brought arts and ideas in their train. Roman astronomy, Roman coinage, Roman art traditions which inspired Indo-Bactrian plastic art at Gandhāra, all flowed through the streams of Roman gold.

Thus the noble cultural heritage of Greater India dissolves into a *melieu* of material forces operating under the inexorable dictates of Nature. Royal fury, foreign invasion, embroiling debts, loss of wealth and lust of gold,—these motive forces set peoples and races on move. They only carried with them a gilded layer of Indian lore and Indian cultural traditions, the social and cultural values which were impregnated by the class-characteristics in their own country. Literature and art reflected this class stamp of society. Like literature, art was divided, though not very sharply, into two schools,—the royal art executed at Sarnath, Karle and Nasik and the folk art carved at Barhut and Sanchi. The wide activity of the guilds in spheres legislative, political and cultural and their importance recognised in all theoretical works, shows the magnitude of economic influence. In the rise and fall of Empires, the same immutable laws were working. The great dynastic interests were supported by the rise of the Brāhmaṇa and the Seṭṭhi on one hand and by foreign invasions on the other which threatened big properties and vested interests. In the rise and decay of religions the same principles are revealed. It would not be gratifying for the Holy Buddha

[1] Bombay Gazetteer, Vol. I, Part I, p. 490.

to find his immortal message reduced to a medley of silly superficial rituals. He would not be flattered at his devotees worshipping his nails and teeth instead of practising the four *vijjā*s and the eight *maggas*. But such is the irresistible march of history. Bereft of the economic interests which called the Buddhist message to fight the existing order with their arms and wealth, Buddhist mission died as a religious force in the country and was transplanted into foreign countries with a new and congenial economic setting.

'artha eva pradhānaḥ' so says Kauṭilya; arthamūlau hi dharmakāmāviti (Arth. I. 7).

APPENDIX

The Date of the Arthaśāstra

The controversy over the date of the Arthaśāstra attributed to Kauṭilya has of late tended to subside and scholars with rare exceptions are complacently building their theses upon the theory of Vincent Smith and Shamasastri assigning the work to the 4th century B.C. The plea to bring it down to the 3rd century A.D. set forth by Jolly in the introduction to his edition of the Arthaśāstra and by Winternitz in the third volume of the History of Indian Literature has had no wide acceptance and was weakened by the refutation of Shamasastri and N. N. Law. In an article in the J.R.A.S., 1929 (pp. 77-89) it was shown by another scholar that the comparison of certain expressions and passages in the Arthaśāstra with Aśvaghoṣa's Buddhacarita on the one hand and with Āryaśūra's Jātakamālā and the Laṃkāvatārasūtra on the other placed the book with tolerable certainty between the beginning of the Christian era and about 150 A.D., or at most 250 A.D. In the Political History of Raychaudhuri 300 B.C. and 100 A.D. are taken as the upper and lower limits. Without any pretension to speak the last word on the subject a few clues to the chronological mystery may be gathered which expose the 4th century theory to considerable amount of criticism and incline the balance of evidence in favour of the 1st century after Christ.

The priority of the Arthaśāstra to the Smṛtis of Manu and Yājñavalkya has been sought to be proved by comparison of their social and political systems. This is based on the false assumptions that the theories in the Arthaśāstra

correlate to facts and institutions without fail and that there was absolute uniformity of beliefs and practices in Magadha and the Brahmarṣideśa or land of Delhi and the Eastern Punjab where the sacred institutes were born. The points of analogy moreover are not less if not more outspoken than those of disparity. As between the Arthaśāstra and Manu, Yājñavalkya and Nārada affinity is very close with regard to the laws of hire and contract, of debt, deposit, witness, gift, stolen property and ownership; robbery, defamation and intimidation; assault, marital rights and proprietary rights of women and inheritance. Manu and Yājñavalkya attest the fixing of price of merchandise. There is also similarity with Manu on the existence of private and communal ownership of land side by side, acceptance of a day's work from common artisans in lieu of taxes, salt as a royal monopoly among other things (land-grants dating from the time of the Śātavāhanas frequently confirm that salt was a royal monopoly under their rule) and reference to the Magadha among mixed castes. The argument that the Arthaśāstra knows only four kinds of slaves while Manu seven and Nārada fifteen was put forth from oversight for the Arthaśāstra distinctly refers to the (1) *udaradāsa*—born slave, (2) *krīta*—purchased, (3) *āhitaka*—acquired by mortgage, (4) *sakṛdātmādhātā*—voluntary enslavement, (5) *daṇḍapraṇīta*—enslaved by court-decree, (6) *gṛhajāta*—born in the house, (7) *dāyāgata*—acquired by inheritance from ancestors, (8) *dhvajāhṛta*—captured in war or raids. It is moreover pointed out that slaves might be acquired in other ways that are left unspecified (labdha-krītānām anyatamāni). Thus the Arthaśāstra list is wider than Manu's (VIII. 415) and embraces almost all the varieties cited by Nārada (V. 26-28) only under more numerous sub-heads except a few which may have been later development. It is most unsafe to derive chronological conclusions from comparison between *śāstra* literature which

not only ignore facts on many instances but represent theories and institutions of a much earlier age than the one when they are composed. Still the closer resemblance of the Arthaśāstra to the later *dharmaśāstra*s than to the earlier *dharmaśūtra*s of Gautama, Bodhāyana, etc., cannot be left entirely out of account.

A conspicuous example of this analogy is found in the currency system described in the three types of literature and in Pali works.

Commenting on Suttavibhanga, the Pārājika, 11-16, Buddhaghosa says that in Bimbisāra's time in Rājagaha :—

1 Kahāpaṇa	=	20 māsakas
1 pāda	=	5 māsakas
1 Kahāpaṇa	=	4 pādas

This *kahāpaṇa* however, he warns, is the ancient *nīla-kahāpaṇa* not the Rudradāmaka—a depreciated standard adopted and followed from Rudradāman's time.

Sāriputta again in his commentary on the passage of Buddhaghosa, explains that this Rudradāmaka is $\frac{3}{4}$ of a *nīlakahāpaṇa*.

From a comparison of the weight of the silver *dharaṇa* as given by Manu, Yājñavalkya and Viṣṇu and of the Rudradāmaka *kahāpaṇa* it is found that they bear the same ratio in weight as the *nīlakahāpaṇa* to the latter, so that the *dharaṇa* and the *nīlakahāpaṇa* may be identified denoting the same class of silver coins.[1] It is to be noted that while Gautama and Kātyāyana, like the Pali texts retain the term *kārṣāpaṇa* for silver as well as copper coins, Manu, Yājñavalkya and Viṣṇu reserve *kārṣāpaṇa* only for copper coins and invent the separate term *dharaṇa* for silver coins. Probably the Pali term *nīlakahāpaṇa* was devised to remove this source of confusion.

[1] See C. D. Chatterji's article on Numismatic Data in Pali Literature in B. C. Law's *Buddhistic Studies*, pp. 424 ff.

Now the Arthaśāstra agrees with the later law-books in this respect. Its silver coin is *dharaṇa* and its copper coin *kārṣāpaṇa*. It also agrees with Manu, Yājñavalkya and Viṣṇu in respect of the prescribed weight of the standard gold and copper money,—the *suvarṇa* and the *paṇa* or *kārṣāpaṇa*—but differs as regards the weight of the standard silver coin—the *dharaṇa*. This difference may be easily accounted for. The prescribed weight of *dharaṇa* in the Arthaśāstra closely approximates to the prescribed weight of the *suvarṇa* and *paṇa* the margin being explicable by the fact that since the weight of the *gaurasarṣapa* and the *guñja* or *kṛṣṇala* might slightly vary in different parts of India, the ratio between the two given in the Smṛtis may not be the exact standard. It seems that the author of the Arthaśāstra aimed at a currency reform whereby the same weight standard could be prescribed for the three classes of coins like many other projected reforms in other spheres of administration.[1]

Shamasastri claims that the *kārṣāpaṇa* which according to Patañjali's Mahābhāṣya was in earlier times equivalent to 16 *māsa*s, indicated the Arthaśāstra's equation of 1 *suvarṇa* or *karṣa* to 16 *māsa*s. He has confused between the weight standard of *karṣa* (to which conformed the standard gold coin *suvarṇa*) with the silver money called *kārṣāpaṇa*. In the Arthaśāstra's table 1 *karṣa*=16 *māsa*s =80 *guñja*s or *kṛṣṇala*s (or *rati*s) according to Smṛti nomenclature while a *kārṣāpaṇa* weighs 56 grains or 32 *kṛṣṇala*s.[2] The *kārṣāpaṇa* of Patañjali may of course be identified with the *dharaṇa* of the Arthaśāstra which is equated with 16 silver *māsa*s. But this equation is repeated

[1] C. D. Chatterji, *op. cit.*, pp. 423 ff.

[2] The average weight of the Rudradāmaka *kahāpaṇa* or old silver punch-marked coins is 42 grains. Therefore 1 *nīlakahāpaṇa*=$\frac{42 \times 4}{3}$ grs.=32 *kṛṣṇala*s or *rati*s, 1 *rati* being approximately equal to 1·75 grs. C. D. Chatterji, *op. cit.*, pp. 423 ff.

with Manu (VII. 135-36), Yājñavalkya (1. 364) and Viṣṇu (IV. 11-12) and in this as in many other respects the author of the Arthaśāstra may have merely lined up with contemporary Smṛti literature without caring whether the system described prevailed in his time actually or only in tradition; or the system may have been revived from the 1st century A.D.

The standard gold coin in the Arthaśāstra is *suvarṇa* which in earlier literature is *niṣka*, *śatamāna* and *kṛṣṇala* and in later ones *dināra*. But no chronological demarcation can be drawn between the *suvarṇa* and the *dināra*. The *dināra* never became a standard token coin all over India though it is found here and there from the 1st century A.D., while on the other hand the *suvarṇa* continues to be the standard as late as in Usavadāta's Nasik inscriptions equalling 35 *kārṣāpaṇas*. Thus the mention of *suvarṇa* as standard gold coin places the Arthaśāstra positively later than the stage when the *niṣka* was the current coin as represented in the Epics and the Jātakas, but not necessarily earlier than the 1st century B.C. when the *dināra* began to obtain currency in parts of India.

The comparison of the political and social theories of the Arthaśāstra with the fragments of Megasthenes bespeaks a similar wrong mode of approach towards the chronological problem as its comparison with the legal injunctions. A political philosopher is no historian. Had Kauṭilya been the maker of the Maurya Empire and founder of the dynasty as well as the author of the monumental treatise it is of course likely that his pet theories would have been worked out in practice and Megasthenes' testimony agreed in many details over them. But Megasthenes differs no less than he agrees. He refers to a good war-practice that crops and lands are not destroyed by belligerents; the Arthaśāstra definitely enjoins such devastation (IX. 1). His affirmation that infliction of injury on royal artisans or

evasion of municipal tithe entailed death sentence is not found in the Arthaśāstra's penal code—which is more akin to that of Manu and Yājñavalkya. The evidences of Megasthenes on writing, on famine and on usury though faulty, contain an indirect truth which substantially militates against the Arthaśāstra.

While these conflicting evidences are dismissed on the score of the rashness of Megasthenes' statements the observation on non-existence of slavery is adduced as tallying with the liberal rules of the Arthaśāstra on slaves. But in the Arthaśāstra's time there were *mleccha* slaves who are summarily passed over, but who obviously far outnumbered the *ārya* slaves and for whom there was no mitigation. Megasthenes therefore seems to have either made a statement without knowledge of facts and consequently of no worth, or the *mleccha* slaves must not have been so numerous in his day as in the time of the Arthaśāstra.

Megasthenes and archaeological excavations show that Pāṭaliputra was surrounded by a timber palisade and an outer ditch. The Arthaśāstra is much against the use of wood because "fire finds a happy abode in it" and wants three ditches to be dug round a fort (II. 3).

The supposition that the Arthaśāstra reflects pre-Buddhistic society does not stand in the face of the clear reference to *stūpa* (XIII. 2) and to the *śākya*s and *ājīvika*s. The proscription of these people along with the *śūdra* and the *pravrājita* (III. 10) in ceremonials devoted to the gods and the manes is characteristic of the movement of Brāhmaṇical revival which is held to have begun from about the time of the Suṅgas. The use of the word *śākya* to denote a *bhikṣu* is of special significance. We do not come across such use earlier than in Kuṣān inscriptions where the word *śākyabhikṣu* is commonplace[1] and later in the Divyāvadāna.

[1] For references; see Epigraphia Indica, Vol. X, p. 222.

So far for the weakness of the 4th century theory. There are positive evidences of more weight which point to the 1st century A.D.

The strongest point in support of the post-Christian origin of the Arthaśāstra is the structure of the text. It is striking that it not only expounds a methodology of treating a subject which is foreign to earlier works but actually and scrupulously follows that methodology (tantrayukti). The medical treatise of Suśruta which is assigned to about the 2nd century A.D. and the Pali works Nettipakaraṇa and Peṭakopadesa belonging to about the 1st century A.D. follow the same order and expound it just in the same manner. Suśruta in particular agrees with the Arthaśāstra in definition and even in the number of the *tantrayuktis* which is 32 (Uttaratantra LXV). The nomenclature is also the same except that for the Arthaśāstra's '*upamānam*' and '*uttarapakṣa*' Suśruta substitutes '*anekanta*' and '*nirṇaya*' respectively. The definitions resemble not only in idea but in many cases also in language. A few parallels may be quoted.

Arthaśāstra	Suśruta
1. Yam-artham-adhikṛtyo-cyate tad-adhikaraṇam.	Same.
2. Śāstrasya prakaraṇā-nupūrvi-vidhānam.	Prakaraṇānupūrvyā-bhihitaṃ vidhānam.
3. Vākyayojanā yogah	Yena vākyaṃ yujyate sa yogah.
4. Samāsa-vākyam-uddeśah.	Samāsa-kathanam-uddeśah.
5. Vyāsavākyaṃ nirddeśah.	Vistāravaçanaṃ nirddeśah.
6. Yad-anuktam-arthād-āpadyate sā-rthāpattih.	Yad-akīrtitam-arthād-āpadyate sā-rthāpattih.
7. Ubhayato-hetumānarthasaṃśayah.	Ubhaya-hetudarśanaṃ saṃśayah.

Arthaśāstra	Suśruta
8. Yena vākyaṃ samāpyate sa vākyaśeṣaḥ.	Yena padenā-nuktena vākyaṃ samāpyate sa vākyaśeṣaḥ.
9. Paravākyam-aprati-siddham-anumatam.	Paramatam-aprati-siddham-anumatam.
10. Atiśayavarṇanā vyākhyānam.	Atiśayopavarṇanaṃ vyākhyānam.
11. Abhipluta-vyapakarṣaṇam-apavargaḥ.	Abhivyāpyāpakarṣaṇam-apavargaḥ, etc., etc.

That Suśruta's definitions are a little more elaborate and precise is easily explained by the improvement undergone in a few intervening decades. It may be noted that later literature do not formulate but simply follow the method and in them its divisions evolve and multiply as for example in the Saṃhitā of Caraka which follows 34 sub-divisions (Siddhisthāna, XII).[1]

The reference to Cīna in the Arthaśāstra is a distinct pointer to an age much later than the year 249 B.C. when the Ts'in dynasty came to rule in China whence the name Cīna was introduced in India. The significant name appears in no Indian literature of proved earlier date. The earliest Pali reference to Cīna and Cīnapaṭṭa occurs in the Buddhavaṃsa and the Apadāna (1. 14; 406, 14), the two Pali compilations that were not included in the canon earlier than in the 1st century B.C. The instances in the Epics are evidently later interpolations as is further proved by the different readings in available recensions. To parade their geographical and racial knowledge the pedants of a later age introduced the Cīnas, the Śakas, the Yavanas (sometimes even the Romakas and the Pārasikas) and other generic terms indicating foreign barbarians along with the indigenous barbarians who existed from an older time and

[1] See B. M. Barua : *Old Brāhmi Inscriptions*, p. 285.

had place in the original text. These Cīnas inhabited the borderlands along the Bāhlīka, the Tibetan valleys and the Prāgjyotiṣa and possibly implied the Mongoloid races percolating from the Himālayan ranges or the people who acknowledged some sort of suzerainty under the Chinese empire (Rāmāyaṇa, IV. 44. 12-14; Mahābhārata, II. 26. 9; 51, 23; III. 176; VI. 9). Their chief produce was skin as well as woollen textile and fabrics of jute and silk in which they specialized along with the people of Bāhlī (pramāṇa-rāga-sparśādyaṃ bāhlī-cīna-samudbhavam. Aurṇañca rānkavañcaiva paṭajaṃ kīṭajantathā, Mbh. II.51. 26). In the Arthaśāstra Sāmūra, Cīnasi and Sāmūli are skins procured from Vāhlava which according to Bhaṭṭaswāmī is the name of a country on the Himālayan borders; and the silk and jute fabrics have become famous Chinese luxuries in Indian market (tayā kauṣeyam cīnapaṭṭaśca cīnabhūmijā vyākhyātāh II. 11). This is reminiscent of the verse in the Buddhavaṃsa, XXIV. II, which runs as: 'pallunnaṃ cīnapaṭṭañca koseyyaṃ kambalaṃ pi ca.' The statements of the Mahābhārata, the Arthaśāstra and the Buddhavaṃsa are remarkably parallel and reflect approximately the same age which in the case of the Buddhavaṃsa cannot be earlier than the 1st century B.C. From Chinese and Indian sources it is definitely known that this flourishing intercourse between China and India began from the dawn of the Christian era.

No less significant is the reference to Ceylonese sandal as *'pārasamudraka' (II. 11, Bhaṭṭaswāmī's commentary)*. In the Periplus of the Erythrean Sea of which the date is conclusively fixed near about the 6th decade of the 1st century A.D. and in Pliny's Natural History which also belongs to the same century, Ceylon is referred to as Palisimundu.[1] Now Megasthenes knows Ceylon as

[1] For the identification of *Pārasamudra* with *Palisimundu* see Raychaudhuri's note in Indian Antiquary, Vol. XLVIII.

Taprobane. The same name is seen in Aśoka's Edicts. The Rāmāyaṇa, however, knows it not only as Tāmraparṇī but also as Siṃhala and Laṃkā. Had the name Pārasamudra been in vogue in the time of the original composition of the Rāmāyaṇa which is not far removed from the beginning of the Maurya Empire[1] it would most probably have been used by the author of the Epic. The Arthaśāstra is thus acquainted with a name that seems to have existed in the 1st century A.D. but not earlier.

The industrial guilds in the Arthaśāstra are a constant source of menace and dangerous rival to royal authority. Villages and agricultural operations are protected against their interference. They supply militia to the royal force and are alternately wooed or intrigued against by kings. They serve as state banks and by means of sinister cartels and cornerings influence price. This extraordinary growth of the *śreṇīs* into an incalculable political and economic force is suggested to have been a later development by a comparative study of the earlier and later Smṛtis and post-Christian inscriptions. In Manu and Yājñavalkya the cartel and corner systems are found in full swing, an unwholesome factor in the market raising and lowering price by their machinations. The banking function of the *śreṇīs* referred to in the Arthaśāstra (V. 2; VII. 11) is characteristic of a later age of thriving money transactions and speedy circulation of capital, and the earliest evidence we have of such operations is in Usavadāta's Nasik Inscription assigned to the 2nd century A.D.

The emergency tax or sur-tax of *praṇaya* (V. 2) appears in the Arthaśāstra and in Rudradāman's Junagadh Rock Inscription but in no revenue or fiscal list of earlier literature or inscriptions.[2] What is more striking is that this levy is mentioned in the Arthaśāstra without reference to

[1] Winternitz: *History of Indian Literature*, Vol. I.

[2] See Raychaudhuri: *Political History of Ancient India*, 4th Edn., p. 8.

any controversy by the author, a levy on the justice of which there might well be some dispute. It may have been that the Śakas first introduced it and the earlier teachers were strangers to the tax or the distinct name by which it was known.

The Arthaśāstra inaugurates the important system of specifying dates in terms of regnal years and months, fortnights and days of an official year (Rājavarṣaṃ māsaḥ pakṣo divasaśca vyuṣṭam II. 6). 'But so far as the written records of Aśoka hitherto discovered go he has nowhere mentioned the dates in terms of the year, month and day. It is in the Kuṣāṇa records that the dates have been stated for the first time in terms of the regnal year, and in that of the month and the day of an official year, cf. 'Devaputrasya Kaniṣkasya saṃ 5 : he 1 di 1.' The specification of the date in term of the regnal year, and the month, half-month and day of an official year as enjoined in the Kauṭilīya Arthaśāstra is a convention which is met with for the first time in the earliest Sanskrit inscription of Rudradāman (A.D. 150): 'Rudradāmano varṣe dvisaptatitame (72) Mārgaśīrṣabahulapratipadāyām' .... The convention once established was adhered to in later Sanskrit inscriptions.'[1]

In the state contemplated in the Arthaśāstra Sanskrit is the official language. It is almost an established fact that from the time of the Maurya Empire right up to the beginning of the Christian era various forms of Prākṛt remained popular and official language while Sanskrit was confined to the cultured few. This is suggested by coin-legends and inscriptions[2] as well as by the rise of the two famous grammatical works, that of Patañjali in the north and that of Sarvavarman in the south who moreover preludes his book (Kātantra) by quoting an anecdote to illustrate how ignorant even the kings had become of the sacred language.

[1] B. M. Barua : *Asoka Edicts in New Light*, p. 75.

[2] See Rhys Davids : *Buddhist India*, pp. 134-36, 317-18.

The grammatical works heralded the revival and popularization of Sanskrit to which the Arthaśāstra is a clear testimony.

The Arthaśāstra shows intimate acquaintance with the Purāṇas and with Epic literature not only in its main plot but in many of the subsidiary *ākhyānas* such as those of Nala, Vātāpi, Māṇḍavya, Dāṇḍakya, etc. and in the theories of the great preceptors and theoreticians who are represented therein. As pointed out by Jolly most of the authorities in the field of political and social sciences quoted in the Arthaśāstra figure in the Mahābhārata and these warn against fixing the age of its composition as high as 325 B.C.

These are not to deny that the Arthaśāstra contains much that must be thrown back to the 4th century B.C. or much earlier. As has been pointed out already, this is the general characteristic of *śāstra* literature that they present an ideal rather than real state of society and often pass earlier opinions as their own. Unlike the Mānava Dharmaśāstra the Arthaśāstra seems to be the composition of a single author but it does not follow that all he wrote was his own. In fact, he acknowledges his debt to his predecessors, a long list of whom frequently appears in the book. And in the process of taking from earlier authorities with or without acknowledgment theories and practices crept in the text which did not belong to the author's time.

It is tempting to synchronise a great treatise like the Arthaśāstra with the foundation of the biggest empire of ancient India. But the chicanery and intrigue, the ruthless police methods, the nightmare of sedition, the unscrupulous use of poison and women reflect not the formation of a stable empire, rather its bankruptcy and decadence. The vicious theory of circles of states speaks of the *mātsyanyāya* or primitive anarchy among bundles of independent and semi-independent statelings each with unlimited territorial ambition coalescing and splitting with

kaleidoscopic variety, faithlessness to allies and disrespect for treaties betray an absence of political morality which evoked scathing denunciation from Bāṇa the representative poet of another empire. The political philosophy of the Arthaśāstra fits not so well with Maurya imperialism as with an age of turmoil when local principalities were dissolving in internecine war.

A possible explanation of the testimony to Kauṭilyan authorship in later literature may be this. Kauṭilya or Cāṇakya or Viṣṇugupta may not have been altogether a fictitious figure as supposed by Johnston[1] and Jolly. He is known both to the Brāhmaṇical tradition of the Mudrārākṣasa and Viṣṇupurāṇa and to the Buddhist tradition of the Mahāvaṃsa and Mañjuśrīmūlakalpa. But had he been the man behind the throne the historians of Alexander who wrote not solely upon Megasthenes' record but utilized plenty of materials now lost to us—Justin, Quintius Curtius, Arrian, Strabo and Plutarch for example,—would not have dismissed him with silent indifference while naming Candragupta and Nanda. Shamasastri fails to note that no literature earlier than from the 4th century A.D. mentions Kauṭilya or ascribes to him either the destruction of the Nandas or the composition of the Arthaśāstra or even quotes from the book. The Milindapañho, a work believed to be compiled about the 1st century A.D., speaks of Nanda, his general Bhaddasāla, their great battle with Candragupta and of the heavy carnage on both sides but not a word about Kauṭilya. Probably he was boosted by orthodox Brāhmaṇas during the zenith of the revivalist movement under the Guptas and it was sought to prove that the king, a Kṣatriya or a Śūdra, was a mere protégé of the Brāhmaṇa chancellor. The claim was bolstered up by the ascription of a masterly digest of

[1] J.R.A.S., 1929.

political science to his authorship. The real author who hailed from a later age, remained obscure and was forgotten, liberally borrowed from earlier savants among whom Kauṭilya or Cāṇakya was one and may be, the chief, just as several other collections of political maxims were issued under the name of Cāṇakya held or supposed to be a crafty politician of antiquity; and this may be a plausible explanation of the social and political institutions of widely separated ages reflected in the floating doctrines incorporated systematically in the book.

ADDITIONAL NOTES

P. 46 L. 29. The king is received by *grāmaṇīs* along with *ugras*, *pratyenasas* and *sūtas* who keep the guest house ready with food and drink (Br. Up. 4. 3. 37).

P. 76 L. 11. Flesh of the ox is prescribed directly in the Bṛhadāraṇyaka Upaniṣad (6. 4. 18).

P. 90 L. 30. Earlier literature speaks of 10 kinds of cereals (dhānya) grown in rural areas, *viz.*, *vrīhi*, *yava*, *tila*, *māsa*, *aṇu*, *priyaṅgu*, *godhūma*, *masura*, *khalva*, *khalakula* (kulattha) (Bṛ. Up. 6. 3. 13).

P. 361 L. 4. According to Associated Press news of 19th June, 1945, more than 100 silver punch-marked coins belonging to the 4th century B.C. have been found in the Gorakhpur district and acquired by the U. P. provincial museum.

P. 482 L. 10. The Upaniṣads give an earlier glimpse into this epic rivalry centering round the issue of animal sacrifice. The priestly and orthodox party upholding animal sacrifice had their stronghold in the Kuru-Pañcāla country, the heterodoxy led by the Kṣatriyas was ascendant in the eastern countries of Kāśī, Kośala, Magadha and Videha which are in the Śatapatha Brāhmaṇa forbidden lands for the pure Brāhmaṇa of the Northern Aryan extraction. The Brāhmaṇas there, it is said, had lost their dignity because of submission to the Kṣatriyas. In the Bṛhadāraṇyaka and the Chandogya, Brāhmaṇa sages are represented as defeated in philosophical disputes with, or as learning philosophical truths from Kṣatriya kings. The culmination of this hostility on ideological plane is seen in the court of Janaka at Videha where Yājñavalkya, a Brāhmaṇa of the East had a hospitable seat to defeat in polemics the orthodoxy of the North and establish his thesis of Brahmavidyā.

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