



**RATAN TATA
LIBRARY**

11 SEP 1961 THE RATAN TATA LIBRARY

Cl. No. S4 30

Ac. No. 28470

Date of release for loan

This book should be returned on or before the date last stamped below.
An overdue charge of twelve nP. will be levied for each day/hour
the book is kept beyond that date.

~~26 NOV 1962~~

~~19 AUG 1964~~

~~26 SEP 1968~~

26 SEP 1974

SELF-ORGANIZATION

ALSO BY
MORLEY DAINOW

PERSONAL PSYCHOLOGY

Clear understanding of fear and unhappiness and mental ills: sound and practical methods for removing these ills; wholesome ideas to lead you to happiness; definite steps to lead you to success; these you will find in PERSONAL PSYCHOLOGY; these Mr. Dainow gives to all those who read and reflect upon what he writes.

Demy 8vo. 12s. 6d. net. 244 pp.

"The book is written in a style easily comprehensible by the average intelligent man or woman without any previous knowledge of psychology, and it would be of help to many young people to read each chapter carefully and perform the set of exercises at the end."—Times Literary Supplement.

PITMAN

SELF-ORGANIZATION

A PRACTICAL COURSE OF
APPLIED PSYCHOLOGY FOR BUSINESS MEN

BY
MORLEY DAINOW

B.Sc. (HONS.) LOND.

AUTHOR OF "PERSONAL PSYCHOLOGY" AND OTHER WORKS
ON PSYCHOLOGY

Sixth Edition of
"SELF-ORGANIZATION
FOR BUSINESS MEN"



LONDON
SIR ISAAC PITMAN & SONS, LTD.

First published, 1924

Sixth edition, 1950

SIR ISAAC PITMAN & SONS, LTD.

PITMAN HOUSE, PARKER STREET, KINGSWAY, LONDON, W.C.2

THE PITMAN PRESS, BATH

PITMAN HOUSE, LITTLE COLLINS STREET, MELBOURNE

27 BECKETTS BUILDINGS, PRESIDENT STREET, JOHANNESBURG

ASSOCIATED COMPANIES

PITMAN PUBLISHING CORPORATION

2 WEST 45TH STREET, NEW YORK

SIR ISAAC PITMAN & SONS (CANADA), LTD.

(INCORPORATING THE COMMERCIAL TEXT BOOK COMPANY

PITMAN HOUSE, 381-383 CHURCH STREET, TORONTO

INSCRIBED
TO
THE MEMORY OF
SAMUEL H. DAINOW, ESQ., O.A., B.A.
A MAGNIFICENT TEACHER
A BELOVED SCHOLAR
AN INSPIRING FRIEND

PREFACE

THIS work appeared originally many years ago under the title of *Self-Organization for Business Men*. Since then, in obedience to consistent and continuous demand, many editions and reprints have been issued, until the paper and board positions during the war prevented the issue of a further edition.

The demand for the book goes on, which is gratifying to both author and publishers. A new edition therefore becomes necessary. As this new edition is thoroughly revised, by embodying the essentials of the latest advances in psychology dealing with learning and personal development, and partly re-written, it has been decided to re-name the book *Self-Organization*.

Readers will note that at the end of each chapter are questions. The formulation of answers to these questions will help to drive home the value of my message and will increase the help in personal efficiency. The body of the book contains the answers to the questions.

MORLEY DAINOW

CONTENTS

CHAP.	PAGE
PREFACE	vi
PART I. INTRODUCTORY	
I. INTRODUCTION	1
II. ON ORGANIZATION	9
III. THE SELF	14
PART II. SELF-ORGANIZATION	
<i>(a) The Organization of Mind</i>	
IV. OBSERVATION AND ATTENTION	25
V. THE FOUNDATIONS OF UNDERSTANDING	31
VI. THE CULTIVATION OF MEMORY (I)	37
VII. THE CULTIVATION OF MEMORY (II)	42
VIII. THE ACQUISITION OF IDEAS	50
IX. THE CULTIVATION OF IDEAS (I)	58
X. THE CULTIVATION OF IDEAS (II)	65
XI. HOW TO STUDY AND HOW TO READ	74
XII. THE CREATION OF IDEAS	81
XIII. IMAGINATION	90
<i>(b) The Organization of Temperament</i>	
XIV. THE GROWTH OF COMPLEXES AND SENTIMENTS	98
XV. GROWTH AND DEVELOPMENT OF INTERESTS	106

CHAP.	<i>(c) The Organization of Character</i>	PAGE
XVI.	NATURE AND STRENGTH OF THE IMPULSES	114
XVII.	THE CONTROL OF THE IMPULSES .	122
XVIII.	DIRECTING THE IMPULSES	127
	 <i>(d) The Organization of Personality</i>	
XIX.	PERSONALITY : ITS NATURE AND ITS NURTURE	132
	INDEX	139

Part I

INTRODUCTORY

CHAPTER I

INTRODUCTION

WHAT Self-Organization Is—Justification for this Book—What Business Is and What Business Involves—Should a Business Man Self-Organize?—Personality in Business—Success in Business—The Goal and its Achievement—Importance of Self-Organization—Essentials for Success in Self-Organization—Questions.

What Self-Organization Is

THERE are two ways in which you can deal with any experience, whether dull, ordinary, or exciting. You can either just be aware of the experience and pass on or take the experience right into your mind and make it part of you. If at this moment, for instance, you are rung up on the 'phone and informed that an uncle of yours is reaching your home this evening and you simply take the message without further thought, your attitude is merely passive—just a bare acknowledgment of the fact. If, however, you put your work aside and, for a few minutes, ponder over the reason of your uncle's coming, your pleasure in his visit, his possible need of you or your possible need of him, the possible advantages to both of you of his visit, then you are making the most of the incident. In the former case you were merely permitting what was outside you to enter your mind. In the latter case you were taking what was outside you, attending to it, analysing

it, understanding it, performing actions as a result of all these and eventually making what was originally outside you a part of your mental inside. A useful word to embrace all these processes is "self-organizing." To organize yourself is to get the best possible value out of every important experience. To do this, you must as soon as possible after the experience reflect upon it, you must analyse the experience so that all that it can bring to you is exposed; you must understand the experience so that all that it contains is brought into relation with your past knowledge; you must act as a result of all these findings either by stating quite clearly to yourself what the experience fully means to you or by doing something usefully appropriate to the matter. All these activities will make the value of the experience permanent for you. Without such self-organization your learning and your work can only be of little value. With such self-organization your studies and your work can bring you near perfection.

Justification for this Book

It may justly be asked why in the midst of the continued publication of an enormous number of books on psychology, on applied psychology, on success, on personal development, on education and on mental training, should yet another book on the subject appear. The justification for the publication of another work on one of these subjects is that, apart from the fresh treatment given, it aims to be of especial use to young people employed in business. The importance of business is increasing, for even

in our so-called Socialist economic age each Nationalized Industry, to be regarded as successful and efficient, must satisfy business conditions; it must make a profit, whether direct in the shape of more earnings or indirect in the shape of better conditions for the workers.* There can be no progress in any of the influences that make for the welfare of life and livelihood without the aid of business. Consider such unworldly, spiritual influences as religion, music, the theatre, painting and literature. The discriminating world of sensitive and aspiring souls cannot listen to religious leaders, hear inspiring music, see heart-stirring dramas, contemplate delightful paintings or read entertaining and illuminating literature without officials to arrange the services, box offices to arrange the concerts and the plays, art agents to hold exhibitions or publishers to issue literature.

What Business Is and What Business Involves

Business can be regarded as a kind of avenue through which all influences improving life and livelihood must pass. All international problems to-day can be boiled down at bottom to the result of the lack of business efficiency (more particularly to the inability so far of national financial experts to decide satisfactorily on international financial understanding and methods). Business is social service in the widest and best sense. The public needs something

* For example, "the whole idea of nationalized transport was to do the nation's carrying more efficiently and more cheaply than it could be done when each form of transport was under different ownership. . . . This means that improvements in public transport should eventually yield a clear benefit to be shared between transport workers and transport users."
—(*Observer* (London), 11th September, 1949.)

and is prepared to pay for it. The business houses supply this need in return for the pay. The public therefore receives what it requires. Business involves three processes. The most obvious process is distributing or selling, directly handing to the public the articles it desires. Before the articles can be efficiently handed to the public they must be placed in boxes on shelves, indexed and priced. Certain members of a business house have to perform under direction the different duties of indexing, pricing, and distributing. This brings us to the next process in business, which is administrating or organizing goods and workers. But the goods reach the distributing departments in a finished form. They were made somewhere. Thus we have the third process in business, which is production or making the goods.

Should a Business Man Self-Organize ?

It may be wondered whether, in the tremendously complicated condition of development that business has reached to-day, it be advisable or useful for a young man or woman employed in business to undertake the additional task of self-development. Is it not the duty of such an employee merely to fit himself or herself to the machine, whether as distributor, administrator or producer? But the increasing complication and development of business will never do away with personal problems, whether in distributing, administrating or manufacturing.

The deeper understanding and consequent better handling of his colleagues and juniors very often turns a moderate administrator into a successful one.

The successful salesman is characterized by the art of interesting, impressing, inspiring and pleasing customers—a delicate personal process.

However scientifically developed business may become, personal problems will be perpetually calling for solution. The science and art of self-organization will help young business men and women to understand the psychological causes producing these problems, in so far as they exist within people, themselves or others, and will therefore help towards the solution of these problems.

Personality in Business

You cannot succeed in business unless in addition to possessing such fundamental essential qualities as mental ability, ambition, enthusiasm, and energy you also possess appropriate knowledge and the art of using it well. You must know your goods, your markets for both buying and selling and how to get the best out of both. You must know how to work your factory, office or shop. You must understand your colleagues and staff and know how to get the best out of them. It may, nevertheless, be possible for an individual, lacking in such knowledge or in the art of using it, to make a success in business. He does it by a certain natural strength and ability which can master all obstacles and produce splendid results. This combination is usually called personality. Personality without knowledge may certainly achieve much, but this achievement is sporadic. It doesn't *always* work. Personality with knowledge and the art of using it well does not merely occasionally

achieve, it becomes a consistent and a continuous achievement. It becomes, indeed, triumphant.

Success in Business

The knowledge is open to all, yet the successes are confined to a few. There must be a reason. It is because the few have known how to combine personality with knowledge, how to organize their personal powers for the different business processes so that the combination becomes irresistible, compelling, successful. A genius in business performs this personal organization unconsciously. He is like a poem of Shelley's, a play of Shakespeare's, a sonata of Beethoven's. His success comes from a hidden source of inspiration. There is no need for the business genius to read articles or books on self-organization, for the science and art of self-organization works through him. His principles, his methods and his actions become the textbooks of students of self-organization. A man of genius creates laws; a wise man of talent learns them and makes them his own.

The Goal and Its Achievement

Do not try to be a genius. You cannot. If you were, you would not be reading this. You would be inspiring it. Genius is not only a gift of the gods; it may also be a gift of the devils, for there have been very few men and women of genius without personal defects. Try to become a man of talent and you will be able to emulate, perhaps to excel, the business genius and yet be free from his defects. Your

goal is clearly defined. You must know and organize yourself. You must know and organize your business. You must combine the two. Business knowledge and organization are much less difficult to obtain than self-knowledge and organization. This book will therefore help you.

Importance of Self-Organization

If you are a salesman and need to increase the sales of certain goods, you will arrange your windows in accordance with certain principles of window-dressing; you will similarly arrange your counters and you will apply your knowledge of your customers in your talks to them. If you are a manufacturer and need either to lower the cost or to increase the quality or speed of production, you will, from certain principles of industry and of costing, know in which processes or materials to economize or which processes can with caution be speeded up. If you are an office manager and desire to arrange a more effective system of follow-ups, you will, in accordance with certain direct-mail principles, change your usual letter or introduce more reliable office equipment. In sales, in manufacture and in administration, you meet the incessant and changing problems of business by better organization based on knowledge of principles and practice.

But in meeting the incessant problems of your own powers, of your mind, of your temperament, of your character, of your personality, you are in even more urgent need of organization, for these problems are more perplexing, the principles for solution

more obscure, and the practice more difficult. In using yourself, the problems are always different and difficult. In dealing with yourself even more than in dealing with your business you need organization—the organization of yourself, self-organization.

Essentials for Success in Self-Organization

From the enormous literature and researches in psychology three thoughts stand out very clearly as the embodiment of wisdom in self-organization. They are—

- I. Keep deeply interested in what you are doing ;
- II. Understand what you are aiming at ;
- III. Adhere most strictly but intelligently to directions given you by your principals at work.

The first organizes your feeling, the second your thought, the third your conduct. Later on I will give you precise details of steps to take and advice to accept on the best way of organizing your feelings, your thoughts and your acts. At present write these three thoughts down. Get hold of their meaning by applying them to your most important business task.

QUESTIONS

1. Mention one difference between genius and talent.
2. State two essentials for success in business.
3. What are the three constituent processes in business ?
4. What are three maxims for self-organization ?

CHAPTER II

ON ORGANIZATION

ATTITUDE to Management—Definition and Importance of Management—Chief Factor in Management—Management and Self-Management—Essential Conditions and Processes in Self-Management—Questions.

Attitude to Management

ORGANIZATION or management was formerly regarded as a mysterious art or as something that was performed purely by "rule of thumb." When, however, it was found that men of humble origin could, by dint of hard work and a happy way of dealing with men, become leaders in industry and business organization, the power to organize was regarded as a natural gift. Good managers were said to be born, not made. The gradual progress of the scientific spirit in all branches of knowledge has, however, shown in many ways that what was originally regarded as mysterious and magical can now be regarded as the result of natural endowment and the wise application of natural laws; in the case of management, of the laws of psychology.

Definition and Importance of Management

What is management exactly? The pioneer of scientific management, Dr. F. W. Taylor, defines it as: "The art of knowing exactly what is to be done and the best and cheapest way of doing it."* But this emphasizes only two sides of management, knowing exactly what is to be done and doing it in

* *Shop Management.*

the best and cheapest way. In addition there is another side, feeling (deep interest in the work, enthusiasm for the best way of doing it, confidence in yourself as the right man or woman for the job). The importance of management is becoming more pronounced daily. Now we have an Institute of Management formed by our Government with the support of the official representatives of both Capital and Labour.

Chief Factor in Management

Up-to-date progress in scientific management is giving more and more attention to the human factor.

“The emphasis in successful management lies on the man, not on the work; efficiency is best secured by placing the emphasis on the man and modifying the equipment, materials, and methods to make the most of the man.”* To make the most of the man—that is the most important task of management.

“Modern management finds that the study of their workmen and the ascertaining how to use their capacities properly is as profitable as the study of the machinery or of the markets.”†

“One of the principles of management is . . . the promotion of personal effectiveness—everything possible is done in the way of creating incentives and clearing away obstacles and delays, to make the best use of the powers of each worker.”‡

Since the end of 1947 special technical committees

* L. M. Gilbreth, *Psychology of Management* (Pitman).

† McKillop, *Efficiency Methods* (Routledge).

‡ Church and Alford, *Principles of Management*.

have been set up by the Lord President of the Council to consider, amongst other problems, "the directions in which productivity could be increased by the application of research into the human factors in industry."*

Management and Self-Management

Management can be learnt and managers can be trained. This is the experience of industry and of commerce in every civilized country of the world. While it may not be possible to make good managers out of fools, it is possible to turn good managers into better managers and to choose from amongst suitable employees those who, with the right training, can be developed into managers. What is true of the selection, the training and the results of the managing of work and men is also true of the managing or organizing of your own interests, powers and abilities, of self-organization in fact. Just as all efficiency engineers working in successful industries are always on the look-out, either by general observation or by psychological testing, to find men and women workers who possess the potentiality for becoming organizers, so you must be on the look-out within your own self for those potentialities within you revealed by those performances which show clearly your progressive suitability for the particular post for which you are striving. This perpetual mental "look-out" will help you eventually to perform the most difficult management of all, 'self-management.

* *The Times* 10/8/1948.

Essential Conditions and Processes in Self-Management

There are two conditions that strengthen the urge for self-organization. One is the obvious one that assails us all, the presence of failure. Our selling does not pull or our administration is in a muddle or our production is unsatisfactory. We therefore ask: "Why have we failed?" The other condition is a better one. It is the perpetuation of success. Our selling is going along nicely or our administration leaves nothing to be desired or our production is pleasing but we want to progress still further in all directions.

In either case we must find out the basis of failure or of progress by analysis and our analysis must be personal. The aspiring salesman must ask himself: "What is Selling exactly? Do I understand it perfectly? Am I applying it really well? If not, what personal drawbacks prevent it and what personal advantages can help it?" The aspiring administrator must ask himself: "What is Management exactly? Do I understand it perfectly? Am I managing men and work really well? If not, what personal failings are preventing me and what personal characteristics are helping me?" The aspiring producer must ask himself: "How is this article made? Am I making it in the best way in the shortest time at the lowest cost? If not, what personal skills do I lack and what personal skills do I possess?"

The answering of these questions involves not only a complete knowledge of our work but of how

we react to our work and most importantly of how we can react with happiness and success. To find this out clearly we must try to know ourselves.*

QUESTIONS

1. What is Management ?
2. What is the chief tendency in modern scientific management ?
3. What questions can you ask of yourself and of the way you are doing your work, the answers to which will be likely to help you to find a better way of understanding and of doing your work ?

*It is doubtful whether we can know ourselves completely for, as the psycho-analytic school of psychologists point out, much of our mental activity takes place unconsciously. Our dreams at night, our reveries by day and the maturing of some of our fundamental interests (religion, politics, business policy, family affections, loves and hates) are, for example, processes that go on in us for the greater part unconsciously.

CHAPTER III

THE SELF

SELF-KNOWLEDGE—Self-Consciousness—The Cure for Immoderate Self-Consciousness—Self-Analysis—Mind—Temperament or Disposition — Character — Personality — Self-Training and Self-Analysis—Questions.

Self-Knowledge

SELF-ORGANIZATION is impossible without some self-knowledge. Self-knowledge is partly acquired by self-examination.

You must be honest with yourself in examining yourself. Never try to under-estimate your bad points or to over-estimate your good points ; never, that is to say, while you are examining yourself. Self-examination, though difficult, should always take place during a calm and peaceful period when you can stand self-criticism.

There are always at least two selves within you, one self is doing, the other is watching. If you ask yourself the question: "Am I patient while doing accounts?" one self is examining the patience and the other self is rendering an account of the patience. These are not two different selves, they are only yourself in different momentary attitudes. One attitude is that of the present time, the actual delving into the quality of patience in doing accounts. The other is the self in the past time, the record of your actual patience or impatience in dealing with accounts.

Self-Consciousness

You are able to build up these two distinguishable, but not separable, selves because your consciousness

is, generally speaking, two-fold. You read and at the same time you are conscious that you are reading. Another word for this is self-consciousness. At any moment you are both conscious and self-conscious.

Self-consciousness, to a moderate degree, may be helpful, particularly when you are working with others, as it may, for example, prevent you from striking peculiar or funny attitudes. Self-consciousness to an immoderate degree is harmful. If you have to do some dictation for your chief or if you have to sell goods to your manager's wife or if you have to lecture to ten juniors and your shorthand notes are confused or your selling is indifferent or your lecture halting—any, or all, of these results may be due to your being too keenly aware of yourself and too little aware of your subject, of what you are doing.

The Cure for Immoderate Self-Consciousness

One cure for too high a degree of self-consciousness is to steep yourself more deeply in your task. Before going to take dictation from your chief, you should reflect on the act of taking shorthand notes, the advantage of being quick, the boon to him and to yourself of your becoming an efficient notetaker. He is busy, you are busy. Make the work itself your one aim. When selling to your manager's wife, think only of the service that you render both to her in supplying her needs and to the house in performing service. Don't think of yourself. Whenever the thought of yourself comes to you, concentrate more eagerly on the goods and on the customer.

When you have to lecture to your juniors, think only of what you have to tell them, why you have to tell it to them and how you have to tell it. If you find yourself halting or faltering, think immediately of your audience, of their dependence upon you. Immediately think of questions to ask them, to find out whether they have grasped your message. Can they apply it? When you catch yourself thinking of yourself, indulge in a more detailed explanation of the particular point of your lecture.

Self-Analysis

This self that you are examining, of what is it made? What does it contain? You can find in it records of facts, of meanings of facts, of judgments of people, of suggestions about each and all of these. This part of the self is the mental self or *Mind*.

Some facts interest you, some bore you. Some people irritate you, some please you. This is another part of yourself, the feeling self coming into play. It is usually given the name of *Temperament* or *Disposition*.

In spite of the fact that some people bore you, you give them attention and render them service. In spite of the fact that some subjects irritate you, you grapple with them and make progress. You perform acts in obedience to certain principles. This is another part of yourself, the action self, or *Character*.

With your mind, your temperament and your character, you can influence others. You perhaps can stand mentally head and shoulders

above others in a crowd ; you can lead men. This is another part of yourself, the social self, or *Personality* coming into play.

Mind

We are all aware of things. Our recorded knowledge of things, when expressed, we call facts. The undeveloped types of men and women who merely produce with a low degree of skill, continually devote themselves to things and facts. A labourer, a charwoman, are examples of such workers. Many of us handle things with a high degree of skill. We do not merely understand things, for our senses and memories serve us well, but we show a high degree of production, such as the making of complete things, chairs, instruments, clothes. This involves *Intelligence*, which is not only a rapid and accurate adaptation to things but a mastery of them.

Most of us, however, try to delve into things, not merely to find their constituents but to find why they exist in a certain pattern or order. We are bringing into play a higher mental level than intelligence. This is *Intellect*. We use intellect when we analyse the qualities (or properties) of things, become aware of ideas, connect ideas into reasons, compose and contrast reasons, make judgments, clinch decisions, discover principles and laws, and generally on the basis of these principles and laws try to introduce order into our world.

We use intelligence and intellect when we judge people and estimate the finer influences of life, such

as religion, art, music and literature, and try to understand the significance of trends in economics, politics and culture. The quality of such judgments is helped by another mental process, *Intuition*.

In using intelligence, we can suggest a new development of things (or invention); in using intellect, we can suggest a new arrangement of ideas; in using intuition, we can suggest a new judgment of a person or of an art-form. In the use of all of these we at the same time are developing a mental process not yet named; it is *Imagination*.

To organize the mind, we must develop intelligence, intellect, intuition and imagination.

Temperament or Disposition

All people possess feelings. These feelings vary in strength or depth. Those of us who have deep feelings possess sensitive temperaments. Those of us who possess shallow feelings have hard temperaments. Most people, perhaps, differ more in the way they express their feelings, or in emotional control and direction, rather than in the depth of the feelings or emotional intensity.

The most obvious type of temperament in which there is no emotional control is the so-called Artistic Temperament. In such a temperament, all sorts of behaviour, shouting, stamping, squealing and destroying, take place as a direct result of the stimulation of deep feelings and of the absence of emotional control and direction. Individuals behaving thus are usually said to possess the artistic temperament, but *Explosive Temperament* would be

a more suitable description than artistic, for the behaviour is far from artistic.

The opposite to this temperament is where the emotion is too well controlled. This might be called *Reserve* or *Phlegmatic Temperament*.

There are other temperaments where the control of the emotion expresses itself peculiarly, selfishly, unsocially. There is the temperament of the dried-up person, who is always grumbling, the *Choleric Temperament*. There is also the temperament of the extremely self-centred person, who is always morose, the *Melancholy Temperament*. Another type is that of the person who is too unselfish, always timid, always yielding, always imagining that things are greater than she or he is, the *Mild Temperament*.*

The best type of temperament is one in which emotional sensitivity, or deep feeling, is combined with emotional control and direction, resulting in the expression of the feelings in some form of service. This is the happy temperament or joyous disposition. This is the temperament of the man who says: "I am sad; let me make nobody else sad," or "I am glad; let me make someone gladder."

Apart from these differences either in emotional sensitivity or in emotional expression, we differ as to the kind of things or subjects or people that move our feelings and inspire our expressions. Some men will walk miles to see a football match, or a boxing match; some women will wait hours to listen to a famous speaker, to hear a famous actor, to welcome a famous artist. These differences may be due to

* Such people, of course, possess an "inferiority complex."

differences in sentiments or in interests or in ideals. A sentiment is our emotional development in connection with people or places or things. An interest is our emotional development in connection with a subject of study or a skill or an art. An ideal is our emotional and mental development in regard to a great idea. Naturally human beings differ in their sentiments, in their interests and in their ideals.

Character

Suppose you are travelling in a train. You meet a very pleasant fellow traveller, a very pleasant man indeed. For an hour he entertains you gloriously by speaking of his hobby of butterfly-collecting, illustrating his remarks by opening his attaché-case and showing you some mounted specimens, perfectly exquisite in their colouring. Suddenly he leaves you at a wayside station and before you realize he has gone you find that somehow £20 has dropped from his papers into your lap. The train has left the station. There was nobody in the carriage but you and him. You know his name and address. He does not know yours. You could easily stop at the next station and change the note at the refreshment room.

If you are torn between two impulses, the impulse of owning the £20 and thereby becoming richer or of returning the £20 and thereby showing your honesty, if this is all that takes place in your mind, then your character is not very high. *You are evidently ruled by impulses.* But an impulse may be good or bad. *You are therefore unreliable.*

If, however, you immediately play for safety, and at the very next station hand the £20 to the guard and obtain a receipt for the money, then you inhibit impulses, you have a *safe character*, but your safety is rather in the avoidance of evil than in the performance of good. You are good because you run away from evil.

If, as you wonder what to do with the £20, you think of what your family, your friends and your neighbours would say of you if they could see you now. If you usually wish them to have a good opinion of you, if you like to be respected, you have a developed feeling of self, a fine self-awareness, a self-respect. This is due to the development within you of a power of moral self-criticism commonly known as *Conscience*. You will now return the £20 because your *self-respect* will not allow you to retain it and you will rejoice in the performance of duty. You now show the beginnings of true character.

If, however, you jump from the levels of impulses or of inhibitions or of self-respect to *clear thinking* and you say either, "This is a stroke of luck, here are £20 for me; thank you, kind fate; I am prepared to face the consequences," or, "This is bad luck on the part of my friend; at the first available station I shall send this back by registered post"—then in both cases *your acts are being performed as a result of clear thinking and fine feeling*. This shows a strong character. In the former case it was a bad character; the thinking was selfish, anti-social, dishonest. In the second case it was a good character; the thinking was unselfish, pro-social, and honest.

Personality

The individual who in the company of friends, associates, colleagues or strangers, stands out so clearly that he is easily noticed and admired is displaying personality. What it is exactly we know not. Let us therefore find out what it does. We first of all notice the individual. We give him our attention. Nothing else for the moment matters except this man. *Personality*, therefore, *compels attention*. As we attend to him more closely, his figure, his bearing, his dress, his manner, his attitude and possibly many other points, help us to prolong the attention and to have confidence. Perhaps he *does* something, miraculously saves a child from death or efficiently solves a difficult mechanical problem, or clearly illuminates a difficult point. *Personality* therefore *inspires confidence*. We then come into closer contact with the man; he talks to us. His accent is good, his voice is clear, his words impress. His manner is not merely convincing but rather charming. What he says amuses us. It pleases us. *Personality* therefore *stimulates interest*. As we go on listening, we find ourselves applauding the opinions of our man, sympathizing with the grievances which he is expressing, believing in the methods which he wishes to apply. For the moment our own opinions and feelings are secondary. What is primary is the outlook of this man. We are followers and he leads. *Personality* therefore *leads*. Great personalities go even further. In addition to this social distinction, they possess able minds, good characters, and happy temperaments; they are able to inspire their

followers to understand and realize the ends of their advocacy. *Personality* is therefore *constructive*.

Self-Training and Self-Analysis

So far I have analysed this self of yours into four different departments. But they are only departments, not closed compartments. You cannot separate mind from temperament or from character or from personality. You can distinguish these four different aspects of the self, but you cannot separate them. In life, generally speaking, you are using them all together at any important moment. In self-training, however, you must pay attention separately to the function and aim of each department.

In the department of Mind, for instance, your aim must be the cultivation of quick and accurate thinking. In Temperament your aim must be the cultivation of deep feeling and controlled expression in the service of a wholesome interest. In Character your aim must be the clear enunciation of and belief in good principles or ideals and spontaneous action in obedience to them. In Personality your aim must be the application of mind, temperament, and character to the ideal of service.

QUESTIONS

1. How do you distinguish between Mind, Temperament, Character and Personality?
2. What *mental* differences are there between the work of a labourer, a mechanic, an engineer, and an inventor?
3. (a) Mention four kinds of Temperaments. (b) Illustrate each kind by examples from real life, literature, or history.
4. (a) How does Character differ from Personality and Temperament? (b) What parts do self-respect and clear thinking and fine feeling play in character?

5. (a) Describe five results that personality achieves. (b) Describe a personality you know, showing how you have observed these results.

6. If you always feel self-conscious when called before the head of your firm to do any work, how would you set about moderating this self-consciousness?

Part II

SELF-ORGANIZATION

(a) *The Organization of Mind*

CHAPTER IV

OBSERVATION AND ATTENTION

PERCEIVING and Imaging—Observing Defined—Aids to Observation
—Attention—First Steps in Attention—Monotony and Variety
—Questions.

Perceiving and Imaging

THROUGH the window, from the walls, from objects in front of you and from everything else, messages are reaching your body, penetrating into your brain and stimulating your mind into activity. These messages are vibrations. They are felt only by certain sensitive parts of your body such as your skin, your ear, your eye, your nose, your tongue. These parts of your body are called sense organs. They are connected by muscles and nerves to the most sensitive bodily part within you, your brain. When the vibrations touching a sense organ pass up the nerves and reach a centre in the brain, the mind becomes aware of something outside it such as coloured objects, noises, smells, warmth. Each sense organ, each group of muscles and nerves, and each brain centre form a sensory system in the body. A short name for such a system is a *sense*. You have many senses such as sight, hearing, tasting, smelling, touching. When a sense is working, the mind becomes aware of things outside it. This awareness is

perceiving. You cannot perceive without a sense organ being stimulated. You see this page because colour travels from it to your eye. You hear the rain because sound travels from the ground to your ear. But if you turn away from the page you may still see it in your mind with your "mind's eye" as it were. If you think of your manager or of your assistant, you may in your mind hear his voice. You are now perceiving, without anything outside you touching a sense organ. Such perceiving without external stimulation is called *imaging* and what you see or hear in your mind is called *imagery*.

Observing Defined

Every mind perceives. Perceiving is as natural a process as breathing. But how many minds can reproduce either in words or in images the *full* results or even the essence of their perceiving? This can be done only by efficient or trained perceiving, which is observing. To develop perceiving into observing is the first practical step in self-organization.

Aids to Observation

You cannot know anything perfectly well unless you are able to say or to point out how it is distinguished from other things. You cannot fully know the features of two men, the appearances of two cars, the outlines and contents of two designs, unless you know the differences in features of the men, in appearances of the cars, in outlines and contents of the design. This task is not too difficult. There are at least four most important differences in

perceiving and Nature has endowed you with the capacity to be aware of them. These are: differences in sense quality, as things seen differ from sounds heard; differences in intensity, as an electric light differs from a lighted candle or as a shout differs from a whisper: differences in time, as a quick message differs from a slow one; differences in space, as a large poster differs from a small one.

Therefore to change perceiving into observing—

- (a) *Use all possible senses ON the object.*
- (b) *Use all possible imagery AWAY from the object.*
- (c) *Note all possible differences IN each sense and IN each image.*

If, for instance, you are to observe a new type of office file—

(a) Ask a question of each sense (e.g. What is it as seen? What is it as touched? What is it as moved? What is it as rapped? What is it as smelt?).

(b) Revise this knowledge without looking at or touching the object (i.e. by imagery).

(c) Take each sense and image and analyse results (e.g. What was the exact colour shade? What was the precise pattern? What was the inside like? How long did it take to examine and understand? How large was it?).

All these questions can be carried out and answered by you if only: (a) the object of your observing is continually clear to you; (b) you push aside any and every outside interruption and suppress any inner irrelevant impulse; (c) you adjust

your mind so as to interpret, or give full meaning to, the object of your observing. In other words, you can perform observation only by performing attention, for it is attention that brings about the three results just mentioned.

Attention

If at this moment you heard a loud crash of glass you would start up and rush to the window. You would willingly give your attention to the cause of the crash. Such attention given without effort, without any consciousness at all of willing, is called *non-voluntary attention*. The objects that arouse it are exciting or interesting. This type of attention is useful but not very helpful for our purpose.

The more difficult type of attention is what you are giving this book. The object exciting it is some purpose you have thought out and you are conscious of deliberate study. This is called *voluntary attention*. This is the type that makes for mental progress.

First Steps in Attention

1. The object to which you attend must be clear to you.
2. There must be no competing external or internal objects or activities.
3. You must be able to keep the object in your mind for some time.

The first step is obtained quite easily. Turn your senses into sense. If it is a speaker, approach within good hearing distance. If it is a picture, approach within true seeing distance. If it is a book,

OBSERVATION AND ATTENTION 29

place it within good holding and seeing distance. The second step needs just a little thought but only a little thought. Do not choose the middle point of a cross road in which to read a difficult book. Choose an environment such as your own room or a quiet corner of any room. At any moment competing activities play on you, such as sounds from outside, a ring of a bell, a knock at a door. You cannot attend unless you suppress your tendency to take notice of these interruptions. But if you choose an environment where such interruptions are at a minimum your power of control and suppression will not be called upon too often. You may also experience internal mental interruptions. At this moment you may suddenly think about a matter of great importance at work, a sudden solution to a difficult problem that has been worrying you and you may go off mentally "at a tangent." To minimize the effect of such mental interruptions and eventually to prevent their too frequent occurrence you are advised to make an immediate note of the matter contained in the interruption (that is the solution to your difficult work problem). By making such a note you will record the interrupting thought for future use and you will relieve the resulting mental pressure. These will enable you to go on attending more efficiently.

The third step involves the consideration of two conditions: monotony and variety.

Monotony and Variety

If you try to attend, and only to attend, to a

small object like a pin, you will find that at the end of a few seconds your mind will wander away from the pin. This task is difficult because it is an interruption of the natural rhythm of bodily and mental activity. If you turn from any small single object to a large single object such as a speaker who is standing very still and speaking in a monotonous tone, your mind will again soon turn away from this object. He is too monotonous. He is lacking in variety. A certain degree of variety helps in the prolongation of the attention process. If the same speaker now moved rapidly to and fro on the platform and delivered his message in most varied tones, now tragic, now comic, now pathetic, your attention would be grasped but not by his matter only by his manner. Therefore *neither monotony of itself nor variety of itself is the best condition for continuous attention. You must have both.* In undertaking any study do not continuously use either one sense or one method. Do not only read the book; reflect also on its meaning; discuss it with a friend; write short essays. Performances in these *many* ways make the task of giving attention less difficult.

QUESTIONS

1. How many senses has man ?
2. What is a sense ?
3. What are the differences between (a) Perception ; (b) Imagery ; (c) Observation ?
4. Give some steps to help observation and state how you would test observation.
5. (a) What is Attention ? (b) How many kinds are there ? (c) State some precautions and conditions for enabling you to attend efficiently.

CHAPTER V

THE FOUNDATIONS OF UNDERSTANDING

ATTENDING and Apperceiving—Perceiving and Apperceiving—
Apperceiving and Understanding—Complete Perceiving—Two
Kinds of Associations—Questions.

Attending and Apperceiving

THE three steps in consciously attending to any object are: the obtaining of sensory, or perceptual, clearness of the object; the controlling, or preventing, of internal and external interruptions and irrelevancies; the maintaining of conditions so combining variety and monotony as to avoid the dangers of either. But these are only steps. They but lead the way. They lead the way to full mental control and grasp. Your mind cannot, however, grasp unless there is something to grasp. *What your mind grasps* is not so much the object of your attention as *the knowledge of the object*. If I take out of my top waistcoat pocket a new, long, black circular thing and show it to you, your mind immediately grasps not the thing, but the knowledge of the thing, which is "Waterman's Ideal Fountain Pen." These words are not written on the pen. Where are they? They are somewhere in your mind. Did they get into your mind at this moment? No! They were there months ago, years ago. The long, black, circular thing you saw me handle brought them up again. Your words, "Waterman's Ideal Fountain Pen," rushed (as it were) to meet the long

black circular thing I showed you, just as when you had newly arrived at a railway station after a long journey, you rushed forth to claim your luggage. You and your luggage became united and you felt complete. Similarly, your knowledge rushes forth to claim the new object and the new object becomes now part of your knowledge. This rushing forth of your past knowledge to claim or label an external object is part of Perceiving but can be called *Apperceiving*. It is because you apperceive, that you go on attending and it is because you attended that you were able to apperceive. Attention may be likened to a bridge by means of which your knowledge is able to bring fully into your mind your present experience, the perceiving of the object.

Perceiving and Apperceiving

Your perceiving can never be complete unless apperceiving also takes place. If you look at any strange man, you perceive a man. This is simple perceiving. But if you attend to the man and soon say to yourself, "I believe that is Mr. Sam Smith's brother," you have been apperceiving and made the perceiving fuller. In apperceiving, you are bringing to your perceiving your knowledge. Attending both opens up the flow of your past knowledge, making apperceiving possible and increases your present knowledge by making perceiving efficient.

Apperceiving and Understanding

In order that you apperceive fully, it is necessary that the object you are perceiving contains something

that you already know. The words on this page are being perceived by you. They are being perceived because your eye (the sense organ), your optic nerve (the nerve of sight), and your brain centre (of sight), all do their work and the mind, as a result, perceives. But your perceiving is easily turned into apperceiving not merely because you are attending (which is, of course, an essential condition for apperceiving), but because these words are written in English which language you already know. If I write "Tumhara Nam Kia Hai," you can perceive this quite well. But, in spite even of your attending becoming concentrating,* you will not apperceive this, unless, like myself, as a result of your Army (or other) experience, you have learnt Hindustani and so see in your present perceiving items you already know. When items in the perceiving and items in the apperceiving can be so adjusted as to fit perfectly, so that what is perceived is immediately apperceived, the apperceiving has reached its maximum degree of activity, and is usually called *Understanding*. *Understanding is trained, or efficient, Apperceiving*. To train apperceiving into understanding is the second practical step in self-organization.

Complete Perceiving

Why did the new, long, black, circular thing I showed you cause you to say or to image the words "Waterman's Ideal Fountain Pen"? Because many years ago, before you knew anything about

* Concentration is merely intense voluntary attention.

fountain pens, you noticed such a thing, you heard others call it a fountain pen, you were told to call it by its right name, and gradually the words, "Waterman's Ideal Fountain Pen," became almost part of your perceiving. Similarly with other matters, without your knowing it, whenever you perceived, you apperceived. You perceived the thing. You apperceived the name.* Your complete perceiving, therefore, is always complicated, complex. It contains much. If you look out of your window at this moment, you will see an enormous number of things. If you image your office or shop at this moment, you will image an enormous number of things. Your complete perceivings and your complete imagings contain very many items connected together. Another word for "connected" is "associated." Your perceiving and your imagery are thus made up of *associations*. You never perceive, you never image, you never reflect, without using these associations. Take any word you like, say, "book," and image or reflect about it. Soon there will spring up from your mind all sorts of pictures, names, incidents. These are all associated with the book. They are *associations*. The words "fountain pen" rushed from your mind when you saw me remove a thing from my pocket because they were associations in your mind of such a thing. *You perceive by associations*. They are the elements. In complete perceiving, your past knowledge rushes forth to claim new experiences and make

* It must be noted that the tendency amongst psychologists to-day, particularly in America, is to drop the use of the term "apperceiving" and embody it in what is understood by the term "complete perceiving."

them knowledge. The claims are established by associations.

Two Kinds of Associations

London is a town. The Thames is a river. London and town are associations in your mind. Thames and river are associations in your mind. You have associated these words and facts together because in your experience you have found them existing together. But why was not the town called Thames and the river called London? There is no reason for not calling the town Thames and the river London. The associations between town and London and between river and Thames follow no reason. They are arbitrary. They are associations that you find outside you, external. Such associations may be called arbitrary or external associations. You often hear the phrases River Thames, Kew Gardens, Crystal Palace. If I say "river," you may think "Thames"; if I say "Kew," you may think "Gardens"; if I say "Crystal," you may think "Palace." This is because they are arbitrary external associations that have been so often expressed together that they almost touch, that they are contiguous. Therefore these associations are called *Associations by Contiguity*.

Such associations, however, simply follow the order outside us. But there is another kind. You meet a man. You are told his name is John Brown. Ever afterwards you associate the man and the name, for that is the external, arbitrary, contiguous order you have found or of which you have been told.

But this man Brown makes you think of loyalty. There is a certain suggestion about this man that you like and call "loyal." You discuss him with one or two other men. Your thoughts, your impressions of him have never occurred to them. You have, therefore, thought out a point characteristic of your own mind not of other minds who have met John Brown. Why have you done this ? Because, to you, there seemed to be something similar between an item in your past knowledge (the idea "loyalty") and your present experience (the man John Brown). It is an association that is not outside you. You have not found it, you have made it. It was an inner process. Further, it was a selective process. You could have taken other items from your past knowledge (e.g. snob, cleverness), but you chose "loyalty." You chose it because something in Brown's look resembled your idea of the expression of loyalty. It was similar to it. Therefore such associations are called *Associations by Similarity*.

QUESTIONS

1. Why has attention been compared to a bridge ?
2. (a) State my two practical steps in Self-Organization. (b) How do they differ ?
3. What are the differences between Perceiving and Associations ?
4. A patient in an asylum in Essex is said to possess marvellous powers of perception and observation. He can tell you on request the name, initials, sex, date of entry, date of death (if any), of every patient who has entered the asylum since his residence there. What is there lacking in this man's mind ?
5. (a) What is necessary before Perceiving can become Complete Perceiving ?

CHAPTER VI

THE CULTIVATION OF MEMORY (I)

BEHIND Observing and Understanding is Memory—Three Constituent Processes of Memory—Reception (or Acquiring Knowledge)—Retention (or Keeping Knowledge)—Recollection (or Recalling Knowledge)—Unrelated Knowledge—Questions.

Behind Observing and Understanding is Memory

WHEN you concentrate upon any object, say a sample, and find out all details, your perceiving becomes observing. When your concentration is so intense and continuous and fruitful that you bring from your mind all kinds of associations, of similarity and of contiguity and enrich the sample with all possible uses and powers, your observing, helped by wide and full perceiving, becomes understanding. But where in your mind were all these associations that during observing partly came *to* you from the object and during understanding came *from* you to the object? When you observed that the sample was a book, bound in buckram, of an octavo size, with a blue cover and leaves uncut, you did not see these words on the sample itself. You saw the qualities in the thing, and your mind, as the result of observing, named these qualities. But the names were in your mind somewhere. When you more fully understood the sample, that it was a book called *The Student's Guide*, by Sir John Adams, a world-famous educationist; a work likely to be of excellent service to a private student; cogent in argument, clear in

style, wise in counsel, helpful in suggestion; you did not see these words in the book. You grasped these qualities, but their names were in your mind somewhere. There is a natural treasury of words, pictures, thoughts, within you. It is commonly called Memory. All human beings have natural memories. The third practical step in self-organization is to turn natural memory into efficient memory.

Three Constituent Processes of Memory

Before your observation or understanding can use your past knowledge it must call it up. This is Recollection. Before recollection can be performed, the knowledge must have been kept by you somewhere in your mind. This is Retention. Before the knowledge was retained it was acquired by you. This is Reception. Each of these processes must be clearly understood in order to be rightly worked.

Reception (or Acquiring Knowledge)

This process is most important. Many people say they cannot remember when they mean they have not taken the trouble to receive the knowledge well. Knowledge received well is usually remembered well. Broadly speaking, your knowledge is of two kinds. One kind deals with things firstly and ideas secondly. The other kind deals with ideas firstly and things secondly. If you have to acquire *a knowledge of things* such as size, colour, shape, weight, touch, smell, *you will acquire such knowledge efficiently by turning your perceiving into observing* by means of attention, or concentration

if necessary. (Full directions for this have already been given in Chapter IV.) If you have to acquire *a knowledge of ideas* such as the sales value of a sample or the value to artistic or economic production of a new invention or the help in administration of a new assistant, *you will acquire such knowledge efficiently by following out the advice* fully explained in later chapters, notably Chapter VIII. The following is a brief suggestion. Take as your starting point your main subject, e.g. sales or production or administration. Ask and *answer* the following questions: (1) What methods or processes are being used by my Firm that help to (a) efficient sales; or (b) efficient production; or (c) efficient administration? (Only answer (a) or (b) or (c).) (2) What are the main ideas I can learn from and bring to bear on (a) the sample for sales value; or (b) the invention for production value; or (c) the assistant for administration value? (3) How does your answer to question 2 fit in with your answer to question 1?

Retention (or Keeping Knowledge)

We can train our powers of reception. We cannot train our powers of retention. Retention is a natural quality like the colour of our eyes. If you have a low retentivity for any subject don't worry about it. Reception and recollection will help you. If you have a high retentivity for any subject it is of no use unless with it you have the power of concentration and the mental ability to understand the subject. The Essex asylum patient mentioned in question 4, Chapter V, had tremendous retentivity but little

concentration and restricted understanding. Hence he is in an asylum. High retentivity alone takes you nowhere; with concentration and understanding it took Macaulay and Gladstone to the highest realms of intellectual and political distinction respectively.

Our retentivity for any subject, apart from being naturally high, ordinary or low, exhibits two other interesting points. We all firmly retain certain items of knowledge received under one or all of three conditions: (a) recency (e.g. the result of the latest sporting event); (b) frequency (e.g. the words of an advertisement like Bovril—"It stops that sinking feeling"); (c) intense feeling (e.g. the face and name of the dentist who removed those most painful teeth of ours).

Many of us differ in the sort of knowledge we retain best. Some men remember numbers better than words. Some women remember patterns better than ideas. Some minds remember voices better than faces. These differences are due either to differences in environment such as home circumstances, education and work, or to differences in natural endowments, such as a gift for music or art or literature or mathematics.

Recollection (or Recalling Knowledge)

This is the most important process of the three. When we have to recall knowledge, whether it be of things or of ideas or of both, our knowledge is likely to be either unrelated or related. A list of telephone numbers or addresses or prices is

THE CULTIVATION OF MEMORY 41

unrelated knowledge. The principles of building construction make related knowledge. The method of recollection varies somewhat with the kind of knowledge. We must therefore consider each kind separately.

Unrelated Knowledge

Let me suppose that your dispatch department is a fairly large one and your business necessitates daily dispatches of different quantities of goods to customers in different towns. You have a list of 2,000 which increases weekly. There is Jones, of High Road, Leicester, to whom 40 are sent daily ; Tomkins, of Beverley Road, Hull, daily takes 25 ; Sanderson, of Twigg Road, Sheffield, daily takes 115. Your task is to remember the 2,000 names, addresses and quantities.

QUESTIONS

1. (a) Mention two kinds of association ; (b) Give three examples of each.
2. (a) What are the three constituent processes of memory ?
(b) How do they differ ?
3. (a) Which of the three following passages is easiest to remember ?
 - (i) Yog, kos, mes, tiv, num, lil, pet, sot, puk, hem.
 - (ii) 123 tree 45 hive 68 late.
 - (iii) The poor fellow made three desperate attempts to save himself.
- (b) Why ?
4. What differences in method would you display in—
 - (a) Remembering four different shapes of patterns of keys ;
 - (b) Remembering four different reasons against capital punishment ?
5. How would you tackle the memory problem mentioned in the last paragraph of this chapter ?

CHAPTER VII

THE CULTIVATION OF MEMORY (II)

THE Intricacies of the Problem—Aids to Memory : (a) Associations Can Be at Hand ; (b) Associations Are at Hand if Habitually Systematized ; (c) Easy and Difficult Associations—Why “Mechanical” Aids Are Only Second Best—The True Aid to Memory—Questions.

The Intricacies of the Problem

You have in front of you, to be remembered, 2,000 items of great complexity. There are 2,000 names and initials ; 2,000 numbers, roads or streets and towns ; 2,000 different quantities. Your difficulties are enhanced by the lack of connection or association between the initial, the name, the number, the road or street, the town and the quantity. You need help. Put the problem aside therefore for a few minutes.

Aids to Memory

(a) ASSOCIATIONS CAN BE AT HAND

If you were asked to state the name of the firm which manufactures “Ovaltine,” what would you do ? You would search in your mind and try to recall the occasion when and where you purchased “Ovaltine” for your wife or child or for yourself, and you would look at your mental image of the label on the bottle and tell me the name “Wander.” You would go back to the mental neighbourhood in which this experience lived. You would try to dig up all possible contiguous associations there: place, time of year, accompanying circumstances.

THE CULTIVATION OF MEMORY 43

One or all of these would help you in your search. You did not, when you were asked, possess the idea of the name, but you had ideas connected with or associated with it; and in probing the latter ideas, the idea required was brought up for you. We must therefore find out how our associations can hang together so that if one is brought up the rest come up with it.

(b) ASSOCIATIONS ARE AT HAND IF HABITUALLY SYSTEMATIZED

If you were asked to go into your bedroom and bring me out a boot and a collar, what would you do? From your chest of drawers or from your wardrobe you would bring out a collar and from the floor somewhere or from your boot cupboard pick up a boot. You would have no need to probe now for mental connections, for *you had made it a habit to put these personal things in their proper places*. The result was that recollection was ridiculously easy. Take a lesson from this. Put all the details of your business in such proper places that the retention of them in the mind will be almost automatic, and the recollection of them will be similarly easy. The initials, the names, the addresses, the quantities can all be indexed systematically and retention thus made automatic. Such a method in itself will help you to recollect these details not so much by holding them in the mind as by finding them outside. It is, therefore, efficient, but it is not efficient enough. You may wish to use your information *away* from your office or under circumstances such as replying

THE CULTIVATION OF MEMORY 45

Thus, for example, if you wished to remember that the velocity of sound per second is 1,142 ft., you would turn the numbers into a phrase such as "a tight run" = ttrn = 1,142.

To apply this so that Jones will remind you of 40, Tompkins of 25, and Sanderson of 115, you will have to weave ingenious phrases such as—

Jones, name very frequent, like a rose	= rs = 40
Tompkins, rarer, like a hill, nil	= nl = 25
Sanderson, long, like a total	= ttl = 115

In between the name and the number you have had to insert easy associations of words. These can be regarded as supporting connections (or associations by contiguity). But they are in themselves a special kind of "mechanical" aid (usually called a mnemonic) and capable of wider application. If you had to remember, for example, that your accountant's name was Dorman, you would string together supporting words such as "Accounts, mathematics, mat, door-mat, Dorman." If you had a foreign correspondent whose name was Little, you would string together the following: "Foreign language—languish—Lydia Languish—Lydia—Little."

To connect the names in our problem, Jones, Tompkins, Sanderson, for example, with Leicester, Hull, and Sheffield, you could use this aid, thus—

Jones : Welsh—Lloyd-George—fiery—match—vesta—*Leicester*.

Tompkins : Kins—sins—hell—*Hull*.

Sanderson : Sanders—cinders—track—feat—heel—steel—*Sheffield*.

These mechanical aids have helped thousands

of minds to bridge over difficult associations by introducing between them easy ones of words and phrases. They have thus helped recollection directly. Their greater value lies in the increase in power they give to the mind of making easier word associations generally.

But associations must not be merely numerous. They must also be persistent.

The aids so far given help to increase the *number* of associations connecting two items, say, Jones and 40. They therefore make the task of probing in the mind safer and more successful. But their persistency, their lastingness, their permanence depend upon the mental energy with which you make this ingenious connection. Such energy is given out by interest. If the job attracts you, the associations made will cling. If the job does not attract, then you must drag in another interest, such as your desire to get on or your desire to minimize the labour of the task. If you can bring interest to the memory task, its lastingness is invariably helped. ✓

Why "Mechanical" Aids Are Only Second Best

You have so far been shown methods of taking hold of certain items of knowledge and so making them your own by "mechanical" connections that you will always be able to use them. But the method has not touched the nature of the knowledge itself. Your mind has been treated so far like a recording machine, taking what is given to it without question, but taking it well and holding it better. This is, however, not the complete way to mental efficiency.

THE CULTIVATION OF MEMORY 47

The knowledge that is given to you must have been compiled in accordance with some principle which binds it together, stronger than the most lasting cement. If we can find out this principle and master it, then the items of knowledge will also be grasped together in our minds and held there. To master knowledge without mastering the principle binding the knowledge together is like making bricks without straw. "Mechanical" aids emphasize such a type of work. They turn minds into mere copiers, not creators; into followers, not leaders; into servants, not directors. They use only one class of association, association by contiguity. They ask the mind to accept only the world as it is, not the world as it might be.

The True Aid to Memory

Let us turn again to our original example of 2,000 names, addresses, places, and quantities. To tackle such a task even by "mechanical" aids and by a deep interest will take considerable time and will necessitate intense effort. Before going straight for this task, pause and ask yourself: Why are these names, addresses, places, and quantities arranged thus? They are arranged thus because they are customers of my firm. But why should my firm have such a varied assortment of places and quantities? Because the goods supplied by us meet special clearly defined needs. In which English towns are these words likely to be felt most keenly? In which English towns are these needs likely to be felt less keenly? Enter down a list of important

English towns with estimated quantities that ought to be needed in accordance with your knowledge of (a) the requirements of such towns, (b) the need supplied by your goods. Compare the lists of 2,000 places, and you will be astonished to find either much resemblance between the two or a sudden conviction that where one compiled list differs there is room for more business. What have you now done? You have grasped the inner relation between a town and its quantity. What has helped you to grasp this? You have by analysis, by thinking, placed something between them. A town requires the goods. The goods meet this requirement. The idea "requirement" is the binding link. In order to understand, you have had to find not what is contiguous, or external, between town and goods, but what is similar or internal. You have developed between these two ideas an association of similarity. Ever afterwards when a town is mentioned, the quantity of goods required will be recollected not so much by any superficial "mechanical" chain of phrases and figures, but by your understanding of the town's requirements. This understanding with its necessary details of number, name, and address will never leave you as long as your mind is functioning efficiently, that is, is able to go on understanding. When faced with a big memory problem, therefore, you have two alternative methods. One is to arrange the items in a long chain linked together by easy "mechanical" associations. The other is, firstly, to analyse the problem into its fundamental principles; secondly, to select the most vital

THE CULTIVATION OF MEMORY 49

principle as your guide ; and, thirdly, to place the items in an order based upon this principle, which will unite the many items by hoops of reason which last longer than steel. The first method will supply you mainly with facts, but with few thoughts. The second will supply you with the leading thoughts by means of which the facts will be retained.

QUESTIONS

1. How would you proceed to remember the essence of these two Chapters on Memory?
2. State the advantages and disadvantages of the figure alphabet.
3. What influences help retentivity to work at its maximum ?
4. What is the best method to follow in order to make memory of a particular subject truly lasting?
5. Distinguish by examples between Association by Contiguity and Association by Similarity.

CHAPTER VIII

THE ACQUISITION OF IDEAS

ORDINARY Meditation or Reflection : (a) Reproductive Meditation ; (b) Productive Meditation—Selective Meditation or the Start of Thinking—The Coming of Ideas : (a) The Thing and its Meaning ; (b) Taking Hold of Meaning ; (c) Turning Perceiving into Conceiving—Shaping Ideas or Thinking at Work : (a) Identity and Difference in Ideas ; (b) Getting Down to Essentials ; (c) Method of Analysis ; (d) Method of Synthesis ; (e) Analysis and Synthesis Must Work Together—Questions.

Ordinary Meditation or Reflection

(a) REPRODUCTIVE MEDITATION

SIT back in your armchair. Take your mind away from the surrounding objects. Reflect upon any personal incident you like. You ruminate: "On Saturday, 7th April, I am due at the Brown's to dinner. They live at Hampstead. How long will it take me to get there? What can I take them? I wonder if Percy K. Z. Lee (a very interesting friend) will be there." Now stop your ruminating and turn to me.

Items from your Mind have been re-collected. They were: a date; a dinner at a friend's; where they reside; duration of journey there; a present; another friend. Why did these items follow each other in this order? What principle, for instance, bound Hampstead to Brown? You will easily be able to answer this. The principle was association by contiguity. The items followed one another in this manner in your reflection because some time before they had been experienced together. Your meditation had been purely reproductive. It had

reproduced to-day only what you had experienced some time previously.

(b) PRODUCTIVE MEDITATION

Let me suppose, however, that instead of reflecting about the Browns you suddenly had in your mind "Percy K. Z. Lee" and pondered over his initials, thus: "Initials are P. K. Z. L. Initials stand for names. What's in a name? Is there any relationship between names and character? Character! can it ever be judged by an impression? Shall we ever be able to classify faces so that at a glance an expert will be able to state whether any particular applicant is suited for a post or not? I must set about classifying faces of people I know and then see if I can guess what is true about new faces, faces of people I meet in the future."

It is possible that such items were never experienced by you before in this particular order. One point followed another in your mind owing to some principle of connection (or association). There is only one other leading principle of association besides contiguity, and this is similarity. One item followed another item because there was something similar in each.⁴ You were not aware so much of the similarities connecting the points in your reflection as of the points themselves. But the general result was that you were contributing a different, perhaps a new, development to your own knowledge. You were not reproducing something old. You were productive. You were producing something different, perhaps something new.

Selective Meditation or the Start of Thinking

In either case so far you have been mentally following an inner lead. You were, however, not conscious of any effort of attention. Points came to you, whether by contiguity or by similarity, and you simply followed them. But if you now *deliberately* take up again the question of character and faces, picking it out from other of your subjects of interest, *you are performing a selective activity*; you are conscious of an effort, you are attending. But to what are you attending? You are attending to two subjects: character and faces, and you are trying to find out whether there is any relation between them. You cannot decide this unless you know much about character and much about faces. You must know what makes up character and what are the points about a face. You must concentrate on the *inner* qualities of each. You are now therefore on the road to thinking.

The Coming of Ideas

(a) THE THING AND ITS MEANING

In reflecting and in perceiving you were concerned with things. You turned from Brown to Hampstead or from character to faces and your mental activity in each case was concerned with a thing, a *whole* thing. But what is Brown? What is Hampstead? What is character? What is face? Each whole thing is a different thing. Brown is a friend; Hampstead is a place; character is a part of the self; face is a part of the body. You are now

concerned rather with the qualities of the things than with the things themselves. These qualities make up its meaning. When you perceive and when you reflect you deal with whole things. You deal with that which you can see, hear, touch. Brown, Hampstead, the face of a man are objects that can stimulate your senses. They are therefore concrete. But when you take any one of these concrete objects and consider its qualities, that is its meaning, you are turning away from the concrete. When you take Brown into your mind and ask yourself: "If Brown is a friend, what does this quality *friend* contain? Of what is it made?" You are now no longer dealing with the concrete object, friend Brown, but with the qualities, the inner parts of friendship, such as: affection, understanding, sympathy, loyalty, patience, companionship, common tastes. These qualities make up the meaning of friendship.

(b) TAKING HOLD OF MEANING

These qualities were pulled out by you as a result of many experiences of friendship. You had discriminated (or found differences) between various friends and friendships you knew and read of. You had compared (or found agreements between) various friends and friendships you knew and read of. The qualities were abstracted from concrete experiences. They may therefore be called abstractions. But they are usually called ideas. In each thing you perceive, in each thing about which you reflect, many ideas are contained. When you deal with the

things as whole things and only incidentally with their meanings or ideas, you are using only your senses, you are perceiving, but *when you deal directly with their meanings, when you pull out the abstract qualities contained in things*, you are using mental powers greater than perceiving, *you are conceiving, you are understanding, you are thinking.*

(c) TURNING PERCEIVING INTO CONCEIVING

Conceiving means dealing with ideas. It is the first step in intellectual progress. To turn perceiving into conceiving concentrate upon any two similar objects or persons; contrast them by noticing differences in qualities; compare them by noticing agreements in qualities. You thus become more clearly aware of their hidden qualities, of their meaning, of what is abstract, of the ideas embodied in each. You turn from the concrete, the objects, that which you can handle, with your senses, your body, to the abstract, the meaning made up of ideas, that about which you can think.

Shaping Ideas or Thinking at Work

(a) IDENTITY AND DIFFERENCE IN IDEAS

Ideas both differ and agree. Your penknife, for example, is useful and also valuable. Use and value are both good qualities. They agree or have this quality of goodness in common. But while use may embrace "function," value may embrace "price." Use and value therefore also differ, one embracing "function" and the other "price". You are now finding out more clearly, with more detail, the

relationship between the qualities use and value. This finding out is part of the thinking process.

(b) GETTING DOWN TO ESSENTIALS

Suppose you wish to find a relation between character and faces, take each separately. What is character? It is a part or an aspect of an individual self by means of which that self reveals morality, reliability and moral courage—to mention only a few qualities. What is face? It is part of a man's body by means of which he performs certain vital and social activities and it contains two parts: the features and the expression.

(c) METHOD OF ANALYSIS

What have I been doing? *I have been cutting up the whole things, "character" and "face," into some of their parts.* I have been taking from the concrete, part of its abstract meaning. Another word for such a process is analysis. I have been analysing two things and, as a result of my analysis, have abstracted or drawn out certain ideas about each thing. I was able to do this because *I, in common with all human beings and animals, can notice differences.* In a face, for instance, I can easily notice the difference between the features and the expression.

(d) METHOD OF SYNTHESIS

Whenever an analysis is being made, a part of a thing is chosen, named and classified. For instance, you can cut a cake into four equal parts and pull

out one. Each part you call a quarter. How do you know? Because from many years' experience you have learnt the fact that if any object is divided into four equal parts, each such part is called a quarter. You are now labelling this part. You are calling it a name—"quarter." You are putting it into a class of things you know—"quarters." You are now building up, not analysing down. *You are building together, or connecting or finding a relation between the thing you see, a part of the cake and the idea "quarter." This is the opposite of analysis and is called synthesis.*

(e) ANALYSIS AND SYNTHESIS MUST WORK
TOGETHER

Analysis and synthesis always take place in right thinking. That to which you attend must be broken up, mentally, into its parts and the parts must be put into their classes.

Character, for example, can be broken up into certain parts. One is the power to act in accordance with high ideals. This is labelled in the class of ideas, "morality." Another is to act nobly in a crisis when nobody is present. This is labelled, in the class of ideas, "reliability." Another is to act in obedience to the highest ideals against powerful opposition. This is labelled, in the class of ideas, "moral courage."

A face can also be broken up into certain parts. One is that which is always seen. This is labelled, in the class of ideas, "features." Another is that which is only frequently seen, but not always. This is labelled, in the class of ideas, "expressions."

To think rightly therefore you must be able to:
(a) pick out the ideas in a thing by differences (analysis); (b) classify these ideas by agreements (synthesis).

QUESTIONS

1. How can you turn perceiving into conceiving?
2. (a) What is Thinking?
(b) Describe the two methods in thinking that must always be present?
(c) Give one illustration of what you mean.
3. What processes must you perform to help you to increase your ideas about, say, two typewriting machines—the Remington and the Underwood—or about any two machines you know?
4. What advantages does a worker who thinks possess over an able worker who works only by “rule of thumb”?
5. (a) Write down some qualities of character.
(b) Write down some qualities of a face.
(c) Do you think that character can be judged by face? If so, why so? If not, why not?

CHAPTER IX

THE CULTIVATION OF IDEAS (I)

THE Art of Judgment (or Practical Reasoning): (a) Order: External and Internal; (b) What Disorder Does; (c) Intuition and Reasoning; (d) The Genesis of Intuition; (e) Explicit Reasoning: I. Empirical Reasoning (or "Rule of Thumb"); II. Practical Reasoning (or Judgment); III. One End of Judgment (or Truth) —Questions.

The Art of Judgment (or Practical Reasoning)

(a) ORDER: EXTERNAL AND INTERNAL

EVERYTHING that you use, everything that you see, and everything that exists, all have many meanings. One of the meanings of the pen in front of you is "that with which I write." One of the meanings of the paper in front of you is "that upon which I write." All things around you are so arranged, they are so put into certain places, that their meanings fit in. You do not find your pen in your fireplace. You do not find your writing paper on the floor (at least, not usually). The pen and the writing paper are things placed in certain positions so that their particular meanings are made clear and the relation of their meanings with the meanings of the other things in the room is satisfied. In any room, in any office, in any shop window, in any street, you can see hundreds and thousands of things arranged in a certain way by means of their meanings. This arrangement of things is called order. But the *order is an outward result of the inner relationship of the different meanings*

of the things. This *inner relationship is called reason.* You grasp order by observing things, but you grasp reason by thinking about ideas.

(b) WHAT DISORDER DOES

We are always looking for order and we are always assuming it to exist. If we meet with deviation from order we become surprised, interested or amused and our minds are stimulated. A policeman in the midst of heavy traffic bending down to pull up his sock; a street lamp-post forsaking its dignity and position to lie down and watch a dog-fight; a house from the walls of which trees are suspended instead of being planted in the front garden—all these are remarkable instances of changes from the usual order around us. They are called remarkable because they cause us to remark or comment upon them.

When I spent my first day in Calcutta, many years ago, I was astonished and amused to see a piano rushing along the street at a height of five feet from the ground. On closer observation I was interested to note that the piano was supported on the heads of sixteen native labourers who were running along with it. It was evidently the Indian method of removing heavy furniture. This was an exceptional instance. It was not so much a deviation from, as a violation of, the usual order. We are used to seeing pianos in drawing rooms resting on the floor and in a corner. One of the meanings of a piano is “a musical instrument for rest for pleasure and for joy” and the idea “rushing

in the street " did not fit into this meaning. There was a lack of harmony between my understanding of the thing (that is, my ideas of the piano, its meaning to me) and what was being done to the piano (the ideas I saw into the street incident). This lack of harmony caused me to attend, to laugh and to reflect.

(c) INTUITION AND REASONING

We spot this lack of harmony in two ways. Some minds are naturally gifted to understand reason by merely observing order. To see a man and immediately and accurately judge his character; to listen to a new proposition and speedily and soundly to offer helpful, encouraging advice or equally helpful, prudent criticism; to receive a sample of a new line of goods and instantaneously and rightly to report its selling value—all these are acts of minds possessing the power of reasoning without being aware of the successive processes of reasoning. The acts are performed so quickly that the mind is only aware of the ends, not the means, of the decision, not the way the decision was made. This valuable gift is *implicit reasoning*, commonly called *intuition*. Most minds, however, make their decisions more slowly. They bring to bear their memories, their knowledge of cases or of things or of propositions similar to the one under discussion. They are fairly clearly aware of the mental steps they take before committing themselves to a decision. These steps form *explicit*, or conscious, *reasoning*.

(d) THE GENESIS OF INTUITION

Intuition depends fundamentally upon Nature. The expert in window-dressing must, as a child, have exhibited a feeling for colour and form. The acknowledged expert in advertisement writing must, as a child, have exhibited a feeling for words, sentences, and smart and snappy sayings. But these were only the fundamentals *possessed in varying degrees by all men and women*. Such gifts left to Nature alone would die. In addition to Nature there is Nurture (or environment, home influence, education, business or other training) and individuality (the particular personal factor). By nurture the gifted child's parents, teachers, seniors in business or other work, played their helpful and formative part. By individuality the gifted child made this part completely effective by consistent industry and growing understanding. Intuition, particularly when applied to the judgment of human character by personal impression, is alleged to be present more strongly in women than in men; and this is probably true. It is certainly true, however, that it was possessed to an exceptional degree by great captains of industry and commerce such as the first Viscount Leverhulme and Thomas A. Edison, to mention only two names. It was certain also that these men possessed remarkable industry and had made great use of environment. Intuition, then, is a gift that can only be effectively used if rightly developed and it is developed in the same way that its "twin brother" explicit reasoning is developed. This way I shall now show you.

(e) EXPLICIT REASONING

I. Empirical Reasoning (or "Rule of Thumb")

You place a bundle of books on the shelf high on the left in front of you. In a moment they come down with a bang. You then place them on the shelf high on the right in front of you because you know from past experience they will rest there without falling. If this is all that takes place in your mind *you are merely following a difference in order without trying to find reason.* You are going by "rule of thumb." You are blindly following the dictates of the external world. That is how an animal mind works. But it is a very inefficient form of mental working. You do not understand the difficulty in front of you nor are you better able to meet future similar difficulties. It is like thinking you have grasped the meaning of a letter when you have only gazed at the envelope, or enjoying a picture when you have only looked at the frame, or finding out the point of view of a book when you have only looked at the title. Purely empirical thinking misses the essence of an incident, the lesson of a mistake. The lesson is contained in the reason behind the order or disorder. Get hold of this reason.

II. Practical Reasoning (or Judgment)

Take the thing "defective shelf" and find out the ideas behind it. They are "overbalancing; greater weight than strength." Now take the idea "proper balance." See whether there is a shelf within your reach that can fit into this idea and

select it for a practical purpose, for the future use for your books. In finding out the ideas that make up "defective shelf" you were *analytic*. In fitting the idea "proper balance" to another shelf you were *synthetic*. *This particular twofold process of relating things to ideas on the one hand and of relating ideas to things on the other hand, is called Judgment.* You express your judgments in a certain form (called a proposition) that embraces these two processes. Here are some judgments—Bovril is healthy; fresh air is good; a pen knife is useful. On the one hand you have the thing, say, "Bovril," and one of its ideas is "healthy." On the other hand you have the idea "healthy," and one of the healthy things is Bovril. The former part of judgment breaks up the thing into one of its ideas; the latter part takes an idea and finds one of the things that fit into it. The former is discrimination, it makes meaning more clear, more intensive, deeper; the latter is classification, it makes meaning more united, more extensive, wider.

III. One End of Judgment (or Truth)

Take the judgment "Waterman's Ideal Fountain Pen is a good pen." You have the thing, the particular pen, in front of you. You have the idea "good pen" in your mind. Firstly, by observation, concentration, use and understanding, you break up the thing into ideas—good shape, suitable nib, rapid filling, easy writing. These are ideas that you abstract from the pen in front of you. Secondly, turn into your mind and bring out those of your

ideas that make up the idea "good pen." They are: shape, nib, filling, writing. Can the pen in front of you be said to be possessed of these ideas? Try each idea separately and you will find that the answer is in the affirmative. In other words, the ideas of "good pen" which existed in your mind as part of your education, *your learning*, your understanding, agree with your present ideas of the thing, "Waterman's Ideal Fountain Pen," the ideas which you have just abstracted. Another word for this power to abstract is *sagacity*. *True judgments are made when your sagacity* (power to abstract ideas from things) *agrees with your learning* (the ideas of the thing already existing in your mind, as a result of education).

QUESTIONS

1. (a) What is the difference between order and reason?
(b) Give one illustration describing order and explaining reason.
2. (a) What is intuition?
(b) Have you ever used it or seen it used well or badly? Can you suggest reasons for this?
3. (a) What factors help the development of intuition?
(b) Give two illustrations from your reading or your work or your experience.
4. (a) What is the exact work that judgment does?
(b) How can you distinguish a true judgment from a false one?
(c) What is the value of judgment?

CHAPTER X

THE CULTIVATION OF IDEAS (II)

THE Finding of Principles: (a) Recapitulation and Introduction; (b) Things and Ideas; (c) Judgment: Conviction and Confidence; (d) Errors in Judgment; (e) Making Truth Permanent; (f) The Heart of Truth, or Getting in Touch with Reason—Questions.

The Finding of Principles

(a) RECAPITULATION AND INTRODUCTION

YOU acquaint yourself with things by using your mind through your senses. This act is called *perceiving*. Part of all your perceiving goes on, existing in the mind as memory, or past knowledge, of things which helps all your future perceivings. This is called *apperceiving*. By prolonging and intensifying your perceiving, which prolongation and intensification are called *attention* and *concentration*, you make your perceiving better, you notice more clearly the details of, and the differences and agreements between, things. Your perceiving has now become *observing*. So far you have been using your mind directly on the things outside you, turning your mind in an external direction; but you can also deal mentally with these things without directly dealing with them in an external way. There are parts of these things existing in your mind; indeed, they have become part of your mind. If you, at this moment, are in your office, you can still *see* your living room at home, *in your mind*. If you, at this moment, are in your living room at home,

you can still *see* your office, *in your mind*. This is *imaging* and what you see is *imagery* (or images).

Just as during observation of things you compare and contrast them, so you also compare and contrast images. These processes become more refined by practice and you begin to find out the inner nature of differences and agreements. Things differ and agree because of the absence or presence, in varying degrees, of certain qualities. One man is fat but tall. Another man is fat but short. One box is black but heavy. Another box is black but light. *Tens of thousands of such comparisons and contrasts have enabled you to discriminate between the thing itself* (the man or the box) *and the qualities of the thing* (size, colour, weight). You are now able to realize that the world is divided into two classes: things and qualities; concrete and abstract; matter and non-matter; wholes and parts. This mental step into the knowledge of qualities, of the abstract, of non-matter is called *conceiving*. When you become more intimately aware of the qualities existing within things by always abstracting them by contrast on the one hand and by perpetually putting them in by comparison on the other hand, you are *thinking*.

(b) THINGS AND IDEAS

In dealing with things and their meanings, with concrete objects and abstract ideas, you are continually becoming aware of more of each. If you are a great reader of books on psychology you may to-day come across a book of which you have never

heard. This will be another concrete object added to your perceptual experience (your experience of things). On taking the book up you will find from the introduction that the author is giving quite a fresh treatment of the problem of the kind of personality necessary for efficient organizing. This will be another abstract idea added to your conceptual experience (your experience of meanings).

Every experience can therefore be of twofold value to yourself: a widening of perception and a deepening of conception; a longer list of things you must experience and a clearer understanding of thoughts you must know. These two results are not too difficult to acquire, as all things contain ideas and all ideas fit into things. The number of things is probably infinite, but the number of ideas may be probably finite. Very many things, for instance, can be covered by one idea. Chairs, armchairs, tables, files, desks, typewriters are all "office furniture." The idea "office furniture" runs through them all. One idea can connect thousands of things. The idea "wireless" is for example the central idea running through and connecting thousands of different things and processes.

(c) JUDGMENT: CONVICTION AND CONFIDENCE

Look at the lamp in front of you. Say something about it. You say "the lamp is bright." Gaze round your room. Say something about that. You say "this room is comfortable." You are now affirming the order outside you by picking out a thing and adjusting an idea to it. This is judgment.

The form of a judgment is called a proposition, and it has two parts, a subject and a predicate. "Lamp" and "room" are the subjects. "Is bright" and "is comfortable" are the predicates. The subject is usually a thing and the predicate, a quality or idea. You could not make these judgments without, firstly, grasping the essential qualities of the thing (lamp or room) and, secondly, having the right knowledge to recognize and name their qualities. The first process is called sagacity ; the second is called learning. When your sagacity harmonizes with your learning your judgment is true, and usually in such cases an added amount of mental force in the shape of feeling is generated in your mind. You become surer of your judgment and of yourself. The former is conviction ; the latter is confidence.

(d) ERRORS IN JUDGMENT

Are your judgments always true ? If you are a mechanical engineer and I show you a motor car you will immediately judge it truly because you will have your ideas ready. If you are an able salesman and I bring you a selling proposition you will immediately judge it truly because you will have your ideas ready. But if I find that your judgment, "This is a really good car," is not supported by my experience of the car, or that your judgment, "This is a bad selling proposition," is denied by my subsequent experience in selling, there is evidently a breach between your ideas of the car or the selling proposition expressed in your judgment and my

ideas gained from experience. You have been guilty of an error in judgment. Something has eluded you. Either your sagacity failed in analysing the thing, in breaking it up into its constituent ideas, or your learning failed in synthesizing it, in fitting things to the ideas you abstracted. You must therefore go back to each of these processes, start again, and make each more thorough.

(e) MAKING TRUTH PERMANENT

But you want to be sure every time. Your judgments so far are true and convincing and confident. They are useful. But are they complete? Will they *always* be useful? Will the truth of to-day be also the truth of to-morrow? Is the truth of to-day the truth of yesterday? Is there anything final and permanent between our sagacity (grasping ideas of a present thing) and our learning (grasped ideas of past things) which can be an unfailing and constant guide to truth?

I am now asking a question, different in kind from any that I have yet asked of, or answered for, you. So far every question started with the word "how." For example: How does the mind observe? How does the mind remember? In reply to these questions I have given you *descriptions* of the mind's workings. But now I am asking a question commencing, not with "how," but with "why." Why is any judgment permanently true? To answer such a question *explanation*, not description, is necessary.

Take any judgment you like; say, "wood

floats.” The subject (the thing) is “wood.” The predicate (the quality, the idea) is “floats.” It is a true judgment, for your sagacity (your immediate understanding of the thing “wood”) harmonizes, or agrees with, your learning (your past understanding of all kinds of similar things, of all kinds of woods). But why does wood float? What idea or quality is there present in the thing “wood” and what are the things contained by the idea or quality “floats” which form *the binding link between these two*? *This connecting link, this underlying basis of order, this fundamental condition is Reason.*

Take the thing “wood.” Analyse it. Break it up. One of the ideas you bring forth as a result of analysis is that wood is “lighter than water.” Take the idea “floats.” Synthesize it. One of the classes of things that float comprises those that are “lighter than water.” This idea “lighter than water” is the common, fundamental, permanent link of reason binding “wood” to “floats.” You can now say “Wood floats because it is lighter than water.” This is your reason, the basis, the groundwork of your judgment. This is the permanent, unassailable, unfailing, lasting rock and foundation of truth.

(f) THE HEART OF TRUTH, OR GETTING IN
TOUCH WITH REASON

I shall now take a few judgments and treat them so as to find the ultimate basis of reason. The treatments are excellent mental tonics. The reasons are among the most valuable results in training for mental efficiency.

THE CULTIVATION OF IDEAS 71

I. You say "Mr. Winston Churchill is a great political leader." This is your proposition. The subject is "Mr. Winston Churchill"; the predicate is "is a great political leader." If this is true, why is it true?

Take the predicate and treat it as an idea. Synthesize it. To what things or ideas can you fit it? Here are some: strength of personality; compelling use of personality; ability in public speaking; speed of thought and action; high intelligence; sense of advantage or tactics; devotion to the public good.

Take the subject and treat it as a thing. Analyse it. What are the ideas contained in it? Here are some: tactician; high intelligence; quickness in thought and deed; great debater; tremendous sway and strength of personality; devotion to the public good.

By the processes of thinking, of analysis and synthesis, of intension (clarifying ideas) and extension (classifying things) you strip from your judgment all ignorance and expose the fine crystals of reason. You can now say truly, to give only a few reasons, "Mr. Winston Churchill is a great political leader because he is possessed of a strong personality, a high intelligence, great ability in public speaking and great devotion to the public good."

II. You say "Pears' Soap is excellent for the complexion." The subject is "Pears' Soap"; the predicate is "is excellent for the complexion." If this is true, why is it true? Take the predicate and treat it as an idea. Synthesize it. To what

things can you fit it ? What are the things good for the complexion ? Here are some : dirt removing things ; pure things ; fat things to lessen friction and feed the skin ; invigorating things.

Take the subject and treat it as a thing. Analyse it. What are the ideas contained in it ? Here are some : it removes dirt ; it is pure ; it contains fat ; it is refreshing ; it feeds the skin.

By thinking you have penetrated through your judgment into the bed rock of reason. You now know the cause supporting your judgment, the principle. You can now truly say : " Pears' Soap is excellent for the complexion because it removes dirt, is pure, contains fat, is refreshing and is a skin food."

III. You say " Business is a great social service." Is this really true ? Take the predicate " social service " and treat it as an idea. Synthesize it. To what things can you fit it ? What things are social services ? They are : hospitals, schools, churches, theatres, art galleries. These things have : goods that are needed ; methods for handling the goods ; methods for distributing the goods.

Take the subject " business." Treat it as a thing. Analyse it. What does it contain ? It contains : goods needed ; methods of handling (administration) ; methods of distributing (selling). You can truly say, therefore, that " Business is a great social service because it contains goods needed by the public ; it handles the goods ; it supplies the goods to the public."

THE CULTIVATION OF IDEAS 73

Your thinking has taken the things you know, the ideas you know, the relations you affirm, and has led you to the connecting link between all of them, the master idea, the reason, the cause, the underlying principle.

QUESTIONS

1. Describe how you have moved, mentally, from a knowledge of things to a knowledge of ideas.
2. (a) How do you obtain truth ?
(b) What is truth ?
(c) What is conviction ?
3. There are two sources of errors in judgment. What are they ?
How can you remedy these errors ?
4. (a) What is sagacity ? How can you improve it ?
(b) What is learning ? How can you improve it ?
5. Explain the following judgments—
 - I. The Rolls Royce motor car is the best in the world.
 - II. Shell Motor Oil is a splendid lubricant for motor cars.
 - III. Psychology is the most important study for all men and women.

CHAPTER XI

HOW TO STUDY AND HOW TO READ

NATURE of Study—Processes in Study—Stages in Study—Dealing with Difficulties—Guessing—Mastering the Results of Study—Cross-Currents in Study—Study Periods—Test of Study—Reading: Aim, Method—Questions.

Nature of Study

THE main point about study is that there is some difficult or technical end in it. Study differs from general reading by having an end in view which is very clearly distinct and somewhat difficult. In studying we bring our minds to bear on what is in front of us or on what is around us, in order that we may understand its nature, make its meaning a part of ourselves and change our subsequent knowledge, feeling or behaviour, or all of these, as a result.

Processes in Study

We can master the contents of our study in two ways. One way is merely the absorption of knowledge. We imbibe that which is in front of us. The other way is to take what is in front of us and make it serve some definite, preconceived end. This is construction. As a rule, however, in efficient study we combine the two processes. When we are concerned with names, with fundamental facts, with words of a foreign language, we perform absorption ; when we are concerned with the explanation of facts, the guiding principle behind a problem, we perform construction. Constructive study is the more

important of the two. As in construction we use new knowledge to enrich old knowledge, we cannot perform construction well unless we approach the subject of our study with our old knowledge ready, that is, with a clear, a definitely thought-out and a deeply felt aim to improve our knowledge.

Stages in Study

There are three stages we pass through in the course of any study. The first stage is the use of our senses. We take in the words of the book, we take in the acts of a demonstrator ; we observe them. The second stage is where we analyse the meaning of the words or understand the acts of the demonstrator. We fit them in with what we already know. We analyse what we see or touch and we give it a meaning ; we infer something from it. Very often, however, our inference does not tally with our observations, and we therefore come to a block. This is the third stage.

Dealing with Difficulties

On coming to such a difficulty, should you go back and step by step go through your observation and inference or should you go ahead ? Your own self-knowledge should help you here. So far in your studies you have, owing to a natural characteristic of mental slowness or quickness, usually performed one of two methods in study. If yours is naturally a slow-moving mind, you have usually studied by making complete observations of all the details of your study, making inferences at every

possible turn. If yours is naturally a quick-moving mind you have not been so thorough, you have usually caught a rapid impression of the main points of your study, you have observed only the essentials and you have only made occasional inferences. You will obtain the best value from your studies if you will occasionally combine both methods. The effort that you perform in combining the methods of thoroughness and impression will itself be a sort of mental training. If your difficulty is a difficulty of observation, if you have left something out which falsified your inference, then you must go back. If, however, your difficulty is certainly not due to observation—you have amassed all the possible facts—but to inference, to a lack of deep interpretation of the facts, then you must not go back. You must go forward. Pass the difficulty by. In concentrating upon further studies you will find that the solution will come to you.

Guessing

When faced with a difficulty such as that mentioned above, should you make a guess? Guessing is an excellent process in study, provided it is based on both facts and reasons. Haphazard guessing, guessing without observation or inference, is valueless but scientific guessing, guided by observation and by inferences, is likely to be very fruitful.

Mastering the Results of Study

You cannot be said to have mastered the results of study unless you can restate them in your own

words. Essay-writing, conversation and public speaking therefore all help you to make what you have studied become more fixedly a part of yourself. Another value of essays and speeches is that they cause you to look up authorities on the questions, incidentally widening your points of view and deepening your hold of the points. A further advantage of literary exercises is that they develop your sensitivity to and your accurate and effective use of words. They may cause you to develop a style in expression which may be both attractive and convincing.

The best way to master the essence of a lecture is to select only the meaning of the lecture, state it in your own words and apply the meaning to examples drawn from your own experience, not from the lecturer's.

Cross-Currents in Study

Your mind is so very much alive and is so rich that while you are concentrating on one study, say, French, you may at any moment want to go off at a tangent to investigate some point in French history or some point of difference between the psychology of the French and the psychology of ourselves. In the interest of the particular study, and in the interest of your powers of concentration, it is incumbent upon you not to follow this tangent. But the mental pressure created by the tangent must not be ignored, as it may lead to a development of the thought. Two suggestions may therefore help you to relieve and to use this pressure. One is,

always have a spare notebook or a spare piece of paper near you when you are studying. On this notebook or paper jot down the heading of the stray thought that has come into your mind. This will immediately relieve the pressure. The second is, when you pause between studies, take up the notebook or the piece of paper, ruminate on the heading, and follow out the mental tangent.

Study Periods

The exact amount of time to be devoted to any one period of study of a subject must depend on the nature of the subject, on your stage of advancement in the subject, on the time of the day and on your physical health. You are the best judge of all these. It is, however, inadvisable to have a study period for one subject longer than two hours.

It is further inadvisable to spend this study period of two hours at one subject more frequently than five times a week. It is very helpful indeed to have intervals of at least one day or of not more than one week between the study periods devoted to any one subject. During this interval the mind seems to be able to adapt itself more easily and more deeply to the subject.

Test of Study

“The test of study is not how long or how hard you have studied but what you have attained by your study.”* What can you give forth, produce as a result of your study? What is its importance?

* Professor Sir John Adams.

What is its difficulty? Above all, how is it related to your other important studies or interests or work? This is the most valuable point about any study, its relation to what is already important.

Reading

AIM

What you are going to read is going to perform something constructive in yourself. It may help you to think more clearly or strengthen your mind; it may help you to feel more clearly or strengthen your temperament; it may help you to act more convincingly or strengthen your character; it may help you to become socially more effective or strengthen your personality. Start, therefore, by asking yourself what particular purpose this reading is going to satisfy.

Is the book going to widen your knowledge of a subject? Is it going to increase your skill in a certain art? Is it going to help you to feel a deeper interest in a certain work? Answer any or all of these questions clearly. Bring into your answer details or possible applications of what you are likely to learn from the book. This anticipation of benefits to come will cause you to be more constructive in grasping the message of the book; it will cause you to make the book serve the most useful purpose.

METHOD

If your book is filled with facts, then you must divide the book into a series of chapters or pages,

and deal with these one after another, resting of course after certain intervals of reading. You must not leave the first piece without mastering its matter.

If, however, the book is a combination of facts and theories, of knowledge and speculation, then you need not be so thorough in your attack. If the first chapter fogs you, go ahead. You will probably find, if you are reading constructively, that in the middle of the third chapter the author's obscurity in the first chapter suddenly becomes clear.

QUESTIONS

1. Describe as fully as possible the value of an aim in study.
2. (a) How would you deal with a difficulty in the mastering of facts in the course of study ?
(b) How would you deal with a difficulty in the mastering of ideas in the course of study ?
3. If in studying any one subject, say, economics, you find yourself often thinking of another subject, say, business, what would you do about it ?

CHAPTER XII

THE CREATION OF IDEAS

THE Function of the New—Two Illustrations: Sales and Organizing:
(a) A Salesman's Problem; (b) An Organizer's Problem—Two
Methods of Enquiry: (a) Your Tools; (b) "The Things" as
[Guides; (c) "The Ideas" as Guides; (d) The Best Method;
(e) Application: I. The Salesman's Problem; II. The Organizer's
Problem; (f) Conclusion—Questions.

The Function of the New

WE must never mentally keep still for keeping still is against the most fundamental law of life. The essential point about all living things is that they always move, either wholly or partly. Movement, however, is not enough for progress. We must move forward and in the right direction, otherwise we shall be simply skidding round in a circle. Reasoning gives us the right direction but the energy causing us to move forward is due to something deeper. Exceptional situations, failures, defeats and their resulting problems, such as an unexpected and continuous drop in our sales, an inexplicable falling away from a high degree of skill in our craft, a chronic repetition of irritating incidents in our managerial province—all baffle us. They are spurs to further effort. We must get a move on. Our sagacity abstracts all the essentials of the problem; our learning classifies and synthesizes these essentials; but still we are far from solution. There is still something further to be achieved, something that will *give not only solution but future guidance*. It is not enough to

turn to the old, to our experience and to our knowledge, for we have squeezed out all we can from the former by sagacity and from the latter by learning. We shall not find *all* we want there. We must have something new. It must be something that we *newly* abstract from what is outside us or *newly* give out from what is inside us, a something that will not only give solution to our present perplexity, but that will if possible prevent future perplexity. Our desire for this is deep ; our search is earnest ; these cause our mental move forward.

Two Illustrations : Sales and Organizing

(a) A SALESMAN'S PROBLEM

You are Tom Brown Straw, a seller of, amongst other things, tooth-brushes. Your immediate job is to open out in Newtown. You get to Newtown and find that the High Road has seventeen suitable shops. You call on Jones and find seeing him impossible. You are told that Mr. Jones is out, and that the manager cannot see you. Thirty yards down you try Brown. Mr. Brown receives you in a most genial manner. He calls you into his office and keeps you for an hour talking about his own hobbies. Every time you mention your goods you set him off on one of his pet interests, but eventually, becoming impatient, out you go. Forty yards down you call on Smith. Mr. Smith sees you at once, but he is very serious and precise. He asks you, with a fixed glance, the price and quality of your goods. You tell him. He replies that he caters only for two types of customers,

the wealthy, who buy expensive and durable tooth-brushes and the poor, who buy so-called cheap and worthless tooth-brushes. He informs you that your tooth-brushes are too poor in quality for his wealthy customers and too dear in price for his poor ones. You are too surprised to reply, and he wishes you "Good day !"

You are faced with three distinct problems—the elusiveness of Jones, who gave you no opening ; the loquacity of Brown, who gave you too many ; the strength of Smith, who smashed your two openings of price and quality. You have got to sell your goods. You have got to sell them to individuals who either elude you, talk you out or confound your arguments. You have sold nothing so far. What has gone wrong here ? That is your problem.

(b) AN ORGANIZER'S PROBLEM

You are John Steel, one of the joint general managers of a large concern. You control five departments. In one department a certain Arthur Iron Westbury has been making excellent progress. He has now been head of his department at the head offices of the concern for two years. You have found him most reliable in every way. One day you receive a demand for a strong, sound man to manage a department of the firm in the provinces. You are asked to advise upon the choice of a man for the post. You suggest Westbury. The partners and the other managers cordially approve your choice. Westbury goes to the provincial post with

your hearty and hopeful good wishes. You feel sure he will do well both for the firm and for himself. But in six months this man, who was so splendidly successful as a department head in the head offices, fails miserably as the chief of a provincial department. It is part of your job as a manager to get the best out of each member of your staff for the good of your house and for the good of the member. You appointed this man but he has given bad service. What has gone wrong here? That is your problem.

Two Methods of Enquiry

(a) YOUR TOOLS

Both problems involve things. The things are: goods and shopkeepers in the one case and men and work in the other. Both problems involve ideas. The ideas in the one case are quality, price, sales value of goods; nature of, and method of, approach to shopkeepers. The ideas in the other case are the qualities of a man (such as leadership, confidence, reliability) and the qualities of the work (such as administrative, commercial, technical). Both problems involve the relationships of things and ideas, or judgments, such as: "These tooth-brushes are the finest quality in the world at the price," or, "This man is the best manager we have." Both problems involve reasons to answer such questions as: "Why is this tooth-brush the finest in the world at the price?" or, "Why is Westbury the best man for the post?" How can we throw light on the problems by their aid?

(b) "THE THINGS" AS GUIDES

We can say of the things we use in our problems that in our experience of them we have abstracted ideas and found permanent reasons (or laws or principles). The salesman can therefore make the following judgments—

"Jones is impossible for he won't see travellers; Brown is impossible for he wastes a traveller's time; Smith is impossible for he is too clever for travellers' talk." He can, as a result, decide to avoid such buyers in the future.

The organizer can therefore make the following judgments

"Westbury is a failure because while he can work well in the head office with all the tradition, the atmosphere and the huge organization behind him, he cannot work at all well when away from these surroundings." He can, as a result, decide that Westbury must never be promoted above his former post at the head office.

The salesman from his experience has abstracted certain ideas about Jones, Brown and Smith, and the organizer has similarly behaved about Westbury. They have both jumped to conclusions from experience, from dealings with things.

This method is quick and practical and is usually called the *inductive* method. It is the acceptance of order by calling it reason. Most practical men argue this way. But in this method there has been no *comprehensive* attempt to grapple with the *whole* problem. Induction is inclined too much to accept a few apparent failures as a mark of permanent

defeat and a few apparent successes as a mark of permanent triumph. It is the method so admirably used by the great Sherlock Holmes. Induction makes the thing, the experience, the particular case, the future guide. It is a useful method, but is apt to over-emphasize experience.

(c) "THE IDEAS" AS GUIDES

The salesman may have failed because he went to his work with a certain idea in his head that as Jones, Smith and Brown sold tooth-brushes they were bound to buy tooth-brushes. The manager may have failed because he always had the idea that success at the head office was bound to mean greater success in a provincial office. If this were so they would both be using a fixed idea (a reason, a law or principle) by means of which things could be estimated. Here the ideas are the guides and not the things, the lessons of experience and not the experience. This method is usually called the *deductive* method. Most theoretical men, such as philosophers, clergymen, scientists, judges, and barristers argue in this way. It is a very useful method, but apt to under-emphasize experience.

(d) THE BEST METHOD

To combine *induction* with its consideration of experience (of things, of order) with *deduction* with its consideration of the full meaning of experience (of ideas, of reason) will help us to get to the root of any problem, the cause of any failure and to bring forth possibly something new as a result.

(e) APPLICATION

I. The Salesman's Problem

Induction tells him that he has failed in not getting closer to Jones ; that he has failed in getting too close to Brown ; that he has failed in not being able to reply effectively to Smith. *Deduction* tells him that *before* he interviewed any of these he should have had clear ideas, fixed ideas, laws, principles, as guides in at least three directions : himself ; the goods ; the customer. His bearing should have been confident and compelling. He should know all about his goods, believe in them and be ready for any unfavourable criticism. He should be prepared to vary his approach, if necessary, according to the idiosyncracies of each customer, so as to solve the elusiveness of Jones ; sternly limit the loquacity of Brown ; reply effectively to Smith by pointing out that the tooth-brush in question will attract a new type of customer, the middle class, which likes to combine high quality with reasonable price, which combination is excellently exemplified in the article he is selling.

II. The Organizer's Problem

Induction tells him that the man from the head offices can be a failure in a provincial office. *Deduction* tells him that he should have had certain ideas about the work and the man before choosing a candidate. He ought to be able to enumerate the qualities necessary for success in the post in the provinces. A few of these would probably have

been : great self-confidence, acceptance of responsibility, reliability, leadership. He ought also to be able to say of a chosen candidate whether he possesses these qualities. In future, therefore, not *induction* alone, or the experience of success in the head office, but *deduction* also, or the principles of success, both in the man and in the job, will guide the manager's choice.

(f) CONCLUSION

The use of induction and deduction by the salesman will cause him not only to solve his immediate problems but to think out new and efficient methods of salesmanship. His judgment by induction was practical, by deduction was theoretical, and by both has become complete and tends to *new* possibilities in sales work. It has become original judgment.

The use of induction and deduction by the manager will cause him not only to solve the immediate problem but to think out *new* and efficient methods of finding the right man for a job. His judgment by induction was practical—that Westbury was a failure ; his judgment by deduction was theoretical, that two principles must be settled before any important appointment is made in the future, the essential qualities necessary for the post and their existence in the proposed candidate. Both by induction and deduction he is impelled to substitute some form of test or guidance to meet this new end. He therefore introduces a *new* method. He has acquired the power of original judgment. He has become original, creative.

QUESTIONS

1. (a) What is your opinion of Tom Brown Straw as a salesman ?
 (b) How can he help himself to solve his difficulties ?
2. How can you account for Arthur Iron Westbury's failure, assuming that conditions, colleagues and business were the best possible ?
3. (a) What is Induction ? Give one illustration.
 (b) What is Deduction ? Give one illustration.
 (c) What value do you obtain by using them together ? Give one illustration.
4. (a) Distinguish between practical judgments, theoretical judgments and original judgments.
 (b) Does this question differ from question 3 (a) ? If so, how ?
5. (a) How would you deal with Jones ?
 (b) How would you deal with Brown ?
 (c) How would you deal with Smith ?
 (d) What would you do *now* with A. I. Westbury ?
 (e) How can John Steel improve his judgments of work and men ?

CHAPTER XIII

IMAGINATION: ITS NATURE, ITS POWER, ITS NURTURE

- I. THE Nature of Imagination : (a) Imagination Leads to Progress ; (b) The Creative Movement ; (c) Imagination Defined ; (d) Necessity Defined. II. The Power of Imagination : (a) The Imaginary and the Real ; (b) Imagination Completes Understanding. III. The Nurture of Imagination—Questions.

I. THE NATURE OF IMAGINATION

(a) *Imagination Leads to Progress*

MENTALLY we lead a double life in many ways. We deal, for instance, with *two* objects : things and ideas. We have *two* methods of dealing with them. If we concentrate on things and find ideas in them it is *induction*. If we concentrate on ideas and bind things by them it is *deduction*. Each method involves *two* processes, analysis and synthesis, sagacity and learning. But the test of our mind, however, comes out only if the apparent double life is united, as when the method of finding the ideas in things, directly drawing the value from experience, is combined with that of classifying things by ideas, anticipating the value in experience. A complete judgment of any thing or any idea involves therefore the practical (inductive, the full knowledge of things) and the theoretical (deductive, the full knowledge of ideas).

Take Hōvis bread, for instance. From the immediately practical point of view it is pleasing

to the eye, pleasant to the palate, easy for the digestion, nourishing to the body, reasonable in price and easy to procure. From the theoretical, thoughtful, point of view, it satisfies all the principles of a bread-food, such as purity of content, right proportion of ingredients, hygienic and scientific system of baking. To arrive at these conclusions, to make such fairly complete judgments, is a good piece of work. It helps us to understand the important things that are produced, but such mental work is only produced by the mind of a follower. If all minds judged and thought in this way and in this way only, there would never be progress, there would only be confirmation of what has been done, merely a standing still. But progressive minds never stand still, they move forward. Once upon a time, for instance, there was a world of bread-eaters without Hōvis bread. How did this bread therefore come into existence ? It came into existence because there were minds who not only understood and followed but who also wanted to lead, to create.

(b) The Creative Movement

The creative movement in a mind may be produced by an external cause or by an internal cause, or by both. The external cause is usually Necessity. We have an experience of a thing or an idea and it leaves us very unsatisfied; it hurts. Necessity impells us to avoid this hurt. By induction we survey the thing and the idea it contains; the practical aspect: by deduction we survey the ideas and principles behind and over

and above the thing; the theoretical aspect. We grasp the essentials of both. We then ask ourselves can these essentials be combined so as to avoid the hurtful experience? Once upon a time, in America, a man travelled in a train by night. It was an unpleasant experience. He could not sleep owing to the jolting of the train. He could not rest owing to the hardness of the carriage seats, the walls and many other practical defects. This experience made him overhaul in his mind the practical and theoretical points about a train journey at night. He abstracted their essentials and combined them so as to produce a restful, sleepful vehicle, a new railway car. His name was Pullman and hence the Pullman Car. Many years ago, in England, a man travelled by coach along country roads. The experience did not satisfy him. The vehicle was too large, cumbrous, slow, uncomfortable. He delved into the practical and theoretical aspects of the coach and produced a new form of road conveyance, which was smaller, more graceful, quicker and more comfortable. His name was Hansom and hence the Hansom Cab.

(c) Imagination Defined

The human mind therefore is able to retain past experiences, select qualities of them, and recombine and remodify them with certain objects in view.* *This is Imagination. Necessity alone cannot lead to new ideas. Without the power of imagination being present in the mind it would knock at closed doors.*

* Adapted from a thought of Professor Sir T. Percy Nunn.

(d) Necessity Defined

But necessity has so far proved the greatest influence in drawing out imagination. It will probably always prove the greatest influence. We must therefore examine it. Pullman and Hansom mentioned above used their imagination in obeying necessity in three directions. They were each upset in *feeling*; they were each also looking for something useful, something that could be made, something that could be produced as the result of *doing*; further, they each knew much, they had the results of *knowing*.

Feeling, doing and knowing are three mental acts we are always performing almost spontaneously. We can distinguish these acts but we cannot separate them. In the most minute moment of mental life we are performing all the three. They are three in one and one in three. But they are the three ways in which necessity makes itself felt and through which imagination expresses itself. In the realm of feeling, joy is a necessity; in the realm of doing, goodness is a necessity; in the realm of knowing, truth is a necessity. When we examine the experience (thing) joy, we find that it can only be reached if certain principles (ideas) are satisfied. The result of the arrangement of these principles is called beauty, and the principles themselves, aesthetics. Similarly, we find that goodness needs certain principles, the result of the complete arrangement is morality, and the principles are called ethics. Truth needs certain principles, the complete arrangement is science,

and the principles are called logic. Truth, beauty, and goodness are therefore Necessity motives by which and directions in which, the imagination asserts itself. Darwin and Newton worked imaginatively for truth; Turner and Shakespeare for beauty; Christ and Buddha for goodness.

II. THE POWER OF IMAGINATION

(a) The Imaginary and the Real

A street, a house, a table are real things. Everybody can experience them in every town. But a fairy, an imp, a goblin are not real things. They cannot be experienced by everybody. It has often been suggested that the function of imagination is to deal with objects and experiences that are not real, that are not experienced as a result of the ordinary uses of our senses. But unreal objects are only used by imagination because they contain hidden meanings and the meanings are part of our real experience. When Barrie wrote: "When the first baby laughed for the first time its laughter broke into a thousand pieces and that is how the fairies were created," he used the unreal, purely imaginary object, fairy, to convey the hidden meaning of the value of a baby's smile. By imagination an author or artist only weaves fiction or uses purely imaginary objects to help to understand real objects more clearly.

(b) Imagination Completes Understanding

To understand any object or any idea means that our practical judgments have mastered the related

things and that our theoretical judgments have mastered the related ideas. Our understanding must not stop there. It must go on, for imagination is understanding in motion, trying to widen the practical and deepen the theoretical. Can we improve the thing? Can we clarify the idea? *Imagination always sees more than what is present. It is always pushing us ahead to a better thing or to a clearer idea.* Imagination is the breath and finer spirit of the mind. Without it, we simply do what has been done; we merely follow. With it, we simply must do what is better than what has been done; we lead.

III. THE NURTURE OF IMAGINATION

To develop imagination therefore we must be both practical and theoretical, we must combine both views and we must be keen on obtaining a result.

The practical aspect alone, directed by external necessity, has given us invention at too great a cost and is therefore awkward and inefficient. Walk into a big Government department and you will find all sorts of sub-departments: one here, another 400 yards away, a third 200 yards away. They have suddenly grown up from time to time to meet the increasingly varied demands of the work.

The theoretical aspect alone, directed by internal necessity, gives us ingenuity at too little a cost, and is therefore also inefficient. There are many self-satisfied men and women who lead their real life in day dreams or imaginary attitudes. They have most ingenious theories but they contribute

nothing to the general sum of human experience and progress.

Before trying to be imaginative you must be both practical and theoretical as the basis. You cannot make bricks without straw. The old must be acquired before the new can be attained. It isn't necessary for you to become either an expert practical man or an expert theoretical man, but you must have a working acquaintance with both.

Take, as an example, the Valet Auto-stop safety razor. You desire to be imaginative about this.

Firstly, take the practical view. Ask yourself many questions. What is it? Of what is it made? What are its functions? What are its good qualities? Compare and contrast it with other safety razors. Write down the list of good qualities you have found.

Secondly, take the theoretical view. Ask yourself many questions. What is a safety razor? What principles should be embodied in such an object? Does this one embody the principles? Does it embody the following qualities: sharpness of blade, smoothness of shave, ease of handling, quality of metal, durability of wear, purity of metal, lightness of weight, compactness of package, reasonableness of price, ease of obtaining blades? Write down the list of good qualities to be possessed by your thought-out ideal of a safety razor.

Compare and contrast both your lists. You may find as a result that you are able to suggest either an improvement in the design and manufacture or in the distribution of the safety razor. Your imagination is now beginning to take a hand.

But you may not be interested in safety razors, you are probably more interested in motors or motor-cycles or wireless or money or gardening or literature or business. But what is Interest? This I shall discuss in the next two chapters.

QUESTIONS

1. Take any object or machine or thing you like:
 - (a) What does induction tell you about it?
 - (b) What does deduction tell you about things like it?
 - (c) What spurts to imagination do (a) and (b) give? Describe them.
2. Take any idea or theory or maxim you like:
 - (a) What does your experience tell you about it?
 - (b) Mention some situations (or processes or conditions) to which the idea or theory or maxim best applies.
 - (c) What spurts to imagination do (a) and (b) give? Describe them.
3. (a) What is imagination?
(b) What is its function or power?
4. (a) Describe some external influence (or influences) which inspire imagination. Give one illustration.
(b) Describe some internal influences determining imagination. Give one illustration.
5. (a) Do the following need imagination to a high degree?—
company secretary; salesman; advertising consultant;
accountant; retail shopkeeper.
(b) Give your reasons for each.
(c) Can you give any help for developing imagination?

(b) The Organization of Temperament

CHAPTER XIV

THE GROWTH OF COMPLEXES AND SENTIMENTS

THE Basis of Temperament—Growth of the Feelings—Growth of Complexes and Sentiments—Organizing Sentiments—A Tendency to Avoid: Sentimentality—Temperamental Characteristics—Questions.

The Basis of Temperament

I HAVE so far dealt with self-organization in regard to the mind, dealing with mental processes such as perceiving, attending, observing, remembering, thinking, reasoning and imagining. When you performed any or all of these you also at the same time experienced feelings such as being bored, being puzzled, being pleased or being interested. In considering emotions I am now turning to your feeling self or Temperament (as was mentioned in the paragraphs dealing with Self Analysis on page 16). The basis of temperament is the body. The nervous system partly influences temperament. The glandial system, by means of the liquids it pours into the blood stream, partly influences the temperament. I use the word "partly" because by mental and social training and development you can modify these bodily influences. If, for example, you feel dull and unenthusiastic on being asked to perform a certain task you can soon change the feeling by realizing that this apparently dull task is part of a most important process likely to help your Department to clinch a good order or to complete a valuable contract. It is in fact well

known that men and women whose bodily conditions clearly suggest choleric or melancholy temperaments, very often exhibit happy jolly temperaments. Where do we find life's trials met with the greatest fortitude and cheeriest humour?—not only in the drawing rooms of Mayfair, not only in the great country mansions, but also in the mines, in factories, in farms, in offices, on the high seas, on our coast lines, in slums and hovels. During the War when men were in the most abject physical condition, with dirt and filth surrounding, comfort deplorably absent and danger threatening at any moment, laughter and fun sprang out spontaneously. Temperament while in origin a problem of the body is in actual practice a problem of the mind.

Growth of the Feelings

Our feelings are very difficult to analyse because we are always experiencing more than one simultaneously. When we fear, for instance, we are often also curious and angry. When we love we are also, at the same time, curious, tender (or brutal), selfish (or unselfish), and elated (or depressed). It is not easy at any moment in adult life to distinguish exactly all our different feelings. We can gain some knowledge of this subject from scientific studies of the growth and development of feelings in children. Babies and infants can be simply angry or simply afraid or simply curious. At such a stage of life feelings are simple and primitive. Soon, however, the growing child experiences two or more feelings at the same time. A child can be fearfully curious about

a new experience, such as meeting a stranger; a child can be both angry and tender towards a favourite dog who is naughty. These combinations of feelings develop and enrich our experience. For example, the combination of anger and tenderness produces in the child mind a new feeling, reproach. The latter feeling can be regarded as a compound or at any rate as less simple and primitive than the constituent feelings of anger and tenderness. These feelings, such as anger and fear, that can be recognized and named are usually termed emotions. An emotion is a clear feeling. As we grow in months and years we go on unconsciously combining simple emotions into deeper emotional experiences which we learn to recognize and name. The first time we saw a large mountain, for example, we had mixed feelings. Probably we experienced awe, a new emotion for us. On analysing awe it will probably be found to be made up of fear, curiosity and timidity (or shyness).

Growth of Complexes and Sentiments

As inevitable results of our emotional growth certain people, animals, incidents, places and things, with whom and with which we have often and often come in contact, become capable of stirring emotions within us. These emotions have, amongst other qualities, two outstanding ones always affecting our actions. One quality is pleasure; the other is pain. Love, curiosity, tenderness are some emotions giving pleasure; fear, disgust, anger are some emotions giving pain. People, animals, places, things and

incidents causing pleasurable emotions are: Mother, father, sister, brother, our pets, our books, our hobbies, our possessions, our homes, our village, our wife and children or our husband and children, our relatives, our friends, our intimate fellow members of our church or of our political or social party or club, some of our compatriots, courtesy to our parents; praise of our relatives; kindness to our pets; appreciative remarks about our heroes or heroines; appreciative remarks about our village or our town or our country; understanding of the wisdom of our favourite writers and, with some fortunate people, our work, our colleagues, seniors and juniors. Some contacts that are painful are: bad news about our parents or dear ones, discourtesy to such folks, unkindness to our pets; scandalous references to our leaders in religion or in politics; insulting remarks about our home or our village or our town or our country or about our heroes or heroines; perpetual dull conversation of a daily train acquaintance. We become related emotionally to the subjects and objects of our experience and even to the recollections of them (for we can recall with delight and pride how Father or Mother replied to the toast of "The Guests" at our Business or Works Dinner the other evening).

Every time we have such emotional experiences a record accumulates within us. This record becomes part of memory. When the record is pleasant it is the beginning of a pleasing accumulation within us which eventually grows into a *preference*. When the record is unpleasant it is the beginning of a displeasing

accumulation within us which eventually grows into a *prejudice*. For instance, if our first acquaintance with a horse were a kick we should develop a prejudice against horses; if our first acquaintance with a horse were a pleasant ride, we should develop a preference for horses. These preferences and prejudices become separate groups of ideas and feelings and tendencies to action within us. They are technically called *Complexes*.^{*} You build up complexes from all your experiences. The materials for this building up are the contents of your environment such as the family, the home, mother, the school, teachers, pets, father, schoolmates; your activities such as noticing other people, liking or disliking them, doing something with or about them. You consequently build up complexes about your family, your home, mother, school, teachers, pets, father, schoolmates. These complexes are the storehouses and powerhouses of ideas, feelings and tendencies to action within you. They help or hinder the expression of the instincts.[†] For instance, a man's complex of his mother often kept him on the path of virtue during the War when sex tendencies were inclined to be very powerful. The almost instinctive tendency to acquisition has resulted in a man amassing wealth, position and power almost brutally, but the complex within him of school and morality has helped him to moderate his brutality and the would-be savage becomes a highly efficient rich man by

* A term first used by Professor Jung.

† Among psychologists in America it is now the fashion to refer to instincts as "drives."

serving society socially as well as by mastering it individually.

The greater part of your complexes is built up unconsciously and you are therefore unconscious of most of them. The part of which you are conscious is called *Sentiment*. You know for example that you have sentiments for your religion, for your political party, for your home, for your country, for yourself—to mention only a few sentiments. They are natural, inevitable, powerful. Sentiments are vital to us, without them we cannot live completely. An individual without sentiments is partly dried up.

Organizing Sentiments

The difficulty about sentiments is not so much the making of them as the making of them round the right people, the right incidents, the right places, the right causes. We must choose worthy ends for our sentiments. Let us turn to the child again. We do not have to teach little Kate, aged 4, to be fond of her dolls or little Peter, aged 4, to be fond of his dog. Why are they at so early an age able to possess a powerful sentiment? Firstly, because they very frequently come in contact with the doll or the dog and, secondly, because they are perpetually performing vital activities, such as eating and dressing, with the objects of their sentiments. Peter feeds the dog; Kate dresses the doll. This is therefore your lesson. If you want to build up a sentiment about poetry or a sentiment about service, then you must very frequently live in contact with poetry or with service and you must frequently perform vital activities with both.

A Tendency to Avoid: Sentimentality

There is a danger in the formation of sentiments, usually called sentimentality. There are men and women so steeped in sentiment for their pets or their hobbies that they seem to be lacking in tenderness for suffering humanity. In such minds the sentiments have become over-developed; the individual has become more concerned with the emotional experience and expression brought about by the sentiment, such as affection for and devotion to the little pets or extraordinary care and skill in hobbies rather than with the end of the sentiments, a wholesome feeling for all living things. The prevention of sentimentality is only possible by keeping in view the ends of sentiments rather than by over-indulging in the means.

Temperamental Characteristics

We all of course have many idiosyncrasies. We call ourselves temperamental if we cannot stand certain coloured eyes or certain coloured hair or certain types of people or certain machines. These idiosyncrasies help to make us distinct from other people. If they ended there, they would be useful. But occasionally they go beyond this and limit our efficiency. They must therefore be controlled. You cannot ignore your idiosyncrasies but you must try to find out their limitations. Very often, a prejudice that you have against a certain type of man or a certain machine or a certain dish is due to an unpleasant experience during your childhood. You must ask yourself whether the new and rich experiences of

manhood and womanhood, which this prejudice is denying you, are worth sacrificing for this slavish adherence to your childish tradition. Some of us are always influenced by our immediate surroundings. Some people work better in a lighter room. Some work better if well dressed. Some work better if seen working.* We cannot say whether these sensitivities should be encouraged unless we try experiments in opposite directions and compare the efficiency and happiness of the work resulting. We must always try to make use of these peculiar characteristics of temperament which from our own experience and our observation of ourself, have been found of use in helping us to do our best work and to feel we have done our best work.

QUESTIONS

1. (a) What are feelings and emotions?
(b) Give a list of ten emotions you have experienced.
2. (a) What is a Complex?
(b) What is a Sentiment?
(c) Describe three of your Sentiments.
3. (a) What is Sentimentality?
(b) How can you avoid it?

* These characteristics emphasize a distinction in temperamental differences put forward by Professor C. G. Jung, "introvert" and "extrovert."

CHAPTER XV

GROWTH AND DEVELOPMENT OF INTERESTS

WHAT Causes Interest—Origin of Interest—What Interest Does—
How Interest Develops—Function of Interests—Conquering the
Uninteresting—The Nurture of Interests—Ideals Refine Interests
—Questions.

What Causes Interest

THE routine of an office or a ship or a workshop can be suddenly interrupted by something that interests you. It may be an accident, such as a window smashed. It may be less violent, such as a colleague's brilliant attempt at preparing a statement; a fellow-salesman's splendid clinching of a useful sale; a fellow-worker's beautifully finished job. All these incidents cause you to look in their direction, to admire, to feel pleased. What interests you outside your work? It may be your boy friend or your girl friend or your husband or your wife. It may be your house or your garden or your motor cycle or your car or your own small workshop. It may be none of these but a meeting of a religious or a political or a literary or an art society or a social or a sporting club. There must be some reason why these people, things or amusements so easily draw forth your energy.

Origin of Interest

Complexes and sentiments cause us to be stirred by certain experiences, to learn from them and to act in regard to them. We all differ in many of our sentiments. We all agree in some of them. One

man may have a sentiment about cricket, another may be indifferent to cricket but has a sentiment about the theatre. When a sentiment has become so intimately connected with its particular subject or object that it can always arouse within us emotion resulting in reading, talking and doing something about it, this relationship indicates that the complex and the sentiment have been developed into an *Interest*. The interest in your property is partly a result of your sentiment of self and of your sentiment of society (and may indirectly be a result also of your sentiment of sex). The interest in your young man or in your young lady, the interest in your husband and children or in your wife and children is similarly a result of all these three complexes. The interest in your religion or in your village or town or country or in your particular political party is a result of your sentiment for society and of other of your sentiments. At bottom we possess some of these emotional tendencies and developments in common with the animals but our higher mental endowment, our mental and social training and development have helped us to refine their expressions. We respond to the sentiment of sex, for example, not in the obvious animal way but in acts of gallantry, chivalry, devotion, courtesy, in love of poetry, art, music, films, plays. All of these stimulate interest because basically they touch the complex of sex, but this sentiment has been so well brought up in most of us as to be almost unrecognized in the course of our cultural activities.

The sentiment of self has been guided to better

expression as a result of our mental and social training and development. We do not rush to snatch food or drink or shelter when we are hungry or thirsty or cold. We do not rush to kill or rob our neighbour when we are in want. We develop our sentiment of self by moral, pro-social means, but our interests in our houses, in our investments, our money, our personal things are due at bottom to this sentiment.

The complex of society has similarly developed within us. We do not force people to be with us. We do not force ourselves on people. We have friends, we entertain friends, we are entertained by them. We mix with crowds at theatres, in shopping centres, at holiday resorts. We lead in fact healthy and vigorous social lives. We belong to groups, political parties, religious sects, sporting clubs, localities. All these interest us because of the natural and developed sentiment of society within each of us.

What Interest Does

“Is it interesting?” is a pregnant question addressed to all of us. But what does it mean exactly? What are the most interesting moments or periods in our work? You may think at once that the pay moment is the most interesting, but it isn’t. You don’t sit back and show enthusiasm over your pay. The most interesting moment is when you have produced some little masterpiece, some piece of work to which you have given your whole-hearted attention and skill. The interest makes you feel really happy. You talk about the work. You become enthusiastic about its quality. You think of further work. In

life, apart from livelihood, what are the most interesting moments? Here are some: meeting your girl or your boy; playing for your club; greeting or being greeted by your husband and children or by your wife and children; surveying your home or glancing lovingly at your garden or orchard. *Each interest fully stirs you. Interest is able to draw forth your energy without apparent effort.*

How Interest Develops

In noticing things, which are those that appeal to us most? They are the new, the novel, the exciting, the uncommon, the surprising. All these appeal to us because one of our interests developing from a simple primitive emotion is *Curiosity*. This grows with mental and social development. An animal's or a child's curiosity is limited in range compared with that of an educated woman's or man's.

What acts do we perform with the greatest gusto, with the greatest pleasure? They are those that lead to something useful, something purposeful, something practical and helpful. Their appeal is strong within us because of another of our interests, derived from a simple natural tendency, *Construction*. Many a man will write for countless days and nights spurred on by this impulse. How fascinating it is for us to construct anything! to help to build a house! or to help to erect a tool house! or to reshape a garden! or to refurnish a room! or to make a dress! in other words to produce a completely fashioned thing, to create, for creation is the highest type of construction. But these constructive acts do

not please us merely because they are purposeful, practical and helpful, but also because they are unconsciously identified by us as part of our own selves. We like to increase the domain of our selves. We therefore collect things and acquire things. Postage stamps, china, glass, engravings, are examples of the working of another interest within us *Acquisition*, which is a development both of the complex of self and of society. Curiosity, construction and acquisition are three powerful interests we build up as a result of education, individual and social, and by means of which we refine and elevate the complexes and sentiments of Self, Sex, and Society.

Function of Interests

Interests compel us to attend to certain things, people, ideas. Often we simply cannot get away from the interests. They invigorate our attention. We do not merely attend without effort. We often go to considerable extremes of discomfort in order to obey a deep interest. The crowds waiting on a cold night outside a theatre or a picture palace; the huge crowds on a rainy day standing for hours waiting for a football match are examples of acute discomforts cheerfully faced in obedience to interests. Interests are therefore our natural and first aids to work. They can help us to think more clearly, feel more deeply, act more strongly.

Conquering the Uninteresting

One of the most frequent pitfalls of temperamentality is the quick pretence that interest is not being served. "To give up as soon as you are a little bored

is contemptible.”* Apart from being contemptible, which is a moral criticism, such a pitfall is very wasteful because very often the pursuit of the so-called uninteresting unveils a rich interest. If you will apply yourself, whenever uninterested, with an extra effort of energy and try to associate the uninteresting subject with one of your own interests, you will soon be rewarded by a deep interest. No subject is really dry. What is dry for the moment is your mind. You must associate the uninteresting subject with some of your sentiments and interests which make up your soul.

The Nurture of Interests

We must begin by recognizing the presence and powers of complexes and sentiments. If given perfect freedom they may take us to disaster for we shall do too much; if completely controlled they will take us to disaster, for we shall do too little. They must therefore be used as servants. The masters must be our developed refined humanized interests as expressed in our thinking, feeling and doing. For instance, if sex has to be expressed, it must be expressed simultaneously through thinking, such as art forms, poetry, literature, pictures, music, plays; through feeling, such as deeper sensitivity to beauty; through doing, such as controlled discipline of social behaviour in a well-bred society.

Do not make too much of the thrilling experiences of life, such as the glorification of Self or the adulation of Society. These must be helped to finer and

* Professor Sir John Adams.

more elevating expression. Consider any subject or task from the point of view of some interests: say Curiosity, Acquisition, Construction. Ask yourself: Can I find here anything new? Can I find here completeness of make or form? Can I find here anything, either in the thing itself or in the ideas behind it, that I can add to my treasury of knowledge and experience?

Life without interest is a living death. Work without interest is penal servitude. Interest abides in the most obvious and ordinary places. The man next to you at the office or the shop or the bench can be interesting if you ask him about his garden or his books. The work you do can be interesting if you will examine it under the eyes of Curiosity, Acquisition and Construction. Above all you yourself can be interesting if you will do things rather than wonder whether you can do them. Around you and within you is romance. Live it and life becomes finer, deeper, more exhilarating, more joyful, and livelihood becomes richer, worthier, happier. You can live it by finding thoughts that clarify, feelings that glorify, actions that fortify, combining them all into yourself, applying them all to your work and bestowing them all on your friends.

Ideals Refine Interests

An interest well developed is self active. Your interest in finance, for example, will cause you to read more than one financial article in the newspapers and will cause you to discuss financial topics with your friends and business acquaintances. Consciously

and unconsciously you build up standards by means of which you estimate a financial offer or spot a financial trend. You get to love these standards with all the intensity of your interest. You get to hate the absence of these standards with similar intensity. These combinations of ideas and emotions are really ideals. These ideals, the direct results of your interests, help to refine and worthily to develop your interests and incidentally make your temperament attractive and cultured in expression. Ideals in other words refine temperament.

QUESTIONS

1. (a) What is the origin of interests?
(b) What is the function of interest?
(c) How can interests be developed?
2. How would you make an uninteresting subject interesting?
3. (a) How can you make your life more interesting?
(b) How can you make your work more interesting?

(c) *The Organization of Character*

CHAPTER XVI

NATURE AND STRENGTH OF THE IMPULSES

PROBLEMS in Character Development—Impulses to Action—Impulses Outlined—Three Levels of Consciousness—Impulses at Work—How to Treat Impulses—An Illustration from Life—Questions.

Problems in Character Development

MENTAL development will help your knowing self (mind), emotional development will help your feeling self (temperament). We now turn to your doing self or character, the self you show (as mentioned in Self-Analysis on p. 15) when you perform acts in obedience to certain principles. (Another name for such conduct is of course Will Power.)

The problem of character development is three-fold. Firstly, we have to find out the strength and nature of impulses ; secondly, we have to learn to control the bad ones and strengthen the good ones ; thirdly, we have to direct the impulses into progressive channels under the guidance of ideals.

Impulses to Action

The impulses that move us are natural in origin. They are part of life. They can of course be called instinctive. Each individual differs in the strength of these impulses for no explainable reason. Just as in one family you may have one child with blue eyes and another with brown eyes, so you may have one

child with strong impulses to action and another with moderate or weak impulses to action. *Nature supplies us with the energy* impelled to express itself: but *environment*, or the world outside us—our homes and parents, our schools and teachers, our friends, our playmates, our work and the individual factor that distinguishes each one of us from every other individual—*help us to develop directions* for the expression of the impulses. Two boys of fourteen, for instance, possessed of equally strong impulses, may differ in the directions of these impulses. One boy may be good at French, the other boy may be good at German. This is not entirely a natural difference, it is very considerably an acquired one, given by environment. At the first boy's school French was encouraged, at the second boy's school German was encouraged. One boy may be much more interested in poetry than in prose. This may be an individual characteristic.

Impulses Outlined

The impulses moving any individual to natural activity are of two kinds—individual and racial. Men and animals, when hungry or thirsty or tired, are impelled to obtain food or drink or rest. These natural impulses work so that the individual possessing them is helped to preserve his life. They can therefore be called the self-preservative, egocentric, ego or *self* impulses. The ego impulses begin to work almost at the first moment of life. A few years later, however, the racial impulses begin to work. They are of two kinds. Men and animals

are impelled to activity by seeing that, or by the hearing of cries which tell that, other men or children or animals are in pain. These impulses work for racial preservation, by means of tenderness and protection. They can therefore be called *the society impulses*. Each individual at a later stage in life becomes impelled to activity at the sight or the contact of another individual of the opposite sex. This can be called *the love impulse*. It is working for racial preservation by means of marriage. These three kinds of naturally inherited impulses, self, sex and society, work within us without any education, as part of a natural law. We obey them spontaneously, implicitly, without learning. Another word for such behaviour is, of course, instinct.

Three Levels of Consciousness

When each impulse moves within us we are aware of the inner urge or movement. We are aware also of what excites the impulse from outside, of our excitement and of our performance, our actual action. Consciousness has therefore three processes in it. The awareness is called *knowing*; the excitement is called *feeling*; the performance is called *conduct*.

The mind always uses these three ways of consciousness. If at this moment a wild cat dashed into your office, you would look at it, notice it, feel upset about it. All these are part of your present consciousness, the awareness of what is outside you. But you would also immediately think about it. Is this a wild cat? Is it savage? What is it likely to do? Did I not read in this morning's paper that

two wild cats had escaped from a neighbouring menagerie ? All these questions have come to you from your immediate past knowledge, which is not in your present consciousness. They have come from a deeper region of your mind, which is called the fore-consciousness. If in addition to your consciousness and your fore-consciousness you have a deep fear or terror of the result of the experience and dash out of your office, or if you have little fear and take up a weapon within easy reach to frighten the creature away, you have in either case performed an act as a result of an impulse, the fear or the courage, of which you were not clearly conscious. Your fear of the wild cat, or your assurance in its presence were dictated by some ideas and feelings in your mind deeper than your consciousness, deeper than your fore-consciousness. They are deep down in the hidden regions of your mind, of which you are unconscious. This part of your mind is called the unconscious mind.

As a rule you work with your conscious mind. Your power of concentration on the work in front of you is able to keep the fore-conscious mind in an assisting capacity. If at any moment your mind wanders from your work and thinks about the game you played last evening, or the breakfast you had this morning, then your power of concentration has become weak and the fore-conscious mind has come fully into play. With a mental effort, however, you can set this right. Your unconscious mind, however, you keep apparently away from you, with an unconscious power of concentration called

repression. You have, without being aware of it, built up this power of repressing the unconscious by thousands of daily acts of repressing impulses. This power of repression is an index of mental self-control and therefore of mental health.

Impulses at Work

At any one moment you are likely to be impelled to action in any one or all of these ways. Firstly, the basic natural impulses or springs may impel you. For instance, if a man is blocking your way out of your office and you push him out of the way ; or if on going home from work you buy flowers for the home ; or if on passing a flag seller you spontaneously put some money into her box. The first example is the play of the sentiment of self, the second of the sentiment of love, and the third of the sentiment of society. If instead of pushing over the man who is blocking your path you wonder why he is preventing you from getting out, you are thinking clearly and your interest, perhaps curiosity, is in play. If you make him feel, without pushing him, that you need to pass immediately, your interest has become more practicable. If you point out to him that whatever he wants will not be helped by limiting your freedom, and if you show him how to get what he wants, the whereabouts of the gentleman who occupies the top office, by going to the caretaker, your interest has become constructive.

The complexes whose roots are in your unconscious mind may prevent or help the clear play of any one or of all of the kinds of impulses and interests

mentioned above. Your irritation at being stopped from going out of the office is deepened by the resemblance between this act and a state of Bolshevism about which you have an unpleasant complex. Your thought and generosity at buying the flowers is found out afterwards to coincide (quite unconsciously) with a favour you asked of your mother or your wife or your husband or with the visit of a friend to whom you are deeply attached. Your purchase from the flag seller is on reflection found to be quite against your views on charity, but you bought the flag because the young lady very closely resembled a dear relative who was in need of help.

How to Treat Impulses

The impulses, therefore, receive their strength primarily from nature or what you have inherited, and secondarily, from the world outside you, or what you have experienced. It is better for you to possess strong impulses rather than to be without some of them. The presence and the strength of the impulses will complicate the problems of your character organization, but without impulses you cannot develop character. It is necessary, therefore, for you to be deeply interested in the impulses that make for the progress of your individual *self*, the ego impulses; in the impulses that make for your affection for home and for children, the *love* impulses; in the impulses that make for tenderness towards others, for responsibility towards others, the *society* impulses. It is necessary for you to be *curious* about all of these, to know all that

makes for the betterment of self, for the development of love, for the improvement of society. It is necessary for you to *acquire* knowledge and skill that make self important, love possible, and society happy. It is necessary for you to be *constructive*, so that what you do enlarges self, expresses love, helps society forward. Further, there must be some definite subjects about which you have deep interest, home, country, your work, recreations. A good share of impulses is therefore essential to you. Let us see how they pull you in all directions.

An Illustration from Life

You are coming home from work. You pass a shop in which you see a cheap edition of the *Encyclopaedia Britannica* for sale. Now your consciousness works, for you are aware of the Encyclopaedia. You stop and look. Now your fore-consciousness comes into play, for you remember that only last week you heard your manager say that a cheap edition of this work would add to the educational usefulness of his office and to the business house in which you are working. You stop and keep on looking. Without your being aware of it you have a strong unconscious wish to please this manager. Now your unconscious mind comes into play. Without your ever having observed it, he is very much like one of your old teachers whose influence you will always treasure. You really have a complex about this teacher which has become partly transferred to the manager. You suddenly remember, however, that you have only two minutes in which

to catch your train to be home punctually for the family meal. Now your love sentiment comes into play. You think, however, that if you could only enquire the price and the conditions of purchase of the *Encyclopaedia*, you would both help in the efficiency of the office and in making yourself more useful to your immediate chief. Now your society impulse comes into play. You go into the shop, make your enquiry quickly, take a note of the price and the conditions and dash out and catch your train in time. If you have done this really well your interest has become constructive. It comes completely constructive when to-morrow, at a suitable moment, you place the required information in your manager's hands. There are three general aspects of your experience. Firstly, there were a number of strong impulses competing; secondly, there was some control on your part, you did not merely go on reflecting, you performed some actions; thirdly, your control and your action were performed in the service of an ideal, business efficiency.

QUESTIONS

1. (a) How many kinds of consciousness are there ?
(b) Give one illustration from your own experience.
2. To what treatment would you subject your natural impulses, in order to develop your character?
3. Why is it good to have many strong impulses ?

CHAPTER XVII

THE CONTROL OF THE IMPULSES

IMPORTANCE of Habits—Unconscious Habits—Formation of Conscious Habits—The Danger of Habit Formation and the Remedies—Questions.

Importance of Habits

To have ideals that are worthy and to believe in these ideals deeply are the best ways of developing character. These are, however, the ends of character; you must also have the means to realize these ends. The ends without the means are not enough. "Hell is paved with good intentions." "Beware of the man whose God is in the skies."* A walker, however keenly aware of the principles of sound walking and however desirous of realizing these sound principles, cannot undertake a walking tour or a walking contest, without training in the discipline of walking and without familiarizing himself with and performing a graduated and thorough series of walking tests. Similarly, it is impossible for you, being possessed of strongly conflicting impulses, to cause them to serve your ideals unless you have some training in the acts of controlling these impulses. The act of controlling impulses without repeated effort is called Habit.

Unconscious Habits

Most unconscious habits are acquired in the service of natural impulses or instincts. In the course of

* From G. Bernard Shaw's *Man and Superman*.

instinctive expression complexes are formed, sentiments acquired, interests cultivated. Unconscious habits are therefore acquired also, some good, some bad. You need the occasional destruction of bad unconscious habits and the permanent formation of good habits. If we examine the growth of the child mind, we find that habits are more effectively formed when there is in the mind a general idea supported by a sentiment, in other words a deep interest. A boy will learn cricket well, a girl will learn dancing well, both will perform and acquire an enormous number of acts well, because each understands the ideas behind the cricket or the dancing and each accordingly possesses a deep interest. Habits are the tram-lines, as it were, along which the tram of character travels. To lay down these lines we must start with ideas and feelings which together form ideals.

Formation of Conscious Habits

The discipline of habit formation consists of certain steps.* The first is understanding. Know clearly, distinctly, what purpose you are serving in acquiring the new step. The second is feeling; desire deeply the purpose which the new habit will satisfy. The third is reflection or preparation. For at least two weeks ponder daily over the aim of the new habit and the feeling for this aim. Ask yourself how this aim is related to the ideas in your ideals. Convince yourself that your feelings for this aim are intimately related to the other sentiments that make up your temperament. Think out

* Adapted from William James.

carefully the time and the manner of beginning this new habit. Tell yourself clearly that it is a new departure, in a sense a different way of living. Do not minimize its importance. The fourth step is launching the habit. You have chosen a day and an hour and an environment which are all helpful. Now go ahead with every atom of energy at your command. For the next fifteen or twenty minutes or half an hour, nothing else matters but the performance of the task. The fifth step is that there must be no exceptions. If during your preparation and reflection you have decided that on every alternate morning between 7.45 and 8.15 you are to study accounts or finance or law or whatever it is, then there must be a slavish adherence to this discipline. "A purpose once fixed and then death or victory."* The sixth point is, seize any stray opportunities that occur of strengthening the acts of the habit, of widening the aim of the habit or of intensifying the feeling of the habit. You may find yourself one day at a party, discussing the principles of accounts or law or finance with a man who is evidently a master of his subject. Bring up an important point that has been worrying you. Give him your interpretation of the point. Inspire him to give you his.

The Danger of Habit Formation and the Remedies

While such a discipline is of inestimable value in forming habits, thereby strengthening your will power (the actual act of controlling and directing impulses) and developing character (the potential

* Sir T. Fowell Buxton.

power of controlling and directing impulses) there is always the danger of your becoming a slave to habits. Habits are servants not masters. Habits are means not ends. There are many routine commonplace minds that always follow their habits to the bitter end. "Fixed ideas," says H. G. Wells, "are mental teeth in more senses than one." The routine mind, the slave-to-habit mind, does not take kindly to initiative, to inspiration, to sympathy, to anything new and interesting. To save yourself from such an ossifying tendency there are two precautions.

One is, occasionally to defy a fixed habit. If it is your custom every day to walk five hundred yards to your office from the station through the High Street then one day walk through the side turning. This change should be introduced at least once every ten days so as to prevent the too easy growth of routine. The second precaution is the formation of a habit of daily relaxation. This should be performed every night for about twenty minutes. Take up a restful position, where bodily comfort is obtained. Turn your mind to thoughts of rest, of peace, of harmony, of country scenes. Such a discipline will at first be found very difficult. Your mind will be like a cat on hot bricks, jumping here, there and everywhere. Persevere with this relaxation, and, within three weeks, you will find that the twenty minutes' daily relaxation will develop a mood of calm reflection in the course of which you will see your errors of the day, and what will be more wonderful, solutions of unsolved daily problems and suggestions for future progress.

This habit of daily relaxation will help you to realize the value of another method in the organization of character, the method of occasional pauses, particularly during the period of heavy intellectual work. At the end of an hour's hard work in unravelling the very mixed accounts of a complicated retail business or in digesting a highly technical report of a mining engineer, put the work aside. Lean back in your chair. Just pause and try to do nothing. If it is difficult to sit down and do it, get up and walk up and down your office. But during the five minutes' pause put your mind to anything you like, but *not* to the accounts or to the report. These pauses are like taking breaths of a mental second wind.

QUESTIONS

1. Outline the steps necessary for the formation of conscious habit.
2. (a) What is the value of relaxation as a habit ?
(b) Write out your own experience.
3. How would you prevent yourself becoming a slave of habits ?

CHAPTER XVIII

DIRECTING THE IMPULSES

**CONTROL Alone Leaves Energy Unused—Self-respect as an End—
Ideals as Ends—Progressive Character—Questions.**

Control Alone Leaves Energy Unused

Now we come to the ends of character formation. We began with the strength and the number of impulses and their possible many conflicts. We then dealt with the means of control over impulses or the formation of habits. We now turn to the directing of these impulses.

Control is never enough. It is not enough for you to hold an impulse through a well-developed habit. You must use the energy exploded by the impulse to get somewhere. This somewhere is defined by thinking.

Self-respect as an End

There are many levels in the preliminary steps to impulsive conflict control and direction. So far we have dealt with two levels, the impulsive level where two impulses merely compete for a stronger pull; the inhibiting level where the bad impulse is nearly suffocated. Inhibition is only a step. This is the limit of the practical advice which expresses itself only in "Don'ts." "Don'ts" can never lead to the realization of good though they may lead to the temporary avoidance of evil.

The third level in character is the self-conscious

level. You have an impulse to be mean or to be dishonest or to be slovenly or to be discourteous. You control this impulse because you have developed self-love, self-respect, a sentiment for yourself, and you are therefore ashamed to be mean or to be discourteous or to be dishonest or to be slovenly. The development of self-respect is really the harnessing of your naturally inherited self-impulse to your ideals, such as fairness, honesty, and courage. Your ideals of fairness, honesty, and courage are a direct result of your possessing and developing your society sentiments. Here you begin to see light. *The development of the right feeling and attitude towards yourself is the mainspring in character development.* No man can become truly manly without self-respect. No man can develop self-respect without bringing about a balance between the self-impulses which cause him to serve himself and the society impulses which cause him to serve society. This perpetual balancing of the two great impulses and the perpetual harnessing of them to ideals are the best ways to carry out the development of character.

Ideals as Ends

Both self-respect and self-control must obey something greater than themselves. There are occasions in life when although a man's self is being sacrificed he is yet performing good work. It may not be self-respecting, for instance, for a manager of ten years' experience to have to become an assistant to a younger and less experienced man. But if the latter

is by far the more capable mind, then the former's self-respect must be sacrificed to the finer society impulse which is service. This brings us to the next level.

Impulses alone confuse us ; inhibition alone saves us for the moment and only for the moment ; self-respect and self-control help us in very many ways ; but the distinction in our ideas between right and wrong or between truth and falsehood or between the beautiful and the ugly, are our best guides in action. This distinction is usually made within us by a mental and emotional unity which we have built up in the course of our growth and development, learning from every possible source, from our parents, our early home life, our teaching at school, our religion, our reading, our talks with friends. This power of criticism we have built up is usually called *Conscience*. In any conflict between our impulses (if, for instance, self-interest pulls one way and love another or if society pulls one way and self-love another), we must appeal to something within us greater than sentiment or our interest, to our understanding, to our reasoning, to our conscience. We must find our direction in the light of our conscience and follow that. Every impulse that pulls against conscience must be fought not by inhibition, nor even so much by self-respect, as by using against it, with as much energy as possible, those sentiments which are supporting conscience. In the circumstances mentioned above, of a manager who has now to perform the work of an assistant manager, he must think out the ideal behind the change. The ideal is that in

the presence of competition from rival firms, his firm needs the best brains in the right place. They think that the new man will be the right leader, but that the old manager with his experience will be the best second-in-command. His society impulses, as well as his self-impulses, can now all be used in the service of the ideal. If, for example, his self-impulses suggest to him that he must not help the new man because his self-respect has been damaged, his society impulses will suggest that it is only by putting self second and the firm first that the business competition can be fought and victory achieved. His conscience will confirm this.

As thinking and reasoning, or the clear enunciation of ideas and the affection for them, or ideals, are the directing ends of character, it naturally follows that those who reason incompletely (that is without conscience) have bad characters, which is true. Criminals in the dock, able financiers who have betrayed trusts, swindlers, all have shown evidence of strong characters, of years of self-control and devotion to some ideas, in spite of conflicting impulses; but the characters were bad, because the ideas and the ideals were served purely by the self-sentiments without the balancing influence of the love and the society sentiments, in other words, without conscience.

Progressive Character

To have strong and good characters is not enough. There must be progress as well as strength and goodness. Changing conditions bring new ideals.

It is not so much that we have to be dissatisfied with the good as we know it to-day, but we must go on making it better and better. Fifty years ago it was very rare for big employers to make it part of their business to be interested in the human side of their employees. To-day, in the business world, welfare work is recognized as a fundamental principle in scientific and progressive business management. The names of Cadbury, Rowntree, Reckitt, Bearsted, Waley-Cohen, Leverhulme, Hartley, Melchett, to mention only a few, will go down in the business and industrial history of England as the names of pioneers who widened the influence of humanity in business. They were not satisfied with the good they found in the world. They wished to improve it. They worked to improve it. They have improved it. This is the highest rung in the development of character; to be always refining our ideals in the light of new and progressive ideas.

QUESTIONS

1. How can you develop self-respect ?
2. If you feel you are being drawn towards a certain action which is bad, how would you proceed to right yourself ?
3. (a) What is a progressive character ?
(b) Give one illustration from your experience or your reading.

(d) The Organization of Personality

CHAPTER XIX

PERSONALITY: ITS NATURE AND ITS NURTURE

SOCIAL Activity is Essential—Humility and Boldness—Value of Mistakes—Compelling Attention—Inspiring Confidence—Stimulating Interest—Leadership—Constructive Personality—Questions.

Social Activity is Essential

THERE are five functions in the work of personality. Firstly, it compels attention ; secondly, it inspires confidence ; thirdly, it stimulates interest ; fourthly, it leads ; fifthly, it is constructive. To compel attention is the first step in personality. But whose attention must you compel ? You must have the attention of others, of your seniors, of your colleagues, of your juniors. You must, therefore, mix with them. This is the expression of one of your society impulses, sometimes called gregariousness, sometimes called the social motive. You must try to converse with your colleagues, you must try to make friends. If you find this difficult and conversation is much more difficult than many people imagine, think before talking. Take one of your interests. Is it important ? If so, why ? Is it useful to business or to religion or to the country or to literature or to happiness ? If so, why ? If you cannot answer these questions, read one or two books on the subject. Prepare yourself with a few leading ideas. If you are

too timid to make openings in conversation, listen to others and try, by questions, to link up their interests with your own. But above all, whether by listening or by occasional talking, or by initiating conversations, keep up this social round. It will gradually destroy some of that social nervousness which prevents the growth of personality and will gradually give you some of that unconscious social confidence, called assurance, which is one of the foundations of personality.

Humility and Boldness

Do not always rush too quickly into conversation or into any social activity. Do not always hold back too completely from either. Alternate both policies. Combine the attitudes of humility and boldness. You must be humble when another person is talking of his or her interests ; you must be bold when you are talking of your own interests.

Value of Mistakes

Do not be afraid of making mistakes. "One thorn of experience is worth many flowers of instruction." By mistakes you realize whether you have been too bold or too humble, whether you have over-estimated yourself or under-estimated others. Mistakes will teach you that before undertaking conversations or any form of social activity, you must clearly know what you want from either or both. Further, you must desire what you want. Your successful experiences in conversation and in

other social activities will make you feel that you can get what you want. This is the beginning of social confidence.

Compelling Attention

To compel attention you must appeal to the senses of the beholders. You must pay attention to your dress, to your bodily appearance, to your bearing, to the way that you use your voice. Observe your chief or your other seniors in the office and shop. What do they wear daily ? What do they wear on exceptional occasions ? How do they approach their superiors ? How do they approach their juniors ? Does their facial expression change frequently or only when the occasion warrants ? Any act performed to compel attention must therefore be thought out as a result of observing the environment and the people in whom and from whom you desire to compel attention.

Inspiring Confidence

Compelling attention is only momentary. It has to be prolonged. To do this you have to call forth admiration, to inspire confidence in yourself. Your acts must therefore be part of a unity. That is to say, do not behave merely so that others attend to you, but so that they are also grateful for the service you are rendering. You compel attention by your manner of your doing ; you inspire confidence by the matter of your doing. Before compelling attention, therefore, be quite clear that what you are doing is useful, really useful.

Stimulating Interest

When you compel attention you become conspicuous. When you inspire confidence you become useful. But you want those who have noticed you and who have appreciated your work, to perform acts about you or your work, or both, as a result. But what is it that makes us work in any direction ? It is interest in that direction. You must therefore be interesting. Why did you compel attention ? You compelled attention because you had something useful to do. Its utility inspired confidence. Can you define its utility ? Is it some clarification of accounts, some step in office indexing, some improvement in office furniture, some effective suggestion in window-dressing ? Think out, think round about, the utility of your act. Produce arguments in its favour. Produce arguments against it. Support the former and meet the latter arguments by illustrations from other shops, from other offices or from books you have read. This energy in conversation, this variety in illustration and argument, will stimulate the interest of others. You are now on the road of personality. You have caused others to notice you ; they are impressed with you ; they find you interesting.

Leadership

You must be different from others. You must not be merely different, but different in a better way. Your manner, the suggestions you make to your manager or to your colleague, bring attention ; your matter inspires confidence ; your method

of presentation stimulates interest. The whole idea is a most important one. It means a complete change in one department. It necessitates a new appointment. You have thought it out. Are you the man to carry it out as well as you have talked about it? In other words, are you prepared to lead this new venture? You have had the wisdom to create and to think out this plan: you must now have the courage to operate it. Turn now to yourself. So far all your personal activities have been subjected to a certain plan. Now comes the moment when the plan must be subjected to you. At the back of your mind must be the running thought—"I am the man that can carry this plan to success." Just as you made these people attend to you, believe in you, be interested in you, so make them now unhesitatingly feel that this new step can and must be undertaken by them.

Constructive Personality

The final step in personality is where you are removed from the glamour of the manager as audience, of your colleagues as audience, of the crowd, of the limelight. You are now to perform your promise. You have been given the headship of this new department; you have been given your commission; you have to translate what was originally an idea in your mind into a thing, into a machine, that others can see, that others can work. You now have to construct. Remember what you were told earlier on, you must be both humble and bold; bold in your belief in the principle of your

plan, humble in considering the conditions of the office, the susceptibilities of your colleagues, the idiosyncrasies of customers. Keep a balance between the two, considering both, ignoring neither. Keep clearly in view the principle of the new plan. Everything that strengthens it must be carried out firmly and tactfully. Everything that weakens it must be turned away firmly and tactfully. Routine, details, hours of work, the temperaments and habits of others—all must be placed secondary to the thing you are constructing; all must serve your ideals—they are the masters. Follow them with might and main and personality gets its greatest gain.

QUESTIONS

1. (a) What are the five steps in using personality ?
(b) State the best ways of compelling attention, inspiring confidence, and stimulating interest.
2. (a) How is leadership developed ?
(b) How can personality become constructive ?

INDEX

ACQUISITION, a developed interest, 110
 —, at work, 120-1
 Adams, Sir John, *Prof.*, quoted, 78, 111
 —, —, —, *Students' Guide*, mentioned, 37-8
 Administrating, *see* Organizing
 Aesthetics, principles of beauty, 93
 Analysis, *see* Judgment and Thinking
 Apperceiving, defined, 31-2
 — and perceiving, 32
 — — understanding, 32-3
 Associations, defined, 34, 35-6
 —, two kinds: contiguity, 35; similarity, 36
 Assurance, how helped, 133
 Attention, how to compel it from others, 22, 135
 — and mind wandering (fore-consciousness), 117
 —, self-organization methods for acquiring, 28-30, 31
 —, two kinds, 28
 BARRIE, J. M., *Sir*, quoted on fairies, 94
 Bearing, *see* Personality
 Bearsted, *Baron*, mentioned, 131
 Beauty as a motive in imagination, 94
 "Bovril," illustrated in judgment, 63
 —, mentioned, 44
 Buddha, mentioned *re* goodness, 94
 Business, analysed, 3-4, 72
 —, defined, 3
 — efficiency—effect of idea of, on character, 120-1
 — importance, 2-3
 — social service, 72
 Buxton, T. Fowell, *Sir*, quoted, 124
 CADBURY, George, mentioned, 131
 Character—
 analysed, 57
 classified, 20-1

Character (*contd.*)—
 defined, 16,
 development of, six stages in, 127-131
 — of, problem in, 114
 —, mainspring in, 128
 —, self-organization method for, 127-130
 habits, attitude, right, to, 124-6
 —, conscious, dangers and remedies, 124-6
 —, defined, 122
 —, discipline of formation of, 123-4
 —, importance of, 122
 —, unconscious, how formed, 122-3
 highest stage, progressive, 130-1
 ideals, defined, 113
 —, effect on character, 128-130
 —, function, 113
 impulses, attitude, right to, 119-120
 —, control, limits of, 127
 —, directions of, 120-1
 —, effect of ideas and ideals on, 128-130
 —, effect of self-respect on, 127-8
 —, how they work, 118-9
 —, illustration of, 120-1
 —, progressive, 130-1
 —, strength of, 114-5
 —, two kinds, individual and racial, 115-6
 Christ mentioned *re* goodness, 94
 Church and Alford, *Principles of Management*, quoted, 10
 Churchill, Winston, political leadership analysed, 71
 Complex, conflict with impulses, 118-119
 —, defined, 12
 —, growth, 100-3
 —, power of, 102
 Conceiving, *see* Thinking
 Concentration, *see* Attention
 Confidence, how to inspire it from others, 22, 134

Conscience, defined, 129
 —, mentioned, 21
 Consciousness, three kinds, 116-8
 Construction, a developed interest, 109
 Constructive study, *see* Study
 Constructiveness, a process in personality, 23
 Conversation, advice about, 132-3
 —, stimulates interest, 135
 Creating ideas, *see* Imagination
 Curiosity, a developed interest, 109

DARWIN, mentioned *re* truth, 94
 Description, defined, 69
 Desire, *see* Sentiment
 Disorder, *see* Judgment
 Disposition, *see* Temperament
 Doing, as a process in consciousness, 116
 —, as a process in imagination, 93
 Drives, 102

EDISON, Thomas A., and intuition, 61
 Efficiency, business, effect of idea of, on character, 120-1
 —, personal, *see* Self-organization
 Ego, *see* Self
 Emotions, defined, 100
 —, *see* Feeling
 —, temperament, 111-2
 Ethics, principles of morality, 93
 Experience, twofold value, 67
 — and reasoning, *see* Judgment
 Explanation, defined, 69
 Extrovert, 105

FACE, analysed, 57
 Feeling, as a process in consciousness, 116
 —, — — in imagination, 93
 Feeling, *see* Interest and Temperament
 Fore-consciousness, 117-8
 Friendship, analysed, 53

GENIUS, in business, 6
 Gilbreth, L. M., *Psychology of Management*, quoted, 10
 Gladstone's memory, 40

Goodness, as a motive in imagination, 94
 —, *see* Character
 Guessing, 76

HABITS—
 attitude, right to, 126
 conscious, dangers and remedies, 124-6
 —, discipline of formation of, 123-4
 defined, 122
 importance of, 122
 unconscious, how formed, 123-4
 Hansom cab, illustrated in imagination, 92, 93
 Hartley, Wm. P., *Sir*, mentioned, 131
 Holmes, Sherlock, illustrated in reasoning, 86
 Honesty, *see* Character
 "Hövis" bread, illustrated in complete judgment, 90-1
 Humanity in business, 131

IDEAS, connecting power of, 67
 —, defined, 53
 —, *see* Imagination and Meaning
 Ideals, defined, 113
 —, effect on character, 128-30
 —, function, 113
 —, refine interests, 112-3
 Imagery, *see* Imaging
 Imagination—
 analysed, 18
 caused, how, 91, 92
 defined, 92
 development, by self-organization methods in reasoning, 88, 91-92
 —, self-organization methods for, 95-7
 function of the new, 81-2
 motives, three, in, 93-4
 power, completes understanding, 94-5
 power, the unreal, 94
 processes, ultimate, three in, 93, 94
 understanding in motion, 4-5
 Imaging, defined, 25-6
 Impulses—
 action, 114-5
 attitude, right, to, 119-20

Impulses (*contd.*)—
 control, limits, of, 127
 directions of, 120-1
 effect of ideas and ideals on, 130
 — of self-respect on, 127-8
 how they work, 118-9
 illustration of, 120-1
 strength of, 114-5
 two kinds, individual and racial, 115-6
Industry, nationalized, 3
Inferiority complex, 19
Ingenuity, *see* Imagination
Inhibition, *see* Character
Initiative, *see* Character, Imagination, and Personality
Instinct, the natural behaviour of
 interest, 109-10
 —, — — — of impulse, 114-5
Intellect, defined, 17
Intelligence, defined, 17
Interest—
 action of, 108-9, 110
 and habits, 123
 and life, 112
 caused, 106
 defined, 107
 development, 109-110
 differences in, 18
 nature of, 111-2
 origin of, 106-8
 power, 100
 refined by ideals, 112-3
 stimulating it from others, 21, 135-6
 uninteresting, conquering the, 110-111
Introvert, 105
Intuition, at work, 60
 —, defined, 17-8
 —, genesis, 61
 —, self-organization method in, 62-4
Invention, *see* Imagination
JAMES, William, quoted, 123
Judgment—
 causes, disorder, 59-60
 —, order, 58-9
 complete, what is involved in, 90-1
 conviction and confidence, 67-8
 end or aim of, 63-4

Judgment (*contd.*)—
 errors in, 68-9
 form (proposition), 67-8
 methods of making, implicit, *see* Intuition
 — — —, explicit, experience as guide, 62
 — — —, — — —, getting truth, 63-4, 69-70
 — — —, — — —, using analysis and synthesis, 62-4
 — of perfecting (real reasoning), 70-3
 — — —, self-organization, method in, 70-3
 original, how made, 87-8
 true, how made, 64
Jung, C. G. Professor, 102, 105
KNOWING, as a process in consciousness, 116
 —, — — — in imagination, 93
LEADERSHIP, acquired, how, 135-6
 —, a process in personality, 22
 —, political, analysed, 71
Learning, defined, 67-8, 69, 70
 —, *see* Understanding
Leibnitz, G. W., 44
Leverhulme, Wm., first *Viscount*, and intuition, 61
 —, — — —, mentioned, 131
Logic, principles of science, 93-4
Love—
 as impulse, 116
 as pleasurable emotion, 100
 attitude, right to impulses of, 120-1
 embraces other feelings, 99
 in operation, 107
MACAULAY's memory, 40
Management, Institute of, 10
Managing, *see* Organizing
McKillop, M., and A. D., *Efficiency Methods*, quoted, 10
Meaning, defined, 52-3
 —, *see* Thinking
Meditation, productive, 51
 —, reproductive, 50-1
 —, selective, 52
Melchett, Lord, 131
Memory—
 described, 37-8

Memory (contd.)—

- , reception, 38-9
- , reception, recollection, retention, 38
- , recollection, related knowledge, 40-1
- , —, self-organization method for, 47-9
- , —, unrelated knowledge, 48
- , —, —, —, aids to :
 - easy associations, how to make, 44-6
 - figure alphabet, 44
 - habitual systems, value of, 43-4
 - interest, value of, 46
 - limits of mechanical aids, 46-7
 - neighbourhood, mental, 42-3
 - self-organization method for, 42-9
 - , retention, 39-40
 - , —, influences helping, 40

Mind, analysed into four processes, 17-18

- , defined, 16
- , self-organization of, *see* under separate headings, such as Observing and Perceiving
- training, aim in, 18

Mind-wandering, *see* Attention**Mistakes, value of, 133-4****Mnemonics, *see* Memory (recollection, unrelated knowledge)****Monotony, *see* Attention****Morality, *see* Goodness****NECESSITY, *see* Imagination****Nervousness, how minimized, 132-3****New ideas, *see* Imagination****Newton, mentioned *re* truth, 94****Nunn, T. Percy, Prof., M.A., D.Sc., quoted, 92****Observer, the, 3****Observing, defined, 26, 37****—, self-organization methods for, 26-8****Order, *see* Judgment****Organizing—**

- a problem in, 83, 84, 87
- analytic questions for, 12, 39
- attitude, old and new, to, 9
- chief factor in, 10-11
- defined, 9-10

Organizing (contd.)—

- human factor in, 10
- self-organization, relation to, 11
- methods, applied to, 87, 88
- successful, 5-6, 10
- Originality, *see* Imagination
- "Ovaltine," mentioned, 42-3
- "PEARS' Soap," good qualities analysed, 71-2
- , mentioned, 44
- Peculiarities, *see* Prejudices
- Pen, good qualities analysed, 63-4
- Perceiving and conceiving, 54
- , complete, 33-4
- , defined, 16-7
- , *see* Apperceiving and Observing
- Personality—
 - defined, 16
 - in business, 5
 - processes, analytic in, 22-3, 132-3
 - , —, constructive, 136-7
 - , —, compelling attention (bearing, dress, manner), 134
 - , —, inspiring confidence, 134
 - , —, leadership, 135-6
 - , —, mistakes, value of, in social activity, 133-4
 - , —, social activity and conversation, 132-3
 - , —, stimulating interest, 135

Politics, *see* Churchill, Winston**Preferences, how caused, 101****Prejudices, how caused, 102****—, — to deal with, 110-1****Principles, finding of, 65-73****Production, analytic questions for, 12, 39****Productivity, 10-11****Psycho-analytic school of psychologists, 13****—, successful, 5****Pullman car, illustrated in imagination, 92-3****READING, aim in, 79****—, two methods in, 79-80****Reasoning—**

- and thinking, 59
- truth, 69-70, 71-3

Reasoning (*contd.*)—

- applications, organizing, 83, 84, 87, 88
- applications, salesmanship, 82, 83, 87, 88
- deductive (from ideas to things), 86
- defined, 70
- described, 59
- explicit, 60-2
- implicit, *see* Intuition
- inductive (from things to ideas), 85, 86
- practical, *see* Judgment
- self-organization methods in, 84, 85-8
- in perfecting judgments, 70-3
- leads to new ideas, 88
- Reckitt, mentioned, 131
- Recollection, *see* Memory
- Relaxation, nature and value, 125-6
- Repression, 118
- Retention, *see* Memory
- Routine minds, 125
- Rowntree, B. S., mentioned, 131
- "Rule of thumb" reasoning, *see* Judgment

SAGACITY, defined, 64, 68

——, *see* Judgment and Thinking

Salesmanship—

- a problem in, 82, 83, 87
- analytic questions for, 12, 39
- self-organization methods applied to, 87, 88
- successful, 4,

Science, defined, 93-4

Self —

- impulses, 115-6
- organization, methods in expression, 109-110, 119, 120

Self-analysis and self-training, 16-23

——, four components, 16-7

Self-consciousness—

- and character, 114
- described, 14-5
- immoderate, care for, 15-16
- , evil of, 15
- normal, use of, 14-15
- see* Self-respect

Self-development, *see* Self-Organization

Self-knowledge, analysed and described, 14

Self-management, *see* Self-organization

Self-organization—

- business, relation to, 4-5
- defined, 1-2
- essential conditions and processes, 12-3
- importance, 7
- method in expression, 109-110, 119, 120
- organizing, relation to, 10-2
- success, essentials for, 8

Self-respect, as end or aim in character formation, 127-8

Self-training, *see* Self-organization

Sentimentality, its cause and cure, 104

Sentiments, *see* Temperament

——, development, 106-8

——, organizing, 103

Sex —

- impulses, 116
- self-organization method in expression, 109-110, 119-120
- Shakespeare, mentioned *re* beauty, 94

Shaw, G. Bernard, quoted, 122

Sincerity, *see* Character

Soap, good qualities analysed, 71-2

Society —

impulses, 116

Study—

- cross-currents in, 77-8
- defined, 74
- guessing in, 76
- periods, 78
- processes, two : absorption, constructive, 74 5
- results, mastering, 76-7
- stages in, 75
- test of, 78-9

Success, business, causes for, 5

——, ——, *see* Organizing, Production, Salesmanship

——, personal, *see* Self-organization

Synthesis, *see* Judgment and Thinking

TAYLOR, F. W., Dr., *Shop Management*, quoted, 9

Temper, *see* Temperament

Temperament—

- basis, 98-9
- characteristics, 104-5
- classified, 18-20
- complexes, defined, 102
- emotions, defined, 102
- environmental effects, 112
- feelings, growth, 99-100
- ideals, refined, 113
- self-organization method for perfecting, 113
- sentiments, growth, 100-3
 - , defined, 103
 - , formation, efficient, 103
 - , —, inefficient, peculiarities, 104-5
 - , —, —, sentimentality, 104
 - and temperament, 101-2
- training, aim in, 22

Thinking—

- and reasoning, 59
- defined, 54
- described, 66-7
- processes, ideas, analysing of, 55
 - , —, conceiving of, 54
 - , —, noticing differences in, 54
 - , —, synthesizing of, 55-6
 - , things, abstracting meaning of, 53-4
 - , —, noticing meaning of, 52-3
- self-organization methods in, 54-7
- start of, 52

Times, the, 11

Transport, British, 3

Truth, in judgment, 63-69

— and reason, 69-70

—, motive in imagination, 94

—, permanent, making it, 69

Turner, mentioned *re* beauty, 94

UNCONSCIOUS mind, 118

Understanding, defined, 33

— at work, 54

—, *see* Reasoning and Thinking

Uninteresting, how to make interesting, 110-1

"VALET Auto-stop Safety Razor," illustrated in developing imagination 96-7

Variety, *see* Attention

WALEY-COHEN, Robert, *Sir*, mentioned, 131

Walking, used as illustration, 122

Wander, mentioned, 42

"Waterman's Ideal Fountain Pen," good qualities analysed, 63-4

— — — —, illustrated in perceiving and apperceiving, 33-4

— — — —, mentioned, 31

Welfare work, a fundamental principle in business management, 131

Wells, H. G., quoted, 125

Will-power defined, 114, 126-7

