GENERAL INTRODUCTION

If the Duke of Wellington had been accused of being a psychologist, his reply would probably have been brief but very emphatic. On one occasion, however, he was trying to state the qualities of a great captain. “One must understand,” he remarked, “the mechanism and power of the individual soldier, then that of a company, or battalion, or brigade, and so on, before one can venture to group divisions or move an army.” Personal courage is necessary and valuable, but is by itself utterly inadequate. In discussing Sir John Moore, Wellington said: “He was as brave as his own sword, but he did not know what men could do or could not do.”

There, in a nutshell, is the case for the application of psychological study to the problems of building and training an army. For it is the psychologist’s business to try to understand “the mechanism and power” of the individual, to know “what men can do and what they cannot do,” and to learn how human conduct is governed.

A modern army is an immense and complicated organisation demanding highly specialised skill and knowledge in many of its branches. In recent years it has advanced towards mechanisation in all directions. Yet it still depends ultimately for its success upon the degree of insight and under-

GENERAL INTRODUCTION

standing with which the men who compose it are treated. Mechanical transport, modern artillery, tanks, aeroplanes, wireless apparatus, gas warfare, technical methods for the detection of enemy guns, aeroplanes, and submarines—in fact all the numerous applications of physics, chemistry, and engineering are at the mercy of the human mechanism by which they are employed. It is the task of the psychologist to attempt to understand that mechanism. And even though at present he can fulfil his task only partially, yet the knowledge that he has gained is important to all those who, in any practical endeavour, have to deal with men either as individuals or in the mass.

Psychology has undergone a very great change during recent years. It is no longer merely a matter of the study, but of the laboratory and of daily life. Not long ago psychologists were chiefly concerned to give a detailed description of the contents of the human mind and of the ways in which the structure of our knowledge is built up. If a man turns away for a time from the things of the outside world and tries to attend to his own mental life, he discovers sensations which arise when he sees colours, hears sounds, touches or tastes objects and so on; images when he allows himself to dwell upon the events of his past life which are no longer present in his immediate outward surroundings; and ideas when he is concerned with general relations and qualities that are treated as independent of merely particular instances. These do not simply
GENERAL INTRODUCTION

lie about in his mind in a disorderly fashion. They are tied or organised together, built up into various groups. Whenever a man thinks, each has its special place and all have their own parts to play. Confronted by some particular external situation to which he must somehow adapt himself, he learns a little about the situation through the activity of his special senses. What he learns may arouse images of other situations or of fragments of other situations, like to or different from the one now before him. These combining, changing, developing may enable him to separate the accidents of the present from its essential features, and he may arrive at some formulation in general terms of what the situation means, or he may adopt what he calls a reasoned plan of action. Now if all this happens to a man who has the right sort of mind and who has a fair amount of leisure, he may begin to speculate about the nature of all the various factors which are involved. What is a sensation? What is an image? What is an idea? he may ask. To answer these questions he delves once more into the recesses of his own mental life, and tries to describe what all of them seem to be like when he experiences them, how in the course of experience they all get linked together, and how far the knowledge which he gains by their means can be accepted as genuine. He may call the result “psychology”; but however successful he may be in his attempt, his answers do not throw much light, and are not of course intended to throw
GENERAL INTRODUCTION

much light upon his conduct when sensations, images, and ideas occur to him. Whatever may be the exact nature of the sensations of sound as actual experiences, for example, the hungry man, when he hears the dinner bell, will hurry to the dining-room, while the man who is not hungry may con-
tinue whatever he is doing till the latest possible moment, and then be moved, very likely, to a violent protest.

Consequently speculations about the exact nature of the contents of mind have tended to give place more and more to a study of how people behave, and why they behave as they do. The psychologist is no longer wrapped up in himself. Looking out into the world, he naturally is at once struck by the amazing variety of things that men do. He wants to find out why one man does this thing and another that, and why one man does this well and another the same thing ill. At once he is a step nearer to experiment. For he can contrive to make a man do things, and in this way learn about the conditions of such action. Psychology is now less preoccupied with an analysis and description of the materials and structure of knowledge, and very much more with a study of the conditions of all forms of human and animal behaviour. The psychologist must push into all the fields of man’s activity, both normal and abnormal, and particu-
larly into all those fields where human activity is most definitely organised and regulated. He is therefore bound to be interested in the Army, and
GENERAL INTRODUCTION

if his interest leads to any insight, the Army must in return be interested in him.

Psychology may, then, be defined as a systematic attempt to understand the conditions of human activity. The term “activity,” as it is used here, must be given a somewhat generous interpretation. The external circumstances of two people may be very much the same; their bodily attitudes may be very similar. But we cannot, by studying the external circumstances and by observing, however accurately, the bodily attitudes, say exactly what they are thinking about. Yet their thinking must be regarded as a form of activity. A dream is a form of activity. Having an image is a form of activity. There are in fact many forms or instances of activity which only the person who displays them can tell us about. Not only so, but it is evident that what a person thinks may have no small influence upon some of his more obvious forms of behaviour both then and later. For much of our evidence concerning the conditions of activity we are driven to go to the person whose behaviour we are studying and to rely upon what he can tell us. Whether this must render many of the psychological formulations of the conditions of activity finally uncertain, since a man is very liable to error in the matter of his own inner life, I do not now propose to discuss. The fact must be admitted, and instead of discussing its exact significance in general terms, it is better to see what psychology, in spite of this difficulty, is able to accomplish.
GENERAL INTRODUCTION

Sometimes people say that psychology should consider only that type of condition which has to be expressed in terms of a man’s own inner experience. But this is a needlessly impossible position. Suppose a group of men who are fighting have to meet a gas attack launched by the enemy. Their conduct depends in the most direct manner upon the physical and chemical constitution of the gases which they have to meet, and upon the respiratory and other changes which those physical and chemical conditions may set up in their bodies. It depends also upon the group’s morale, upon the individual’s timidity or daring, upon the leader’s insight and skill. To ignore the physical and physiological conditions will produce as faulty and fragmentary an understanding of their conduct as to overlook those conditions which belong more immediately or exclusively to the mental and social make-up of the persons concerned. In studying the conditions which determine human activity the psychologist must consider:

(a) the physical conditions, i.e. those which belong to a man’s external environment;
(b) the physiological conditions, i.e. those which belong to a man’s bodily organism; and
(c) those other conditions which belong to the man’s own life, but which so far nobody has succeeded in expressing adequately in physical or physiological terms. For example, a groom may be fearless with a horse, a shikari with a wounded tiger or on bad ground, and yet both may be cowards
GENERAL INTRODUCTION

in other circumstances. This third group of conditions are what are generally termed psychological. But the psychologist is by no means called upon to shut himself up in the study of these alone.

We must now turn once more to the modern army and try to realise some of the important problems which confront its makers. On the one hand an army is like an immensely complicated machine possessing many delicate and highly specialised parts. On the other hand it is based upon some of the most simple, fundamental, and unspecialised of all human tendencies. Any one of its technical branches depends for its success upon the possession by those who man it of specialised abilities which have been trained in the best possible way to the completest possible efficiency. Take the enormous development in recent years of mechanicalised transport. The growth of this depends upon the practical application of scientific discoveries of a very technical nature. The use of it demands men who have specialised knowledge and specialised interests. It is impossible to say of any group of men, taken haphazard, that each member of that group is just as likely as any other to be able to understand and apt to apply the special knowledge and behaviour which any branch of mechanical transport demands. A successful man may need special visual skill, particular forms of manual dexterity and muscular control, the sort of imagery that is able to cope with mechanical problems; and these must all be backed up by
GENERAL INTRODUCTION

interests which turn naturally in the direction of the management of swift forms of locomotion. The same kind of thing is true of each arm of a modern signalling service. Here again special problems demand special capacities: a high standard of keenness of vision, in some instances accurate colour discrimination, in others well developed acoustic capacities, so that particular sounds may be immediately recognised and accurately localised. Similarly in regard to every technical branch of an army, special demand is made upon some fundamental sensory reaction, such as particular skill in vision, hearing, touch, or control of bodily movement; upon the possession of some predominant type of concrete imagery; upon a special temperamental quality or combination of temperamental qualities; upon a particular acquisition of knowledge. It may seem that the last of these, the possession of specialised knowledge, is merely a matter of teaching. But a man does not learn simply what he is told. He learns only that part of what he is told in which he is interested; and interests are less easily made to order than has been popularly or officially supposed.

Now all these types of human activity are exactly the concern of the more technical part of present-day psychology. They are what the psychologist studies in his laboratory. It is his business to know how the eye, the ear, the skin, the muscles react when certain specific conditions are provided. He has developed his own technique for testing, ranking,
GENERAL INTRODUCTION

understanding these reactions. He deals similarly with the common kinds of imagery, and with special types of memory. He is beginning to work out his own ways of discovering temperamental capacities, and so of understanding and controlling their expression. This is laboratory work which has an immediate application to a large number of problems of military organisation.

But no matter how highly technical may be his immediate work, the good army man is primarily and fundamentally a fighter. I think this is true even of the more sedentary branches of the service, and it is certainly true of those whose place is in the field. Moreover it is probably still correct to say, that the success in practice of the most highly technical branches of an army depends upon the efficiency and steadfastness of the least specialised arms of all—the mass of the infantry and cavalry. Nobody would argue that the modern infantryman is unskilled. But he requires less specialised abilities and less specialised knowledge than many of his fellows. He must have the capacity to withstand fatigue, must possess endurance, courage, discipline, loyalty, a gift of comradeship, and, unless he is to be a source of serious weakness in a crisis, a pugnacity which is not solely dependent upon group stimulation. These more general and widely spread qualities have distinguished all the great organised fighters since fighting began. The psychological problems here are, correspondingly, more general ones. How can these qualities be
GENERAL INTRODUCTION

trained and developed, and kept bright and burnished and ready for use? To answer this question a knowledge of laboratory technique is of little avail. The psychologist must now go out into the world of daily events and mingle with men therein. He must try to observe the primary driving forces which build up character and conduct. And if he cannot then acquire the insight to enable him to find at any rate some part of the answer to this question for himself and others, he is a poor psychologist and his psychology is a feeble instrument.

There is a special set of problems which, in view of the nature of modern warfare, are of particular importance to the military psychologist. To the bulk of an army the modern war is a war of position rather than one of movement. In spite of the most elaborate systems of relief, according to which a man is in the front line of fighting for only relatively short periods, this subjects a soldier to a well-nigh intolerable strain. If there is any weakness in his mental character, the war of position is apt to find it out and to work upon it. Probably every character, even the most stable, will crack and break under certain conditions of prolonged strain. But some are much more liable to be upset than others. These, at a crisis, are a profound source of weakness. They not only suffer themselves, they readily and unwittingly contaminate others, for a group in a tight position is often peculiarly liable to suggestion.

In some cases it can be predicted with practical