THE PSYCHOLOGICAL REVIEW

THE MIND AND THE MAN-WITHIN

BY A. P. WEISS

Ohio State University

While those psychologists who call themselves behaviorists may consistently refuse to enter controversies about the nature of mind or consciousness, yet if their methods are adopted, it is necessary to show why the distinction between mental and physical has such prominence in the methodology and the fundamental assumptions underlying traditional psychology. In other words if, as would be maintained by a monistic behaviorist, a psychosis is only another form of neurosis, how did the conception "Every psychosis has a neurosis" ever originate among so many able and critical thinkers.

If the basis of all experience is action, then what is the nature of those actions to which men for two thousand years have given the name soul, ego, spirit, self, mind, consciousness, ideas, volition, awareness, etc. Is there such a thing as a dualistic prepossession and if so how did it originate? It seems reasonable to suppose that so thorough going a differentiation between the mental and the physical, should have a structural or functional basis in the human body. Such a basis the writer believes exists in the fact that *the nervous system of man is not supplied with sense organs or receptors for which the adequate stimulus is either a nervous impulse, or the neural changes induced in the nervous elements by the passage of a nervous excitation.* This makes it impossible for man to react as discriminatively to neural changes in the brain, spinal cord and nerve centers, as to changes in his environment; that is to say, man knows more about what is

going on outside of his body than within it. Therefore, in order to meet the practical requirements of adjustment to other persons, he personifies his own behavior mechanism.

However, before it is possible to show how this structural or anatomical limitation gave rise to the mind-body problem as found in traditional psychology, it is necessary to consider the behavioristic basis underlying the concepts of the natural and supernatural.

Origin of the Natural-supernatural Prepossession.—This prepossession, the writer believes, can be traced to the fact that *when an organism is acted upon by a variety of intense stimuli for which there is no adequate inherited or acquired behavior, the organism reacts in the manner that is appropriate in the most similar familiar situation.*

For a concrete illustration imagine a primitive man caught in a terrific storm.¹ The stimuli acting on him are so intense and varied that no one course of action is long continued. The blinding flashes of lightning, the crashing of trees, the howling of the wind,—for none of these does he have a specialized response. An event for which there is a more or less adequate form of behavior, and which resembles the storm conditions, is perhaps the occasion when primitive man expects to be overwhelmed by a powerful enemy. He cannot, however, fight the storm as he would his enemies because of the non-localizable character of the storm stimuli. Since the storm offers nothing to attack, he begs for mercy. The act of begging for mercy is the appropriate reaction when fighting the enemy is no longer possible.

However, in the case of the storm there is no person or group of persons toward whom he can direct his supplication. Primitive man is apparently begging for mercy even though the usual stimulus (enemy) is absent. In other words, he is reacting to a physical event as if it were a person; he has

¹ Some readers will wonder why the writer did not use the phenomena of death or dreams as illustrative material. In some respects these phenomena show the personifying process better than the storm situation that has been selected. The writer believes, however, that the dualism arising out of death or dreams represents a more advanced stage in the process of personification and should be regarded as corroborating rather than initiating the process.

personified the storm. It is not necessary to assume that this is the only form of behavior that could develop. Many other ways of reacting to the storm situation probably did develop, but personifying the storm has such decided advantages over other forms of behavior that it gradually displaced them. The process of personification may be regarded as developing through two stages:

1. When there is no adequate reaction to an impelling situation (storms, etc.) primitive man reacts in a manner that is appropriate (begging for mercy, etc.) in a more familiar situation (victorious enemy).

2. There is a gradual modification of the vicarious form of behavior so developed, into appropriate reactions to imaginary persons having attributes similar to the natural events so personified. Thus the storm god becomes a blustery, noisy individual. The god of winter is cold and cruel.

This process of personifying impelling natural events is to be regarded as a gradual evolution out of which the personifying reactions survive. It is not necessary to suppose that these reactions are the initial forms of behavior. When, however, a personifying reaction once occurs it soon displaces other forms of behavior because of the following advantages:

1. The individual reacts in the most resourceful manner consistent with his native and acquired endowments, because reactions to persons represent the most complex adjustments that primitive man must make.

2. The individual is given a definite plan according to which an analysis of the perplexing situation is immediately possible.

While the analysis of the storm into its apparent moods, passions, idiosyncrasies, does not at first seem valuable, yet when the alternatives are either doing this or giving way to baffled inaction, it is easy to see how an anthropomorphic analysis may lead to reactions that further effective adjustment. A simple rule for the guidance of primitive behavior might read as follows: When in doubt as to what to do, react to the situation as if it were a person; this will not only tell you what to do, but you will also be able to separate the situation into its important and unimportant parts.

It is well to point out here that this rule is only an unverified theory; a theory that gets its almost universal validity solely from the fact that it 'works.' The theory really has no factual foundation in the sense that the hidden-man is actually ever perceived. This logical inconsistency probably had very little effect in retarding its acceptance. It was the *practical* results that determined its adoption.

It should not seem strange that a theory which actually has no factual basis should be adopted so generally. As social interaction becomes more complex many of the individual's reactions are directed to *absent* persons such as friends, enemies at a distance, chiefs or sovereigns who are actually seldom seen. It is therefore relatively easy to build up a set of adjustments to persons that are never seen or rather that are continually absent. Since the situations out of which the react-to-the-hidden-man theory arose were usually impelling or critical, the wishes and desires of the hidden-man as mediated through priests or medicine men carried with them the stamp of authority. The imperative character of the reactions to the hidden-man, their degree of permanence and constancy, the fact that the hidden-man was actually never perceived, were so different from the ordinary social reactions to other persons, or the food and shelter activities of ordinary life, that the distinction between natural and supernatural was finally made.

The Hidden-Man Theory is Displaced by Natural Science.—Even though the react-to-the-hidden-man theory could not be verified by observation, it was nevertheless effective in initiating the analysis of critical situations. This resulted in discriminative reactions which separated the essential from the non-essential. Gradually its range of application was extended to include not only critical and impelling situations but all the conditions under which man lived. Out of this, some system of religion gradually arose. While the hidden-man was never located, yet in hunting for him society learned many new ways of overcoming the hardships of nature. So valuable did some of these discriminations prove to be that some of the investigators of the attributes of the hidden-man

forgot the object of their search. It was found that many interesting and valuable forms of behavior could be developed without the hidden-man theory; indeed, in some instances the theory was even a hindrance. In this way the hidden-man theory became the instrument of its own elimination.

Finer and finer analyses were made and a methodology gradually arose in which the hidden-man theory was discarded and the emphasis placed on the classification and systematization of the discriminations that could actually be made with the sense organs. Then, instruments were devised by which the range and acuity of the sense organs were greatly increased. Formulæ and propositions were invented by the aid of which many discriminations could be predicted. Much of this now makes up what we call the body of natural science. In other words, as science develops, the gods disappear and they disappear first from those events in which the discriminations are most easily made.

There was at first considerable opposition from those in authority against discarding the hidden-man theory; indeed it is still the prevailing theory underlying human behavior, but by judiciously accepting the hidden-man theory at such times when it does not interfere with his investigations, the scientist is now left unmolested.

The Hidden-Man becomes the Man-within.—Where the nature of the investigation is such that the discriminations are not so dependent on the range and acuity of the senses, where the subject matter is hidden or obscure, or where it is dependent on records compiled by others as in the social sciences and psychology, the hidden-man theory is not so easily eliminated. A significant modification does however take place. The hidden-man becomes the man-within. The same principles that produced the hidden-man theory also produced the man-within theory of human behavior or conduct.

When man attempts to study human behavior in the same way that the geologist studies the earth, he immediately finds that one great section of his investigation is beyond the reach of his sense organs. He may discriminate to the finest detail

the nature of the stimulus; he may measure the reaction to the last degree of precision, but he cannot trace out the *path* of the nervous excitation over the nervous system which alone determines what the character of the reaction will be. The psychologist's inability to react to changes that take place in the nervous system of man is a problem of the same sort as that which confronted primitive man when he tried to react to the strange and mysterious forces of the storm. Primitive man solved his problem by personifying natural phenomena. The early student of human behavior solved his problem by personifying neural function.

For the early psychologist the man-within who directed the distribution of the nervous impulses was called the soul or ego. But the closest anatomical scrutiny failed to reveal either the soul or its administrative headquarters. It was therefore concluded by some that the soul or the man-within did not live in the body but merely escorted the nervous impulses, without influencing their distribution. By others it was concluded that while the soul did influence the distribution of the nervous impulses, it was impossible to say how it was done. A perplexing situation arose. Some psychologists invented new terms to take the place of the word soul. Some of these terms are volition, conative tendency, psychic force, vital impulsion, will to live, cosmic urge, subconscious, censor, libido, etc. Others decided that while there was not a really truly man-within, there was something else that functioned in the same way. This substitute for the man-within they called awareness, consciousness, mind, experience, meaning, intellect, mental function, satisfaction and annoyance, '*unanschaulichen Bewusstseinsinhalt*.'

Even this late modification of the man-within theory was of little help to those psychologists who were primarily concerned with human conduct. No explanation or description of the precise manner in which mind or consciousness or mental function influenced behavior was offered. The insistent demands proved annoying and to escape it some psychologists lost interest in human behavior and devoted themselves to a study of mind or 'consciousness as such.'

A new group of psychologists arose who decided to throw out the hidden-man and the man-within theories altogether. These psychologists maintain that if the nervous system, while in function, could be scrutinized as closely as the events occurring outside man's body, the need for a soul, or mind or consciousness, would be no more necessary than the hidden-man theory is necessary to account for the storm. Just as the hidden-man theory arose from the inadequate discrimination of the elements which made up natural events, so the man-within theory or the mind-body problem arose because man has no sense organs located in the nervous system by means of which the most important element in behavior, the nervous impulse, can be scrutinized and localized. That condition which is called awareness and which has always been surrounded by a halo of mystery, merely indicates that neural activity may take place and yet the individual may not be able to detect any bodily movements, or react discriminatively to the neural activity. That is to say, awareness means only that there is no detectable overt action, but nevertheless there is neural function which, if it could be observed, would have a specific configuration. These psychologists who are often called behaviorists further believe that the study of human behavior along the lines laid down by the natural sciences will not restrict it to a few mechanical reflexes but will in time include all activity even that of the introspecting psychologist or the philosophizing philosopher.

Summary.—The origin of the dualistic prepossession in traditional psychology that expresses itself as the mind-body problem, may be regarded as arising from the tendency of man to personify events for which no adequate form of behavior has been established. To react to a perplexing and impelling situation as if it were a person, releases the most effective inherited and acquired reactions and also furnishes a plan of analysis according to which the situation may be separated into important and unimportant parts. As the progressive perfection in the instruments of analysis fail to reveal the 'hidden-man' the tendency to personify gradually disappears.

Human behavior is determined by neural function but because there are no sense organs in the nervous system for which the adequate stimulus is neural function, it is impossible to discriminate the conditions which show the relation between the environment and behavior. To overcome this limitation in the study of human behavior, traditional psychology has personified neural function. The personification has passed through successive stages, from the frankly confessed personal soul or spirit, to the more restricted use of the term ego or self and finally to the guarded use of the conceptions mind or consciousness.