MIND AND BODY


Translated and summarized by A. T. Boisen

An attentive examination of the mental life and of its physiological accompaniment leads me to believe that common sense is right and that there is infinitely more in human consciousness than in the corresponding brain. The brain does not determine thought and by the same token thought is in large part independent of brain.

Real, concrete, living thought is something of which psychologists have hitherto had little to say. What one usually studies under this name is not so much thought as an artificial imitation obtained by piecing together images and ideas. With images and with ideas you will not get thought any more than you will get movement out of positions. It appears when thought, instead of continuing on its way, makes a pause or turns back upon itself.

The brain is the instrument by which consciousness, feeling and thought are directed upon real life and in consequence rendered capable of efficacious action. Let us say, then, that the brain is the organ of attention to life. It is for this reason that a slight modification in the cerebral substance is sufficient to cause an injury to the entire mental life. It is not the spirit itself that is deranged, but rather the instrument for the insertion of mind into matter. When a madman talks his reasoning may be in accordance with the strictest logic. One might say after listening to this or that paranoid that it is by the excess of his logic that he is led astray. His mistake lies not in reasoning badly, but in reasoning away from reality, like a man who dreams.

The only function of thought to which one might assign a place in the brain is memory, particularly the memory of words. Since the time of Broca, a more and more complicated theory of aphasia and of its cerebral accompaniments has been built up. Scientists of unquestioned competence now challenge this theory, but there is one point upon which all agree: maladies in the memory of words are caused by more or less clearly localized lesions in the brain. Let us see what actually takes place in such maladies. In cases where the lesion is grave and the memory of words is profoundly affected, it happens frequently that a strong excitation, an emotion, for example, brings back all at once the memory which had seemed forever lost. Would this be possible if the memory had been deposited in the altered or destroyed matter? What takes place is rather as though the brain served to recall the memory, not to store it.

Notice now what we see in progressive aphasia, that is, in cases in which the forgetting of words keeps getting worse. In general the
words disappear in a definite order, just as if the disease knew grammar. Proper nouns disappear first, then common nouns, then adjectives and lastly verbs. This may at first seem to justify the hypothesis of an accumulation of memories in the brain tissue. Proper nouns, common nouns, adjectives and verbs will constitute so many superimposed strata, as it were, and the disease will attack one of these strata after the other. True, but the disease may originate from the most diverse causes, it may take the most varied forms, it may begin at any point whatsoever of the cerebral area concerned and progress indifferently in any direction; and still the order of disappearance of memories remains the same. Would this be possible if it was the memories themselves that the disease attacked? The explanation must then be sought elsewhere. Here is the very simple explanation which I propose. In the first place, if the proper nouns disappear before the common nouns, then the latter before the adjectives and the adjectives before the verbs, it is because it is more difficult to recall a proper noun than a common noun, a common noun than an adjective and an adjective than a verb. The function of recall, in which the brain evidently assists, will then limit itself to tasks that are easier and easier in proportion as the lesion in the brain becomes more aggravated. But whence comes the greater or less difficulty in recall? And why should verbs of all words be those which we have least difficulty in evoking? It is due simply to the fact that verbs express actions and that actions may be mimicked. The verb can be directly represented by gestures, the adjective only thru the mediation of the verb to which it is related, the common noun thru the double intervention of the adjective which expresses one of its attributes and of the verb implied by the adjective, the proper noun thru the triple intervention of the common noun, of the verb and of the adjective. It follows then that as we go from the verb to the proper noun we go farther and farther away from action which is directly capable of expression in gestures and thus of representation by physical acts. Devices more and more complicated become necessary to symbolize in movement the idea expressed by the word we seek. Since it is upon the brain that the task of preparing these movements devolves, and since its functioning is the more impaired, reduced, simplified as the region involved is injured, it is by no means surprising that an alteration or destruction of tissues which makes impossible the evocation of proper or of common nouns should leave unimpaired the power to recall verbs. Here as elsewhere the facts lead us to see in cerebral activity an acted-out extract of mental activity and not an equivalent of this activity.

I believe that our entire past is present in us subconsciously, -- I mean by that, present in us in such a manner that our consciousness, in order to become aware of it, has no need of going outside of itself or of introducing anything external. In order to perceive distinctly all that it contains, or rather all that it is, it needs only to get rid of an obstacle, to raise a veil. Happy obstacle that! and the veil infinitely precious! It is the brain which renders the service of keeping our attention fixed on life; and life looks forward. It looks back
upon the past only in so far as the past can aid it to clarify and prepare for the future. To live, for the spirit, is essentially to concentrate on the act of accomplishing. It is then inserted into things by means of a mechanism which will extract from consciousness all that is serviceable for action at the risk of obscuring most of the rest. Such is the role of the brain in memory: it is not used to preserve the past but first of all to mask it, then to allow to appear whatever is practically useful. And such also is the role of the brain in the face of mind in general. Disentangling from the mind what is capable of externalization in movement, inserting the mind into the motor frame, it leads it most frequently to limit its vision, but also to render its action efficacious. This means that mind surpasses brain in every respect and that cerebral activity responds only to the lowest part of mental activity.

It follows therefore that the life of the spirit cannot be a mere effect of the life of the body and that everything happens as though the body were simply used by the spirit. In consequence we have no reason to suppose that body and mind are bound inseparably one to the other.