Fortunately for you teachers, the elements of the mental machine can be clearly apprehended, and their workings easily grasped. And, as the most general elements and workings are just those parts of psychology which the teacher finds most directly useful, it follows that the amount of this science which is necessary to all teachers need not be very great. Those who find themselves loving the subject may go as far as they please, and become possibly none the worse teachers for the fact, even though in some of them one might apprehend a little loss of balance from the tendency observable in all of us to overemphasize certain special parts of a subject when we are studying it intensely and abstractly. But for the great majority of you a general view is enough, provided it be a true one; and such a general view, one may say, might almost be written on the palm of one's hand.

Least of all need you, merely as teachers, deem it part of your duty to become contributors to psychological science or to make psychological observations in a methodical or responsible manner. I fear that some of the enthusiasts for child-study have thrown a certain burden on you in this way. By all means let child-study go on,--it is refreshing all our sense of the child's life. There are teachers who take a spontaneous delight in filling syllabuses, inscribing observations, compiling statistics, and computing the per cent. Child-study will certainly enrich their lives. And, if its results, as treated statistically, would seem on the whole to have but trifling value, yet the anecdotes and observations of which it in part consist do certainly acquaint us more intimately with our pupils. Our eyes and ears grow quickened to discern in the child before us processes similar to those we have read of as noted in the children,--processes of which we might otherwise have remained inobservant. But, for Heaven's sake, let the rank and file of teachers be passive readers if they so prefer, and feel free not to contribute to the accumulation. Let not the prosecution of it be preached as an imperative duty or imposed by regulation on those to whom it proves an exterminating bore, or who in any way whatever miss in themselves the appropriate vocation for it. I cannot too strongly agree with my colleague, Professor Münsterberg, when he says that the teacher's attitude toward the child, being concrete and ethical, is positively opposed to the psychological observer's, which is abstract and analytic. Although some of us may conjoin the attitudes successfully, in most of us they must conflict.

The worst thing that can happen to a good teacher is to get a bad conscience about her profession because she feels herself hopeless as a psychologist. Our teachers are overworked already. Every one who adds a jot or tittle of unnecessary weight to their burden is a foe of education. A bad conscience increases the weight of every other burden; yet I know that child-study, and other pieces of psychology as well, have been productive of bad conscience in many a really innocent pedagogic breast. I should indeed be glad if this passing word from me might tend to dispel such a bad conscience, if any of you have it; for it is certainly one of those fruits of more or less systematic mystification of which I have already complained. The best teacher may be the poorest contributor of child-study material, and the best contributor may be the poorest teacher. No fact is more palpable than this.

So much for what seems the most reasonable general attitude of the teacher toward the subject which is to occupy our attention.

II. THE STREAM OF CONSCIOUSNESS

I said a few minutes ago that the most general elements and workings of the mind are all that the teacher absolutely needs to be acquainted with for his purposes.

Now the *immediate* fact which psychology, the science of mind, has to study is also the most general fact. It is the fact that in each of us, when awake (and often when asleep), *some kind of consciousness is always going on.* There is a stream, a succession of states, or waves, or fields (or of whatever you please to call them), of knowledge, of feeling, of desire, of deliberation, etc., that constantly pass and repass, and that constitute our inner life. The existence of this stream is the primal fact, the nature and origin of it form the essential problem, of our science. So far as we class the states or fields of consciousness, write down their several natures, analyze their contents into elements, or trace their habits of succession, we are on the descriptive or analytic

level. So far as we ask where they come from or why they are just what they are, we are on the explanatory level.

In these talks with you, I shall entirely neglect the questions that come up on the explanatory level. It must be frankly confessed that in no fundamental sense do we know where our successive fields of consciousness come from, or why they have the precise inner constitution which they do have. They certainly follow or accompany our brain states, and of course their special forms are determined by our past experiences and education. But, if we ask just *how* the brain conditions them, we have not the remotest inkling of an answer to give; and, if we ask just how the education moulds the brain, we can speak but in the most abstract, general, and conjectural terms. On the other hand, if we should say that they are due to a spiritual being called our Soul, which reacts on our brain states by these peculiar forms of spiritual energy, our words would be familiar enough, it is true; but I think you will agree that they would offer little genuine explanatory meaning. The truth is that we really *do not know* the answers to the problems on the explanatory level, even though in some directions of inquiry there may be promising speculations to be found. For our present purposes I shall therefore dismiss them entirely, and turn to mere description. This state of things was what I had in mind when, a moment ago, I said there was no 'new psychology' worthy of the name.

We have thus fields of consciousness,--that is the first general fact; and the second general fact is that the concrete fields are always complex. They contain sensations of our bodies and of the objects around us, memories of past experiences and thoughts of distant things, feelings of satisfaction and dissatisfaction, desires and aversions, and other emotional conditions, together with determinations of the will, in every variety of permutation and combination.

In most of our concrete states of consciousness all these different classes of ingredients are found simultaneously present to some degree, though the relative proportion they bear to one another is very shifting. One state will seem to be composed of hardly anything but sensations, another of hardly anything but memories, etc. But around the sensation, if one consider carefully, there will always be some fringe of thought or will, and around the memory some margin or penumbra of emotion or sensation.

In most of our fields of consciousness there is a core of sensation that is very pronounced. You, for example, now, although you are also thinking and feeling, are getting through your eyes sensations of my face and figure, and through your ears sensations of my voice. The sensations are the *centre* or *focus*, the thoughts and feelings the *margin*, of your actually present conscious field.

On the other hand, some object of thought, some distant image, may have become the focus of your mental attention even while I am speaking,--your mind, in short, may have wandered from the lecture; and, in that case, the sensations of my face and voice, although not absolutely vanishing from your conscious field, may have taken up there a very faint and marginal place.

Again, to take another sort of variation, some feeling connected with your own body may have passed from a marginal to a focal place, even while I speak.

The expressions 'focal object' and 'marginal object,' which we owe to Mr. Lloyd Morgan, require, I think, no further explanation. The distinction they embody is a very important one, and they are the first technical terms which I shall ask you to remember.

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In the successive mutations of our fields of consciousness, the process by which one dissolves into another is often very gradual, and all sorts of inner rearrangements of contents occur. Sometimes the focus remains but little changed, while the margin alters rapidly. Sometimes the focus alters, and the margin stays. Sometimes focus and margin change places. Sometimes, again, abrupt alterations of the whole field occur. There can

seldom be a sharp description. All we know is that, for the most part, each field has a sort of practical unity for its possessor, and that from this practical point of view we can class a field with other fields similar to it, by calling it a state of emotion, of perplexity, of sensation, of abstract thought, of volition, and the like.

Vague and hazy as such an account of our stream of consciousness may be, it is at least secure from positive error and free from admixture of conjecture or hypothesis. An influential school of psychology, seeking to avoid haziness of outline, has tried to make things appear more exact and scientific by making the analysis more sharp.

The various fields of consciousness, according to this school, result from a definite number of perfectly definite elementary mental states, mechanically associated into a mosaic or chemically combined. According to some thinkers,--Spencer, for example, or Taine,--these resolve themselves at last into little elementary psychic particles or atoms of 'mind-stuff,' out of which all the more immediately known mental states are said to be built up. Locke introduced this theory in a somewhat vague form. Simple 'ideas' of sensation and reflection, as he called them, were for him the bricks of which our mental architecture is built up. If I ever have to refer to this theory again, I shall refer to it as the theory of 'ideas.' But I shall try to steer clear of it altogether. Whether it be true or false, it is at any rate only conjectural; and, for your practical purposes as teachers, the more unpretending conception of the stream of consciousness, with its total waves or fields incessantly changing, will amply suffice.[A]

[A] In the light of some of the expectations that are abroad concerning the 'new psychology,' it is instructive to read the unusually candid confession of its founder Wundt, after his thirty years of laboratory-experience:

"The service which it [the experimental method] can yield consists essentially in perfecting our inner observation, or rather, as I believe, in making this really possible, in any exact sense. Well, has our experimental self-observation, so understood, already accomplished aught of importance? No general answer to this question can be given, because in the unfinished state of our science, there is, even inside of the experimental lines of inquiry, no universally accepted body of psychologic doctrine....

"In such a discord of opinions (comprehensible enough at a time of uncertain and groping development), the individual inquirer can only tell for what views and insights he himself has to thank the newer methods. And if I were asked in what for me the worth of experimental observation in psychology has consisted, and still consists, I should say that it has given me an entirely new idea of the nature and connection of our inner processes. I learned in the achievements of the sense of sight to apprehend the fact of creative mental synthesis.... From my inquiry into time-relations, etc.,... I attained an insight into the close union of all those psychic functions usually separated by artificial abstractions and names, such as ideation, feeling, will; and I saw the indivisibility and inner homogeneity, in all its phases, of the mental life. The chronometric study of association-processes finally showed me that the notion of distinct mental 'images' [_reproducirten Vorstellungen] was one of those numerous self-deceptions which are no sooner stamped in a verbal term than they forthwith thrust non-existent fictions into the place of the reality. I learned to understand an 'idea' as a process no less melting and fleeting than an act of feeling or of will, and I comprehended the older doctrine of association of 'ideas' to be no longer tenable.... Besides all this, experimental observation yielded much other information about the span of consciousness, the rapidity of certain processes, the exact numerical value of certain psychophysical data, and the like. But I hold all these more special results to be relatively insignificant by-products, and by no means the important thing."--Philosophische Studien, x. 121-124. The whole passage should be read. As I interpret it, it amounts to a complete espousal of the vaguer conception of the stream of thought, and a complete renunciation of the whole business, still so industriously carried on in text-books, of chopping up 'the mind' into distinct units of composition or function, numbering these off, and labelling them by technical names.