THE PSYCHOLOGICAL REVIEW.

THE PSYCHOLOGICAL STANDPOINT.

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I.

The plain man who is innocent of special psychological culture, and has only the knowledge of his own mind and of other minds which is forced upon him by experience and the unavoidable half-conscious reflection upon experience to which one is led by every-day life, is still pretty well provided with psychological knowledge of a certain sort, and he uses with some skill the psychological methods in vogue in the schools. His thinking is by no means clear, it is sometimes quite inconsistent, it is limited to a narrow field. Still, I should hold it to be, in embryo, psychology as natural science, for it is psychology from the standpoint of the common understanding, and in thinking about minds and their relations to things the plain man thinks very much as he does when he is concerned with material objects. He believes that he has a mind, though he has no very distinct notion of what it is. He believes that this mind is intimately related to his body, which is a thing outside of his mind. He believes that through this body it is related to an external real world, from which it receives influences and which it can influence in return. In this external world he thinks he finds other bodies more or less like his own, and believes that there are, connected with them, other minds, as his mind is connected with his body. Further, he believes that, as he can express by actions of his body ideas or emotions in his mind, so the minds connected with other bodies can give

expression to their ideas or emotions, and such an expression is to him the revelation of the contents of these other minds. He thus compares the mental states of other men with his own, and forms some general notions of the contents of minds and the ways in which they act, thus arriving at the beginning of a mental science. He may have done all this without even having heard of the science of psychology.

The handbooks of psychology describe at length the stages by which our plain man arrives at the knowledge of minds which he possesses, and describe it much better than the possessor himself could do. His thinking has been half-conscious and unanalytic; he has rather felt his way than seen it. And yet we may note that the psychologist, in obtaining the knowledge which has made it possible for him to write such a description, has followed no method not already applied by the unscientific subject of his description. Our subject has had recourse to introspection; he has made use of the objective method; he has not confined himself wholly to passive observation, but has sometimes experimented. Experience of his own conscious states has given him the key which is to make significant the expressions and actions of other men and of brutes. He has certainly observed these expressions and actions, and framed a more general notion of mind than he could have done by a mere examination of his own mental processes. And every time he has sought by persuasion or by any other means to produce a given mental state in another he has employed experiment, as does the *galopin* who rides on the back-platform of the bob-tailed car, at a personal inconvenience to himself, with the avowed purpose of getting the driver 'wild.' Of course, such introspection as we are discussing is blind and instinctive, such observation is loose and inaccurate, such experiment is undertaken for no scientific purpose, and sins in all sorts of ways against the canons of experimental investigation. Nevertheless, they remain introspection, observation, and experiment. The difference between the plain man and the psychologist does not lie in the fact that the latter uses any method peculiar to himself, esoteric and above the comprehension of the unlearned. It is simply a case of the difference everywhere found between the scientific

and the unscientific, the man who applies methods carefully and seeks accurate and exhaustive knowledge of a subject, and the man who feels his way blindly, going only so far as he is impelled to go by immediate practical needs. The knowledge of mind gained by the plain man is loose and vague, more or less inconsistent, and very limited in extent. Yet it is, as far as it goes, a knowledge of mind, and does not differ in kind from that of the psychologist.

II.

Now that psychology is emerging gradually from that ill-defined medley which has passed by the name of philosophy, and is taking its place as a distinct discipline, it is coming, I think, to be generally accepted that the psychologist must occupy much the same standpoint as the ordinary man. I do not, of course, mean that he must be as loose and careless in his thinking, but that he must be scientific rather than metaphysical, accepting without question the assumptions upon which the natural sciences rest, and investigating the phenomena of mind much as they investigate material phenomena. The plain man becomes more careful and accurate when he becomes scientific, but he does not change his whole point of view. He is still in a real world of things about which he reasons as he did before. As a plain man he knew something about plants; as a botanist he knows much more, but he has passed through no intellectual revolution in becoming a botanist. There in the real world are real plants which he may examine, and upon which he may try experiments. The results obtained by the botanist are sufficiently intelligible to him, even if he be a very poor botanist himself. They are expressed in a language of which he has always known at least the rudiments. And the physiologist assumes an external world, in which are a number of organized bodies, forming a part of a real system of things. He seeks to obtain a general knowledge of the peculiar phenomena presented by these bodies, and to fix their relations to the rest of the system. Every one knows something about physiology, even if he has never heard the word pronounced. One may know very little

indeed, but even in that case one's ignorance differs from that of the physiologist only in degree. The point of view is essentially the same. Lungs are lungs, and exist and function in a real external world among other real things, and the only problem is to discover how they conduct themselves there. Physiological truths do not lead one away from the ways of thinking to which one is accustomed in common life.

In the same way the psychologist assumes an external real world, the world of matter and motion. In this world there are organized bodies presenting certain peculiar phenomena which he regards as indications of mental action. He accepts a plurality of minds distinct from each other and from the system of material things, each standing in a peculiar and intimate relation to one body. Each mind knows directly its own states, and knows everything else by inference from those states, receiving messages along certain bodily channels and reacting along others. Upon this basis he strives to give an accurate account of the contents of minds and to trace the history of their development. He stands upon the same ground as the ordinary man, and, as has been said above, he follows the same methods in his investigations, making use of introspection, observation, and experiment. He applies the methods in a broader and more scientific way; he is clearer, and more exact and thorough; but he remains a student of 'natural science.' However he may modify, as a result of his studies, his views of minds and of their relation to a material world, he still holds to the existence of distinct individual minds in certain relations to such a world and through that to each other. He conceives each as shut up to its representations of things, and dependent upon messages conveyed to it from without, as does the disciple of Locke. Ideas are, to him, like images in a mirror, numerically distinct from the things which they represent, and of which they give information.

A psychologist is, it is true, also a man, and he may be a metaphysician or epistemologist as well as a psychologist. In such capacity he may have his own opinion about these psychological assumptions. He may be a natural dualist or a hypothetical realist, a materialist or an idealist. As a phi-

losopher he is free to choose, but not as a psychologist. In the latter capacity he puts all this aside, and remains on the plane of the common understanding, the plane of natural science. There is, of course, much that is vague in the thinking of the man who rests wholly on the plane of natural science. The physicist may have no very clear notion of what he really means by matter and energy, and yet he may be a good physicist. He may experiment with ingenuity, and observe and record phenomena with accuracy. And the psychologist may have the vaguest of notions as to the whole connotation of the word 'mind,' or of the phrase 'a material world,' and yet he may be a good psychologist, and materially add to our knowledge of minds. If he has not carried on with some measure of success the sort of reflective thinking demanded in epistemology or metaphysics, he will probably mix from time to time with his psychology more or less crude material that is not strictly psychological. But this is on his part a work of supererogation. He has the right, as has the physicist, to work in his own field, and to make use of some concepts he has not completely analyzed.

III.

It must be admitted that the position regarding minds and their relation to an external world taken by the plain man and by the psychologist contains, when criticised from the standpoint of epistemology, that most serious of difficulties, a flat contradiction. It assumes that each mind has only its representative images of things, and not the things themselves. When it asks how a given mind comes to have a knowledge of an external thing, it concerns itself with the messages that have been conveyed to the mind, the materials, so to speak, out of which the image has been built up. It describes the process of building up such an image, and, distinguishing sharply between the image and the thing, maintains that the mind knows only so much about the thing as is contained in this image or in other images obtained in the same way. It admits that, given such an image in the absence of the thing (a hallucination), the mind will have

absolutely no way of knowing the thing absent except by referring to its other experiences and assuming this one, as abnormal, to be a false representative, and without a corresponding reality behind it. In other words, it shuts the mind up to its own circle of consciousness, and makes the external world present to it only by proxy. The outer world, *as the mind knows it*, is a complex mental experience, built up out of mental elements, and not the real outer world at all. It is only something that stands for the real outer world. Thus the very idea 'outer' is, to the mind possessing it, only a something in consciousness—an inner representative of genuine externality, but, in itself, not external at all.

Yet all this rests upon reasoning in which it has been assumed that the mind is *not* shut up to its own experiences, but directly knows an external world of things. A man looks at his own body, the body of his neighbor, and some material object in front of which both are standing, and he seems to himself to be immediately conscious of all three. He grants his neighbor a knowledge of the object, reasoning as I have indicated in an earlier section, and distinguishes between this man's knowledge of the object and the object itself. The former he makes a representative of the latter, connects it in thought with the man's brain, and admits that it may even not wholly resemble the object as he sees it. He holds that the man is not directly conscious of the object itself, but infers it through the representative image. He then applies the same reasoning to himself, and concludes that he is himself not really conscious of the three objects with which he started, but only of representative images. Through such images he must infer the whole outer world—his own body, other men, other things.

But if he is not really conscious of his own body, the other man's body, and the real object, what becomes of his reasoning? Of what is the other man's image representative, and with what is it connected? Is it representative of an external object? The object which it has been assumed to represent is now seen to be an image in his own consciousness, and there is not a shadow of evidence that it represents any other. With what brain is it connected?

The brain belonging to that body which is under observation? That body, too, is now seen to be his own image and relegated to consciousness. And what do his own images represent and where are they? His image of the object cannot represent that object seen out there in front of his body. That object is his image, if he is shut up to images, and his body as perceived is another image in his consciousness with the object. The real object, the real body, are things to be inferred. They are not open to direct inspection. His image of the thing must not be referred to the brain which belongs to the body of whose existence he is directly aware. It must be referred to a brain in a totally different world. Where look for evidence that it is connected with any such brain in any such body? Yet evidence must be adduced for all this. The doctrine that there is an external world, and that it is mirrored by a number of minds which are shut up to their own representations of it, is not usually advanced as a gratuitous fiction. It is supposed to rest upon evidence. Is not one conscious of one's own mental experiences? Can one not observe the relations of these to the material world? Can one not arrive by analogical reasoning at some notion of the mental states of others, and apply one's results to one's self? The appeal is to experience, to observation and induction. And yet if the conclusion of the argument be true, the foundation upon which it rests is a delusion. If one be really shut up to one's own mental states, one has never observed their relations to material things, and never inferred from changes in material things the mental states of another. It is a strange argument that rests upon an assumption which its conclusion declares to be false.

The difficulty here pointed out is not assumed gratuitously. It is really inseparable from the psychological position both of the plain man and of the psychologist, though it is forced into greater prominence by the superior consistency and clearness of the latter. The plain man distinguishes in his loose fashion between a man's ideas of things and the things themselves, and he admits that if the ideas are not true representatives, their possessor will not truly know the things.

The psychologist makes more distinct the line of separation, and conceives the man's whole experience of an outer world as a mere copy of what is external, describing in detail the elements of which it is built up, and the process of its formation. Both hold, explicitly or implicitly, that we perceive directly the outer world, and that we do not so perceive it, but only infer it. The contradiction is there. It is imbedded in the very structure of the psychological position, the standpoint of common thought and natural science.* Psychology is not called upon to solve it, for it does not concern psychology. The psychologist has done and still does excellent work while simply disregarding it. It may safely be left to the epistemologist.

And the epistemologist, if he be wise, will not quarrel with the psychological standpoint. He will recognize its value as a basis for work of a certain kind, and he will object to the psychologist's mixing with his psychology reasonings which, however true and valuable in themselves, serve only to darken counsel when mingled injudiciously with other things. He may, as epistemologist, point out where the difficulty really lies, show why the psychologist's assumption does not lead to error, and indicate how the results obtained by him are true even for epistemology when restated in certain ways. But he will regard such discussions as more or less out of place in a text-book of psychology, and regret finding them there, much as he would regret finding

* I shall not here discuss at length the peculiar philosophical doctrine which attempts to hold to the psychological standpoint and remove the contradiction by declaring that both the ideas and the things are really given in experience. One need only read what has been written in support of it to be convinced that its adherents, after distinguishing between ideas and things, confound them completely. If consciousness testifies to anything clearly and unmistakably, it is to the fact that we do not under normal circumstances see things double. The inkstand in front of me I see. I see only one. I may call that one *idea* or *thing* as I please. I am certainly not conscious in looking at it of both a copy and an original. How would a hallucination be possible if, in addition to the image, there were immediately present to the mind in perception also the thing represented by the image? The absence of the thing would be remarked at once. The doctrine is bad as psychology, and bad as epistemology. It cannot afford to be really clear, and it wisely takes refuge in obscurity, making the phrase 'knowledge of things' unintelligible. I shall again touch upon this point later.

metaphysical reflections introduced to any great extent in a treatise on physics.

IV.

The psychologist should, then, frankly accept the standpoint of common thinking, the natural science standpoint, without attempting to make it consistent. He should accept without question an external world; should assume that his own ideas of things represent it, and can be proved by observation to represent it truly; should infer from the actions of other bodies ideas more or less like his own, which are representatives of external things as are his ideas.* He should then, in harmony with the psychological fiction that no one is directly conscious of external real things, assume that each mind is shut up to its own representations; that the world is mirrored in each consciousness, and that the pictures of it in different minds may differ. To him each mind's knowledge of the external world should mean the presence in it of such a picture—of such and such mental elements arranged in such and such ways. He can then set before himself the difficult but perfectly definite task of discovering just the elements present in a consciousness, and the method of their arrangement. He may describe the building up of a consciousness, and may relate everything in it to the system of real things in an intelligible way. His work is, in a real sense of the word, scientific, and resembles closely what scientific men are trying to do in other fields. It does not demand metaphysical reflection. And the best results are to be obtained in psychology, I feel sure, by holding firmly to this scientific standpoint. When it is abandoned, as it sometimes is even by men whom one would most naturally expect to be strictly 'scientific,' the resulting obscurity and confusion are positively depressing to a lover of clear thinking. Of course, until epistemology as well as psychology has done its perfect work all one's thinking will not be perfectly clear. The plain man and the scientist both employ, as has

* I, of course, do not limit a consciousness to such ideas with 'objective reference.'

been indicated above, some conceptions that they have not completely analyzed. Such obscurities in their thought need not prevent it from being, as common thought or as scientific reasoning, clear and effective. One may reason well and clearly about spaces and times without being a philosopher, provided one remain on the plane of the common understanding, and ask only for scientific clearness. But when one occupied with scientific reasonings abandons the scientific standpoint, he is apt to introduce a very different kind of obscurity, and to encumber his task with serious and needless difficulties.

One or two illustrations will serve to make more clear the point upon which I wish to insist here. Within the limits dictated by an article of this kind no thought can be developed at great length. But I hope to make plain in one or two instances that psychology is a loser when the psychologist abandons the psychological standpoint, and tries to be psychologist and epistemologist at the same time.

V.

The psychological standpoint assumes, as I have said, an external world and a number of minds or consciousnesses reflecting it. To it, knowledge of the external world or knowledge in any sense means the presence of such and such complexes in a consciousness. The psychologist sets himself the task of analyzing these, exhibiting their elements, and giving an account of their genesis and their relations to other things. Now, as all external things, in so far as they are to enter a consciousness and be known, must enter through their proxies, it is of the very first importance not to conceive of the contents of a consciousness in such a way as to make it inconceivable how they can act as representatives at all. For example, the external thing to be known is a chair; the representative of this in a particular consciousness is the idea of a chair. Since a chair has legs, a seat, and a back, and is by these and other marks distinguished from other objects, must there not be in the representative, in the idea itself, something to correspond to these? If the chair has color as

well as form, must not both elements be in some way represented in the idea? Must not the arrangement of represented elements in the object have its representative in an arrangement of representing elements in the idea? If one is to have a true and complete knowledge of any external thing, must not every single element in the external object have its correlate in consciousness? Surely it is inconceivable that one and the same thing in consciousness should stand for half a dozen things outside, and yet give true knowledge of them or truly represent them. Is the external object complex and the representative idea simple, the complexity of the object is not represented at all. If we assume, as I think the psychologist must, that each man knows of things only as much as is represented in his ideas, we must conceive of his ideas as really capable of being representatives of complex things. We must make his consciousness complex.

I do not think I can better emphasize the point I am making than by referring to the treatment of consciousness contained in Professor James' able book, which every one has so lately been reading.* This paper is in no sense a general criticism of the book, to which I refer merely for the sake of illustration. The book is, however, so frank, and so positive in its statements, that one naturally turns to it rather than to another, when one wishes to find a doctrine 'writ large.'

Professor James gives as the irreducible data of psychology four things, which he emphasizes by numbering them and putting them in separate frames. These four things are the psychologist, the thought studied, the thought's object, and the psychologist's reality (vol. I. p. 184). Why he has selected as the fourth the psychologist's reality, it is a little hard to say, for he states immediately afterwards that the psychologist believes in the reality of numbers 2, 3, and 4, and he himself evidently assumes without question, throughout the book, the reality of 2 and 3. One is further puzzled to know why Professor James has omitted from his enumeration something else which he appears to distinguish from all the things mentioned above, and to treat as an irreducible datum.

* *Principles of Psychology*, N. Y. 1890.

This something, the most mysterious thing in the world (p. 216), is Knowledge. Knowledge is, it is true, spoken of in one passage as a 'particular quality' or 'cognitive function' of states of consciousness (p. 185), and it is asserted in another that 'the brain being struck, the knowledge is constituted by a new construction that occurs altogether *in* the mind' (p. 219). One who read such passages alone might be inclined to regard knowledge as 'a mode of being of ideas' or a kind of consciousness. But Professor James considers the view of knowledge which would make it "a mode of *being* of 'ideas'" as 'pitifully impotent' (p. 476); and distinguishes between thoughts (consciousness, p. 185) and knowledge, as follows: "Almost anyone will tell us that thought is a different sort of existence from things, because many sorts of thought are of no things—e.g., pleasures, pains, and emotions; others are of non-existent things—errors and fictions; others again of existent things, but in a form that is symbolic and does not resemble them—abstract ideas and concepts; whilst in the thoughts that do resemble the things they are 'of' (percepts, sensations), we can feel, alongside of the thing known, the thought of it going on as an altogether separate act and operation in the mind" (p. 297). When one reads these passages and others like them, one feels that Professor James must look upon knowledge as a something quite distinct from all that to which he refers under the various names of thoughts, feelings, mental states, and states of consciousness. He must use the word mind to indicate a something which contains both states of consciousness and knowledge, two elements differing in kind, irreducible and ultimate. Such a position, consistently held, involves one, it is true, in difficulties that must seem to the average man rather startling. If, for instance, when one perceives a chair, one directly knows the chair, and feels, alongside of this knowledge, the thought or percept, it would seem quite conceivable that one could know the chair in the absence of the percept, and the function of percepts in perceiving is not apparent. One might know all sorts of things without having any mental states at all. One would have only knowledge—no consciousness, no thoughts.

It is merely possible that Professor James has omitted

knowledge from his list of irreducibles because he does not regard it as concerning psychology at all. We naturally think of everything that can be found in a mind as a legitimate object of psychological study, but, according to an explicit statement in the chapter on 'The Methods and Snares of Psychology,' this science is limited to the study of thoughts, or states of consciousness, and their relations to things. In summing up his chapter Professor James says, with the emphasis of italics: "These thoughts are the subjective data of which he (the psychologist) treats, and their relations to their objects, to the brain, and to the rest of the world constitute the subject-matter of psychologic science." If psychology be really limited to this field, and if knowledge be something different from thoughts, of course it does not concern the psychologist. Nevertheless, in spite of the above citation, I can scarcely believe that Professor James seriously means to thus turn his back upon knowledge. He certainly uses it more or less in his psychology. I can think of only one pretext under which he may introduce it. It may be made to fall within the limits he has indicated, if it be defined as a relation between thoughts and external objects. In some passages Professor James appears to so define it. And yet, if this be the definition of knowledge, it is hard to see how knowledge can be wholly *in* the mind, and once there 'may remain there, whatever becomes of the thing' (p. 219).

I confess I am puzzled to know what to do with knowledge as treated by Professor James, but, all things considered, I think it must be added to the above mentioned list of irreducibles—or rather may be allowed to take the place left vacant by the psychologist, the thinker, who turns out later in the book (Chapter X.) to be a thought, or pulse of consciousness. (In speaking above of the possibility of knowledge without consciousness, the knower was assumed to be an irreducible.) With his conversion into a thought, we have still on our hands thoughts or states of consciousness, objects, and knowledge. The last I will leave at this point, frankly admitting that, with all Professor James' assistance, I can form no clear notion of what he makes knowledge, or even feel certain whether he puts it in the mind or outside of it. It appears to

be distinct from consciousness and also distinct from objects known. States of consciousness are generally admitted to differ from one another, and so are objects, but whether we are to regard knowledges as differing, so that what is in one mind can be distinguished from what is in another simply by a difference in this element, I cannot guess. If there be no difference in this knowledge element, then the contents of different minds, or of the same mind at different times, must be distinguished and classified through differences in their other elements—they differ in containing different conscious states. Psychology, in so far as it is concerned in distinguishing and describing mental contents, may go on while ignoring knowledge.

To turn to something less mysterious and more familiar, conscious states—these are recognized in every psychology, and by psychology as natural science must, I think, be made to cover even what is meant by knowledge. It must regard a man's consciousness as all he gets of anything, and must conceive even his knowledge or belief that there is something beyond his consciousness as in itself a mental complex, a conscious state, which can be analyzed, and described, and the genesis of which can be traced. Since, to it, conscious states must serve as the representatives of all that is external, it must, as has been said, so think of them that it will not be impossible to conceive how they can serve as representatives at all. It may enter an energetic protest—and this is the point to which what I have said in the paragraphs preceding has been leading up—it may enter an energetic protest against Professor James' conception of consciousness as an unanalyzable, indivisible unit, a something in which no parts can be distinguished. How can such a consciousness represent any object not itself unanalyzable and indivisible? How can it represent two objects as two, or an extended thing as extended?

Professor James declares unintelligible the assumption that our mental states are composite in structure, made up of smaller states conjoined (p. 145). Consciousness he regards as 'an integral thing not made of parts' (p. 177); it is a 'single pulse of subjectivity' (p. 278), 'undivided' (p. 277), 'containing

no manifold of coexisting ideas' (p. 278). Every 'pulse of thought' (state of consciousness at a given moment) is an 'indecomposable unity' (p. 371), 'an uncompounded psychic thing' (p. 179). Feelings cannot be put together to make a consciousness: "Take a hundred of them, shuffle them and pack them as close together as you can (whatever that may mean); still each remains the same feeling it always was, shut in its own skin, windowless, ignorant of what the other feelings are and mean. There would be a hundred-and-first feeling there, if, when a group or series of such feelings were set up, a consciousness *belonging to the group as such* should emerge. And this one-hundred-and-first feeling would be a totally new fact; the one hundred original feelings might, by a curious physical law, be a signal for its *creation*, when they came together; but they would have no substantial identity with it, nor it with them, and one could never deduce the one from the others, or (in any intelligible sense) say that they *evolved* it" (p. 160). A consciousness supposed to consist of a dozen feelings Professor James compares to a sentence consisting of a dozen words each of which is in the mind of a different man. There is nowhere a consciousness of the whole sentence (p. 160).

Conscious states are, therefore, simple, unanalyzable units. They may, then, differ from each other, and be distinguished as this state or that, but they cannot be analyzed and described, they can only be named. How do sensations differ from percepts, percepts from concepts, memories from fictions? As well ask how the sensation of redness differs from that of blueness. The psychologist may arrange in a given order a number of unanalyzable units, and state their relations to other things, but a descriptive psychology which busies itself with such units can be called descriptive only by way of courtesy. It cannot give any sort of an answer to the question, 'What are they like?' or, 'How do they differ from each other?'. It cannot describe. Of course Professor James does not attempt a psychology upon any such basis. When he treats of the various mental states he talks of them as does any one else, making them composite, analyzable, and describ-

able. It is because he has done so pretty consistently that he has written so good a book.

It is difficult to know, in view of the wealth of material at hand, just what to cite in illustration of the fact that Professor James does not treat consciousness as an indivisible, unanalyzable unit at all. One must, however, begin somewhere, and I shall refer to a few passages almost at random. In the opening sentences of his book Professor James does not hesitate to speak of the 'complexity' of mental phenomena (I. p. 1); a little further on he speaks of 'groups of sensations forming determinate *objects* or *things*' (I. p. 19); and on the next page he asks: 'What are perceptions but sensations grouped together?' In the same chapter he regards it as certain that consciousness is much more 'developed' in the hemispheres than it is anywhere else, and asserts that the development of will must be 'proportional to the possible complication of the consciousness' (p. 78). In the chapter on 'The Perception of Space' we find such statements as the following: "In the sensations of hearing, touch, sight, and pain we are accustomed to distinguish from among the other elements the element of voluminousness" (II. p. 134); "Now my first thesis is that this element, discernible in each and every sensation, though more developed in some than in others, is the original sensation of space" . . . (p. 135); "If a number of sensible extents are to be perceived alongside of each other and in definite order, they must appear as parts in a vaster sensible extent which can enter the mind simply and all at once" (p. 146); "Measurement implies a stuff to measure. Retinal sensations give the stuff; objective things form the yard-stick; motion does the measuring operation" (p. 267). These sentences stand out from their context in all the prominence given by italics. They have not been penned thoughtlessly. And yet one marvels to think they are intended to apply to a something in which no parts can be distinguished—to an indecomposable unity. How can such a unity have elements distinguishable from other elements, or parts which can be placed alongside of each other, or portions which can be measured? And how can one speak of what is present in imagination as a blurred picture or a sharp image, or describe it as an image surrounded by a

'fringe' composed of 'transitive' parts of consciousness, if all that is in consciousness be wholly without parts, an indecomposable unit (II. p. 49). Such partless images we might naturally suppose capable of representing only mathematical points, but we discover one of them to be the image of Professor James' absent friend. How Professor James can know of whom he is thinking is a mystery—a mystery worthy, I think, of a place beside 'knowledge' as one of the most mysterious things in all the world. What, too, shall we say to the percept, which is also indecomposable, when we find it to be the general law of perception that whilst part of what we perceive comes through our senses from the object before us, another part always comes out of our own head (II. p. 103)? or when we read: "Who can be sure, in his sensible perception of a chair, how much comes from the eye, and how much is supplied out of the previous knowledge of the mind?" (I. p. 191). And how can we regard an emotion as an indecomposable unit, when we happen upon the exclamation, "Who can enumerate all the distinct ingredients of such a complicated feeling as *anger*?" (I. p. 191).

We have, furthermore, repeated statements from our author to the effect that this indivisible something called consciousness can be split. "We shall find," he says, "in Chapter X, numerous proofs of the reality of this split-off condition of portions of consciousness" (I. p. 165). Again: "It must be admitted, therefore, that, in certain persons, at least, the total possible consciousness may be split into parts, which coexist but mutually ignore each other, and share the objects of knowledge between them" (p. 206); "How far this splitting up of the mind (consciousness) into separate consciousnesses may exist in each one of us is a problem" (p. 210); we "are forced to admit that a part of consciousness may sever its connections with other parts and yet continue to be" (p. 213); "Now although the *size* of a secondary self thus formed will depend upon the number of thoughts that are thus split off from the main consciousness, the *form* of it tends to personality, . . ." (p. 227). Are we really concerned here with an indecomposable unit? To conceive such a thing split into two or more parts of different sizes is indeed a difficult task. I can

think of only one way in which such a consciousness as Professor James supposes can be divided. It is granted time-parts (p. 279), and the fragmentary consciousnesses may, perhaps, divide these among themselves. This interpretation does not, however, adjust itself to the text at all, and it would be doing Professor James an injustice to foist it upon him.

The chapter on 'The Consciousness of Self,' although it contains occasional lapses into the 'indecomposable unity' idea, may yet be said to treat consciousness with fair consistency as a complex and decomposable thing. It has 'elements' and 'parts.' "Compared with this element of the stream," says our author, "the other parts, even of the subjective life, seem transient external possessions, of which each in turn can be disowned, whilst that which disowns them remains" (p. 297). As this element is "more incessantly there than any other single element of the mental life, the other elements end by seeming to accrete round it and to belong to it" (p. 298). The self under discussion is never found in the stream of consciousness all alone (p. 299); it is strongly contrasted with all the other things consciousness contains (p. 302).

It is unnecessary, I think, to multiply citations. The few that I have given are sufficiently direct and unambiguous. One might quote from almost any chapter—from that, for example, on attention, where we find such phrases as: "It is the simplest possible case of two discrepant concepts simultaneously occupying the mind" (p. 410); or from that on conception, where an image held before the mental eye is distinguished from the vague consciousness which surrounds it (p. 473). But as my object is illustration and not criticism, I shall quote but one more passage, which we may take as an apology (Professor James gives several such) for the expressions used in the citations already given. It reads as follows: "For the ordinary 'analytic' psychology, each sensibly discernible element of the object imagined is represented by its own separate idea, and the total object is imagined by a 'cluster' or 'gang' of ideas. We have seen abundant reason to reject this view. An imagined object, however complex, is at any one moment thought

in one idea, which is aware of all its qualities together. If I slip into the ordinary way of talking, and speak of various ideas 'combining,' the reader will understand that this is only for popularity and convenience, and he will not construe it into a concession to the atomistic theory in psychology" (II. p. 45).

Now far be it from me to insist that one may not, for convenience, speak with the vulgar, while thinking with the learned. It may be wise to do so on occasion. But it does not seem unreasonable to demand that the language one uses shall be capable of a translation into the tongue of the scholar when such a translation is asked for. In the present instance, I do not believe the thing can be done. I do not think Professor James could possibly say what he has said about mental phenomena and consistently use language which would treat consciousness as an indecomposable unit. As a philosopher he has accepted such a consciousness: as a psychologist he has fallen to the level of natural science and common-sense, and eschewed it completely. The interruptions from the philosopher introduce a disturbing element into the lucid expositions of the psychologist. One meets with difficulties which seem gratuitous. Much of the blame I should be inclined to lay on the shoulders of that unhappy intruder 'knowledge,' who seems to love darkness rather than light, and whose deeds may be more than suspected to be evil.*

* We may at least, with some confidence, accuse 'knowledge' of arbitrariness and unjust discrimination. We find that a consciousness cannot consist of a hundred feelings for the reason that each feeling is "shut in its own skin, windowless, ignorant of what other feelings are and mean" (I. p. 160). No feeling—being thus windowless and 'hide-bound'—can know another existent feeling. But a feeling (thought, consciousness) may know a material object which is not a feeling (p. 197); and it may also know another feeling, provided that other be non-existent—nay, in that case, it may even adopt it and hug it to itself (p. 340).

I am inclined to think that Professor James' treatment of consciousness is the result of a conspiracy between two quite distinct influences. We are almost tired of hearing from the apperceptionists that the contents of a consciousness must not be regarded as resembling a heap of wooden counters to which we may add, or from which we may subtract, a given number without causing any change in the rest. The notion of consciousness as an organic whole, and not an aggregate of changeless elements, is in the air, and deservedly receives emphasis. In the associational

The remedy for these ills appears to me to lie in a return to psychology as natural science. The excellence of Professor James' book—which I have chosen out of a large class, for use as a text-book in the University of Pennsylvania—lies to a great degree in the fact that he does, in spite of himself, usually treat psychology as a natural science. It is easy to find fault with special points in almost any book, but it would be the extremest injustice to estimate a book after a consideration of such points alone. And I hope that what I have said will not be taken as an expression of opinion regarding Professor James' work as a whole. From many points of view I admire his volumes greatly.

VI.

I have developed my first point at such length that I cannot do more than mention a second. I must, however, mention it, for it seems to me of such importance that it should not be wholly passed over. Psychology as natural science must not merely assume a consciousness complex and capable of representing, in some intelligible sense of the word, an external world beyond it, but it must also recognize all conscious states to be mere phenomena, resolutely confine itself to phenomena, and, as science, eschew all metaphysical entities—'substrata,' 'unit-beings,' 'transcendental' selves, and what not. Whether one conceive conscious states as 'parallel' to brain states, or conceive of them as belonging with these latter to the one series

psychology which Professor James criticises ideas were much deader things than they are to us to-day, and I think his reaction against such a view of ideas very natural. But this influence alone would not have made him, I think, speak of consciousness as an indecomposable unity. The blame for this lies with his doctrine as to the nature of knowledge. If, when I perceive an object, I have, in addition to my percept, a 'knowledge' of the object, which gives me, somehow, the object known and the percept 'alongside' of each other, I may reduce my percept to a mathematical point if I choose, and yet go on talking about the parts of the object. The percept has become a useless thing. Its function has been usurped by 'knowledge.' I think that this is the real explanation of the fact that Professor James can speak of consciousness, even occasionally, as having no parts. He falls back on 'knowledge' for information which could not possibly be extorted from 'an uncompounded psychic thing.'

of causes, and determining physical movements, in either case one may study them from the natural-science point of view. They are in any case phenomena, which may be analyzed and described, and the relations of which to other phenomena may be determined by accepted scientific methods. The physiologist studies the phenomena presented by organized bodies without reference to any metaphysical 'substratum' or 'reality' underlying them, and so should the psychologist study the phenomena of mind. To him sensations, percepts, judgments, knowledge, the self, — everything he may find in a consciousness should be a phenomenon and nothing more, a conscious state or a component part of a conscious state. To divide mental phenomena into classes, and account for the one class by reference to that phenomenal something we call the brain, while referring the other to a 'self' not belonging to the world of phenomena at all, is surely unscientific. As well might the physiologist refer some of the phenomena of the human body to the 'substratum' granted it by the philosopher, holding explanation of them, in the ordinary sense of the word, inadmissible. The world of 'substrata' belongs to the metaphysician, if it belong to any one, and the psychologist will not gain by trespass. Let him stay on his own ground.