

## OF CONSCIOUS EFFICIENCY

*Sec. 1.*—It is generally agreed that what we call interaction takes place between some parts of the nervous system and others: the capacity of a nervous part to act thus, constitutes what we call its efficiency.

In previous articles of this series, we have seen reason to believe that all parts of the nervous system are at all times active so long as they are alive, and that they are fundamentally of the same nature; and, if this is true, then it would appear that all parts of the nervous system must be reciprocally efficient; the activity in any one special part would not be what it is but for the influence of the activities in all other parts of the system; nor can the activities in these other parts of the system remain unaffected by the activity of this special part. This carries with it the conclusion that in any given neururgic pattern, the neururgic emphases and the undifferentiable neururgic mass against which these emphases are contrasted, display a reciprocal efficiency.

But if the theory of a thoroughgoing neururgic and noetic correspondence which we are considering in these articles is valid, then we should be able also to say that in any given noetic pattern, the noetic emphases and the undifferentiable noetic mass against which these emphases are contrasted must also display a reciprocal efficiency; provided it is agreed that anything like efficiency appears within consciousness, a point to which we refer later. That is, the field of attention and the field of inattention must be reciprocally efficient. But the field of attention in any moment is what we usually speak of as the presentation of that moment; and if it is true, as we have argued in the preceding article, that the field of inattention is what we call the Self, we may then say that the Self and the presentations to the Self are always reciprocally efficient.

*Sec. 2.*—But it may be questioned whether we are justified in speaking thus of an efficiency within consciousness, and to this question we may well turn before going farther. When we do so we at once perceive that in fact the notion of efficiency is gained only as the result of our introspective experience; it is a datum of what we call subjective observation, and so far as we apply it to objects in the outer world, we do so by a process of interpretation. We attribute it to objects in the outer world because we note a close analogy between events in the outer world series as given within consciousness, and events in the purely subjective, or what we may call the not-in-the-outer-world, series. As Dr. Geo. W. Knox well puts it,—if we awakened to full consciousness in an hermetically sealed glass receptacle, in the midst of a forest in a wind storm,

and were without any tendency to move our eyes, or to accommodate them to moving objects, then the falling leaves about us would appear as a mere succession of phenomena within consciousness. But were we suddenly removed from our glass receptacle, at once, in connection with our reaction to the wind-blown leaves, we would gain the experience of efficiency. This experience it is which gives us the basis for the attribution of a like characteristic to objects in the outer world with which we find ourselves confronted. We ascribe efficiency to these objects in the outer world as a counterpart of the efficiency which we experience subjectively; and we then extend this attribution to particular objects in the outer world as they relate to others.<sup>1</sup>

*Sec. 3.*—The question, then, is not whether we are justified in attributing efficiency to consciousness, but rather whether we are justified in attributing to objects in nature this efficiency which we discover in our conscious experience. I shall not take space here, however, to consider this point, inasmuch as this question is answered affirmatively by practically all men, learned and unlearned. This attribution is indeed fundamental to our conception of the existence in the physical world of systems of interactive parts, of which systems the nervous system with which we are here concerned is one type.

I think, then, that we may assume that in any given neururgic pattern, the neururgic emphases and the undifferentiable neururgic mass are always reciprocally efficient; and, assuming the validity of the theory of a thoroughgoing neururgic and noetic correspondence, that the field of attention (the noetic emphases) and the Self, *i. e.*, the field of inattention (the undifferentiable noetic mass), are always reciprocally efficient.

This thesis carries with it certain results of great interest, some of which we shall discuss later in this and in the next article of this series; but before considering these, I shall ask the reader to turn with me to another closely related problem.

*Sec. 4.*—In the light of this conception of a thoroughgoing reciprocity of neururgic efficiency, and of a corresponding thoroughgoing reciprocity of noetic efficiency, let us attempt to state what we mean

<sup>1</sup> It is interesting to note in this connection that Professor B. L. Gildersleeve tells us that his study of the Greek language, which was so clear an expression of the innermost of psychic experiences, convinces him that 'effect to the natural man means will. The neuter has no nominative because it has no personality,—no will.' I quote here, and later on, from personal letters which Professor Gildersleeve has kindly allowed me to make use of. How the object affected may be subsumed under the object effected, he has indicated in his 'Later Grammar,' § 329 note. Confer also the *American Journal of Philology*, II., 89.

by the common observations, that under certain conditions the 'body acts upon the mind,' and that under certain conditions the 'mind acts upon the body.'

In order to simplify our discussion we must first note that all action of a man's body, as the result of its contact with the physical world, is traceable back to activities within his bodily system, of which activities those within his nervous system are of preeminent importance. Taking this for granted, we may restate the every-day observations above mentioned in the following terms:

1. Some activities in the nervous system, due to the reception of energy from the physical environment of the system, affect the nature of consciousness.

2. Some states of consciousness affect the activities of the nervous system in a manner which brings about adjustments of our bodily organs which indirectly affect objects in the physical world.

But these facts may be still differently stated in terms of our theory of a thoroughgoing neururgic and noetic correspondence, as follows:

1. The first case may be stated thus:

A given noetic pattern  $\beta$  now existing would not be what it is but for the previous existence of a neururgic pattern  $A$ .

But this previously existing neururgic pattern  $A$  had corresponding with it a noetic pattern  $\alpha$ ; although in retrospect  $\alpha$  is not prominent, while  $A$  is. And this now existing noetic pattern  $\beta$  has corresponding with it a neururgic pattern  $B$ , which, however, is not prominent in retrospect, although  $\beta$  is.

Hence what we are really saying is that a given noetic pattern  $\beta$  now existing (and its corresponding neururgic pattern  $B$ ) would not be what it is but for the previous existence of a noetic pattern  $\alpha$  (and its corresponding neururgic pattern  $A$ ). This surely is not difficult to believe.

In the case here considered, in retrospect, the series  $A$ -and- $\beta$  is in the field of attention, while the series  $\alpha$ -and- $B$  is not. Consequently, we have before us in the attention the neururgic pattern  $A$  followed by the noetic pattern  $\beta$ , with a sense that  $A$  was efficient in relation to  $\beta$ .

2. The second case may be stated thus:

A given neururgic pattern  $B$  now existing would not be what it is but for the previous existence of a noetic pattern  $a$ .

But this previously existing noetic pattern  $a$  had corresponding with it a neururgic pattern  $A$ , although in retrospect  $A$  is not prominent, while  $a$  is.

And this now existing neururgic pattern  $B$  has corresponding with it a noetic pattern  $\beta$ , which, however, is not prominent in retrospect, although  $B$  is.

Hence what we are really saying is that a given neururgic pattern  $B$  now existing (and its corresponding noetic pattern  $\beta$ ) would not be what it is but for the previous existence of a neururgic pattern  $A$  (and its corresponding noetic pattern  $\alpha$ ). This surely is not difficult to believe.

In this case, in retrospect, the series  $\alpha$ -and- $B$  is in the field of attention, while the series  $A$ -and- $\beta$  is not. Consequently we have before us in attention the noetic pattern  $\alpha$  followed by the neururgic pattern  $B$ , with a sense that  $\alpha$  was efficient in relation to  $B$ .

*Sec. 5.*—But some one may feel that what we have just said does not touch the main point that appears to the average man to involve difficulty. We are not so much interested in case 1, where the ‘body appears to act upon the mind,’ as in case 2 where the ‘mind appears to act upon the body.’ And in relation to this case 2, we find our difficulty only in certain of our experiences. We do not find a problem where a noetic emphasis  $\alpha$ , as in sensation-perception, affects a following neururgic pattern  $B$ , as in the resulting activity of the reactive organs; for we are ready to assume the existence of a neururgic emphasis  $A$  corresponding with the first occurring noetic emphasis  $\alpha$ , and are equally ready to agree that  $B$  is what it is because of the efficiency of the previously existing  $A$ . What we ask for is an explanation of the action, upon the following neururgic pattern, of the Self which is not a noetic emphasis. Let us then consider the case where the Self seems to be efficient in determining the form of a certain neururgic pattern.

Under the view maintained in the last article, the Self, as the field of inattention, is part of the first-mentioned noetic pattern  $\alpha$ , and had corresponding with it an undifferentiable neururgic mass within the corresponding neururgic pattern. What we really say in such a case, then, is this: a given neururgic pattern  $B$  now existing (and its corresponding noetic pattern  $\beta$ ) would not be what it is but for the existence of the neururgic mass in a previously existing neururgic pattern  $A$  (and the field of inattention, or Self, in its corresponding noetic pattern  $\alpha$ ).

This surely is not difficult to comprehend if our theory of a thoroughgoing neururgic and noetic correspondence is valid, and if there is, as we hold, at all times a thoroughgoing reciprocity of efficiency between all parts of the neururgic and noetic systems.

*Sec. 6.*—Now let us turn again to the consideration of the corollary of the theory of a thoroughgoing neururgic and noetic correspondence above referred to, *viz.*, that the field of inattention and the field of attention,—the Self and the presentations to the Self,—are fundamentally of the same nature, and being systemically related, are always reciprocally efficient. This means (1st) that

in every moment of consciousness the form of noetic emphasis determines some measure of alteration in the nature of the undifferentiable noetic mass, *i. e.*, the field of inattention, or in other words, the Self; and (2d) that in every moment of consciousness the form of the noetic emphasis is more or less determined by the efficiency of this field of inattention,—of the Self. Let us consider each of these points briefly.

*Sec. 7.*—Evidences of changes in the nature of the Self, due to the influence of noetic emphases, or presentations, can of course not be gained by reference to introspection, for the realm of introspection is within the field of attention, and the Self, under our hypothesis, is not presentable in attention.

But we may hope to gain indirect, objective, evidence of this action of the presentation upon the Self by noting cases in which it is clear that presentations are given to the Self of a man under observation, and considering the nature of his Self as indicated by his mode of action. We may observe, in other words, the evidence of a change in what we call the man's character, as the result of emphases which we have reason to believe are given in his consciousness.

Such evidence is before us at all times in the actions of men who are utterly lacking in self-consciousness,—whose fields of attention contain no empirical egos, but merely the presentations to the unrepresentable Selves. For example, observing a man writing steadily and quietly at his table, all intent upon the visual elements before him, unmindful of the striking clock, or of the rumble of loaded wagons on the street, we suddenly see him stop writing, rise from his chair, and go to the window with the remark, 'Did you hear that clap of thunder?' Here the Self of one form which was occupied with visual impressions and the thoughts connected with them, suddenly becomes a Self of another form reacting to aural stimuli. If we judge by their reactions, as we always must judge, the two Selves at the two moments are manifestly diverse, and this diversity is clearly due in large part to the diversity of the emphases within the whole of consciousness of the two moments.

Some reader at this point may feel inclined to question our right to speak thus of the man's diverse Selves, but I shall ask him to waive his objection at present, awaiting the study of this point in a later article in which I shall consider the mutability of the Self.

*Sec. 8.*—We may turn, then, to our second point made above, to which I shall devote the remainder of this article, and which will appear of importance in an article to follow.

Under the theory here examined, in *every* moment of consciousness, the form of the noetic emphasis is more or less determined by

the efficiency of the Self. To take the simplest kind of an example: A complex noise reaches me from the street as I write, and I find certain of the sounds so emphasized as to suggest the rhythmical beating of drums. When I study the noise, however, I find no one set of sounds predominant, nor do I discover any noticeable rhythm in their occurrence. Something from without the given presentation must have served to emphasize certain tones, and must have given the rhythm to the succession of sounds. And clearly this influence must have been within consciousness; and having been within consciousness and yet not in the field of attention, it must have been within the field of inattention, *i. e.*, within the Self.

I do not need to point out to the readers of this JOURNAL that we are here considering the great fact of mental assimilation, nor that this assimilation is always discriminative in character; but I wish to lay stress upon the point that this discriminative characteristic of assimilation is due to the nature of the conscious system as apart from the noetic emphasis, and existing at the time the noetic emphasis occurs; and that this discriminative characteristic is not determined by the nature of the emphasis in the field of attention, but rather by the nature of that part of consciousness which is apart from the field of attention, namely, the Self.

This may seem to the reader altogether too commonplace to refer to in the pages of a JOURNAL devoted to expert work, but I shall ask him to note that once having acknowledged that the Self is, at any time, efficient to modify the form of the noetic emphasis within the field of attention, then, if the thesis here presented is valid, it must do so in some measure at all times. That is, the Self always, and without exception, has its part in the determination of the form of the noetic emphasis in the field of attention.

But, if this is true, it certainly shows us that the distinction between active and passive,—voluntary and involuntary,—voluntary and spontaneous,—attention, which is made much of in these days by many psychologists of high standing,<sup>2</sup> is a misleading one. It may be a distinction of some small value in descriptive work, but it can not be of any fundamental importance.

The Self must *always* have its part in the determination of the nature of the noetic emphasis. At certain times, this part played by the Self is perfectly clear, when, for instance, two opposed and incompatible emphases appear in attention, and when the Self acts to emphasize the one and to minimize the other. Then we have what we call clear voluntary attention.

At other times, the part played by the Self may be so unemphatic

<sup>2</sup>Cf. James, 'Psychology,' I, p. 416 ff.; 'Briefer Course,' p. 221. Sully, 'Outlines,' p. 80. Ribot, 'Psychologie de l'Attention.' Stout, 'Groundwork,' p. 50; 'Analytical Psychology,' I, p. 240 ff.

that it altogether escapes our notice. Then we are likely to say that the stimuli from the environment, or their resultants, force our attention without any self-activity, and then the careless thinker speaks of the state as one of involuntary attention.

But it is clear, if our contention is justified, that, even where the forcefulness of the stimuli determining the emphasis is most extreme, there must be some element of efficiency arising out of the Self, which in some measure determines the special form in which the emphasis appears. This point will appear of importance in the next article of this series.

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## DISCUSSION

### ANSWER TO PROFESSOR PIERCE

THE experience described by Professor Pierce in the *JOURNAL* of July 21 is, I think, a common one, certainly with myself, and at least not unknown to several others, as it has been put on record by Professor Stout, in his 'Analytical Psychology, Vol. I., p. 247: "In some instances the sensation itself never enters into attentive consciousness at all. Thus, in walking along a street, a name may suddenly come into my mind, and I may at first be totally unable to account for its intrusion; but on looking around I find the name printed in large letters above a shop window or on an advertisement board. Now the name as it first occurred to me was not visualized, but internally heard and articulated. It follows that the visual experience must have influenced the flow of mental images, while itself remaining in the field of inattention." In a footnote on p. 248 he adds: "The following additional example was communicated to me by Professor MacKenzie as this work was going through the press: "An even more striking experience (which very often happens to me) occurs in glancing over a large page (especially the page of a newspaper). One often becomes aware of some word in such a case which one finds oneself repeating internally. On investigation it sometimes appears that there is no such word on the page, but that one part of it occurs at one part of the page and another part at another. Here one has not only received an impression, but made a combination without having attended to it."

I have a number of such combinations recorded, one of which is unique, as the letters are in reverse order. On July 7, 1904, I was reading 'The Story of the Plants,' by Grant Allen. Glancing over