

ARTICLE V.

PHYSIOLOGICAL PSYCHOLOGY.¹

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FROM Leucippus to Herbert Spencer, atomists and evolutionists have ever produced some form of physiological psychology. The *Zeitgeist* has, however, so rapidly discounted extreme evolution — the lay figure around which physiological psychology has lately been built — that it may be ignored.

Speaking by ages, who is guilty? Have the *hoi polloi* transmuted philosophy into dirt? We do not hear any other system of mental science knocking at the door. Who is teaching it? In 1893, William James, Professor of Psychology in Harvard University, wrote: "Psychology is on the materialistic tack and ought, in the interest of ultimate success, to be allowed full headway even by those who are certain she will never fetch the port without putting down the helm once more."² No one will dispute that it ought to be given "full headway," "for ultimate success," but we confess little sympathy with the "baby act." Is it too much to ask that teachers of psychology, after so long a time and at so great expense, cease to mislead radiant and ingenuous life?

ORGANISM AND LIFE.

The organism houses the life. The destruction of a room

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² Psychology, Briefer Course, p. 7.

or two may not oust the tenant; but this, or other shock, tends to his ejection.

Agreeably with the current report that Dr. A. Carrel, of the Rockefeller Institute for Medical Research, had succeeded in isolating the heart of a chicken, and had been awarded the Nobel prize, the writer of this paper communicated with Dr. Carrel, asking the question, "Do your experiments lead you to think that any organ of chicken or man is necessarily vital?" The answer was braver than the question. He replied: "The life of the individual is the result of the coordination of many of the parts of the organism, some of these being more necessary than others. The life of every part can go on, under the proper conditions, when it is isolated from the organism." We differentiate brute life as the sum of the forces which pervade the organism, causes it to grow, preserves it from decay, is conscious and thinks — the slightest cognitive touch of subject and object. Even Charles Darwin's progenitor, an ascidian larva, would writhe were it impaled on a fishhook; and human life as the sum of the forces which pervade the organism, causes it to grow, preserves it from decay, is conscious, thinks and is religious. Probably no man objects to these distinctions as including too much or too little; and from Dr. Carrel's experiments, corroborated by Paris surgeons, we draw these conclusions:

1. *Life occupies the whole organism.* We see with our eyes and feel with our little toes. No man told Thomas Cranmer that his right hand was a sinner.

2. *Neither nerves nor brain, spinal marrow nor heart, is vital;* and functions may be lost in transference to "proper conditions." One does not demur to these conclusions on the ground of doubting whether the isolated heart lived. One hundred and twenty days of rhythmic beating would seem

enough; nobody could ask it to cackle. "The silver cord may be loosed" before "the golden bowl is broken."

3. *Mind differs from matter and is distinct from it.* Take another chicken, kill its heart, isolate the remainder of the organism, prolong its life under "proper conditions," and you have exhausted the possibilities of demonstration.

CONSCIOUSNESS.

With Sir William Hamilton, consciousness and perception are two names for the same thing; and he asks: "If the authority of consciousness be disallowed, what other warrant of truth remains? Where else will a source of certainty be found?" "Consciousness is to the philosopher what the Bible is to the theologian. Both are revelations of the truth, and both afford the truth to those who are content to receive it as it ought to be received, with reverence and submission."¹ Nor, thus "cabined, cribbed, confined," would Professor James and *confrères* deny the application. Human consciousness, as we would exclusively use the term, is the *cognition of one's self as existing, subjectively, objectively.* It is the only simple and direct apprehension that we recognize; but it is enough. What is this cognizance? "*I am,*" body, soul, and spirit; subjectively, objectively, not body, not soul, not spirit, but one entity — without schism. Sometimes, under pathological conditions, physical pain accents and emphasizes the body. Sometimes, stained with sin, the ruby dye betrays me to myself, — an intelligent moral being, — and consciousness cries "me" louder than ever. No sane man has ever contradicted its testimony. What think you of a psychology which throws a divine voice into a scrap heap with "states of mind," and "fringes of thought," and a

¹Lectures on Metaphysics.

“sensation” of temperature? Not only has Professor James but the truly great Hamilton, degraded it with unworthy associations and hopelessly confused his disciples. This unanimous, simple, and indisputable self-recognition leaves no ground for a “materialistic hypothesis” that “mental action may be uniformly and absolutely a function of brain action.”

Put the helm hard down and tie it with a square knot.

THOUGHTS AND THINKERS.

“If we could say in English, ‘It thinks,’ as we say ‘It rains’ or ‘It blows,’ we should be stating the fact most simply and with the minimum of assumption. As we cannot, we must simply say that thought goes on.” “The thoughts are the thinkers.”¹ Fashionable psychology is a brazen essay at materialism, with an appeal to confused metaphysics to substantiate it. The following paragraph is a fair statement: “The consciousness of Self involves a stream of thought each part of which as ‘I,’ can remember those which went before, know the things they knew and care permanently for certain ones among them as ‘me,’ and appropriate to these the rest. This ‘me’ is an empirical aggregate of things objectively known. The ‘I,’ which knows them, cannot itself be an aggregate; neither for psychological purposes need it be an unchanging metaphysical entity like the Soul, or a principle like the transcendental Ego, viewed as ‘out of time.’ It is a thought, at each moment different from that of the last moment, but appropriative of the latter, together with all that the latter called its own.” The snarl is easily untangled. Professor James assumes that “Self,” “I,” and “Me” are separate entities, but he is mistaken. It is a matter of gram-

¹ James, *Briefer Course*, pp. 152, 216.

mar. They are identical in meaning. He assumes, also, that "a stream of passing thoughts" flows on without interruption, but he is mistaken. It is interrupted, by sleep or disease. He assumes that "each part of the stream of thought which went before" is a *living person*, — the "I" and the "Me" — who "cares for thoughts, remembers and appropriates" them; for instance, that, in right-angled triangles, the square on the hypotenuse equals the sum of the squares on the other sides — enough materialization to scare Euclid or startle the Fox Sisters.

BRAIN PATHS.

The neural system of this psychology is a *chef-d'oeuvre*. Rightly agreeable with anatomical conditions, these ingenious men find the human organism full of fibrous nerves, charged from birth with vital force, extending from periphery to spinal marrow and brain. Here let them take "habits" for an example. The theory is, that "habits" are formed by wearing abnormal pathways through the brain. It does not appear that other material than brain stuff and marrow is plastic enough. "The currents once in must find a way out. In getting out they leave their traces in the paths which they have taken. The only thing they can do, in short, is to deepen old paths or to make new ones; and the whole plasticity of the brain sums itself up in two words when we call it an organ in which currents pouring in from the sense organs make with extreme facility paths which do not easily disappear. For, of course, a simple habit, like every other nervous event, the habit of snuffing for example, or of putting one's hands into one's pockets, is mechanically nothing but a reflex discharge and its anatomical substratum must be a path in the system."¹ The whole elaboration looks as false as paper

¹ William James, *Psychology*, p. 137.

flowers; it fatally lacks the simplicity and immediateness of nature—as an eye or an ear. God never made it. Even the theory of reactions is questionable. Has every afferent nerve an efferent mate? He who would eject intelligence from the organism, by mechanical contrivances, contradicts himself at every turn. How does it happen that when the brain wants to put its hands into its pockets and tread the old path for the thousandth time since it first ripped its unguided way through plastic matter, or wishes to telegraph its dissolute stomach for a drink of whiskey, in the same amazing manner, it may immediately get mad and strike and kick by motor nerves exclusively? Has it ever occurred to these gentlemen that, like a charged telegraph wire, messages may be sent both ways over the same nerve at the same time? or that this would preclude “currents,” “explosions,” and “discharges,” or that paths plowed through the brain to nowhere, by an imaginary force, are ridiculous and absurd?

No more serious error of physiological psychology appears than ascribing the grace of God to an exercise of human will under natural conditions. Doubtless materialism is only atheism, “sitting up straight and looking pretty. Company has come.” We are so constituted that the faculty of will cannot be mentioned without suggesting the supernatural. Jeune schoolboys are called to arbitrate the claims of God. “There is a fourth form of decision,” as Professor James puts it, “which often ends deliberation as suddenly as the third form does. It comes when, in consequence of some experience or some inexplicable inward change, we suddenly pass from the easy and careless to the sober and strenuous mood, or possibly the other way. The whole scale of values of our motives and impulses then undergoes a change like that which a change of the observer’s level produces on a view. The most

sobering possible agents are objects of grief and fear. When one of these affects us, all 'light fantastic' motions lose their motive power, all solemn ones find theirs multiplied many fold. The consequence is an instant abandonment of the more trivial projects with which we had been dallying, and an instant practical acceptance of the more grim and earnest alternative which till then, could not extort our mind's consent. All these 'changes of heart,' 'awakening of conscience,' etc., which make new men of so many of us may be classed under this head. The character abruptly rises to another 'level,' and deliberation comes to an immediate end."¹ Surely, to attribute conviction of sin to this volition cannot be the best feature of the monstrosity.

¹ Shorter Course, p. 432.