

WILLIAM JAMES AND THE ART OF TEACHING

Though He Did Not Teach a System of Pedagogy, His Books Are Full of "Educational Applications."

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When it was suggested that I try to sum up for the "Review" something of the contributions of William James to educational thought, I must confess to being somewhat overwhelmed by the magnitude of the task. For what James has given to education cannot be summed up in formulas, ticked and labeled. He wrote but one book bearing directly on educational questions, and "Talks to Teachers" owes its popularity more to the informal essays with which it concludes than to the more formal pedagogical lectures which furnish its main reason for being. In the library copy of this volume, which lies open before me at the "Table of Contents," some student hand has written after the essay "On a Certain Blindness in Human Beings" the words, underlined and followed by an exclamation point, "Read It!" This, and not any of the more strictly professional contents, stood out from the rest of the volume for at least one reader; and what student comment has decreed, let the critic be chary of denying!

The truth is that James taught no system of pedagogy. He was not at home in that strange and hybrid language which has lately been dubbed "pedagogy." Indeed, he was rather inclined to deny that psychology "is something from which you can deduce definite programs and schemes and methods of instruction for immediate schoolroom use." "The science of psychology," he says, "and whatever science of general pedagogics may be based on it, are in fact much like the science of war. Nothing is simpler or more definite than the principles of either. In war, all you have to do is to work your enemy into a position from which the natural obstacles prevent him from escaping if he tries to; then to fall on him in numbers superior to his own, at a moment when you have led him to think you far away; and so, with a minimum of exposure of your own troops, to hack his forces to pieces, and take the remainder prisoners. Just so, in teaching, you must simply work your pupil into such a state of interest in what you are going to teach him that every other object of attention is banished from his mind; then reveal it to him so impressively that he will remember the occasion to his dying day; and finally fill him with devouring curiosity to know what the next steps in connection with the subject are. The principles being so plain, there would be nothing but victories for the masters of the science, either on the battlefield or in the schoolroom, if they did not both have to make their application to an incalculable quantity in the shape of the mind of their opponent."

But while James taught no pedagogical system, while he had nothing but contempt for pedagogical jargon and precept "frothed up in journals and institutes, till its outlines often threaten to be lost in a kind of vast uncertainty," yet none the less there is hardly a chapter of his writings, from the Principles of Psychology with its two fat volumes, down to the little essay on "The Energies of Men," which has not a direct bearing on education in the widest sense of the word. From this point of view, his whole system is shot through and through with a pedagogic purpose. He does not so much offer "educational applications" as he makes education the very fibre of his thinking, alike in psychology and philosophy. For him, all must issue in action, must find its value in the conduct it inspires. This "organization of tendencies to behavior" is education, and it is at the same time the highest service rendered by psychology and by philosophy. Pragmatism might almost be described as the teacher's philosophy. Action becomes with him at once the test and the result of truth; it is the starting point and the goal of education, the problem of psychology, the sanction of philosophy. Conceived in such a spirit, no system of psychology or of philosophy could possibly escape a tremendous pedagogic significance.

And so it has come about that this man, who taught no educational system, formulated no pedagogical creed, has had more influence on modern educational thought, both directly, and through the books and the teachers he has inspired, than any other contemporary writer with the single exception of Stanley Hall. It is an influence which, in order to be appreciated at its full value, must be viewed in the light of educational tendencies as he found them. Only by giving his educational conceptions their proper setting in the educational thought of the nineteenth century is it possible to estimate what they have meant for contemporary education.

It was Rousseau, who contributed so much to the currents of thought of the early part of the last century, who first clearly brought into modern theories the notion that education must take its starting-point from the nature of the individual to be educated. In his brilliant paradoxical

formulation, he would have us trust the natural instincts and impulses of the child without reserve; the teacher's business is the mere negative affair of safeguarding and suggesting.

One-sided though this conception is, it nevertheless contains the germ of the thought which has for the last century been remaking education—the idea that we must learn to know the individual better if we are to educate him more efficiently. Only by founding education on a sound psychology can we better our methods of instruction. This master-idea, put into practice by Pestalozzi and enriched by Froebel, finds its first well-rounded expression in the psychological-pedagogical system of Herbart. It was Herbartianism, coming to this country in the early eighties, which dominated educational thinking at the time James began to make his influence felt. From this system, then, we may take our point of departure.

For Herbart, the ultimate end of education is found in the formation of character—in action. So far James would agree. But from this point the two paths diverge. Herbart held that action is determined by the presence in the mind of clear ideas, which of themselves pass over into expression. It thus becomes the immediate business of education to provide the mind with a stock of ideas, and to assure that these ideas are clear. Now what makes an idea clear, what gives it its tendency to act itself out, is the fact that it has been properly assimilated by the mind; digested, so to speak; related to the stock of ideas already on hand. This process of relating a new idea to the whole mental content is apperception. The great function of the teacher, then, is to make sure that apperception takes place correctly. There is a certain typical process by which the mind works in assimilating ideas, in making apperception possible. This process may be represented by the so-called "formal steps": five in number, as usually formulated, preparation, presentation, comparison, generalization, and application. All knowledge gets to be a part of the mind by this general process; the teacher who follows this general method will make apperception possible, and so right action. Furthermore, that ideas may become clear, a many-sided interest must be aroused, and these interests must be permanent in order that right action may be lasting. It is the more important to stock the mind with knowledge because, in Herbart's system, it is regarded as possessing no inner tendencies to growth of itself, it is a "structure to be erected," not a "germ to be developed." The chief immediate concern of education, then, becomes the stocking of the mind with ideas; apperception and interest are the corner-stones of Herbart's system.

Leaving to one side for a moment the intrinsic merits and defects of such a conception, it is a sad fact that, with the possible exception of the kindergarten extravagances committed in the name of Froebel, modern educational history has hardly a parallel to the educational abuses which resulted from a half-digested notion of what the Herbartian system really meant. Terms like "apperception," "apperceptive basis," "education through interest," "the five formal steps," were wrenched from their psychological context and erected into educational fetiches. They became sacrosanct mysteries, before which the profane could only bow down and worship. The torments which have been inflicted on teachers and pupils in the name of Herbart would need the pen of a pedagogical Dante for their adequate description. There arose a sort of pedagogical cant, a strange melange of stock phrases robbed of all meaning, but supposed to be possessed of some sort of magical efficiency. It is no new conception in the history of human thought that when a thing has been given a polysyllabic name it is thereby explained in its true essence. On the other hand, it is a very real tendency against which the human mind has always to fight, and which disappears just in proportion as scientific methods of thinking enter. Now the history of education shows that teachers have always been especially prone to this sort of loose, unanalysed thinking, just because the material with which they have to deal is so vast, so complex, requiring such rigorous thinking, such close analysis, that the easiest way is always to substitute words—and preferably those of a classical origin—for real entities.

With all this James had no patience. Against it he directed all the force of his clear thinking and the light artillery of his ridicule. "Perhaps the term 'apperception,'" he says, "embodies as much of this mystification as any other single thing. In one book which I remember reading, there were sixteen different types of apperception differentiated from each other. There was associative apperception, subsumptive apperception, assimilative apperception, and others up to sixteen. There is no reason, if we are classing the different types of apperception, why we should stop at sixteen rather than sixteen hundred. A little while ago, at Buffalo, I was the guest of a lady who, a fortnight before, had taken her seven-year-old boy for the first time to Niagara Falls. The child silently gazed at the phenomenon until his mother, supposing him struck speech-

less by its sublimity, said, 'Well, my boy, what do you think of it?' to which, 'Is that the kind of spray I spray my nose with?' was the boy's only reply. That was his mode of apperceiving the spectacle. You may claim this as a particular type, and call it by the Greek name of rhinotherapeutic apperception, if you like; and, if you do, you will hardly be more trivial or artificial than are some of the authors of the books."

Or, again, "We have of late been hearing much of the philosophy of tenderness in education; 'interest' must be assiduously awakened in everything, difficulties must be smoothed away. Soft pedagogics have taken the place of the old steep and rocky path of learning. But from this lukewarm air the bracing oxygen of effort is left out. It is nonsense to suppose that every step in education can be interesting. It is certain that most schoolroom work, till it has become habitual and automatic, is repulsive, and cannot be done without voluntarily jerking back the attention to it every now and then. This is inevitable, let the teacher do what he will. The interest which the teacher, by his utmost skill, can lend to the subject, proves over and over again to be only an interest sufficient to let loose the effort."

But after all, great though was the of James in toppling false pedagogical gods from their pedestals, it was his direct constructive services which were greatest. From his psychology came certain tendencies, lines of emphasis rather than detailed systematic contributions, which have entailed far-reaching modifications in present-day educational thinking.

Fundamental here is the stress which James in all his writing laid on action. This is the great conception which unifies his pedagogy, his psychology and his philosophy. Man thinks, he held, not for the sake of thinking, but in order that he may act. Consciousness has evolved in the history of the race primarily to make possible better adjustments by providing a greater number and flexibility of reactions. All consciousness, then, tends naturally to find completion in action. Not merely the "clear ideas" of Herbart, but all impressions, pass over into expression. "Man, whatever else he may be, is primarily a practical being, whose mind is given him to aid in adapting him to this world's life."

From this view of the nature of mind there follow two corollaries of immense importance to education. In the first place, it is evidently not so much the business of education to create out of nothing tendencies to action, through "stocking the mind with knowledge, as it is to organize tendencies which, from the very nature of mind, are always present. Education may be defined as "the organization of acquired habits of conduct and tendencies to behavior." Indeed, "our education means, in short, little more than a mass of possibilities of reaction, acquired at home, at school, or in the training of affairs. The teacher's task is that of supervising the acquiring process. An uneducated person is one who is nonplussed by all but the most habitual situations. On the contrary, one who is educated is able practically to extricate himself, by means of the examples with which his memory is stored and of the abstract conceptions which he has acquired, from circumstances in which he never was placed before." Thus behavior, not knowledge, is the test of education.

We teachers tend, even today, so much to the "book-la-rnin" theory of education; we feel so strongly that nothing the pupil acquires is of value to him unless he can pass an examination on it; we make our education so much a matter of intellect and so little a matter of feeling and action—and then we sit in helpless wonder when from all sides comes the chorus of complaint that education has not accomplished what was expected of it, that crime, and graft, and discontent, and blind political allegiance, have lessened so little! How much more far-reaching, and—alas—how much more difficult, is the function of the teacher as James sees it!

Again, since the circle of thought is never complete without action, the teacher who attempts to stifle self-activity is fighting against nature. "No reception without reaction, no impression without correlative expression—this is the great maxim which the teacher ought never to forget. An impression which simply flows in at the pupil's eyes or ears, and in no way modifies his active life, is an impression gone to waste. Its motor consequences are what clinch it." Even a bad reaction is "better than no reaction at all; for, if bad, you can couple it with consequences which awaken him to its badness." It is the great service of manual training, of laboratory work and shop work, that "they give us citizens of an entirely different fibre." Vagueness, and uncertainty, and mental dishonesty, and wrong conceptions, are not possible when doing things is in question.

Such an emphasis on action naturally leads to a closer examination of the sorts of tendencies to action with which man is equipped. While Herbart had taught that the human mind at birth is possessed of no inner tendencies to growth, James, taking a wider and more biological view, saw much more truly. Psychology

and biology are alike agreed today that man is at birth equipped, not indeed with any innate stock of ideas, but with multitudes of tendencies to behavior which are native and unlearned. These are the instincts, which man shares with, and in great measure inherits from, the animal world. Nursing, grasping, smiling, crying, curiosity, anger, rivalry, sympathy, fear—the list might be indefinitely extended—are all forms of behavior which occur in advance of experience, before they can by any possibility be learned by the individual. James was the first to call attention to the importance of these instinctive factors in human life and to their value in education.

The instincts with which the pupil is equipped cannot be neglected, like all other mental functions, they tend to seek expression of some sort, and the teacher must see to it that the expression they do take is in the service of worthy ends. For the great characteristic of instinct in man is its plasticity; it may lead alike to conduct of the highest or of the lowest kind. To take one illustration, that of the instinct of rivalry. "To veto and taboo all possible rivalry of one youth with another, because such rivalry may degenerate into greedy and selfish excess, does seem to savor of sentimentality and even of fanaticism. The feeling of rivalry lies at the very basis of our being, all social improvement being largely due to it. Can the teacher afford to throw such an ally away? Instincts ripen and decay; what we are interested in at any given time is largely due to the instinctive tendencies which are uppermost in us. The teacher must then 'strike while the iron is hot,' he must 'crowd in the athletic opportunities, the mental arithmetic, the verse-learning, the drawing, or what not, the minute you have reason to believe the hour is ripe. The hour may not last long, and while it continues you may safely let all the children's other occupations take a second place."

But instinctive behavior, so plastic and easily moulded at first, soon tends to become specialized along habitual lines. Instinct give rise to habits, tendencies to behavior which are acquired, not innate. Our nervous systems grow to the way in which they are exercised. "Just as a sheet of paper or a coat, once creased or folded, tends to fall forever afterward into the same identical folds." Action, so multifold in its possibilities in early life, becomes stereotyped along definite lines, so that the adult is little more than a "mere bundle of habits." "Ninety-nine hundredths, or, possibly, nine hundred and ninety-nine thousandths of our activity is purely automatic and habitual, from our rising in the morning to our lying down each night."

Such a general law of life is of first importance in education. A great part of the work of the efficient teacher must concern itself with the forming of proper habits, and the breaking of wrong ones. For not by mere good resolutions, not by knowledge alone, is character shaped. "Could the young but realize how soon they will become mere walking bundles of habits, they would give more heed to their conduct while in the plastic state. We are spinning our own fates, good or evil, and never to be undone. Every smallest stroke of virtue or of vice leaves its never-so-little scar. Nothing we ever do is, in strict scientific literalness, wiped out."

But James's chapter on habit must be read for itself. The maxims he lays down, the applications to everyday life that he makes, these have been "preached from a thousand pulpits." And then when one turns back to Herbart and sees that in his system the word "habit" hardly occurs, one is struck afresh with the importance of the psychology of James for education.

The problem of character, then, is in the first instance the problem of forming right habits. Voluntary action, exercise of the power of the will, these mean in the last analysis ordinarily a choice between two systems of habitual action. But none the less, there is choice. All has not hardened and set beyond power to change. The will is free, after all, and so we are not mere automata, but in all of us there is still some plasticity, some power of different responses. But what is it that enables our choice to incline, now to this side, now to that? Since all ideas tend to pass over into action, the problem reduces itself to this: How is it possible that an idea can be held before the mind long enough to pass over into expression? The solution is to be found in "the effort of attention by which we hold fast to an idea which but for that effort of attention would be driven out of the mind by the other psychological tendencies that are there. To think, in short, is the secret of will, just as it is the secret of memory." To teach right thinking, the habits of calling things by their right names and attending to their proper aspects, is then immensely important for education; but it is important, not in itself, for the mere stock of ideas attained, but because right thinking leads to right action. And action here must be taken in the widest sense of the word; it includes inhibition, self-restraint, as well as action which is outwardly manifest. Not to give expression to one's impulses, to inhibit them, is not a mere

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