## BRIDGEWATER STATE UNIVERSITY

## **Bridgewater Review**

Volume 2 | Issue 2

Article 8

Mar-1984



Edward W. James Bridgewater State College, ejames@bridgew.edu

## **Recommended** Citation

James, Edward W. (1984). An Idea of the College. *Bridgewater Review*, 2(2), 13-17. Available at: http://vc.bridgew.edu/br\_rev/vol2/iss2/8

This item is available as part of Virtual Commons, the open-access institutional repository of Bridgewater State University, Bridgewater, Massachusetts.

## Idea Of The College



ardinal John Henry Newman in the spring of 1852 delivered a series of lectures, eventually published as The Idea of a University, which argued against those who thought that education should be useful. These proponents of utility maintained "that Education should be confined to some particular and narrow end and should issue in some definite work" -- a view, Newman observed, which they "seemed to have thought ... needed but to be proclaimed ... to be embraced." Were Newman here today he would soon see that the issues troubling him trouble us. To be sure, we face now new slogans, crying not only for "utility" but, a decade ago, for "relevance" and, today, for "jobs." Yet the questions are much the same, focusing on whether a college education should guarantee the immediate results of a specific product.

Newman's reply to the proclaimers of utility (or relevance or jobs) was, first, that education aimed for something far more important, and second, that its aim was ultimately more useful and relevant than any specific product. For the aim of a college education was nothing less than enlargement of mind -- in his words,

the power of viewing many things at once as one whole, of referring them severally to their true place in the universal system, of understanding their respective values, and determining their mutual dependence (VI, 6).

The value of this disposition of mind, Newman charged, far transcended any training for a specific function. For a person who has attained such an enlargement of mind "will be placed in that state of intellect in which he can take up any one of the . . . callings" and so be better equipped to deal creatively and insightfully with his or her development as well as with the changes and variety of society (VII, 6).

Nevertheless, granting that Newman's reply has been influential and sounds pretty, is it true? Remember that when Newman delivered his lectures the word "science" had been coined just a decade before. Newton and his non-relativistic views on the independence of space and time reigned as absolute monarchs, mathematics was still unclear about alternative geometries and had not vet dreamed of the paradoxes of infinite sets, Darwin's Origin of Species was seven years from publication, economics had established itself as a distinct discipline less than a century before, psychology was almost four decades from being seen as an independent inquiry, and Newman himself felt no reservation in addressing his audience solely and repeatedly as "Gentlemen." Clearly, gentlepeople, we have come a long way. So, as pretty and apt as it sounds, is Newman's view true? Is it the case that one will or should learn at the College how to refer things to their true places in the universal system?

I believe it is obvious that we cannot answer that question unless we go to the disciplines themselves. And to give us some direction, let us ask a question of the

on disciplines --- say, How can we understand

human activity?

One obvious discipline to help us answer this question is psychology. There we will read, say, B.F. Skinner, who holds that our desires and feelings cannot explain our behavior. For, Skinner argues, a person never does anything because he or she wants to do it: wanting, feeling, desiring, and all such mental acts are the mere shadows of the true causes. This is so, according to Skinner, because a person is best understood in behavioral terms -- as a "complex repertoire of behavior appropriate to a given set of contingencies." And what determines whether a behavior pattern is appropriate is whether it has or tends to have, survival value. Hence the true causes must be looked for within an environment defined by an evolutionary framework. Accordingly, why one does what one does must be explained, says Skinner, within an evolutionary-behavioral model.

So now, after reading Skinner, can we say that we have one piece in the "Universal System" of knowledge? Can we say that we have heard from psychology? We can, provided we read only Skinner. But turn to another influential psychologist, say, Phillip Teitelbaum, and we read that Skinner is right in telling us that we do not act from feelings but is wrong in telling us to look to the behavioral environment for the true causes. Not there but the central nervous system is the source of explanation of human behavior. In Teitelbaum's words:

The nervous system is what makes us tick, so we take it apart. Chop it into smaller chunks and our behavior also decomposes into smaller fragments. Intergrate the units of the nervous system and you synthesize behavior.

What one does, then, must ultimately be accounted for in terms of the central nervous system. But do not stop with these two thinkers. Continue and read, say, Carl Rogers, who views a person as a "selfactualizing process of becoming," and who consequently insists that desires and hopes and the like must be considered in understanding people. For these are central to the matrix of self-actualization: to exclude them would be to omit what is most significant about us.

It seems, then, even on the basis of this brief look, that the question, "What does psychology tell us?" is ludicrous, for psychology does not tell us any one thing. It is not a monolithic discipline. Rather sharp disagreement abounds over the most fundamental matters. In our glimpse we saw this disagreement focus on where to look for an explanation of human activity: What are "the facts"? -- our behavior, neurological organization, purposes and plans? Yet implicit within this question lie a number of others, concerning the very aim of psychology and the place and nature of values and humanity in it.

If we had time we could observe that similar disagreements exist throughout the social sciences. Like psychology they are all deeply divided, and within themselves, concerning (1) their aim -- description, prescription, explanation, revolution? (2) their method -- prediction and control, valuational analysis, empathic understanding, dialectical analysis? (3) and even their topic -- just what is society, a person, politics, economics anyway? But for the sake of time let us put this more extended examination aside, and turn to the physical sciences.

There, too, unanimity eludes us: guasars, red shifts, the myriad small particles of physics, relativity theory, the status of quantum mechanics -- all leave room for profound and widespread disagreement. However, what I wish instead to focus on, in this brief excursus into the physical sciences, is their historical nature. For even when we find general agreement in the physical sciences, the content of the agreement has changed radically from epoch to epoch. For instance, if we were able to and did transport some physicists of one to two millenia ago to the present and asked them to explain human behavior, they would dismiss the question as absurd for a physicist to answer. For Aristotle had taught them that such



Plato Discoursing with a Student From the painting, "Philosophy," by Chavannes

Newton Analyzing the Ray of Light



questions belong to the theory of deliberation and not the theory of the heavens. Yet were we to question physicists of one to three centuries ago they would probably be more willing to reply. Indeed they might even refer us to that sixteenth century thinker Laplace, who reasoned that an "intelligence, who for a given instant should be acquainted with all the forces . . . and with the . . . positions of the entities," and who also knew their laws, would know all. "Nothing would be uncertain for him; the future as well as the past would be present to his eyes." Hence human action for our physicist of one to three centuries ago is fully explicable and predictable in terms of (1) the positions and forces of the physical bodies at (2) a given instant of the universe -a view which we have come to call classical determinism.

But now, if we ask physicists of today our question, we would find them probably to be one of two types -- a "believer" or a "sceptic." Both would reject in toto the classical thesis of determinism but for different reasons. The believers would reject the deterministic thesis on two grounds: First, they would point out that

Einstein showed that there is no "given instant" to the universe as classical determinism held, for time is a local phenomenon, intertwined with acceleration and mass. Hence, contrary to classical determinism, there is no "universal moment" common to all things and thus there is no possibility of determining the nature of all things at such a "moment." Second, the classical determinist view of a thing as having a definite force and position or "nature" must be dismissed, for quantum mechanics has shown that there is a real indeterminacy in regard to particles having both specific force and position. Hence human behavior, if understood as influenced by the micro-entities of quantum mechanics, could not be clearly predicted and at best might be seen within the matrices of probability functions. The sceptical physicists, however, would reply that what is crucial in science is not the general agreement on the current position but that the current position has always been rejected. Consequently, there is no reason to believe that the position agreed on today will be the final position, or indeed, that there will ever be a final position. And if

some wish, as our believing physicists wish, to assume that physics in particular and science in general "progress" to the real, they must give a reason for this faith. For since when does predictive power entail an understanding of the real? That we are able to control more does not mean we know more. To think so is to confuse knowledge with magic. Rather, our sceptical physicist concludes, physics does not speak of the real but instead provides us with convenient mathematical tools, which we label formulae and theories, and which organize our experiences. Science, like any tool, is neither true nor false but useful or not useful.

"But what of the scientific method?" someone might ask here. "Isn't the scientific method a point of agreement on which we can build?" Well, to answer this question we must critically examine "the method" -- a difficult task, since for some to criticize the method is to criticize the divine. But let us start out by recalling what the scientific method is popularly held to be -- a procedure in which we are to (1) observe the facts, (2) construct an explanatory hypothesis, (3) deduce (preferably novel) predictions from the hypothesis, (4) compare what is predicted with what happens, and (5) determine whether the hypothesis is confirmed, refuted, or requires revision.

However, we shall find pronounced disagreement here as well. To begin with, we have already touched on some of the difficulties in applying this method to the social sciences: How can we observe "the facts" when what is in question is what the facts are? and why should we construct predictive hypotheses when what is in question is whether people can be understood in this way? While physics and chemistry do not have the second problem, they do have the first -- especially when it comes to the frontiers of their disciplines. Moreover, when they do not have the problem of what "the facts" are, when they do by and large enjoy agreement as to what counts as evidence, first, we will have to recall that these "facts" change from historical epoch to epoch, and second, we must realize that this agreement leads them not to teach the so-called scientific method. For, recall how many of the answers are in the back of the book. Yet how can there be answers, when the method tells us to reject these answers that are not personally validated by us? Or consider how you did or will approach a laboratory problem. Say that you are told that a microscope should reveal red circles on this slide. But, alas, no matter how hard you look, you fail to see the red circles. You adjust and readjust the knobs. You call a friend in to adjust and readjust the knobs. But no red circles. The only red circles are those in your eyes from pressing so hard against the microscope; and you can't see those either, since you have no mirror. So then, do you conclude that the theory is false? -- that it is to be dismissed? By no means. You might be dismissed, by the professor, but not the theory. What these reminders indicate is that it is not the theory that is being tested here but the student -- as is seen by how you panic when your answers don't agree with those in "the back of the book" or when you don't see the red circles. Hence, it seems quite misleading to insist that the scientific method as just stated is what we learn and master in science courses. We learn to compute right answers, to see red circles, that science is arbitrary or subjective in the way a personal decision -- say one's preference for chocolate ice cream -- is subjective. But it is to say that the standards and canons of science are determined from within the practice, which itself is an historical endeavor and so is continually open and in flux. Consequently, we can no more look to "the method" of science as providing us with that touchstone on which we can all agree than we can look to "the method" of ethics or religion. All of these endeavors are cultural and so temporal phenomena. Hence their methods will not only vary from epoch to epoch but also will be open to dramatically different interpretations.

unable to appreciate or understand each other. And in an era when all of the disciplines are especially needed to face the troubles of the world, the "degree of incomprehension on both sides is the kind of joke which has gone sour" (p. 18). A mere scientific education is narrow, yes, but so is a mere humanities education.

But for many, and by now no surprise, Snow does not go far enough. It is not that we are separated by ignorance but that the literary culture is not worth knowing. Francis Crick, who with James Watson worked out a structure for the DNA molecule, argues that Snow's mistake was to "underestimate the differences" between the two cultures:

... the College offers no invitation to see how everything falls into its place but rather offers an invitation to find out where the disagreements are concerning how things fit into their places, and indeed whether there are things to fit and places to fit into.

and to measure carefully; but we do not learn to criticize the current theory.

The justification for such an approach is that it is extraordinarily effective and no one has come up with a better one. In the words of one of the major philosophers of science today, Thomas Kuhn:

Without wishing to defend the excessive lengths to which this type of education has been occasionally carried, one cannot help but notice that in general it has been immensely effective. Of course, it is a narrow and rigid education, probably more so than any other except perhaps in orthodox theology. But for normal scientific work ... within the tradition that the textbooks define, the scientist is almost perfectly equipped.

The intent of an education in science, accordingly, is for the student to attain to the levels and standards of the current theory. Hence education in the physical sciences is not much a matter of criticism as it is a matter of initiation -- initiation into the formulas, facts, and methods employed at that time in the discipline. In this sense of introducing the student into a total system of techniques, strategies and standards, science is "subjective." This is not to say In addition to being divided within themselves, moreover, the academic disciplines are also divided from one another in part by ignorance and at times in part by profound differences concerning the status of the humanities and humanity's place in nature.

That the disciplines are divided from one another by ignorance is no news. C. P. Snow was saying decades ago that a scientific education is narrow. He observes that Charles Dickens, who among novelists is considered as all too obvious, is too often viewed by scientists as though "he were an extraordinarily esoteric, tangled and dubiously rewarding writer . . . the type specimen of literary incomprehensibility.

But Snow does not stop here. He goes on to ask:

But what of the other side: They are impoverished too - perhaps more seriously because they are vainer about it. They still like to pretend that the traditional culture is the whole of 'culture' as though the natural order didn't exist. (p. 10).

What we are left with, says Snow, is at least two cultures, the literary and the scientific, The old or literary culture, which was originally based on Christian values, is clearly dying, whereas the new culture, the scientific one, based on scientific values, is still in an early age of development.... It is not possible to see one's way clearly in the modern world unless one grasps this division between these two cultures and the fact that one is slowly dying and the other, although primitive, is bursting into life.

For Crick, then, we have only one legitimate culture, the scientific one, with the residue as decadence. But such a divisive claim! Why does he make it? He does so because he believes that the "ultimate aim of the modern movement of biology is in fact to explain all biology (and eventually all human life) in terms of physics and chemistry," (p. 10). That is, the model Crick has of scientific understanding is that of a ladder, where the happenings in large groups -- currently studied by sociology, economics, and the like -- will eventually be explained by (the lower rung of) psychology, the study of individual behavior, which in turn will be reduced to (the next rung of the ladder) physiology, the study of the nervous system, which in its turn will be reduced to

biology, the study of life systems, and then to chemistry and, finally, to (the bottom and basic rung) physics. In contrast to the sceptical understanding of science, which views such a ladder of knowledge as at best a possibility for exciting but ultimately curious correlations, Crick sees the ladder as a reality not yet fully borne out but nevertheless providing a justification for holding that the source of all legitimate explanations and values resides only in science and ultimately in physics. Accordingly, the literary culture, in pretending that it is a source of insight and value, is playing the fool's role.

Of course the "other" culture is hardly quiet before such an onslaught. But what is important for us to note here is that the discussion continues. But to what end? --Just that, perhaps by now obviously enough, is what cannot be said. For where such disagreements exist, there "knowledge," in Newman's sense, does not. But this result should not lead us to deplore the state of "knowledge." Rather it should challenge us to reconceive it: To grasp the human activities of learning and understanding, we must no longer look, as Newman in the nineteenth century did, to those calm areas of agreement and unity. but instead we must seek out the turbulence of controversy. For as we have seen repeatedly, understanding is an historical happening. It is not a list of eternal truths but a groping for the precise articulation and the sustained analysis of those issues that divide us. To learn, as Newman so clearly saw, is an enlargement of mind. But it is not, as he believed, the awareness of how things fit into "their true place in the universal system." Rather enlargement of mind involves seeing the issues which divide us, and understanding these issues as cultural -meeting our particular needs at this particular time; historical -- developing and emerging in time; multi-faceted -- embracing many fields in bewildering complexity; ongoing -- of immediate concern and challenge; and open -- forever to be pursued.

Englargement of mind, thus, does not involve the serene quiet of mystic contemplation but the dynamic and unceasing quest for sense in life. It does not result in "products" or believers, who possess the One Truth, but rather fosters thinkers who have a profound tolerance for ambiguity and uncertainty, and yet who have as well an enduring commitment to some sort of "sense making" amidst the buzzin' bloomin' confusion.

Consequently, the College offers no invitation to see how everything fits into its place but rather offers an invitation to find out where the disagreements are concerning how things fit into their places, and indeed whether there are things to fit and places to fit into. This invitation, however, must not be misconstrued. It is not an invitation to become an *instant colleague*, one able immediately to contribute creative ideas to the hurly burly

. . . the perplexity of life is that in response to one's no trump bid one confronts an off-tackle slant.

of the controversies. First must be mastered the assumptions and views leading to and allowing us to state the issues; and such mastery involves the hard work of memorizing, problem-solving, exercises in writing essays, and the like. Nor is it an invitation to become a fact monger, to memorize all the material in grade grabber fashion, yet to fail in the end to see the point of the mastery. For the point is none other than freeing the student from the ignorance of the issues so that he or she can become engaged in the cultural deliberation regarding them. Nor is it an invitation to be a discipline mole, to master the material and see the issues but only within the confines of one or two disciplines. Newman himself worried about this "danger of being absorbed and narrowed by a discipline," (VII, 6); for to be so narrowed is to lack a sense of the sweep of the controversies within even one's own discipline. Nor again is it an invitation to become a sampler, to hop arbitrarily from one discipline to another. As Newman saw, that would be to make "the error of distracting and enfeebling the mind by an unmeaning profusion of subjects; of implying that a smattering in a dozen branches of study is not shallowness, which it is, but enlargement, which it is not," (VI, 8). Nor finally it is an invitation to be a collector of recipes -- to seek for the "practical" directives from the various disciplines. For a recipe, even a collection of them, lacks all sense of the vagueness, ambiguity, and flux built into the human situation. With a recipe one can perhaps plan a dinner; but one cannot manage one's life. For the perplexity in life is that in reply to one's no trump bid one confronts an off-tackle slant.

Rather, with Newman, the College asks its students to enlarge their minds. With him it views this aim as much more significant than any particular and immediate aim -- say, learning how to run a business or become a doctor. And with him it views the achievement of this aim as something far more useful than the achievement of any specific product. For what the College seeks is not "products" -- things of dull doings -- as if a person could be confined to the mastery of facts, techniques, and recipes. Rather, the College looks for persons who are aware of themselves as having choices within a matrix of cultural issues and who recognize that these choices will often make a difference. Such agents as these will be far less likely to be taken in by any simplistic account or method and will be much more likely to meet successfully the demands of a world in flux and radical change -- where our distinctions are repeatedly blurred, our predictions at best come out only half true, our lives are ambiguous and uncertain. In this sense our education, our liberal education, alone can be useful. For in its refusal to offer the easy truth, the unambiguous "facts" and the clear "life management recipes," in its refusal to gloss over or disguise the profound disagreements underlying our pretty theories, and in all its profound insistence on the subtle interconnectedness of our ideas and our lives, the liberal education more than any other kind of study, makes us aware of "the real world." Indeed it makes us free -- the root meaning of "liberal" -- by making us realize that the real world is an open question. Welcome to the College.



Edward W. James, Associate Professor of Philosophy, has a number of articles on philosophy of logic, philosophy of science, and ethics in various philosophical journals and anthologies. He is currently completing a book on ethical pluralism, its sources and standards.

17