

CHAPTER 9

PRAXIOLOGY OF EDUCATION AS A BRANCH OF EDUCOLOGY

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TRANSITION: 'Educology' is a term that names knowledge about education. Such knowledge can be categorized with respect to several different sets of criteria. For example, with respect to the criterion of standards of verification, at least three categories of educology are distinguishable: analytic, normative, empirical. And, with respect to the criterion of objects of knowledge within the educational process, at least another three categories are possible: knowledge about good states of affairs in education (normative philosophical educology); knowledge about extant states of affairs in education (scientific educology); knowledge about effective action in education (praxiological educology).

In the previous chapter, Professor Biggs argues, among other things, that knowledge about effective educational action is in a deficient, inadequate state of development. More effort should be directed toward the extension of such knowledge. In this next chapter, Professor Perry explicates the concept of praxiological educology (i.e., the praxiology of education) and relates it to the concept of educology. His explication includes the interesting points that (1) praxiology of education is a subdivision of educology; (2) responsibility and accountability in education necessarily require praxiological educology; (3) knowledge of how to achieve undesired as well as desired ends is included in the concept of praxiology; (4) kinds of effective performance include, at times, deliberate inaction; and (5) the context of performance determines its effectiveness. This last point echoes Professor Maccia's statement in Chapter 2: Effective functions are relations, not activities, and effective performances are not mere doings, but organized, systematic doings that are adequate in relation to ends.

Professor Perry's conception of educology, then, is to a large extent coherent with that of Brezinka, Maccia, Steiner, Christensen, and Monshower: Knowledge about education includes knowledge of good or right relations in education, knowledge of extant relations in education, and knowledge of effective relations in education. They share the conception that educology implies more than scientific knowledge about education, although there is disagreement about what scientific knowledge about education characterizes. What Monshower maintains is science of education is very close to what Perry explicates as praxiology of education.

Perry differs with Biggs in the conception of educology with respect to the range of knowledge about education. Biggs argues for knowledge

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about effective performance in education and proposes the term 'educology' as a name for that knowledge. (Monshower does likewise and argues that it be regarded as the science of education.) Perry explicates the conception of 'knowledge about effective performance in education' and conceives of it as part of (or a branch of) the knowledge about education that is possible. The whole of that knowledge is educology, and one part is the praxiology of education: knowledge about effective performance in education.

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Whether we are doing teaching ("education") or studying it ("educology"), what is our basis for presuming to know what we're doing? How do we know what effects our actions are having, or how our actions are best described or explained, what ends our actions are aimed at achieving, and whether our actions have any substantial prospect of success?

Put the matter another way: How accountable are we? How much responsibility is it reasonable for us to take for the results of our actions in the classroom or in the laboratory? If we do not have knowledge -- legitimately and adequately warranted knowledge -- about what we are doing, it would appear that we can neither predict, nor accept responsibility for, the effects of our actions; it would appear, that is to say, that we are "flying blind" and might better stop before we hurt someone.

What is the present situation? In small matters and restricted contexts where the number of relevant variables can be controlled rigorously, we have often learned to get consistent results, in education, as in medicine, engineering, and meteorology. Rote learning, for example, works wonders with young children, military recruits, and medical students. Operant conditioning works, within limits, on organisms generally (and even on you and me, so long as we don't think we are being manipulated).

For the most part, however, our knowledge about effectiveness is only rudimentary: effective action seems to be one of the last domains of human experience and being to have attracted interest as a formal field of study. Perhaps owing to its obvious complexity as a topic and perhaps for other reasons. Fortunately, the subject has begun to attract the efforts of such investigators as Kotarbiński, Steiner, and von Mises, as well as Körner, Skolimowski, and many others. It may be hoped, and even assumed, that the vision exhibited in the exploratory works of these, the founders of praxiology, will offer guidance and inspiration, not to say provocation, to others who might share the quest.

The present work, insofar as it is intended as something more than a means of conveying a brief bibliography to a wider audience, will be given to exploring several choices that will need to be made in the course of establishing adequately warranted knowledge claims about effective action. In particular, I propose to examine, first, whether praxiology

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is only to be concerned with actions that are effective in achieving *desired* states of affairs or processes, and, second, what *kinds* of effective action are possible. Both of these questions will lead to a third fundamental issue, namely, how the context of action is to be established, described, and explained, and with a discussion of that issue I will close.

To begin with, then, it might seem at the outset that a domain of knowledge about effective action would be concerned with only those actions that are effective in bringing about valued states of affairs and preserving them in being. This, however, is far from an adequate appraisal of the burden praxiology must carry, and not solely because, with regard to ends judged worthwhile, it is nevertheless possible that other, competing ends might be judged even more worthwhile, so that the end in view, however valued, might need to be made to give way to its more highly valued rival. Something once desired might come to be seen as having been valued by mistake, and again the need to know how to eliminate it would arise. Thus, with regard to any end on which we may place a positive value, we need praxiological knowledge to enable us to:

1. actualize that end;
2. preserve that end, enhance it, or diminish it; and
3. eliminate that end, or preserve it in non-being.

A further, and most valuable, sort of praxiological knowledge, in this connection, is the knowledge of natural processes such that we can determine when no effort or intervention on our part is called for in order that the desired state of affairs occurs: diligent inattention may prove to pay the best dividends.

It should not come as any surprise to recognize that we need praxiological knowledge about ends we do not value, or on which we place a negative value. We need to know how to bring about all possible states of affairs even if, and perhaps especially if, those states of affairs are in our judgement not worthwhile. We need also to know how to preserve these states in being, as well as how to eliminate and prevent them, for several reasons not the least of which is that we are liable to make our original valuations mistakenly, or have them invalidated by changing circumstances.

The most important reason, I suppose, why we need praxiological knowledge about states of affairs that are not desired is in order to be able to recognize whether present practices or processes are making them happen. Take, for example, the sort of apathetic outcome in which a student behaves with chronic passivity on any level higher than his viscera: Can we not see a clear profit in trying to gain knowledge about how this deplorable state comes to be?

In such a situation, one might take comfort in exploring the terrible tyranny over the mind that is exercised by an internalized contradiction, for what is the name for the result but 'panic'? Having discovered this powerful result, it becomes obvious to the researcher as well as the

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teacher that whatever the process of education may have in it, contradictions are not allowable (unless, of course, they are permitted along with some conceptual means to combat their nasty effect).

With regard to any bodily motion, there are countless correct answers to the question, "What are you doing?" If, for instance, in a game of cards I choose to play, and do play, the queen of diamonds, I can be said to be playing trumps, depleting my opponent's resources, infuriating my partner, shortening the game, and so forth. I might also be fairly said to be wasting my time, worrying my daughter, giving away my money, setting myself up to be fired from my job, or forgetting my medication. The "real" label for a specific bodily motion depends on the context within which the motion occurs, the purpose served or intended to be served, and the relative rank and authority of those in a position to judge the matter.

This is especially important in the case or the infinitely many occasions where bodily motions do not occur: where I do *not* lift a finger to help someone, where I do not press the brake pedal in time to prevent a collision. In the classroom as everywhere else, there are always countless motions we do *not* make, and what, then, are we *doing*? If we are deliberately abstaining from motion, we may be able to say so, but how will it ever be possible to offer a complete list of the infinitely many motions that we are not deliberately abstaining from initiating? Perhaps praxiology will be able to locate a set of boundaries that will enable agents to distinguish accurately and completely between what they are doing and what they are not.

Suppose, moreover, the attempt is made to specify alternatives to some motion chosen: the alternative being infinite in number, such a specification is impossible. This, however, seems an inadequate conclusion in view of the significance of alternatives in determining the significance of choice: an afternoon spent studying calculus *instead of* holding hands with one's beloved represents a choice so powerful as to be in some instances permanently effective. "What choice did he have?" is certainly an important question; praxiology ought to be able to make some contribution to an answer.

One final point remains to be made about specific bodily motions: they occur in an environment in which countless natural processes (and social processes as well) are already occurring, and in which countless other agents are, or might be, initiating other motions. How are we to know what the combined effect of all these processes and choices will be? In view of the boundless numbers of intentions and nonintentions, alternatives, consequences, processes and possible agents, it should be obvious that only by the most strenuous efforts along the lines of the already established domains of knowledge are we ever going to "know that we're doing." Our only hope, that is to say, will lie along the lines according to which we establish, at least provisionally, boundaries of practical relevance, boundaries which will test themselves in the course of proving more useful or less for our purposes. Thus it turns out that we can only know what we are doing within some given framework of what we are prepared to consider "normal" (or "possible").

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Every discriminable motion, whether by teacher, educologist, or student, can be observed and interpreted in countless contexts. One and the same gesture, for example, can be interpreted as a momentary impulse, part of a professional tactic or strategy, part of some institutional program, plan, or policy, or even as a symptom of an ideology, the manifestation of some fundamental cultural norm; and which is it, "really?"

Distinctions must be established, to sort out different levels of action, to distinguish different practitioners so far as their training, skills, and responsibilities are concerned. Thus, for instance, we might distinguish between praxiology, administrative praxiology, and educational praxiology, depending on whether knowledge of effective action was to be put to use by political leaders, administrators, or teachers.

This may be a defensible scheme, but there is obvious danger, for if, for instance, a teacher's knowledge of effectiveness extends only to the door of the classroom, then whatever happens beyond that door may well defeat the entire program being taught. If the teacher's eye is not on the widest possible horizon and the longest possible run, the prospect becomes ominously great that the teacher's accomplishment will amount to training and indoctrination, not education. If the teacher's eye is not on the sort of perspective that makes self-awareness and autonomy primary, then the student's eye will probably miss the mark also.

A preliminary way to distinguish three kinds of educational actions now presents itself. We can safely follow what has come to be familiar terminology and call them (a) pre-conventional, (b) conventional, and (c) post-conventional. Conventionality, the centerpiece of this particular bouquet of concepts may be taken as well exemplified by any familiar game such as football or chess: there are familiar rules, and experienced players know how to follow them. Pre-conventionality will be presented by the state of affairs prior to learning the game in question: one's moves, and one's reasons for them, are random in most cases and appropriate only by accident, if at all. Post-conventionality will then be the situation at the far end of the line when one has learned well how to play the game and is now concerned with such issues as why to play the game, whether to play it, and whether to change it (and, if so, for what reasons).

Conventions appear to be the most fruitful, if not the only, means to establish a standard for a correct description: as a word can only be defined within a given language, so a move can only be described within a game, or a game-like structure. Furthermore, conventions protect against the relativistic problem of determining whether the agent moved or the agent stood still while the entire world moved around it.

Conventions, of course, will be expected to appear in infinite variety and pattern; whatever conventions exist today will be surpassed tomorrow. This, however, is only to be expected; and it is the most important reason for the development of post-conventionality. Commitment to the conventional level alone amounts to devotion, and is, in a finite and fallible world, naive, albeit comfortable and predictable. Educational practices aimed

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at terminating the process of maturation at the conventional level will be, clearly, indoctrination, inexpensive only in the short run.

Pre-conventionality does not readily present itself as a goal that could even possibly be desired except in rare instances such as combat when it is one's adversary whom one aims to render incoherent and ineffective. Here, however, the point can be repeated that it is extremely useful to study the procedures and practices that will be effective in generating pre-conventionality, so that we can discern whether our present procedures and practices are likely to have that effect and, if they are, to change them. The effect of pre-conventionality is ultimately apathy, owing to confusion.

So, curiously enough, is the ultimate effect of conventionality, if we are to believe, as seems obvious, that conventional systems of whatever kind obey some sort of rule similar to the classic second law of thermodynamics, which holds that any closed system tends toward disorder. Conventional systems which lack any internal apparatus for maintenance, modification, and repair, must either depend on extra-systematic apparatus or else, in time, collapse into pre-conventionality. And again we find a goal that is not worthwhile, but for which praxiological knowledge is very much needed.

Two kinds of educational actions have now been considered; the third is post-conventional in nature, and I think it important (and perhaps crucial) to state at the outset that it is a kind of action that is *added to* conventional action (or blended with it) rather than a kind of action that takes the place of conventional action. Just as reflective thinking has as one of its primary objects the effectiveness or ineffectiveness of habitual thinking, so post-conventional action has as one of its most important functions the analysis, comparison, and, perhaps, modification of conventional actions. Once this is seen however, the significance of this distinction not only in the teaching and educological processes, but also in the description of an adequate outcome for the educational process, should be clear. To the extent that individuals who have encountered the educational process should thereafter be more rather than less capable of guiding their own maintenance and growth, post-conventionality must become a permanent part of their thinking.

There is no knowing, in any absolute and eternal sense, of what we are "really" doing. Since there is no knowing all possible consequences, all possible alternatives, all possible obstacles, there is no absolute knowing about effective action.

There is, however, the possibility of knowing within specified (and ever expanding) limits, of knowing as well as anyone (or everyone) else; what this possibility presupposes, however, is an enduring world view, a shared paradigm of the world and the processes and states within it, one that includes in all meaningful detail some such three-level model as the one here suggested. The educational practitioner, the educological prac-

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titioner, and the student, will share in a unified system of understanding and practice in which differences of responsibility and authority will rest on skill and choice as much as anything and more by far than on degree of befuddlement as is presently the case: we have at the moment a crew and passengers on Spaceship Earth, and the passengers are the ones too confused to function. There's something wrong with that.

Praxiology is essentially aimed at allowing us all to know what we are doing. As such, it is, or might be, and in any case ought to be, both the foundation and the outcome of education and educology: not a novel thought, but one that will prove effective, and that's what praxiology is for.

I wish to add one brief note to this introductory essay, a note about the concept of knowledge. Much of the literature I have seen is addressed to the massive task of determining how it is to be decided when knowledge has been achieved. Regarding this subject I wish only to say that knowledge rests on our choices of definitions and our choices of standards of evidence. It seems to me that we will spend our careers making these choices, testing them, and then, perhaps wearily but always hopefully, turning to choose a new and better alternative. We have reached the Socratic standpoint, so that we know that we don't know, and one of the items we know we don't know is how much better our knowledge can get. We will never know. Fortunately, we don't need to.

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