The Practical: Arts of Eclectic

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Preface and Recapitulation

Introduction

Though titled "The Practical" and concerned with practice, the series of papers of which this is one is grounded in a consideration of theory as well as practice. The series is concerned with theory because a study of educational literature reveals that education in general and the field of curriculum in particular have been inveterately theoretic and that this theoretic bent has let education down. Educators have sought theory (theory of curriculum, theories of teaching and learning) as if such theories would be sufficient to tell us what and how to teach. Educators have applied theories from the behavioral sciences toward solution of practical problems as if these borrowed theories could be applied simply and directly. Meanwhile, educators themselves, as well as others, bear witness to the fact that problems so attacked have been poorly solved. Extant curriculums with the stamp of theoretic legitimation often fail in practice. Teaching which is coherent with theory often misses its practical mark.

Some of this failure is inherent in the character of practical

problems. They are never solved completely or once and for all. Much of the failure, however, can be traced to marked disparities between theory and practice and to peculiarities of theory from the behavioral sciences.

Theories of curriculum and of teaching and learning cannot, alone, tell us what and how to teach, because questions of what and how to teach arise in concrete situations loaded with concrete particulars of time, place, person, and circumstance. Theory, on the other hand, contains little of such concrete particulars. Theory achieves its theoretical character, its order, system, economy, and, above all, its very generality only by abstraction from such particulars, by omitting much of them.

Theories borrowed from the behavioral sciences are marked by two other forbidding traits. Each of these sciences treats only a portion of the complex field from which educational problems arise, and, in the course of enquiry, the science isolates its treated portion from the portions treated in other behavioral sciences. Second, each behavioral science brings to bear on its treated portion not one but many principles of enquiry, each of which affords a different perspective and leads to a different treatment of its subject. Thus, pluralities of theory arise, no one member of a plurality complete, each member throwing its own useful light on the subject treated.

The incongruity of theory and practice cannot be corrected by a fundamental change in either one or the other. The practical is ineluctably concrete and particular. The strength and value of theory lie in its generality, system, and economy. Nor can the peculiarities of the behavioral sciences be removed easily or swiftly. They arise, as indicated in the first paper of this series,[1] from the complexity of their subject matters and the limitations of human ingenuity.

The problems posed by these complications can, however, be

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solved by other means. First, the particularities of each practical problem can be sought in the practical situation itself, the search guided by resources much richer than any one theory can afford. Second, in each instance of application of a borrowed theory to a practical situation, incongruities can be adjusted by mutual accommodation. Third, restricted subject and limited treatment so characteristic of behavioral theories can be transcended by using more than one such theory.

The methods by which these ends might be achieved have, however, a complication of their own. Although they can be described and exemplified, they cannot be reduced to generally applicable rules. Rather, in each instance of their application, they must be modified and adjusted to the case in hand. Because of this complication, I call them *arts*. These arts can be divided, though only for purposes of discussion, into two sorts: arts of the practical and arts of eclectic. The former are arts which supplement theory, which do for practice and the charting of practice what theory cannot do. The eclectic arts are arts by which we ready theory for practical use. They are arts by which we discover and take practical account of the distortions and limited perspective which a theory imposes on its subject.

In this paper, I shall deal mainly with the eclectic arts and, indeed, with only one subgroup of them. Nevertheless, let us look more closely at all these matters.

Arts of the Practical

The radical difference between practice and theory is visible wherever they occur together: in medicine, politics, law, and engineering, as well as in education. The practical is always marked by particularity, the theoretical by generality. The generality of theory ranges widely. At one extreme, it consists of such elegant, encompassing constructions as the postulates of Euclidean geometry, the system of terms which describes the wavelike condition and statistical location of small particles in the atom, and the Freudian blueprint of the soul. It consists, at the other extreme, of such neat, restricted summations as empirical generalizations, delimitations of species and genera, types, and subtypes, and simple measures of populations so delimited, such as means and modes.

Always and everywhere, whether at one extreme or the other, generalities are achieved only by processes of abstraction or idealization. Species are differentiated and defined on the basis of only *some* differences and similarities. Many others are ignored. Euclidean treatment of plane figures is concerned only with their conformation; the particular size of one figure or another is not included. The geometrical triangle, with its perfect sum of angles, takes no account of the variations in sum of angles which will mark any collection of any visible triangular surfaces. The height of any one Scotsman will only infrequently correspond with the mean height of Scotsmen. Very few women correspond precisely with Botticelli's Venus, and the intensity of very few lights varies with the square of the distance from their sources.

The very fabric of the practical, on the other hand, consists of the richly endowed and variable particulars from which theory abstracts or idealizes its uniformities. The road we drive on has bends and potholes not included on the map. We teach not literature, but this novel and that. The child with whom we work is both more and less than the percentile ranks, social class, and personality type into which she falls. Yet, we will drive our car smoothly, convey *Billy Budd* effectively, and teach 'Tilda well only as we take account of conditions of each which are not included in the theories which describe them as roads, literature, and learning child. We must take notice of these conditions, make some estimate of the relevance of each to the task in hand, and devise some means by which to cope with them.

The particularities of the practical, merely by existing, constitute one difficult problem for the practical arts. The problem is to *see* them—to take note that each is there and to honor it as possibly relevant to our concerns. This is difficult because we normally see only what we are instructed to look for and we are instructed by theory. Hence, if we take 'Tilda only as a learning child, we see only what a theory of learning, of childhood cognitive development, or of personality tells us to see. We will be blind to other particulars.

The practical arts operate in at least one semisystematic way to meet this problem. The way consists of deliberately "irrelevant" scanning of 'Tilda: looking at her through a succession of lenses which have nothing to do with her studentship. One looks at her

as small brother's sister, as Mommy's first, as occupant of the third floor apartment, as slightly overweight with a hint of southern accent. One wonders whom she will marry and what her married life will be like.

There are additional ways in which arts of perception may operate. First, it is quite possible that, if we perceive enough of 'Tilda's rich detail by "irrelevant" scanning, what remains will become conspicuous by virtue of not being included in any of the categories ("theories") we have brought to bear. That is, when only a few categories are used and, therefore, few details seen, the rich remainder constitutes a large undifferentiated background. If, however, the bulk of that background is subjected to differentiation, is nibbled away by successive "irrelevant" scannings, the situation is reversed. The now large mass of differentiated detail becomes background for the small remainder made noticeable by its very isolation—the conspicuously dark and lonely figure wandering at the back of the lighted crowd sitting around the bonfire.

Second, and despite prevailing psychological dogma, I think it probable that immediate perception, perception without the aid of learned organizers, categories, "theory," may occasionally occur —though such perceptions are doubtless fleeting and fragmentary. There are a few good arguments and much anecdote to support such a view. There is notably the argument that not all our learned categories are demonstrably taught us by telling and pointing. Some may have been taught us by experiences to which we were not directed. At any rate, the first teller and pointer could not have been told.

There is also reason to think that there are ways in which accessibility to immediate perception can be enhanced. The electronics troubleshooter, faced with an intermittent crackling of a hand-wired amplifier, first seeks the trouble systematically. He checks each tie point for loose connections, tests each one for a cold solder joint. This procedure fails to expose the trouble. He then, figuratively, throws his eyes out of focus, though still staring at the maze of wiring. Not quite so figuratively, he throws his mind out of focus, stops or disconnects the guiding mental machinery, loosens his muscles. Very often, this relaxation of guided attention works. The source of the electronic difficulty "leaps to the eye."

There are, of course, additional practical arts. There are arts of problemation. These are arts by which we assign various possible meanings to perceived detail of the situation and group them in different ways in order to perceive and shape different formulations of "the" problem posed by the displeasing situation. There are arts for weighing the alternative formulations of a problem thus achieved and for choosing one to follow further. There are arts for generating alternative possible solutions to the problem, arts for tracing each alternative solution to its probable consequences, arts for weighing and choosing among them. There are also reflexive arts for determining when the deliberation should be terminated and action undertaken. These must be left for discussion on another occasion.

Arts of Eclectic: Legitimation of Curriculums

Besides the radical difference between theory and practice which is visible wherever they occur together, there are special peculiarities of the theories which education borrows from the behavioral sciences. These peculiarities pose their own barriers to the easy application of theory to the solution of educational problems, and there are arts which surmount these barriers. These additional barriers and a first sketch of the eclectic arts are best seen in the context of ways in which we currently try to legitimate curriculums.

Exhortation and special pleading.—One group of exhortations in the literature is represented by the following paraphrases:

1. The schools of the world should disseminate a new conception of government, one that will embrace all of the activities of man, wherever he is throughout the world.
2. The organization of the school, of every classroom in it, and of every activity in every class should aim to disclose to the young the desirability of rules of the game: the possibility of devising and emending rules and the benefits which accrue from playing according to the rules. Only by this means, intensively and consistently carried out, can we hope to reduce government and imposition of order by force and sanction to their proper place as courts of last resort.
3. The population of every school and classroom should be highly heterogeneous in its clientele. These heterogeneous students should be encouraged and enabled to form subgroups which recognize and

give social force to the differences in interest and preference which bind and separate them. These subgroups should be encouraged to choose agents. These agents should function to adjudicate and compromise the different demands of different subgroups on limited resources and to resolve other conflicts which arise between group and group. Only in this way will representative government be rediscovered and returned to its proper function.

Another set of exhortations:

a) We must embody in an *un*structure of the schools our realization that the attention span of children is brief, their interests fleeting and numerous, their capacity to profit from an experience limited to the duration of their interest in that experience. Schools must become informal, unstructured, affording a wide variety of activities for every child and permitting him to move from one to another at will.

b) The child requires a structuring of space and time against which he can test his growing ego strength and into which he can retreat when the anxieties raised by uncertainty exceed his moment's capacity for enlarging his external reality. Hence, the early school should supply a firm divisioning of time and effort and a clear demarcation of "home" and "other." These divisions are not to be imposed willy-nilly, but their rhythms should be sufficiently enforced to be ever present in the immediate background of the child's awareness.

c) In sum, the schools must first supply each child with occasions and objects of aggression which are at once satisfyingly destroyable but not so irreplaceable that the ensuing guilt is too great. It must supply appropriate objects of libidinal cathexes. It must supply activities and occasions for increasing the child's capacity for suspense of impulse, including, of course, adequately supportive, guiding, and punishing adult figures. Finally, it must supply the child with resources for adult sublimation of instinctual energies.

One characteristic of these exhortations is immediately noticeable. Each draws on one science while ignoring others. Each item of the numbered set speaks from a view of the nature of government, drawn from annals of political theory. Each item of the lettered set speaks from a view of the child's inner life, drawn from annals of psychology. Other exhortations can be found which draw on sociology while ignoring politics and psychology. Others draw singly on economics or some other single field.

It is noteworthy that each of these singularly based exhortations is plausible, appealing. They are so because each speaks to one or another human need or desire to which education might contribute. Their very coexistence, then, points to an inadequacy of each and to the problem posed by this inadequacy. Each omits what another includes. They need, then, somehow to be joined and reconciled. This is one task of the eclectic arts.

A second characteristic is equally obvious. Each numbered item draws on a view of government which differs from the views of government drawn upon by the other numbered items. Each lettered item draws on a view of the child's inner needs and conditions which differs from the views employed by the other lettered items. It is also clear that these differing views are not merely contradictory views, one of which may be right and the others wrong. Most of them are literally different *views:* each stands in such a relation to the subject matter it shares with others that it sees a different facade or sees it in a different perspective. Thus, *a* sees large a present state of the child's existence; *b* sees large a condition of its continuing growth; and *c* sees large the instinctual impulses with which the child must cope. Again, the coexistence of the three points to an incompleteness of each. This mode of being incomplete constitutes the second problem with which the eclectic arts are designed to cope.

A third characteristic of these exhortations flows from the first and second: they constitute frighteningly one-sided educational commendations. If they be taken as curricular prescriptions, the result could be only chaos as far as the child in school is concerned. Any one of the proposals would lead to a curriculum so inadequate, so incomplete, that displacement would quickly ensue. The replacement, if it stemmed from another such one-sided commendation, would do something the first failed to do but would fail to do what the first accomplished. It, too, would be displaced in favor of another, and so on indefinitely. The child's education, in consequence, would be a series of abortive jerks and startings with no course charted and followed to a defensible destination.

Special pleadings reveal the same fault. The defense of one science curriculum points with pride to one set of strengths. The defense of another praises it for quite different strengths. One best fits the structure of scientific enquiry. Another is most up to date

in content. A third is accessible to a wider range of student competences. A fourth is designed to meet certain social needs. These different pleas cannot speak to one another because they are speaking from different grounds: different subjects of different behavioral sciences or widely different views of one of these subjects. Again, the effect on curriculum, if effect there were, would be a splintering of children's education.[2]

This third characteristic of curriculum legitimations—that they are frighteningly one-sided commendations—constitutes the moral and pragmatic reason why educators ought to attend to the first and second characteristics. If education is to be good for students and if the institution of education is to avoid the punishment with which societies threaten institutions which fail their function, educators must attend to the problems posed by the inadequacy of borrowed theory: the incompleteness of their subjects and the incomplete view which each takes of its incomplete subject.

Eclectic arts and incomplete subjects.—The problems of education arise from exceedingly complex actions, reactions, and transactions of men. These doings constitute a skein of myriad threads which know no boundaries separating, say, economics from politics, or sociology from psychology. For example, the way I allocate my scarce resources is tied to my infantile experiences. My infantile experiences, in turn, were determind in part by my parents' economic resources, in part by their political allegiances, in part by their small-town milieu. It is just such a complex web which must somehow be taken into account if we are to effect durable solutions to educational problems.

Yet our fullest and most reliable knowledge of these matters is not knowledge of the web as a whole. It is knowledge of various shreds and sections of the whole, each shred and section out of connection with other shreds and sections. It is the knowledge conferred upon us by the various behavioral sciences. Some six sciences are involved: a kind of behavioral epistemology, concerned with what men know or can find out; a kind of behavioral ethics, concerned with what men need and want and what among these wants and needs conduce to a satisfying life; sociology-anthropology; economics; political science; and psychology.

This separation of the whole of human affairs into subjects of various sciences is not a fault of these sciences but a condition of

all scientific enquiry. All communities of enquiry are controlled by principles of enquiry which distingish in the awful complexity of the world lesser complexities with which enquiries can deal. These same principles supply terms for the questions to be asked of each subject matter and point to the various kinds of data which each enquiry will seek.

In the course of thus readying a subject of scientific, of theoretic, enquiry, the principles which distinguish it from the whole tend to confer on the partial subject an appearance of wholeness and unity. The connecting and entwining threads which originally made it one aspect of a larger whole are smoothed down and covered over. The notion of a social fact, for example, gives to the subject of some sociological enquiry an appearance of independence from psychological fact. The notion of an epigenetic development of individual personality from factors inherent in each organism confers on psychological fact a pseudoindependence from social facts and confers on social facts, indeed, the appearance of being mere expressions of individual personality.

These separations and smoothings of subjects of enquiry are reflected in the knowledge we inherit from the sciences which treat these subjects. The bodies of knowledge are themselves separated, each couched in its own set of terms. Only a few terms of each set have connections with terms of another set. Hence, the bodies of knowledge we inherit from the behavioral sciences are, taken separately, only imperfectly applicable to practical problems, problems which arise in the whole web of the original complexity.

We cannot hope for an early theoretical healing of these ruptures of subjects and of knowledges about them. New principles of enquiry which knit together what earlier principles cut asunder come only occasionally and in the long course of enquiry. What is required is a practical healing, a recourse to temporary and tentative bridges built between useful parts of bodies of knowledge in the course of their application to practical problems. This is the function of one group of eclectic arts.

These arts are addressed to the underlying structure of theories. They are arts which identify the devices which confer the appearance of completeness on the subject of the enquiry. They are arts which trace these devices to their effects—to the distortions and smoothings they impose on the subject of enquiry and the comple-

mentary subordinations and alterations they confer on adjacent subjects. They are further arts which determine what portions of other sciences, other theories, can be made to run in harness with the theory in hand and which cannot. They are, finally, arts by which to effect the temporary harness and apply the team to our practical problem.

Eclectic arts and incomplete views.—Each separated and simplified subject of a behavioral science is still so complex that it affords scope for application of numerous principles of enquiry. Each such principle makes its own selection of the data relevant to its enquiry. Each one effects its own subordinations and superordinations among the facets of the subject. Each asks different questions of the subject and gives rise to different answers. In consequence, a plurality of theories arises in each behavioral science, each one incomplete, each throwing its own light on the subject.

Some members of a plurality are more useful than others on a given practical problem. No one throws all available light on the subject. One member may complement another more effectively or more immediately than would some other. Hence, another set of eclectic arts is required—arts which will disclose what a given principle of enquiry does to its subject, what emphases it induces, what perspective it takes, what it leaves clouded, obscure, or ignored. These are the arts which will occupy us for the remainder of this paper.

Interim Summary

We can distinguish, for purposes of discussion, three sets of arts for reconciling the incongruities of theory to practice in attacking problems of education. There are practical arts concerned with particulars of the practical omitted by theory. There are eclectic arts concerned with the incompleteness of each subject of the behavioral sciences. There are other eclectic arts which select among, adjust, and sometimes combine the incomplete views which constitute the plurality of the theories generated in each behavioral science.

These sets of arts are not, however, wholly separable from one another. Much usage of the practical arts is, indeed, focused wholly upon the unpleasing concrete situations which rouse our concern for practices and urge us toward their modification. Much usage of

the eclectic arts is focused wholly on the theories which seem to bear on our practical concerns. Collectively, however, these arts are concerned with *bringing a principle to its case.* This is achieved not by bringing one to the other, but by mutual accommodation. The principle (theory) must be selected and adapted to the case. But the case becomes a case of (an instance of) this theory or another only as it is made to be so. We carve it from the situation in a fashion which makes it so; we select from facts of the situation what we shall treat as relevant facts of the forming case; then we divide the relevant facts into those we shall entertain as alterable and those we shall treat as fixed. The steps in this mutual accommodation are taken first from one side, then from the other. Hence, arts of eclectic and arts of the practical commingle.

Transition

In what follows, we are concerned with the arts which treat pluralities of theory about a single subject. We are concerned with how their function and use can be conveyed to prospective educators. But how they can be taught depends on the character of the arts themselves. The character of the arts, in turn, depends on the peculiarities which distinguish one member of a plurality of theories from others. Hence, we must be dealing with all these three simultaneously. We shall use one example throughout the treatment: theories of personality. We shall therefore consider some of the peculiarities of these several theories, the means by which these peculiarities are detected, and how these means can be conveyed to students of education.

The Teaching of Eclectic

The Problem

Nearly all theories in all the behavioral sciences are marked by the coexistence of competing theories. There is not one theory of personality but many, representing radically different choices of what is relevant and important in human action and passion. There is not one theory of groups but several. There is not one theory of learning but half a dozen. All the social and behavioral sciences are marked by "schools" distinguished from one another by different choices among principles of enquiry, each choice of

principle determining a selection and arrangement of different aspects, and different relations among aspects, of the subject under treatment.

Even the best theories which arise from enquiries so directed (and there is no other way of directing theoretical enquiries) are, then, radically incomplete in their views. Vague and ambiguous theories, trivial theories, and unsupported speculations can be identified and eliminated by various familiar methods of analysis and criticism and are, in the course of the history of most fields of enquiry, in fact, eliminated. The theories which survive this winnowing—good theories—are nevertheless incomplete, each taking its own view of the subject matter and throwing its own peculiar light upon it.

If this incompleteness were patent, we would have no problem. If there could easily be an immediate (by theory unmediated) apprehension of an instance of the actual, existing subject matter of these theories, then an instant's comparison of the real thing with its representation in theory would betray the incompleteness of the theory. This happy possibility unhappily does not exist. Good theories are persuasive theories, plausible theories. Each of them formulates in its own way some truths about some men under some circumstances; each is "true," *in its own terms,* of some, perhaps many or all, instances of its subject matter. If these truths, once well presented to us by a theory, find their referents in our own experience of men, this resonance of experience with assertion persuades us not only of the "truth" of the theory but of its whole truth. We not only seek what it tells us to seek, we do not seek and only rarely note what it does *not* instruct us to search out. This constitutes our problem as educators.

"Problem" has here its usual two senses. It stands for something we complain about or ought to complain about: a handicap, an undesirable, a vice. It also stands for the query by means of which we begin to seek correction of the vice complained of. Both senses deserve formulation.

Tunnel vision.—The problem in the first sense is obvious enough. The vice is tunnel vision. The possessor of only one of a collection of competing theories sees its subject matter in only the peculiar light cast by that theory and conceives as alternatives of education (ends or means) only the ones suggested by the one view

and judges among them only in the light of the one. The teacher of art or literature possessed by only one critical theory sees only a limited array of the polyvalences of literature or art for education. The curriculum planner possessed by only one theory of personality conceives of a healthful and satisfying life for his students in unnecessarily narrow terms. The architect of school systems possessed by only one view of the relations of school and society sees only one or a few modes of school organization and polity.

The problem in the second sense is equally obvious—at least in initial and general form: by what alternatives to doctrinaire instruction can some of the riches of the radical pluralism of theory be made accessible to educators in training? I shall suggest four such alternatives, three of them useful and two of these three almost immediately available for use by intelligent and well-informed faculties.

A note on "objectives."—It should be noted in advance that the suggested alternatives to doctrinaire instruction may each contribute to somewhat different outcomes. "The riches of radical pluralism" takes on different meanings. An alternative may contribute to informed use of a *single* theory. That is, it will contribute mainly or solely to the potential educator's understanding of the idiosyncrasies of his chosen tool: what it foregrounds and suppresses, where its accuracy or reliability is worst and best. On the other hand, it may contribute to informed choice among a battery of alternative theories, choice appropriate to the specific problem to be solved or to the concrete case in hand. Third, it may contribute to the ability to bring a multiplicity of theoretic stands to bear on a concrete case, thus ensuring a wider view of what might be done by way of education, a wider view of the considerations relevant to choice among alternatives, and a wider view of the hardships and facilitations to be expected in the course of instruction.

It is not at all clear which of these possible outcomes, if any, is the most desirable for prospective educators. Theoretically, I suppose, the best case could be made for the last. In practice, however, all will depend on the concrete case. In some cases, time may be of the essence. Then, it may be far more desirable that an intelligent choice be made among limited alternatives than a hurried and anxious choice among many. In other cases, the person or group of persons involved may be unable to tolerate much uncer-

tainty or uncertainty long sustained. It may be far better for such persons that they possess limited tools, knowing them well, than a larger armament which, like all armament, presses for its use but brings much anxiety in its train.

Mere Conspectus

The most obvious and least useful alternative to doctrinaire instruction is a trio of doctrinaire instructions. Says a junior faculty member at a meeting considering Professor June's course syllabi: "He proposes one-quarter courses in each of such broad conceptions as friendship, family, and aggression. It would be much better, much more just, to make them year courses with several different professors teaching each concept. After all, there are many points of view on such matters. All of them ought to get a hearing —or at least more than one."

There are good intentions behind such proposals, and they constitute good beginnings. There is recognition of a kind of pluralism. There is distaste for arbitrary choice among the plurality. There is also the firm promise, however, that arbitrary choice is merely postponed and transferred to another elector. The realization of this unfortunate promise can be seen in actual student responses to merely conspective courses, and the inevitability of the promise can be seen in the nature of the suggestion itself.

A very common and most pathetic student response is the query, sometimes brazen, sometimes simple and unembarrassed, sometimes shy and troubled: "So there are three theories. Which one is right?"

The pathos of this kind of response lies in the fact that it is not the fault of students. The whole burden of their education (not only at the primary level, where it is probably desirable, but at the secondary level, where it may not be, and at the collegiate level, where it almost certainly is not) has been a collection of unique solutions to sharply separated problems and of single bodies of "fact" about each of many isolated subject matters. With such a background, students are quite unprepared to recognize the character of theoretic pluralism, much less cope with it. This circumstance, in turn, points to the notable practical weakness of mere conspectuses: they are neither understood nor believed. And they will not be until and unless two distinct factors are added to in-

struction in general or to conspectuses in particular. We shall name them in a moment.

A second, very common, student response, though rarely voiced unless solicited, consists, in effect, of assigning to each member of a conspectus a curious, equal validity. Each member of the conspectus has evidence and argument to support it. Each is espoused by one substantial voice of authority. Each, therefore, must be, in some sense, right. Each, then, deserves respect and mastery.

At first glance, this student response appears a grade more sophisticated than the first. It seems to recognize plurality as a fact of life instead of treating it as an illusion the professor can dispel. In fact, it is this apparently greater sophistication which is the illusion. With nothing more to go on than the conspectus itself and the apparently equal distribution of evidence and praise among the members of the plurality, most students reason that the problem posed by the plurality is a problem of congenial choice. Respect for and mastery of each member of the conspectus are taken as preludes and requisites to discovery of that one of the plurality which is most congenial and therefore to be chosen. In effect, the student treats the plurality as an odd outcome of enquiry (to which he is not privy) but not as a fact of his life.

The suggestion itself—that doctrinaire espousal be replaced by conspectus—promises little more than can be seen in these student responses. It provides a sort of *pro forma* justice or impartiality with respect to alternative views but no apparatus by which to understand, judge, or exploit the array of views. That the suggestion is often coupled with the proviso that each view be presented by an advocate of it—"several different professors teaching each concept"—suggests that the professoriat is in much the same condition as some students: pretty much at a loss for means to deal with the plurality other than by impartial presentation (i.e., partial advocacies but *equal* partial advocacies).

The phrase "understand, judge, or exploit" suggests the two factors which are wanting in mere conspectus. We need, on the one hand, a mode of communication which will explain how it can be that different men of intelligence, knowledge, and goodwill can arrive at such different views of a common subject. We need, on the other hand, means by which students can discover the various powers of perception which a variety of theories can confer.

Inappropriate accounts of enquiry.—A beginning toward the first of these needs would be achieved by no more than a general and introductory disquisition on enquiry and its difficulties couched in terms which speak pointedly to the existence of pluralities of theories and account for the origin of such pluralities.

The terms of the most familiar accounts of enquiry (e.g., hypothesis and verification, induction and generalization) will not, however, serve this purpose, since they ignore or understate precisely the factors requiring emphasis.

The typical hypothesis-verification narrative, so popular among natural scientists and now becoming popular even among psychiatrists, puts its emphasis on verification and ignores or underplays the alternatives available as the content of hypotheses. Such narratives, differing somewhat among themselves, give different views of the method of *proof* employed in science but have little or nothing to say about methods of *discovery* and *invention*—that is, invention of new terms in which to frame new kinds of hypotheses which embody the possibility of obtaining new forms of knowledge of things, as against obtaining knowledge of hitherto unknown things.

Yet such inventions, and the discoveries consequent on their use, lie at the heart of enquiry and constitute one origin of pluralities of knowledge. It is one thing to have conceived knowledge as knowledge of invariant sequences of classifiable events and to shape hypotheses concerning which class of events is the invariant antecedent of the class of events under scrutiny (e.g., whether wars follow economic deprivations of a nation or threats to the powers of a ruling class; whether the sensation of thirst is the consequence of reduced salivary flow or of neural impulses triggered by increased concentration of blood salts). It is quite another thing to have conceived knowledge as knowledge of formal relations among invented quantities or processes which "account for" a selected body of phenomena (e.g., $F = Ma$ to account for the motion and rest of bodies), to have invented a few alternative formal structures of this kind and subjected them to successful test. In the same way, our verification tests may be aimed at choice among hypotheses concerning the efficacy of determining factors (e.g., analysis of variance and covariance) or among hypotheses concerning which irreducible elements of a set of such elements constitute the matter

under investigation (e.g., classical inorganic chemical analysis and synthesis). The existence of such invented alternatives as these (accounts in terms of antecedent-consequent relations, in terms of formal relations, or of multifactorial determiners, or of constitutive elements) is one of the matters which require emphasis in any account of enquiry which will begin to display the whys and wherefores of pluralities of knowledge.

The typical induction-generalization account will not serve our purposes either. Such accounts put their emphasis on the process brought to bear on a subject matter and the character of the emergent knowledge but treat the subject matter as a *singular* given. They pay little or no attention to the degrees of freedom, made available by the multitudes of similarities and differences among things, for varieties of groupings (taxonomies) on which to bring to bear the inductive process. Yet, varieties of ways in which a segment of the world can be bounded and sectioned (sliced, divided) are another principal source of pluralities of enquiry.

The logical positivist account which speaks in terms of observed facts, observed relations among facts, and a *choice* of mathematical languages into which to incorporate the observed obviously speaks to one of the sources of plurality (alternative accounts) but equally obviously ignores the other (alternative matters accounted for). Quasi-platonic accounts assert the merely contingent character of any and all joints, seams, or separations in nature and emphasize the potential diversity of subject matters, but denigrate pluralities of theory based on such diversities and obscure their usefulness by treating all contingent joints and separations as merely imperfect starting points of intermediate enquiries to be used only as stepping-stones to an ideal, wholly unified theory of everything, of all the world, seen as an englobed unity.

An appropriate account of enquiry.—The account which would begin to quicken conspectuses into useful life requires a set of terms which would describe the complexity of the subjects of the behavioral sciences, shows how this complexity affords scope for (indeed forces on enquirers) a multiplicity of questions to be addressed to the subject under enquiry, and gives further scope for a variety of selections and emphases among the numerous facets of the complex subject as resources for answering each question addressed.

The notion of principles of enquiry, together with the notion of issues of principle, embodies such a set of terms.[3] The notion of a principle of enquiry supposes that a given body of enquiry has its origin in commitment to a conception of the subject matter which is prior to the investigation. Such a conception sets the boundaries of the subject and names the crucial relations, parts, elements, range of properties, array of actions, or related participants which give it its character. Thereby, the principle locates the data to be sought in investigation, indicates the way in which these data are to be interpreted, and determines the form which the resulting knowledge will take on. The notion of issues of principle merely adds that, for any reasonably complex subject matter, there is scope for a conflict of principles and scope for a variety of selections of determining parts, properties, and relations within the bounds of one principle of enquiry.

It is probable, indeed, that an economical and educationally effective account of this kind could be limited to a single form of principle. The part-whole principle is a likely candidate, since it is ubiquitous in the behavioral sciences. Organs and organism in biology constitute one case in point. Ego and id as organ-like parts of the personality represent the principle in psychology. Individuals or institutions as constituting society, and ideas, ideals, and values as parts of "culture," are two other instances.

With any one of these as concrete examples, the disquisition could exhibit some of the issues of principle involved in this form: the whole determinative of the parts (cultural determination of personality, e.g.); the parts determinative of the whole (psychoanalytically oriented sociology); mutual determination (social conditioning and purposed reform). It could then exhibit the scope for various selections of constitutive parts: not only ego-id-superego but cognitive-conative-appetitive, or ego–external nonego–internal nonego–core, for example. (A general account of this kind will be outlined in a sequel to this paper.)

Accounts of actual enquiries.—Even if no more than this were added to the conspectus, students would at least be saved from the expectation, forced on them by earlier doctrinaire education, of a unique solution to every problem. This and no more, however, would provide only some understanding of plural enquiry in general and not understanding of the practical and concrete enquiries

which constituted the theories which compose the plurality under treatment in a given conspectus. To serve this end, it is necessary that each theory be seen as it arises from the concrete enquiry which gave birth to it. The principles and premises which governed the enquiry should be identified. What data were selected by these principles as the data relevant for the enquiry must be seen. The mode of interpretation by which the data are transformed, encompassed, or traversed to the finished formulation of the theory should be disclosed. (A sketch of such an account is contained in the section below on polyfocal conspectus.)

From such an exposition, students might begin to discern the fact that the members of a plurality of theories are not so much *equally* right and *equally* deserving of respect, as right in different ways about different kinds of answers to different questions about the subject and as deserving different respects for different insights they are able to afford us. A teacher of literature, for example, might begin to discover that a critical view of literature as the repository and expression of archetypical problems of human existence and a critical view of literature as formal orderings of plot and character, music, imagery, and language are not contradictories, one or both of which must be wrong, but contrarieties, different facets differently viewed, each of which is *some* part of the whole.

I remarked that what is wanting in a mere conspectus is an apparatus by which students can understand, judge, and exploit a plurality. Addition to the conspectus of an account of the enquiry which generated each member of the plurality provides ground for understanding. It also rectifies a common mistaking of the notion of "judgment" in this context, the mistaken notion that what is to be judged is only the strength, the soundness, the reliability, of each theory. It begins to show that, on the contrary, the good theories constituting a plurality (the educational usefulness of poor theories or bad theories is not at issue here) are to be judged also and primarily in reference to the contribution of each to validity: what and how much of the subject matter each reveals, what incomplete light it casts on the subject matter, and what consequent omissions and distortions characterize its view. (In order to make this judgment, one ignores, of course, the claim appended to many

doctrines that it is the only possible doctrine or the only defensible one.)

The possibility of common places.—The additions so far suggested do not, however, provide an apparatus sufficient for taking full advantage of this correction. The additions permit recognition of what needs to be done but not a tool for doing it. This tool, too, can be supplied. It is constructed by a certain mode of systematic comparison of the principles, premises, methods, and selections used by and in each enquiry. This mode of comparison generates a set of factors to be called "common places" or "topica" (the names pilfered from Aristotle and Bacon). These common places represent, in effect, the *whole* subject matter of the whole plurality of enquiries of which each member-theory reveals only one facade at best, and usually only one facade seen in one aspect.

An adequate set of common places, then, provides a map on which each member of a plurality can be located relative to its fellow members. It not only permits the student to know that through each theory he will see *some* part of the whole, it also enables him to know—to some degree, at any rate—*what* part of the whole he will see.

I hasten to emphasize that comparison of enquiries aimed at disclosure of common places is a task of enquiry, not of instruction. The recommended pattern of instruction would consist in the introduction of the appropriate set of common places as means for dealing with the members of the plurality under scrutiny. Unfortunately, I must add also that little scholarship of this kind has been done in the behavioral sciences. Few sets of well-established common places are to be found in the literature. Hence, this addition to conspective programs of instruction must await the requisite research. (I shall use one reasonably complete set in a later paper on common places, not only to indicate their usefulness but to suggest the process of reflexive enquiry into enquiry which generates them.)

The foregoing taken in its entirety—the notion of an appropriately constructed account of enquiry in terms of principles and issues of principle, the notion of narratives of the concrete enquiries composing a plurality, and the notion of the common places of a family of enquiries—constitutes a forbidding, indeed an intimidating, prescription for instruction. It is not, however,

intended to be taken in its entirety for any instruction of any and all students. For some purposes and for some clienteles, it may be sufficient to provide no more than an appropriate general account of enquiry. Certainly, if a general account be well given once in a context of pointed instances, it need not be repeated in subsequent courses. Rather, subsequent courses would move immediately into the concrete enquiries which constitute their interests.

Furthermore, such a later course need not necessarily treat all the constituents of its conspectus in terms of their origin in enquiry. If four or five doctrines constitute the program, it may be positively desirable as well as prudent to treat only two or three as outcomes of enquiry. Those presented only in their rootless, doctrinal form may then serve as provocations to students to search out for themselves the enquiries which produced them, or to engage in speculative reconstruction of the enquiries. Meanwhile, the two or three which are treated via their producing enquiries may be used (especially with students aiming toward careers of research and scholarship) as backgrounds against which to construct models and plans of alternative enquiries.

The third component of these suggestions—common places—would, where available, be means by which to systematize accounts of concrete enquiries and render them susceptible of treatment with greater dispatch, instead of constituting an additional time-consuming pattern of instruction.

Arts and disciplines of critical analysis.—A program of initiation into pluralities can, on the other hand, be rendered even more complete (and complex). It can provide an induction into the arts and disciplines of sophisticated enquiry into enquiries, as well as give accounts of the character and content of enquiries. For potential investigators, as against potential consumers and users of doctrine, it probably should do so.

The means are fairly obvious. Conjoint critical analysis (by instructor and students) of concrete enquiries replaces narrative about them—wholly or in part. Students examine the records of an inquiry. They press past the "answers" propounded in the papers to the suppressed questions (problems) to which the answers speak. They press through the recitals of data sought and found, and interpretations made, to the terms in which the recitals are couched and to the distinctions imposed by the enquirer upon the

subject matter. The order and relation of the terms and distinctions, to one another and to the questions they generate, are schematized as a record of the supporting skeleton of the enquiry. The procedure is repeated for a second and third line of enquiry of the same family and the several structures of terms and distinctions are compared with one another.

From such analyses, reconstructions, and comparisons there arise, first, vivid awareness of some of the alternative attacks available to the family of enquiries under scrutiny and perception of the differing consequences of different patterns of attack on the character and content of the knowledge which accrues. There comes, second, increasing mastery of the critical competences which disclose these structures of enquiry.

At some point in the developing mastery of critical competence, student interest turns, or can be turned, away from the enquiries of others to possible enquiries of his own. One or more of the batteries of attack now known are directed toward other but homologous subject matters of enquiry. Later, subject matters may be selected which differ—as subjects of enquiry—in a few marked ways from the subject matter on which the learned pattern of enquiry was seen to bear, thus posing to students the problem of modification of the pattern of enquiry, its adaptation to different subject matters.

Still later, attention can be directed to the generation of "new" patterns of enquiry, patterns not so far seen in operation by the student but rendered discernible to him because they are, by contrariety or another relationship, implicated in the patterns known by the student. Finally, with very good students and a representative set of enquiries, the skeletal structures developed may in turn be scrutinized for discovery of the common places which relate them to one another. We shall turn to instances of some of these devices later.

So much, then, for understanding and judgment—theoretical mastery—of pluralities. Such theoretical mastery has value as ground for expectation and comprehension of pluralities of enquiries and as leading toward facility and flexibility in enquiry. It also provides (in its simpler forms) an almost ideal ground for practical mastery—exploitation—of pluralities. It is probably not, however, always a necessary ground for practice (i.e., the *use* of

pluralities of view as means for fuller grasp of the facts, circumstances, and possibilities which constitute actual educational problems). Almost certainly, it is not a sufficient ground—at least for many students. Students will not, by virtue of intelligent possession of a plurality of views, necessarily use them when examining instances of the persons, groupings, or events treated by the views. It is notorious, for example, that theoretic mastery of pluralities of critical doctrine by students of literature leads "upward," more often than not, to preoccupation with systems and schemas of critical doctrine and *not* "downward" to more flexible and comprehensive views of literary works. Exploitation of alternative views, their practical utilization, ought, then, to be pursued (at least on the part of educators in training) in its own right, as a capstone to theoretic mastery. A pattern for such a pursuit follows immediately.

Polyfocal Conspectus

First cycle.—Polyfocal conspectus is a pretentious name for what may appear at first glance to be a simple procedure. Its unit consists of alternation of mastery of a view-affording doctrine with thoroughgoing involvement in bringing the doctrine to bear as a revealing lens on real, simulated, or reported instances of its subject matter.

The student first masters, let us say, Freud's tripartite construction of human personality. He reads, discusses, and debates (with fellow students and instructor) appropriate chapters from *The New Introductory Lectures, The Ego and the Id,* and *Beyond the Pleasure Principle.*[4] The characters, the roles, and the relations of ego, id, and superego are clarified and made vivid. Freud's view of the normal progress of the person's maturation is followed. Some of the numerous vicissitudes which beset the progress of this development are duly noted and the behaviors heeded which arise from vicissitudes undergone (and overcome or not overcome) in the course of development. This adventure constitutes the first phase of a cycle.

The second phase begins, for example, with a viewing of a composite motion picture or video tape. The viewing reveals, let us say, five episodes drawn from the ongoing activities of a teacher and a group of children, a "class." The episodes, singly and to-

gether, reveal something of the behaviors of all the students involved and of the teacher, but they focus, by means of conventional directorial and camera techniques, on one student, on his behavior and his transactions with fellow students and the teacher.

At the end of the first viewing, the instructor invites response from his trainees, unstructured invitation inviting first reactions. They come sparsely at first, then more richly: characterizations of the child's behavior, of the teacher's behavior; attempts at formulation of the educational problem involved; tentative diagnoses of the child's condition, speculations about causes. From these resources, the instructor selects (covertly) the two or three starting points he considers most promising for his purposes and most appropriate to the training group in hand.

These purposes cannot be nicely specified, since they depend in part on the responses to the unstructured invitation and what these responses reveal to be the strengths and weaknesses of the group. The overriding purpose is to begin to imbue students with ability to bring the principle to the case. The instructor will be concerned, then, with drawing students' attention to the problem of selecting among exhibited behaviors those to which the Freudian theory demands attention. However, since he is looking ahead to *poly*focal conspectus, he will also be concerned that students see in the situation behaviors to which the Freudian view does not command attention and recognize these behaviors as outside the purview of the theory. He will be concerned to evoke continuing self-criticism by students of the appropriateness and precision of their Freudian interpretation of the selected behaviors—though again with an eye to their recognizing scope for other interpretations. He will also be concerned with relations between observers and the observed apart from considerations of theory: whether students see well and wide-rangingly; whether they see what, indeed, was there, or some altered version of it. (For these purposes, the video tape should be available for playback.) In all of this, he will play the part of a *prejudiced* monitor: he will honor selections of Freudianly nonrelevant behaviors and instances of non-Freudian interpretation but insist on the priority of the Freudian view.

Overtly, he responds to some one of the trainee comments with an answering challenge or question: what evidence (in the exhibited behavior) the trainee bases his diagnosis upon; the trainee's

ground (in the Freudian theory) for characterizing as he has the behavior noted; whether the putative cause asserted is plausible; whether the educational problem noted is indeed a problem, and, if it is, whether it is likely to be solved by educational means or require therapeutic intervention. By such challenges, response to challenge, and the discussion which ensues on challenge and response, the original (selected) comment is clarified, corrected, and expanded.

The discussion then moves to a second step toward bringing the principle to its case. The instructor asks of trainees what additional information they wish or require to test the clarified diagnosis, to check the characterization, to verify the speculation concerning causes, to serve, in sum, whatever purposes the selected starting point, as clarified and seen by the trainees, requires. The requests for information will suffer one of two fates. They may be granted forthwith (from a second viewing of the film, from documents readied for the purpose, from additional film held in reserve). They may be challenged: with respect to their relevance to the case in question, with respect to their possible discoverability, with respect to the mode of interpretation which the trainee will use upon the data, or with a question concerning the ground in Freudian theory which legitimizes the request as an appropriate request in the circumstances. (Whether requests are granted or challenged depends on particulars of the moment.)

If the request is granted forthwith, the discussion moves on to incorporation of the new data into the ongoing treatment of the case, to expression of doubts and challenges concerning the way they are used, to defenses or revisions made in the light of the challenges or doubts. If the request is challenged, discussion moves to clarification and revision of what is challenged, to successful rebuttal of the challenge, or to reasoned withdrawal of the originating request. If the latter is the outcome, the instructor and trainees turn to another or revised request. If the outcome is one of the former, the data are provided and discussion moves on to their interpretation and use by the group, the interpretation and use being subject, again, to challenges from the instructor and, by now increasingly, to challenges from trainees. Eventually, the discussion is brought to a reasonably satisfying and reasonably defensible close in the shape of a diagnosis agreed upon, a program

for amelioration of the originating condition, or a recommendation concerning curriculum and instruction which will take account of such needs as the child's behavior suggests.

The purpose of this program of question, challenge, response, and counterresponse is twofold. The general and obvious purpose is to transform the Freudian (or other) material from a doctrine to a *view,* from a body of "knowledge" to a *habit* of observation, selection, and interpretation of the appropriate facts of concrete cases. This purpose is, or should be, characteristic of any program devoted to training toward a profession, whether pluralities are involved or not. The second purpose lies within the first and is crucial to the *poly*focal aim of the endeavor. It consists in ensuring that each selection of facts from the multitude visible in the original portrayal are the facts dubbed relevant by the Freudian view, that characterizations made are Freudian characterizations, that diagnoses are from the Freudian nosology, that the causes sought are the kinds of causes that the Freudian doctrine conceives as the efficacious causes. The second purpose, in short, is to avoid *bad* eclectic: the *unaware* mixing of elements of two views, even though the mix be coherent, or the mixing of the immiscible without knowing that the mixture is incoherent.

The latter subpurpose is patently desirable. It is avoidance of a confusion. The former is less obviously but equally desirable for two reasons. First, a merger of ideas, for example, the collapse of a distinction into a larger whole, is not inherently more desirable than the distinction. To view a cat and a dog as two instances of animal reveals one sort of thing; to view a cat as one thing and a dog as another reveals other facets of the two. Each such act of viewing is desirable, and without awareness of which device one is using (making the distinction; collapsing it), one is unlikely to use the other. This is to say that a small measure of polyfocality is lost and one contribution toward the habit of polyfocal scrutiny is not only lost but obscured. The second reason concerns the two whole views from which the merged elements are drawn. If the two views are indeed two (as they should be in a well-chosen plurality), the unaware merging of miscible elements from the two obscures the differences which render them two. One view is unconsciously assimilated to the other, is lost as a separate view as far as the unaware user is concerned. This is to say that a large measure of

polyfocality is lost and a large contribution to the discipline of polyfocal scrutiny obscured. These reasons for maintenance of the "purity" of the Freudian view are also the reasons why the instructor plays the part of the *prejudiced* monitor. He is retaining conceptual space for the other whole views which later cycles of the program will introduce. When each of these is treated, he will be prejudiced in its favor.

This ends the first cycle: a phase of mastery of a doctrine, a phase of involvement in bringing it to bear as one revealing lens. The second and successive cycles, which treat other doctrines and bring them to bear as additional revealing lenses, are *not* mere repetitions of the first. A new factor is introduced, a factor of cumulation.

Cumulative cycles, phase 1.—The second cycle begins as did the first, with mastery of a view-affording doctrine. The second doctrine may be one which appears to be immediately comparable with the first, using the same form of principle, parts, and relations among parts, and having parts which *seem* to be much the same as the Freudian parts. The Aristotelian construction (*Ethics,* bks. 1–6)[5] is a useful case in point, with its appetitive and actively rational parts and a quasi part connecting the rational and appetitive.

Alternatively, the second doctrine may use the same form of principle but conceive and assign parts which appear to be radically different from the parts of the first construction. The construction by Carl Frankenstein (*The Roots of the Ego*)[6] is an interesting case in point, with an ego in transaction with internal and external nonegos plus a central "core." (It is pleasant to have a construction with four parts instead of three.)

The second doctrine may, on the other hand, use a radically different form of principle. In the more extreme interpersonal theories, for example, not only are parts dispensed with but the whole envisaged is an altogether different whole, no longer "the personality" encased in one skin and possessing a character which determines relations with other personalities. Instead, the whole envisaged is a system of relations which determine the relata. The "personality" loses its entitative status and becomes, instead, the intersect of its friends and enemies.

In the beginning, the new doctrine is mastered in much the same way as was the first. The new view is taken in its own terms,

the text studied, interpreted, discussed, and debated. Comparison with the first doctrine is avoided. This pattern of restricted attention is followed until responses to text and query which unreflectively identify features of the new doctrine with features of the old diminish to a trickle.

The point of this restriction is probably clear. The overwhelming tendency of students faced with a new member of a family of doctrines is to assimilate the new one to the first-learned. He treats the new one as being the same as the first, or as deviating in only a few identifiable and unremarkable ways, or as being flatly contradictory of discrete passages of the first. (Whether this tendency is a result of schooled expectation of a one right answer, is due to some general tendency to favor the first-learned, or is due to some other or combination of factors need not concern us now.) If this kind of operation is allowed to go unchecked, no plurality can arise, only a one view with variations and some "errors"—hence, the initial habituation toward treatment of the new in its own terms.

Once assimilation efforts have diminished, however, attention can be fully turned to the cumulative factor, a comparison of the two doctrines aimed at clarifying the distinctness of their views. This clarification does not require an exhaustive treatment of the differences of principle, premises, terms, and distinctions which distinguish the theories, or even a very thorough treatment, since we are not concerned in polyfocal conspectus with establishing the disciplines of critical analysis or sophisticated enquiry, or even with imparting a thoroughly informed conspectus of doctrines as doctrines. What is required, rather, is just that degree and kind of treatment which will impart to students a readiness to try the doctrines as distinctly different ways of looking on personality, each with its own defensible point of view and perspective.

If the second doctrine is the Aristotelian construction, one might well begin with the posited parts in each doctrine which appear to students to be much the same—the Freudian "id" and the Aristotelian "appetitive." By focused reexamination of the new text via question and answer, one begins to disentangle what students have tacitly merged. The two parts *are* generically similar: each is the repository of the impulsions we share with other mammals. But Freud assumes an ineluctable hegemony of the id over the other

parts: its demands cannot be ignored except at the price of sickness; it is the origin and sole proprietor of the "psychic energy" on which all the parts depend; it is the sole source of pleasure. The other parts "borrow" their energy and their capacity for pleasure. Since Freud assumes this hegemony, he forecloses the possibility of enquiries into possible modification of the id by the other two parts. (Freudian "sublimation" is not a modification of the id but a rechanneling of its energies.) On the other hand, the same assumption thrusts into the foreground the question of the dynamics by which illness arises from frustration and the further problem of discriminating the ways, other than modification of the id, by which the requirements of the various psychic organs are reconciled.

In Aristotle, on the other hand, the appetitive is assigned a considerable plasticity. There are not only the possibilities of sublimation and repression of its impulsions but also the possibility of symptom-free renunciation; not only the possibility of renunciation, indeed, but of cultivation, the nurturing of potential impulsions and pleasures which others may hardly feel at all.

The difference between the appetitive in Aristotle and the id in Freud leads to a differing construction of other psychic parts as well, since each part in each view is in organic connection with its fellow parts. Aristotle assigns to his rational part (the rough equivalent of the Freudian ego) and original (built-in) potential for modification of the appetites. He then assigns to it a possible course of development through which it becomes eventually capable of determining what aspects of the appetitive are most profitably to be changed and in what direction—a kind of self-diagnosis and self-therapy.[7]

Thus, Aristotle investigates precisely what Freud can ignore—the question of the instruments available in the psyche for modification of impulsion and the processes by which modification occurs. But by the same token, Aristotle's assumption forecloses for him the matters so central in Freud: the origin of neurosis and the character of the shunts (sublimations) by which neuroses are avoided.

The instructor then indicates to students the plausibility of each assumption. No man, at least no young one, can deny the imperiousness of sexual demands. On the other hand, no one, at

least no older one, can deny that many men pursue vastly different objects and activities with much the same energy, zest, and single-mindedness which Freud reserves for pursuit of objects of the "instincts." One goes on to indicate the heuristic defensibility of the assumptions as well. Each of them indicates and instigates enquiries which the other relegates to the background or to oblivion.

There is another kind of question of great potency for our purpose. One can ask how Aristotle (or Maslow or Hartmann) takes account subordinately of the matters in the forefront of the Freudian (or Allportian) investigation and, conversely, how Freud takes account of the Aristotelian emphases. The "answers" are then exhibited. Aristotle introduced a scale of continence and incontinence constituting a wide range of genetic individual differences in the accessibility of the appetitive to modification and control; Freud posited especially effective and desirable channels of "sublimation"—art and science.

This form of question yields two profits which potentiate each other. In the first place, it casts a bright light on the degrees of freedom available for explanation as a component of enquiry. Theories do not differ only in the facts they subsume; different explanations are not necessarily one right, one wrong. Rather, under the control of different premises and principles of enquiry, different theories may organize and explicate their common stock of facts in different ways, each of the ways as defensible as the other. In the second place, students find the question of different accountings for similar facts highly attractive. They see its import, enjoy addressing it on their own to works examined, and are often able, with little or no new training, to elicit the data it requires. In brief, the question and its answers achieve a large measure of the outcome which cumulative first phases are designed to serve. They convey a sense of the useful and defensible otherness of the doctrines treated and convey a measure of the discipline which will expedite later treatments of the same sort.

In any case, with a clear indication that the two doctrines' similar organic parts (id and appetitive) differ in pointed ways, one can go on to exhibit some of the larger differences in doctrine which stem from these first differences. If these parts differ in their respective schemes, so must the relations of each to its accompanying

parts. If the relations differ, then it is highly likely, if not necessary, that the other parts differ, too, that Aristotle's rational may have powers or properties assigned to it which differ from the powers and properties of Freud's rational ego. There is no need, of course, to pursue all these possibilities into the actual fact, since we are not concerned in polyfocal conspectus with exhausting the systems of difference between doctrines. With some students, it may be enough merely to indicate the possibilities. In most cases, it is essential to locate one or two of the actuals for the sake of reinforcing the student's appreciation of the possibilities.

One may then step back and try for a characterization of the difference of the two doctrines as a whole: that the Freudian is a physicianly work concerned mainly with the etiology, diagnosis, and treatment of disease; that Aristotle's is a political work concerned mainly with a program for rearing the young. One is primarily therapeutic, the other orthogenic. (This omnibus characterization will become important for us when we come to speculate on the probable and desirable outcomes of a polyfocal pattern of instruction.)

Other doctrines, other questions.—Of course, if the second doctrine is not Aristotle's but some other, such as the suggested Frankenstein or interpersonal, the useful questions will differ too, since they depend on the actual relations and most generative differences of the doctrines under treatment. To be sure, examination of the Frankenstein might easily lead students to recognition of much similarity in the origins of Freud's superego and Frankenstein's external nonego. (Both are environmental, with heavy weighting on the social environment.) Pursuit of this similarity would again lead to detection of differences which eventuate in radically different treatment and use of the environmental factor in the two theories.

However, pursuit of the critical differences between these two similars, as in the comparison of Freud and Aristotle, would prove to be a long way around to the telling differences between Freud and Frankenstein. One might better begin by pointing out that if the approximately same whole can be discriminated by different men into substantially different sets of parts, it could be because they had anatomized the whole in different planes, taken different cuts through the subject matter.

With this possibility clarified by simple examples, one or another of its corollaries can be pursued. If the two sets of cuts intersect, then each coherent organ or part disclosed by one cut will be found distributed as subordinate constituents among some or all of the coherent organs disclosed by the other cut. One can then search for the substantive equivalents of this imagery: what fate has overtaken the materials of Freud's superego, say? Into what new parts in Frankenstein have they been assimilated and in what new way organized with what newly accompanying materials? What emphases of Freud have consequently dropped into obscurity? What new emphases emerge in consequence of the new combinations of materials and their new organization? What are the possible uses and disuses of these different emphases for problems and situations in education?

Another line of attack emerges from the probability that men of intelligence taking different cuts through a subject matter may well have done so with different intent. They may have intended different disclosures as personae in different dramas. One asks, therefore, to what use the parts are put, what accounts they make possible.

This question proves to be highly revealing in the case of Frankenstein and Freud. Freud wishes to give us an embryogenic account of the development of the psyche. This account must have two characteristics. It must be an account with beginning, turning point, and definitive close. It must be an account in which parts arise by differentiation from the matter of a primal part which must forever tinge the character of what arises from it. Freud's ego, id, and superego serve these purposes admirably. The id, the instincts, constitutes a primal part from which ego and superego arise but from which they can never become wholly independent. The Oedipal crisis and the superego it generates constitute the turning point. If and when the ego develops strength and experience enough for good scanning and employment of the world (in the service of the id) and for effective mediation between superego, id, and world, development is complete. There will be continuing and satisfying life, but it will be the life of a matured community (the psyche) with a stable constitution.

Freud wishes personae which will also make vivid an account of the inner conflicts which his clinical experience revealed. Again,

the Freudian parts serve admirably. The demands of the id, the strictures and ideals of the superego, and the opportunities afforded by the world have built into them a great unlikelihood that they will often coincide.

Frankenstein, on the other hand, is only subordinately interested in a definitive embryogenic account. His first concern is for an account which will legitimize the possibility of ego growth indefinitely prolonged, of a lifetime not marked by a definitive plateau but, rather, continuing its increase in content, in flexibility, coherence, and versatility as long as physical health permits. His account, too, must have certain additional characteristics. It must account for a growth of individual egos which preserves, despite generic similarity, the possibility of unique egos. Second, in order to make possible indefinite growth, it must find a way in which the ego, far from exhausting what it feeds on, replenishes its sources in the very act of growing.

The parts discriminated by Frankenstein serve these difficult purposes admirably. The only practicable limit to the ego's continuing growth is misdirection by chance or bad nurture, misdirection which limits the permeability of the ego's membranes to the kinds of matters it earlier fed upon. The possibility of a unique ego is preserved by the diversity of the worlds to which a permeable ego can turn for nurture. The plenitude of its resources for continued growth is insured by assignment to the ego of capacity for increasingly *catalytic* autonomy. That is, the more autonomous the ego grows, the greater its competence to recognize, confront, and profit from a correspondingly increasing autonomy of the inner and outer nonegos which are its resources.

Again, as in the earlier examples, one moves from notice of differences in organizing (explaining) principles to indication of their plausibility. (By "plausibility" here and earlier, I mean merely that the conception can be matched with corresponding facts.) Some men do bloom throughout their lives. Many men conform for the most part to a prevailing model, but some do not. It is indeed the experience of some of us (and conveyed to others by drama and the novel) that the more we are and know that we are, the more recognizable, interesting, and profitable become the differentnesses of others.

And still again, as earlier, one may move from here to indication

of some of the ways in which facts made foreground in one view are taken into subordinate account in the other. In the case of Frankenstein, for example, what for Freud is seen as central conflicts among the parts of the psyche become, for Frankenstein, the defenses and maneuvers by which the deprived or misdirected ego avoids the growths which threaten its inadequate autonomy. Similarly, the relations of parent and child which, for Freud, precipitate the Oedipal crisis are transformed by Frankenstein into means by which the child is inducted into the world of growth.

Radical difference of principle.—To round out this budget of examples, let us take the possibility of comparing Freud with a theory which is completely interpersonal, yet takes account of all the facts treated by Freud. If there were such a pure and "complete" interpersonal theory, it would stand to the Freudian theory as a beautifully simple and therefore extraordinarily vivid example of polyfocal plurality.

On the theoretical side, each would include the same materials. Each would also involve both relata and relations. That is, each must talk of John and James, of Paul and Paula. Each must talk. too, of enmity and alliance, of wanting and being wanted, fearing and feared, aggressing and being aggressed upon, nurturing and nurtured. The difference between the two theories would consist in the simple, wholesale, and symmetrical exchange of roles between these two—between relata and relations—in the dramas of the two theories. In each theory, there are the roles of explanation and that which is explained, explicans and explicandum. But in one of the theories (Freud's), it is the relata which, predominantly, constitute the explicans while relations are explained. The personality is thus and so, or these two persons are thus and so. *Therefore,* he fears or wants her; she rouses his anxiety; he identifies; she projects.

In a thoroughgoing interpersonal theory, on the other hand, it is (predominantly) relations which constitute the explicans while relata are explained. There were such relations as nurturance, neglect, or failure of conscientious neglect; there are such relations as exploitation, ruling and being ruled, alliance, love, competition, cronyism. *Therefore,* he is impulsive; she is withdrawn; man is gregarious, she will fear authority figures; he will recoil from tall ones, be drawn to the short. (In fact, the exchange of roles here is

even more vivid than I have suggested. The factor which plays the role of explicans not only explains but generates. The explicandum is not only explained but sired by the explanation.)

On the practicable side, the difference in emphasis, in view afforded by the two doctrines, is equally wholesale, simple, and vivid. From the one view (Freud's), behaviors are primarily symptoms. Causes must be sought in the normal pattern of personality development as such and in deviations from that pattern imposed by the particular vicissitudes suffered by this particular personality during its ontogeny. Radical modifications of behavior must be instigated by some kind of renewal of ontogeny which will reconstitute the personality as a whole. Amelioration of behavioral symptoms must be sought in accessible parts and characteristic processes of the personality which can be put in the service of other parts (e.g., supplying new channels of sublimation; supplying less destructible objects of aggression).

From the interpersonal point of view, on the other hand, behaviors are *not* only symptoms but are causally efficacious. They consist of provocations which evoke responses which provoke still other responses, all of this repeating and reinforcing old patterns of provocation and response. Consequently, modification of behavior can be sought in relations deliberately established between client and therapist, between student and teacher, which suggest to the client, encourage and abet, new ways of address which evoke new responses which function as new stimuli to still further new responses which break the ancient patterns and establish new and more rewarding ones. (The distinctions between radical and ameliorative treatment disappear.)

Given theories of such neat contrariety, the instructional operations which will make clear their polyfocal potential can be very brief and simple. They may consist of no more than an exposition of the radical difference between the two (much as in the paragraphs above) together with indications of differences in perception and interpretation of noted behaviors which would arise from their use as perspectives. It is almost certainly desirable, however, that some measure of student initiative and participation be enlisted. This can be added to the lectorial explication by questions put and answers sought from the texts under study or from experience.

One such pattern of questioning is suggested by the fact that most students recoil in disbelief from interpersonal doctrines. Each of us is usually well wedded to belief in our own existence as enduring and determining persons and are inclined to extend the same courtesy to others. This prevalence of selfhood suggests mischievous questions to students designed to elicit examples of the contrary from their own existences. One asks if anyone present recalls a moment in a group when his behavior altered on the entrance of an addition to the group. To one of those courageous enough to identify himself, further questions are addressed, designed to probe the alteration of behavior: the new feelings which accompanied the change of behavior, the new intentions or impulsions which seemed to engender it, the enhancements or diminutions in pleasures and pains which followed on the new entrance, even changes consequent on the new entrance in perception and valuation of persons present throughout the period of the group's assembly, With the ice thus broken, one is usually well able to go on to instances from the lives of other students and from there even to the tentative characterization of classes of occasions in which one student or another "becomes a different person."

One point to this line of questioning and response is obvious enough: it helps to raise interpersonal doctrine toward the threshold of possible belief by conferring on it a measure of plausibility drawn from students' own experience. This outcome is, of course, necessary if the view is to function as a lens coequal with the Freudian (or other) lenses. There is a second, less obvious, point to the line of enquiry. Precisely because it is addressed to experience instead of the text, it is a foretaste of phase 2 (the viewing phase) of this second cycle of polyfocal conspectus. It is the preparatory, fumbling *use* of a doctrine as a lens looking out on the world.

Before we can pass on to a brief description of a cumulative phase 2, a postscript to this treatment of interpersonal theory must, in conscience, be given. There not only is no pure interpersonal theory extant, there is not likely to be one. Relations, however efficacious they may be, are usually conceived to require some ground, some matter originating from another source, on which to act. (In one recent translation of the Old Testament, not even God is seen creating *ex nihilo*. The opening line of Genesis reads,

"When God began to create the heaven and the earth, the earth was void and without form." The earth may have been formless and void, but it was there.)

The converse, of course, holds for Freud's theory. It is not purely entitative. A primal part, if it is truly *one* part as usually conceived (homogeneous), cannot, of itself, differentiate into other parts. Some secondness is required as trigger and probably as guide. This triggering and guiding may be chance or it may be a relation to some factor outside the primal part or to some factor embedded in the primal part in earlier (phylogenetic) times. Both of the latter possibilities are used by Freud. The rise of the superego is triggered by the child's relations to its parents. The potential for emergence of the ego is instituted phylogenetically by irritations of life matter by influx of energy from the environment.

Fiction though it be, this notion of a *pure* entitative theory and a *pure* relational one is useful—useful, indeed, in three ways. First, if this or a similar account is conveyed to students without prior signaling of its fictional character, it permits communication with dispatch of the important difference between two kinds of theory, each of great value in the planning of curriculum and the execution of instruction. (I assume that I need not defend the desirability of noting and interpreting the behavior of students in the course of teaching and learning, or the desirability of considering the character of human personality in deliberating about ends and means of curriculum. I assume, further, that neither entitative theories nor relational ones need defense against the other.)

Once the first function is served, the fiction can be corrected in either of two ways: as I have done here, by simple confession; or by the careful examination of real instances of the two kinds of theory (Harry Stack Sullivan's *The Interpersonal Theory of Psychiatry*[8] would be a useful representative of the interpersonal). The second means is the more desirable, since it conveys much more vividly to students the refusal of the facts of life—even the facts of such a refined life as the life of enquiry—to be wholly encompassed in clear and simple ideas. This is the second usefulness of the fiction.

Third, the notion of pure alternatives has enabled me to convey here with considerable dispatch what otherwise might have been a difficult and extended exposition: that explanation in scientific

enquiry is not a kind of *thing* (as in the vulgarism "fact versus explanation") but a kind of role. "Explanation" is what organizes and conveys. The explicandum is what is organized and conveyed. "Facts" may be used *to* explain as well as to *be* explained. And different accounts can arise merely from different choices of which facts or which kind of facts to elect for which roles.

A second reflexive comment is in order. I have used as examples throughout this discussion materials drawn from only one field—personality theory. I have drawn on a single field in order to establish between us—you and me—a common body of exemplary material and to establish between theses, between one point and another, a body of common examples. The body of common examples between one point and another constitutes a first and concrete order of connection between points made, connections which supplement and undergird the connections expounded in general terms. The example used at a given point should, then, throw light upon earlier points (and later ones) as well as on the point exemplified in the moment. These instances of different accounts of personality, for example, are intended to illuminate one of the earliest points made—the need for an account of enquiry appropriate to the existence of pluralities of theory—as well as to exemplify phase 1 of a cumulative cycle of polyfocal conspectus. The same instances lay much of the ground, too, for what we shall treat later in the sequel on common places.

I have deliberately drawn on the single field, personality theory, because it is one of the softest of the soft behavioral sciences on which decisions and conclusions in education rest. This softness constitutes a positive advantage, for it arises in large part from the complexity of the subject, a complexity which, in turn, gives rise to very wide freedom for choice of principle of enquiry, of terms of explanation, of emphases among accumulated facts. This latitude in turn makes easier the task of indicating the character and origins of plurality.

It must not be supposed, however, that plurality necessarily disappears as sciences get "harder." Sociology, even biological ecology, have their own diversities. A community can be investigated, for example, as an oversized organism depending for existence on execution of definite vital functions. Enquiry will then proceed by attempting to specify these vital functions or roles and proceed

by determining for each of a set of discriminated kinds of communities what organisms or species of organisms serve each function, occupy each "niche." (A similar pattern characterizes "Parsonian" investigations of human communities and the investigations of classical comparative physiology.) On the other hand, a community can be conceived in terms of the exchanges between members of materials involved in their metabolism. In that case, enquiry aims to establish the network of exchanges which define a community: what is exchanged, at what rate, with what equilibria maintained or upset. (A similar pattern characterizes "economic" studies of human communities and international relations, except that the goods and services exchanged are not limited to material ones.)

In brief, the pluralism with which we are concerned is conspicuous in the softest sciences but not limited to them.

Interim summary.—Let us consolidate position after this excursion into personality theory. We are concerned with a definite pattern of instruction called "polyfocal conspectus." It is concerned with imparting to students a measure of inclination toward and competence for examining educational situations and problems in more than one set of terms. (It does not aim to impart thorough knowledge of the structures of pluralities, or disciplines of sophisticated analysis and enquiry—only as much as is necessary for effective use of tools, not their construction and criticism.)

The pattern of instruction proceeds in cycles, the number of cycles depending on the number of alternative perspectives one wishes to impart, but preferably not less than three. Each cycle has two phases.

The first phase of a first cycle is concerned with imparting a doctrine.

The second phase of a first cycle is concerned with transforming the doctrine into a view, moving it from the status of "knowledge" toward being one mode of discriminating certain kinds of problems and materials appropriate to their solution in educational situations. The second phase proceeds by confronting students with real and simulated situations sufficiently "busy," unstructured, and various to admit discrimination of many problems and materials and, indeed, of many different kinds. The discipline imparted consists of ensuring that each selection of facts from the multitude presented in the situation, each formulation of problem,

and each search for materials of solution are the facts, the problems, and the materials appropriate to the doctrine under study. This discipline is made necessary by the need to reserve perceptual space for second and additional doctrines, and views of the world by means of these other doctrines.

Second and subsequent cycles are not duplicates of the first. A cumulative factor is added to each phase. The cumulative factor is appended to ensure that perceptual space, discrimination of one view and doctrine from another, is maintained or, if not maintained, is knowingly violated and to good purpose.

The cumulative factor in first phases consists of a *few* questions addressed and followed which clarify the distinctness of the doctrine under study from the doctrines which occupied earlier first cycles. The selected questions can be addressed, on the one hand, to differences in the apparatus of enquiry: differences in formal principle (Freud and the interpersonal); differences in purpose (Freud and Aristotle); differences in the materials selected for embodiment of the formal principle (Freud and Frankenstein); differences in other sorts of premises, terms, and distinctions. The selected questions can be addressed, on the other hand, to the fates of materials (data) acted on by the apparatus: what retreats and advances, what foreground-background reversals, occur as one moves from doctrine to doctrine; translocations of explicans and explicandum. Better and best questions cannot be specified, since their value depends on the actual differences between the doctrines under study. It is nevertheless the case that a *few* questions well treated will suffice. The numerous questions suggested in our excursion into personality theories constitute *alternatives*.

Cumulative cycles, phase 2.—We can turn now to description of a cumulative second phase. It begins, as did phase 2 of the first cycle, with presentation of a real, recorded, or simulated problem situation.[9] The trainees, again, are asked to discriminate a problem in the situation, a problem of the kind signified by the doctrine under study. By now, however, with the experience of phase 2 of the first cycle assimilated, this initial maneuver can be enriched. The trainees are asked to identify and formulate silently the problem they "see." They watch, request a rerun if the material is recorded, make written note of their formulation. (It is important to request that they make written note, since *oral*-cerebral commit-

ments have a way of being erased or overridden by a first-voiced view, and we are concerned in this enrichment with evoking some diversity of problem perceived.) When notes are finished, the instructor asks for first one and then another description of "the" problem. From the several problems voiced, he asks students to select a pair (and their advocates) which joins an issue. The issue may be one of accuracy or reality of perception. (It is astonishing to discover with what frequency trainees "see" what did not occur or embroider what did.) It may be an issue of fitness of the problem formulated to the doctrine in hand. In any case, he requests criticisms from fellow students of the problem as voiced; invites the voicer to rebut or to adapt his or her description to the cogent criticism; uses the materials thus evoked to emphasize aspects of the guiding doctrine overlooked, or to clarify aspects of the doctrine which this foray into practice reveals to have been obscure, or more firmly to establish connections between the generalities of the doctrine and the particularities of actual cases.

When one such debate has run its course and served its purpose, another is joined, and the same procedure is continued until the urgencies, doubts, and uncertainties signaled by students have had their day. (I urge you to compare this procedure with the procedure earlier suggested for phase 2 of a *first* cycle. The differences are telling and mark one aspect of cumulation: the much larger measure of student participation, the extent to which the initiative passes to them, the frequency with which they *ask* the important questions as well as answer them.)

When several problems have been clarified and agreed upon, the group selects one for further pursuit. (Note again the contrast with the first experience of this kind. Then, the instructor made the choice; now it is made by the group.) Requests for additional information are honored, discussed, or challenged for their relevance. The new data are assimilated to the problem or the course of its solution, and the discussion is brought to a satisfying and defensible close: a sound diagnosis, a program for amelioration, an outline of curriculum or instruction.

All of this is much as in the first cycle except for the enhanced amount of student participation and control. Only one factor not so far named marks off this episode from its counterpart in the first cycle: *its work must be done on an entirely different case.* If, for

example, the chosen cases are classroom situations, the room and the children must be different: older or younger, brighter or dingier, of a different size and shape. The occasion for the children's behavior should be different; so also the tone and temper of the behavior. The reason for this condition is dramatic but simple. It concerns the heart of our problem: polyfocal conspectus and the maintenance of perceptual space.

In the cumulative phase 2 as so far described, the problem of maintenance of perceptual space has been minimized. The first doctrine examined and the first essay toward its application (the first cycle) are days in the past. Mastery, discussion, and debate of the second doctrine have intervened and occupied the recent time and attention of students. Even though the difference of second doctrine from the first formed a part of that discussion, the discussion centered on the second doctrine and will have closed with it as solo occupant of the stage. The choice of an entirely different case maintains and enhances this distance of the two doctrines and views and affords a highly dramatic (affectively powerful) contrast to what follows.

What follows is sudden and unsignaled re-presentation of the *original* case. At once, the trainees are faced with what "they had finished with." It is in fact finished as far as the trainees are concerned: organized, structured, given shape by the doctrine earlier treated, neat and disposed. Now the problem of the trainees is to escape the tyranny of the first doctrine, a tyranny made doubly tyrannical over them, since they had served as its agents in shaping the present case. Their new task is to de-compose the finished picture they had earlier shaped, resolve it into its original busy and polyvalent potentialities, then reshape it into a new picture, a new kind of problem, and a new kind of solution, and do all this without destroying beyond possibility of recovery the first picture composed. Only then will trainees have experienced a polyfocal conspectus.

Applications.—With respect to the behavioral sciences, little more need be said about the poignancy of eclectic treatment. Sociology, social psychology, cultural anthropology, psychology, and political science are loaded with studies arising from competing principles leading to solutions which invite eclectic treatment, and these solutions are, in turn; loaded with purport for educational

problems. The following come to mind as especially demanding polyfocal conspective treatment on the part of educators:

Child development, especially studies involving notions of "concepts" and their formation.

Learning theories.[10]

Studies of styles of enquiry, creativity, and other envisaged varieties of pattern for perception of, response to, and manipulation of the environing world.

Studies of intelligence and scholastic aptitude, under whatever other name and with whatever distinctions may be further imposed.

Studies of groups, group behavior, and the behavior of persons in groups.

Studies of family, social class, and subcultural determination of life style, character, and personality.

Treatments, whether from jurisprudence, sociology, politics, or psychology, which assert the "real" or "proper" relations between society and the individual.

Conceptions of motivation, especially those which raise issues involving oppositions of autogenous rewards as against external attractions, and competition as against collaboration.

There is another and wholly different sphere in which conspective treatment would reward education: the commonly recognized fields of knowledge which education draws upon for content, materials, and aims of curriculum. History, literature, even the sciences, are richly polyvalent resources for curriculum. Yet little is done in the education of teachers and curriculum planners to afford them a vivid and systematic view of these numerous options. Educators-in-training are usually left merely to stumble upon one or a few of the available alternatives, and the circumstances of their accidental discovery are usually such as to lead trainees to choose one as "the" nature of the field. Other valences, if encountered later, are then usually perceived as mistaken, effete, or enemy aliens.

What is radically impoverishing here is not merely that only a few of many resources are seen but that they are seen and judged only by reference to a narrow conception of a field of knowledge. What is wanted is a furniture and frame of mind in which a field of knowledge would appear as affording such numerous, viable

alternatives for education as virtually to demand that they be scrutinized and judged not merely as sound or unsound conceptions of the field, but also as more or less appropriate in the education of young people of differing competences, needs, and circumstances. Polyfocal conspectus would afford such a furniture and frame of mind.

The field of literature is an accessible case in point. As indicated in the first paper of this series, critical scholarship has generated a dozen conceptions of the novel, short story, and drama, each constituting a different way in which a literary work can be read and a different significance of it to the reader. A work can become a vicarious experience, a display of a social problem, a light thrown on the reader's own circumstance or problem, an evidence concerning the author's epoch, an occasion for aesthetic pleasure, a disclosure of devices by which to organize thought and move the hearts of men, or an accessible and moving ideal of existence and action.

The problem posed by this diversity to the educator of educators is, first, to bring these alternatives to light for his trainees, second, to provide them with grounds for judging the efficacy of literature in each of these possible roles, and third, to provide occasions for deliberation by the educators-in-training concerning which of these options, if any, literature should be for various kinds of students' schools and other circumstances.

History affords an even wider range of options and therefore poses the same educational challenge and educational opportunity. Different historians seek different facts as the pertinent facts of history. Some seek to know all aspects of what they call a culture. Others focus only on the economy and the conditions of life of the producing members of that economy. Others examine what they take to be the products of ordering intellects—religions, languages, legal codes, literatures, and technological inventions. Still others focus on national, class, and cultural combats, others on modes of political order. Historians differ, too, in the means they use to order, organize, or "explain" their chosen facts. Some find their explanations in supposed laws of history: cycles of growth and decay, spiral or linear progress toward freedom, order or some other fulfillment. Others look for psychological laws: notions of challenge and response, of habituation and revolt, of a warfare of

reason and passion, of an evolution of human potentiality or a growth in human character. Some look backward for the origins and causes of what they take to be important states and conditions of the present. Others look forward to find causes, treating history as a tendency toward these causes. Still others try to avoid causes and to exhibit merely the temporal order of events. Some even seek the causes of events in history itself: a people's idea of their past and how that idea influenced their decisions about their present.

As in the case of literature, each kind of historical work may have its peculiarly appropriate contribution to make to one group of students in one place and time, while other modes of selection of the pertinent past and other modes of their interpretation may have most value for other students. Hence, again, resources for education and opportunities to match resources with educational needs are overlooked if educators-to-be are not apprised of this richness of history and helped toward competence in making defensible choices for different students amid the available riches.

The sciences exhibit their own polyvalency. A science is at once a body of highly sophisticated knowledge about some segment of the world, a body of conceptual habits which tends to isolate that segment of the world from other segments, and a body of rules for coping with its segment of the world. It is also a source of technological means for alteration of that world. A science is, in addition, a discipline (or several) consisting of a rational order of problems posed and of principles and methods brought to bear upon the problems. It is also a community of a certain kind and a subculture with an ethos which distinguishes it from other subcultures. It is a human activity which affects the rest of human action (economic, political, social, personal) and in turn is affected by the rest of human action. For some group of students in some set of circumstances, any one or any combination of these may constitute the appropriate guise which science should wear in their schooling.

Polyfocal conspectus can be readily adapted to the opportunities afforded by history, literature, and the plastic arts as curricular resources. The basic pattern of a series of two-phase cycles remains appropriate, although the desirable number of cycles will be larger, and, fortunately, first phases briefer, than in the treatment of theories from the behavioral sciences. The character of first phases will also remain much the same. Each will examine a "theory" of the

field of knowledge under consideration: a critical theory of literature or the arts;[11] an essay in historiography or philosophy of history.[12]

Second phases retain the role they play in the case of behavioral scientific materials—transformation of a doctrine to a view—but materials and procedures will require adaptation to the object viewed. In the case of literature, the simplest but least effective procedure would consist of following each doctrine with a literary work selected for its appropriateness to the doctrine brought to bear upon it. The weakness of such a procedure lies in its failure to provide experience of actively different viewings, since the object itself constrains the view. The ideal procedure would operate on a single work so rich as to permit reading and rereading in as many different ways as there are doctrines under consideration. The most practical procedure will probably prove to be one of progressive overlap in which, for example, of six critical doctrines, the first and second are brought to bear on one work, the second and third on a second work, and so on, with variations.

In the case of history, analogous procedures apply. The simplest procedure would present for each historiographic theory a historical work which closely follows the doctrine enunciated by the theory. The ideal procedure would present a large, heterogeneous body of raw materials (a simulation of the chaos in fact posed by the past to the historian) from which the trainees would select, in the light of each doctrine, the appropriate facts and submit them to the organization or interpretation demanded by the doctrine. The most practicable procedure will doubtless prove to be some compromise between these two.

It should be kept in mind, however, that second phases as applied to curricular resources serve a second function. They are not intended merely to make educators-in-training flexible readers or cognizant of the varieties of history. They are also intended to present alternative readings of literature and alternative forms of history as alternatives for curriculum. Consequently, second phases should provide extended occasions for deliberations concerning the matching of kinds of readings and kinds of histories to the differing needs and circumstances of different students.

Most regrettably, the procedure of polyfocal conspectus is not adaptable at present to the sciences as curricular resources. Materi-

als which would constitute an appropriate range of "theories" for first phases are both too few and too widely scattered throughout a range of journals to serve the purpose, and materials appropriate for second phases are scarcer still.

Outcomes.—Educators have long been accustomed to ask at this point in a curricular discussion, "What is the intended outcome?" The question arises from the dogma that curriculums should be devised, controlled, and evaluated in the light of "objectives" taken as the leading principles. Consideration of the practical character of curriculum and instruction convinces me that this dogma is unsound. There are principles alternative to objectives which generate defensible curriculums. There are coprinciples, for use with objectives, which guard against some of the errors and excesses which arise from dependence on objectives as sole leading principles. I shall discuss these matters at large in a later paper of this series. One detail of the matter, however, concerns the question of intended outcome as addressed here to polyfocal conspectus.

The detail is merely this: I do not intend or expect one outcome or one cluster of outcomes but *any one* of several, a plurality. Recognizance of the several stems from consideration not of possible outcomes, but of the materials under treatment: pluralities of theory, their relations to the matter they try in their various ways to subsume, their relations to one another.

Sartre describes one conceivable outcome thus:

> Consider the example of the cube: I know it is a cube provided I have seen its six sides; but of these, I can see only three at a time, never more. I must therefore apprehend them successively. . . . When I see three sides of the cube at the same time, these three sides never present themselves to me as squares: their lines become flat, their angles become obtuse, and I must reconstruct their squareness. . . . We must *learn* objects, that is to say, [conjugate] upon them the possible points of view. The object itself is the synthesis of all these appearances.[13]

I doubt very much that such an outcome of polyfocal conspectus is likely. I base this doubt on consideration of the complexity of the objects represented by a plurality of theories, on the complexity of the theories, and on the competence of the men who constructed the theories. The objects are more complicated than a cube. The partialities and distortions of them by theory are more

complicated than the perspectives of vision of a cube. The theorists are highly competent.

This outcome is, nevertheless, possible. I base this faith on consideration of one of the states of mind and character that afflict constructors of theory; they are often bent more on constructing a new one than on enlarging the purview of one constructed by others.

Other outcomes are likely. The adventure with the conspectus may drive some students away from the field of education. It may convey to some a merely *general* appreciation of the complexity of theory and its incongruity with the practical. It may convey to others an informed awareness of the strengths and weaknesses of their preferred instruments. It may convey to some an ability (and its accompanying habit) to choose different instruments on different occasions, instruments appropriate to the practical situation they confront. It may convey to some an ability to use several instruments serially. To still others, it may convey a wider perspective on the range of educational problems and the range of possible solutions to them, but little or no increment in their ability to manage practical situations. (I base these anticipations on experience of students who undertake training in education.)

Any of these outcomes is desirable, at least for education. Some of them are too expensive.[14]

1. Joseph J. Schwab, *The Practical: A Language for Curriculum* (Washington, D.C.: National Education Association, 1970). A shorter version appeared in *School Review* 78, no. 1 (Autumn 1969): 1–24.

2. It can be argued that exhortations and special pleadings are not to be taken as curricular prescriptions, that their one-sidedness does not represent the character of curriculum legitimation generally. The first of these claims is often true. Many exhortations and special pleas are designed to bring into the light considerations long neglected. They are, in effect, invitations to more extended use of eclectic arts. It is not true, however, that one-sidedness is limited to this mode of legitimation. The other three modes I can identify exhibit the same or analogous faults. Measurement of the relative success of one curriculum as against another can treat only the efficiency of each in achieving one aim or another. It has no apparatus for weighing alternative aims. The legitimation which occurs in the course of planning and developing curriculums (aims sought, considerations taken into account) again basically shows concern for only one or a few determinative factors, rarely a full or even wide complement. A third mode consists of theories which purport to show that one determinative factor always takes precedence over others or assimi-

lates others. Most arguments to such views covertly take their premises from the factor which is nominated king. Hence, there are as many such arguments and resulting theories as there are determinative factors to consider.

3. The notion of a principle of enquiry and description of the forms of principle conspicuous in biology and the behavioral sciences are described in my "What Do Scientists Do?" *Behavioral Sciences* 5, no. 1 (January 1960): 1–27.

4. Sigmund Freud, *New Introductory Lectures on Psychoanalysis* (New York: W. W. Norton & Co., 1933). *The Ego and the Id* (London: Hogarth Press, 1957), and *Beyond the Pleasure Principle* (New York: Liveright Publishing Co., 1950). For a thorough documentation of some of the analyses used in the body of this paper, see Seymour Fox, "The Conceptual Structure of Freud's Theory of Personality" (diss., University of Chicago, 1966).

5. Aristotle, *Nicomachean Ethics* (numerous editions in English). In addition to books 1–6, see sections on pleasure in book 9.

6. Carl Frankenstein, *The Roots of the Ego* (Baltimore: Williams & Wilkins, 1960).

7. With students especially interested in personality theory, it may be useful to point out that some recent efforts to assign greater powers to the rational—some of the "ego psychologies"—are frustrated in their efforts by failure to take account of the organic connection among the various parts: they do not reduce the "size" of another part in order to make room for a larger ego.

8. Harry Stack Sullivan, *The Interpersonal Theory of Psychiatry* (New York: W. W. Norton & Co., 1953).

9. For discussion of the character and criteria of material for such a simulation, see my *College Curriculum and Student Protest* (Chicago: University of Chicago Press, 1969).

10. For a report on an interesting eclectic treatment of learning theory, see Paul F. Kleine, "From Learning a Theory to Theorizing about Learning," *Education at Chicago* (Winter 1971), pp. 15–21.

11. For planning and construction of first phases on literature, the following are suggested: R. S. Crane, ed., *Critics and Criticism,* abr. ed. (Chicago: University of Chicago Press, 1970); and Lionel Trilling, ed., *Literary Criticism, an Introductory Reader* (New York: Holt, Rinehart & Winston, 1970).

12. For first phases on history, see Ronald H. Nash, ed., *Ideas of History* (New York: E. P. Dutton & Co., 1969); Thomas N. Guinsberg, ed., *The Dimensions of History* (Chicago: Rand McNally & Co., 1971); and Fritz Stern, ed., *The Varieties of History* (New York: Meridian Books, 1956).

13. Jean-Paul Sartre, *The Psychology of Imagination* (New York: Washington Square Press, 1966).

14. For a highly sophisticated treatment of the relations of theory and practice generally, see Richard McKeon, "Philosophy and Action," *Ethics* 62, no. 2 (January 1952): 79–100. The study and plan for this paper were made possible by a grant from the Ford Foundation. Time for writing was made available by the Van Leer Jerusalem Foundation. I am indebted to the faculty and students of the School of Education, Stanford University, for much useful criticism.

[Notes]

[14] **Philosophy and Action**
Richard McKeon
Ethics, Vol. 62, No. 2. (Jan., 1952), pp. 79-100.
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