The study of curriculum may be characterized as an inquiry into the range of ways in which the subject matters of teacher, student, subject, and milieu can be seen. A review of the literature indicates that curriculum theory has been under development for several years. However, considerable research and conceptual formulation must be done to define the specific variables of the field adequately and to integrate them into a discipline of "curriculum," sufficiently identified for theoretical analysis and recognition as an academic subfield. A number of suggestions are made toward the development of curriculum theory, particularly concerning the practical relationships of curriculum to the four-part framework of students, teachers, subject matters, and milieux. (JK)
PROBLEMS IN SEARCH OF DISCIPLINED ATTENTION

OR

A DISCIPLINE IN SEARCH OF ITS PROBLEMS:

A DISCUSSION OF SOME ASSUMPTIONS IN A CURRICULUM THEORY

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The University of Chicago

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My concern in this paper is the problem, or rather cluster of problems involved in making explicit the range of ways in which curriculum can be discussed. Specifically I want to attempt to characterize the domain of questions and issues that is curricular and sketch out something of the nature of the art or discipline that does, or should address these questions. In attempting this explication I want to distinguish curriculum from education in curriculum and education in curriculum from research and the practice of curriculum so that I can attend here only to the systematic enquiry that might be called curriculum research. My discussion will spill over into these other areas but I hope the focus will be reasonably sharp.  

In stating my concerns in terms of a presumption about the existence of a discipline of curriculum I have, by implication at least, foreshadowed my conclusion. I wish, ultimately, to characterize the study of curriculum as an enquiry into the range of ways in which the commonplace subject-matters of teacher, student, subject and milieu can be seen. The potential that this range of ways represents can become a basis for opening up a range of choices and for making coherent the reasons for decision-making and action about the mechanisms for intervention in the interactions of these commonplace subject-matters as they exist in fact in real institutions. I want to argue that this range of problems can be handled systematically, that is in a quasi-theoretical manner, insofar as it is possible to enquire into the grounds of good and bad decisions and expose methodically the bases of differing kinds of action and decision. Inasmuch as my immediate problem is simply initial characterization and tentative stabilization of what our field is concerned with, and thus might be, my preoccupation is not the formal stipulation of what we should be doing in any prescriptive sense. More formal stipulation must be attempted, but this must be

1My thinking about these issues owes more than I can acknowledge to discussion with Joseph J. Schwab; this paper should be read alongside his "The Practical: A Language for Curriculum" (1969a).
a later task; this paper should be read as a tentative and highly speculative first essay.

I

This initial and perhaps brash task of characterization and stabilization is an important one. One of the problems of curriculum as a field of study is its failure to define its concerns and its basic subject-matter in a sufficiently generic way for practitioners of the field or students to know, in any sense that is equivalent to the feeling that students of history, political science or psychology have for their subjects, what the field or its subject-matter is. Bald, yet meaningful statements of the kind that "this focus on customs in interdependence has continued to distinguish the discipline of anthropology from the other subjects with which each branch of anthropology is associated" (Gluckman and Eggan, 1965, p. x) cannot be made about curriculum, and if they are attempted are either meaningless or simply aggravating, inviting argument.

It is this ambiguity and uncertainty that I want to react against most directly in this paper. My concern is the paradox my title suggests; we do not have an organized intellectual or practical discipline that has vitality, coherence or recognizable form being brought to bear in any systematic or sustained way in a transparent or troubled world. The consequences of this problem are obvious in the intellectual wasteland of administration and curriculum in our public schools. What real leadership the schools have comes not from curriculum, but from other disciplines and agencies--and with mixed results. Let me attempt to sustain this assertion.

Last year three teacher friends with no education in education beyond teacher training and their own experience produced a text, and implicitly a program for junior high school English that was widely and correctly accepted as a creative tour de force (Hannan, Hannan and Allinson, 1967). Since seeing their text I have wondered whether or not the possibility of my participation in their
work would have changed the character of what they have achieved in a sufficiently significant way to justify the marginal investment I have made, and (more important) organized education has made in the institutionalization of the sub-field of curriculum. This example is, of course, inconsequential; but it does serve to direct attention to the problem posed by the expectations that one might hold for the outcomes from a study that is widely institutionalized (as a field of graduate study, if not research) within colleges and universities.

Let us assume that the product of an institutionalized field of enquiry and practical training can be seen in terms of a sustained and cumulative research tradition, in terms of an "education" for some students of education, or in terms of some enhancement of competence in the practice of some set of specific professional skills within an appropriately supportive institutional milieu. These separate products sum into terms that reflect some kind of general impact on an intellectual or institutional order, whether this outcome is seen in purely reflective terms, in practical terms, or in some combination of reflective and practical. If this kind of generalized expectation is acceptable, we then have to ask in what sense curriculum as an institutionalized field meets this implicit criterion. It is difficult to be at all specific or convincing in one's evaluation, but perhaps the persistent and acknowledged failure to meet its central concern of offering leadership to curriculum reform implies a pessimistic conclusion. Our standard recommendation to ask the subject experts leaves the nagging question of "Which ones?" The problems of the inner-city schools make our weaknesses in leadership transparent while the tinkering that passes for curricular reform in the suburbs shows how ineptly we lead in our traditional bastions.

1For the conventional wisdom see Neagley and Evans (1967), pp. 193-197. Ausubel (1967) makes a different kind of argument that we might have been expected to attempt.
Schwab (1969a) has attempted to list some of these deficiencies. It is, however, difficult to sustain these kinds of assertions in a short paper; it is easier, and perhaps as meaningful for our purposes here to explore what research in our field is and to explore by implication the fruits and the definition of the field insofar as they manifest themselves in a roster of papers that represents current work in the area. The field becomes then not my (or someone else's) intuitions, but that which appears in an appropriately authoritative review of work in curriculum. A charge of unrepresentativeness can be levelled against any such roster but then the same charge has to be levied against any other roster drawn from the same source (Haller, 1968).

Tables 1 and 2 set out the results of a preliminary survey of this kind performed on the citations in the most recent issue of the Review of Educational Research (1966) concerned with curriculum.

Table 1 suggests something of the range and incoherence of the work in the field. Of the 178 works cited 64 were either reviews of current practices or reviews of research in the field. Only 13 of the 178 were avowedly psychological despite the importance of psychology in such curricular prescriptions as the Tyler rationale (1950). Of these 13 citations six were to chapters in N.S.S.E. Yearbooks or A.S.C.D. reports and two more were general chapters in curriculum-oriented compendia.

The most revealing heading in Table 1 is "Discussion of issues within curriculum." This is broken down in Table 2. The five articles categorized as "Towards a curriculum theory" represent essays in meta- and meta-meta-theory that seem to have been subsequently undeveloped. The articles of "Structure" are, in the main, preliminary skirmishes with the problem of the organization of the intellectual disciplines that have received little subsequent detailed
Table 1

Inventory of Citations - Review of Educational Research, 36, 1966

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reviews of current practices and translations of &quot;theory&quot; into practice</td>
<td>51</td>
</tr>
<tr>
<td>Discussion of issues within curriculum</td>
<td>30</td>
</tr>
<tr>
<td>Research papers</td>
<td>25</td>
</tr>
<tr>
<td>Psychology - articles on generally psychological themes</td>
<td>13</td>
</tr>
<tr>
<td>Reviews of research</td>
<td>13</td>
</tr>
<tr>
<td>Processes and techniques for altering curriculum</td>
<td>9</td>
</tr>
<tr>
<td>Societal, economic and social trends in general</td>
<td>5</td>
</tr>
<tr>
<td>Teacher education</td>
<td>5</td>
</tr>
<tr>
<td>Social context of schooling</td>
<td>4</td>
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<tr>
<td>Research methodology</td>
<td>3</td>
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<tr>
<td>Objectives</td>
<td>3</td>
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<tr>
<td>National assessment program</td>
<td>3</td>
</tr>
<tr>
<td>Papers on general research issues, i.e., reading readiness</td>
<td>3</td>
</tr>
<tr>
<td>Curriculum evaluation</td>
<td>2</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>9</td>
</tr>
</tbody>
</table>

Table 2

Inventory of Citations - "Discussion of Issues within Curriculum"

<table>
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<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Towards a curriculum or instructional theory</td>
<td>5</td>
</tr>
<tr>
<td>General works</td>
<td>4</td>
</tr>
<tr>
<td>Structure as a slogan - analysis of terms</td>
<td>1</td>
</tr>
<tr>
<td>Structure of single subjects</td>
<td>10</td>
</tr>
<tr>
<td>General arguments about knowledge or educational ends and their implications for school curricula</td>
<td>10</td>
</tr>
</tbody>
</table>

1 This inventory excludes a number of compendia, e.g., Heath, New Curricula; Gage, Handbook of Research on Teaching; Ford and Pugno, The Structure of Knowledge and the Curriculum; Passow, Education in Depressed Areas; individual chapters are included under the appropriate heading.
Overall little of the work reported in the Review is research in any tight sense of the word;² the preponderant class of writing is near-journalism or comment that does reflect neither sustained nor methodical exploration of empirical or theoretical issues. Where the results of sustained work are cited they typically come from outside the organized field. Entry of such work comes randomly or through an extraordinarily limited number of entry points, and without any necessary regard for the intellectual or practical context that might be called the study of curriculum or the subject-matter that is curriculum. The roster of issues reported as being explored or researched bears little relationship to any intuitive perception of the kinds of problems or issues that affect real students in real schools. The titles of the research papers cited suggest that no powerful models with any kind of appropriate isomorphism to the problems of our subject-matter are operating. To take an example, the discussion of the structure of the subjects and the implications for learning appears to be one thing, research into appropriateness and meaning of the notions quite another.

I do not wish to belabor this point. The condition of curriculum as an academic sub-field is analogous to that of many of the other institutionalized semi-professions and much of what we do in classes and in-service is more or less appropriate in context and defensible on those grounds. My concern is essentially a limited one in that I want to ask questions about the state of curriculum as a research and researchable discipline within a university, and specifically graduate school milieu. Many of the shortcomings of our sub-field

¹Connelly (1968) is a significant and important exception.

²Research: "Diligent inquiry or examination in seeking facts or principles; laborious and continued research after truth" (Webster).
are in fact remedied by other branches of education; yet the communication of remedies from the more academic branches of education to the realms of practice is random at best while we, who have a direct concern with the problems that affect schooling as it is, do not necessarily (if our research reflects our beliefs) consider either many of the issues or the proposed remedies worth addressing. To pick up some glaring examples: How many generations of secondary subject teachers or consultants have absolutely no knowledge of, say, reading? What considered precepts can be given for the formulation of viable inter- or multi-disciplinary programs? To what disciplines should we turn systematically for theory and data to buttress theoretically sound analysis and decision-making?

If these problems can be accepted as symptomatic of some malaise in the field a number of stock diagnoses are possible. We could argue that the problems of curriculum (or education, depending on the critic) are a function of the limited time at which curriculum has been at work with its problems; we could claim that our problems are the result of long-term weaknesses in the means of organizational mobilization and accumulation of energy and resources; our critics could claim that our problems are a function of the collective intellectual poverty of educators; or it might be that our problems are a result of the forms in which our enquiry is couched. Any inadequate formulation of principles might spill over into our formulation of the nature of graduate training and education within our field. I am concerned at the moment with the last of these possibilities. It is, in its implications, the most serious possible diagnosis. If it were possible to establish that it was a plausible presupposition to argue that our forms and traditions were a priori potentially fruitless no amount of tinkering with devices for ameliorating the other diagnoses would be likely to remedy the situation.
III

To this point my argument has been negative; my intention in making so negative a case has been to convey something of my concern for this "problem of curriculum" and to suggest something of my feeling for the urgency with which we need to address some theoretical problems within the field. Let me now shift to an approach, albeit highly tentative at this point, to one basic policy argument that does have a relevant theoretical treatment within curriculum. In developing this aside I hope to demonstrate some of our neglect of theoretical arguments for our phenomena and, more positively, show something of the relevance and necessity for some kinds of theoretical discussions.

The only well-known and long-recommended, if not used, formulation of a heuristically useful model for ordering the points at which analysis and decision-making are required for curriculum development is the Tyler rationale. In the 1950 University of Chicago syllabus (Tyler, 1950) three categories of concern are seen as basic in the developmental undertaking: the selection and specification of behaviorally expressed objectives, the development and ordering of learning experiences based on these objectives, and the appropriate evaluation of the effects of these experiences with consequent feedback to the objectives.

The rationale, although dated, does have continuing relevance. It attempts to link within one structure expectations about objectives and evaluation and highlights a number of problem areas within curriculum in a way that is intuitively satisfying. However, the rationale does not spell out in any coherent way how a movement through general categories of problems should be undertaken beyond the initial stipulation that the sources of curriculum are student needs, contemporary life outside the school and the intellectual disciplines as these appear after screening through a grid of psychology and philosophy.

These initial stipulations are again useful at a general level in that they

They have, however, been sharply criticized as a basis for any usefully tight prescriptions for curriculum development on the grounds that, as formulated, they fail to acknowledge the characteristics of teaching and learning as they occur in the classroom or in teachers' thoughts as they think about what they will do; and, more important immediately, that the "sources" are ad hoc, do not issue in any way from the Tyler development system and have no capacity for self-regulation (Millar, 1960; Johnson, 1967, 1968). Criticisms of this kind and the problems the criticisms highlight have led to series of attempts to argue that the only valid "source" for curriculum items is the academic subjects; student needs and life outside the school are only criteria against which content selected from the subjects can be measured.

Attempts to throw the burden of "sources" onto the subjects alone have two consequences: the thrust of the argument stemming from this starting-point becomes a search for prescriptive rules that derive only from the subjects for the selection of curriculum. In the course of the search for these rules the notion of "measuring" items against contemporary life and needs slips out of the discussion. But this slippage is unfortunate. Institutional inertias demand that curriculum explore a range of institutionally meaningful ways in which feedback from subjects to needs and contemporary life (i.e., relevance) may be secured. An articulation between curriculum and contemporary life is by no means simply effected (as can be argued) by the use of the disciplines per se, yet such an articulation is necessary and desirable both educationally and pedagogically. The simple demands that inner-city communities make for the successful teaching of social skills such as literacy and numeracy cannot be articulated by an appeal to the dynamics of subjects. The issues that this last set of demands poses in the city school systems are immediately compelling.

As I read the demands of the inner-city communities for local control over
curriculum it seems that a considerable burden of the argument rests on a justifiable criticism that the schools have not met the reasonable expectations of these communities for an articulation between the schools and student and social needs. The increasingly common sense of the illegitimacy of the institutions of public education most often arises out of this lack of articulation (Janowitz, 1968).

The advocacy of community control becomes, then, a claim which can be contained in both a diagnostic and a constructive sense within the structure of concerns that the Tyler rationale exemplifies, a case for devices to link within one developmental structure the concerns of students, student needs and contemporary life. Community control becomes, therefore, an attempt to develop the instruments of such an articulation with the implications that such articulation would offer for legitimization; yet, from the institutional and professional point of view, the instrument being proposed is an extraordinarily crude and dangerous one.

Certainly if our estimate of the linguistic and psychological sources of the characteristic educational retardation of the inner city are at all meaningful community control will solve nothing more than the most superficial manifestations of illegitimacy. Yet the simplicity of the demands that the cry for community control attempts to articulate through a political process requires that we respond to the problem with our own appropriately simple instruments.

It would seem that this end of articulation, insofar as it locates problems for attention, could be met by the development and use of a number of indices that measured in a valid and socially meaningful way the effectiveness of the schools in meeting a set of minimal social expectations for school output. The most pertinent analogy we might explore is the military notion of, say, mega-deaths as an index of output for a weapons system or the welfare notion of indices of poverty. The development of the arguments for such a set of indices, a clarification of their nature and an exploration of their validity and usefulness are immediately important tasks for a curriculum theory. In its fruit such a
set of arguments has the added potential of turning many of the conventional measures and gestures towards equality of educational opportunity on their ears.\footnote{This paragraph represents a tentative expression of a concern for a set of techniques that might be termed curricular management. It is paradoxical that educational research's obsession for quantification has not been turned to management of any kind. Decision-making within almost all large urban systems is purely political; the data that are collected from the schools rarely enter the decision-making structure.}

I have sketched this fragment of an argument in some detail in an attempt to show, by implication, something of the character and role of what I take to be theoretical discussion within curriculum. Curriculum, I am trying to suggest, should have as part of its task an attempt to address in a sustained and critical way questions of public and administrative policy. Curriculum as part of its purview should demonstrate a potential for rational critique and rational leadership within education; problems of policy, insofar as they have curricular implications, are part of our subject-matter and our attempts to address these problems should, by their rational power, be an important part of the training and considerations of policy-makers. Curriculum must have a potential for leading, or at least attempting to persuade through rational dialogue, the behavior of the institutions that will, or at least do control public education.\footnote{For a sustained attempt to deal with curricular problems as problems of policy see Anderson and Fisher, n.d.}

IV

I have treated this kind of summary argument at some length in an attempt to illustrate what I take to be one, almost totally neglected aspect of theoretical discussion within curriculum. The argument, however, even in a developed form would not go any way as a complete exemplar of the form of discussion I take to be necessary to meet the concern I have for spelling out the root character of our field. Let me return now to the stipulation of my first paragraphs: that curriculum as an intellectual art or discipline should be seen as a methodical instrument for opening a range of ways in which the subject-matters of teacher,
student, milieu and subject can be seen. The potential that this range of ways represents should become the basis of an opening up of the range of choices for action and for making coherent the reasons for decision-making, action and intervention into the interactions of these elements as they exist in fact. This kind of general formulation goes some of the way to defining the subject-matter of curriculum as an intellectual discipline and does delimit, to some extent, the range of problems that we must address.

Oliver (1967) has attempted a formalization of this notion of elements in interaction by generalizing and merging the psychotechnological conceptions of content and component repertoires (Glaser, 1965) and the manpower planning notions of manpower demands and capabilities (Anderson and Bowman, 1966) to suggest that the set of curricular decision-points can be described in terms of a resolution of the contrary forces that a set of demands determined by a social milieu and the subjects make on a set of capabilities offered by institutions and students. His presumption is that any given curricular specification must imply some kind of resolution of these contraries such that a productive equilibrium is attainable.

This combination of the subject-matter elements of student, subject and milieu and the notion of a demand-capability interaction that must be resolved offers an immediately useful paradigm for giving direction to much of our work. Developed even as loosely as I have outlined Oliver's formulation offers an accessible and useful stabilization of the subject-matter of curriculum of a kind that would seem to have the promise of productive and cumulative enquiry. A battery of appropriate methods and methodologies for curriculum research would follow from this initial location of problems. The direction of the enquiry would seem to be at least partially consistent with intuitions about what curriculum should be addressing.

There is, of course, a long history within curriculum and education of concern for the kinds of problems which Oliver's paradigm highlights. I have Judd's
Psychology of the High School Subjects (1915) on my shelves; however, most of the work that has been attempted (even when avowedly couched within this kind of tradition) has failed to pay appropriate attention to each element of the hypothetical relationship. Thus all too often student capability is explored in educationally trivial manifestations or, alternatively, stipulations about subjects are made without regard for their utility or meaningfulness vis-à-vis the student.¹

To a certain extent, then, this conjunction of the notions of demand and capability with some exhaustive listing of the elements that curriculum must address does provide the beginnings of a subject-matter and a set of problems for curriculum discourse. Yet a number of problems arise as soon as one attempts to go beyond these most general of terms. Thus, a prescription to attend to demand and capabilities insofar as they manifest themselves in milieu, teacher, student and subject gives only the most limited sense of direction. Obviously, some tightening is needed, but as soon as an attempt is made to tighten, to become more precise or prescriptive two kinds of problems are exposed. First, no element in any schema that might be developed for a curricular purpose is discrete and can be treated separately from any other element. Each element in a curricular prescription involves each and every other element with the implication that, the tighter a theoretical formulation of hypothesized relations becomes, it becomes less isomorphic with a meaningful curriculum subject-matter. Second, the problem of ends invariably intrudes so that a discussion of any part of a comprehensive formulation always involves a discussion of ends. It is this problem of ends and means which is the most bedevilling; it is a sense of ends which forces curriculum talk to give attention to the intractability of subjects, for example, juxtaposed with learners if we require, even as an ultimate goal, that students gain some "true" understanding of a subject. Students must, by

¹For a more extensive discussion of this kind of problem see Schwab (1958).
this kind of argument, be enabled to comprehend a subject in its own terms and function intellectually and from their own volition in accord with the demands of a subject, yet it is these demands which cannot, in the nature of education, be attained. It is this problem which destroys the simple elegance of reciprocal formulations of demands, capabilities and equilibria. Teachers talk not of simple outcomes but of how they can reach individual children, each one differently and each at his own level (Jackson, 1966); this way of speaking is a recognition of the basic lack of the reciprocity that the kind of model I have been developing imposes.

The problem of ends enters curriculum at other points. The teacher's confounding of "What do I want to do?" with "What will I do?" wrecks the simple linearity of almost all curricular models. Curriculum is, in its practice, concerned with ends in so total a way and at so many levels that simple distinctions between aims and learning experiences or "programmatic" and "analytical" forms of curriculum theory cannot be sustained. The working out in fact of understandings about ends is, in practice, the most important measure of the validity of any given program. Thus, the objection to the curriculum work of Bobbitt, Rugg, et al. is not the impregnation of their theories about curriculum with philosophical platforms, rather the simple-mindedness of their platforms—and this should have become evident in the course of any serious reflection on the results of curriculum-building which seriously attempted to use these principles and prescriptions as starting-points for development (Johnson, 1967; Kliebard, 1968).

This, then, is the subject-matter and the set of problems which must be addressed in its own terms by arguments which purport to be curricular arguments. This is the subject-matter which must be stabilized in some way before it can be entered into a systematic enquiry that can be called research into curriculum. A clearing of the ground that surrounds curriculum and different positions about curriculum is the important therapeutic priority for a curricular theory. The
products of such a therapy should be a clarification of the subject-matter that we must address and a set of valid rules for the production of meaningful statements about that subject-matter. The ultimate products of therapy and construction should be a form of characterization and a variety of stipulations which, in sum, permit us to distinguish curricular enquiry and knowledge from other enquiries.

V

The persistent concern with ends is the most important demand that intuitive perceptions about the nature of curriculum talk requires us to locate within a characterization of a discipline of curriculum. The end of curriculum talk is, by implication, always educative action and a sense of what education means must enter and constrain any decisions that might (or can) be made about possible actions and the kinds of actions that might be proposed. This sense of what education is must be an integral part of any educative act (Peters, 1965). There are other concerns that must be accounted for. The complexities of curricular action demand ranges of practical knowledge, senses of the fitness of things and tacit understandings about how the world works. Formal prescriptions or rules about how to proceed or what might be done cannot cover the range of exigencies in curriculum any more than rules of drafting or architecture can guarantee pleasing paintings or buildings, or rules for statesmen can guarantee wisdom, prudence and greatness. The application of knowledge to action in curriculum, and these other fields of practical art, is indirect and so complex in practice that it is impossible to simply reduce them to any formal disciplinary and intellectual form. They are not theoretical or intellectual fields.

Nevertheless the attempt to prepare a curriculum for a specific audience of any kind presumes that it is possible to talk about the functions or power that a considered course of action is intended to have in use. An attempt to discuss what should be done--and this kind of talk is characteristic of all educational writing--assumes that it is possible and useful to consider (in some way) and
plan (in some way) for kinds of presumably effective experiences. It seems possible, therefore, to consider curriculum from two distinct, but inextricably related points of view: on the one hand, in terms that involve the intentional and practical relationship of the curriculum to the things on which it is employed—students, teachers, subjects and milieux—and, on the other, in terms that involve discussion of what can be done to give effect in some general way to intentions. Different means are more or less effective and it is possible to consider the facts of success and failure in practice and the grounds for such success and failure. If this distinction between forms of discussion can be established it becomes possible to discuss both techniques and ends in ways that acknowledge their mutual interaction, that recognize the necessity and inevitability of an interaction between means and ends in reality, but which permit distinct and appropriate separate analysis. The study of curriculum as means can become an enquiry into the devices and modes of actualization of the interaction of the commonplace curricular elements in specific and real situations. Education in and for curriculum becomes a problem of training in this quasi-discipline, of the evaluation of means and the application of the fruits of this study to educative ends. These two training or educational tasks are different; in the recognition of their difference there is a reformulation of the action-knowledge problem, of the research and development problem, and a prescription for our graduate programs.

VI

This kind of analysis, developed out of the Aristotelian formulation of the subject-matter of rhetoric (McKeon, 1965), gives us the beginnings of a subject-matter for curriculum enquiry and some sense of the place that such a study has in the total context that is curriculum activity. The explicit subject-matter for curriculum becomes the potentialities that subjects, students, teachers, and milieux offer, in their interaction, for an end. The end of the enquiry is a
knowledge of and suggestions for the variety of ways in which these potentialities can be actualized. The thrust of the enquiry is towards more or less concrete actualizations in terms of "curricula" for schools and systems, course outlines, texts and materials, environmental forces, teacher models, lessons and the like. The end of the enquiry becomes what might be done; this is certainly the teacher's question as he approaches any given curricular or teaching problem.

Yet, although in the context of practical enquiry into curriculum theory this kind of formulation of the scope of the field is heuristically useful, it is nowhere near adequately enough developed to give any real direction to a nascent field. The analysis to this point has begged one major problem and ignored the problem of giving explicit meaning to the placeholding commonplaces of teacher, student, milieu and subject that I have used throughout this discussion. Let me conclude by briefly treating these two sets of problems.

The stabilization of the subject-matter of curriculum I have attempted presumes that it is possible to consider what can be done through manipulation of a range of curricular elements to give effect to ends. It has to be assumed for this kind of prescription that ends can be located in some way that makes it possible to measure the effectiveness of different uses of means. The Aristotelian prescription for rhetoric presumed such an assumption could be made about a speech by using the simple question, "Did he persuade his audience as he intended to?" Moving back from this question it became possible to talk about the problems involved in resolving the requirements of the subject of the oration with the needs of an audience through an appropriate sense of what a speaker has to do to communicate with his specific audience. Curriculum uses terms such as these and the tone of some of our literature (e.g., Bloom, 1968) suggests that the rhetorical question is the appropriate one. However, the simple analogy of rhetoric does not hold for, although our ultimate purpose is rhetorical in that we want the form of presentation of a subject to become only a stylistic adjunct
to a logic, this purpose cannot be met in the nature of education. As I have suggested earlier, reciprocal formulations cannot work.¹

Nevertheless, in spite of this real difficulty, ends with their potential as devices for stabilization of curriculum enquiry do enter persistently into curriculum talk. Ends, seen as objectives that are "after a fashion" behaviorally specified, are inevitable parts of all of the "What do I want to do?" and "How do I want to do it?" talk of teachers that is the primitive and basic paradigm for curriculum enquiry. Concrete and behavioral objectives, or presumptions about what the teacher has in mind, control the student's movement through educative experiences and are primary agents through which students come to terms with the unknowable, and most often incomprehensible, demands of schooling. Objectives, or ends play such an important role in all thought about curriculum, whether on the part of students or teachers, that a prima facie case at least can be built for their use as the primary artifact in the stabilization of subject-matter of curriculum (Bash, 1964). If this case can be sustained, the structure of Aristotle's Rhetoric with its exegetical and developed tradition becomes available for the field and would seem to have an important potential as a source for ideas.

The second problem I raised at the beginning of this attempt to flesh in the paradigm I am suggesting for curriculum enquiry has a more substantive importance. The treatment of concrete curricular problems demands that ranges of specific meaning be given to the intuitively understood elements that make up components of schooling. Again I cannot begin to approach this essential step here, but let me sketch the kind of argument I would want to make by treating very briefly the problems posed in explicating two divergent curricular arguments.

Specific meaning elements, and the phenomena that such meaning elements carve out of a presumed reality, come about through the imposition of broadly

¹Some of the theoretical implications of this fundamental problem are discussed in Schwab (1958).
philosophical frames on things which exist only in the sense that they can refute, not cause the ways in which things are seen. The very conception, then, of what it is sensible to address in a curricular position is a function of a philosophical schema that addresses the nature of the world, in our case the social world. What this implies can be seen in the parallel reading of two quite different approaches to the same problem: let us take as examples Bereiter and Engelmann's Teaching Disadvantaged Children in the Preschool (1966) and Dennison's intriguing discussion of his First Street School in New York (1968). Both prescriptions for schooling address, avowedly, the same phenomenal problem—the disadvantaged child—but in fundamentally different ways. The terms and very conception of the problems of the disadvantaged become quite different and imply quite different things about the nature of curriculum enquiry and prescription. The issue at one level of reading of these positions is "What does it even make sense to attempt to address?"

In Bereiter and Engelmann's case curriculum development consists in the development of programs which offer the promise, if plugged in appropriately, of insuring guaranteed remediation. The task of curriculum is the development of such programs. In Dennison's case such predictability is inconceivable and the best that curriculum can give us is some insight into the range of ways that a teacher might use to find each child. The crucial element in remediation is the teacher's understanding of the needs of each child and her ability to find a way in which she can reach the child. It is most important that she understand this characteristic of human nature, recognize the complexity of each child's relationship to his world and search, differently for each child, for the points of intervention that might permit the liberation of each child's innate capacities and drives. The best that training can give the teacher (and where, by inference, curriculum as an enterprise should place its effort) is some general notions about child development and systematic experience in the recognition of generic
conditions.

These two, different positions entail different philosophical schema. Two analytically separate notions can be used to locate these schema and account, to some extent, for the differences in the programs. Thus, on the one hand, we have a set of assumptions about the nature of the social world: in Bereiter and Engelmann's case we have an assumption of lawfulness, predictability and order and the possibility of intervention based on this lawfulness; in Dennison's case such a search is in principle inconceivable for the social world cannot be made to yield itself to any mechanical or rule-governed model. On the other hand, we have different epistemologies: in Bereiter and Engelmann's case a clear distinction between the knower and the known with no place for feeling in science or logic; in Dennison's case there is no room for such distinctions: intellect, will, tastes and passions all enter in the learner's reception of anything that he might know (White, 1969).

The implications of these differences for formulations of training in curriculum and for formulations of the relationships between knowledge and possible action are radically different and pervade the arguments, to take one example, between the "romantics" and the curriculum "technologists." The recognition and recovery of these differences should be, in and of themselves, educative (Schwab, 1969b). Such an education in curriculum would require us to recognize the differing adequacy of differing formulations of these kinds. And differing arguments have differing virtues; these differing virtues may be analyzed by dialectical juxtaposition while analysis of individual positions in terms of the principles they exemplify might permit us to identify the perversions and failures of individual formulations. In the range of formulations that such an analysis would make available we would have some of the alternatives implied in the idea of methodical decision-making.
REFERENCES


