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Editor's Note

This issue opens with Richard Butt's criticism of Schwab's famous criticism of the role of theory in curriculum studies. I suspect this debate is only beginning. Next is Robert Donmoyer's useful and interesting discussion of "educational criticism." Henry Giroux's important article follows. At Airlie last year Kuhn's student Theodore Brown (his paper will appear in 3:1) advised the writing of a sociology of curriculum studies, and the Schubert-Posner essay represents, in part, a significant undertaking of such work. Following it is Van Manen's interview with Langeveld, which we are very pleased to present. Next is Kirke White's concise summary of Huebner's work, an oeuvre whose significance for the field has yet to be fully assessed. We would be very interested in publishing such assessments.

In the next section is Leonard Berk's careful and fascinating study of biography and Madeleine Grumet's compelling and succinct sketch of autobiography and reconceptualization. Concluding is the first part of my study of autobiography and educational experience.

In the following section is Roderick Fawns' discussion and illustration of science teaching as theater, followed by Professor Schnell's study in curriculum development, specifically the rationale and design of a history of education course. James Wood's study of the teaching of mathematical thinking in an elementary school concludes this part.

The final section opens with an interesting and incisive review of child development literature from a critical and feminist perspective, important work done by Barry Kaufman and Gail Kaufman. The section concludes with Sandra Wallenstein's provocative images of curricula to come.

Next is a poem evoking the memory of last year's meeting, written by Edward Milner. Concluding this too-large issue are reviews of Michael Apple's IDEOLOGY AND CURRICULUM and Elliot Eisner's THE EDUCATIONAL IMAGINATION.

W.P.

Against the Flight From Theory: But Towards the Practical

Richard Butt
McGill University

Acknowledgements

An earlier and briefer version of this paper was prepared while the author was a student at the Graduate School of Education, University of Ottawa. I wish to acknowledge the encouragement of Dr. Patrick Babin, of the University of Ottawa, and the useful comments and editorial help of Lynda Butt and Dr. Norman Henchey, McGill University.

The status of curriculum as a field of inquiry and action has been a continuing source of concern for educators during many years. We continue to wrestle with what curriculum is, how it may be distinguished from instruction, and what general principles may be derived or induced for its development, design, implementation, and evaluation. Colleagues seem to agree that curriculum, which foreshadows instruction and learning, is the real business of education, but as soon as one attempts to treat it at some level above the practical, curriculum slips between the cracks of traditional disciplines. Few treat it as a thing of academic substance in itself. Tyler (1977) recently reflected that some of these very concerns were emphasized during the Battle Creek conference in 1947, noting that little progress had been made since then. Perhaps this hiatus is what motivated Schwab (1969, 1970, 1971, 1973) to make an attempt to reconstruct modes of curriculum problem solving. Since existing paradigms of problem solution in the field had failed, it was reasonable that Schwab should offer a new paradigm which was necessarily revolutionary in nature.

Despite the furor that his articles created and their stimulant effect, there appears to have been only limited movement beyond the problems of 1947. If Schwab's contributions contain the germ of a cure for curriculum's ills, we have failed to identify it and act accordingly. One of the main reasons for this, perhaps, is our failure to fully digest and assess Schwab's work in this area. Connelly and Weiss (1972, p. 23) noted the lack of critical appraisal of Schwab's articles and, in the five years since then, criticism that has been published has either reflected tacit acceptance of Schwab or has examined only limited aspects of his work. The purpose of this paper, therefore, is to attempt to present a critical appraisal of Schwab's views, particularly as they apply to the role of theory in curriculum (Schwab, 1970). As a result of this appraisal, the paper then attempts to demonstrate how a reconceptualization of Schwab's view may discern what is of value for further growth in the field.

Symptoms and Diagnosis

Most students of curriculum echo Tyler's (1977) concerns and agree with Schwab's (1970, p. 1) claim that the curriculum field is in an unhealthy state (Huebner, 1976, p. 154; Straumanis, 1976, p. 171; Tyler, 1977; Scheffler, 1973, p. 181). In the matter of diagnosis, however, most of the same authors are opposed to Schwab's assertions that curriculum's ills are directly caused by an "unexamined and mistaken reliance on theory" (1970, p. 1) and that "The curriculum movement has been inveterately theoretic and its theoretic bent has let it down" (p. 21).

Where then is this plethora of theories or of the theoretic? Goodlad (1966, p. 1) certainly did not see it. He observed that "Nowhere in education is there a greater need for conceptual systems to guide theory building, research, and planning than in the field of curriculum". He goes on to add:

> There has not been, therefore a clustering of differing theoretical positions with respect to the same categories of curricular phenomena... Consequently, the conditions for meaningful discourse and cumulative inquiry have not been present. (p. 3)

Myers (1970, p. vii) complements this by observing that "There is no clearly articulated theoretical framework or conceptual scheme that has universal or even general support which could serve to suggest appropriate

decisions for the various personnel associated with education." Unruh (1975, p. 61) comments thus:

> Early leaders in the effort to call the attention of educators to the significance of theory in education were amazed and disappointed to find unexpected ignorance, indifference and even hostility to learning about the meaning of theory.

The roots of this attitude lie perhaps within both the substance labelled educational theory and the pedagogy utilized within the preservice training of teachers. Hilliard (1971, p. 37) cites empirical studies which show that teachers in training all over the western world have consistently devalued the "theoretical" components of their courses. It must be evident that they do not see the "theory" they receive as being a useful source of principles for explaining and guiding what they should do in the classroom. I would claim with others (Downey and Kelly, 1975, p. 1; Hilliard, 1971, p. 41; Huebner, 1976, p. 154) that this historical aversion to theory in the field of education is due to an abundance of impractical theory rather than any inherent impracticality of theory itself.

From this, I concur with the opinions of Huebner (1976, p. 154) and Straumanis (1976, p. 171) that the ills of curriculum are not to be explained by reliance on theory, since there is no plethora of theories, and no overemphasis of the theoretic, in education generally, and in curriculum in particular. Furthermore, it is the dearth of good theory that causes the crisis in principle which Schwab identifies. Good theory emanates practicality and what the field of curriculum has failed to do is "generate intellectual products which can be utilized by curriculum developers and users" (Straumanis, 1976, p. 171). In deriding the theoretic and emphasizing the practical as a solution to our problems Schwab appears to be asking us to become carpenters. To Tyler (1977, p. 256) however, this would mean remaining as carpenters and not becoming architects. In these terms the practical is an erroneous solution since the compelling need is appropriate and practical theoretical constructs, which will unite a fragmented field (Diamonti, 1977, p. 270), guide research, development, and action. These hopefully will minimize the re-invention of the wheel and prevent sideshows (Smith, 1976, p. 169.

Schwab Reconceptualized

At this point do we then disregard Schwab's work? Certainly not. As Fox (1972, p. 45) observes, Schwab's antitheory articles ironically provide a role for theory; more specifically they indicate indirectly how educational and curriculum theory may be strengthened. What I hope to do is to demonstrate how much of Schwab's criticism of the theoretic mode within the curriculum field can be reconceptualized in ways fruitful for problem solution.

I contend that the evidence which Schwab marshalls to support his position that theory per se and its emphasis is inappropriate for problem solving in curriculum, is really a critique of the abuse of theory and an overemphasis of its limitations. So that, if the problem of developing pricniples for guiding practice in curriculum is approached from the point of view of dearth of theory and abuse of theory, then much of what Schwab said would be seen to be correct in itself but inappropriately interpreted and applied.

Schwab sees the problems of curriculum as having been caused by reliance on theory which has inherent weaknesses. One overall weakness, he claims, is the "vice of abstraction" (1970, p. 25) whereby when general rules about a particular phenomenon are derived, inevitably nonuniformities and the particularities of reality are left behind. Subsequently, Schwab (p. 26) discusses the tendency of theory to regress to or rely on the ideal rather than true reality. Arising from the above weaknesses, Schwab (1971, p. 494) asserts that theory per se is not practical. Ultimately, he (1970, p. 11) sees the weaknesses of theory arising from two sources: first, the incompleteness of the subject matter of theories when what is thought to be the appropriate portion of reality is separated from other phenomena; secondly, the partiality of view that each theory takes of its already incomplete subject matter. By partiality of view I assume that Schwab is referring to the specific meta theory and value orientation each theory takes. Schwab feels that the combination of these inherent weaknesses of theory render the theoretic an impotent mode for the solution of practical problems in curriculum. One's first response might be that, if the theoretic mode is so weak and therefore inappropriate for curriculum, why is this not the case for other applied fields or disciplines. Theory has been most useful in

uniting, explaining, and assisting with inquiry and problem solution in many other applied fields, such as sociology and psychology, why not then in curriculum? Certainly, it could be argued that the subject matter of curriculum is much more complex, fragmented and interdisciplinary than other fields. Such complexity makes curriculum theorizing quite difficult and the so-called weaknesses of theory which Schwab identifies potentially more harmful. But surely other fields of inquiry were at the same stage of incoherence at some time prior to the development of useful theory; furthermore, when curriculum is viewed, not via its own constructs but via the conflicting constructs of foundation disciplines, it will inevitably appear incoherent.

Besides these comments which attempt to reveal general weaknesses in Schwab's analysis, the argument of this paper may be strengthened further by a close examination of what he calls the inherent weaknesses of theory. Here I will limit myself to a consideration of the empirical-analytic sense of theory since it is that sense of theory that Schwab appears to be criticizing. In this paper I am not advocating this mode of theory to the exclusion of other forms such as phenomenological or critical theory. I acknowledge the usefulness of these forms of theory, when each is used in appropriate circumstances, and their potentially complementary roles (Smith, 1978; Denton, 1979, p. 1) in educational inquiry. In retrospect, and following the re-emergence of phenomenological and critical theory approaches in education, I think what Schwab's articles achieve, despite the fact he did not say so explicitly, is a criticism of the sole reliance on the empirical-analytic mode of theorizing in the same manner as Bernstein (1976, Ch. 1). The case Schwab makes for the practical can certainly be aligned with arguments to utilize a phenomenological mode of inquiry. His concept of deliberation and its attempt to help curricularists transcend their hidden values may also be seen, if not as congruent with, then confluent with the practical aspects of critical theory.

Having said that, and returning to the main thrust of the paper, I am concerned that, in the manner typical of the field of education, we are all rushing hell-for-leather towards phenomenology and throwing one of the babies out of the bath water. What will I attempt to show is that what Schwab calls inherent weaknesses of (empirical) theory can be strengths or, at worst, only limitations outweighed by the power of good theory. Where they do become true weaknesses, it is as a result of the abuse of the basic rules of the empirical-analytical mode of theorizing.

To place Schwab's criticisms within their proper context, it is necessary to consider them from within the functions and limitations of empirical theory. Empirical theory represents one way of making sense of the apparent chaos of the universe. It searches to expose patterns, relationships, causes and effects within reality. Its major purposes are to unify, simplify and explain. From this base, it predicts events both by induction into the unknown and by deduction back to the known. From these functions it can be seen that, to be worthwhile, a theory must predict and explain reality with a degree of precision that is better than other means -- not perfectly, but better. A measure of the "worth" of this type of theory can be represented by the ratio of the quantity of a particular set of phenomena explained by the relationships established, patterns identified, and common factors exposed, to the quantity of the phenomena not explained due to relationships not accounted for, uniqueness of separate elements of the phenomena, and true chaos or randomness. The numerator represents the strength of theory, the denominator the limitation, and the quotient its power. Statistically that is: Variance Explained/Variance Not Explained.

So I disagree with Schwab when he labels the leaving behind of nonuniformities and the particularities of reality as the vice of abstraction (1970, p. 25) and I think they are better called the vice of non-abstraction. Abstraction, in fact, is the strength of empirical theory when appropriately used; therefore, as Sheffler (1973, p. 190) observed, it is inappropriate to call abstraction a vice of theory. When what Schwab is talking about is labelled as the vice of non-abstraction, it must still be considered. It represents the denominator of the statistical quotient above. Most certainly, if the denominator is too large, the theory would be rejected as inadequate. The whole point of our many statistical gymnastics is to check that this limitation indeed does not constitute a weakness by being too large compared to the numerator. If Schwab is saying then that current curriculum theory does not account for a useful proportion of its reality when compared to unexplained events, then I agree with him. In this case the non-abstracted portion is so large it represents a weakness rather than a limitation. However, Schwab advocates abandoning the theoretic when it is clear that one of the aims and fruits of good theorizing, in the empirical sense, is the reduction of the vice of non-abstraction.

Subsequently, Schwab (1970, p. 26) mentions the tendency of theory to regress to or to rely on the ideal, which is a valid observation since many theories state clearly that their laws only function perfectly for the ideal case. For example, Boyle and Charles show how the Kinetic Theory of Gases is based on an ideal gas. However, several points should be noted: 1) the ideal nature of their laws has been acknowledged; 2) their gas laws, even with the "drastic imperfections" of real gas, still predict reality with at least 95% accuracy! Van der Waal subsequently modified their equations so as to allow for an additional part of the realness of gases. Again the aim of evolving empirical theory is to increasingly explain and predict reality under given circumstances and limitations. Likewise in curriculum theorizing, the Myers (1970) framework for educational decision-making may be somewhat limited and ideal but this undoubtedly will be modified and improved to take better account of changing social and political reality, thus becoming a more practical framework.

Following from the notion that empirical theory predicts reality, it is hard to comprehend Schwab's assertion that theory per se is not practical (Schwab, 1971, p. 494). He falls into the trap of assuming that the abuse of theory is theory; that therefore the separation of theory from practical reality by the guardians of the ivory tower is the aim of theory. This is not so: to theorize well is to emanate practicality as illustrated by either behaviorist or developmentalist theory when applied to appropriate situations. Piagetian theory has tremendous practical utility for the classroom when applied to cognitive development, as do learning curves when used to solve the practical problem of optimum number of frames and time allotment for a Skinnerian teaching program. There are not, however, many theories within the realm of education as applicable to the practical situation as the foregoing examples. Indeed in attacking the artificial distinction between theoretical and practical discourse in education, Huebner (1976, p. 154) found that curriculum discourse is ineffective not because it is theoretical but because it achieves little. We have in education what perhaps might be the ultimate in hypocracy: the languages of the theoretic and practical being very nearly independent. This creates enormous problems when one attempts to translate what amounts to poor theory into practice. As Scheffler (1973, p. 187) states in his criticism of Schwab, theory and practice should not be separate but inextricably linked; he echoed Dewey who one time noted that theory is in the end the most practical of all things.

Schwab's remaining criticisms form the touchstone of his rejection of the theoretic as a useful mode of curriculum problem solving.

> The weaknesses of theory arise from two sources: the inevitable incompleteness of the subject matter of theories and the partiality of view each takes of its already incomplete subject. (Schwab, 1970, p. 11)

The above quotation is an important statement, for I believe an analysis of the notions of "incompleteness" and "partiality" will reveal the actual problem which the field of curriculum faces and which Schwab almost identifies. Again, if they are viewed from within the function and limitations of theory, they point out how theory may be improved.

In approaching any theoretic effort it is essential to first identify the specific problem of concern. Following this, the set of interrelated events and phenomena (Beauchamp, 1975, p. 82) which are appropriate to that problem may be delimited. The purpose of this exercise is to provide the target which the theory is to explain. That is, the reality base (or as Schwab would say, subject matter) of theorizing must be appropriate for the problem. As I understand Schwab, his notion of incompleteness denotes the fact that there are boundaries to the reality base of any theory when it is delimited from the universe of real events, together with minutiae within these boundaries which are not accounted for by the theory. First, the establishment of an appropriate reality base[1] whose boundaries ideally include events to be accounted for and exclude those not pertinent to the problem would enhance the theory builders' task and the practicability of the theory produced. This surely represents a legitimate and utilitarian incompleteness as opposed to the illegitimate incompleteness caused by an inappropriate reality base. As to the minutiae left behind by abstraction, they have either been accounted for by a higher level generalization or not. The theory may only be considered useful if it accounts for a significant proportion of these minutiae, so disproportionate incompleteness in this sense would

would invalidate the theory. Similarly, there is a need to establish a value base[2] for theorizing in the form of basic assumptions, values and beliefs particularly as applied to the prescriptive theory characteristic of applied disciplines. This is derived from both operational values inherent in the reality base of the problem and subjective values inherent in the world view or philosophy of the theorist. I believe Schwab's notion of "partiality" applies to the value base of the theory; however, far from being a weakness, a value base is a necessity for establishing a source of criteria for any prescriptive theory. Weaknesses may occur if the value base is not made explicit and examined for internal consistency so that aspects of the value base do not contain competing partialities.

What then is the problem that Schwab attempts to identify? Is it real? "Incompleteness of subject is easily seen in the entirely cognitive learning theory which takes no account of emotional needs and satisfactions" (Schwab, 1970, p. 11). It can be seen from this excellent example that it is real, as are the competing partialities of theories of emotion and cognition. These are not weaknesses inherent in theory per se, as Schwab claims, but weaknesses in theorizing as applied to edcuation. They represent abuse of theory.

I would argue that the real issue is illegitimate incompleteness and competing partialities which occur when there is an inappropriate reality base in terms of the problem. An appropriate reality base for the problem implicit in Schwab's example would not involve an artificial separation of cognition and emotion. In reality they are inseparable. Schwab is correct in his diagnosis of the problem but not in his pinpointing of the cause. We inevitably run into trouble when attempting to apply theories to real educational problems because many so-called educational theories have been developed from artificial and inappropriate reality bases of conventional foundation disciplines which do not necessarily match educational reality. In terms of the real problems of education they may therefore be illegitimately incomplete and of inappropriate or mixed partiality. As Downey and Kelly (1975, p. 2) point out, the rejection of educational mush and beautiful thoughts as theory "in favour of a more rigorous and differentiated study of the foundation disciplines" has been an over-reaction, "a rejection of the baby with the bath water". Hence the problem of searching for theory within the foundation disciplines which obfuscates the development of appropriate educational theory can be seen.

Generally, then, what has been known as educational theory has been the step child of psychology and the social sciences which often present an academically fragmented view of educational reality. Theory developed from these bases, even if legitimate theory, most often is not educational theory because it has not treated educational reality. Furthermore, within the naive utilization of the empirical-analytic mode of theorizing in curriculum, often the reality treated has been a "technical" reality (Pinar, 1978, p. 8) generated by the abuse of science through the overextension of the industrial-technological societal paradigm, especially within the school system (Harman, 1972; Butt, 1979).

Further confusion has ensued because so-called educational theory which does examine educational reality has confused metatheoretical bases. It has been indecisive as to whether or when it should be scientific, ideologically prescriptive, or just plain descriptive theory.

To a significant event, then, what has generally passed as educational theory has been falsely labelled either as educational, or as theory, or both. It is not surprising then, that what I call pseudo-theory is not perceived as practical in the real world of education, with the language and practice of education being nearly independent. With this situation obtaining in education over a good number of years it is not too difficult to understand the aimlessness, confusion, vagueness and anomie which have characterized the curriculum field. Scheffler (1973, p. 184) summarizes as follows:

> We have indeed had a series of blithe theoretical intrusions from psychology and the social sciences, each over confident, each relatively blind to the contributions available from other quarters, each relatively insensitive to the rich body of experience embodied in the lore of educational practice.

This leads us to the practical.

The Role of the Practical and Eclectic

Schwab's (1970, 1971, 1973) explanation of his practical and eclectic modes demonstrates their potential

utility, and it should be stated here that they will always have a role in curriculum in and of themselves. However, Schwab advocates the emphasis of these approaches to the minimization of the theoretic as a way out of our present crisis of principle in curriculum. Obviously I do not take this view; I prefer an emphasis on appropriate theorizing. Within this, the practical and eclectic have an important role, but for theory development as well as problem solution. In attempting to define the key substantive problems within the field of curriculum and delimit appropriate reality and value bases for theorizing, Schwab's practical mode will find much utility, since good theorizing, in any mode, must always be preceded by an intimate knowledge of the reality base concerned. A useful initial step in any theoretical endeavor is direct observation and involvement with real problems. The intimate connection between Piaget's observations and his theory demonstrates the link between the practical and appropriate theorizing. So I view the practical as an important prerequisite for filling the theoretical void that exists in curriculum by providing appropriate reality bases from which to develop theory unique and pertinent to the field.

An alternative route for developing curriculum theory directly from its own reality base which may be economical of effort is to utilize theories from other fields. Schwab feels this is impossible. I think not, provided the particular curriculum problem and appropriate educational reality and value bases are defined. Schwab's arts of the eclectic could then be practised on theories closest to these bases in order to explicate the details of their partialities, incompleteness, commonalities, and points of conjunction. Going beyond Schwab's eclectic to a coherent curriculum theory would depend on the theoreticians's skill at transposing the above theoretical portions through the unified reality and value base of curriculum. This procedure would not be easy but is certainly possible as Petrie (1976, p. 11) has so ably illustrated. Whether one approaches curriculum theory via the eclectic or the practical would depend on which appears most economical for a particular set of phenomena.

Summary

I have agreed with Schwab that the field of curriculum has been in a crisis of principle but have attempted to illustrate that the cause of this crisis is due to the lack of emphasis on the theoretic, inappropriate theorizing, and in part the abuse of empirical theorizing. This differs from Schwab's view that the source of crisis is due to an overemphasis of the theoretic and inherent weaknesses of theory per se.

Contrary to Schwab, who sees theory (implicitly empirical theory) as impractical, inherently weak from "incompleteness" and "partiality", I have attempted to show that the purpose of exemplary theory is practical, with therefore, strong links to reality. The problems of illegitimate "incompleteness" and "partiality" are not problems of the theoretical enterprise per se but a reflection of reality and value bases inappropriate to the field of curriculum.

It is hoped that this paper establishes a place for appropriate empirical theory within the field of curriculum. It is apparent that the most pressing issue that should now be engaged is the question of metatheory. Theory in education can be descriptive, explicative, and prescriptive. Our most important activity now is to engage in speculation as to what types of theory could and should be formed within education generally and how curriculum lies within this metatheoretical framework. What situations, problems and purposes within curriculum require what sorts of information from what types of theorizing? Also useful would be speculation as to how the subject matter of the curriculum field can be subdivided. Perhaps, then, the existing confusion concerning what are appropriate targets, methods, and purposes for curriculum theorizing might be clarified, leading to useful paradigms for theory building in specific curriculum areas.

FOOTNOTES

1. A parallel here may be drawn with phenomenological, ethnographic and grounded theory.
2. A parallel here may be drawn with critical theory.

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The Evaluator as Artist
A Discussion of Premises and Problems with Examples from Two Aesthetically Based Evaluations*

Robert Donmoyer
The University of Georgia

O wad some pow'r the giftie gie us
To see oursels as others see us!
R. Burns

The limitations of the evaluation field's traditional emphasis on measurement of outcomes in terms of preestablished goals has prompted the development of alternative evaluation models and new roles for the educational evaluator. Levine's (1974) adversary model, for example, casts evaluators in the roles of prosecuting and defense attorneys. Scriven's (1972) goal free model transforms the evaluator into a sort of latter day philosopher-king. In the illuminative evaluation model of Partlett and Hamilton (1973), the evaluator becomes a quasi-anthropologist sans anthropological theory, and in Stake's (1975) responsive approach, the evaluator turns into a quasi-journalist who may occasionally editorialize but, for the most part, simply observes and interviews and then reports his findings.

In addition to these models, an artistic model of educational evaluation, a model rooted in art and literary criticism, has begun to emerge. Mann (1968) was the first to utilize an artistic metaphor to conceptualize curriculum evaluation. He suggested that a curriculum might be viewed as a work of art and that the curriculum evaluator might function much as a literary critic does. Willis (1975) and Kelly (1975) expanded Mann's initial discussion. Advocates of the literary criticism model tended to focus on curriculum in its preactive form; in addition, most of the discussions of the literary criticism model emerged out of a reconceptualist orientation toward the curriculum field, an orientation which is concerned with development of new ways of talking about curriculum and suspicious of the field's traditional ameliorative emphasis (Pinar, 1975).

In the mid 1970's Elliot Eisner (1975, 1976, 1976) proposed a somewhat different version of the artistic model of curriculum evaluation in his discussions of educational connoisseurship and educational criticism. Eisner's examples were drawn from art rather than literary criticism, yet this difference was not the significant one. More significant was his expanded focus which included the interactive curriculum within the artistic evaluator's field of vision; also significant was Eisner's self conscious acceptance of both evaluation's traditional ameliorative function and its traditional reliance on social and behavioral science, although both the method of amelioration and the function of social science were somewhat redefined.

This paper focuses largely on the Eisner version of the artistic model, a version which assumes a weaker, more metaphorical relationship between the educational critic and the critic in the arts and in the field of literature. The paper grew out of the realization that while much has been written about educational criticism, there have been few actual examples of educational criticism presented for public scrutiny and even fewer discussions of the problems encountered by the evaluator employing an artistic approach to evaluation in real classrooms to evaluate real programs and real teachers. My plan, therefore, is two-fold. First, I will illustrate the central ideas of artistic evaluation with excerpts from and references to critiques of two classrooms. These educational criticisms were part of a more general qualitative evaluation of the implementation of a curriculum in a California school district. Second, I will focus on certain problems with the artistic model of curriculum evaluation which emerged during and after this particular evaluation. Before proceeding, however, it seems important to describe more fully the specific setting and circumstances of the evaluation from which the two criticisms were taken.

The Evaluation: Setting and Circumstances

The Curriculum

The Curriculum which was being evaluated was The City Building Educational Program (Nelson, 1974), a

multidisciplinary, experientially oriented curriculum emphasizing group process skills, problem solving and the development of intuition. The curriculum which was developed by a team of educators and architectural consultants is organized around activities as opposed to objectives, specifically, activities related to the planning and construction of a city of the future. The particular version of The City Building Educational Program implemented in the evaluated setting emphasized architecture and, in fact, architects and students of architecture served as classroom consultants. The curriculum guide does not designate a specific age group with which the curriculum is to be used, but many of the activities, e.g., activities related to scale, require skills which most students do not possess until they reach the upper elementary or middle school years. The curriculum is designed to be somewhat open ended, however, so in principle it could be adapted to different ages by eliminating or altering some of the activities.

The Curriculum and the School District

The school district where the evaluation occurred was located in a rural area of California with a large percentage of migrant students. The City Building Program in this district was, in fact, partially funded with migrant education funds and was directed by the Director of Migrant Education. He was personally enthusiastic about the program's activity oriented philosophy and felt such an orientation was particularly appropriate to the needs of migrant students. The program was also supported by a grant from the school board. To appeal to this group, the program's name was changed to The City Building Basic Skills Program, and its potential for helping students learn the 3 R's was emphasized. In the curriculum guide, this benefit is treated peripherally.

The City Building Program is designed as a one year curriculum; due to funding delays, it was not implemented in this district until February. The program was implemented by five volunteer teachers in their respective classrooms after a brief inservice training program. Several teachers had previously used the program in the district's summer program for migrant children. The program was implemented at the following levels: kindergarten, first grade, third grade, a fifth-sixth grade combination, and seventh grade.

The Evaluation

The evaluation consisted of a qualitative assessment of the curriculum guide itself, educational criticisms of the five classrooms which had implemented the program, and an overview of the program based on issues raised in the specific classroom and curriculum criticisms.

The evaluation was conducted by two evaluators from Stanford University. Each evaluator observed and critiqued two or three classrooms individually: the critique of the curriculum guide and the program overview were based on consultation between the two evaluators. Individual classroom criticisms were written after an extremely brief period of observation: two school days in the beginning of June. Budgetary considerations precluded more extended observation time.

The evaluation was to be formative in purpose, and its audience was to be the program's teachers and directors. We were informed, however, that the program participants might opt to distribute the evaluation report to other administrators and to the members of the school board. These groups would decide whether the City Building Program would be continued, terminated, expanded, or altered in some other way.

This cursory description of the evaluation context should be sufficient to serve as a backdrop for the following discussion. The first part of that discussion focuses on the central ideas of artistic evaluation and utilizes two of the criticisms from the City Building evaluation to illustrate these ideas.

The Evaluator as Artist

Aesthetic Content and Aesthetic Form

The educational critic functions as an artist and art critic in two related ways. First, he/she focuses on the aesthetic aspects, i.e., the qualities, of an educational experience. Second, he/she uses aesthetic forms of communication to present his/her findings to the audience.

Langer (1957) has emphasized that artistic symbols are presentational in character, i.e. their meaning is embodied in their form. Ordinary discourse, as well as discourse in science and mathematics, utilizes representational symbols: "c-a-t" and "1 + 1 = 2" have no meaning in and of themselves. Rather they receive their meaning by conventional association.

Representational symbols and the extended symbolizing process known as reasoning have great utility. Discursive forms, however, cannot accommodate all aspects of experience. Certain aspects of experience, the subjective aspects, i.e., "the direct feeling of it," "will not take the impress directly or indirectly of discursive form (Langer, 1957, p. 22)." The presentational symbol of the artist, however, allows the translation of what is subjective, i.e., "unspeakable, ineffable," into a form which is objective and, hence, communicable.

The evaluator-as-artist, therefore, utilizes artistic symbols and artistic form to communicate those aspects of the educational process which traditional evaluators and even most ethnographers ignore: the qualities extant in a particular educational experience, or, to use Vallance's (1978) phrase, the "personal lived-in quality of curriculum (p. 144)." The qualities of curricular experience as valued both intrinsically and because they impact on future growth (Dewey, 1936).

Metaphor

Because the critic communicates through the written word, metaphorical language is an essential tool for the evaluator-as artist attempting to portray curricular experience. Metaphor was used extensively in the educational criticisms prepared for the City Building evaluation. For example, in "Shades of Deja Vu in a Third Grade Classroom," metaphorical language was used to add a qualitative dimension to the physical description of the classroom.

> Throughout the room, books and papers form unplanned collages on desk tops and shelves. In the back of the room, partially hidden from view by a permanent room divider, large sheets of insulation fall haphazardly against the wall. Nearby commercially prepared ecological activity cards spill out of their package onto countertop and floor, while large cardboard boxes covered with dog-eared black construction paper and white construction paper stripes lay exhausted atop one another like victims of a knock-down, dragged-out barroom brawl.

Metaphorical language was also used to portray personal qualities of key participants. In "Democracy and Education is Alive and Well and Living in Mr. Diemo's Seventh Grade City Building Classroom," I attempted to use metaphor to capture qualities that words like charismatic can only point to.

> Energizing the activities of all the groups and particularly the activities of the planning commission is the electric personality of the teacher, Mr. Diemo. With his wire rim glasses, his dark blue corduroy pants, and a blue and white gingham shirt that could easily feel at home on the cover of a John Denver album, Mr. Diemo...projects a contemporary image...Mr. Diemo is a consumate theatrical performer. His voice sings with a velvet intensity; his movements seem almost dance-like. Even when standing still, talking to students about their various activities, his hips mirror the emotion of his voice, springing or sliding or oozing from side to side, as though under the influence of Bob Fosse's choreography. His arms and shoulders move too, often in broad, intense, expressively flowing gestures, not unlike the gestures of a French cabaret singer.

Metaphor was relied on, too, to characterize the qualitative aspects of interactions. When Mr. Diemo's homework assignment to the class was unclear and the aide supplied by City Building funds interrupted him to inform him of his lack of clarity, this interruption was characterized as being done "with good buddy assuredness." When the third grade teacher, Mr. Nopata, responded to the greetings of students, his response was likened to the response of "a hip Nelson Rockefeller on the stump, acknowledging...greetings with the broadest of smiles."

Teacher-student interactions within the classroom also were described with the aid of metaphor. Concerning the theatrical Mr. Diemo, I wrote,

> Yes, Mr. Diemo is a skilled and energetic performer, yet there is no proceneum arch in sight. Clearly this is not to be a one-man show; rather this is participatory, environmental, improvisational theater. Here, to paraphrase that astute social commentator, James Durante, everybody is expected to get into the act.

"Democracy and Education is Alive and Well and Living in Mr. Diemo's Seventh Grade City Building Classroom" also contains the following somewhat more specific but still metaphorical description of student instructor interactions.

> Tom Messanger, the architect consultant for this class is in the front of the room leading the class in solving...the problem. His gruff, somewhat ponderous and professorial tone does not appear to command the same sort of natural respect and rapport engendered by Mr. Diemo or Mark. Hints of an us-against-them tug-of-war tension so commonplace between teacher and students in middle school classrooms and so remarkably absent from this classroom yesterday now begin to emerge. Students begin talking to each other, seemingly about extraneous matters; individual students begin making audible, joking asides. When these things occur, Mr. Diemo either raises his hands like a cheerleader trying to quiet booing fans at a football game, or he verbalizes what appears to be this classroom's normally unspoken commandment, "Be serious above all." These unobtrusive interventions settle the offenders and Mr. Messanger and the class can proceed to solve the problem.

Thus, metaphorical language is an important tool for the evaluator-as-artist. It is not the only tool borrowed from the arts and literature, however. Kelly (1975) also emphasizes the importance of plot, theme, and voice.

Voice

Kelly (1975) and Willis (1978) have emphasized that the adoption of a point of view is inevitable with any form of evaluation; within the artistic model, however, the subjective dimension of the critique is made readily apparent through the development of voice. As Kelly notes, voice is "a way of expressing the person of the speaker, of letting the reader know where the narrator stands and how he feels about the subject... (p. 121)"

The "person of the speaker" and the personal perspective from which the classroom is being viewed are made quite apparent in the following introspective musings which come near the beginning of "Shades of Deja Vu in a Third Grade Classroom."

> As we walk on, I begin to sense that my earlier feelings of deja vu have begun to be warmed by touches of sentiment and nostalgia. Lately I had been in too many classrooms whose curriculum mimicked not only the limited content, but also the restrictive form of standardized achievement tests, and I had seen too many teachers behave as cold, detached accountants, unfeelingly prescribing work to robot-like students and the auditing the work the robots produced. Bob Nopata's classroom promised a much needed respite from these experiences. Here was someone who would return me to the educational values of an earlier era, an era now more distant than the year would indicate. Here was someone who promised to transport me to a time when the excessive order and regimentation that are tody's educational virtues would been seen, to polemicists, at least, as symptoms of a "crisis in the classroom"; here was someone who could return me to a time when concern for "why children fail" and "how children learn" took precedence over the mere shaping of behavior; here was someone who could return me to an era when educational attention was not limited to grade equivalency scores but was also focused on "the lives of children."
>
> To my surprise, however, the recollection of these polemics of an earlier era also begins to call up a cool caution to play counterpoint to the warmth of nostalgia. I recall that when polemics were transformed to practice, excessive regulations too often were replaced by the absence of any sort of order, pedagogical anarchy resulted. I also recall that a myopic concern with thinking and the development of cognitive processes often left poor penmanship, careless arithmetic errors and

other manifestations of sloppiness and carelessness go unnoticed and uncorrected; parents (many of whom were secretaries and accountants whose jobs depended on neatness and accuracy) were legitimately confused and concerned. Finally, I remember that often in the past concern with the quality of classroom life and a commitment to "love kids" was unaccompanied by a sense of pedagogical responsibility; in such instances children often did not acquire the skills necessary to function in a world where one is not automatically loved. Clearly, educational climates within a nation change for a multitude of reasons, many related more to general political and economic factors than to anything educators do or do not do. Still, as with the reform minded progressives during the first half of the century (Cremin, 1964), the educational reformers in the sixties must be held partially responsible for their own demise. This thought considerably darkens the feelings of deja vu which just moments earlier had been brightened by nostalgic sentiment.

Plot

Plot is another device the educational critic borrows from the arts and literature. The critic does not simply present a chronology of classroom events (what Kelly would call plot-line), but infuses description with notions of causation and intentionality. The following description of how the City Building Program's emphasis on democratic decision making was actualized in Mr. Nopata's classroom demonstrates the use of plot by the evaluator-as-artist.

Ricky, then, in what appears to be a desperate move, spits out that he does not like Lisa because she has freckles. Lisa begins crying.

Bob's rich baritone voice retains its almost sing-song, Captain Kangaroo gentleness as he reminds Ricky of the time when Ricky had come to him in tears because some students were teasing him because he was Filipino. He gently prods Ricky to see the relationship between this event and his dislike of Lisa because she has freckles.

Students now pick up on this theme, although not as gently. One boys taunts, "Willie has freckles. Ain't he gonna be your friend anymore?" Other students begin pointing to freckles on their own faces or on the faces of other students. Some students get out of their seats and cross over to Ricky's desk. Before long most of the students are out of their seats displaying the sort of lynch mob psychology that made Alexander Hamilton distrust democracy.

Faced with the onslaught, Ricky too begins to cry. Finally Marshall Bob returns law and order to the classroom by requiring students to take their seats. He gently tells an almost hyperventilating Ricky to step outside with him. Ricky, however, does not move. Bob repeats calmly, "Come on." Ricky manages to emit a hostile, "No!", through the cracks of near frantic inhaling and exhaling. Lisa, still crying, says to Ricky, "Now you know how I feel." She sounds more wounded than bitter. A "yes" manages to squeak out of Ricky's still quite enlarged breaths.

Bob tells Ricky to take deep breaths. Then, as he sits on the desk beside Ricky, Bob repeats rhythmically, calmly, calmingly, "Deep breaths, deep breaths, deep breaths..." As he does this, Bob looks at me, his face glowing like a self-satisfied tap dancer on amateur night who brazenly solicits the audience's approval and applause. Clearly, Bob is sending me a message, a message which I read, "Isn't this great! Isn't this exciting!" I turn away, unsure of the answer I wish to send back. Three minutes more of "deep breaths, deep breaths, deep breaths..." Then when Medea-size rage is finally reduced to muted sobs, it is sermon time. Reverend Nopata's topic is prejudice; his text is an incident which another teacher had that morning related in the teacher's room. He tells how the teacher had always thought someone was stupid and fat and clumsy and how pleased the teacher was when she found out that the person was only fat and clumsy, not stupid.

At the conclusion of this little sermon, Lisa begins to talk about her feelings. Seeming more like an adult participant in a group therapy session than a third grader in a classroom Lisa coolly discusses how Ricky had hurt her. Ricky, several minutes closer to his optimum point of emotion upset and missing Lisa's verbal prowess must content himself with a "Me, too," after one of Lisa's articulate renderings of the hurt she has felt.

This little drama begins to wander aimlessly, unable to write itself a final act and provide the resolution only final acts can bring.

Theme

Theme also plays a part in the writings of both the art and educational critic. In the two criticisms serving as examples, in fact, theme more than plot provides the organizational focus, the sense of unity. In "Shades of Deja vu...," for example, the dominant theme--that Mr. Nopata's curriculum has the advantages and disadvantages of earlier progressive and open education curricula--emerges at the outset in the description of the classroom and the teacher and re-emerges throughout the remaining descriptions as well as in the interpretive and evaulative comments presented in an introspective context throughout the paper. Although no single theme dominates the descriptive section of "Democracy and Education is Alive and Well and Living in Mr. Diemo's Seventh Grade City Building Classroom," subthemes such as student involvement, student self-discipline, the teacher as group member and group leader, and improvisation in the classroom can be found; these subthemes are tied together in the subsequent interpretive and evaluative section (in this criticism, conscious interpretation and evaluation generally follow description) which relates classroom practice to John Dewey's educational thought.

The Evaluator as Artist

Artistic Construction and Reconstruction

The educational critic's role is not only artistic because he focuses on the qualities of experience and utilizes the tools of the artist to communicate these qualities. There is also a less literal, more metaphorical meaning of art which applies to the evaluator as artist. This is the meaning Nisbet (1976) employs when he speaks of Sociology as an Art Form and the meaning James (1958) uses when he calls teaching an art. This meaning is tied to a constructivist conception of knowledge and action. Constructivists argue that human beings create their world. It is believed that reality is not perceived directly; rather, external reality is thought to be mediated by schemata which are at times the unconscious by products of social interaction and at other times the result of a more personal construction process analogous to the creative process of the artist.[3] Both types of constructions are relevant to the work of the evaluator-as-artist.

The Evaluator as Artist and the Process of Artistic Reconstruction

Unlike many other evaluators, the evaluator-as-artist acknowledges that while "the world of nature...does not 'mean' anything to molecules, atoms and electrons (Schutz, 1970, p. 11)", such is not the case with human beings. Since the meaning people impose upon reality ultimately impacts on the way people think and act, the evaluator as artist is concerned with understanding not only personal meanings of relevant actors, but also intersubjective meanings which exist not only in the minds of individuals but also in classroom practice (Taylor 1971). Such understanding is important for external decision makers; it may also be important to participants since meaning can often be unconscious.

Both criticisms make at least an attempt to describe extant meanings within each classroom. "Shades of Deja Vu...", for example, discusses the intersubjective meaning of reading in Mr. Nopata's class by describing both classroom practice (limited time devoted to reading; reading for utilitarian purposes only) and personal perceptions (a female student: "Oh, we don't have time for reading.") In "Democracy and Education is Alive...", the personal and intersubjective meanings of the traditional skill areas was also probed through observation and interviews.

Although attempts were made to understand and communicate events from the perspective of participants, the limited amount of time spent in the classroom precluded any sophisticated probing of the deep structure of classroom interaction or individual action. Indeed certain anthropologists have argued that no amount of observation time will lead to an internal understanding. Khleif (1974), for example, argues that since a classroom observer can never really be a participant and since he/she is already familiar with the culture and language of his society, he/she will not undergo "cultural shock," and therefore his/herself will not undergo the

"configuration change" required to see from participants' perspectives. Khleif may overstate this point somewhat; nevertheless, for whatever reason, what I saw in the two classrooms critiqued was as much a result of what I brought to the classroom, both my tacit and propositional knowledge, as what was actually there.

The Evaluator as Artist and the Process of Artistic Construction

From the constructivist perspective, the subjective character of the evaluation is not a weakness but a strength, for evaluation cannot avoid being subjective. For the constructivist, reality is multidimensional and any one vantage point will reveal only partial understanding. The evaluator-as-artist has the ability to objectify what he sees from the perspective he occupies by virtue of his own unique history. Hence, he/she can help participants and other decision makers to see aspects of the curriculum they may have overlooked and to see things they have seen before from a different angle.

Particularly helpful in this regard are the various theoretical constructions, both scientific, quasi-scientific, and consciously unscientific, supplied by the various disciplines and fields of study. These constructions are not used for purposes of law-like prediction and control, although they may help approach questions of probable causes and effects more judiciously. Their primary function, however, is to serve as aids to perception. Individually they simplify reality by providing focus and by translating the anticipatory schemata of perception (Neisser, 1976) and the tacit knowledge of experience (Polanyi, 1957) into discursive form; when used in combination with each other, however, these theoretical constructions also help us see more completely.

In addition to tacit knowledge gleaned from six years as a teacher sympathetic to experientially oriented curricula such as The City Building Educational Program, various theoretical knowledge was employed in interpreting and evaluating events in the two City Building classrooms I critiqued. In "Democracy and Education is Alive and Well....," for example, Spolin's (1963) theory of improvisation in the theater was used to explain why Mr. Diemo's improvisational style of teaching seemed to be working and James Moffett's (1968) theory of language development was used to evaluate certain benefits with respect to language development which might accrue from his interactive style of teaching. In addition, as the title of the criticism implies, the educational thought of John Dewey (and also criticisms of Dewey's position) was also used extensively to evaluate the City Building curriculum as implemented in this classroom. For example, these comments followed a brief discussion of Dewey's cautionary notes on democratic organization of the classroom:

> Mr. Diemo, too, seems sensitive to the issues Dewey has raised with respect to transporting democratic social organization to the classroom. His use of an agenda indicates a willingness to provide direction and focus, yet the agenda is sufficiently non-directive to allow for student initiative and communal decision making. Similarly, Mr. Diemo does not hesitate to exercise direct authority when necessary. As Dewey predicts, however, such occasions are exceedingly rare; normally the class commandment, "Be serious above all," remains an unquestioned and unspoken rule. When a verbal reminder is called for, Mr. Diemo offers it in the interest of the group and the group's communal purpose, not as an expression of personal power. Mr. Diemo's conversation with Frank at the end of the second day indicates both a willingness to exercise direct authority when necessary and the manner in which such authority is exercised.
>
> Thus Mr. Diemo is both member of the group and, by virtue of his "greater maturity...and...greater knowledge of the world, of subject-matters and of individuals" he is the group's natural leader. His leadership, however, does not appear to inhibit students' perception of themselves as full participants in the group's decision making processes. In the words of Jeff, "(T)he kids have the power to overtake the teacher if they vote on it or get up a petition...We could rule out anything Mr. Diemo says, and I think we could do it to most any other teacher if we wanted to." These are not the words of an insurrectionist, but of a responsible citizen aware of his potential political power and the socially sanctioned means for exercising it.

Various theoretical perspectives and research findings were also employed in the criticism of Mr. Nopata's classroom. Included were the findings of the effects of individualization reported by Stallings (1976), discussions of the hidden curriculum, Herbert Kliebard's (1975) discussion of alternative approach to goals in

curriculum organization, Eisner's (1969) discussion of behavioral and expressive objectives, and cognitive psychologists' discussions of the causes of grooved thinking (Steinbruner, 1974).

Problems for the Evaluator-as-Artist[4]

Thus far I have tried to note and exemplify what the evaluator-as-artist does. Clearly he/she focuses on aspects of curriculum that are often obscured by the methodologies and/or reporting procedures of other evaluation approaches. Because the evaluator-as-artist illuminates idiosyncracy, the process of curriculum, and the qualities of the curriculum process, and because he/she uses theory as an aid to perception and action, he/she should provide a valuable supplement to information provided by other evaluators working with other evaluation models. The evaluator-as-artist however, confronts problems, particularly when he/she evaluates curricula in their interactive forms. A reading of the Joint Committee's (1978) proposed evaluation standards indicates that many of these problems are not unique to the evaluator as artist; even traditional problems are magnified, however, when the evaluator's focus is largely emergent, when the evaluator is his/her own evaluation instrument, and when the evaluator's report strives for the richness and ambiguity of art rather than the precision and sterility of science.

The remainder of this paper, therefore, focuses on seven problems which arose in connection with the artistic evaluation of the implementation of The City Building Educational Program. Most of the discussion is based on information gleaned from interviews with four teachers and two administrators after they had read the evaluation report. Their opinions on the evaluation and the general evaluation approach ranged from enthusiasm to skepticism. With a few exceptions, however, the focus will be on the difficulties raised.

The Problem of Time

A primary concern in evaluating the evaluation was the effect of the limited amount of observation time. Half of the teachers and administrators interviewed found the classroom descriptions amazingly thorough and accurate (i.e., the descriptions were in line with their own perceptions) and, hence, did not see the limited observation time as troublesome. The project director, for example indicated that even negative reactions of some teachers may have resulted primarily from other factors than inaccuracies resulting from limited observation time:

> I think a lot of the comments hit home. A lot of things made sense to them. I think that's what hurt them the most. I don't know if it was hurt, but the fact that you had such a deep perception of what they were doing in the class, and things that they themselves want to change.

The director also discussed comments about him which were included in the program overview. In this overview I complimented the director for fostering a sense of personal and professional community among program participants, but questioned whether group cohesion was not sometimes cemented with an "us-against-them" mentality which stymied external and internal criticism. Concerning these comments, the director said,

> The things you said about me were really relevant. You only had about a paragraph devoted to me, but of all the things you could have said, they really made me sit and ponder and reevaluate what I was doing.

In contrast to the director, three teachers tended to be critical of the classroom descriptions, although two of these teachers did not relate their criticisms to the limited amount of time allotted for observation. In fact, one of these teachers, Mr. Nopata, reported an ex post factor "ah-ha!" experience after reading the criticism of his classroom similar to the one discussed by the project director in the above quotation. One teacher, however, did see the limited amount of observation time as troublesome. Since her comments were particularly insightful, I include excerpts from the transcript of my discussion with her. The discussion focuses on Mr. Nopata's classroom.

Teacher: I just felt if it's gonna be that subjective--let me word it differently. If you were, say, a Chicano college graduate who was raised in a ghetto area and maybe whose parents were illiterate and you came from a different background, I don't think a person like that would have seen things that you saw.
Author: O.K.
Teacher: And I feel like there were a lot of things maybe relevant to this area, this culture that you didn't see. It's just like somebody coming from the country going to the city and the things they see are like really out of...they're real, but they're really out of perspective but really not as important as if you were there for three years then those things would become obsolete. There are more important things going on.
Author: Right, but can you see a benefit from seeing things from an outsider's perspective?
Teacher: Yeah. Like I was saying, maybe there are a lot of people who would react in the same way, and how would you deal with them so they wouldn't get those kinds of feelings.
Author: But is it helpful in the setting? Can you see that it might be beneficial to see things from somebody else's point of view? An outsider's point of view? To see things you may tend to take for granted but which may really be important?
Teacher: O.K. Right. I think maybe if you were here longer and there had been more time, we could have met more often and discussed these things...
Author: O.K., that's the key...
Teacher: We would have learned a lot...
Author: And I would have learned a lot...
Teacher: And you would have learned a lot, and there would have been a lot more going on... The feedback was missing.

This teacher may have exaggerated the effects of limited observation time. I am not at all certain whether my view of Bob's classroom would have been radically altered had I been given more time to observe. I had taught in a ghetto school myself, and, therefore, I was not totally naive to the educational implications of poverty. In addition, my impressions were relatively similar to the views expressed by other teachers and administrators in the district interviewed both before and after the criticism was written. Indeed, further probing indicated that differences in perception may not have been as great as first thought; the metaphors I had chosen had, at least in this reader's mind, distorted my meaning.

Still, it is important to realize that an outsider may easily bring with him/her an insensitivity to environmental constraints which cannot be overcome during a brief period of observation. More importantly, time is essential for the kind of communication for which the evaluator-as-artist strives. Since the goal is to help participants see anew, i.e., to see through the eyes of another person, time for interaction and feedback, not to mention time to build mutual trust and respect, is essential. When feedback and interaction are not provided for, the message of the critic can easily be distorted, either consciously or unconsciously, and written off as emanating from a totally unsympathetic value perspective.. Imprecise, poetical modes of communication are particularly susceptible to such misinterpretation.

What I am saying, then, suggests that the artist-as-evaluator might work effectively in the context of clinical supervision, a suggestion which has already been made by others (Sergiovanni and Starratt, 1979; Cross, 1977). In addition, if outsiders are employed to bring a fresh perspective (and one principal repeatedly emphasized the need for periodic external assessment), then the artistic evaluator's role ought to be quite similar to the evaluator's role outlined in the"alternative and extended view" of evaluation discussed by the Stanford Evaluation Consortium (Cronbach and Ross, 1976). This view emphasizes among other things, that "(t)he evaluator, instead of running alongside the train making notes through the windows, can board the train and influence the engineer, the conductor, and the passengers..." It also notes that "(t)he evaluator should recognize (and act upon the recognition) that systems are rarely influenced by reports received in the mail (p. 18)."

The Problems of Personal Description

The problems of personal description has been recognized by others who have written about artistic approaches to evaluation. Jenkins and O'Toole (1978), for example, raise the following question: "Can cryptic pen portrayals of individuals get close enough to their full, rounded uniqueness as people for the human perspective to be defensible (p. 542)?" In attempting to answer their own question, they distinguish between round and flat characters.

> Flat characters are humorous types of caricatures constructed around an idea or quality. Round characters partake of a full imaginative and moral existence. It seems unlikely that the curriculum evaluator will ever compete with the novelist in sheer roundness of characterization. Perhaps the best he can hope for is a few well chosen suggestive phrases held together by a narrative viewpoint, or some sense of an issue that can be sharply personalized (art teaches by example). If so, he is closer to the world of the theater critic than the world of the novelist, and his ethical dilemmas, vis a vis his responsibility to the subjects of the study, are increased rather than dimished. (p. 542)

Jenkins and O'Toole might have added that even great art, with all its complexity and ambiguity, is still an abstraction and therefore an incomplete rendering of reality. To be sure, any focus on curriculum processes must be incomplete, but nobody expects an impersonal Flander's Interaction Analysis, for example, to present a full picture. The power of artistic description, however, results from the illusion of reality it creates.

The personal descriptions were troublesome to half of the teachers in the City Building evaluation. These teachers touched on the problem of multidimensionality discussed by Jenkins and O'Toole. Their primary concern, however, centered on another facet of personal descriptions which Jenkins and O'Toole touch on, the inseparability of public performance and private personality. Many of the teachers asked, "What does hair length have to do with teaching? Isn't such a personal description of me and my actions in the classroom an invasion of my privacy?"

I could certainly make a case for the inclusion of personal description in evaluation. First, I could note that teachers teach themselves as well as the curriculum (Eisner, 1974) and therefore a discussion of personal characteristics and values is a defensible subject for evaluation. I could also note, somewhat defensively, that the personal descriptions I employed in the illustrative criticisms were never done arbitrarily; they always related to some general point (e.g., an explanation for Mr. Diemo's success with his students). Finally, I could argue that personal descriptions are important in helping a wider audience understand the qualitative experience of the curriculum, should the evaluation report be released to a wider audience.

These arguments, I believe, are valid. However, they do not obliterate the ethical problem so clearly delineated by Jenkins and O'Toole. There appears to be only two ways out of this dilemma. First, artistic evaluation can be used in the context of clinical supervision with the clear understanding that what the supervisor/critic writes will not be seen by anyone except the teacher being critiqued. Second, if an outside evaluator is used or if the supervisor/critic wishes to release his critique to a wider audience, the teacher must have veto power over the release of any or all of it. In short, questions of ethics as well as questions of utility require the artistic evaluator to initially, at least, play a formative role and write for an audience of one.

The Problem of Metaphor

The problem of personal description is intertwined with the problem of metaphor. Although some teachers and all interviewed administrators considered the use of metaphorical language a welcome relief from the staid writing of educational scientists, many teachers were bothered by the use of metaphor. Particularly troublesome for some was the following metaphorical allusions to the sixties which were made in the opening of "Shades of Deja Vu in a Third Grade Classroom" and which, in fact, introduced the theme which re-emerged throughout the critique.

> Bob Nopata, the City Building Program's third grade teacher, seems like a remnant of the sixties, an aging flower child still managing somehow to bloom and grow in the sunshine despite massive changes in the societal ecology. There are updates, of course. Neat, nondescript slacks and shirt

> substitute for the outlandish, sometimes slovenly garb of an earlier age; tennis shoes cover what earlier might have been bare feet; a bouncy, almost cocky tennis shoe gait stands in for the sixties' ethereal shuffle. Still certain visual and auditory stimuli -- an everpresent guitar, longish black hair pulled back into a ponytail, and a drooping walrus-like moustache, hip speech periodically punctuated with the exclamation, "Man!" -- combine with less tangible qualities to create feelings of deja vu.
>
> Three of these less tangible qualities, a playful enthusiasm, an ideological self-assuredness, and a distaste for the status quo, begin to emerge during our very first conversation... We sit together on the floor of Bob's classroom amid a decor that could best be characterized as early Haight-Ashbury cluttered. The bulletin boards show the neglect and decay of tenemant slums...

Interestingly, the teachers who were concerned with this section did not generally question the appropiateness of fit between the metaphorical description and the described reality. Some raised the dimensionality problem discussed above, yet even these individuals conceded that Mr. Nopata relished his role as outsider and anti-establishment type and that I had "really picked up on that." Rather than appropriateness of fit, therefore, my critics were more concerned with questions of ethical appropriateness. "Was it justifiable for the evaluator to allude to the personal preference and life style of the teacher even obliquely," they asked.

Obliqueness, in fact, created difficulties in and of itself. As I discovered when I interviewed the teachers, when one says one thing to mean another, one can easily be "misread". For example, I intended the above description of Mr. Nopata to be read basically as description and not evaluation. Later on in the criticism I made clear that I personally looked back on the sixties, both professionally and personally, with mixed feelings, just as I saw positive and negative aspects of Mr. Nopata's curriculum. Yet in retrospect, I can understand whey Bob Nopota, after reading the first page of my criticism, could say, "This guy is out to get me." Clearly many people, particularly in a conservative school district like the one in which Bob works, do not share my ambivalence toward the age of flower children, and to them, my metaphors may say more than I intend. The many positive features of Mr. Nopata's classroom pointed to later in the criticism could easily be obscured by the evocative character of the opening metaphors.

I am reluctant to abandon the use of unconventionalized metaphor. Indeed, the desire to help people to see anew requires new ways of talking. In addition, acknowledging idiosyncracy requires metaphorical description. Metaphor, however, must be used cautiously; the safeguards discussed in the context of personal description must also be employed with all metaphorical descriptions.

The Problem of Plot

The attribution of causation presents other problems. Social psychologists (Harvey and Kidd, 1976; Jones, 1972), for example, speak of the fundamental attribution error, i.e., the tendency of individuals to overestimate personality or dispositional characteristics and downplay situational pressure in explaining events. When the evaluator's focus is specifically on the teacher, the evaluator can easily be even more prone than usual to commit the fundamental attribution error.

I may have committed this error in "Shades of Deja Vu in a Third Grade Classroom." In this criticism, I specifically related many of the difficulties I saw in Mr. Nopata's classroom to Mr. Nopata's tendency to oversimplify complex questions and to his generally uncritical anti-establishment ideology. Although I indicated that the City Building curriculum provided an ideological framework to support Mr. Nopata's view of education and that the perceived "us-against-them" attitude prevalent among City Building personnel may have lent social support, I said nothing about the role Mr. Noptat's school may have played in fostering what I considered to be an uncritical anti-establishment stance.

One teacher I interviewed after the evaluation report was released indicated that Mr. Nopata's attitudes may have been at least in part the product of his situation. Specifically she indicated that all the teachers in his school were hostile toward him and wanted to get him out of the school. He was in fact transferred at the end of the year.

In a sense, the attribution of causality inevitably involves one in a chicken/egg type of controversy, and Collingwood's (1946) discussion of the relativity of causes indicates this controversy is incapable of solution. In fact, if Collingwood is correct when he asserts that the attribution of causation is inevitably tied to purpose, then an attribution bias in favor of the teacher as opposed to the environment is not only inevitable but also desirable when, as with "Shades of Deja Vu..." the designated audience, initially, at least, is the teacher. The relativity of causes, however, does provide yet another reason for using artistic evaluation primarily in a formative role and for insuring that if educational criticisms are to be released to summative decision makers, program participants be guaranteed veto power over material describing them and their actions.

The Problem of Distance

Michael Apple (1978) raises a related problem in his critique of the qualitative case studies in Willis' Qualitative Evaluation. Apple criticizes most of the case study writers for failing to look beyond the school to the broader political and economic environment and making that broader environment a part of the explanatory framework. As Apple notes, "This very 'external' context provides substantial legitimation for the allocation of teacher time and energies and for the kind of cultural capital embodied in the school itself (p. 502)."

Apple's criticism could be applied to the two educational criticisms being used as examples in this paper. The fault, however, likes not so much with the specific criticisms but with their general ameliorative purpose. Whenever the objective is to help practitioners to improve the curriculum, the evaluator-as-artist must focus on what such decision makers have the power to improve. This means that the critic must accept the parameters set by the existing social order and direct his/her attention to options which are possible within those parameters. Thus ameliorative artistic evaluation, just as ameliorative evaluation in general, is inevitably a relatively conservative activity.

Indeed, in the two criticisms being used here for purposes of illustration, social and political forces were referred to, but reference to such forces was made in the context of putting legitimate constraints on classroom practice. Consider, for example, the following reflections on a conversation I had with Mr. Nopata about his reading program.

> One could argue...that we should not be concerned with decoding skills and, hence, reading until we have helped children develop the cognitive processes which will be brought into play in the process of comprehending what is read. This appears to be Bob's position, so I concede that a case can be made for this position in principle. I note, however, that in this less than best of all possible worlds, social reality dictates that decoding and encoding be emphasized at the outset of schooling. I note that once students leave the confines of Bob's classroom, they will be labeled failures if they cannot read (and I could have added, write and compute). I also note that statistics indicate that slow readers in the earlier years are almost always slow readers in high school, and I argue that even if this is a result of socially created phenomena, such phenomena must still be accommodated.

The Problem of Logistics

Some of the problems with the evaluation resulted not from the evaluation itself but, as one teacher put it, "from how the evaluation was used." In violation of the agreement between the teachers and the project director and in contradiction to statements the project director had made to us during negotiations, the evaluation report, including the classroom criticisms, was released to other administrators in the school even before the teachers had seen it, much less had an opportunity to decide to release the material. The project director's actions were understandable. He was attempting to salvage the program in the wake of Proposition 13 cutbacks, and he felt that the evaluation which was balanced, but on-balance, more positive than negative, might be useful. Though understandable, the project director's actions were ethically questionable and point up the need for clear reporting procedures which are outlined in detail and in writing.

The Problem of the Theoretician-Practitioner Gap

Happily, the problem of the theoretician-practitioner gap was a problem which existed more in my anticipations than in actuality;even those teachers who felt a gap existed, agreed that it could have been bridged

with more time and more opportunity for interaction and feedback. To my surprise, no teacher was bothered by the use of theoretical references and specific citations. Eisner has argued that specific references are necessary to provide depth and intellectual support for interpretive and evaluative comments. I have always been concerned that such citations would be perceived by practitioners as an academic affectation, or worse yet, as cocktail party style theory dropping. The teachers I interviewed, however, indicated they appreciated such citations and some suggested the references might make an excellent reading list for an inservice seminar.

Thus, in this evaluation, the theoretician-practitioner gap was relatively narrow. Of course, I should add that it helped greatly that both evaluators had relatively extensive classroom teaching experience; the first question the teachers asked us centered on our experience in the classroom, not in the university.

Conclusion

The evaluator-as-artist brings a touch of humanity to the evaluation process. Not only does he/she remind us that evaluation is a human activity inescapably intertwined with human subjectivity, he/she also reminds us that education itself is rooted in human interaction. What educational practitioners perceive, believe, value, and think impacts not only on the curriculum that is taught, but also on the curriculum that is learned; the evalutor-as-artist offers the educational practitioner an opportunity to step outside of himself/herself and to view the personalized curriculum he/she teaches through the eyes of another human being.

The very humanity which is the artistic evaluator's strength, however, also poses unique problems. Seven of these problems have been discussed in this paper. Although these problems have been gleaned from informal interviews with a relatively samll number of respondents after an evaluation conducted under less than ideal conditions, commonsense indicates that the seven problems discussed here transcend the idiosyncracy of individual and situation. Therefore, it has been suggested that the evaluator-as-artist adopt primarily a formative role, possibly working within the context of clinical supervision. If the artistic evaluator is an outsider, ample time for feedback and interaction must be provided. In addition, it has been argued that the practitioner who is the subject of the artistic evaluator's criticism must retain veto power over the release of the criticism to summative decision makers or any other individual. Only if these suggestions are adhered to can the evaluator-as-artist's work be ethically desirable, politically possible, and practically useful.

*An earlier version of this paper was presented at the 1979 Annual Meeting of the American Educational Research Association, San Francisco, California.

FOOTNOTES

1. George Willis' recent book, QUALITATIVE EVALUATION, rectifies this situation somewhat. In addition to exemplifying the diversity of approaches coming under the qualitative evaluation umbrella, selections by McCutcheon and Vallance exemplify aspects of the artistic subset of qualitative evaluation.
2. For detailed discussions of the differences between curricula organized around objectives and those organized around activities, see Kleibard (1975) and Eisner (1969).
3. The existence of innate and developmental schemata has also been hypothesized.
4. The problems discussed in the following section refer specifically to the use of artistic approaches to research for purposes of evaluation. Elsewhere I have suggested that educational researchers have underestimated the potential of qualitative methodology and artistic modes of reporting for non-evaluative research (See: Donmoyer, "Logical, Psychological, and Phenomenological Generalization: Toward a Rationale for the Use of Naturalistic Methodology and Modes of Reporting in Curriculum and Instruction Research." Paper presented at A.E.R.A. annual meeting, April, 1979). While the use of artistic methods and modes of reporting in a non-evaluative context is not without problems, those problems are not identical to the problems confronting the artistic endeavor.

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Dialectics and the Development of Curriculum Theory

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One of the major tasks of the curriculum field is to demonstrate in consistant fashion the process of self-criticism and self-renewal. Unfortunately, such a task is more easily stated than accomplished. Yet, while the reasons for the loss of this critical capacity are varied and complex, the underlying source for the atrophy of self-reflection in the curriculum field may be traced to a general failure, particularly among members of the dominant tradition, to understand how the interface of ideology, dominant institutional interests, and curriculum theory contribute to the latter's incomplete development.

Walter Benjamin provided one clue when he wrote, "In every era the attempt must be made to wrest tradition away from a conformism that is about to overpower it."[1] What this implies is that no field of inquiry, including the curriculum field, is immune from the self-complacency that threatens it once the field gains status as an "acceptable" mode of discourse and inquiry. Thus, the institutionalization of the curriculum field points to the need to develop a mode of analysis that educates its members to the language and logic of its own political and ideological center of gravity. What this means is that if the curriculum field is going to resist the conformity that threatens to overtake it, its members will have to reassess its possibilities for critique and growth against the influence and mediations of those dominant institutional forces that often work to limit the curriculum field's power as a mode of critical discourse and inquiry.

The role of curriculum theory as a vehicle of critique and vision has a long and valued tradition. If that tradition is to be maintained, we will have to begin with an acknowledgement of its decline within the last few decades. At the core of this acknowledgement is the notion that such a tradition consistently needs to replenish itself in the face of changing historical situations and the development of new social formations. This suggests that we must consider new forms of discourse and practice in order to maintain the field's critical posture as well as its ability for self-renewal. This paper represents one step in the process of self-renewal. It attempts to show the significance of the concept of the dialectic for curriculum theory and practice. It posits a general framework that points to new ways to examine the relationships and ensuing questions that result when we use a different conceptual model to critique the curriculum field. The model used in this paper is neither altogether new, nor is it intended to be complete. In part, it modestly demonstrates both the strengths and weaknesses of the dialectic itself: the dynamic of an unfolding process whose very existence points to an incessant struggle against a series of conflicts and contradictions that underscore the curriculum field, the wider society, and the perceptions that shape our understanding of the world in which we live and work. Moreover, these conflicts and contradictions are rooted in real life situations, and if they are to be understood by educators, they will have to be examined at their source, for only then can they be overcome. The concept of the dialectic helps to shake us from the boredom and indifference that accompanies the belief that we live in the best of all worlds. In essence, it speaks to the existence of contradictions that are a part of every age. Its message is neither a celebration of relativity nor cynicism, bur rather an acknowledgement that the search for the truth must begin by seeing beyond the false harmony between subject and society. Such "harmony" must be seen for what it is: a piece of ideology that smoothes over the existence of those contradictions that call into question the meaning and consequence of our work as educators and the role that such work has in reproducing the inequities that mark the larger society.

The meaning of the dialectic has an elusive quality. Variations on its meaning and application extend from Plato to Hegel to Mao Tse Tung. The concept has been defined in purely idealist terms by Hegel as well as in vulgar materialist terms by a score of orthodox Marxists.[2] In its many versions, it has been used as a rationale to support repressive ideologies and social systems as well as radical world views and social orders. Given the mixed history of the concept, it will be a major goal of this essay to delineate what I believe are the most useful and central categories of the dialectic.

Instead of being viewed as a universal method, characterized by rigid rules and magical qualities, the concept of the dialectic is defined here as a critical mode of reasoning and behavior, one that represents both a

part as well as a critique of the conflicts and solutions that define the nature of human existence. In effect, the real meaning of the concept of the dialectic is rooted in the major assumptions that give its categories their driving and critical power. Similarly, the categories themselves both reflect and develop out of those aspects of human knowledge that reflect and critically penetrate "the process of natural and social development."[3] But if these categories of the dialectic are to become functional, the assumptions that reveal both their interests and intent must be clarified. It is to the latter task that I will now turn.

It is my belief that the notion of the dialectic becomes important only with a commitment to the notion of emancipation, one that seeks to liberate human beings in both subjective and objective terms. In other words, a notion of emancipation that penetrates the world of everyday life with critical concepts that link the pre-conceptual, the ritualized experiences and the routine practices of daily existence with forms of reflection that reveal their objective and social roots. It is in the tension between the recognized oppression that underlies our daily lives and the critical understanding that demands a call to rectify it that the dialectic becomes more than a neutral social science category.[4]

Given this context, it would be inappropriate to reduce the dialectic to a form of epistemology that functions solely as a tool of rational understanding. Nor can the dialectic in this case be viewed simply as a ready made formula or "method" whose laws exist outside of history or human action. Both positions strip the dialectic of its critical force. In the first instance, the dialectic is reduced to mere cognition. Lost here is the concreteness of the dialectic, a concreteness rooted in the very basis and origins of being itself.[5] In other words, the dialectic is more than a comprehension of reality, it is the "designation for aspects of being within being itself...human existence in its reality, in its events, within the world as it is conceived and formed."[6] Karol Kosik captures this point in his claim that "Dialectics does not enter cognition from without as an afterthought...Rather cognition is dialectics itself, in one of its forms."[7] Cognition, in this sense, is not simply contemplation, it is the understanding of reality insofar as humankind shapes it in the process of living it.

On the other hand, it is important to understand that the dialectic is not simply a methodology governed by universal laws. Such a perspective has more to do with "frozen" ideology than a critical concept of the dialectic. Removed from the necessity of constant self-renewal through the process of reflective criticism, this view of the dialectic becomes synonomous with a petrified, omniscient system of univeral laws. Not only does methodology stand alone as a measure of truth in such a view, it also denies the notion of human intentionality and the interplay between human consciousness and specific historical circumstances. Such a position has more to do with vulgar forms of positivism than with the dialectic. T.W. Adorno has noted that the latter position can only degenerate into a form of ideological shorthand that extends unqualified support to the status quo. He writes:

> A rigorous dialectical thinker should not in fact speak of method, for the simple reason-which today has almost entirely disappeared from view-that the method should be a function of the object, not the inverse. This notion, which Hegel elaborated very convincingly, is one which has been all too simply repressed by the positivistic spirit, such that the over-valuation of method is truly a symptom of the consciousness of our time. Sociologically speaking, it is truly closely related to the general tendency to substitute means for ends. In the last instance, this tendency is related to the nature of the commodity: to the fact that everything is seen as functional, as being-for-another and no longer something which exists in itself.[8]

Of course, this is not meant to imply that methodological reflections should be dispensed with. What it does mean is that method should allow educators to get a clear perception of how they should resolve predefined issues; but the ultimate meaning of such issues must be dealt with before methodological considerations can be taken into account. Thus, the dialectic does not begin with a methodology, it begins with the fact of human existence and the contradictions and disjunctions that, in part, shape it and problematize its meaning in the world. This is not meant to suggest that the concept of the dialectic does not have its limitations. In some cases, the dialectic is useful, in others it is not. It is clear that there are microphenomena and projects that under certain conditions yield valuable insights when analyzed according to the rules of formal logic, rules which are distinctly undialectical. For example, there are laws of formal logic such as the law of

exclusion, i.e., either A, or non -A, that are more applicable to a specific problem than the concept of the dialectic might be. Yet, while formal logic has a certain valuable specificity and application, in the final analysis it is the dialectic that helps us to understand the limitations of formal logic. To ignore the limitations and strengths of the dialectic is to expand it into its opposite: an empty concept with no boundaries or possibilities for self-reflection and correction. In the final analysis, we can say that the dialectic represents an interpenetration of reasoning and method, an interpenetration that belies both an abstract objectivism and abstract subjectivism. If the driving power of the dialectic is to dissolve into metaphysical smoke, it must be seen as a form radical critique and action, each of which act on the penetrate the other.

This brings us to another assumption that gives critical power to the concept of the dialectic. Any emancipatory notion of the dialectic has to be grounded in the process of critique and praxis. In general terms this means that the dialectic functions so as to help people analyze the world in which they live, to become aware of the constraints that prevent them from changing that world, and, finally, to help them collectively struggle to transform that world. As a form of critique, the dialectic functions to bring to awareness underlying contradictions that support existing forms of alienation. It is based on the use of a language and discourse that is capable of looking at the world in a different way: that is, from a perspective that transcends the world of 'facts' and 'natural' laws that serve to smother reality and to flatten contradictions. Although it must be recognized that as a first step towards praxis, critique is as difficult as it is necessary. In other words, critique in itself in this country is a difficult task. This is particularly true in the United States since the dominant social science paradigm eschews critical categories of social thought.[9] It comes as no surprise to find that categories like social class, ideology, false consciousness, and class conflict are either missing from the language of mainstream social science or conveniently stripped of any analytical power. Under such circumstances, the relationship between dialectical reasoning and critical thought becomes lost.

In brief, a critical concept of the dialectic moves beyond mainstream social analysis by presenting itself as both the form and experience of critique. As an epistemology it gives power to the concept of negative thinking. Herbert Marcuse illuminates the latter with his claim that "Dialectical thought starts with the experience that the world is unfree; that is to say man and nature exist in conditions of alienation, exist as other than they are."[10] Thus, the driving force of negative thinking resides in its ability to penetrate reality and to search and reveal the source and genesis of the contradictions that give it meaning. Put another way, negative thinking is an attack on the pseudoconcrete, i.e., the collection of phenomena that reproduce and support forms of mystification and ideology that conceal the essence of reality. Kosik describes the pseudoconcrete as "The collection of phenomena that crowd the everyday environment and the routine atmosphere of human life, and which penetrate the consciousness of acting individuals with a regularity, immediacy and self-evidence that lend them a semblance of autonomy and naturalness..."[11] Clearly, there is no room in this type of analysis for those positivistic assumptions that suggest: (1) that the relationship of theory to practice is primarily technical; (2) that there is only one scientific method, (3) that knowledge is inherently neutral, and (4) that scientific inquiry itself is value free.[12] The importance of critique as a fundamental dimension of the dialectic rests with its ability to peel away the layers of meaning that give shape to our everyday lives; moreover it serves as a guide to action designed to alter those life forces that embody the power of an oppressive reality. As such, the concept of the dialectic used here is closely tied to an acknowledgement of the importance of a critique that embraces critical categories which serve to illuminate the intersection of the social and the personal, history and private experience. This allows us to further extend our definition of praxis as a guiding assumption of the dialectic.

Praxis as we use it has a number of important moments, all of which overlap and interpenetrate. Praxis, as one moment, represents the transition from critical thought to reflective intervention in the world. Paulo Freire captures the importance of this general conception of praxis when he writes:

> Men will be truly critical if they live in the plenitude of praxis, that is if their action encompasses a critical reflection which increasingly organizes their thinking and thus leads them to move from a purely naive knowledge of reality to a higher level, one which enables them to perceive the causes of reality.[13]

But praxis, as another moment, suggests more than a struggle against the forces of oppression; it further suggests a struggle that defines freedom in social and not merely personal terms. Emancipation is linked in this case to groups of people struggling against the social forces that oppress them. It also suggests that the struggle affirms the power of human agents to act in a self-determining fashion out of a context that is as deeply historical as it is critical. Praxis then, as a another moment, typifies a conception of freedom that analyzes the content and form of existing struggles within the context of their historical genesis and development.

Praxis, as a third moment, translates an historical sensibility into a critical sensibility.[14] More specifically, it is argued here that modes of reasoning, interpretation, and inquiry develop a critical capacity to the degree that they pay attention to the flow of history. In the absence of an attentiveness to history, criticism is often muted by the dominant ideology, which often parades under the banner of absolute verities and "natural" laws. This type of "assault" on historical sensibility is no small matter. Marcuse rightfully claims that this represents a form of false consciousness, "the repression of society in the formation of concepts...a confinement of experience, a restriction of meaning."[15] Understandably, a critical notion of the dialectic grounds itself in historical sensibility because not to do so represents an attack on the very process of thinking itself. In more specific terms, the dialectic incorporates an historical sensibility in the interest of liberating human beings not only from those traditions that legitimate oppressive institutional arrangements, but also from their own individual history, i.e., that which society has made of them. This is the critical point that links praxis and historical consciousness. For we must turn to history in order to understand the traditions that have shaped our individual biographies and intersubjective relationships with other human beings. At the core of the dialectic is the notion that underlying the mediations that form the intersubjective space in which we live, work, study and dream are social relationships, relations between people and not things. All the material things around us, whether it be in the buildings we live in to the money that we use to pay our rent, represent the objectification of human labor and social formations operating under specific socio-historical conditions. These are both part of the dialectic and serve as well as an object of study and analysis through one form of the dialectic, i.e., dialectical reasoning.

In short, if the concept of the dialectic is to become useful in the service of radical pedagogy, it will have to be grounded in assumptions that give its central categories an emancipatory purpose. I have specified what these assumptions are by arguing: (1) that the dialectic is a form of praxis that links critical reasoning with a critical intervention in the world; (2) that the dialectic is not guided by absolute laws but is a process of critique and praxis that under different historical circumstances takes different forms; (3) that the dialectic necessitates human agents acting collectively to transform the world in which they live; (4) that the dialectic is grounded in a vision that links historical and critical sensibilities as modes of reasoning that inform and enrich each other; (5) that the dialectic is not value-free, but rests on interests that oppose oppression in all of its forms.

II

This section will briefly spell out what the central categories of the dialectic are, and attempt at the same time to provide brief examples of how these categories relate to educational theory and practice.

Totality represents one of the central categories of the dialectic. Its meaning is based on the insight that for any fact, issue, or phenomena to become meaningful it must ultimately be examined within the context of the social totality that gives it meaning. This represents one of the fundamental tenents of the dialectic, one that underscores context in the methodological sense as well as in the sense of grasping the importance of "historical totality." For instance, Herbert Marcuse writes:

> To comprehend an historical object completely in its concrete reality, one has to grasp the totality of events. Such a comprehension is impossible if the historical object is considered rigid and isolated from its historical context, and treated as an identity free of contradictions "throughout time," instead of seeing it as a many-faced coming into being, acting and passing away in time. Not only its positive moments should be brought into view but also its negative moments which equally belong to it-what the historical object has been-and what it is becoming, and what it is

not contributes to its reality, since this is what determines it and moves it.[16]

Moreover, the category of totality stresses that the "irreducible unit of reality is the relation and not the thing."[17] Within the context of human history and understanding, socio-political reality is seen as the "unity of production and products, of subject and object, of genesis and structure."[18] Thus, the category of totality speaks to the importance of seeing things relationally in their many sided development, moreover, it points to a world in which things, meanings, and relations are not conceived as objects removed from human history and action, but rather are seen as products of human praxis. Within the notion of totality there is little room for a reified, positivistic vision of the world, one that celebrates a posture that is at once fragmented, isolated, and ahistorical.

In concrete pedagogical terms this means that the role of schools, curriculum development, and pedagogy itself must be examined with a context that reveals their development historically as well as their relationship to the larger social order. Michael W. Apple has voiced this concern with his claim that:

> ...education as a field of study does not have a strong tradition of such 'situating.' In fact, if one were to point to one of the most neglected areas of educational scholarship, it would be just this, the critical study of the relationship between ideologies and educational thought and practice, the study of the range of seemingly commonsense assumptions that would lay bare the political, social, ethical, and economic interests and commitments that are uncritically accepted as "the way life really is" in our day to day life as educators.[19]

As a mode of reasoning, the category of totality in the dialectic allows educators not only to become more critically interpretive, it also suggests new ways of acting in the world. It helps teachers and students alike to link knowledge with specific normative interests, with specific frames of reference. The latter point necessitates one important qualification about the category of totality, and that is, for this category to become viable it must be connected to notions of causality and ideology. The category of totality ceases to be dialectical when it becomes nothing more than a methodology for asserting that everything is connected with everything else. The importance of totality lies in its value in helping us answer fundamental questions about the truth content and nature of reality.[20] It focuses on the ideological and objective structures of society and looks at how they function in their contradictions and correspondence to distort as well as reflect reality. Totality in this sense points to causal relationships as part of an effort to ascertain the truth. This leads us to the next category, the notion of mediation.

Mediation is a core category of the dialectic that enriches and deepens the notion of totality. It does this by dispensing with the trivial notion that reality is merely a reflection of the sum of forces that make up the world in which we live. In essence, mediation rejects simple "reflection" theories by claiming that "all active relations between being and consciousness are inevitably mediated..."[21] This suggests two important points: (1) mediation is a process that embodies the object itself, i.e., those forces that shape our perceptions of the world are not just in our minds, but are a material and constitutive part of our everyday routines and practices; (2) pure immediacy in its various forms: perception, commonsense, 'facts', and sensation is an illusion. Mediation is thus a process, an internalized force, and a critical category. It can be used to reveal how the mechanisms of social and cultural reproduction both determine and legitimate the meaning of various socio-cultural institutional arrangements, modes of knowing, ways of behaving, patterns of interaction, etc. In short, the category of mediation provides the framework for looking at various cultural phenomena in terms of their essences and not in terms of their "legitimated" commonsense meanings. Thus, mediation indicates a search for the essence of a phenomena, a peeling away of its different layers of meaning until one finds the combination of objective and subjective forces that made it what it is and therefore constitute its true nature. Mediation is both a process and a statement against the notion that phenomena reveal themselves immediately. It posits the need for human beings to look for the structure of meaning beyond the distorting fabricated 'reality' of ideology. It points to another level of reality, one that suggests not distortion but reality in its unmasked form.[22]

The value that the category of mediation has for educators is noteworthy. It calls into question the static and petrified commonsense assumptions that underlie much of our thinking about curriculum and classroom pedagogy. It forces us to think relationally about the nature of knowledge, classroom social relationships, and values. Similarly, it points to ever-widening levels of mediation and correspondence between schools and the larger society. Not only does it continually prod us to make problematic the selection, organization, and distribution of meanings and values that structure classroom learning, it also serves to open to examination the very belief and values that guide for actions in and out of the classroom.

In brief, the category of mediation is crucial to the dialectic because it lifts our commonsense perceptions and experiences to new levels of understanding, complexity, and concreteness. In doing so, it serves to illuminate the way in which specific social and political forces mediate between ourselves and the larger society. As a critical category, it replaces the myth of the autonomous individual with the problem of what one has to do to struggle to become a self-determining social agent acting on rather than responding to the world in which we live.

The next category of the dialectic I have labeled is the category of appropriation. Unlike the Hegelian version of the dialectic, the unfolding process at work in history, in my view, is not abstractly spiritual, it involves a subject. This means that at the heart of the dialectic is a human agent who is never merely a passive being removed from the historical arena, but instead is an acting subject who with qualitatively different levels of reasoning and action appropriates and penetrates the reality in which he or she lives. Appropriation, as it is used here, refers to human beings who in varying degrees both reproduce and act upon the socio-cultural matrix in which they find themselves.[23] The driving force of appropriation is the recognition of the value of consciousness and action in the service of praxis. Appropriation rejects the overly-determined and passive view of man inherent in various forms of behaviorism and vulgar Marxism. But appropriation represents more than a celebration of subjectivity, it further represents a rejection of all world views and social formations that support an objectified, and oversocialized model of human behavior. In other words, it both rejects and struggles against forms of objectivism that deny human consciousness, subjectivity, and action.[24]

Within the context of schooling, the category of appropriation posits reflective thought and action as a central concern of both teachers and students. This points to forms of classroom interaction that promote critical dialogue and communicative patterns stripped of unnecessary institutional control. In addition, it helps us to focus on the way in which various aspects of the schooling process reproduce in both material and ideological terms the mechanizations of social conformity and control. Thus, it helps us to focus more critically on questions concerning the nature of the hidden curriculum, the patterns of social control underlying student-teacher relationships, and the forms of ideology embedded in the use of specific types of knowledge and modes of classroom evaluation.[25] But if appropriation is to move beyond a hermeneutic function, it will have to be linked to a notion of transcendence, and this leads us to the final category of the dialectic.

As the final category of the dialectic, transcendence (Aufhebung) subsumes a number of other characteristics that are often associated with the dialectic, i.e., the driving force of contradictions, the unity of opposites, and the negation of the negation.

The essence of the category of transcendence lies in its refusal to accept the world as it is. Its posture is based on the political and moral imperative that things must change. Inherent in its aforementioned nature is a commitment to a world view that calls for the "emancipation of sensibility, imagination, and reason in all spheres of subjectivity and objectivity."[26]

Transcendence distinguishes itself by its acknowledgement that the contradictory forces that steer, shape, and characterize specific historical moments and social formations must be measured against their emancipatory and repressive possibilities. They must be seized by human beings acting as subjects in the intervention and shaping of history and dealt with as part of a "struggle for their liberation."[27]

On one level, transcendence represents what Agnes Heller has called:

> ...the simple consciousness of alienation, the recognition that the social relations are alienated: from this there follows (or this constitutes the base for) the need to overcome alienation, to overturn the alienated social and productive relations in a revolutionary way, and to create general social and productive relations which are not alienated.[28]

Thus, transcendence as a category of the dialectic is a call to action informed by an emancipatory vision. It is a call to develop an awareness of our own historically conditioned self-formative processes as well as an awareness of those socially unnecessary modes of domination that shape the larger society. In different terms it is a call to reveal how the antagonistic character of social reality manifests itself in both personal and social terms and how both of these realms affect, change, and reproduce each other.

Put another way, transcendence is more than an explanatory concept, it is a categorical demonstration of the negation of the negation. That is, it traces the contradictions that characterize existing society to their fractured source and tries to overcome them.[29] As the negation of the negation, transcendence is at first a form of refusal and secondly an act of reconstruction. Resistance gives way to the search for qualitatively better modes of existence. The medium of transcendence is informed consciousness and reflexive action, and its goal is a society free of alienating and oppressive social institutions and life forms.

While it is impossible to detail here how this overarching category of the dialectic might specifically shape the process of schooling, one aspect of its pedagogical application can be clarified. The category of transcendence forcefully supports an educational philosophy based on the assumption that the purpose of education should be to educate youth not for the present "but for a better future condition of the human race, that is for the idea of humanity."[30] Transcendence posits the need for all educational workers to examine their most fundamental assumptions about pedagogy next to a clearly delineated set of emancipatory intentions. In this case, commitment is substituted for objectivism, and a critical and visionary posture toward the world is substituted for a 'professional' noncommital manner. Thus, what all of this means is that we need a critical pedagogy that links pedagogical processes to radical modes of reasoning, both of which support each other and act as a catalyst for students and teachers to fight against those ideological and material forces that prevent such a synthesis from manifesting itself, whether it is inside or outside the school. A number of radical educators have already begun to lay the foundations for such a pedagogy.[31]

The concept of the dialectic as presented in this essay is both a conceptual tool as well as a mode of experience that is useful in developing pedagogical theory and practice. Its basic categories are not universals, but social processes steeped in specific assumptions about schools, society, human nature, and freedom. Moreover, these categories provide a powerful analytical scheme for analyzing, modifying, and changing the complex mediations that influence the many levels of human consciousness and action, both in schools and in the wider society. The dialectic points not only to the contradictions of schooling, but also to the need for tracing and resolving those contradictions in the larger society. I will now finish up this essay by suggesting a few specific ways in which the concept of the dialectic can be applied to classroom pedagogy.

III

If the concept of the dialectic is to become relevant for classroom pedagogy, teachers can begin by using its central categories to examine the curriculum as a selection from the larger culture. By doing so, they can begin to look at their own educational philosophy within a particular social, cultural, and historical context. The notion of schooling as a cultural phenomenon not only calls into question the basic assumptions that structure one's view of classroom pedagogy, it also forces teachers to examine the role schools play as agents of social and cultural reproduction. The dialectic, in this case, illuminates for teachers the way in which the dominant beliefs and values in the wider society and their own world views interpenetrate. Schooling, in this case, is stripped of its innocence. The foundation for a progressive form of classroom pedagogy can be now developed since schooling can be understood as a study in ideology and values. Questions concerning totality, mediation, and appropriation now become essential in developing a form of pedagogy in which teachers carefully examine how the structural and ideological determinants of the dominant society affect the behavior, attitudes, and speech of all those involved in the classroom encounter.

The concept of the dialectic is particularly useful in making teachers attentive to the specific ways in which cultural forms in the classroom reproduce, redefine, and affect the selection of meanings and social

relationships that receive institutional support. One major task of classroom teachers will be to help students understand the social and economic meanings that stand behind various forms of classroom knowledge and pedagogical encounters. This means that we have to make clear to students, depending upon the levels we are working with, the valuative underpinnings and limitations of different forms of knowledge. Just as teachers must come to recognize the theoretical assumptions that underlie their own pedagogical concepts and practices, students must also learn to recognize the meaning of frame of reference, and how the latter concept is instrumental in deciding, selecting, organizing the 'facts' that go into everything from their social studies texts to their health textbook.[32] The foundation for such an approach can begin by developing classroom pedagogy around social processes and conceptual models that raise and demonstrate questions such as: (1) What counts as knowledge? (2) How is what counts as knowledge organized and produced? (3) How is such knowledge transmitted? (4) Who has access to such knowledge? (5) Whose interests does such knowledge serve?

If organized around the above questions, classroom pedagogy of this sort would have to develop a view of students that recognizes them as appropriators or self-conscious agents in the classroom encounter. This means teachers would have to take seriously those cultural experiences and meanings that students bring to the day-to-day process of schooling itself. Problematizing knowledge becomes meaningful only if students are allowed to explore such knowledge within their own modes of knowing and understanding. The important notion of schooling as a selection from the wider culture becomes meaningful when teachers begin by acknowledging not only the source and meaning of their own cultural capital, but also the importance and meaningfulness of the cultural capital that characterizes their students. If we take the experiences of our students as a starting point for dialogue and analysis, we give them the opportunity to validate themselves, to use their own voices. Once students become aware of the dignity of their own histories and perceptions, they can then make a leap to the theoretical and begin to examine critically the truth value of their meanings and perceptions, particularly as they relate to the dominant culture.[33]

William Pinar has written of the need for students to be able to formulate questions that will help them to capitalize on, use, and learn within their own experiences.[34] This is an important point. Teaching students to step outside the somewhat reified world of schooling represents more than supplying them with critical modes of reasoning. Critical reasoning becomes an empty exercise if students don't learn how to both reflect on as well as transform the nature and meaning of their own lived-worlds. In other words, students must be given the opportunity to learn how to use and interpret their own experiences in a manner that reveals how the latter have been shaped and influenced by the dominant culture. Subjective awareness becomes the first step in transforming those experiences.

One important step in helping teachers develop a pedagogy that will assist students to move beyond the taken-for-grantedness that shapes part of their view of the world lies in providing them with a new language and conceptual scheme through which they can view the world more critically. It goes without saying that dialogue and supportive interaction represent crucial mediums in the development of a dialectical pedagogy, but they become meaningful only if students have a language which allows them to move towards a critical stance, "a way of looking at the world which can serve as the foundation of subsequent analysis and criticism..."[35] In concrete terms this means that students must learn a language that is both hermeneutic and emancipatory. Such a language would help both teachers and students to become more interpretive, but it would also reveal the structures and limitations present in different modes of language. For instance, a distinction should be made between a dialectical and non-dialectical approach to language. The latter can be designated as a language that is confined to the boundaries of a given subject, confined to the operations, principles, and inner space of a given topic. This is the 'inside' language of technocratic rationality, i.e., the language of means, techniques, etc. We often hear it among lawyers, music theorists, mathematicians. And so on. A more dialectical language is characterized by the way it draws from a variety of subjects to examine any given topic. It draws upon the 'languages' of psychoanalysis, sociology, history, psychology, and a wide variety of other subjects in order to examine a specific problem or issue. It is the language of connections and mediations. It refuses to support a mode of reasoning that reinforces the artificial constructs between the

various disciplines and subjects.

The use of a dialectical language will make it easier for teachers to enable students to understand the meaning of frame of reference. By looking at issues from a variety of perspectives, students can learn something about the interpretive screens that people use in constituting and creating reality. The latter is of profound insight and has enormous political significance. When applied to the content and process of classroom pedagogy, it "tells us that our most basic thought-processes and our very image of reality are neither natural, inevitable, or fixed but merely the product of the particular society in which we live."[36] The link between human knowledge, values, and the nature of truth becomes an operational pedagogical principle within this approach. One qualification must be made here. Teaching students critical conceptual categories that help them to confront their own unexamined and implicit views of the world should not be reduced to a mere celebration of subjectivity, i.e., "you have your views and I have mine." The latter is a form of "bad subjectivity" and can be avoided by teaching students to challenge and test the relationship between what they know and reality as it objectively exists. The world does not necessarily correspond to the way people view it. Not to understand this is to ignore the importance and meaning of false consciousness and to end up supporting a mystifying form of cultural relativism. Students must be taught to look beyond the immediate, they must learn how to test the truth claims inherent in any interpretation, including their own.

Hopefully, this paper has demonstrated successfully the need for curriculum theorists and other educators to reexamine the most basic assumptions and values that guide their work. It has provided a rationale and some suggestions for using the concept of the dialectic as a step towards the process of renewal and self-criticism in our field. If the spirit of critique and social commitment is to be kept alive in the curriculum field, we are going to have to work hard to sustain such a tradition. This suggests not just developing new conceptual models through which to view our work, more importantly it means committing ourselves to a notion of truth and justice that makes our view of what we do and who we are meaningful. It is the consequence of what we do that makes the concerns of this paper imperative. The rest is up to us.

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Origins of the Curriculum Field Based on a Study of Mentor-Student Relationships

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Purpose

Curriculum literature during the past ten years is replete with accusations of ahistoricism and with calls for historical data, interpretation, and criticism. The purpose of this study is to provide a piece in the puzzle of curriculum history by constructing a genealogy of curriculum scholars.[1] The data provide ample potential for interpretations and criticism in curriculum history. They enable a new dimension of investigation into the intellectual origins of those who carved out the field now known as curriculum inquiry. Admittedly, mentor/student connections are only one avenue to comprehensive portrayal of intellectual origins. Other avenues that must be explored are noted later, but they are beyond the scope of the present study.

Before continuing, the terms curriculum scholar and geneaology should be clarified relative to their use in this study. A curriculum scholar is a person who has produced curriculum literature and is/was actively involved in functions acknowledged to be curricular, e.g., holding "curriculum" positions at universities, directing curriculum projects, exercising leadership in curriculum-oriented professional associations, and directing and organizing curricular publications. Geneaology refers to the network of doctoral mentor and doctoral student connections. The use of genealogy is partially literal and partially metaphorical; thus, terms such as decendents, trees, and ancestors are not used with "tongue-in-cheek" but for communication purposes.

The primary purpose of the present study is to compile the data. This is a prerequisite to the more illuminating task of analyzing, interpreting, criticizing, and evaluating the data. An ultimate purpose of constructing a curriculum genealogy is to arrive at a better position for inquiry about lines of curriculum thought relative to origins. Laudable though this is, finality in interpretations oversteps the data at this point. Since the majority of preparation time consisted in gathering and compiling data, the majority of article space is devoted to portrayal of findings. Preliminary interpretations and speculations, however, are offered with the hope that they will spur further study.

Assumptions that undergird this study should be set in perspective. It is faulty to assume that connections among curriculum scholars and mentors are the primary factors in the development of lines or schools of curriculum thought, but it is equally faulty to assume that they have no effect. Surely, origins of ideas in curriculum or any other scholarly area derive from a host of influences on scholars in addition to their mentors; e.g., personal experience outside of academia, teaching experience, reading exposure, and association with other scholars. Nevertheless, mentor/student relations and the institution in which doctoral study took place presumably have some impact on and the directions of students' subsequent scholarship. If this were not the case, then the worth of doctoral advising and even of teaching itself would be problematic.

There also is, admittedly, a measure of interest attached to this study that only pertains to curriculum scholars. Curriculum scholars come to know one another over the years, and they simply enjoy learning about their intellectual relatives and those of their colleagues. Such information may have limited impact on the curriculum of schools or even on the substance of curriculum writing, but knowledge that satisfies personal interest is defensible to generate in its own right. It stimulates community. It is, in fact, in this vein that the genealogical project originated. We feel that the impact of developing a saga or body of lore that members of a group can feel is their own, inspires inquiry and cooperative pursuits. Thus, we do not want to minimize the value of this study for the creation of scholarly knowledge, but at the same time we want to emphasize its worth on a personal level. The potential embodied in a saga that remains privy to a coterie of scholars who are interested in a roughly similar domain, we suggest, is in itself a worthy kind of knowledge to seek.

Evolution of the Study

The scene was a dimly lit Pizza Hut in a dormitory at the University of Wisconsin at Milwaukee. The setting was the evening following the first day of the 1976 Milwaukee Curriculum Theory Conference. Attempting to relax after a day of travel and curriculum theorizing, we found ourselves in the midst of a trivia contest held by the Pizza Hut proprietors. Since we were aged by comparison to most of the students who frequented this establishment, our knowledge of old movies and television programs was far greater than their's. Since we were conditioned by a total of nearly 40 years of formal schooling, we could not withhold answers when we knew them, even though we did not want to win more pizzas and beers. However, these prizes continued to accumulate on our table. Eventually, we ignored the scene and the contest and embarked on a trivia contest of our own, a contest of "curriculum trivia" exemplied by: What publisher published the first edition of FUNDAMENTALS OF CURRICULUM DEVELOPMENT (1950) by Smith, Stanley, and Shores? In what year did Boyd Bode publish MODERN EDUCATIONAL THEORIES? So went the questioning. Finally, questions centered on who studied with whom, when, and where. That our knowledge was filled with gaps on this matter was soon obvious. That such knowledge was significant rather than trivial gradually became apparent.

We began to speculate. What if all prominent curriculum scholars eventually traced to the same origins? What if students of certain scholars produced certain distinct types of curriculum thought? We wondered if any such list of interconnections existed. We agreed that a genealogy would contribute to historical understanding of curriculum studies, and we decided that if one did not exist, we would attempt to create one.

We quickly discovered that no such genealogy existed. Moreover, as we posed the question to curriculum scholars and librarians we discovered a distinct lack of knowledge on the matter. Further, we discovered a considerable amount of contradictory information. In a positive vein, our colleagues indicated a desire for genealogical information because they perceived it as both interesting and useful. This expression was gathered through informal conversations. A more formal gathering of information followed with questionnaires that requested information on mentors, institutions, and dates of study. The questionnaires were distributed to the members of the Professors of Curriculum group, the American Educational Research Association Special Interest Group on the Creation and Utilization of Curriculum Knowledge and selected others who published curriculum writings. The latter were obtained by surveying authors cited in A CHRONOLOGY OF CURRICULUM LITERATURE (Schubert, 1977). When authors' addresses could be obtained, questionnaires were sent. We are still in the process of locating many of these authors; hence, the majority of those polled were from the Professors of Curriculum and the AERA SIG. Over 250 questionnaires were sent and 95 were returned. Among those returned, 53 were from the Professors of Curriculum, and 49 respondents were listed as authors or editors of curriculum books (Schubert, 1977). The returns do, however, account for over 400 authors.[2] It is important to note here that a number of prominent curriculum authors are not listed in the diagrams or charts, because we could not discover information about them or because they did not respond to our questionnaires. Emphatically, it is not our intent to shun any of these scholars; indeed, we welcome information from them if they wish to contribute it.

The information collected was entered into a computer bank at Cornell University. The program provided names of curriculum scholars, their current or prominent (in the case of retired or deceased scholars) university affiliation, their mentors, the university of their doctoral study, and the year of their doctorate. Charts at the end of this article present data accumulated on these topics. Successive indentations on the charts distinguish students from mentors, thus portraying "generations" of curriculum scholars. In some cases information is provided on generations that date well into the 1800's. We caution readers to disassociate our use of "generations" from the ordinary use of that term, which implies that scholars in the same generation are contemporaries. On the contrary, two scholars from 1940, for example, may be several generations apart due to the ages of mentors who preceded them and their own ages when they received the doctorate. A self-explantory numbering system in the charts provides easy reference to each scholar's generation, others who studied with his or her mentor, and students of that scholar. Diagrams that provide overviews of major trees and a sample of scholars within them are presented in the section on findings that immediately follows. Discussion follows the presentation of findings.

Findings and Limitations

Findings were combined with information from historical, archival, and biographical sources. In many cases the latter corroborated questionnaire results; in other cases it supplemented that data.

Some difficulties encountered in the study are worth mentioning. Our request for dates was discovered to be somewhat ambiguous; thus, it accounted for some faulty responses to that part of the questionnaire. Furthermore, many trees are quite limited. One reason for this is lack of data. Another is that a sizable number of scholars entered curriculum studies after being prepared in philosophy, psychology, or another discipline. Some of these scholars stated that because of such preparation they did not consider information about scholarly ancestors germane to a curriculum genealogy. On the contrary, we consider such information to be an important contribution to understanding the disciplinary origins of curriculum. To know the curriculum writers who were trained in science, humanities, social sciences, and the professions (other than education) as compared with education and curriculum preparation would indeed be helpful. Although we anticipated tracing origins to several fields of inquiry, we did not anticipate the judgment that such information would be irrelevant. We do conclude that such judgment has obvious implications for interdisciplinary inquiry in curriculum scholarship.

Another interesting, though not wholly unexpected, response was the inability of many respondents to trace their origins beyond their mentor. This supports the criticism of ahistoricism, and points to a dimunutive scholarly value attributed to heritage saga and lore in curriculum studies. As a result, a number of prominent scholars are listed in trees that bridge less than three generations and portray only two or three persons at each level. While these trees hold potential for analysis and interpretation, they are seldom emphasized in the discussion here. This is not only due to limitations of space and time, but also because it makes sense to await the acquisition of more data. Discussion, therefore, concentrates on trees that portray more than three generations with several scholars in each. Obviously, findings are only as accurate as the respondents who provided them. Some of it has been checked against other sources, but such sources are very scarce and pertain only to the most widely noted scholars.

Readers will note that results are dominantly American. Some non-American information is, however, available. A Swedish tree, for instance, shows a line of connection from Herman Sigvald, to Torsten Husen, to Urban Dahllof, to Ulf Lundgren. Response from several British curricularists points to the inappropriateness of our questionnaries for them. It was explained by these respondents that many British curricularists embark on curriculum studies after preparation in a cognate discipline, and that they frequently do not have doctorates. This indicates a weakness in our study, one that illustrates an all to pervasive lack of international persepctive in curriculum scholarship. We hope to discover better ways to account for scholar/mentor relationships across international contexts.

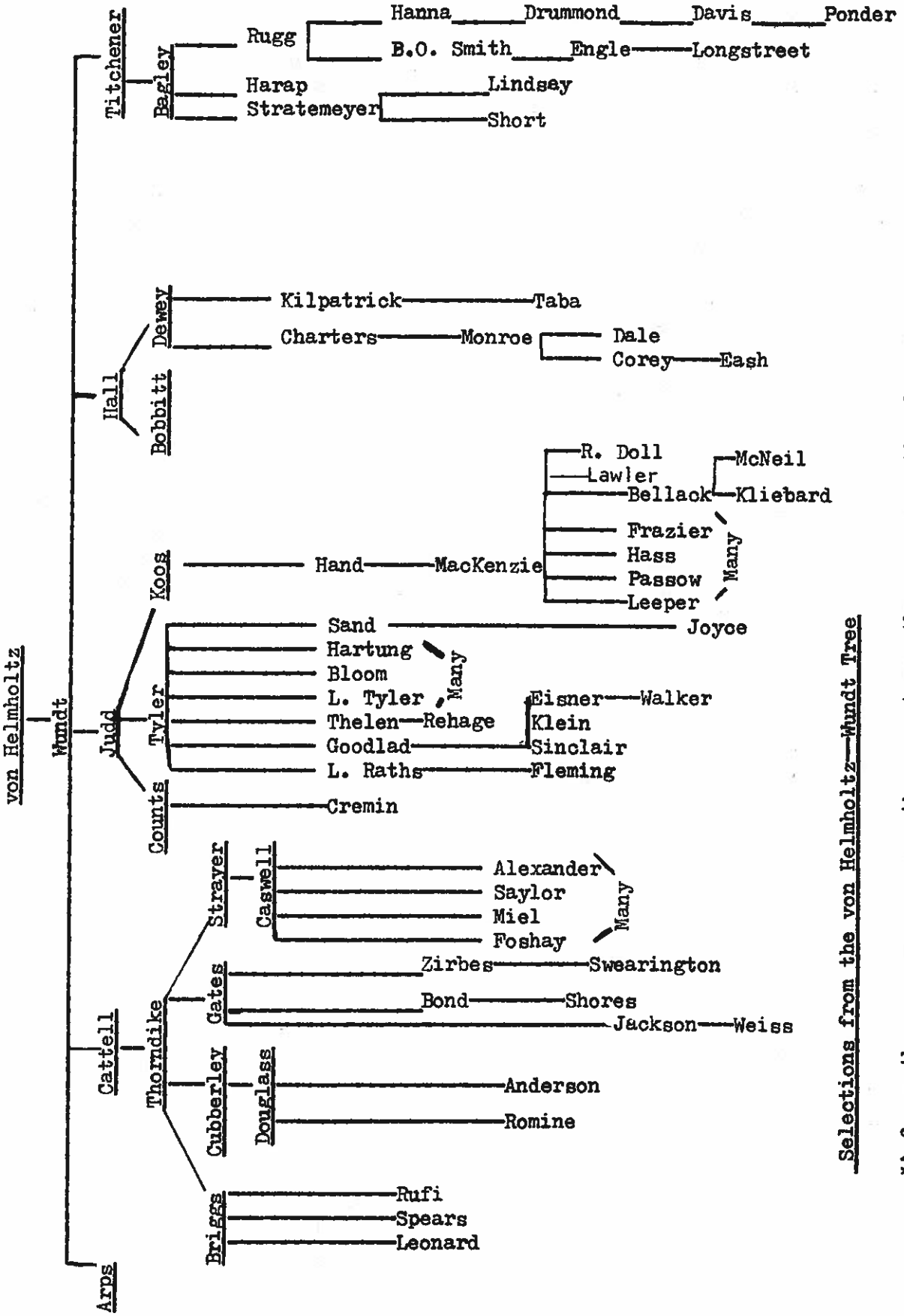
Figures 1, 2, 3, and 4 provide an introductory overview to the more elaborate chart section at the end of the article. We suggest that the figures be perused before the discussion section is read.

Discussion

This section contains both descriptions of major trees and preliminary interpretations that are partially speculative. The interpretations are offered in the spirit of: "What if..."; "This may be..."; "Isn't it interesting that..."; and "We encourage the reader's assistance in..." We feel certain that readers possess knowledge that fills gaps and corrects problems in our information; therefore, we welcome contributions.

As is evident in the figures and charts, the most elaborate tree (Figure 1) traces to Wilhelm Wundt (1832-1920), German physiologist, philosopher, and psychologist, who was founder of the world's first psychological laboratory at Leipzig in 1879. His mentor was Hermann von Helmholtz (1821-94), a prominent physicist, physician, and physiologist who studied with Johannes Peter Muller (1801-1858) and was markedly influenced by the psychological implications of the latter's work on the origins of sensations within sense organs. Von Helmholtz's interest in psychology, and concomitantly in philosophy of science, shows considerable kinship to the metaphysics and epistemology of Immanuel Kant.

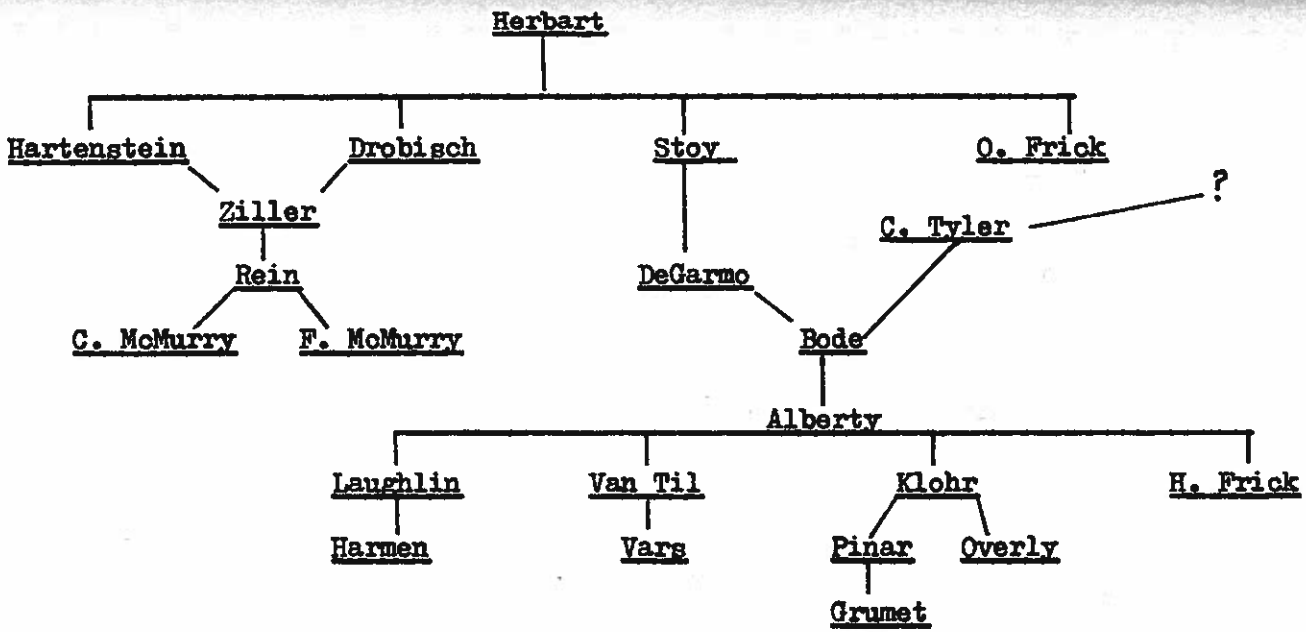
Wundt's research on sensation and experimental and introspective psychology caused a great number of students to seek his mentorship. Among the Americans who studied with Wundt were J. McKeen Cattell,



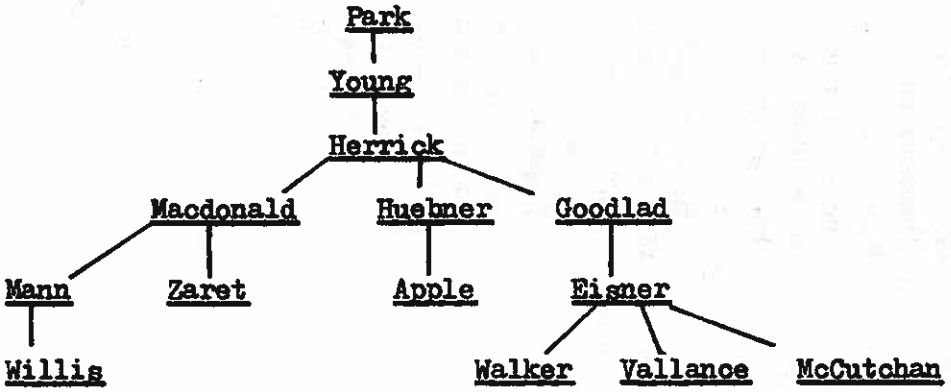
Selections from the von Helmholtz—Wundt Tree

*A few authors appear on more than one tree; they are exceptional cases because information about them is controversial or because they clearly had more than one doctoral mentor. In such cases explanations are provided in the discussion and/or in notes that accompany the charts at the end of the article.

Figure 1

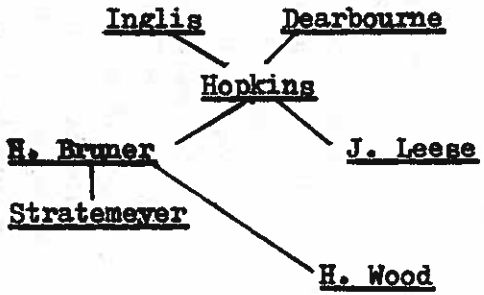


Selections from the Herbart—Bode Tree



Selections from the Park—Herrick Tree

Figure 3



Selections from the Inglis—Hopkins Tree

Figure 4

G. Stanley Hall, Charles H. Judd, Hugo Munsterberg, George F. Arps, and Edward B. Titchener. Hall, known for studies of adolescence, established the first psychological laboratory in the United States at John Hopkins in 1881. Cattell founded a laboratory at Pennsylvania and later Columbia. Munsterberg went to Harvard at the invitation of William James. Judd headed the laboratory at Yale before becoming professor and Dean of Education at Chicago. Titchener developed the study of experimental psychology at Cornell, and Arps became President of Ohio State. According to R.S. Peters and C.A. Mace (1967, 20) the pronounced philosophical, introspective, and speculative features of Wundt's work were neglected by these American interpretors who emphasized the experimental and statistical aspects. Cattell, for example, deovted much energy to the measurement of individual differences, showing the impact of his study with Galton.

That much of the curriculum field is solidly rooted in experimental psychology is strongly evident when one reflects on those who studied with Wundt's students. Judd's students include Ralph Tyler, C.C. Crawford, Leonard Koos, and George S. Counts. Harold Rugg, too, came under Judd's influence when he taught statistics at Chicago. H.C. Morrison may have been a student of Judd as well, but our data are limited on him. One can see the influence of Judd in the propensity of these scholars to seek generalizations. The Tyler branch includes Louis Raths, John Goodlad, Benjamin Bloom, Lee Cronbach, Ole Sand, and Herbert Thelen, among others. Further extension of this branch accounts for David Krathwohl, Kenneth Rehage, James Raths, Elliot Eisner, Decker Walker, Gail McCutchan, and Elizabeth Vallance. The latter four, illustrate a variety of curriculum inquiry that emphasizes interpretive and qualitative perspectives. Goodlad, Eisner's mentor, also studied with Virgil Herrick (Figure 3) as did James B. Macdonald and Dwayne Huebner. The propensity of descendents of Herrick (e.g. Eisner, Willis, Mann, and Apple) toward critical, interpretive, and qualitative scholarship is worth examination.

The Koos branch of the Judd-Wundt tree includes Nelson Bossing and Harold Hand. Gordon Mackenzie, Hand's student, was mentor to Harry Passow, Glenn Hass, Arno Bellack, Marcella Lawler, Alexander Frazier, Laurel Tanner, Ronald Doll, Philo Pritzkau, and George Sharp.

J. McKeen Cattell takes the Wundt tree into its most prolific branch. Cattell's student, E.L. Thorndike, whose connectionist psychology, laws of learning, and studies of animal behavior account for his leading role in the history of American educational psychology, was first influenced by William James at Harvard prior to his studies with Cattell. Thorndike taught George D. Strayer, whose influence on curriculum at Columbia was primarily through the work of his student, Hollis Caswell. Caswell, first author of one of the most widely used general or synoptic curriculum texts (Caswell and Campbell, 1935), taught Wells Foshay, Galen Saylor, William Alexander, and Alice Miel. These and subsequent descendents of Caswell (e.g. Berman, Kimpson, Chasnoff, Spodek, Eash) are difficult to categorize under one rubric. Nevertheless, it is safe to say that most contributed to and/or supported synoptic curriculum texts, be they of the readings variety of Hass, the process of orientation of Berman, or the curriculum planning of Saylor and Alexander. Although different, from Foshay's critical essays to Lawler's emphasis on social dimensions of curriculum change, most of these descendents focused on schools and the need to evaluate and develop curricula for them.

The intellectual ancestry of John Dewey is especially complex, and his inclusion in the Wundt-Hall tree needs explanation. The vicarious influences of Plato, Bacon, Hegel, Jefferson, Darwin, Comte, Franklin, Herbart, Froebel, Henry George, and philosophers of the Enlightenment are all acknowledged as having profound impact on Dewey's thought (Skilbeck, 1970, 1-5). The influence of founders of pragmatism, William James and Charles Sanders Peirce, is of course unquestioned. The latter taught Dewey during his doctoral studies at Johns Hopkins. Dewey's principal advisor was G.S. Morris, though his lineage is more difficult to trace than of of Peirce and Hall. Hall's prominence in the Wundt tree, and the fact that he also taught Dewey at Johns Hopkins, connects Dewey with origins of other curricularists. This connection should not obscure the influence of the aforementioned others, especially since Hall studied philosophy with James at Harvard prior to his study with Wundt, and since Hall was sufficiently influenced by Freud and Jung to be first to bring them to lecture in the United States. The origins of both Hall and Dewey are indeed rich and varied, but the influence of Wundt's work on both of them should not be minimized.

Franklin Bobbitt also received his doctorate under Hall's influence, at Clark University, approximately twenty-five years after Dewey received his. Often referred to as father of the professional field of curriculum,

Bobbitt had pervasive influence on many scholars who followed. His scientific procedures for curriculum development can be detected in the books work of those who used and augmented them; examples include the writings of Harap, Charters, Caswell, Gwynn, Ragan, Tyler, and Taba. Although we have not identified Bobbitt's students, the scientific and experimental influence of Wundt as mediated by Hall can be seen in the scientific curriculum building movement. Bobbitt's social efficiency orientation and his methodology of activity analysis combine to form an interpretation of science that differs radically from Dewey's instrumentalist problem-solving by individuals engaged in the context of daily experience. This debate, much a part of the curriculum discourse of today, will be addressed again later.

Let us turn attention to Dewey's students who span the continuum from social and philosophical thought to psychology, politics, and the theory and practice of education. For present purposes, discussion centers on those who most directly influenced curriculum. It is, however, difficult to determine the directness of an influence and, in Dewey's case, it is even difficult to discover the extent of certain students' study with him. It is clear from Sidney Hook's statement in his 1977 John Dewey Lecture that he studied with Dewey; however, Hook is surely more a philosopher than a curricularist, although he did edit a curriculum book. Seguel (1966) mentions J. Meriam, W.W. Charters, and W. Wirt as students of Dewey. Ohles (1978) lists Taba as a student of Dewey, but he was clearly at the end of his career at Columbia when Taba received her degree in 1932. According to Brickman and Lehrer (1965, 149-53), Dewey was Professor of Philosophy at Columbia from 1904 to 1930 when he became Professor Emeritus, in residence, from 1930 to 1939. The same source includes a section by William Heard Kilpatrick (14-15) who claims that Dewey was his primary teacher for three years.[3] At Chicago, prior to his career at Columbia, Dewey also influenced students who became important in curriculum. Ella Flagg Young, principal of Dewey's laboratory school and subsequently Superintendent of Schools in Chicago, received her doctorate under Dewey along with his high praise. Willard Wirt, of the famed Gary Plan, studied with Dewey, as did W.W. Charters who received the doctorate under Dewey in 1904. Charters, in turn was mentor to Walter S. Monroe who served as mentor to Edgar Dale and Max Corey. At Columbia, Dewey influenced Briggs, Cocking, Foshay, Hand, Hanna, Meriam, B.O. Smith, and Zirbes, even though he was not officially their mentor. Some argue that Dewey's position in the Philosophy Department at Columbia effectually isolated him from influence of Teachers College students. Though this seems plausible, it is shrouded in mystery. Whether Dewey's impact on curriculum scholars who studied at Teachers College was formal or informal, his impact on scholars who studied there seems impossible to dispute. Whether such scholars remained at Teachers College or populated other universities, they disseminated interpretations of Dewey's perspective. It may be the case, however, that Kilpatrick influenced some of them more than Dewey did, giving the Dewey branches more of a Kilpatrick orientation than a Deweyan one.

The curriculum writings of probable descendents of Dewey, combined with those of Caswell and his students and others from Thorndike-Wundt origins, in large part created the character of curriculum development from the mid-Thirties to the mid-Sixties. Many of these scholars fit rather loosely into those who Pinar (1978) calls traditionalists, i.e., those who see their roles as service to schools rather than theory or research. They began to use the term principles to mean guidelines. Their origins as former practitioners, who were imbued with the need to develop substance for the escalation of universal schooling in the 1920's, differed considerably from scholars whose origins were in the extant cognate fields. Nevertheless, it can be argued that founders of curriculum thought in the late 1800's and early 1900's grew out of strong disciplinary and practice-oriented bases. That there is precedent for disciplinary strength long before the curriculum reform movement of the 1960's can be readily found in the work of Herbart, Wundt, Von Helmholtz, Hall, Dewey, Thorndike, DeGarmo, Charles Tyler, Titchener, Cubberley, and Cattell. Still, the curious phenomenon of changing intricate discipline-oriented perspectives into recipe-like guidelines is a problem in educational writing for practitioners that merits extended investigation. Exploration of such a problem may, for example, necessitate detailed inquiry into the very different interpretations of science implicit in the work of Dewey as compared with that of Bobbitt or Thorndike. What led descendents of both interpretations to produce a body of literature that is synoptic in character, i.e., encyclopedic treatments of the multitude of pieces of curriculum thought in summary form under one cover? Bode (1927) anticipated this trend that would dominate curriculum literature, and tried to set it in persepective by explicating differences among assumptions upon which

approaches to curriculum construction rest. In his preface to Bode's MODERN EDUCATIONAL THEORIES (xi) Bagley commented:

> Glaring inconsistencies among different "reform" proposals have gone unnoticed -- and many an ambitious educational "leader"...has given his endorsement impartially to them all!

Caswell and Campbell (1935) provided a precedent for synoptic texts that schooled curricularists for several decades. Descendents of Briggs, as well as those of Caswell and others, did likewise. Briggs and his descendents are incorporated into the Thorndike-Wundt tree; although conclusive evidence of Brigg's mentor is not available, other indicators, such as date and place, are supportive of this inclusion. Two of Briggs' prominent students became curriculum scholars and well-known administrators: Harold Spears who was Superintendent of the San Francisco schools and J. Paul Leonard who was President of San Francisco State. Descendents of Briggs, Dewey/Kirkpatrick, Cattell/Strayer, and Judd/Tyler/Koss, though different in many respects, shared a paramount concern for schooling and a faith in means-ends reasoning. In any case, subsequent generations of these founders seemed to amass an amalgam of tenets from the several origins, even in cases when such tenets were based on opposing assumptions.

A major question continues to surface: What assumptions guided decisions to provide synoptic treatments with action-oriented guidelines or recipes, i.e., a major departure from the orientation of Dewey, Thorndike, or even Wundt. What rationale diminished both Thorndike's emphasis on measurement, careful observation, and cause-effect relations, and Dewey's situation reading, projection of probable consequences, and practical application of the scientific method? Or is it more accurate to ask what pressures forged the amalgamation? Was it largely the need for rapid preparation of curriculum developers to provide for the escalating pace of universal schooling? Such questions did not go unnoticed in the synoptic texts. Many authors made valiant attempts to be self-critical and to set their writings in perspective.

Those who criticized pervasive acceptance and perpetuation of such amalgamations, as noted above, generally opposed uncritical adherence to the kind of scientific methodologies that Pinar (1978) labels conceptual empiricist. Certain of the descendents of Boyd Bode (Figure 2) and those of Virgil Herrick (Figure 3) tend in this direction. They often provide a blend of criticism set in socio-political and normative perspectives with strong emphasis on the need to study curricular effects on students in specific situational contexts.

Let us first consider Herrick who studied with social psychologist, Kimball Young (an actual descendent of Brigham Young for curriculum trivia buffs), who in turn studied with Robert Park, noted sociologist from the University of Chicago. The methods and substance of Virgil Herrick's approach to curriculum is both critical and practical, as extrapolated in the work of his students -- James Macdonald, Dwayne Huebner, and John Goodlad (who became Tyler's student after Herrick's death). Macdonald's thrust is critical, humanistic, and points to the need to clarify normative assumptions for research. Huebner draws upon a wide range of social, historical, philosophical, and psychological bases in his attempts to address curriculum problems. Michael Apple, Huebner's student, continues such criticism by examining the relation between ideology and curriculum and the concomitant perpetuation of socio-economic classes by the kind of knowledge reproduced in schools. Huebner's (1976) seconding of Schwab's (1970) critique of curricular research and general indictment of curriculum inquiry at large is evidence of criticism of both past and present thought. Goodlad's observational studies in schools, his setting of curriculum in a context with schools and individuals, and recently (1978) his ecological perspectives for accountability, provide evidence of origins with Herrick. Similar emphases on observation and criticism can be seen in the work of Goodlad's students, e.g., Frances Klein, Robert Sinclair, and most notably Elliot Eisner, with his emphasis on curriculum criticism and connoisseurship. Eisner's students, Decker Walker, Gail McCutcheon, and Elizabeth Vallance, continue this emphasis on criticism and observational studies. Macdonald and his students (John Zahorik, Alex Molnar, Esther Zaret, and John S. Mann) along with Huebner, Apple, and George Willis (Mann's student) are among those who are sometimes referred to as "reconceptualists." Such authors often focus on curriculum criticism about the quality of educational experience that is often obfuscated by the dominant tendency to quantify.

Critics of dominant curriculum thought are also found in relative abundance among descendents of Boyd Bode (Figure 2). Bode studied at Cornell with Charles Tyler and with Charles DeGarmo. Although we are

unable to trace Tyler's origins, DeGarmo stems from an incredibly rich line of philosophers and educators especially some who wrote about curriculum as a part of philosophical schemes long before it was a recognizec area of study. DeGarmo, foremost among American Herbartian educators, studied in Germany with K.V. Stoy. Herbart's student and loyal disciple. Stoy was succeeded at Jena by Wilhelm Rein, another Herbartian who had studied with Drobisch and Hartenstein, students of Herbart. Herbart's intellectual ancestry can be traced in one direction to Pestalozzi, Forebel, Rousseau, and Lessing, and along a more direct route to Fichte, Kant, Martin Knutzen, Leibnitz, von Schonborn and Tschirmhaus, Descartes and his disciples, Spinoza, the French Jesuits, and Ignatis Loyola. It is, indeed, interesting to ponder these connections and their implications. Yet, one should not get carried away with them. The influence of Herbartianism on Bode was likely minimal. According to Harold Dunkel (1970), Herbartianism in America was dead shortly after 1900, though books by DeGarmo and Charles and Frank McMurry continued to be used for twenty more years. Let us, therefore, return to Bode and his descendents, not directly associating him with Herbartianism, but realizing that his philosophical heritage is well worth careful scrutiny. Bode's student, Harold Alberty, was mentor to William Van Til, Herman Frick, Kimball Wiles, and Paul Klohr. William Pinar, one of the founders of the reconceptua-list position and inaugurator of THE JOURNAL OF CURRICULUM THEORIZING, studied with Klohr, and Madeleine Grumet studied with Pinar. A number of Klohr's students appear on the Board of Advising Editors of this journal. These descendents of Bode are often critical of mainstream curriculum thought and provide greater emphasis on philosophy and the humanities in their contributions to curriculum thought, although much of Alberty's work in contrast, may be categorized as synoptic.

Neither the Bode-Herbart (Figure 2) nor the Herrick-Park (Figure 3) trees appear to have overt connections with the Wundt tree (Figure 1); however, Edward Titchener who was noted earlier as Wundt's student was mentor to William C. Bagley at Cornell. Bagley received his doctorate in 1900, the same year that Bode received his under the mentorship of DeGarmo and Charles Tyler. Thus, it is quite probable that Bagley was influenced by DeGarmo, although he studied psychology. The descendents of Bagley are rather clouded. While some reports indicate that Florence Stratemeyer studied with Bagley, Caswell reports that she studied with Thomas Alexander, E.S. Evenden, and Herbert Bruner. All may be the case. B.O. Smith, Rugg's student, reports that Bagley was Rugg's mentor. As noted before, Judd influenced Rugg at Chicago, as did Kilpatrick, Dewey, and others at Teachers College and Lincoln School. Rugg moved from statistician to philosophical curricularist during these transitions. Clearly, by 1938, the philosophical perspectives had impact on Smith and subsequently on his students such as Robert Ennis, Shirley Engle, and a number of others. Smith and his students seem to consciously provide bridges over the ever-widening gap between philosophical and curricu-lar discourse. According to Tyler, Paul Hanna studied with Rugg; according to O.L. Davis, Hanna also studied with Strayer, which would place him in the Thorndike-Cattell branch of the Wundt tree. In any event, descendents of Hanna include Harold Drummond, Paul Wilson, O.L. Davis, Gerald Ponder, and Francis Hunkins. Henry Harap is reported to have studied with Rugg; since Harap was in consumer education, however, he may have studied with Briggs who published in that area. The work of Hanna, Smith, and Harap reflect interpre-tations of Rugg's philosophic outlook combined with practice oriented guidelines designed to facilitate deci-sion and action. Smith, Stanley, and Shores (1950) developed criteria for various kinds of curriculum deci-sions. Harap (1928) provided one of the first guides for curriculum making by practitioners. Stratemeyer (1947) created the notion of persistent life situations for different age levels as a vehicle to make curriculum considerations more concrete. Rugg's work at Lincoln School and his rendition of the child-centered school (Rugg and Shumaker, 1928) illustrate his intimate concern for practice as well as theory. Thus, Rugg, Strate-meyer, Harap, and Smith provide special strategies or perspectives for practitioners as well as for scholars. It is interesting to speculate about possible origins of these orientations in the work of Bagley. Moreover, it is interesting to note similarities between these philosophy-practice connections and the orientations offered by descendents of Bode, Herrick, and Dewey.

Ellwood P. Cubberley, noted educational historian and administrator, is included in the Thorndike branch of the Wundt tree (Figure l) though his placement there can be considered controversial. Clearly, Cubberley received his doctorate at Columbia in 1905, the same year that Strayer received his under Thorndike.

Cubberley may have studied with Thorndike but, despite who his official advisor was at Columbia, his mentor, in fact, was David Starr Jordon. Jordon led Cubberley first to Indiana University and later to Stanford. Cubberley's career was quite thoroughly developed by the time he went to Columbia, and he spent a very short time working on it there. At Stanford, Cubberley was mentor to Harl Douglass, who taught Stephen Romine and Vernon Anderson at Colorado. Both served as mentors to a number of students. Historical perspectives, as interpreted in synoptic texts and collections of readings, characterize work by many of Cubberley's descendents.

Finally, one smaller tree should be mentioned. L. Thomas Hopkins, a noted curriculum theorist of Deweyan persuasions and author of comprehensive and philosophical curriculum works in the 1920's and 1930's, studied at Harvard with Walter F. Dearbourne and (according to a letter from Hopkins) was profoundly influenced by Alexander Inglis. Joseph Leese and Herbert Bruner studied with Hopkins at Columbia, and continued the tradition of the comprehensive text. Hopkins saw curriculum as intrinsically integrated in the interactions among students and teachers. Leese, too, emphasized the teacher's role in curriculum.

This concludes the speculative discussion of relations among members of major geneaological trees and the thought that emerged from them. Additional mentor-student connections are presented in the charts at the conclusion of this article. Some bolster major trees outlined in the figures and discussion. Others show data on less robust trees that may or may not connect with those discussed above. More data need to be collected before a complete portrayal of the network of curriculum scholars can be fully approximated. Even though a complete picture is not yet possible, the data yield strong tendencies in the following areas: (1) divisions or schools of thought within curriculum study; (2) institutions having marked impact on the field; and (3) "founding parents" of curriculum thought. Schools of thought were treated in the foregoing sections, so let us briefly discuss the other two areas.

Institutions. It is quite clear that Columbia and its Teachers College is the most extensive seedbed of curricularists. Many curricularists stem from Cattell, Thorndike, and Strayer, and from Dewey and Kilpatrick. Many descendents of Thorndike established centers of curriculum study throughout the United States. Examples include: Hanna at Stanford, Drummond at George Peabody, O.L. Davis at Texas, Alexander and Hass at Florida, Frazier at Ohio State, Berman at Maryland, Saylor at Nebraska, and Firth at Georgia. Thorndike's student, Strayer, remained at Columbia, as did some of his descendents, e.g., Elsbree, Reutter, Caswell, Foshay, Lawler, and Miel. From the Dewey tree, Kilpatrick remained at Teachers College, Streitz went to Ohio State. Taba to Stanford and Shane to Indiana.

Stanford was already dominated by Cubberley, its dean of education, whose student Harl Douglass, served as mentor to Anderson and Romine from Colorado. Coupled with Hanna, Taba, and others, Stanford appears under Columbia's influence. However, the independence and variety of Cubberley's study with Jordon and others diminishes that influence. It can be asserted safely that Cubberley contributed to the unique character of Stanford and the curriculum scholarship that emerged within it. Thus, Stanford must be seen as a major early center of curriculum scholarship.

The University of Chicago was made a center of curriculum study by Dewey and Francis Parker (an informal mentor of Dewey), Ella Flagg Young, Willard Wirt, and W.W. Charters. Franklin Bobbitt came to Chicago after receiving his doctorate at Clark University. When Dewey went to Columbia, Chicago continued prominence under Judd, followed by Tyler and Herrick, and recently Thelen, Schwab, Bloom, and Jackson. Goodlad and Cronbach, Tyler's students, contributed to major educational centers at UCLA and Stanford. The latter points again to Stanford, sustained in very recent years under Eisner and Walker.

Tyler was also prominent at Ohio State as evaluator for the Eight Year Study. Ohio State was already well-known in curriculum by virtue of Bode, Streitz, and Alberty. Through these scholars, Ohio State descendents include Van Til, Klohr, Frick, Wiles, Overly, and Pinar, who populated Indiana State, Ohio State George Peabody, Florida State, Indiana and Rochester.

The Kimball Young/Virgil Herrick tree at the University of Wisconsin produced Macdonald and Huebner. The former remained at Wisconsin and later went to North Carolina at Greensboro. Huebner went to Teachers College where he served as mentor to Apple who joined Kliebard at Wisconsin.

Harvard, too, must be noted not only for Hopkins and his mentors, Inglis and Dearbourne, but for Charles Eliot's influence and for the coterie of philosophers who surrounded William James, many of whom studied in Germany during the intellectual reigns of such scholars as Wundt and Herbart. Such Harvard scholars as Whitehead, Burton, J. Bruner, Brameld, and Scheffler had important impact on curriculum thought.

The Bagley branch of Wundt's tree shows the role of the University of Illinois through Rugg, B.O. Smith, Broudy, Stanley, Shores, and others who kept Illinois a center of curriculum study for over three decades.

Cornell must be acknowledged as a seedbed of curriculum study by virtue of DeGarmo, Tyler, Titchener, Bagley, and Bode, and the students who studied with them. More recently Cornell has been a home for Mauritz Johnson, William Lowe, George Posner, Robert Ennis, and D. Bob Gowin.

In sum, Columbia dominates the institutional leadership, at least relative to origins. The combined effects of the Cattell/Thorndike/Caswell and the Dewey/Kilpatrick branches of the Wundt tree influenced centers of curriculum study at a great many institutions. Chicago, Stanford, Cornell, and to some extent Ohio State, Illinois, Harvard, and Wisconsin evolved with independence.

Founding Parents. Wundt and Herbart seem most conspicuous among remote ancestors of the curriculum field. Even their influence cannot be considered wholly separate, since DeGarmo was careful to admit that in his most influential book, THE ESSENTIALS OF METHOD of 1889, he followed Wundt more fully than he did Herbart (Dunkel, 1970). Despite their commonalities, descendents of Wundt, i.e., Cattell, Titchener, Hall, and Judd, differed significantly on many issues. Great caution should be taken before grouping them together too tightly. Nevertheless, it was their students who were the major founders of curriculum study in the Twentieth Century. This is less directly the case with Thorndike, Bagley, Cubberley, Gates, Counts, and Dewey, than it is with Strayer, Bobbitt, Charters, Koos, Tyler, Douglass, Monroe, Rugg, Kilpatrick, Briggs, Harap, and Statemeyer. From the combination of DeGarmo and Charles Tyler stemmed Bode and Alberty, his student, who had major impact on curriculum study. Similarly, Herrick, of the Young-Park tree and Hopkins of the Dearbourne-Inglis tradition should be acknowledged. Finally, the impact of Caswell and MacKenzie from Columbia, Tyler from Chicago, and Smith from Illinois and South Florida, together with their students, must be acknowledged as among the most pervasive.

The academic preparation of founders of curriculum is interesting to ponder, particularly the fact that many were not prepared in curriculum or even education. In the case of very early founders this is understandable, since few if any academic programs treated those areas directly. Wundt was a philosopher, psychologist, and physiologist. His students were psychologists with pronounced experiemental leanings. Herbart was a philosopher. Dewey studied philosophy and psychology; Thorndike, Cattell, and Judd studied measurement oriented psychology; Cubberley had an eclectic preparation with emphasis in history; Rugg was trained in engineering, sociology, and psychology; Bagley, his mentor, was trained in psychology; Bode's preparation was in philosophy; Kimball Young was educated in social psychology. Perhaps, Kilpatrick, Strayer, Gates, DeGarmo, and the McMurry brothers were first among those trained in education. It would be interesting to learn more about the formal and informal study of major curriculum writers, but that is another project.

Conclusion

Our conclusions are tentative. They are mostly stated above. It bears repeating that we do not consider a genealogy of mentor/student relationships to be more than one, among many, ways to portray curricular origins. Others might include: content analyses of curriculum texts; citation analyses, studies of the work of curricularists with schools; analyses of curriculum thought in socio-cultural context; and biographical studies of informal influences on scholars' lives.

Such alterations may or may not be productive. As important as it is to establish connections between American curricularists and their intellectual ancestors across the sea, it is equally important to explore the unique aspects of the European heritage that appeared when it was transplanted in American soil. The philosophical perspectives of Wundt were, for example, neglected by his American students in favor of large scale emphasis on experimental laboratories. The complexity of Herbart's thought was reduced to methodological steps. Yet, these examples and their overall impact cannot necessarily be assessed as wholly negative. Much was incorporated that derived from the American settings to enrich aspects of the thought brought from

Europe. Surely, the syntheses of grassroots experience and eclectic perspectives that forged the educational contributions of such educators as Francis Parker, Ellwood P. Cubberley, William James, William T. Harris, John Dewey, Boyd Bode, and Harold Rugg are more than can be explained by a single mentor or even a group of mentors. Thus, it is necessary to consider both similarities and differences among students and mentors if a balanced portrayal of curriculum origins is sought. Again, our present study is only one perspective.

Finally, we hope that the work presented here and the questions that stem from it will further these purposes: (1) that a more comprehensive and accurate picture of the curriculum field will emerge; (2) that a greater sense of community among curriculum scholars will evolve through realization of a common saga; and (3) that a more productive sense of direction that builds upon our past may evolve for future curriculum thought and practice.

FOOTNOTES

1. Great appreciation is extended to the following scholars for their efforts to assist this project through conversation and letters: Hollis Caswell, O.L. Davis, Robert Havighurst, L. Thomas Hopkins, Phillip Jackson, Joseph Leese, Gordon MacKenzie, Galen Saylor, and Ralph Tyler. Many thanks are given to Ann Lynn Schubert who contributed more than ample research, ideas, preparation of materials, and typing. Steve Ferrar is gratefully acknowledged for collating information, and Marj Hulin for typing. All who submitted questionnaires are thanked for the time it took to make the data available. Finally, the American Educational Research Association Special Interest Group on the Creation and Utilization of Curriculum Knowledge is remembered with gratitude for providing the initial mechanism for distributing questionnaires through their newsletter.

2. Presentations on preliminary versions of the genealogical project were presented to the AERA Annual Conference (Posner and Schubert, 1979) and to the Society for the Study of Curriculum History Annual Meeting (Schubert and Posner, 1979).

3. All of this invokes the question of the character of advisor/advisee relationships in doctoral work prior to 1925. Did students have advisors who we can assume had a prime influence on their work? This is an interesting question for further study. In the interest of this question and the more specific question about other students of Dewey, JoAnn Boydston (Director of the Center for Dewey Studies at Carbondale, Illinois) was contacted by phone. She knew of no complete record of Dewey's students, although she readily provided names of several philosophers who studied with him. His students who pursued curriculum scholarship are even more difficult to discover.

NOTES ON CHARTS

1. Buros was Tyler's first assistant on the Eight Year Study and probably had marked influence on him at that time.
2. Zirbes also studied with McGaughy, Mossman, and Hillegos, according to Hollis Caswell.
3. Jackson also studied with Arthur Jersild in the Child Development Institute at Teachers College, Columbia.
4. Goodlad also studied with Virgil Herrick.
5. Hall was also influenced by Charles Eliot.
6. His probable mentor was Hall, although he also studied with William James.
7. G.S. Morris and his principal advisor, although he also studied with G.S. Hall and C.S. Peirce.
8. He was also influenced by Ralph Tyler and worked with him on the Eight Year Study.
9. Cubberley was at Columbia in 1905; it is likely that he studied with Thorndike.
10. Bode also studied with Charles Tyler, philosopher at Cornell.
11. Caswell said Stratemeyer also studied with Thomas Alexander and E.S. Evenden. He said that she was strongly influenced by H. Bruner.
12. Rugg was also influenced by Kilpatrick and Judd. Tyler questions the Bagley-Rugg connection.

13. Harap may have had a mentor in economics since he studied consumer education. Briggs, who published in that area, may have been Harap's mentor.
14. DeGarmo was at Cornell when Bode was there; this is depicted in writings in an old text of George Posner's.
15. Caswell believes that W.S. Monroe and W.H. Burton studied with H.C. Morrison who as at the University of Chicago for the bulk of his career. Tyler believes that W.S. Monroe studied with Judd. Monroe's doctoral dissertation (in the University of Chicago Library) was chaired by Charters.
16. Each also studied with Marcella Lawler.
17. According to Drummond, Hanna may have studied with Jesse Newlon; according to O.L. Davis he studied with Strayer as well.
18. Nelson also studied with Richard Gross at Stanford who received his doctorate under James I. Quillen at Stanford in 1952.
19. Lowe also studied with Lawrence Metcalf who studied with Allen Griffen.

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1	Von Helmholtz, H.L.			Heidelberg
1-1	Wundt, Wilhelm			Leipzig
1-1-1	Arps, George F.	Leipzig		Columbia U.
1-1-2	Cattell, J. McKeen	Leipzig		Columbia U.
1-1-2-1	Thorndike, Edward L.	Columbia U.	1898	Columbia U.
1-1-2-1-1	Strayer, George D.	Columbia U.	1905	Columbia U.
1-1-2-1-1-1	Buros, Oscar[1]	Columbia U.		
1-1-2-1-1-2	Mort, Paul	Columbia U.		
1-1-2-1-1-3	Elsbree, Willard	Columbia U.	1928	Columbia U.
1-1-2-1-1-3-1	Reutter, E. Edmund	Columbia U.	1950	Columbia U.
1-1-2-1-1-3-1-1	Firth, Gerald	Columbia U.	1959	U. of Georgia
1-1-2-1-1-3-1-1-1	Hart, Nancy C.	U. of Georgia		Oglethorpe Schools
1-1-2-1-1-3-1-1-2	Colbert, Vada J.	U. of Alabama	1972	N.Georgia College
1-1-2-1-1-3-1-1-3	Callisom, Karen	U. of Georgia	1976	Greenwood S.C.
1-1-2-1-1-3-1-1-4	Curry, Thraith	U. of Alabama	1970	U. of Alabama
1-1-2-1-1-3-1-1-5	Black, Lorraine	U. of Alabama	1972	Samford U.
1-1-2-1-1-3-1-1-6	Terrell, Mary Sue	U. of Alabama	1970	Jackson & Lee U.
1-1-2-1-1-3-1-1-7	Spisa-am, Wichit	U. of Minnesota	1967	Thailand, M.of Ed.
1-1-2-1-1-4	Caswell, Hollis L.	Columbia U.	1929	Columbia U.
1-1-2-1-1-4-1	Foshay, Arthur	Columbia U.		Columbia U.
1-1-2-1-1-4-1-1	Wann, Kenneth	Columbia U.		Columbia U.
1-1-2-1-1-4-1-1-1	Spodek, Bernard	Columbia U.	1962	U. of IL U-C
1-1-2-1-1-4-1-1-1-1	Davis, Michael	U. of IL U-C		James Madison U.
1-1-2-1-1-4-1-1-1-2	Stewart, Ida	U. of IL U-C		U. of Houston
1-1-2-1-1-4-1-1-1-3	Schickedaur, J.	U. of IL U-C		Boston U.
1-1-2-1-1-4-2	Miel, Alice	Columbia U.	1944	Columbia U.
1-1-2-1-1-4-2-1	Chasnoff, Robert	Columbia U.	1958	Kean College
1-1-2-1-1-4-2-2	Berman, Louise	Columbia U.	1970	U. of Maryland
1-1-2-1-1-4-2-2-1	Holmes, Edward	U. of Maryland	1975	
1-1-2-1-1-4-2-2-2	Murphy, Joyce	U. of Maryland	1974	Maryland State
1-1-2-1-1-4-2-2-3	Stuvenson, Carol	U. of Maryland	1973	Montgomery County

***Notes for charts are presented at the end of this section.**

1-1-2-1-1-4-3	Saylor, John Galen	Columbia U.	1941	U. of Nebraska
1-1-2-1-1-4-3-1	Kimpston, Richard D.	U. of Nebraska	1963	U. of Minnesota
1-1-2-1-1-4-3-2	Reece, Jerald	U. of Nebraska	1960	New Mexico State
1-1-2-1-1-4-3-3	Smith, Ronald	U. of Nebraska	1966	Ed.Comm. of States
1-1-2-1-1-4-3-4	O'Hanlon, James	U. of Nebraska	1964	U. of Nebraska
1-1-2-1-1-4-3-5	Jaenije, Vaughan	U. of Nebraska	1967	Eastern IL State
1-1-2-1-1-4-3-6	Mcardle, Richard	U. of Nebraska		Cleveland State
1-1-2-1-1-4-3-7	Hapi, Richard	U. of Nebraska	1960	Kent State U.
1-1-2-1-1-4-3-7-1	Demyam, Peter P.	Kent State U.	1976	Johns Hopkins U.
1-1-2-1-1-4-4	Alexander, William M.	Columbia U.	1940	U. of Florida
1-1-2-1-1-4-4-1	Williams, Emmett	Peabody College	1963	U. of Florida
1-1-2-1-1-4-4-2	Wiles, John	U. of Florida	1972	U. of Montana
1-1-2-1-1-4-4-3	Strickland, Kate	U. of Florida	1976	U. of Texas
1-1-2-1-1-4-4-4	Sistrunk, Walter	U. of Florida	1966	Mississippi State
1-1-2-1-1-4-4-5	Kealy, Ronald	U. of Florida	1969	Frostburg S.T.C.,MD
1-1-2-1-1-4-4-6	Compton, Mary	U. of Florida	1967	U. of Georgia
1-1-2-1-1-4-4-7	Baker, Dan	U. of Florida	1974	U. of Tennessee
1-1-2-1-1-4-4-8	Burke, William I.	U. of Florida	1975	U. of N.Carolina
1-1-2-1-1-4-5	Kendall, Glenn	Columbia U.		California State
1-1-2-1-1-4-6	Spain, Charles	Columbia U.		Peabody College
1-1-2-1-1-4-7	Basler, Roosevelt	Columbia U.		Peabody College
1-1-2-1-1-4-8	Oliver, George	Columbia U.		William & Mary
1-1-2-2	Gates, Arthur I.	Columbia U.		Columbia U.
1-1-2-2-1	Bond, Guy L.	Columbia U.		U. of Minnesota
1-1-2-2-1-1	Shores, J. Harlan	U. of Minnesota		U. of IL U-C
1-1-2-2-1-1-1	Schubert, William H.	U. of IL U-C	1975	U. of IL CC
1-1-2-2-1-1-2	Rodgers, Fred	U. of IL U-C		U. of IL U-C
1-1-2-2-1-1-3	Durkin, Dolores	U. of IL U-C		U. of IL U-C
1-1-2-2-2	Zirbes, Laura[2]	Columbia U.	1927	Ohio State U.
1-1-2-2-2-1	Swearington, Mildred	Ohio State U.	1950	Florida State U.
1-1-2-2-2-1-1	White, Charlotte	Florida State U.	1974	Dept.of Ed., FL
1-1-2-2-2-1-2	Barber, Raymond	Florida State U.	1972	Drexel U.
1-1-2-2-2-1-3	Esposito, James	Florida State U.	1972	U. of Virginia

1-1-2-2-2-1-4	Cleary, Lynn	Florida State U.	1970	U. of South FL
1-1-2-2-2-1-5	Perry, Ione	Florida State U.	1967	Dept.of Ed.,N.C.
1-1-2-2-2-1-6	Marshall, Carol	Florida State U.	1960	Kansas State U.
1-1-2-2-2-1-7	Spicola, Rose	Florida State U.	1960	
1-1-2-2-2-1-8	Magacioni, Virginia	Florida State U.	1959	U. of Georgia
1-1-2-2-3	Jackson, Phillip[3]	Columbia U.		U. of Chicago
1-1-2-2-3-1	Weiss, Joel	U. of Chicago		OISE
1-1-2-3	Cubberley, Ellwood P. [9]	Columbia U.	1905	Stanford U.
1-1-2-3-1	Douglas, Harl R.	Stanford U.		U. of Colorado
1-1-2-3-1-1	Romine, Stephen	U. of Colorado	1954	U. of Colorado
1-1-2-3-1-1-1	McKean, Robert	U. of Colorado	1966	U. of N.Colorado
1-1-2-3-1-1-1-1	Richardson, Rob	U. of Colorado	1970	U. of N.Texas
1-1-2-3-1-1-1-2	Rothstein, Bob	U. of Colorado	1967	Kansas State U.
1-1-2-3-1-1-1-3	Hause, Richard	U. of Colorado	1976	Denver Schools
1-1-2-3-1-1-1-4	Amundson, David	U. of Colorado	1973	
1-1-2-3-1-1-1-5	Al-Jallal, Abdulaziz	U. of Colorado		King Abdulaziz U.
1-1-2-3-1-1-1-6	Kirby, Darrell	U. of Colorado	1962	New Mexico State
1-1-2-3-1-1-1-6-1	Howard, Bert	New Mexico State		Gilroy Schools
1-1-2-3-1-1-1-6-2	McConville, J.L.	New Mexico State		U. of Texas
1-1-2-3-1-1-1-6-3	Vaughan, Ted	New Mexico State		U. of Wyoming
1-1-2-3-1-1-2	Anderson, Vernon E.	U. of Colorado	1942	U. of Maryland
1-1-2-3-1-1-2-1	Nossman, Lois	U.S. Int. U.	1977	Grossmont H.S.
1-1-2-3-1-1-2-1-1	Telford, Katherine	U.S. Int. U.	1976	Carlsbad H.S.
1-1-2-3-1-1-2-1-2	Wood, Johanna	U. of Maryland	1973	D.C. Schools
1-1-2-3-1-1-2-1-3	Statom, Jodellano	U. of Maryland	1972	U. of Maryland
1-1-2-3-1-1-2-1-4	Huden, Mary Oliver	U. of Maryland	1973	College of Notre Dame
1-1-2-3-1-1-2-1-5	Flanagan, William	U. of Connecticut	1955	RI Com. College
1-1-2-3-1-1-2-1-6	Goldberg, Arthur	U. of Connecticut	1952	RI Com. College
1-1-2-3-1-1-2-1-7	Elkins, Deborah	U. of Connecticut	1955	Queens College
1-1-2-3-1-1-2-1-8	Peipper, Alice	U. of Maryland	1973	Central CT
1-1-2-3-1-1-2-1-9	Yina, Neville	U. of Maryland	1974	Jamaica, Min.of Ed.
1-1-2-3-1-1-2-2	Hollister, George E.	U. of Minnesota	1947	U. of Wyoming
1-1-2-3-1-1-2-2-1	Hugins, George	U. of Wyoming	1960	Adams State College
1-1-2-3-1-1-2-2-2	Richers, Elmer	U. of Wyoming	1969	Lakewood Schools

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1-1-2-3-1-1-2-2-3	Johnson, Burdett	U. of Wyoming	1970	Weber State College
1-1-2-3-1-1-2-2-4	Overholt, James L.	U. of Wyoming	1970	State College,Chico
1-1-2-3-1-1-2-2-5	Rasmussen, Richard	U. of Wyoming	1969	LaCrosse State
1-1-2-3-1-1-2-2-6	Lynch, Herbert L.	U. of Wyoming	1964	Iowa State College
1-1-2-3-1-1-2-2-7	Tredway, Dan	U. of Wyoming	1959	Western State
1-1-2-4	Briggs, Thomas	Columbia U.	1914	
1-1-2-4-1	Rufi, John	Columbia U.	1925	Columbia U.
1-1-2-4-1-1	Van Dyke, L.A.	U. of Missouri	1942	
1-1-2-4-1-1-1	Woods, Bob	U. of Iowa	1950	U. of Missouri
1-1-2-4-1-1-1-1	Starr, Robert	U. of Missouri	1970	U. of Missouri
1-1-2-4-1-1-1-2	Denton, Jon	U. of Missouri	1972	Texas Tech.
1-1-2-4-1-1-1-3	McCurdy, Don	U. of Missouri	1967	Nebraska U.
1-1-2-4-1-1-1-4	Guenther, John	U. of Missouri	1970	Kansas State U.
1-1-2-4-1-1-1-5	Wood, Fred	U. of Missouri	1965	Pennsylvania State U.
1-1-2-4-1-1-2	Sturges, A.W.	U. of Iowa	1959	U. of Missouri
1-1-2-4-1-1-2-1	Friesen, David	North Dakota	1964	U. of Alberta
1-1-2-4-1-1-2-1-1	Hersom, Naomi	U. of Alberta	1969	U. of British Columbia
1-1-2-4-1-1-2-1-1-1	Preston, Raymond	U. of Alberta	1975	W.Australian Inst.
1-1-2-4-1-1-2-1-1-1-1	Jiffaris, David	U. of Alberta	1973	Australia
1-1-2-4-1-1-2-1-1-2	Blakey, Janis	U. of British Columbia		U. of Alberta
1-1-2-4-1-1-2-1-1-3	Pylypiw, James	U. of Alberta	1974	Lakehead U.
1-1-2-4-1-1-2-1-1-4	Oberg, Antoinette	U. of Alberta	1975	U. of Victoria
1-1-2-4-1-1-2-1-1-5	Masters, Bernard	U. of Alberta	1973	World Bank, WA
1-1-2-4-1-1-2-1-1-6	Chalmers, Hal	U. of Alberta	1972	U. of Moncton
1-1-2-4-1-1-2-1-1-7	Jiffaris, David	U. of Alberta	1973	Australia
1-1-2-4-2	Spears, Harold	Columbia U.		San Francisco Schools
1-1-2-4-3	Leonard, J. Paul	Columbia U.		San Francisco State
1-1-3	Judd, Charles	Leipzig		U. of Chicago
1-1-3-1	Crawford, C.C.	U. of Chicago		U. of S.California
1-1-3-1-1	Mickelson, John M.	U. of S.California	1947	Temple U.
1-1-3-1-1-1	Gross, Bernard	Temple U.	1971	Antioch School of Ed.
1-1-3-1-1-2	Hough, John B.	Temple U.	1961	Chio State U.
1-1-3-1-1-3	Appel, Marilyn	Temple U.	1968	Med.College of PA

1-1-3-1-1-4	Moskowitz, Gertrude	Temple U.	1960	Temple U.
1-1-3-1-1-5	Glatthorn, Allan	Temple U.		U. of Pennsylvania
1-1-3-2	Tyler, Ralph	U. of Chicago		U. of Chicago/SRA
1-1-3-2-1	Raths, Louis E.	Ohio State U.	1933	Ohio State U.
1-1-3-2-1-1	Fleming, Robert	Ohio State U.	1946	
1-1-3-2-1-1-1	Raths, James	New York U.	1960	U. of IL U-C
1-1-3-2-1-1-1-1	Hauwiller, James	U. of IL U-C	1976	Montana State
1-1-3-2-1-2	Fleck, Henrietta	U. of Chicago		
1-1-3-2-2	Goodlad, John[4]	U. of Chicago	1949	UCLA
1-1-3-2-2-1	Torgunrud, Eugene	UCLA	1971	Prov. of Alberta
1-1-3-2-2-2	Con, Fatiman Hamid	UCLA	1971	U. of Malaysia
1-1-3-2-2-3	McClure, Robert	UCLA	1965	NEA
1-1-3-2-2-4	Sinclair, Robert	UCLA	1968	U. of Massachusetts
1-1-3-2-2-5	Purdom, Daniel	UCLA	1967	U. of South FL
1-1-3-2-2-6	Klein, M. Frances	UCLA	1965	Pepperdine U.
1-1-3-2-2-7	Goodman, Kenneth	UCLA	1963	U. of Arizona
1-1-3-2-2-8	Eisner, Elliot W.	U. of Chicago	1962	Stanford U.
1-1-3-2-2-8-1	McCutcheon, Gail	Stanford U.	1976	U. of Virginia
1-1-3-2-2-8-2	Vallance, Elizabeth	Stanford U.	1975	U. of Mid-America
1-1-3-2-2-8-3	Walker, Decker	Stanford U.	1969	Stanford U.
1-1-3-2-2-8-4	Nelson, Murry	Stanford U.	1975	Pennsylvania State U.
1-1-3-2-3	Thelen, Herbert	U. of Chicago		U. of Chicago
1-1-3-2-3-1	Rehage, Kenneth	U. of Chicago		U. of Chicago
1-1-3-2-4	Tyler, Louise	U. of Chicago		UCLA
1-1-3-2-5	Bloom, Benjamin	U. of Chicago		U. of Chicago
1-1-3-2-5-1	Krathwohl, David	U. of Chicago		Syracuse U.
1-1-3-2-6	Frieche, Fred	Ohio State U.		
1-1-3-2-7	Wirt, Jim	Ohio State U.		
1-1-3-2-8	Arnold, Dwight	Ohio State U.		
1-1-3-2-9	Grimm	Ohio State U.		Wayne State U./NEA
1-1-3-2-10	Weedon, Viv	Ohio State U.		
1-1-3-2-11	Hartung	Ohio State U.		
1-1-3-2-12	Sand, Ole	U. of Chicago		
1-1-3-2-12-1	Joyce, Bruce	Wayne State U.		Stanford U.
1-1-3-2-12-1-1	Selden, Steve	Columbia U.	1972	U. of Pennsylvania

1-1-3-2-13	Cronbach, Lee J.	U. of Chicago		Stanford U.
1-1-3-3	Koos, Leonard V.	U. of Chicago		U. of Minnesota
1-1-3-3-1	Bossing, Nelson L.	U. of Minnesota	1925	U. of Minnesota
1-1-3-3-1-1	Adkim, Arthur	U. of Minnesota	1958	U. of Maryland
1-1-3-3-1-2	Krug, E.A.	U. of Minnesota		U. of Wisconsin
1-1-3-3-2	Hand, Harold C.	U. of Minnesota		Stanford U.
1-1-3-3-2-1	Mackenzie, Gordon N.	Stanford U.	1940	Columbia U.
1-1-3-3-2-1-1	Passow, A. Harry	Columbia U.	1951	Columbia U.
1-1-3-3-2-1-2	Hass, C. Glen	Columbia U.		U. of Florida
1-1-3-3-2-1-2-1	Bauch, Jerold P.	U. of Florida	1967	U. of Georgia
1-1-3-3-2-1-2-2	Roberts, Arthur D.	U. of Florida	1968	U. of Connecticut
1-1-3-3-2-1-2-3	Bolden, Bernadine J.	U. of Florida	1977	U. of North FL
1-1-3-3-2-1-2-4	Comfort, Ronald E.	U. of Florida	1971	U. of Virginia
1-1-3-3-2-1-2-5	Jackson, Michael R.	U. of Florida	1971	Southern IL U.
1-1-3-3-2-1-2-6	Giblin, Thomas R.	U. of Florida	1971	U. of Colorado
1-1-3-3-2-1-3	Frazier, Alexander	Columbia U.	1950	Ohio State U.
1-1-3-3-2-1-3-1	Wishon, Philip	Ohio State U.	1975	East TN State
1-1-3-3-2-1-3-2	White, Mary Lou	Ohio State U.	1973	Wright State
1-1-3-3-2-1-3-3	Luckey, Evelyn	Ohio State U.	1972	Columbus Schools
1-1-3-3-2-1-3-4	Pilder, William	Ohio State U.	1968	Greenwich, N.Y.
1-1-3-3-2-1-4	Lewis, Arthur J.	Columbia U.	1957	U. of Florida
1-1-3-3-2-1-4-1	Erb, Thomas	U. of Florida	1977	U. of Florida
1-1-3-3-2-1-5	Hock, Louise	Columbia U.	1954	New York U.
1-1-3-3-2-1-6	Tanner, Laurel	Columbia U.	1968	Temple U.
1-1-3-3-2-1-7	Leeper, Robert	Columbia U.	1950	ASCD
1-1-3-3-2-1-8	Bellack, Arno	Columbia U.	1953	Columbia U.
1-1-3-3-2-1-8-1	Kliebard, Herbert	Columbia U.	1964	U. of Wisconsin
1-1-3-3-2-1-8-2	McNeil, John D.	Columbia U.	1956	UCLA
1-1-3-3-2-1-9	Elliott, David	Columbia U.	1964	
1-1-3-3-2-1-10	Lawler, Marcella	Columbia U.	1949	Columbia U.
1-1-3-3-2-1-10-1	Eash, Maurice J. 16	Columbia U.	1959	U. of IL CC
1-1-3-3-2-1-10-2	Grant, Sydney R.	Columbia U.	1962	Florida State U.
1-1-3-3-2-1-10-3	Grimsley, Edith E.	Columbia U.	1969	U. of Georgia
1-1-3-3-2-1-10-4	Hain, John	Columbia U.	1959	SUNY
1-1-3-3-2-1-10-5	McInnes, John A.	Columbia U.	1969	Inst. of Ed.,Toronto
1-1-3-3-2-1-10-6	Mullen, David	Columbia U.	1960	U. of Georgia
1-1-3-3-2-1-11	Doll, Ronald C.	Columbia U.	1952	Richmond College
1-1-3-3-2-1-12	Barnes, Fred P.	Columbia U.	1953	U. of IL UC
1-1-3-3-2-1-13	Elliott, David Loucks	Columbia U.	1963	U. of CA Berkeley
1-1-3-3-2-1-14	Pritzkau, Philo T.	Columbia U.	1952	U. of Connecticut
1-1-3-3-2-2	Lowe, William 19	U. of IL UC	1960	U. of Rochester
1-1-3-3-2-2-1	Shuster, David	U. of Rochester	1976	Rochester Inst.Tech.
1-1-3-3-2-2-2	Barley, Steven	U. of Rochester	1975	Eastman-Kodak

1-1-3-3-2-2-3 Ellison, Robert	U. of Rochester	1974	Webster, N.Y.
1-1-3-3-2-2-4 Claunch, Edna	U. of Rochester	1973	SUNY
1-1-3-3-2-2-5 Sullivan, Judith	U. of Rochester	1972	U. of Rochester
1-1-3-3-2-2-6 Fisher, Lawrence	U. of Rochester	1971	Wellsley, Maine
1-1-3-3-2-2-7 Morse, Philip	U. of Rochester	1972	SUNY
1-1-3-3-2-2-8 Stoff, Sheldon	Cornell U.	1965	Adelphi U.
1-1-3-4 Monase, Walter S.	Columbia U.		
1-1-3-5 Counts, George S.	Columbia U.	1916	Columbia U.
1-1-3-5-1 Cremin, Lawrence	Columbia U.	1936	Columbia U.
1-1-4 Hall, G. Stanley[5]	Leipzig		Clark U./Johns Hopkins
1-1-4-1 Bobbitt, Franklin[6]	Clark U.		U. of Chicago
1-1-4-2 Dewey, John[7]	Johns Hopkins U.	1884	Columbia U./Chicago
1-1-4-2-1 Kilpatrick, William H.	**Columbia U.**		Columbia U.
1-1-4-2-1-1 Streitz, Ruth	Columbia U.	1930	Ohio State U.
1-1-4-2-1-1-1 Shane, Harold G.	Ohio State U.	1943	Indiana U.
1-1-4-2-1-1-1-1 Mecklenberger, J.	Indiana U.		NASB, Washington
1-1-4-2-1-1-1-2 Weaver, Roy	Indiana U.		U. of S. California
1-1-4-2-1-1-1-3 Young, Doris	Northwestern U.		
1-1-4-2-1-1-1-4 Husk, Charlotte	Northwestern U.		Ohio State U.
1-1-4-2-1-1-1-5 Leavitt, Jerome	Northwestern U.	1952	CA State, Fresno
1-1-4-2-1-1-1-6 Feyereisen, K.			Wayne State U.
1-1-4-2-1-2 Taba, Hilda	Columbia U.		San Francisco State
1-1-4-2-2 Hook, Sidney	**Columbia U.**		
1-1-4-2-3 Young, Ella Flagg	U. of Chicago	1900	Chicago Schools
1-1-4-2-4 Wirt, William	U. of Chicago		Gary Schools
1-1-4-2-5 Charters, W.W.	U. of Chicago	1904	U. of Chicago
1-1-4-2-5-1 Monroe, Walter S.[15]	U. of Chicago		
1-1-4-2-5-1-1 Corey, Stephen	U. of IL U-C		
1-1-4-2-5-1-1-1 Eash, Maurice[16]	Columbia U.	1959	U. of IL CC
1-1-4-2-5-1-1-2 Halverson, Paul	Columbia U.	1952	U. of Georgia
1-1-4-2-5-1-1-2-1 Walker, William	Syracuse U.	1962	Alfred U.
1-1-4-2-5-1-1-2-2 Donegan, Dennis	Syracuse U.	1964	U. of Pittsburgh
1-1-4-2-5-1-1-2-3 Crane, P.	U. of Georgia	1975	U. of West FL

Von Helmholtz

I-1-4-2-5-1-1-2-4	McDiarmid, G.	Syracuse U.	1965	OISE
I-1-4-2-5-1-1-2-5	Swyers, William	U. of Georgia	1969	Virginia Cmwlth.U.
I-1-4-2-5-1-1-3	Trump, J.L.	U. of Chicago		
I-1-4-2-5-2	Dale, Edgar	U. of Chicago		
I-1-4-2-5-2-1	Chall, Jeanne	**U. of Chicago**		
I-1-4-2-6	Merriam, Junius	Columbia U.		
I-1-5	Titchener, Edward	**Leipzig**		Cornell U.
I-1-5-1	Bagley, William C.	Cornell U.	1900	Columbia U.
I-1-5-1-1	Stratemeyer, Florence[11]	Columbia U.	1924	Columbia U.
I-1-5-1-1-1	Short, Edmund	Columbia U.	1965	Pennsylvania State U.
I-1-5-1-1-2	Openshaw, M. Karl	Columbia U.	1963	U. of Colorado
I-1-5-1-1-2-1	Ganey-Wieder, Mary	U. of Colorado		U. of Colorado
I-1-5-1-1-3	Lindsey, Margaret	Columbia U.		**Columbia U.**
I-1-5-1-1-4	Hermanowicz, Harry	Columbia U.		Columbia U.
I-1-5-1-2	Rugg, Harold Oroway[12]	U. of IL U-C	1917	U. of Chicago/Colmb.
I-1-5-1-2-1	Smith, B.O.	Columbia U.	1938	U. of IL U-C
I-1-5-1-2-1-1	Nuthall, Graham	U. of IL U-C	1966	New Zealand
I-1-5-1-2-1-2	McClellan, James E.	U. of IL U-C	1955	SUNY
I-1-5-1-2-1-3	Lieberman, Myron	U. of IL U-C	1953	U. of S.California
I-1-5-1-2-1-4	Goodson, Max	U. of IL U-C	1949	U. of Wisconsin
I-1-5-1-2-1-5	Coombs, Jerold	U. of IL U-C	1964	U. of British Colmb.
I-1-5-1-2-1-6	Amieke, Shino	U. of IL U-C	1959	U. of Hawaii
I-1-5-1-2-1-7	Ennis, Robert	U. of IL U-C	1958	U. of IL U-C
I-1-5-1-2-1-8	Engle, Shirley	U. of IL U-C	1953	U. of Indiana
I-1-5-1-2-1-8-1	Taylor, Bob	Indiana U.	1957	U. of Colorado
I-1-5-1-2-1-8-1-1	Sherk, Harry	U. of Colorado	1971	Alberta, Dept. of Ed.
I-1-5-1-2-1-8-1-2	Prait, Robert	U. of Colorado	1970	U. of N. Iowa
I-1-5-1-2-1-8-1-3	Pynneson, Thomas	U. of Colorado	1972	U. of Texas
I-1-5-1-2-1-8-2	Longstreet, Wilma	Indiana U.	1970	DePaul U.
I-1-5-1-2-1-8-3	Hutson, Harry	Indiana U.	1978	Indiana U.
I-1-5-1-2-2	Hanna, Paul[17]	Columbia U.	1929	**Stanford U.**
I-1-5-1-2-2-1	Wilson, Herbert	Stanford U.	1957	U. of Arizona
I-1-5-1-2-2-1-1	Scotkin, Jacie	U. of Arizona	1977	U. of Arizona

Von Helmholtz

1-1-5-1-2-2-1-2	Beezer, Bruce	U. of Arizona	1970	N.Carolina State
1-1-5-1-2-2-1-3	Cappoueelo, Emma	U. of Arizona	1965	U. of Massachusetts
1-1-5-1-2-2-1-4	Justin, Neal	U. of Arizona	1969	Florida Atlantic U.
1-1-5-1-2-2-1-5	Borral, David	U. of Arizona	1976	San Diego State U.
1-1-5-1-2-2-2	Drummond, Harold	Stanford U.	1948	U. of New Mexico
1-1-5-1-2-2-2-1	Van Dongen, Barbara	U. of New Mexico	1975	Albuquerque Schools
1-1-5-1-2-2-2-2	Ramsey, Curtis	Peabody College	1958	Bir Zeit U., Israel
1-1-5-1-2-2-2-3	Miller, Jack	Peabody College	1959	Peabody College
1-1-5-1-2-2-2-4	Jones, Douglas	Peabody College	1957	U. of N.Carolina
1-1-5-1-2-2-2-5	Hughes, James	U. of New Mexico	1973	Oakland U.
1-1-5-1-2-2-2-6	Hargrove, Richard	Peabody College	1957	Lamar U.
1-1-5-1-2-2-2-7	Sloan, Fred	Peabody College	1957	Southern IL U.
1-1-5-1-2-2-2-7-1	Dobson, Russell	U. of Oklahoma	1966	Oklahoma State U.
1-1-5-1-2-2-2-7-1-1	Goldenberg, Ron	Oklahoma State U.	1972	U. of Georgia
1-1-5-1-2-2-2-7-1-2	Grahlman, Bill	Oklahoma State U.	1975	U. of Tulsa
1-1-5-1-2-2-2-7-1-3	Roubinek, Darrell	Oklahoma State U.	1971	U. of Arizona
1-1-5-1-2-2-2-8	Davis, O.L.	Peabody College	1958	U. of Texas
1-1-5-1-2-2-2-8-1	Gay, Geneva	U. of Texas	1972	Purdue U.
1-1-5-1-2-2-2-8-2	Gregory, Thomas	U. of Texas	1969	Indiana U.
1-1-5-1-2-2-2-8-3	Bennett, Christine	U. of Texas	1972	Indiana U.
1-1-5-1-2-2-2-8-4	Ponder, Gerald	U. of Texas	1974	North Texas State
1-1-5-1-2-2-2-8-5	Kysilka, Marcella	U. of Texas	1969	Florida Tech.
1-1-5-1-2-2-2-8-6	Hunkins, Francis	Kent State U.	1966	U. of Washington
1-1-5-1-2-2-2-8-6-1	McKim, Les	U. of Washington	1977	Belevue Schools
1-1-5-1-2-2-2-8-6-2	Boone, Stan	U. of Washington	1970	Shoreline Schools
1-1-5-1-2-2-2-8-6-3	Clegg, Blanche	U. of Washington	1970	Akron U.
1-1-5-1-2-2-2-8-6-4	Douce, Hermond	U. of Washington	1969	U. of Jamaica
1-1-5-1-2-2-2-8-7	Kean, John	Kent State U.	1965	U. of Wisconsin
1-1-5-1-2-3	Harap, Henry[13]	Columbia U.	1923	Columbia U.

1 Herbart, J.F.	Gottingen	1802	Konigsberg
1-1 Hartenstein, G.			Leipzig
1-2 Drobisch, M.W.			Leipzig
1-2-1 Ziller, T.			Leipzig
1-2-1-1 Rein, W.	Leipzig	1854	Leipzig
1-2-1-1-1 McMurry, Charles	Halle	1887	Jena
1-2-1-1-2 McMurry, Frank	Jena	1889	Columbia U.
1-2-1-1-3 VanLiew, C.C.	Jena		Peabody College
1-3 Frick, O.	Jena		Halle
1-4 Stoy, K.V.			Jena
1-4-1 DeGarmo, C.[1]	Halle	1886	Cornell U.
1-4-1-1 Bode, Boyd[10]	Cornell U.	1900	Ohio State U.
1-4-1-1-1 Alberty, Harold	Ohio State U.	1927	Ohio State U.
1-4-1-1-1-1 Spafford, Ivol	**Ohio State U.**		
1-4-1-1-1-2 Luecking, Evelyn	**Ohio State U.**		
1-4-1-1-1-3 Lawhead, Victor	**Ohio State U.**		
1-4-1-1-1-4 Ramseyer, John	**Ohio State U.**		
1-4-1-1-1-5 Chieva, Clare	**Ohio State U.**		
1-4-1-1-1-6 Robertson, Jack	**Ohio State U.**		
1-4-1-1-1-7 Noda, Daniel	**Ohio State U.**		
1-4-1-1-1-8 Van Til, William	Ohio State U.	1946	Indiana State U.
1-4-1-1-1-8-1 Vars, Gordon	Peabody College	1958	Kent State U.
1-4-1-1-1-8-1-1 Broda, Herbert	Kent State U.	1977	Wayne County Schools
1-4-1-1-1-8-1-2 Dyer, Daniel	Kent State U.	1977	Harmon Middle School
1-4-1-1-1-8-1-3 Bergmann, Sherrel	Kent State U.	1976	Lake Forest College
1-4-1-1-1-8-2 Fox, Charlyn Joyce	Indiana State U.	1974	U. of Missouri
1-4-1-1-1-8-3 Warren, Paul	New York U.	1967	Boston U.
1-4-1-1-1-8-4 Gibboney, Richard	Peabody College	1957	U. of Pennsylvania
1-4-1-1-1-8-5 Kelly, Marvin	Indiana State U.	1973	Florida Schools
1-4-1-1-1-8-6 Turner, Harold	Peabody College	1956	U. of Missouri
1-4-1-1-1-8-7 Replogle, Vernon Loy	Illinois State U.	1951	Illinois State U.
1-4-1-1-1-8-8 Morris, Robert	Indiana State U.	1977	Auburn U.
1-4-1-1-1-8-9 Groebli, John	Peabody College	1958	
1-4-1-1-1-9 Klohr, Paul	Ohio State U.	1948	Ohio State U.
1-4-1-1-1-9-1 Overly, Norman	Ohio State U.	1966	Indiana U.
1-4-1-1-1-9-1-1 Ovando, Carlos	Indiana U.	1976	U. of S.California

1-4-1-1-1-9-1-2	Baron, Daniel	Indiana U.	Indiana U.
1-4-1-1-1-9-1-3	Silvernail, David	Indiana U.	1977 U. of Maine
1-4-1-1-1-9-2	Shaker, Paul	Ohio State U.	1975 Mount Union College
1-4-1-1-1-9-3	Saleh, Labiba	Ohio State U.	1963 Jordon, Min.of Ed.
1-4-1-1-1-9-4	Abdel-Halim, Ahmen	Ohio State U.	1964 Riyhad U., Saudi Ar.
1-4-1-1-1-9-5	Beegle, Charles	Ohio State U.	1965 U. of Virginia
1-4-1-1-1-9-6	Chiareloti, Leigh	Ohio State U.	1976 Bowling Green U.
1-4-1-1-1-9-7	Bullough, Robert	Ohio State U.	1976 U. of Utah
1-4-1-1-1-9-8	Williams, David	Ohio State U.	1973 Pennsylvania State U.
1-4-1-1-1-9-9	Pinar, William	Ohio State U.	1972 U. of Rochester
1-4-1-1-1-9-9-1	Coward, Russell	U. of Rochester	SUNY, Brockport
1-4-1-1-1-9-9-2	Wallenstein, Sandra	U. of Rochester	Diona Press
1-4-1-1-1-9-9-3	Schwartz, John	U. of Rochester	U. of Rochester
1-4-1-1-1-9-9-4	Padgham, Ronald	U. of Rochester	Rochester Inst.Tech.
1-4-1-1-1-9-9-5	Somers, Stephen	U. of Rochester	HEW - Washington
1-4-1-1-1-9-9-6	Grumet, Madeleine	U. of Rochester	Hobart/William Smith
1-4-1-1-1-10	Frick, Herman	Ohio State U.	1942 Florida State U.
1-4-1-1-1-10-1	Harris, Samuel	Florida State U.	1961 U. of West FL
1-4-1-1-1-10-2	Hernandez, Dave	Florida State U.	1968 Florida Tech. U.
1-4-1-1-1-10-3	Oberhausen, Marilyn	Florida State U.	1975 Brenau
1-4-1-1-1-10-4	Houmes, Gary	Florida State U.	1970 Winthrop College
1-4-1-1-1-10-5	Seigel, Betty	Florida State U.	1961 W.N.Carolina State
1-4-1-1-1-10-6	Shannon, Robert	Florida State U.	1960 U. of South FL
1-4-1-1-1-11	Laughlin, Hugh	Ohio State U.	1926 Ohio State U.
1-4-1-1-1-11-1	Harmen, Earl	Ohio State U.	1958 U. of Utah
1-4-1-1-1-11-1-1	Pitt, Carl	U. of Utah	1969 Horne, Montana
1-4-1-1-1-11-1-2	Krall, F.R.	U. of Utah	1972 U. of Utah
1-4-1-1-1-11-1-3	Wight, Ted	U. of Utah	1971
1-4-1-1-1-11-1-4	Mitchell, Charles	U. of Utah	1971 Indiana
1-4-1-1-1-11-1-5	Strautopoulos, Irene	U. of Utah	1969 Athens, Greece
1-4-1-1-2	Hulfish, H. Gordon	Ohio State U.	Ohio State U.
1-4-1-1-3	Griffin, Alan		
1-4-1-1-4	Kircher, Everett		
1-4-1-1-5	Jewett, Robert		

Robert Park

1	Park, Robert	U. of Chicago		U. of Chicago
1-1	Young, Kimball	U. of Chicago		U. of Wisconsin
1-1-1	Herrick, Virgil	U. of Wisconsin	1938	U. of Wisconsin
1-1-1-1	Macdonald, James	U. of Wisconsin	1956	U. of N.Carolina
1-1-1-1-1	Zahorik, John	U. of Wisconsin	1971	U. of Wisconsin
1-1-1-1-2	Molnar, Alex	U. of Wisconsin	1972	U. of Wisconsin
1-1-1-1-3	Zaret, Esther	U. of Wisconsin	1967	Virginia Cmwlth. U.
1-1-1-1-4	Ubblelohode, Robert	U. of Wisconsin	1972	Earlham College
1-1-1-1-5	Mann, John	U. of Wisconsin	1966	
1-1-1-1-5-1	Willis, George	Johns Hopkins U.	1971	U. of Rhode Island
1-1-1-1-6	Weingarten, Ira	U. of N.Carolina		CABOT, Chicago
1-1-1-2	Bennett, Roger	U. of Wisconsin	1970	Memphis State U.
1-1-1-2-1	Bentham, B.J.	Texas Tech U.	1977	IDEA, Los Angeles
1-1-1-3	Huebner, Dwayne	U. of Wisconsin	1936	Columbia U.
1-1-1-3-1	Apple, Michael	Columbia U.	1970	U. of Wisconsin
1-1-1-3-1-1	Rosario, Jose	U. of Wisconsin	1976	SUNY
1-1-1-3-1-2	King, Nancy	U. of Wisconsin	1976	Wheelock College
1-1-1-3-1-3	Franklin, Barry	U. of Wisconsin	1974	U. of S.Carolina
1-1-1-3-2	Manolakes, Theodore	Columbia U.	1961	U. of IL U-C
1-2	Estvan, Frank	U. of Chicago		Wayne State U.
1-3	Eberman, Paul	U. of Chicago		

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Walter Dearbourne and Alexander Inglis

1	**Dearbourne, Walter** and Inglis, Alexander			Harvard U.
1-1	Hopkins, L. Thomas	Harvard U.	1922	Columbia U.
1-1-1	Leese, Joseph	Columbia U.	1943	Columbia U.
1-1-1-1	Marchand, Antoinette	SUNY		Temple U.
1-1-1-2	Regan, Ellen	SUNY		OISE
1-2	Bruner, Herbert	Harvard U.		Columbia U.
1-2-1	Wood, Hugh	Columbia U.	1937	U. of Oregon
1-2-1-1	Lawrence, G. Beryani	U. of Oregon	1965	
1-2-1-2	Upraity, T.N.	U. of Oregon	1961	Nepal's Ambs.to France
1-2-1-3	Akers, Howard	U. of Oregon	1953	
1-2-1-4	Newbry, Burton	U. of Oregon	1953	Usaid, Katmandu,Nepal
1-2-1-5	Debernardis, Amo	U. of Oregon	1951	Portland Cmty.College
1-2-1-6	Iwpecoven, Hoevard	U. of Oregon	1951	
1-2-1-7	McNutt, Paul	U. of Oregon	1950	
1-2-1-8	Smith, Richard	U. of Oregon	1947	

George Beauchamp

1	Beauchamp, George	Michigan State U.		Northwestern U.
1-1	Talmage, Harriet	Northwestern U.	1967	U. of IL CC

Max Beberman

1	Beberman, Max			U. of IL U-C
1-1	Dilley, Clyde	U. of IL U-C		
1-1-1	Roetter, Michael	U. of Toledo	1976	Owens Tech.College

Lois Beilin

1	Beilin, Lois	Columbia U.	1969	Hunter College

G.L. Berry

1	Berry, G.L.			U. of Alberta
1-1	Westbury, Ian	U. of Alberta	1968	U. of IL U-C
1-1-1	McKinney, W. Lynn	U. of Chicago	1972	U. of Rhode Island
1-1-2	Kepler, W.	U. of Chicago	1977	Columbia U.
1-1-3	Arlin, M.	U. of Chicago	1972	U. of British Colmbia

William Brink

1	Brink, William			Northwestern U.
1-1	Bishop, Leslee	Northwestern U.	1960	U. of Georgia

Bob Burton Brown

1	Brown, Bob Burton			U. of Florida
1-1	Vickery, Tom Rusk	U. of Florida	1968	Syracuse U.
1-1-1	McIntyre, D. John	Syracuse U.	1977	Illinois

Roald Campbell

1	Campbell, Roald			U. of Chicago
1-1	Myers, Donald	U. of Chicago	1960	Oklahoma State U.

John Chase

	Chase, John			U. of Chicago
-1	Anderson, Robert	U. of Chicago	1940	U. of Chicago

Virgil Clift

	Clift, Virgil	Ohio State U.		New York U.
-1	Ornstein, Allan	New York U.		Loyola U.

George Fahey

	Fahey, George			U. of Pittsburgh
-1	Miller, Yvonne	U. of Pittsburgh	1973	Norfolk State U.

William S. Grey

	Grey, William S.	U. of Chicago		U. of Chicago
-1	Burton, William	U. of Chicago		Harvard U.
-2	Moore, Walter	U. of Chicago		U. of IL U-C

M.E. Haggerty

	Haggerty, M.E.			U. of Minnesota
-1	Pick, Wesley	U. of Minnesota		

Ernest Horn

	Horn, Ernest			Indiana U.
-1	Willard, Ruth	U. of Iowa	1954	U. of Oregon
-1-1	Gengler, Charles	U. of Oregon	1965	Oregon College of Ed.

Mauritz Johnson

	Johnson, Mauritz			Cornell U.
-1	Posner, George	SUNY, Albany	1972	Cornell U.
-1-1	Rudnitsky, Al	Cornell U.	1976	Smith College
-2	Duke, Daniel	SUNY, Albany	1972	Stanford U.

K. Keohang

1	Keohang, K.			U. of London
1-1	Kelly, P.J.	U. of London	1972	U. of London
1-1-1	Nicodemus, Robert	U. of London	1973	The Open U.

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Herman Sigvald

1	Sigvald, Herman			U. of Lund
1-1	Husen, Torsien	U. of Lund		U. of Lund
1-1-1	Dahllof, Urban	U. of Lund		U. of Goteborg
1-1-1-1	Lundgren, Ulf P.	U. of Goteborg	1972	Stockholm Inst. of Ed.

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F.B. Knight

1	Knight, F.B.	Columbia U.	1920	
1-1	Remmers, H.H.	State U. of Iowa	1927	Purdue U.
1-1-1	Gage, N.L.	Purdue U.	1947	Stanford U.
1-1-1-1	Clark, Christopher	Stanford U.	1976	Michigan State U.
1-1-1-2	Peterson, Penelope	U. of Wisconsin	1976	U. of Wisconsin
1-1-1-3	Winne, Phillip	Stanford U.	1975	Simon Fraser U.
1-1-1-4	Shutes, Robert	Stanford U.	1969	Texas A & M U.
1-1-1-5	Rosenshine, Barak	Stanford U.	1968	U. of IL U-C

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Birk Mendenhall

1	Mendenhall, Birk			
1-1	Blackman, Charles	Ohio State U.	1957	Michigan State U.
1-1-1	Rathmiller, Peggy	Michigan State U.	1968	Michigan State U.
1-1-2	Phillips, James	Michigan State U.	1960	Kent State U.
1-1-2-1	McNally, Elaine	Kent State U.	1976	Iowa State U.
1-1-2-2	Hamden, Mohamed Ziad	Kent State U.	1977	U. of Ryad, Saudi Ar.
1-1-2-3	Lerrick, Stephen	Kent State U.	1976	Amer.School Health
1-1-2-4	Kunstel, Franke	Kent State U.	1975	U. of S.Carolina
1-1-2-5	Forgan, Harry	Kent State U.	1969	U. of Miami
1-1-2-6	Andreyka, Robert	Kent State U.	1969	Pennsylvania State U.
1-1-2-7	Deming, Basil	Kent State U.	1971	U. of Maryland

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Dorothy Miller

	Miller, Dorothy	U. of Pittsburgh	1960	U. of Pittsburgh
-1	Dyer, Prudence	U. of Pittsburgh	1966	Drake U.
-1-1	Gerlovich, Jack	Drake U.	1977	Dept. of Pub.Instr.
-1-2	McGrady, Bonny	Drake U.	1976	Des Moines Schools
-1-3	Wilson, Lorraine	Drake U.	1975	Cen.of Appl.Ekisti.

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J. Cecil Parker

	Parker, J. Cecil			U. of CA, Berkeley
-1	Costa, Arthur	U. of CA, Berkeley	1969	California State U.
-2	Rubin, Louis	U. of CA, Berkeley		U. of IL U-C

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Art Partridge

	Partridge, Art	Stanford U.	1959	U. of N.Colorado
-1	Hosford, Philip	U. of N.Colorado	1963	New Mexico State U.
-1-1	Dowell, Art	New Mexico State U.	1973	Arapahoe Jr.College
-1-2	Barker, Marie	New Mexico State U.	1973	U. of Texas
-1-3	Shroder, Angela	New Mexico State U.	1975	U. of Texas
-1-4	Smith, Clarence	New Mexico State U.	1973	Arapahoe H.S.
-1-5	Neuenfeldt, John	New Mexico State U.	1977	U. of Wisconsin

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Carl Rogers

	Rogers, Carl	Columbia U.		U. of Chicago/Ohio
-1	Combs, Arthur	Ohio State U.	1946	U. of Florida
-1-1	Frymier, Jack	U. of Florida	1957	Ohio State U.

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Sewell Wright

	Wright, Sewell			
-1	Schwab, J.J.	U. of Chicago		U. of Chicago
-1-1	Connelly, F.M.	U. of Chicago		U. of Chicago
-1-1-1	Enns, Robin	OISE		OISE
-1-2	Fox, Seymour	U. of Chicago		
-1-3	Seigel, Judith	U. of Chicago		

Sewell Wright

I-1-4	Arby, Thomas	U. of Chicago		
I-1-5	Ott, Mary Diederich	U. of Chicago		Cornell U.

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Richard Gregory

	Gregory, Richard			Cambridge U.
-1	Parlett, Malcolm	Cambridge U.	1967	Edinburgh U.
-1-1	Hamilton, David	Edinburgh U.	1973	Glasgow U.

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Sir Godfrey Thomson

	Thomson, Sir Godfrey			U. of Edinburgh
-1	Nisbet, Stanley	U. of Edinburgh	1940	U. of Glasgow
-1-1	Stenhouse, Lawrence	U. of Glasgow	1956	Centre for Applied Research in Ed., U. of E.Anglia

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An Interview with a Dutch Pedagogue

Max Van Manen
University of Alberta

The following interview was made with Dr. M.J. Langeveld at his home in Bilthoven, the Netherlands. Langeveld, now retired, has been described by his contemporaries and followers as the most significant influence in Dutch pedagogic and educational theory since the second world war. He has published dozens of books and articles in Dutch and German, and at present he is still active as author, speaker, and pedagogic consultant. As founder and senior professor of the Institute for Pedagogic and Didactic Studies at the University of Utrecht Langeveld brought together the work of a group of scholars who began to experiment with a special kind of inquiry*, life-world studies in psychology, education and pedagogy. This work was indicative of an emerging personalistic pedagogy pursued within a phenomenological framework.

***Van Manen:** In your opinion, what is the contribution of phenomenology to the study of education and pedagogy in the Netherlands and Europe?*

Langeveld: The main contribution of phenomenology in education is the introduction of the concept of the life-world. In other words, the idea that there is a world which precedes theorizing and which precedes any kind of scientific and theoretic structures. It is the world in which we live and this is related, I believe, to the phenomenological interest since phenomenology always places itself in immediate proximity to the lived experiences of the life-world. No other form of scientific inquiry does this. In contrast, science classifies, selects experimental subjects, creates observational categories, and so forth. The immediacy of the field of lived experiences is the accomplishment of Husserl's way of studying the phenomena directly, that is to say without theoretical detours. Thus, the life-world was created long before he introduced explicitly the term "life-world". But when you ask the same Husserl how he sees this epistemologically, then you leave the domain of the life-world -- you pose a theoretical question and Husserl may come up with answers which could indeed be faulty arguments. Then it becomes clear that Husserl is a mathematician who gets involved in a form of philosophizing which is undeniably idealistic. Consequently his phenomenology reflects less manifestly a life-world approach than might really be expected of him. But we should remind ourselves that it is easy for us to pass such judgements from a point of view which has the clarity of hindsight -- meanwhile Husserl has been dead for more than forty years.

Husserl arrived relatively late at the idea of the life-world, and the concept has no conscious precedent, but there were ideological precedents. For example, Hegel made the distinction between objective spirit and subjective spirit; and then there is that materialism of Karl Marx who had to go through Hegel in order to arrive at the philosophy of concrete life. But this materialism has little to do with the concern of the life-world. The life-world of Marx is a world charged with a cognitive interest in political ideology -- it is not the pretheoretic experienced world of everyday thinking and acting. These comments are not meant to criticize a political point of view. I am merely saying that because of this a priori factor of the political, one should not confuse phenomenological life-world analysis with political analysis.

***Van Manen:** What was the pedagogic scene like in the nineteen forties when you started your career? Did you notice a lack of attention for the life-world of the child among educators before you?*

Langeveld: They could not articulate an interest for a subject with which they were not in some way or other familiar. Naturally, they lived in the life-world but they talked about "practice" or "the field" -- the "praktijk" they said. And that was an innocent precursor about which we could ask: "Don't you really mean the practice of the life-world? Or do you mean applied theory?" That is the important question, I believe. Well then, the educator in those days was quite willing to respond by saying: "I mean both." And thus you could see

at that time what he can still see today: a two-fold interest among educators -- on the one hand there is the philosophy of education and on the other hand there is the practice. Consequently, the practitioners felt "we are really the ones who do it", while the academics felt "we are really the ones who understand it." And between the educational practitioners and the educational theorists there yawned an enormous abyss. It seemed to me that the idea of the life-world could become the bridging interface which otherwise separates the two groups. The important point is, however, that once you have introduced the idea of the life-world, you have also introduced the principle of a philosophic-anthropological interpretation of the life-world in the way of the pedagogic mode-of-being-in-the-world. In other words, a phenomenological pedagogy immediately and irrevocably implies a value-theory. When children are born they did not ask for their conception, this life. So why do we keep them alive? That is not a value-judgement but a value-action which belongs in the life-world.

Van Manen: What do you feel are the main themes of such value theory?

Langeveld: Recently I have described them as two themes: a pedagogic value-theory and the image of the human being in education. The latter I have chosen since the educational literature completely glosses over the fact that human beings are not born as mature adults. We find in the literature many so-called ideal images of the educated person, derived from sociology, philosophy, psychology, Marxism, and so forth. But when you ask, "what really happens to the child?", then there is silence. The question is simply not addressed. And so I say, the notion of the image of humanness is a value structure which contributes to the pedagogic value theory. The value theory intends to show that in the pedagogic life-world values are already functioning. A phenomenological pedagogy wants to understand what are the values which are embedded in the life-world of the pedagogic-being-in-the-world. We should attempt to understand or grasp pedagogy as a life-world phenomenon, and in so doing arrive at a value theory.

Van Manen: Do you ultimately then "describe" the nature of a functioning value theory or do you end up with the pedagogic decision of "prescribing" a value theory?

Langeveld: I would make visible phenomenologically that it is impossible to be involved as educator while ignoring the pretheoretic relevancies of the life-world. Those relevancies belong to the structure of the life-world implicitly, while they can be made explicit by the pedagogue who reflects on them. This means that when a child is born we bear the responsibility, and that is a value-concept. When I feed the child and keep it alive then this is the immediate reality of the life-world. But why do I sustain the child? How do I have to make decisions about the life of this child? If at birth, I would let the child starve, everyone would say, "you are a murderer, that is intolerable." But when you keep the child alive -- what are you then? The point is, of course, that pedagogy is from the very beginning a moral act. And when you continue this line of thinking then you get, for example, the following. It is, of course, very fine when someone says, "well, I will undertake the responsibility for this child, or these children." All right ... but does she do it? That is the first question. "Does she do it?" In other words, "Is he or she dependable?" That is the first question of a pedagogue. And then next you inquire, "Can she do it?" This is the question of capability. And so I get immediately three value dimensions together: responsibility, dependency, and capability. Capable of what? Talking? Criticizing? No, capable of doing. The pedagogic capability lies in the doing! That is a value-requirement of every educator. Well, then you may ask, where does a person acquire such capability? And then I answer, "This takes me outside the value-theory. Now I arrive at the formative process of education. And this is where we need pedagogues."

These then are only a few starting points from where you see immediately how in the pedagogic world as life-world certain realized values lie embedded. Their realization may be deficient in many respects, but the point is that they are present. And naturally that has quite far-reaching consequences, because it is on this basis that the entire problematic of education is grounded.

Van Manen: Is the pedagogue a moralist?"

Langeveld: The pedagogue realizes morals -- not as moralist because a moralist only preaches or talks about values. A pedagogue is a person who realizes values in the lives of children. And, it's true that these are primarily moral values since they define human relationships.

Van Manen: In what way is the pedagogic capability of the professional educator of a different modality than it is for the parent?

Langeveld: First of all the professional pedagogue is not responsible for the presence (the birth) of the child. That responsibiility lies with the parents. And this is the starting point for their involvement in the immediate life-world relationship which is profoundly fundamental for the whole of human existence. Even if the educator was not there, things would not come to a stop. Children are born. One could say, this is such a basic principle for educators that our first question really ought to be: "To what extent is the educator successful in entering the life-world situation?" If he is not successful then he has no business being an educator. He might as well become a bus-driver or a guide on a cultural tourist bus. "Everyone look to the sight at the right and off we go again!" So the question for educators is, "What is the nature of the specific relationship of this pedagogue and this child?" "What can he or she do with a child?" "What is a child in his life?" Maybe he is a person about whom you have to conclude: "Actually he never has a real contact with this child." He stands in front of a class presenting important knowledge -- as we see done especially in many high schools. So that you cannot help but say, "gosh what a knowledgeable fellow!" "This teacher knows what he is talking about!" "What scholarship! Too bad he did not become a university teacher." "If only he would do a doctoral program then we could make him into a professor." But he stands in front of a class. And, now he has to relate the subject matter to the children in such a way that it becomes pedagogically relevant; that is to say, relevant in the life-world of the child. Well, that is fundamental for our didactic or methodological thinking -- especially in the praxis of the presentation, so that you may say that it has to become real in the life-world of the child. And if I lead this child out of his life-world toward the world of the theoretic then I have to ensure that this road remains relevant. The child must be able to live it in the here-and-now. If the theoretical world of school subject matter is completely cut off from the life-world then the child becomes an alienated inhabitant of that world. And this is a phenomenon which we educators only know too well.

The pedagogic task is very ambivalent. On the one hand the pedagogue must constantly enter the life-world. And, on the other hand, he has to help the child to open this world into the theoretic. But he has to keep in mind that the child has to live with it. And that boy or girl therefore has to do two things at once: on the one hand the child has to make it creatively part of his or her lived-in -world, and on the other hand he or she has to be able to be creatively productive with it in the theoretical world. These are two different forms of creativity. For example, take the subject of sex-education. We can say about sex-education: "What good are the stories if you cannot live with them?" In that case you may as well not bother. So the important question is: "Does it become part of the life-world?"

Van Manen: Is it your opinion that analytic descriptions of pedagogic aspects of the life-world could play a shaping role in the preparation of teachers -- for example in helping them to develop competence in gaining access to the life-world, and also for acting competently as pedagogues in that life-world? I wonder in what way specific life-world descriptions might assist in sensitizing teachers to special topics, problems of experiences.

Langeveld: I would not know what, outside of this relationship, you could do with a teacher. Ignoring the life-world would amount to preparing teachers for simply "passing down" pieces of knowledge of scholarship. In that case, what you are really saying to the child is this: "Here is a wall, now you must climb over it." Of course, this is not an uncommon approach in education -- the teacher does nothing else than rattling off theoretical nonsense. In fact, he is saying to the child: "If you cannot get over that wall, then you are stupid." "You have a low IQ!" "You only score so much!" So I am back at my earlier statement that the life-world is pedagogically important since the child has to live with the subject matter of our teaching. We must

guard ourselves against the danger of making the teacher estranged from the life-world of the child.

Van Manen: So the intent is to prevent the teacher from becoming estranged from the life-world; that is, the objective of teacher education is to make the teacher life-world-able, child-life-world-able. What then are the sorts of phenomenological topics which might be most appropriate helping the beginning teacher to become able in this sense? Most of the phenomenological studies which emerged from the so-called Utrecht School were more focussed on the social world and the psychology of everyday life -- less on the world of the child in school, the curriculum, etc.

Langeveld: It might be illustrative to refer to Piaget in this context. You see, he is an example of an individual who stands outside the life-world, and who feels that he can understand the spatial developments of the dimensions of the life-world of the child from a purely theoretical structuralist position. So for him the developmental process of the spatial experience of the child is the natural route toward three-dimensionality. Instead, one should ask the question: "What is the spatial experience primarily like for the child?" Well, that is in which things stand: the tables, sofas and chairs and the house stand in space. That is why you can walk around things, climb over them, fall off them, crawl behind them. Thus. there is an implicit theoretic possibility to arrive at the consciousness of three-dimensionality. However, chances are that you would never arrive at it, not even in a life-time. In some earlier cultures there existed no explicit conception of three-dimensionality but it did not trouble its members in the least. It did not prevent them from walking around rocks, climbing over them, hiding behind them, or even falling off the rocks. So it is in the process of becoming conscious of things that we come up with categories -- categories such as "time". What is time for the child? Well, that is becoming hungry. Isn't Daddy home yet? Becoming impatient. These are matters to get at what time is like in the world of the child.

Van Manen: What then does it mean to educate with respect to this?

Langeveld: It may mean to accustom the child to regularities. Indeed, the child should learn to divide up its time, to be able to plan for activities. You should be able to make an appointment, because the child must also learn to become dependable. One has to be able to depend on another person. So, in time in the sense of the clock, clock time, makes social relations, social arrangements with others possible. Continuity, contemporaneity, future, past time, these are all functional (not incidental) dimensions of the life-world. In a world thus oriented I must teach a child to read the clock. But, of course, he should not just be able to read the clock, he has to live with it as well. And, so you must confront the experience of human life-worlds in the technological structures of a world which says: "Yes, but you should try not to become a slave of the clock." This means that you have to learn a piece of life-world freedom, which you can take with you when you enter the world of work and technology. And the child should be able to retort: "That is all fine and dandy but if I don't catch my ten-to-eight bus then I'll be late at school or at work.. So I have to be able to count on it that the bus-driver gets to work in time as well. And in this way, we have involved the children directly in the question of social structures, and so on. But my question is, "where is all this with Piaget?" "Nowhere!" There is another important question and this has to do with language. What is the significance of language in the life-world of the child? Communication? Yes! Relationships, therefore? Yes! But it also concerns other issues. Language brings things to us, which we do not know or understand. It calls forth things in us, which we did not believe could be called upon in us. So it is much more than solely communication and information. It is also, if you like, inspiration. It has to be recognized that, before the semantic and the logical aspects of language as a tool of knowledge, language is solidly founded in life-world relations. Therefore, language cannot be analyzed adequately in terms of cognitive developmental foundations, and so forth.

Van Manen: In terms of your own work and that of others like you, what do you feel are the tasks and priorities with which educators should be most concerned?

Langeveld: The challenge is to penetrate deeper and deeper into an anthropological phenomenology of the life-world whereby the philosophic-anthropological categories of child-rearing and education are grouped congenitally together. They form irreducible components. This is the reason why for my recent book EVERY CHILD IS A PERSON, I chose the subtitle: Thinking and acting together in rearing and educating children. These two tasks (child rearing and educating) must be brought to consciousness without becoming alienated from reality by making this bringing to consciousness too theoretically charged with abstract nonsense. Phenomenology as an anthropological epistemology must take care, therefore, that we do not get alienated from the world in which we all must live. And it should be added that phenomenological inquiry should make it possible to contribute to an understanding of the way in which such alienation from the life-world is in fact a problem of living in this society. So this is the important, pedagogically fundamental question: how can I help bring a child to humanness in a world which has alienated itself from him -- a world which upon entering is an alienating world.

Van Manen: You feel that teachers have become alienated to a certain extent from children, or from what it is to be a child. What factors do you feel are responsible for this? How significant is teacher-education in this respect?

Langeveld: In part teacher-education contributes to this; there is too much theorizing in an non-phenomenological sense. Another problem is that when you prepare a young man or a young woman for education, then this is for the young person necessarily a process of distantiation of his or her own personhood. It involves distantiation from childhood, because he or she is no longer a child. It is distantiation from pubescence because as pubescent he or she must attempt to achieve as soon as possible a sense of adulthood. And so, in a way the beginning teacher feels very thrilled about this process of distantiation. It is a thrill to stand in front of the class and "to tell it like it is." That feels very good for an almost outgrown late-adolescent. He who declares himself anti-authoritarian is almost authoritarian because he makes a claim to adulthood which is not yet there. So I feel that the whole developmental process of the young person entering teacher-preparation is a problematic issue. This is less of a problem in a more tradition-oriented society where traditional norms, habits and ideas are simply passed on, and where adulthood is almost "preaching" so to speak. But when you live in an age where you hear people say, "That is authoritarian" -- which it can be, then the role of the young person as educator becomes a real distortion which cannot be avoided by the young person. It is something with which he can no longer cope. Thus the problem is that he has not yet gained relevant life-experiences.

Van Manen: How do you describe the forming process of the educator?

Langeveld: The interpretive moment is the most crucial. The interpretive makes clear how it should be lived. Such interpretive moments we also recognize in the performing arts, such as in the actor or the singer. Thus the first step out of the ordinary life-world is made, for example, by singing, or by writing your language in poetic form. In the performing arts the second step is that you become an actor, and the third step that there is an academy where you then get prepared for the life of an actor. And at this point you return from outside back into the ordinary life-world. That is the entire formative process. You proceed by way of hermeneutic processess to a didactic form wherein you return through hermeneutic processes -- but now in a different garb. Now you are no longer the youth which emerges from it but the man or the woman who sings it. Thus on the whole the preparation of educators is of a hermeneutic character. That is why I simply refer to it as "hermeneutic activity."

*Some aspects and implications of this work has been discussed by Van Manen in "The Phenomenology of Pedagogic Observation", CANADIAN JOURNAL OF EDUCATION, Vol. 4, No. 1, 1979, pp. 5-16; and in "An Experiment in Educational Theorizing: The Utrecht School", scheduled to appear in INTERCHANGE (Summer, 1979 issue).

The Work of Dwayne Huebner: A Summary and Response

Kirke White
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The intensive study of one man's thought as it developed over a period of twelve years in an exciting, challenging and humbling experience. How does a student attempt to handle a group of writings which by no means neatly follow and build upon one another, but which must bear some relationship to each other if merely because they are written by the same author? After attempting several approaches, I have decided that my best hope for writing the type of paper that I wish is to begin chronologically. By this I mean that I shall summarize each article, and in the process point out themes as they develop. A general discussion of themes will comprise a second section of this paper. The final section will contain a critical appraisal, from a personal perspective, of validity and utility of "Hubernian" conceptions.

Dwayne Huebner is a complex and often frustrating thinker. His articles and papers are tightly written. Any summarization of them courts danger. Furthermore, any attempt to make a brief analysis of his thought is probably foolhardy. So, naturally, I begin.

Part I

"Politics and Curriculum" (1962)

In this article, Huebner espouses the use of political science as a means of exploring the curriculum field and thereby adding some life to it. Educators' failure to make use of struggle, conflict and especially power can be linked to their adherence to what Huebner calls their "pseudo-political ideology" which is a simplified conception of democracy. This adherence has also isolated educators from other possible guides to life activity such as humanistic literature, philosophy or theology. For Huebner, it is by thinking from a political science perspective that the function of power groups ("educational elites") in controlling action can be discerned. Also, the source of these groups' power can be seen, at least partially, to reside in the strong ideology of each group. But educators have no strong ideology. They have nothing which promotes a sense of group cohesiveness. Instead, they merely rely upon "the search for the truth" or "scientific generalizations" (8, p. 93) to legitimate their classroom actions. In this Huebner finds them culpable. By neglecting the identifying symbols of groups, such as ideologies pointed to by the thought system of political science, educators weaken their group cohesiveness and effectiveness.

Huebner's conclusion is significant in light of his later work. Issues in the curriculum field are not to be fully explicated by following any one discipline. Rather, a curriculum worker should strive to make use of any thought sytem which can provide him with analytical power.

"Implications of Psychological Thought for the Curriculum" (1968)

"Implications of Psychological Thought for the Curriculum" is an important article. Ideas that are formulated in it are repeated, rephrased and sometimes totally reworked in later articles.

There is some relationship between this article and the previous one. In both, Huebner is attempting to clarify the role the language and thought of another discipline may play in designing what happens in education. In the "Politics and Curriculum" article, he deplores the neglect of political science; in this article, Huebner argues for a reduced role for psychology.

The purpose of the article is to unravel the interrelationship of curriculum and psychological thought in order to explicate what the real role of psychological language might be in curriculum. Huebner begins with two items of faith: (1) Curriculum is an environment-producing discipline (2) Curriculum has been led astray by overdependency on the category "learning." (The real focus should be education.) Taken out of the self-criticizing and self-correcting milieu of its discipline, psychological language has tended to become reified for curricular people and is thereby misused. It must be remembered that psychological thought is but one tool of a curriculum worker. Its usefulness must also be validated as must the utility of thought from any other

domain. Huebner believes the special uses of psychology lie in two areas. It has a technological use by showing how to embody educational materials and teaching patterns in useful ways. It also has disclosure use. The psychological thought serves as one instrument among many others, such as the sciences, philosophy, humanities and arts, and theology, by which a curricularist can discover what it is to be a human being.

These uses of psychological thought and the disclosure use of the thought of other domains have implications for the curriculum. Huebner asks the reader to assume that the basic disclosure model is the being, man, who hearkens and speaks to the world in which he lives. The task of the curricular person then becomes "to provide environments which make it possible for the individual to hearken to the world, to speak authentically from the center of his own being and to engage in the ensuing conversation." (5, p. 34) The technological use of psychological knowledge will allow the building of special conditions which will realize the hearkening-speaking segments of the above. This would be commonly known as learning. Beyond this, the disclosure uses of all the domains come into play. The learning, which the use of psychological knowledge brought forth in a technological environment, opens the way for education to take place. As the end product of curriculum design, Huebner views education as true conversation between the student and teacher. He states it more explicitly when he says that the curriculum design should "call forth responsible speech from our students", meaning that they engage in a "critical dialogue with people and with the environment." (5, p. 33) The people are the teachers, and the environment is the one curriculum designers have built, using the multiple disclosure models.

At least two key Huebernian themes should be noted in this article: (1) curriculum is a discipline whose purpose is educational environment production, (2) psychological thought has too strong an influence on the field of curriculum.

"Elementary Education" (date?)

This article expands the reader's understanding of the distinction between learning and education raised in the previous article. Huebner declares that the concept of learning and the notion of purpose are inadequate to describe the values which can be realized in educational activities. The means-end perspective prevents attention to the varied values which may become manifest as students and teachers interact with materials or people in educational environments. Closely reflecting his ideas in the previous article, Huebner states that learning is a process of mastering rules of social usage, a means to an end. The true end, which is education, is the confrontation of the meanings inherent in the educational environments. The student grows and develops as he engages in such confrontations. These confrontations help the student to build his own meaning and answer his question of identity, "Who am I?" The school or educational system first provides the instructional activity which helps the students to learn the symbolic and critical skills that they need, but also then provides "communication channels between young people in search of meaning and more experienced people who provide meaning." (4, p. 13) Huebner feels that, for the second task especially, additional means of valuing educational materials and educational environments are necessary.

Briefly, he identifies four broad value areas. The technical value of an educational material or an educational environment would indicate what skills of usage and skills of criticism each helped to develop. The meanings values could incorporate two aspects: the aesthetic values existent in a particular educational material or environment, or the medium that comprised educational material or educational environment and the impact that medium has upon the student. In the third kind of value, moral value, an educational material or educational envirionment could be considered for its effect in changing or restructuring human relationships. For instance, it might make the student freer of the teacher's direct control. In power values there are also two possibilities of influence discussed by Huebner. The educational materials or environment could alter the individual's power in his interactions with the world. It might also increase the student's power to deal with personal problem situations. These four values, Huebner suggests, will point the way to researching for principles to guide the design of educational materials and educational environments.

In summarizing the task of the curricular worker, Huebner states:

> The classroom curriculum process is one of bringing into the classroom the materials and teacher competencies necessary to develop valued skills and critical abilities, and to make available to

children the socially valued meanings to which they can respond and from which they can evolve their own meanings. (4, p. 20-1)

"Curricular Language and Classroom Meanings" (1966)

In this article, Huebner reinforces his attack on what he now calls the "myths" of learning and purpose in present curricular language. These "myths" are dangerous because they prevent the use of other conceptual models for thinking about curricular problems and phenomena. Tyler's curricular tasks are seen by Huebner as a strait jacket binding the curricular worker, by the language system, to asking only certain questions which will produce only certain answers. But, Huebner argues, many language systems should be used in the description of each educational reality.

To break the cycle, Huebner suggests that the main educational realities are classroom activity and the existential choice over what activities will occur. Given this, the key curriculum questions become: (1) "What can go on in the classroom?" (2) "How can this activity be valued?" (3, p. 14) Huebner now states that the task facing all curricular workers is "to identify and develop 'valued educational activity.' " (3, p. 14) Huebner identifies five value frameworks or systems by which to value educational activity. These seem to represent a refinement of the four broad categories he discussed in the previous article.

The technical value system is the currently all too popular (according to Huebner) means-ends rationality, based upon behavioral science language systems. Using this, a curriculum worker's concern in designing an educational activity would be to mobilize material and people which would produce certain results, such as skills in the students. Evaluation would be of the quality control variety.

The political value system would value educational activity for the support or prestige that it would bring the teacher or other curriculum people. The rationality of this system is a political one in which the curricular person seeks enhanced power so that he may accomplish his work more effectively.

Within the scientific value framework, educational activity would be valued for the knowledge it produced about itself. A maximization of knowledge for the teacher or curriculum worker would be the result of educational activity highly valued from a scientific value perspective.

An educational activity valued from an aesthetic value framework might reflect one or several dimensions of such a framework. It could have "psychical distance" (3, p. 17) meaning that the educational activity as an art object "is the possibility of life, captured and heightened and standing apart from the world of production, consumption and intent." (3, p. 18) In another dimension, the educational activity could also be valued aesthetically as something with its own wholeness and design. Still another dimension of aesthetic value could look to the symbolic value of the educational activity as a revelation of the meanings of the educator as a individual and as a spokesman for mankind.

The last system, the ethical value system, values educational activity as "an encounter between man and man." (3, p. 18) The educational activity is valued for itself, not as a symbol of anything else.

Huebner's point is that when fully developed into rationalities, the use of all five rationalities will make educational activity fuller and more meaningful by adding new sources of description, analysis and creativity to the present technical system of rationality.

Again, one can see in this article an effort by Huebner to clarify and widen the parameters of thought and of language use in the field of curriculum.

"The Leadership Role in Curricular Change" (1966)

Here Huebner becomes quite specific about what tasks face the curricular worker in his attempt to influence a child's education. The only impact a curricularist can have on the education of the child is through the educational environment he designs. Changing and revising these environments demands that the curriculum designer note the conditions inherent in any educational environment. These are the "artifacts" (educational materials) and the ways of working with the artifacts and students (patterns). Working with these conditions is his technical task. The curricular person must also pay attention to the economics associated with these conditions. He cannot forget to take into account the political and historical reality of the local community within which he is working. He must also remember that putting together the teacher conditions and material conditions into patterns which reflect the "dominant educational values" is a problem best dealt with from an

aesthetic perspective. But if these were the only thought patterns and values perspectives the curriculum designer used, he would be condemned by Huebner, for Huebner maintains that yet additional matters should be considered.

The curriculum change is also an ethical task for its designer. The educational environment must allow for the unconditioned. It must encourage the possibility for the student to become more than he is. The environment should engage in mutual influence both student and teacher via conversation, power (in the good sense, by which Huebner means political negotiation), and love. Domination is anathma.

The responsibilities of a curriculum change leader are, therefore, multifaceted and burdensome. He must be aware of all available conditions and values which might influence his ability to act. This would include paying attention to teacher values, local societal values, useful theories from all disciplines, and even his own values orientation. He has political responsibility to use power to build the new environments while preserving that which is essential to the history of the local community. He has aesthetic responsibility to design an environment which joins the educational conditions to a vision. That merger should offer promise to each student, showing him what he can become. The curriculum leader's final responsibility, according to Huebner, is his responsibility to be a man, and thereby help other growing numbers of humankind be by helping them to take responsibility for their lives.

It is possible to see in this summary that Huebner has made use of the value systems he outlined in "Curricular Language and Classroom Meanings." He has also continued his advocacy of multiple thought systems in curriculum design.

"Reflections on the Curriculum of Two Elementary Schools in Washington" (1966)

This article is an attempt to create categories useful for a curriculum person in observing and criticizing elementary school curriculum. Since the curriculum worker's concern is with design, his interest, according to Huebner, should be the design of the educational environment or situation. Huebner uses the five value systems identified in "Curricular Languages and Classroom Meanings," technical, political, scientific, aesthetic and ethical, to identify values existent in, or lacking from, the educational environments he observes in the two elementary schools. Huebner notes that the value systems illuminate positive and negative values inherent in individual components or combinations of components of the educational environment. These components which are shaped by the design of the educational environment are (1) material aspects ("things" in classroom, building, books, etc.), (2) content (symbol systems used in classroom and teacher language), (3) skills, competencies and/or characteristics of the teacher, (4) organizational structures.

The majority of the article is devoted to attempting to use these values as a means of criticizing the curriculum of these two schools so as to expose possible improvements. It is also, of course, an attempt to illustrate the utility of this method of curriculum evaluation.

Here, again, we see Huebner illustrating how to expand the parameters of thought concerning what should and should not occur in an educational setting. It is also useful to note that Huebner's four components shaped by the design of an educational environment are much more explicit, and therefore helpful, than his rather vague "conditions" of an educational environment ("artifacts" and "patterns") discussed in the previous article.

"Curriculum as Concern for Man's Temporality" (1967)

In this article, Huebner again attacks the concepts of learning and purpose for the restrictions they have caused in the thinking about curriculum. These concepts are inadequate, for they do not illuminate the total educational phenomena. Learning helps to point to what must concern the educator by explaining how conditioning and patterning occur. But concentration on learning, an abstracting activity that makes man feel separated from the world, gives a student a faulty perception. Man is not fixed at one stage in his biological evolution. The concentration of educators, argues Huebner, should not be on the individual as a learner but on the student as a "being-in-the-world." (2, p. 177) The environments must call forth "moments of vision" during which the student grasps his potentiality for being on the basis of the "having been." (2, p. 178) Huebner summarizes the task facing the curricularist:

> Education is a manifestation of the historical process, meshing the unfolding biography of the individual with the unfolding history of his society. The past becomes the means by which the

individual can project his own potentiality for being. The educational environment must be so constructed that the past is in the present as the basis for projection." (2, p. 177)

What would this environment be composed of? According to Huebner, it would have three aspects or components. The first component must "call forth responses from the students." (2, p. 177) For this component, decisions must be made by educators as to what aspects of the past are so valued that they should be made part of the educational environment. The second component of the environment "must be reactive" to the student. (2, p. 177) It should also be bringing valued aspects of the past into the students' present, but the emphasis in this component is on "valued forms of responsiveness." (2, p. 177) In its third component, the environment must make the opportunities available for the student to become aware of his temporality.

The psychological concepts of "purpose" and "learning" provide some guidance for the selection of specifics concerning each of these two components of the educative environment. The function of the category "purpose" is to "screen the past and the present-as-already-past to determine which components can serve man's temporality and society's evolving history." (2, p. 178) Learning helps the curricularist to make decisions concerning the sequencing of educational experiences.

The successful attainment of component three is dependent on the teacher infusing the educational environment with his wisdom so that a student is able "to envision his own projected potentiality for being as it exists in the past-present-future." (2, p. 178-9)

I have used more direct quotations in this summary because I wish to provide a background for later discussions. In this important article, we encounter for the first time Huebner's conception of temporality.

"The Tasks of the Curricular Theorist" (1968)

Viewed historically, this paper can be seen as a major pivotal work in that it summarizes much of what Huebner had previously written and points the way toward his future writings.

Huebner writes of being discouraged at the current state of curriculum theorizing. He feels discussion in that vein might be better served by discovering the interrelationships among the three different activities engaged in by curricularists: educational practice, empirical research, and talking and writing about curriculum. The tasks should first be directed toward each of these areas individually.

For Huebner, language is the logical starting point leading toward an investigation of curricular theory, for theory must be rooted in the language used by those doing the theorizing. The tasks of a curricularist in relationship to language are several, according to Huebner. First, the situations in which language is used by curricularists must be identified. Second, categories of language functions in these situations must be enumerated. These two tasks are necessary if the curricularist is to begin to truly refine curricular language and critique his colleagues' use of it. For the sake of discussion, Huebner suggests six non-discrete categories of language use: descriptive, explantory, controlling, legitimizing, prescriptive, and affiliative. The third language task is a search for the sources of the various language usages of curricularists so as to understand the history of curricular language. Huebner identifies language areas that have at various times served as sources for curricula. These are philosophy, theology, psychology and other behavioral sciences, various humanities and technologies and plain common-sense language. Discovery of which of these are dominant sources at any one time is one curricular task. The main value of such an historical search is to insure that curricular language is not using words or expressions no longer creditable in the parent discipline from which they were borrowed.

Regarding the practice segment of curriculum, Huebner believes attention could most profitably be focused on the characteristics of the educational environment. The tasks of the curricularist are here similar to those associated with the analysis of language. First, the curricularist must create categories so as to be able to discriminate among the various components of the educational environments. They are the educational materials, the language and symbols systems used by students and teachers within the environment, and the patterned behaviors of those who live in the environment. These three features, materials, symbol systems and patterns of relationships among people are relatively stable over time and "can be identified as particular organizational forms." (11, p. 12) Categorizing these patterns, as well as formulating a descriptive language for cataloguing

and charting the aforementioned environmental dimensions of curriculum practice, are tasks facing the curricular theorist.

A second task of the curricularist in relationship to curricular practice is to prevent obsolescence within the educational environment. The curricularist must recreate the materials, the teacher symbol skills and/or patterns, the discourse system, and the interrelationships among the previous three. He should do this based upon his historical awareness of the possibilities of obsolescence.

As a final task in the curricular practice area, Huebner exhorts curricularists to articulate the relationship between the environmental components and their sources.

The relationship between language and practice (environment) also, for Huebner, points toward curricular chores. For instance, what is the amount of reciprocity between language and environment? Does one seem more influential in creating the other or do they both equally create and recreate each other? Huebner further suggests the need for curricularists to find, create or borrow a language that can be used to describe and explain human events in educative situations. This means relying upon language that is not psychological. Huebner puts forward the possibility of phenomenological thought. He states that "practice as human event" or concern for the biographies of the individual interacting with each other in the educational environment demands "conceptual systems that articulate the phenomena of human power and the dramatic shape of human events." (11, p. 15) Finding these systems is a task for the curricularist.

Huebner goes on to point out that curriculum theorists have not seen curriculum as a form of human praxis, of world building. They have spoken instead of authority and problems of technology, and relied upon science and technology. The curricularist must see the importance of, and the utilization of, artistic and political considerations in designing educational environments.

The research leg of the three areas originally mentioned in this article demands that the curricularist constantly check to insure that the existing language and existing conditioned aspects of the environment remain viable, appropriate, and useful. If any do not, the curricularist must recreate them.

The length of this summary portrays the ambition in this article. It is Huebner's attempt to define inquiry within the discipline of curriculum.

"New Modes of Man's Relationship to Man" (1969)

This is an interesting and beautiful article. While not directed at curriculum thinkers directly, it says many of the same things as Huebner's previous works, but the ideas are expanded to interest a wider audience.

The instrumental functional or means-ends pattern of encounter between individuals in the present-day world, says Huebner, is severely limiting. Each person should freely give and freely receive from the other. This is love. Huebner advocates "conversation...a form of love in action" as his new mode of man's relating to his fellows. (6, p. 148)

True conversation involves a willingness on both sides to speak, to listen and to accept the resultant and emergent opportunities for change. By the art of conversation "man can become aware of what he is and what he may become, and may help his fellow man to do the same." (6, p. 152)

The importance of conversation today is that it offers an alternative to the controlling or indifferent speech of the modern scientifically and economically-oriented world. It illuminates other ways of making sense of our relationships with one another. It, thereby, increases man's freedom by increasing his opportunity for choice.

There are many barriers to conversation including the socialization practices in this society, personal fears and anxieties concerning other people, among many others. But Huebner is convinced that the major barrier is the functional use of language so common in modern speech. This language evolves from the dominant position of the scientific mode of thought. It is excellent as a language of control, prediction and abstraction, but Huebner argues, man is not a thing. The reliance upon scientific language for common speech has led to "I-it" attitudes by men toward men. What is needed is the acceptance in conventional language of a great variety of language patterns for thinking about and talking with other men. The compartmentalization of language systems and forms of thought must be broken down. Huebner believes that both existentialist thinkers and philosophical analysts offer possible "tools for making the educator aware of his limited, and limiting,

thought patterns and language systems for shaping value and legitimizing action." (6, p. 161) Huebner suggests two thought patterns that should be incorporated into conventional language as a basis for man's interaction with man: religious language and humanistic language.

While not addressing itself very directly to education, this article does repeat a now common theme: the need to expand present-day thought patterns. The concept of conversation is a beautiful one which seems to relate very closely with what should be taking place in an educative environment as the child confronts the meanings of other people.

"Curriculum as the Accessibility of Knowledge" (1969)

In this article, Huebner presents the thesis that the work of a curricular person is to embody knowledge valued and carried by individuals and social groups into accessible environmental forms, and that these forms must, by some criteria, be interpreted as educational. He supports this thesis by making three points. First, the widespread attention directed toward the behavior of the educatee and the rhetoric of curriculum discourse has hidden what should have been the primary focus of curriculum attention, the educational environment, its components and the increased capital investment in the latter. Second, with the development of the varied forms of educational technology, knowledge is no longer accessible merely from a book or from another person. This broadens immensely the potentialities for making knowledge accessible to students with widely diverse characteristics. Third, knowledge does not merely reside in men, it resides in environmental form. Language, instruments and technologies are all ways of organizing and directing information for use. Such embodied knowledge serves man in two ways: (1) "It opens up a world and in so doing suggests possibilities for him;" (2) it "provides the necessary instruments or 'know-how' to enable man to adhere to that opening in the world, operate within it and move the possible to the actual." (1, p. 8)

Given an educational focus on knowledge embodied in environmental forms, for Huebner, "The significant phenomenon is the relationship between human action and the situation or environment within which it occurs." (1, p. 9) Human action is partially determined by the situation within which it occurs. The responses by a student in an educational environment should be linked to a feedback process which will help to pattern the responses in socially valued ways. The feedback systems should seek to establish patterns of relevance in socially valued ways. To the extent that feedback systems can be embodied into the material environment, the teacher is "freed to establish the personal relevancies or meanings for the educatee." (1, p. 11)

For the rest of the article Huebner concerns himself with three practical aspects of establishing these environments. He recognizes that the engineering of accessible knowledge into educational environments is a multi-faceted task, requiring the talents and knowledge of such diverse specialists as philosophers, psychologists, media specialists and artists. As these specialists make environmental components available, the curricular person must orchestrate these diverse components into meaningful structures. The curricularist will face the economic aspects of making knowledge truly accessible as he faces the cost potential of using the variety of interfaces for each student now possible, as he weighs the pros and cons of various sequencings for each student, and as he looks to the cost of trying to educate teachers in the multitude of environmental forms. Finally, the curricularist who thinks of curriculum as accessibility of knowledge will be faced with the use of power. He will be making decisions over what knowledge will be made accessible and to whom.

This article is an elaborate and often tedious investigation of the intricacies of regarding the educational environment as accessible socially valued embodied knowledge. It is another large step in Huebner's expanding explanation of what exactly one should be thinking about as a curricularist, as a designer of educational environments.

"Poetry and Power: The Politics of Curricular Development" (1973)

This paper is a passionate plea by Huebner for educators (specifically the members of the A.S.C.D.) to partake in a new form of talk or language. The talk should be about the politics of making "a more just public world." (7, p. 5) It should illuminate the political and economic nature of education. The talk would relate to the whole public world and to the schools their share in making that public world.

Huebner identifies three "ingredients" or "rights" in this talk which must govern any discussion of the

public world and the school. The first is "the unconditional respect for the political, civil, and legal rights of the young as free people participating in a public world." The second is "the right of access to the wealth in the public domain." (1, p. 5) (Wealth is defined as the power-increasing triad of knowledge, traditions and skills.) The third ingredient is "the right of each individual regardless of age to participate in the shaping and reshaping of institutions within which he lives. (1, p. 7)

Huebner's call is for talk that leads to political action. Educators can use their collective clout to insure that general governmental funds and public educational funds are spent in ways which contribute to greater public justice, greater fulfillment of the "rights" previously mentioned.

In blunter, but possibly even more articulate language, Huebner is echoing and amplifying his plea of eleven years before. The language and thought of political science, including all of the ramifications of the concept of power, demand to be used by educators in the better interest of schools, as well as in the better interest of the public world.

"Toward a Remaking of Curriculum Language" (1974)

In this most complex article, Huebner is making use of themes and ideas discussed in his previous articles. Many of these are either summarized or reworked. He also extends his explanation of the effects of man's temporality on the notion of intentional education.

Huebner advocates a new definition of education. He wishes it "to refer to the futuring of the person and the futuring of a society." (12, p. 37) The old definition emphasized the educatee with a reliance upon the language of learning and socialization. This hid from the educator the conflicts inherent in educating the new person and maintaining valued aspects of society. Conflicts between individual and society, conflicts over political activity, conflicts over use of power were all hidden by the old language and definition. Huebner states that, in truth, the whole temporal nature of man was obscured. The language of socialization encourages maintainence of the status quo. It hides from adults the awareness that "living together is the sharing of memories and intentions and the building of public or shared worlds." (12, p. 39) Thus the child's rightful place as a participant in adult-child political activity, as a builder of public worlds, and as an interpreter of the meaning of life is thwarted by this language.

The existence of this new person (the child) gives rise to one concern of an educator, a concern for the "transcendence, liberation, emancipation, or however you might wish to speak about temporality of the person." (12, p. 39) A second concern includes access to, and protection of, the "collective wealth" (goods, services, traditions, embodied memories) of the society. The third object of educational concern is the community which has traditions for caring for its new beings and its collective wealth. For Huebner, intentional education can only take place after these three concerns are recognized. Talk of these concerns yields "the stuff for our hermeneutical and world-building arts." (12, p. 41) Thinking about the "togetherness" of the three allows articulation of educational organizational and educational method. The individual, the past, and the community must be considered equally in an educator's planning, and interrelated "by hermeneutical or interpretive activity, by political activity and by work activity." (12, p. 41)

Following from these givens, the two key curriculum questions raised by Huebner are: (1) What knowledge, in what format, is accessible for particular children in a particular place? (2) When certain accessible knowledge is brought together with the presence of children and the presence of particular communities, what activity is possible? The first issue causes a more thorough consideration of the questions of content and educational organization. But it is the second that is dealt with at length in this article.

Huebner reiterates the three conceivable activities: Hermeneutical, (interpretation), political (arrival at an agreed upon collective memory and intention), and work (maintenance and building of public space). The first refers to the activity that would take place in the classroom. Huebner believes the Hermes process opens up educational method to new forms of inquiry. Thinking of classroom activity as an interpretive experience could reduce the strain on psychological concepts that are constantly used to describe educational activity.

The work activity refers to scientific study of particular subject fields and the resultant technologies which culminate in the production of new instructional materials and methods. These are potentially new contributions to the public wealth. These new artifacts and traditions should undergo a value screening test that asks

"what is valuable enough to be conserved as part of the past and made present to the young." By asking this question, the educator talks about what offers possibility for the future (remember Huebner's definition of education) and not what should be learned (avoiding the use of normative controlling terminology).

If the communal traditions and intentions do not mesh with the child's work in his "Hermes process," the third activity, political, should combine with the second (work) to force the creation of new materials and thereby lead to interpretive activity. Through the processes of negotiation and conflict, the child will devise, or help to devise, different materials and interpretive skills. The child realizes through this his own right to share in, and to reinterpret for himself, the public wealth. This activity points the way to what Huebner calls "open education." He states:

> Rather, an open place of education must be interpreted as a place where adults seek to influence the young, where the young seek to influence the adults; a place where the past as present may be used, interpreted, rethought, and reworked; a place not of submitting to someone else's power and accepted ways but of negotiating for power in the maintaining and reforming of the public world. (12, p. 52)

In this one quotation alone, the echos of several articles can be heard. "Toward a Remaking of Curricular Language" is an important and useful work because it does bring together so much of Huebner's previous thoughts, and therefore serves as an excellent stepping stone into the second part of this paper.

Part II - Themes

Early in the article "Toward a Remaking of Curricular Language" Huebner writes: "My previous work has been an effort to attend to the phenomena of education without being unduly and perhaps unconsciously socialized to the language, the institutions and the norms of everyday educators." (12, p. 36-7) He has, in fact, been consciously working at the opposite task involved in the Hermes process. He has been attempting "to make the familiar strange" so it can be better understood. Huebner's emphasis has been on educational language, educational environment, and the activities which may occur in them. He has also been concerned with the tasks of a curricularist. Let us review what he has had to say about these themes.

Almost every article began with, or dealt exclusively with, curricular language as it is currently used and constituted. Huebner's argument would go roughly as follows:

Present-day curricular thought and language is too narrow. It is mainly composed of conceptions such as learning and purpose that are borrowed from psychology. This creates a hydra-like problem for curricularists. Such a narrowly conceived language severely constricts the parameters of thought of curriculum workers. It also threatens the validity of much of their work, since these workers accept and use these psychological conceptions as "truths." Transplanted into the curriculum field, however, learning and purpose have lost their self-correcting disciplinary context. Seemingly unconsciously, these conceptions have been allowed to grow in importance far beyond what is reasonable. They have become what schooling, and even education, is all about.

The use of other conceptual models to think about curriculum is prevented. Furthermore, this reliance upon psychology as the primary source of curricular language has hidden what is taking place and what could take place in the education of youth today. Combined with the contemporary language of socialization, current curricular language hides what adults, perhaps unwittingly, do to children. Educators and parents, due to their entrapment within the current curricular and socialization thought and language systems, do not see how they are impeding their children's access to the collective wealth, their ability to confront meanings, and their potential to participate in recreating the world through hermeneutical, political and/or work activities.

Psychological thought does have its utility for a curricularist. It has a technological use. With it we are able to determine how to embody educational materials and teaching patterns in useful ways in the educational environment. It also serves as one source by which the curriculum designer can discover what it means to be a human being so that he may build educational environments that call forth and nourish humanness. But psychological thought and its discipline is only one of several disclosure models and value perspectives

of which the curricularist should be aware and make use.

Other disciplines such as the sciences, philosophy, the humanities, the arts, and theology should be used to disclose more aspects of humanity. The discoveries also could be used to build more effective educational environments. Further, the curricularist should be concerned with economic thought which reveals the cost potentials of educational environments. He must view and evaluate the values inherent in the educational environments through technical, scientific, political, aesthetic and ethical value frameworks. It is, in fact, true that any thought and language pattern, including phenomenology and linguistic analysis, that gives the curricularist more analytical power over the educative environment should be used.

One of curricularists' problems has been a lack of understanding as to the origins and the various functions of the language they are using. Discoveries of the solutions to these are tasks that would greatly benefit curricular workers. When completed, the talk and writings of all who deal in curriculum matters could be thoroughly understood, evaluated and criticized. Work has begun, but is far from completion, even though tentative solutions have been suggested to spur inquiry.

Failing to possess the above information concerning curricular language, the curricularist is still able to identify a fruitful direction for the rethinking and the reconstruction of his language. This is the direction indicated by talking about education "as concern for the evolving biography of the peson and the evolving history of a community or society." (12 pp., 37-8) Thinking and talking about the individual, the society and the culture, and about their being present together is a key for curricularists in their task of building educational environments. Use of these three presences implies that the curricular person will draw upon all of the above-mentioned disclosure models, value frameworks and other domains of knowledge in the talking and thinking that leads to the building of educational environments and activities.

Another important theme in Huebner's writing is educational environment and the planning of the activity that is to take place in that environment. In looking at Huebner's references to, and discussion of, this theme throughout the twelve years, changes of emphasis take place, and it is possible to discern an evolution in this idea. In "Implications of Psychological Thoughts for the Curriculum," Huebner states that curriculum is a discipline aimed at building educational environments. These environments can be designed to create learning experiences which will provide the students with certain skills and competencies. But true eudcation entails much more than this. It involves the individual harkening to the world, speaking to it authentically and engaging in true conversation. In "Elementary Education," Huebner posits that what education really means is that a student pursuing education is one who is confronting the meanings he or she finds in materials and people. In "Curricular Language and Classroom Meanings," we find that the curricularist's task is to ask what activity should go on in a classroom and how should it be valued. Then it is his problem to design the valued educational activity which is to take place in the educational environment. Reading these articles all at once is like watching an artist sketching a portrait. Features, major and minor, become incorporated or reworked with each new article.

In "Leadership Role in Curricular Change," Huebner attempts to explain what must be acknowledged as curricularists design these valued educational activities for their educational environments. The educative materials, patterns of student behavior, economic realities of the situation, political and historical realities of the local community, teacher conditions, values of all parties concerned, useful theoretical conceptions from outside disciplines, and various values perspectives (especially the ethical) must all be borne in mind. Curriculum design is extremely complex. As its optimum, Huebner suggests an environment that would lead a student and teacher to engage in mutual influence through conversation, negotiation and love.

Huebner's "Reflections on the Curriculum of Two Elementary Schools in Washington" points out in more detail what it is that comprises an educational environment. It includes (1) material aspects, (2) content, (3) teacher skills and competencies, and (4) organizational structures. Each of these and their overall interrelating design can and should be criticized by use of technical, scientific, political, ethical and aesthetic values systems to determine what values are existent in the educative environment.

Huebner's previously stated notions of true education (it occurs when the student engages people and materials in conservation, confronting the meanings of each and being aided in this process by consciously designed educational environments which call forth such activity) seem to have led him to a conception of

educatee as "being-in-the world." Accepting this Heideggerian reality, Huebner in "Curriculum as Concern for Man's Temporality" explores the ramifications of such a conception. The design of educational environments must show concern for the evolving biography of each individual educatee and the evolving history of his society and community. It must embody the dialectical relationships that the society values. Using valued items of the past, the environment must call forth "moments of vision" wherein the student grasps his potentiality for being. To carry out these three "musts," the educational environment needs to contain three components.

The first calls forth responses from the students. It is the embodied aspects of the past that are valued enough by curricularists to be made a part of the educational environment. Curricularists determine which aspects of the past can serve man's temporality and societies' evolving history by using the value category of objective or purpose. This is a value category not used to select determined futures, but used to screen the past for utilization in the educational environments.

The second component of the educational environment must respond to the student. It serves as the shaping component. Learning theories are used as technological tools to help to determine the sequencing of the educational activities. Hopefully, this will help to shape and channel each student's emerging transcendence or temporality into accepted social patterns.

The third component of the educational environment is the moment when the student is able to envision his own projected potentiality as it exists in the continuum of past, present, and future. Only the teacher, as the human aspect of the educational environment, can bring this forth. The teacher can do this because he/she shares in the temporality of existence with the student.

Huebner feels much more remains to be learned so as to increase the power of curricularists in designing effective educational environments and seeing them in historical perspective. Therefore, in his "The Tasks of a Curricular Theorist" Huebner stated that to be able to truly create educational environments as he was envisioning, the curricularists needed to focus on the characteristics of the educational environments. Again, these were the educational materials, the language and other symbolic systems used by students and teachers, the patterned behaviors of all individuals who love in the educational environment, and the patterns of relationship (content) that develop and remain stable among these three. Curricularists should chart and catalogue these characteristics and in so doing develop a descriptive language. They also should determine the sources and articulate the history of each. Having done this, they would be able to prevent obsolescence by reconstituting any characteristic as it is needed.

In an effort to add to the conceptual tools used by curricular thinkers and to add vitality to the curriculum field, Huebner in his "Curriculum as Accessibility of Knowledge," states that curricularists should consider their task as one of objectifying knowledge in environmental form. Scientists are embodying more of their information in forms accessible to young people. Curricularists should view their designing of educational environments as the same task. This will help to refocus many curriculum questions now hidden in a maze of inappropriate curricular language. Viewed in the context of the evolution of Huebner's ideas concerning educational environments, this hardly seems an astonishing suggestion. Since decisions about what to include in the educational environment had to revolve around societally valued aspects of the past and present, calling the aspects "embodied knowledge" is really only a clarification.

It is in "Toward a Remaking of Curriculum Language" that Huebner returns to the question of what activity can and should occur in the educational environments. In the classroom, the children should be engaged in the hermeneutical activity of making the strange and foreign experience presented to them familiar and understandable. In all areas of the educational environment, the students should participate in work activity and political activity when necessary to devise and negotiate for new, more effective means of making the public wealth accessible to them. This would make real an overall activity that can be called "open education" which would guarantee the nurturing of the students' rights.

Huebner appears to be summarizing his conceptions about the educational environment and educational activities in this article: designing the educational concerns of nurturing the individual, preserving the valued past, and working within the local societal customs. Given these, decisions must be made about what knowledge is to be made and can be made accessible to what students, and what activities are possible. Whatever

activities are settled on, they should call forth interpretive activity from the student. They should further allow the student the right to negotiate and work for different forms of accessible knowledge and hermeneutic activity if those presented in the classroom activities fail to stimulate him/her.

It is possible to see how the somewhat vague activity of "confronting meaning" has evolved to a more full-bodied description of what is meant by educative activity. The factors to be considered in planning an educative environment are rather simply stated in "Toward a Remaking of Curriculum Language," but a reading of the other articles illuminates the many aspects implied by those words "educational concerns." Obviously in "Toward a Remaking of Curriculum Language" Huebner believes he is well down the road toward accomplishing the tasks he set for curricularists in relationship to curricular practices.

The third, and really an overriding, theme in Huebner's work is that of the tasks of a curricularist. I am going to refrain from restating the many tasks Huebner pointed to, especially in the three articles: "The Leadership Role in Curricular Change," "The Tasks of a Curricular Theorist," and "Toward a Remaking of Curricular Language." In general, for Huebner, these tasks revolve around the previously discussed themes of understanding and creating useful curricular thought and language, and of designing educative environments and activities.

Part III - A Critical Appraisal

Huebner's extended plea for educators to realize the fallacies in granting an exalted position to learning and objectives (especially behavioral objectives) is certainly the most important aspect of his work for me. While of late behavioral objectives have lost some of their sparkle in colleges of education, they are still the yearned-for ends of educative activity in most public schools. My high school recently undertook numerous teacher in-service gatherings and personal work to prepare us for writing our overall course goals and daily lesson objectives in behavioral terms. We did rewrite all courses in this manner. At the time, I considered our actions to be commendable, worthwhile and a bit avant-garde. Now, having read Huebner's explanations of how constricting to educative action is strict adherence to the use of objectives, learning and other transplants of psychological language, I question the value of all of that time and effort. I also wonder about who is reading the works of curricular scholars. Is it just other curricular theorists? Why is it that we at Schroeder High School would in 1971-72 do something whose worth was cast into doubt by ideas written as much as nine years previously?

There seems to be no point in arguing with Huebner's thinking regarding psychological thought as it has and is influencing education. It has dominated the parameters of thought and action. Other disciplines and the value systems they would bring into play should also be used to design and evaluate educational activities. I shall certainly never again plan a lesson with merely behavioral goals and a technical value system in mind. In this regard, Huebner has been successful in making this educator more aware of what he is doing.

Another conception of Huebner's, under the heading of language and thought, which I find to be somewhat helpful is the concept of man's temporality as it should influence the design of the educative environment and activity. When one is planning to teach a course in grammar in secondary schools, it is easy to view the students as "learners", as semi-empty receptacles to be filled with course material. Huebner is correct when he states that such attitudes neglect much of the dynamic interplay of factors that must be considered by the curriculum designer. It is useful to think of the evolving biography of the student, the history of the community and the traditional local ways of resolving the conflicts that result from the needs of these two when designing educational environments. Thinking of the interplay of these factors helps to put things into a broader perspective. A curricularist would not be prone to lean totally over to the sides of uninhibited free development for each individual or its opposite of indoctrination. Furthermore, this perspective forces a realistic appraisal of what is possible in this particular educational tradition at this particular time. Too often potentially useful educational innovations succumb because the planners act as if they and their students live in a vacuum with no outside pressures or long-standing customs.

Tied closely to Huebner's view of the need to recognize the student's temporality is his desire to have educators include student rights as part of their "talk" about the school and the public world. I earnestly agree that the student's civil, legal, and political rights to participate in the public world should be accepted

and nourished. Likewise, their rights of access to the tools of public power and tradition, along with their right to create and recreate public institutions, should be nurtured. Huebner is correct in insisting upon these rights for students. Without them, any scheme for designing "valued educative activities" that help "beings-in-the-world" hearken to their world and realize their "moments of vision" would be a farce. Instead, it would be a subtle form of propagandism for the purpose of socialization. The task of wresting out of curricular language the manipulative talk of learning and socialization, and inserting talk of student rights will be enormous. But it is a task worth doing. Fortunately, awareness is a good part of the battle.

It is for these two conceptions, the role of psychological thought and language in curriculum talk and curriculum as concern for man's temporality, and also for his insistence upon student rights that I find the reading of Huebner's works to be of value. However, after all of the reading and rereading, and after all of the agonizing attempts to gain understanding, I suppose it was inevitable that I would find as much to criticize as to praise.

I must admit, after all of the arguing that I have done the contrary, that Huebner has not broken from the basic conception of curriculum and instruction set forth by Ralph W. Tyler. While Huebner's words are somewhat different (education instead of learning) and his emphasis is not on objectives but more on educational environments, much of his work is similar to that of Tyler's. The key seems to lie in Huebner's basic acceptance of a curricularist's function as one of design. Once that is established, it appears difficult to break from the parameters of action established by the four basic Tylerian questions.

Huebner seems self-contradictory when this point is closely investigated. He states flatly the basic design function of a curricularist, and yet in his "The Tasks of a Curricular Theorist" he refuses to define curriculum. Not defining the term makes sense if one is going to actively look into widely varied aspects of it before settling upon a definition which may only include some of these aspects. Indeed, Huebner has been shown, in the summaries, to advocate the scanning of all possibly related systems of language and thought for potential inclusion in curricular thought and language. But I find it most curious that, when it comes to the function of a curricularist and the closely related definition of the word curriculum, Huebner appears to have no such desire for expanded vision. In fact, he never even appears to entertain the idea that there can be more to a curricularists' work. My criticism is that, while advocating open investigation and use of all disciplines which will give educators greater analytical power over what they are doing, Huebner neglects to follow his own advice. He has accepted an answer for the function of a curricular person and never seems to reevaluate that answer. I am not convinced that design is not the main, or even the only, function of a curricularist, but I am alarmed that Huebner appears to be so inconsistent.

I find I am also critical of Huebner's discussions of the educational environment and educational activity. His propensity to speak in generalities and complexities without giving any practical examples to illustrate his conceptions is disconcerting. Educational activity has been described by him as "confrontation with meanings," "mutual influence through conversation, negotiation and love," and "being-in-the-world," "dialectics," "moments of vision" among others. Never once does Huebner give a concrete example of what one of these occurrences would look like if it happened or even how it might concretely be designed to happen. I find this frustrating and irritating. Without some examples, his arguments lose much of their impact. I am not able to assure myself that I understand to what he is referring. Consequently, my appreciation for the practical worth of his discussions of an educational environment and educative activities is greatly diminished.

It is my belief, however, that even if Huebner could put his discussions into practical contexts, they would have only marginal influence on the curriculum as designed by most educators. Looking at Huebner's latest grouping of words to describe what students can do in an educational activity, one finds "hermeneutic," "work," and "political" activities. Even when these words are defined by Huebner, how are they helpful? They do not answer John Holt's question about what do you do on Monday. They do not really give any help in designing an education environment that will call forth the student's temporality, and mesh it with society's history while not stepping outside the traditional rhythms of continuity and change. What these words will do is give great names to what happens, if it happens correctly.

I conclude, then, that Huebner's contribution is in the area of language and thought, not in the area of practice. In the extreme, we might say that Huebner has really only give us some new words to describe the

same old things. He would probably not disagree. He would add, however, that those words are part of a language in the making. The language is descriptive. For, in retrospect, Huebner's activities can be seen as a somewhat less than systematic continuing analysis of the phenomena of education for the purpose of establishing a descriptive curricular language. In its present form, however, Huebner's language is merely a grouping of conceptions which offer some different perspectives on the education panorama. Much work on the language remains to be done before it will be comprehensive. Huebner does not call his language descriptive, but I believe that is what it must be, given Huebner's understanding of the different uses of language and the function its words serve. If this is true, then there appear to be two difficulties: (1) At the rate Huebner is working, we will have to wait ten to fifteen years for anything resembling a completed language, (2) A descriptive language will only tell us more clearly what we are doing or could be doing. It will not explain education. It will not prescribe for education. These problems will need other languages.

Obviously, I do not find this work to be lacking in merit. It does seem to be important to be able to adequately, thoroughly and unambiguously describe all aspects of education. The working out of a language that would allow such is necessarily tedious and difficult. Yet I am troubled by the passing time. I am also troubled that, even when this beautiful language is available, we will be no closer to understanding how "moments of vision" or whatever one wishes to call true education, take place. After all, when I say that I have taken into consideration all aspects of the individual educatee, including his rights, skills and values, all aspects of the responsibility incumbent upon me to preserve the public wealth, all aspects of the community's traditional ways of settling conflicts between the two, and have attempted to mesh the evolving emergent educatee with the historically developing society in a hermeneutical classroom activity, what have I really said? And what do I do if the lesson flopped and the student wants and needs some other help in order to gain some understanding of what was going on? Yes, Huebner's language is more descriptive of what happened, but it is hardly more useful in correcting the situation.

This is my main frustration with Huebner, and, I suppose, with curriculum writing in general. It is the frustration of a practicing teacher reading a theorist. Huebner argues against the abstration of "learning" and yet his conceptions are not more concrete. We live in an age of space and atomic energy, and paradoxically educators are still in prehistoric times, without even a language which will allow us to rationally describe to each other where we are or what we are about. Huebner tells us that sometime soon he will provide us with such a language to help us. Yet even in the possession of that, we will still be designing classroom activities and places of education which will take up long years in the lives of enormous numbers of young people, without the slightest real understanding of how it is that education takes place, let alone how education can be designed.

It is most difficult for me to accept our neophyte position when it comes to understanding the human educational process. I am most frustrated to have struggled through Huebner's often difficult language and to have ended with that conclusion. The social scientist in me feels the effects of a Toffler-like "shock". It is not the shock of being thrust into the future, but the shock of gaining a truer perspective on the present.

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Education in Lives: Biographic Narrative in the Study of Educational Outcomes

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Chapter I
Introduction

It is commonly argued that we must distinguish education from schooling; for schooling is one among many agencies affecting a person's education.[1] Yet even so, schooling is not just one among many. For our aim in maintaining schools is precisely to advance the education of those who attend, and the same cannot be said of the other institutions -- home, church, media, boys' and girls' clubs, libraries, museusm, theaters-- that also shape a person's education. To put it more succinctly, education is the justifying aim of schooling.[2]

If so, then we ought to be judging the schools according to the quality of education they afford. Instead, in a snarl of logic and custom, we typically judge schools according to the schooling they deliver. We identify the tasks that schools want their students to master and we test student performance on those tasks. Sometimes we go further and test for attitude changes that we think schools should effect. Occasionally we employ classroom observation, structured or free, looking for appropriate sorts of interaction. Each of these procedures is readily defensible; but none is definitive. Test performance, attitude change, classroom behavior-- each is rather a proxy for the educational events that we would note, if we knew how.

Late in his career, John Dewey offered an account of what makes schooling educative. It was not a foregone conclusion, in Dewey's view, that schools were functioning well just because they were attaining their professed ends. For schools could operate effectively as organizations and yet mis-educate students. "Everything," he said, "depends upon the quality of the experience that it has [by the learner]." And by quality he meant two things: (1) whether the immediate experience is agreeable, and (2) whether it comes to anything later--whether it influences later experience.[3]

The message to those who would judge schools is clear enough: the proper subject of study is the learner's experience--not just classroom experience or even present experience but also the influence of present on future. Intractable as such an idea may seem to researchers, especially if viewed through the goggles of our usual approaches, it is handily within the reach of a common mode of inquiry; and that mode is biography. For biography can give an account of the quality of student experience, which means that it can make the philosopher's criterion concrete and empirical.

My purpose in what follows is to show how biography can, by rendering the quality of a learner's experience, disclose the educational significance of events in his or her life. In the end the idea of disclosing educational significance will take on meaning, I believe, and hence the potential contribution of biography to educational inquiry will become clearer.

FOOTNOTES

1. This point has recently become salient in social criticism and in research on the social and instructional determinants of scholastic achievement (or "school effects," as this line of inquiry is called). For an illuminating discussion of the current concern with the multiplicity of instructional agencies, see Lawrence A. Cremin, PUBLIC EDUCATION (New York: Basic Books, 1976).

2. The concept of education has been discussed on a diffuse, if not an extensive, literature. I shall make no attempt to review it here. Let me acknowledge, however, the precedent for the concept of education employed here: it is John Dewey's. At one point Dewey offers what he calls a technical definition of education. Education, he says, "is that reconstruction or reorganization and experience which adds to the meaning of experience, and which increases ability to direct the course of subsequent experience." DEMOCRACY AND EDUCATION (New York: Free Press, 1966), p. 76. Because it emphasizes the learner's experience, this concept

is unusual. More commonly, discussions of the concept of education have placed their emphasis on the teacher's practice. See, e.g., R.S. Peters, "What Is an Educational Process?" in THE CONCEPT OF EDUCATION, edited by R.S. Peters (London: Routledge and Kegan Paul, 1967). For a useful review of recent issues concerning the concept of education, see William Frankena, "The Concept of Education Today," in EDUCATIONAL JUDGMENTS, edited by James F. Doyle (London: Routledge and Kegan Paul, 1973).

3. The emphasis in the quote is Dewey's John Dewey, EXPERIENCE AND EDUCATION (New York: Macmillan, 1963 [1938], p. 27.

Chapter II
Why Study Education Through Biography?

This chapter presents a rationale for a biographic approach to the study of education. The argument proceeds in three parts. First, I observe that educational research has not traditionally distinguished between the study of schooling and the study of education, and that as a consequence the logic of our approach to questions about school outcomes is circular; if we are to correct that, we must begin to consider what it would be like to conceptualize educational phenomena apart from any particular agency of instruction. Second, I note that John Dewey had considered this problem, and that his solution calls to mind the narrative biographer's approach to lives. I shall contend that Dewey conceived the educative in terms of the history of individual experience, and therefore that he employed what may be called a biographic conception of education. Third, I suggest the chief use of biographic narrative: that it permits us to make sense of individual experience, and thus to discover what is educative in a life, without compelling us to decide in advance whether a certain kind of practice will be educative. The rationale for biographic study of education is, in short, that it permits us to discover, rather than to assume, the educational significance of what happens to a student.

Education or Schooling?

The distinction between schooling and education, which has been urged by philosophers and social thinkers for decades and ignored even longer by school people and researchers, was popularized in recent social criticism. Such writers as Paul Goodman and Ivan Illich have contended that schooling performs a range of functions, from custodial supervision of children to reinforcing the society's status structure; but that among these functions education is conspicuously absent.[1]

This argument constitutes an attack on schooling, though not on schooling alone. However we regard such attacks, whether with glee or dismay, most of us discern the force of the criticism. It is moral, stemming from our common understanding that education, a value-laden concept, embodies an ideal. To say that the schools operate but do not educate is to charge them not just with inefficacy but also with corruption--exactly as if someone were to say that though the courts continue to try cases, they do not dispense justice. For as justice is the justifying aim of courtroom practice, so education is the justifying aim of schooling.

This concept of education is the starting point for our inquiry. But let me broaden the context. It may be that "education" is of interest to educational research mainly because it relates to schooling. "Educational" research, after all, is chiefly the study of schooling. But this is not an essential constraint on the subject matter of educational research. "The school is but one among many educational agencies and forces in the society," argued George Counts half a century ago.[2] If we limit our interest to the functioning of any one institution, the study of education is bound to misconceive its subject matter. Lawrence Cremin has recently proposed that we think of these many educational agencies and forces as acting jointly; the social instrument of education is thus not home or school or peers but the aggregation of them--what he calls a configuration.[3] The educational importance of schooling, considered as part of a configuration, depends not upon its power to shape children but upon its role. This is the context in which I propose to regard the influences that result in education. But let me stress that even in this broader context, there is a distinction to be maintained between education and the configuration that brings it about. We may teach for the sake of the learner's education.

But the teaching is not the education.

Education is something that happens in the lives of individuals; that is where we must turn to find it. This notion, too, is an old one. It has sometimes been translated into behavioral terms, where it says "education is a change in the learner's behavior"; but the original, not the translation, is pertinent here. For the original has long been expressed through, and distorted by, schoolhouse custom.

It has been the custom for more than a century to judge teachers, schools, and school programs according to the performance of students. This accords, it would seem, with the understanding that education is the purpose of schooling, and that good schooling will alter student performance. But what kind of performance gives evidence of educational progress? The answer has customarily been satisfactory performance on the sorts of tasks that teachers assign. Through eight decades of research and development on assessing school outcomes, since the work of Joseph Mayer Rice, we have continued to use student performance on schoolhouse tasks as the criterion of schooling that works. This begs the question of whether the schooling has been educative; it judges instruction as if it were its own end. In practice, the justifying aim of schooling has been schooling.

But how shall we conceive another criterion? We are sure that education is not simply the outcome of schooling; yet what is there to look at, apart from the learner's successful performance of the tasks that he or she has been taught?

This is the logical snarl that suggests our problem: how are we to recognize education when we see it?

Dewey's Theory of Education as a Biographic Conception

John Dewey had an answer to this question. It was, in brief, that education can happen only through experience; and that only certain experience is educative. The characteristics of educative experience were, he said, continuity (which means that educative experience bears a certain relation to subsequent experience, making possible additional "growth") and interaction (which means that the experience happens through a person's acting upon his or her "situation" at the same time that the situation is acting on him or her).[4] In a moment I shall discuss this answer in greater detail. For now, however, I just want to suggest what Dewey was talking about.

"Experience," the domain in which Dewey locates educational happenings, is a vast abstraction from the commonplace; for it refers simply to what we do, or to what happens to us, insofar as we are conscious of it. Dewey made experience a philosophical concern for educators, a topic to be pursued self-consciously as an Idea. And today we tend to respond to "experience" as though it were a mere abstraction, lacking definite reference. Insofar as this is so, I suspect Dewey would regard himself a failure. His characteristic purpose was to draw philosophers from the heights of abstraction to consider the deeper implications of ordinary life; it was not his usual purpose to turn the ordinary into an exalted mystery. It seems to me, therefore, that we are sure to misread the implications of Dewey's talk about education and experience if we fail to fill in the commonplace intellectual background of his original audiences. We have tended to forget that throughout Dewey's life there was an empirical discipline whose subject matter was, precisely, human experience. The discipline was biography--which was widely and correctly viewed as a kind of inquiry distinct from the scientific.

The biographic tradition. -- Biography in its modern form dates from the late eighteenth century. Though the stories of lives had been written since classical antiquity, it was not until autobiography began to flourish that biographical study assumed the conceptual orientation that now predominates. In its modern form, a biography is the formative history of an individual's life experience.[5]

During the nineteenth and early twentieth centuries, biographies proliferated by the thousands. Some were published and some were not. Some were written by scholars and others by lay people. Some were about the famous and others were about the obscure. By the early twentieth century the biographical form embodied a literary tradition--brilliant, extensive, and profound--whose mode was sometimes historical, sometimes lyrical, sometimes fictional, but whose theme was characteristically the formative influence of early experience. In the historical mode, nineteenth-century scholars wrote a great many lives of public figures.[6] But the historical writing was hardly the most distinguished biographic work; it was rather, a demonstration

of the potential for scholarly treatment of the evidence of life experience. In prose autobiography, in lyrical poetry, in fiction, the flourishing of biographic writing produced undisputed classics. One has only to remember authors and titles: John Stuart Mill, AUTOBIOGRAPHY; Samuel Taylor Coleridge, BIOGRAPHIA LITERARIA; William Wordsworth, THE PRELUDE; Johan Wolfgang Goethe, DICHTUNG UND WAHRHEIT; Charles Dickens, DAVID COPPERFIELD. The impulse to write life history in the modern mode touched the whole range of literary production in the nineteenth century. The importance of this literature to us is not that it documented what actually happened in someone's life--though each of the works I have cited did that, excepting the Dickens. It is rather that, one after another, the great minds of the nineteenth century addressed themselves to the problem of explaining how individuals came to be the people they were--and the resulting works often were masterpieces of their type. The influence of this literature would be hard to exaggerate. In the first place, given the new formative emphasis in biographical literature and the fascination of the Romantic writers with childhood, the topic of education was raised from the status of a mere practical concern to that of one of the more persistent themes in nineteenth-century intellectual life. In the second place, once education became a pre-occupation of many of the finest writers of the nineteenth century--who typically dealt with it in the context of biographical and autobiographical narrative--it became a preoccupation of their readers. By the late nineteenth century, to read the best of contemporary literature, no matter whether it was autobiography, fiction, lyric poetry, or literary criticism, was to encounter biographical speculations about the way in which a person's early experience affected his later life.

In the late nineteenth-century America, the Progressive education movement was aborning among the cultured. Those who read such literary magazines as THE FORUM during the 1890s witnessed the birth. The same magazines were the carriers in America of the nineteenth-century biographic tradition. At the same time that THE FORUM was publishing literally dozens of Joseph Mayer Rice's criticisms of American schools, THE CENTURY was publishing dozens of monthly installments of the biography of Abraham Lincoln. Though I have no direct evidence, the indirect evidence in such texts as Dewey's DEMOCRACY AND EDUCATION (at which we will look shortly) plainly suggests that Dewey's intended audience, Rice's audience, and the readers of biography were the same people.

Those who read the literary magazines of the 1890s took their history and biography in large doses. Early in the twentieth century, as the popular audience for historical writing waned and historians turned to a more professional orientation, biographic writing declined in scholarly respectability. Historians avoided it because it was too literary. Yet popular interest in biography never declined; so that when, after the first world war, literary biogaphers discovered depth psychology, there was an avid popular audience for a newly analytic style of biographic literature.[7] A biography boom ensued. And by the 1930s, thanks to the acceptance of depth psychology in the universities, an incipient reaction against the doctrines of the new "scientific" history of two decades before, and the sheer vitality of literary biography among general readers, biography returned to the good graces of the scholarly community.[8] Between 1930 and 1945, biographical study was resumed by historians--and was adopted as a highly esteemed method by scholars in the social sciences as well. It became a staple of the "culture and personality" studies conducted by ethnographers; it was adopted by Henry A. Marray and his associates at Harvard as the very standard at which scientific explanation of personality should aim; and by the time of the second world war, it had become so common a concern of research in the social sceinces that the Social Science Research Council commissioned an interdisciplinary panel to examine the problems of securing and using evidence of individual life histories.[9]

Between the last decades of the nineteenth century and the middle of the twentieth, there was hardly a decade during which biography was not prominent; more disciplines in the social sciences adopted it for a time. Biography was not just present. It was everywhere: in literature, history, the sciences of man. Why was biography ubiquitous? Let me reject one reason, and then propose a second as a partial explanation.

First, the ubiquity of biography was not due to any advantage it offered as a scholarly approach to human life. On the contrary, it would seem to offer no advantages. Biographical research and writing are expensive of a scholar's time and effort. It is not unusual for a historical biography to require a decade's work; biographies of larger scope, such as Leon Edel's life of Henry James, have taken much longer. The anthropologist

who collects life history data may well spend months or years getting what he needs for a single study; Oscar Lewis conducted interviews intensively for more than six months and then occasionally during the following three years before he had the materials for his CHILDREN OF SANCHEZ.[10] What is worse, biography is not the ideal "methodology" for any discipline that wishes its results to be regarded as scientific. Except under unusual circumstances, biographies are not replicable, quantitative, or suited to the systematic comparisons that are the essence of scientific method. And, it should go without saying, narrative biographies (which are the usual kind) are never generalizable. Biography is, in other words, a troublesome "method" for social scientific research.

But, properly speaking, biography is not a method of research at all. It is a form of inquiry in its own right. As a form of inquiry, it defines its subject matter. And that subject matter is human experience, when viewed formatively. Insofar as we are capable of asking, in terms of experience, how a particular individual has come to have the ideas, the skills, the values that he or she possesses, we are employing a biographic conception. Why was biography so widely resorted to earlier in the century? Because, given that social scientists and others were concerned with formative experience, biography was unavoidable. It defined what they wished to study; and some said as much.[11] In this sense it was the biographic tradition, dating from the early nineteenth century and embodied in history, fiction, and poetry, that supplied the paradigm--the very conceptual frame--for raising questions about how people became educated.

Dewey's conception of the educative.--It happens that the remarkable flourishing of interest in biographical study from the late nineteenth to the mid-twentieth century spanned John Dewey's career. It was one of the few intellectual traditions that literate lay people and scholars in the humanities and social sciences held in common. As a speaker or writer addressing educated Americans, Dewey could count on an audience that was familiar with biography in some form--whether scholarly, fictional, or journalistic. And, in fact, in his own discussion of experience, Dewey cued his audience to seek biographical illustrations.

At the start of DEMOCRACY AND EDUCATION, for example, Dewey argues that education is essential to the continuation of human life. Individual creatures live through interaction with their environment, he notes; but the life process transcends individuals, is passed from one to the next; and this passing of life ensures the life process itself, because it make adaptation possible. In the same way, he says, turning now to human social life, individuals undergo experiences in the course of their lives--experiences who benefits they pass along to the next generation, thus insuring the continuity of their way of life (or culture) through transmission. And education, he says, is the means of this cultural transmission.[12]

Dewey's strategy for linking biological with cultural life turns on a pun. He instructs the reader to notice that "life" signifies more than a beating heart. "We use the word 'life' to denote the whole range of experience, individual and racial. When we see a book called the LIFE OF LINCOLN we do not expect to find within its covers a treatise on physiology. We look for an account of social antecedents; a description of early surroundings, of the conditions and occupation of the family, of the chief episodes in the development of character; of signal struggles and achievements; of the individual's hopes, tastes, joys and sufferings."[13] Think, says Dewey to his reader, not just of life as the biologists know it but also of life as the biographers render it.

The choice of example can scarcely be happenstance. For this is an important passage in DEMOCRACY AND EDUATION. It introduces the concept of experience. The occasion is marked off simply because, contrary to his usual practice, Dewey troubles to supply a concrete image. How would he have us envision life as experienced? Think of a book, suggests Dewey, a biography: experience is what the book is about. And, as if that were not specific enough, he cites several topics conventionally treated by biographers--in effect, kinds of experience.

The concept of experience is crucial, of course, in this work and we have a right to expect a definition when it is introduced. In fact, we have one here. It is an ostensive definition--definition by exemplification. And it is therefore worth noting that Dewey defines experience by reference to biography. To be sure, this is not his last word on the concept of experience. But it is his first; it supplies a conceptual context within which his later discussion of experience may be oriented.

Dewey's later discussion in DEMOCRACY AND EDUCATION introduces a formula to identify the general

aim of teaching: "What is required is a transformation of the quality of experience..."[14] It is just this formula that Dewey recalls when, in EXPERIENCE AND EDUCATION, he sets out to explain what makes schooling educative. I have cited part of this discussion already. Let us return to it now, bearing in mind the biographical frame that Dewey himself suggested for interpreting his talk of experience.

In EXPERIENCE AND EDUCATION biography is again suggested, though not directly. Speaking of experience, Dewey warns his readers to think concretely. To speak of educative experience is not to invoke a general concept, a grand abstraction. There is no general experience. Experience "is always the actual life-experience of some individual." It is an obvious remark. But to disregard it is to misread what was meant as reasonably plain advice to teachers. The advice--to judge schooling according to the quality of student experience--directs teachers away from general doctrines and generalized procedures of every sort: test scores, psychological theories, research findings. Look, says Dewey, at your effect in the lives of individuals.

At what effect? Attend to the quality of experience.

> The quality of any experience has two aspects. There is an immediate aspect of agreeableness or disagreeableness, and there is its influence upon later experiences. The first is obvious and easy to judge. [But] the effect of an experience is not borne on its face. It sets a problem to the educator. It is his business to arrange for the kind of experiences which...promote having desirable future experiences.[15]

What kind of gauge of teaching can this be? The criterion of educational value is the learner's future experience, which in individual cases is unpredictable. Dewey elaborates: "Just as no man lives or dies to himself, so no experience lives or dies to itself. Wholly independent of desire or intent, every experience lives on in further experiences. Hence the central problem of an education based upon experience is to select the kind of present experiences that live fruitfully and creatively in subsequent experiences."[16]

Ine one sense this "problem" that Dewey sets the educator is insoluble. A teacher or curriculum planner cannot know in advance what activities will bear fruit in individual lives. Yet in practice this objection is misguided. To plan well one does not have to know, any more than a painter must know before he sets brush to canvas what his work will look like when he finishes. The only thing that either must know is how to recognize his end. In the case of the fine arts--literature, music, painting--the artist must serve as his or her own audience, must know a finished work when he or she sees it. This is mainly a matter of artistic form, of noticing that essential relationships are intact. In the same way, a teacher or curriculum planner need not be able to predict precisely what his or her effect will be, but must be able to envision some such end as he or she wishes to achieve. In other words, to plan or teach intelligently one must have a formal concept of education, a vision of the kind of relations that one hopes will hold between a student's conscious experience now and in the future. This is the kind of criterion that Dewey urges here.

To get such a picture, to envision the end, one must leave the present scene of instructional activity, travel down the road of time, and look back. Though the effects of earlier experience on later are not predictable, the relation of earlier to later experience is accountable -- but only in retrospect. And the quality of experience, as Dewey speaks of it, lies chiefly in this relation. The discipline that orders experience so that such relations can be discerned is biography. My point is that Dewey's conception of the educative is precisely a biographic conception.

To know education when one sees it, then, one must attend to (1) the experience of individuals, (2) in retrospect, (3) with special reference to the relations between earlier and later events (or, in Dewey's terminology, with special reference to the quality of experience).

But, now, is this too much ado about nothing? We rarely have much trouble making sense of our own experience in retrospect. Why make so much of biography, which is (so it may seem) only common sense applied to memories of one's own life or to observations of other lives?

The answer is that observations of one's own and others' experience only seem to make sense easily. If one observes more carefully than usual, or remembers less selectively, or tries to make sense of the experience of someone from a very different culture, one will begin having trouble. Under such circumstances, one comes to realize that lives don't make sense as readily as we usually think, and that some discipline like biographical

narrative becomes necessary to set things straight.

Rendering Educative Experience Intelligible

We do not normally require an art or a scholarly discipline to interpret our own experience. There are handier, more conventional aids: stereotypes, verbal formulas, common beliefs, and so on, which we employ half-consciously at best. To speak a language is, in one respect, to command an enormous amount of this interpretive paraphernalia. Thus the sociolinguist Basil Bernstein: "We see and hear and otherwise experience very largely as we do because the language habits of our community predispose certain choices of interpretation."[17] Just speaking the common language is a means of making sense of both our own and others' lives. As a consequence, we tend to take the interpretation of ordinary experience for granted.

Anthropologists, however, who wish to study experience in other cultures cannot usefully employ the usual interpretive apparatus of their own. They substitute art for our merely half-conscious habits of interpretation. One anthropologist has recently argued that these interpretive arts are the essence of ethnography, where their function is "to reduce the puzzlement...to which unfamiliar acts emerging out of unknown backgrounds naturally give rise."[18]

The use of biography in studying education in our own culture is much the same: to reduce the puzzlement engendered when we face the unfamiliar. Unlike the ethnographer in a strange culture, we typically do not face an unfamiliar cultural background. But we face an unfamiliar historical background; and in the study of education, the history of what an individual does or thinks is essential to know. The educational significance of any act or idea depends upon knowing what the person has done or thought under similar circumstances before; without that knowledge, no observation of what a person does or says now can make educational sense. Biographic study is a disciplined way of interpreting a person's thought and action in the light of his or her past.

What is a biography?--A biography, as I shall be concerned with it here, is the story of a life. And a story, or a narrative, is a construct; it is an artifact assembled from the record of someone's activity. Its use is to make that person's experence intelligible--here, in particular to show the educational significance of events in a life.

Not all scholarly biography is narrative. In psychology, for example, one finds analytic case histories that have been regarded by their authors as biographies, though no one sufficiently literate to read them could mistake them for life stories.[19] In history, likewise, there is an extensive tradition of biographical inquiry whose chief principle of explanation is psychological (often psychoanalytic).[20] And also in history another long tradition of research is called, among other things, collective biography; even though the subject of the research is not an individual but a group, and even though the principles of explanation may be economic, sociological, demographic--anything that permits the historian to classify and compare many life histories.[21] Narrative is thus not the inevitable form of scholarly biography.

And neither is it a conceptually derivative form, a sort of second-rate case history. For, although narrative biography may also employ theories from the social sciences, its power to render a life intelligible does not depend upon the application of such theories, whether explicit or implicit.[22] It depends, rather, on a literary device (namely, plot) which imposes a form on the otherwise incoherent collection of data about a life.

How does plot impose a form? In practice, there is nothing worth calling a method, no step-by-step procedure. The narrative biographer's task is one of selecting, arranging, clarifying, and assembling incidents. Plot supplies the principle for doing so. The biographer chooses an event as an end point, as the outcome of a story as yet unconceived, and assembles its antecedents and consequences. This assembling of incidents requires more than a correct sense of chronology. To achieve the effect of a story, the links between incidents must be made to seem secure, the earlier happenings making the later more likely. The linking of incidents through one another and to an outcome is the heart of the matter. It is an artifice, as it must be. Lives do not present themselves coherently to a close observer. Quite the contrary: the closer the observation, the more incoherent the life. As the biographer constructs a plot, arranging and linking incidents in relation to an outcome, the life assumes a shape and thereby becomes intelligible.

A biography, then, is a selection of incidents from a life arranged and linked with respect to an outcome

so as to render an intelligible account of how that outcome came to pass. This is, of course, a formal (or structural) definition of biography; and it is this structural aspect of biographic writing that will be the focus of the rest of the study. But, make no mistake, in the biographic frame, these structural concerns are substantive to education.

I have argued that our understanding of Dewey's conception of education is impoverished, and most likely distorted, if we forget the tradition of educational writing that Dewey's audience is likely to have known--nineteenth-century biographical literature.[23] But the literary canon of the past, the particular lives, are less pertinent to our educational interests than biographical rendering itself. One of our own ideas of education--the criterion of educative experience articulated by Dewey--is embodied in the very art, in the noting, selecting, and ordering of the events in a life. This art, as a form of inquiry, is essential for discovering the educational significance of what happens to students.

The importance of biographical narrative to the study and practice of education lies in its application as an intellectual method. If we wish to understand such a method, we must try to use it. And since the use of biographic rendering is to interpret the events of individual lives, my purpose in what follows is to show how such interpretation does indeed disclose educational significance. This is obviously an illustration, not a "proof." Still, as illustrations go, it is elaborate; it is nevertheless not definitive or complete. I shall emphasize just one aspect of the biographical approach--the manner in which the formless record of a student's activity can be made intelligible as educational experience.

The illustration is contained in the next five chapters. The events discussed here are drawn from the life of one eighteen-year-old whom I call Peter Nussbaum. In the next chapter I explain the origin of the biographical episodes: how I came to have a record of the events represented and what I did with the record to construct the two narratives. The first of the narratives then follows, accompanied by a discussion of the significance of the events in the episode; and then the second episode, followed again by a discussion of the significance of the events. Throughout I employ Dewey's suggestion that the educational significance of what happens in these episodes depends upon the way in which earlier experience becomes embodied in later.

FOOTNOTES

1. See Paul Goodman, COMPULSORY MIS-EDUCATION (New York: Horizon Books, 1964); Ivan Illich, DE-SCHOOLING SOCIETY (New York: Harper & Row, 1971).
2. See George S. Counts, "Some Notes on the Foundations of Curriculum-Making," in THE FOUNDATIONS OF CURRICULUM-MAKING, Twenty-Sixth Yearbook of the National Society for the Study of Education, Part 2 (Bloomington, Ill.: Public School Publishing Co., 1930), p. 75.
3. Lawrence Cremin, PUBLIC EDUCATION (New York: Basic Books, 1976), p. 30.
4. John Dewey, EXPERIENCE AND EDUCATION (New York: Collier Books, 1963), chapters 2 and 3.
5. I am following the analysis of Karl J. Weintraub, "Autobiography and Historical Consciousness," CRITICAL INQUIRY, 1 (June 1975): 821-48.
6. A study of the form and the literature of biography written by nineteenth-century British historical biographers is A.O.J. Cockshut, TRUTH TO LIFE (London: Collins, 1974).
7. The dizzy enthusiasm for Freudian psychology carried one biographer and critic to forecast the imminent demise of literary biography in favor of psychoanalysis; yet it would appear that the past fifty years have treated literary biography more kindly than psychoanalysis. See Andre Maurois, ASPECTS OF BIOGRAPHY, trans. Sidney Castle Roberts (New York: D. Appleton and Co., 1929).
8. See John Higham, "The Historian and His Audience," in HISTORY: PROFESSIONAL SCHOLARSHIP IN AMERICA (New York: Harper Torchbooks, 1973).
9. For a thorough discussion of biographical approaches in the culture and personality studies, see L.L. Langness, THE LIFE HISTORY IN ANTHROPOLOGICAL SCIENCE (New York: Holt, Rinehart and Winston, 1965). The espousal of literary biography as the standard for personality study is in Henry A. Murray, EXPLORATIONS IN PERSONALITY (New York: Oxford University Press, 1938), pp. 604-9. For the report

of the interdisciplinary panel, see Louis Gottschalk, Clyde Kluckhohn, and Robert Angell, THE USE OF PERSONAL DOCUMENTS IN HISTORY, ANTHROPOLOGY, AND SOCIOLOGY, Social Science Research Council, Bulletin no. 53 (New York: Social Science Research Council, 1945).

10. Oscar Lewis, THE CHILDREN OF SANCHEZ (New York: Vintage Books, 1963), p. xx.
11. E.g., Murray, EXPLORATIONS IN PERSONALITY, p. 3.
12. John Dewey, DEMOCRACY AND EDUCATION (New York: Free Press, 1966), pp. 1-2.
13. IBID., p. 2.
14. IBID., p. 11.
15. Dewey, EXPERIENCE AND EDUCATION, pp. 27-8.
16. IBID., p. 27.
17. Basil Bernstein, "A Sociolinguistic Approach to Social Learning," in CLASS, CODES AND CONTROL, vol. 1 (London: Paladin Books, 1971), p. 142.
18. Clifford Geertz, "Thick Description: Toward an Interpretive Theory of Culture," in THE INTERPRETATION OF CULTURES (New York: Basic Books, 1973), p. 16.
19. See, e.g., H.A. Murray, EXPLORATIONS IN PERSONALITY. Also see Robert W. White, LIVES IN PROGRESS, 2nd ed. (New York: Holt, Rinehart and Winston, 1966).
20. See Frank E. Manuel, "The Use and Abuse of Psychology in History," in HISTORICAL STUDIES TODAY, edited by Felix Gilbert and Stephen R. Graubard (New York: W.W. Norton, 1972).
21. See Lawrence Stone, "Prosopography," in Gilbert and Graubard, HISTORICAL STUDIES TODAY.
22. The place of theory in historical explanation has been in dispute for decades. For an overview, see William H. Dray, PHILOSOPHY OF HISTORY (Englewood Cliffs, N.J.: Prentice-Hall, 1964), chapter 2.
23. Though I have no direct evidence concerning Dewey's own familiarity with the biographic tradition--apart from his reference to the biography of Lincoln cited above--I doubt that he could have escaped its influence. For we do know that he was a reader of catholic interests. In his college years, he avidly read three English journals--the FORTNIGHTLY, the CONTEMPORARY REVIEW, the NINETEENTH CENTURY--whose regular contributors included Sir Leslie Stephen, the greatest champion of biography of his time and the moving force behind one of the monuments of nineteenth-century English scholarship, the DICTIONARY OF NATIONAL BIOGRAPHY. Dewey also read extensively in nineteenth-century history and sampled biography--notably Eckermann's CONVERSATIONS WITH GOETHE, who was himself a major figure in the biographic tradition. See Lewis S. Feuer, "John Dewey's Reading at College," JOURNAL OF THE HISTORY OF IDEAS 19 (1958): 415-21.

Chapter III
From Life to Episode: The Construction of the Biographic Accounts

The next four chapters present and discuss two episodes from the life of one student. The happenings treated there were derived from a field study conducted intensively with several students for an academic year. During that year I attempted to document the greatest variety of influences on these students. I was trying, in effect, to observe education naively.

I did not approach the observations with any particular educational theory in mind. In fact, I spent some time deliberately trying to root out the conventional concepts and questions of educational research. I was not being perverse, for the premise from which the study had begun was that the most common models of educational process were in fact seriously inadequate. There is reason to believe that such simple questions as, "What is the effect of a certain textbook (or teaching method, curriculum package, etc.) on what students learn?" are unanswerable at the moment. And the trouble is not so much methodological as conceptual. On the one hand, achievement tests remain undependable devices for measuring the effects of teaching; the trouble stems from the relative crudity of our conceptions of the content we teach.[1] On the other hand, the commonest models of school learning and of school effects are also too crude to be of much use; and, again, the difficulty is not methodological but conceptual. We have not carried our thought about the process of schooling far enough to express it usefully in mathematical models of school effects.[2] To adopt one of the usual conceptions of how sutdents become educated seemed worse than pointless. Even if my purposes had been more conventional, it would have been like leaping aboard a sinking ship. But given that my purpose was to try to find a way through the conceptual difficulties, to adopt some conventional conceptualization would have been like carving holes in the leaking hull. That is one reason why there is nowhere in this study a formal definition of "education." It is also the chief reason that, when I went into the field to observe students in the course of their education, I took the minimum of conceptual baggage. Nowhere was there a distinctly educational (or "schoolish") category scheme for structuring the observations. And, consequently, the record of observations was, in most respects, unstructured.

In one respect the structuring was deliberate, however. Observations were ordered according to time: both duration and chronology. That was because I knew they would provide the material for narrative. For the rest, I tried to make the observations comprehensive, aiming at a record of what each student was doing, where, and with whom, hour by hour for the entire year. That was impossible to achieve; but in Peter Nussbaum's case, which we are about to examine, the hourly record of activity is nearly complete. Exhaustive recording seemed the best insurance against unwitting application of educational theory by selection. (A more detailed account of the procedures of the field study appears as Appendix A.)

The results of this procedure were predictable. I produced records of activity in which education, being undefined, was also invisible. There was evidence of learning, to be sure, and of experiences that were bound to have consequences. But the data themselves--hourly logs of activity, field notes, student tests and papers, interview transcripts--did not, could not tell a story of education. Indeed, the record as a whole was very nearly incomprehensible.

I stress this point for a reason. Many researchers who know the perplexities of interpreting quantitative data seem to imagine that the uncoded, verbal record of a field study is comparative child's play to construe. They will concede, of course, that if the record is to be interpreted in the light of a theory--as when, for instance, the transcript of a clinical interview is interpreted psychoanalytically--then there is a genuine interpretive task in hand. But what sort of interpretation does a chronological record of activity require to turn it into biographical narrative? Some researchers, I'm afraid, would answer: none at all. They may suppose that a chronological record is a narrative biography, that the procedure for writing biographical narrative is essentially to compile the chronicle of events and then decorate it. But the usual standards of historical and biographical scholarship preclude any such thing.

The most fundamental principle of historical scholarship is called, following tradition, "the critical method."[3] It instructs the historian or biographer to take nothing at face value, to regard all evidence as corrigible. Did Peter Nussbaum say he made a film last March? That does not mean he did. And what did he mean by

saying he "made a film"? Did he write it? Direct it? Shoot it? Edit it? Act in it? What was the event to which the statement testifies.

The point is that narratives--most especially scholarly narratives--cannot be drawn directly from the record.[4] The record does not contain events, from which narrative is constructed. It contains words on paper, speech on tape, photographic images. Words and images have to be construed. Rarely does that record of words and images embody the events that constitute the biographer's story. Usually it embodies testimony pertaining to those events. The events themselves are inferences from the testimony. So, too, are the links that bind the events, the principles that organize the narrative. For chronology alone will not make a series of events intelligible; narration demands some conception of causality, of later events being consequences of earlier ones.[5] And causal links are, of course, never observable or recordable; they must always be inferred. That is why a narrative cannot simply be shaken out of the record. It is the product of interpreting evidence not of transcribing data.[6]

The narrative episodes that follow are the products of a deliberate critical procedure. The central task of that procedure was to make educational sense of a record of student activity, which, because it was comprehensive, did not bear distinct educational significance. Here is how I conceived the task.

What is an Educational Episode?

There are moments when something dawns on us, when we achieve an insight. At such a moment we have resolved, at least tentatively, some problem that previously created bafflement or concern; or perhaps we have just imagined a possible solution (which comes to the same thing). Either way, resolving such a problem, if it is genuine, enables us to proceed where we could not before. And frequently the resolution, the insight, is the consequence of deliberate effort, of our trying (even if wrongheadedly) to reach a resolution. The effort, the insight, and the going-on are the marks of an educative experience, as Dewey saw it.[7] For our purposes here, those moments of insight are what the educational episodes in a biography are about. And an educational episode is the story of how one of those insights happened.

This "definition" is somewhat artificial, I hasten to add. We are dealing with individual lives when we write biographic accounts, and with individual experiences within those lives. Each life and each experience will be different. Those differences are, moreover, the very justification for biographic inquiry, and an essential aspect of education when viewed in a biographic frame. We can affirm this by saying that the effort, the insight, and the going-on are elements of the ideal type of an educative experience; because educative experiences differ, the marks of the ideal type will appear differently (and, sometimes, one or another may be absent) from one instance to another.[8]

The task of constructing an educational episode thus consists in locating a candidate experience and telling its story. But to tell the story one has to find the story, and that may not be easy. There are in any case three sorts of evidence that one looks for in the record. First, because the turning point of the episode will be a moment of insight, one looks for evidence of such moments. Second, because the moment of insight typically represents the resolution of some problematic situation through effort, one looks for evidence of the problematic situation and of the activity it spurs. Third, because the experience is supposed to enable later experience, one looks for the evidence that the experience has had fruitful consequences.

This is, as I say, a process of finding the story, of discovery. Though much of the search goes on as a preliminary culling and organizing of the contents of the record, it does not stop there. The narrative form itself serves as a heuristic, so that the search for, and clarification of, the story is extended by the act of writing.

Finding the Turning Points

The observations on which the following episodes were based consisted sometimes of my personal witnessing of events in Peter Nussbaum's life, sometimes in my perusal of his work, sometimes in talks with his friends, and parents; but most of the evidence of the record came from two sources: a log that he kept on his activity hour by hour, and weekly interviews that I conducted with him over the course of nine months. Throughout this period I was thinking about the events as they happened, considering them as possible foci of educational episodes.

Peter was a college freshman when interviews began, and had in fact arrived at school no more than a few hours before the first one. He was then eighteen, voluble, and thinking seriously about how he ought to spend the rest of his life. His interests, he said, were the sciences and the arts--specifically, engineering and film making--and he did not know which to choose. Indeed he did not know how to choose, but he thought his school experience ought to be of some help. For months afterward the various considerations appeared in his conversation and, frequently impelled his activity, until one afternoon in mid-February he was struck rather dramatically with a moment of insight and reported that he had made up his mind then and there: he wanted to be a film maker.

At the time this moment, tagged with a potent emotional charge, seemed an excellent candidate for narrative explanation. His activity since that day has tended to confirm that he had indeed redirected his efforts as a consequence of that moment, that it had been a turning point. Four years later, having graduated from college, Peter has a steady job with a film studio and is an applicant to two foundations for grants to fund the production of a film of his own. In short, the episode has all the marks of an educative experience. I chose it, however, shortly after the end of our interviews, gambling that it would be a consequential decision; the writing of the episode was complete before Peter's graduation.

The second of the events, though very different from the first, also seemed a good candidate by the end of our interviews. In collaboration with two of his friends, Peter had devised and conducted an inquiry into his dorm-mates' sexual sophistication. It was a project much like those that students in his dorm had undertaken for course credit; but Peter had pursued it on his own, to answer for certain a question that had plagued him for years. That was its principal qualification as an educative experience. But there was this time no dramatic moment of insight on the record. The whole business was far more intricate, more subtle. In the end I chose to tell the story of the sex poll as a challenge to the method. The educational significance of the project was obscure and I wanted to see how far it could be illuminated through a critical examination of the record and narrative rendering.

Constructing the Narratives

A principle of research methodology advises that one clearly defines whatever he is looking for before conducting observations, and I had not done so; for then I surely would have begged the question of how education happens, a question I wanted to address. In observing and recording Peter's activity during the year I had taken pains to avoid using any classification scheme that would shape a picture of education by default. The result was a pile of records concerning nine months of Peter's life, a span that embraced a number of potentially interesting events including the two I have just mentioned. But the educational significance of those events was more or less obscure; for in even the clearest instance one could not see just how the problematic situation had been resolved.

The trouble was that the method of observing and recording Peter's activity had worked. It did not beg the question of how education happened. As a consequence, the record did not display the educational significance of any important happening. If there was to be an explanation of the educational significance of Peter's career choice or his sex poll, it would have to be extracted from the record. The questions about education had become biographical inquiries--questions about the relations of events in a particular life.

Constructing the narrative accounts of Peter's decision to become a film maker and of his sex poll project required finding what evidence the record contained. It became clear almost at once that the record was practically inexhaustible. That is to say, the same statement from Peter often pertained to both the episodes I intended to write--and might have informed ten others in addition. His movies, for example, testified both of his understanding of the art of film and, in their plots and characterizations, to his sex role conceptions. Finding evidence pertaining to one episode or the other could not be simply a matter of sorting. So I read back through the whole of the interview transcripts and wrote a digest, indexing each entry under the themes on which it touched and the persons to whom it referred. The themes were those that related to either of the two crucial events (sex, computers, movies, engineering, art, etc.). To preclude premature selection, I tried to classify every statement in the transcripts under one of these themes.

By the time I had digested the transcripts, I was familiar enough with the record to begin thinking about

the plot of the stories. What had been the antecedents of Peter's decision to become a film maker? I worked backwards looking for evidence of events that had been crucial and for clues to how they had happened. Eventually I decided on a rough outline of the episode--picked out three events which marked additional turning points in Peter's thinking about a vocation; this made a simple plot, which if recited, would explain how Peter came to choose film making. Later I followed much the same procedure in sketching the story of the sex poll. As I worked back and forth from the digests or transcripts to the outline, raising more and more minute questions about how one event followed from another, the episodes became more coherent.

That is the way I worked out the structure of the episodes. And structure, in the sense of a plot, is precisely the Deweyan criterion of educative experience. For Dewey the educative quality of an experience lies in its relation to antecedent and consequent events in a life.

To see how far that conception could be applied in practice I decided to use an unconventional style of narration. I decided to suppress what most scholarly historians regard as indispensable: interpretive commentary. That commentary usually carries the burden of scholarly interpretation or speculation on the events being reported. But, because narrative structure was the device that had to bear the burden of explanation here, it seemed important to demonstrate the work of narrative structure alone. For that reason, the narratives may seem more like fragments of a novel than of a biography. My own commentary follows each of the narratives as a separate chapter, and is intended to explicate more fully the course of events in each episode.

Reading the Accounts

I offer the two episodes that follow as examples of how narrative structure functions to disclose the educational significance of events in a life. To further the demonstration, I have left the earlier parts of the first episode in a somewhat less polished state than the rest; earlier on, somewhat more of the structural skeleton shows. I suggest that the reader take note of the construction in these early parts.

In the first two parts I have tried to distinguish clearly between incidents or "scenes," which are the basic material of the story, and narrative summary, which functions to link the scenes. The distinction between scene and summary reflects a series of decisions that I have made concerning the relative bearing of different happenings on the main turning point of the episode. These decisions are the most elementary way of imposing a form on the events evidenced in the record, and this form is what makes the events intelligible as parts of an episode. To show this structure of scene and summary, each scene in the first two parts is presented in the raw, as it were. That is, each appears as an extended quotation directly from the interview transcripts. Sometimes the quotations have been shortened, with excisions indicated by three spaced asterisks (* * *); spaced periods (. . .) are signs of a speaker's hesitation.

A scene serves either of two functions. It may present an act (like a decision). Or it may reveal thought or feeling that I, as a writer, believe to be a determinant of what comes next. In educational episodes, where the outcome is expected to be an insight of some sort, thought and feeling are likely to play a large part as antecedents. Insights are relative, after all. Peter's insight into his own beliefs about the masculine sex role may be jejune to others; it is no less an insight with respect to the history of his own thought. To understand it as an insight we need to know how he had thought before. As the writer of an educational episode, I will want to use scene (not just summaries) to convey the sort of confusion or false belief from which my subject is about to be liberated.

In the case of Peter's decision to become a film maker, what he thinks and feels are indeed important antecedents to his ultimate moment of insight. The scenes of the first section are intended to display (1) Peter's initial indecision, (2) the confusion he suffers when he thinks about the art of film making, the quality of his own work, and the risks that he imagines are entailed in his trying to enter the move business.

Between the scenes I have inserted summaries of other evidence in the record to cue the reader and to provide background information. The summaries are chiefly narrative glue. I have tried to make the summaries straightforward, nontheoretic, and brief. I have also tried to follow the record closely. Summaries that report a happening are based on distinct evidence in the record. Where evidence in the record is lacking I have not followed the biographer's time-honored custom of speculating; I have simply left a gap in the narrative.

After the second section of the first episode, however, I have not distinguished between scenes and summary so graphically. Only the functional distinction remains. This makes for more elegant narration and easier reading.

The episode that follows is an account of Peter's decision to become a film maker. That decision depends upon his understanding of the art (its rewards and its demands) and of himself (his abilities and his desires). In the course of the episode, so I contend, he acquires the understanding he needs to make up his mind; the outcome is a moment of distinct revelation to Peter.

FOOTNOTES

1. A useful and ingenious exploration of this problem is John Bormuth, ON THE THEORY OF ACHIEVEMENT TEST ITEMS (Chicago: University of Chicago Press, 1970).
2. Alexander Mood, who supervised the data analysis for the Equality of Educational Opportunity Study, has said flatly that we cannot distinguish the effects of schooling from those of other influences, using present models. Quoted in N.L. Gage, TEACHER EFFECTIVENESS AND TEACHER EDUCATION: THE SEARCH FOR A SCIENTIFIC BASIS (Palo Alto, CA: Pacific Books, 1972), p. 33.
3. See Marc Bloch, THE HISTORIAN'S CRAFT (New York: Vintage Books, 1953), chapter 3.
4. Unless the biographer is playing midwife: Oscar Lewis, THE CHILDREN OF SANCHEZ (New York: Vintage Books, 1963).
5. This observation goes back to Aristotle; for a standard, modern discussion of causality in narration, see "The Plot", in E.M. Forster, ASPECTS OF THE NOVEL (New York: Harvest Books, 1955).
6. "Interpretation" as I use it refers, not to a synonym for "opinion," but to a discipline in the humanities. An introduction to the discipline in its traditional form is: E.D. Hirsch, Jr., VALIDITY IN INTERPRETATION (New Haven: Yale University Press, 1967).
7. John Dewey, DEMOCRACY AND EDUCATION (New York: Free Press, 1966), pp. 139-40.
8. This use of "ideal type"--as a conceptual model for interpreting particular historical events, which can be expected to represent the type only partially--seems to have been precisely the application intended by Max Weber, who introduced the concept. See H.H. Gerth and C. Wright Mills, FROM MAX WEBER: ESSAYS IN SOCIOLOGY (New York: Galaxy Books, 1958), pp. 59-60.

Chapter IV
How Peter Decided to Become a Film Maker

Section 1

By the time Peter discovered that undergraduates could not major in film, it was already too late. He had accepted the offer of admission from a university in California. Then three weeks later he read a guide to college programs in film making, which described the university's undergraduate offerings as meager: one course, and that one limited to students in their last year of a major in "communications."

"Oh God! I thought."

What was worse, the same guide said that, among good liberal arts colleges, Wesleyan University had the best undergraduate film program in the country. Peter had been admitted to Wesleyan and had then chosen the California school at the urging of friends and family. So he began his first year of college as an engineering major, though he had not given up the hope of studying film. And from the first, the prospect of a major in engineering made him uneasy.

The predicament of choosing a major was entangled with that of choosing a career. Peter, who had always been an excellent student in mathematics and the sciences, was an excellent candidate for a career in engineering. Yet he loved movies and wanted to think he might make them professionally. The trouble was that without the chance to try himself in a film program he could not tell whether he had the abilities that film making requires. Under the circumstances, he might squander a career in engineering if he chose movies mistakenly; but if he played it safe and chose engineering, he might be squandering a chance at movies.

So during his first term he strained to make out even the most obscure testimony to his talent for film making. He worked at still photography to refine his technique. He watched every film of importance shown on campus, pursuing its analysis with a zeal that invited caricature. He pursued the friendship of the one dorm-mate who shared his interest in film, even though she insisted on remaining aloof. He tracked down other students on campus who had succeeded in making films, attended their screenings, and found out how their interests had fared on campus. He rehearsed his plans in letters to friends. He talked and worried. He waited for the mailman.

Peter and his friend Darryl had made two movies before they left Chicago for their respective colleges. One was a three-minute experiment entitled "The Wizard," and the other, a twenty-five minute fantasy of sex and aggression entitled "The Wrath of Dindon, the Killer Turkey," They had entered both in a national contest for young film makers. The prize was a $1000 scholarship to a summer film school at UCLA, and notice of the winners was due in the mail from New York. But for Peter there was more riding on the letter than a summer scholarship. He would be receiving a professional judgment of his work.

"The Wizard" had been made the previous spring, as a course project for the film workshop which Peter and Darryl's high school had offered after hours in its adult education program. The film consisted of a single scene. Peter had written the script and acted its only part.

It was a simple film: In an aura of eerily colored light, the wizard mixes chemicals, then drinks them. Now he is capable of magic. At his command a bookend vanishes and books spill out over the tabletop. Fluid in test tubes, books, a pen, a notebook disappear. Then walking to a full-length mirror, the wizard peers at himself, gestures, and vanishes. Beside the mirror a door opens, hesitates, shuts. The whole is set to organ music.

On this brief scene they lavished two weeks' shooting time, setting lights carefully and redoing the shots that failed the first time. Their choice of subject and invention of incident, like the self-conscious concern with color, lighting, and music, was governed by considerations of effect.

Not so the plot and characters of "Dindon," invented this time by Darryl and filmed during the summer. Although they worked again for effect through photography, color, and lighting, Darryl's design for the story apparently found its shape in his own fantasy; the demands of the cinematic medium came afterward. The making of "Dindon," as Peter told the story, was more nearly the filming of a fantasy acted out than the making of a movie.[1]

[Darryl] had read Jack London's story about some guy and his dog who hated each other up in the Yukon, and they were always trying to kill each other, but they didn't want to kill each other cheaply. They wanted to really kill them good, you know, and so they didn't; they never got around to it until the end.

So what it is....He wrote a story about two kids who were forced to live together. They were cousins who were forced to live together for the summer because their parents were going on vacation, and they wanted them both in one house. And so they hated each other.

One guy was a stud, you know, a real mover. And in the first scene of the movie they didn't know they're cousins. They're on the highway, and the stud is picked up by the other guy (who is Darryl, who wrote the movie; and he's also in it, which is a mistake). And he's a physical culture type. (You know, lifts weights...the whole bit. He's crazy, you know: a real machine guy, you know--plays with guns, you know, and everything. All right?) And so he's driving with his girlfriend and picks up the stud, and by the end of the sequence the stud has the girl, you know. And so he throws [the stud] out of the car, and that sets the stage for the fight to come up. Then they find out they're cousins, and they live together; and the rest of it is just, you know, fighting scenes between them, you know, as they get back at each other. . . . . .

Now the thing is that what [Darryl] did originally... In the original script he had them killing each other in the end. But I said, "Look" you know, "these are just kids. They don't do that. They do that in the Yukon you know, guys, you know, twenty years ago, but they don't do that--kids don't you know, shoot each other and stuff like that. They just don't do that." So we toned it down a little bit and now they just fight. I mean, he had one scene there before, where the guy was fighting with him, and the guy was like knocked out, practically: You know, this stud guy was knocked down. And what this guy does is goes up and jumps up and down on this guy's legs until they're broken. It's the grossest thing. I can't believe that. I read that and I said, "You gotta be kidding, you know. That's gross! It's like one of the grossest things I've ever seen, you know. You can't put that in a movie. If you say that in a regular movie it would be gross." And so we cut out stuff like that. They just fought, and the guy got hurt a little bit, and, you know, that was it. The thing was, he didn't even have an ending to it--a good ending to it--even when he did redo it. It just was a terrible ending. And so I came up with a...I'd been thinking about a title, and I thought, there's no way we're going to...so let's just do a completely abstract title, you know--so everyone will know it's funny. So I said, "The Wrath of Dindon, the Killer Turkey," you know, like a joke title. (We were thinking of doing "The Son of," you know, "Mighty Joe Kong," that type of thing.) And so we used that. And then for the ending I said, "Well, the only way to end the thing--it should really be funny--is when we have Dindon show up." That's what he does. Dindon shows up and kills them both. So that's funny. 1.1.13-14][2]

Peter's parents, who had seen the films that Peter made with Darryl and who had enjoyed "Wizard", did not think "Dindon" was funny. They thought it was immature, and told him so. But Peter was not counting on plot to impress the judges. He had directed the photography and the editing of the picture. "Our big plus is technical quality." [1.1.15] Hoping that no one else had taken similar pains with technical matters, Peter waited to hear what the judges thought.

He had plainly invested this competition with special significance. During his senior year in high school he won a National Merit scholarship--worth, as it happened, $1000, just what first prize in the film competition would pay toward a summer studying film at UCLA. But the National Merit award was simply a windfall; he hesitated to regard it even as an honest expedient for procuring his share of the year's expenses.

P: That's kind of my contribution. I don't know. Of course, I didn't work for it.

LB: Does that make a difference?

P: Yeah. Well, sure. You know, I can't say to my parents "I'm contributing a thousand dollars because I really didn't you know. I didn't do anything to do it. They just tested me and

> decided: Well, the way you are we'll give you a thousand dollars. * * * It's just like winning a sweepstake or something. I didn't do anything to really merit it. They just decided they liked my kind of person. So they give me a thousand dollars. [1.1.6-7]

Winning first prize in the film contest occasioned none of the same contempt for the award. Perhaps the film award would also seem less worthy after he had won it. But his desire to win was no more simple anticipation than it was a longing for the prize money.

P: You can win a thousand dollars. And just, you know... Even if we...I don't need the money, I'd like to win a prize, and...just to know I'd won something with it [the film].
LB: Does that count as work?
P: Pardon?
LB: That's a thousand dollars, too.
P: Yeah. Well, this is...this is...It's actually not a thousand dollars. It's a thousand dollar scholarship to UCLA for the summer.
LB: To UCLA for the summer?
P: Yeah. To film.
LB: Right. But would you dismiss that the way you dismissed the National Merit?
P: Well, I wouldn't use it for my college education. This is actually a thing for me. I wouldn't apply it to my...you know...this sort of college expenses. No, I wouldn't dismiss it, because I had worked on the movie--and, you know, I had produced this movie--and they decided the movie is worth something. If they decide I'm worth something, and they're not going to use me, that something else. [But] if they decide the movie's worth something, then that's something I've made, and put a lot of work and thought into. [1.1.11-12]

Winning a national prize in film making would attest to the quality of Peter's thought and the promise of his work. It was just such testimony that Peter was finding hard to come by. Friends in the sciences could work for grades, assured that their official record in engineering or pre-medical courses would, if it were good enough, open the necessary doors. But how does one find out whether he can make it in the arts? In established arts it has traditionally been success in competition. Success in cinema may proceed along somewhat different paths; becoming a professional may demand, as Peter was aware, that one take a job as dreary as any engineer's and risk keeping it. No matter the differences. Peter was seeking assurance that his interest in making films was not just a longing to be a film maker. He had, he thought, at least a month to wait before he found out.

Meanwhile he began to see himself in a predicament. If he stayed at the university, did he block further experience in film making? He took the first opportunity to pursue the question.

Students who recently had taken the university's film production courses were to show their work one Friday evening early in October. Peter learned of the showing and made plans to attend. "I will definitely... Even if I won't enjoy it, I have to see it because I want to see what kind of movie they produce in this department, to see what's going to happen with my film future." [4.29]

After the showing he found the future only a little less obscure. There was just one auspicious sign: four of the five films were fictions, only one was a documentary. Everything else was worrisome. The fellow who had made the best of the films, and whom Peter had sought out after the showing, advised that anyone really interested in making films should leave the university. To get into the production course he had had to wait until he was a senior.

> It was ridiculous. He said that if you really wanted to make films, you're not to be able to stay here..you know, you're just not going to be able to find it here. So I may transfer to Wesleyan.
> Eventually.
> I like it here. I like everything about the place except the film program.
> It all depends. If I really get interested in film, I will have to transfer.
> I mean, it would be nice to come here, major in psychology or engineering, and then go to Wesleyan

afterwards. But that's ridiculous. You can't really do that sort of thing. [5.3.2]

Perhaps one can do that sort of thing, can pursue a safe course of study at one school and then depart to pursue something much riskier at another. What one cannot do is avoid deciding in the end. Film or something safe? Peter saw the decision immanent, embodied in the need to decide whether he would transfer, but he hated to decide when he had so little sense of his competence in film. One thing seemed plain: this was not the school for someone with serious designs on training in film.

LB: Well, before you decide that there is nothing to do here...

P: I should talk to people.

LB: Yeah [in a tone that said, "Perhaps, but I had something else in mind"]. In general...I talked to the dean of humanities and sciences about the university's undergraduate program. And his claim was: The strength of this university is that anybody with initiative can do anything he wants.

P: Yeah, that's what the guy said [i.e., the student film maker]. He said, "If you want you can get a Super-8 camera and make your own films, and they'll give you credit for it--and they'll help you with it" is what he said.

LB: Well, you might even be able to use their cameras.

P: Maybe.

LB: Depends, I think, on who you know. And, you know, just get in and talk to those guys.

P: What I did is I discussed it with him...And the conclusion I came to is I'm waiting for this contest thing.

LB: Yeah...

P: If I win the contest I'm going in there and say, "Look! I want to use the camera. All right?"

LB: Why does the contest make any difference at all? [Implication: What bearing does it have on asking for a camera from the communications department?]

P: Because it proves that I'm good.

LB: Why do you...?

P: That I'm on a level, as good a film making level, as any senior they're going to have, and they should let me in [presumably, to the film making course].

LB: Suppose you don't win the contest. Is that a reason not to go in and tell them to give you the camera because you're going to make films?

P: No. If I don't win, I'll go in and show them the film and say "This is what I've done. Will you please ...? Now I'd like to work out...I would like to see what you're going to offer me in film." I'll still show them the movie. I may show them the movie anyway if I win. Actually, if I want to see it...

LB: Do you have a copy of the movie?

P: No, no prints. There's only the original. Contest has it. Everyday I go to my mailbox looking for a letter from that contest. That's why I get really upset when it doesn't come. [5.3.4-5]

Peter was making no move until he heard what the judges thought. So he had begun watching the mail, even though it was by his calculations still too early to expect a decision.

LB: When are you supposed to hear?

P: They're judging, they said. When they sent me a letter, they said the preliminary and semi-final judging was over, and the final judging--they sent me this letter before October--and they said the final judging would be in October.

LB: They didn't tell you whether you were knocked out or not?

P: No, no, no. * * * They said the final judging would be in October. [They had completed all but the final judging in the ten days from September 20 to September 30.] So at that rate, when they've only got like (what?) forty films left at most, you know--well, they would have cut down the field incredibly. I would have thought * * * there's a good possibility it's going to take them like three days to finish the judging, and it would be done, you know. I could get the letter any

time, you know.

* * *

I expect to get it before the end of the month. Really. And no later than like November 3. All right. But I expect to get it no later than the end of the month, and I could get it next week. I could get it today (October 12). It could be in my mailbox! [5.3.7-8]

But it wasn't. As the weeks of waiting accumulated, Peter anticipated the arrival of the letter, rehearsing the moment in fantasies whose details he savored.

P: Here's my prediction. If I lose [he groans] it won't change me that much. you know I'll just write my friend [Darryl] one letter that says we lost. It'll be so dramatic! It'll be great: I'll get a big sheet of paper, and right in the center in little words I'll type "we lost." And I'll send it to him like that.

LB: What happens if you win?

P: If he doesn't send me his phone number, I'll have to write him a letter. The first page would be a big "WE WON" which will fill the whole page. In color, and everything.

LB: How about a big page with tiny little words "We Won"?

P: It'd be great. And then on the flip side, of course, it tells exactly what happened. That's better. [thinking] It'd be great. I won't send it airmail. I'm nasty. [laughing] I think I'll send it airmail. I might send a telegraph. [6.2.19-20]

The next week there were more rehearsals. "I was sure I would have found out about it by now." He began to imagine ways that the notice might have been misdirected.

LB: You gave them your address here?

P: Yeah. Well, what I did was: I gave them my address at home and then I sent them a note. Then, with something else I had to fill out, I sent them a thing saying my current address is now here; please address all correspondence to me at this address. I hope they'll do it.

They might not. Hell, it could go to my house first. My parents will send it along to me. Or... I'll tell you:

If they send it to me unopened it would be find with me. [But] if they would...in other words, if they called me up and said "Peter, you lost," or "Peter, you won," I would really be angry with them.

LB: You'd rather wait the extra several days?

P: Definitely. Definitely. Definitely. I want to open the letter myself. To find out. I don't want anyone else knowing what I...you know...opening and experiencing it and then telling me. I want to experience it the way I'm supposed to experience it, which means open the damn letter!

Here's a letter from the contest! Open it up. Spread it out on the table. Don't look at it. Put my hand over it, and then slowly go down it, like that. I mean, for the first line, man: "We regret..." or "Congratulations!" [7.25]

He was by now suffering false alarms. It was the end of October. Either the notice would arrive within the next few days or there was something wrong in the conduct of the contest itself.

Today I get to my post office box, you know--right there, you know--and there's this little card in it. They put a little card in it if there's something too big to be delivered to your mail box. And I said, "God! Here it is! The films. They're sending me back the failms. I lost. They're sending them back."

So I ran over there, and it's a gift from my parents: that book, that photography book. I couldn't think of anything else it could be. I...for a second thought of a gift crossed my mind, but I thought "it's too much of a coincidence," you know. And like the film cans won't fit in there, in my post office box. I know that. So, so that's good.

What I want is to get a letter say "we're holding your films because you won. We're printing

them." I don't want them to send my films back with "we regret to inform you" or whatever they would use for a contest. I don't know. So. Well, I'll wait till next week. Next week at this time I've simply got to have it. There's no way.

Unless something's wrong. Unless they're off schedule, which is also possible. Maybe they got more films than they expected. I don't know.

It's driving me crazy. My friend, you know: he's got no worries. He's in New Haven. They're not going to write him anyway; I'm going to tell him. He doesn't particularly care. He didn't work on it for the last two weeks. I did it all by myself. [7.24]

Of course it was driving him crazy.

The judgment passed on "Dindon" would appraise a film whose final state was Peter's doing. The photography was largely his work. The editing he had completed all by himself. Around this assertion of responsibility, in its very phrasing, one seems to hear the overtones of a somewhat more boyish voice declaring its independence.

Only a week before Peter had declared that he was intent on breaking free of the direction his family had set for him.

P: I'm not going to live in Chicago. I just can't talk to my parents...really, you know. Sometimes I can. But in general, I have a general subconscious urge that I occasionally notice just to get away from my parents and everything. I've got to completely break away from the past, to make something completely different. Things in my past life and stuff like that--past mistakes--really bug me...really but me...stuff like that. So I'm breaking away.

LB: Is that related at all to your interest in film?

P: It probably is, too...possibly, you know. Like my parents...my relatives...you know as soon as I was doing good in school they all wanted me to be a scientist. (And they gave me science books and all that stuff, you know. It was so great, you know. And then, you know...) So in order to get out of that I've got to break away.

Well, actually my relatives aren't really like that. I mean, they would be happy if I went into film, too. But my mom isn't particularly. And everyone else, you know, when it comes down to it...

I've heard her finally admit...she had admitted, you know, "I want to be proud of you. I want you to be a scientist, not a film maker."

And I said to her, "Wouldn't you be more proud of me? Like I could be some insignificant scientist someplace you'd never even hear of. What if, on the title of a movie, it said, you know: Director of Photography, Peter Nussbaum. Wouldn't that be more famous, you know? And posh?"

"No," she says, "I want you to be a famous scientist."

It's such a gross thing. She's kind of you know... It wasn't what you could call a big serious discussion. It really wasn't. All those discussions we have are, you know, a little bit tongue-in-cheek. But, you know, you kind of pick up the basic meaning, you know. So, you know, I'm breaking away, man. I'm catching the wind and sailing off! Yeah. Away from Chicago. Chicago...the Midwest. I'm hitting thecoast: I'm going to live it up. That's all there is to it. You know, my parents are great but...you know, see you around.

I mean my parents are better than probably almost any parents I can think of, any parents I've met. I mean, in terms of what I want to do, they're a lot more liberal, and everything else. And they still like me, which is amazing. They still love me, you know.

Like most parents who are really tolerant just don't care that much, you know. My parents really love me. It's incredible. And my friend pointed this out, [the one] who goes to Yale. His parents love him too, but they love him so much they are way overprotective. My parents are more lenient than probably any other parents around, but they really love me. Just as much as his parents do. It really shocked him.

I mean my parents are great. I've got nothing to complain about. But I'm breaking away anyway. [6.3.5-6]

Section 2

On the morning of November 1, Peter received an envelope from his parents, in which he found another from the contest in New York.

LB: Tell me about the letter * * *.

P: It came, and it says... It just sayswe lost. It says the big one lost. The little one I don't know about yet. The big one is lost though: I mean the twenty-five minutes "Wrath of Dindon, the Killer Turkey." It's over. It's lost. It's...it wasn't a disappointment....
It was a disappointment; it wasn't a surprise.
It wasn't even that much of a disappointment, at least not when I got it. It may turn out to be, But there were a lot of things wrong with that movie.
You know, I was just hoping...
It's one a certain level, though. It's got, you know, stuff most kids wouldn't do--you know, night scenes and stuff.
And the whole thing was--what our winning depended on was--that no one was on our level. I mean they might have a better plot but they're not on the level of doing those fancy shots, you know. If they were on that level and they took the time (like we would have taken if we'd had it) they should have beat us out. And all this does really is indicate there were people like that in this contest. [8.2]

After receiving bad news from the contest, and having been told by two more students with filming experience on campus that he was at the wrong school if he wanted to make films, Peter retreated from any decision about a career. "I'm not committing myself to anything at this point," he brooded. "I have to think about everything. I hate to commit myself to film. It's risky...risky." [8.5] What was he to make of the contest results? The judges' evaluation had been correct, he believed. The film had faults. In that sense, they had confirmed his appraisal. But the judgement was of the film as a whole. What should he think about his own work? How effective were the photography and the editing? Not so effective that they overbalanced the puerile plot, of course, but what did that mean? As evidence of his ability in film, the results were useless. Yet there was an adverse judgement of his work to contend with, and he was inclined to take it to heart. The cinematography was flawed, he thought; he should really have reworked it until it was right.

P: But even if I had shot it all over, would it be really good? Or is it just getting better technically, but never achieving any real feel for the medium...which is (I would probably say) innate* * *.

LB: Are you sure it was lack of feel for the medium that did you in, in the contest?

P: No, definitely not. In the contest...it was just...mistakes and stuff. I'm certain of that. There is no problem there. But. It's just a question of: Once I get on the kind of level where that's not the problem, will I be able to...you know...progress beyond that level? To a level where I'm actually getting decently artistic with the photography and stuff?

LB: Yeah.

P: And that is a big question. [8.5]

The big question was whether there was a future for Peter in film. If the blemishes were removed from his technique, and mere technique discounted, would there remain evidence of sufficient feel for the medium to justify his turning from engineering, the choice of his mother and his relatives? The major of his two closest friends, Darryl and Robert? Or would he be a fool to risk it? He could not tell, and within a day of the letter's arrival he decided against pursuing the question further, at least for a while. "I'm not worrying about film now. I've put it out of my mind, and I'm thinking about my psych--which I have to get done and I'm far behind in it." [8.5]

With the news that "Dindon" had lost, Peter turned to the most routine of his personal obligations of the

moment: his course work in psychology. So far was he from consuming interest that he had let nearly all of the quarter's reading go, and now he was saddled with completing the work in a little more than three weeks. He had hundreds of pages of the text left to do. After computing his reading speed, he figured it would take almost 25 hours of reading to finish--a godsend, an urgent distraction. He would take up the matter of film making after the quarter was over.

> I just have to let this whole thing, this contest thing, sit for a while. And talk to my friends. I've put all that off. I've got to talk to my friends about this whole mess of movies, you know--and that's [got to wait] till Christmas vacation, you know. I have to discuss the whole mess with them...the whole idea, the concept of movie-making and all that stuff...whether I should transfer... everything. But I'm not...
> I have time now, and I'm just trying to live almost from day to day and get the psych out of the way...not worry about these things yet. [8.23]

That evening he went back to his room from dinner and read psychology for five hours straight.

Psychology was not the only course he had neglected. A few days earlier he had returned to his photography after a lapse of several weeks. He did his first serious stint of darkroom work in nearly a month, printing negatives from just after dinner until two the next morning.

LB: What were you printing?

P: All the ones...the negatives I'd just developed; all the negatives I've ever taken here, I printed. What I did was: I contact printed them first, and then anything that looked interesting I blew up to five by seven. And I found out that most of the pictures I've taken here were shit... absolute crap. Blew these things up. They looked like junk, man! It was terrible. Very disillusioning. Very bad.

* * *

I'm going to have to do better. I intend to take pictures this weekend [though he did not take pictures that next weekend] and do a lot better.
See, those were just fun pictures, really. My intents were...I didn't have a lot of time with them. It just would have been nice if they had come out good anyway. [laughing] You know, but ...the question is...now I've got to take a lot of time with [pictures taking]: Can I produce?! Yes, I'm testing myself: do I have it, or don't I? So I'll find that out.
I'm using the photo club's lights. It doesn't cost anything, so I'll be using those, It'll be good.

LB: Do you do anything for fun?

P: (pause) Maybe not.

LB: Anything that doesn't constitute a test?

P: I...I've contemplated that.

LB: Have you?

P: Yeah.

LB: What have you decided?

P: I don't know. I haven't decided. (laughing) It just may be...well, no: cause I did those photos for fun.
But it bugged me when they didn't come out right.
But when I was doing them, you know, it didn't bother me. Most things I do are as a test.

LB: Really?

P: I think. I think.

LB: What are you trying to prove?

P: (perplexed) I don't know. (laughing) I'm sick!

LB: Come on.

P: I don't know. I seriously... (7 second pause) No, I...you know, I haven't thought about it enough to draw any conclusions about something that major. I do a lot of things for fun.
I do have a certain problem, in the respect that a lot of times I can't watch someone doing

something and enjoy it. I would enjoy it, but I also get the urge that I should be doing it: "I wish I could do that." But it's hard for me, a lot of times, to watch someone and say, "He's really good, without saying, "I wish I could do that." You know...which is really interesting--perverse, according to Darlene, the girl on my wall. You know...not perverse; she just says, "That could be bad!" (laughing) Maybe I'm super-ultra-ridiculously competitive.

LB: What do you think?

P: Ahh...I tend to say that I am.

LB: You think you are?

P: Yeah. I think so. I don't particularly like it...but I think I am. And I don't know if I can particularly get out of it either. [8.20-22]

In the weeks that followed, the question of Peter's academic major began to work itself loose from his interest in film. Early November was the time to choose courses for the winter quarter. It was time to decide whether he would begin the sequence of math and science courses that an electrical engineering major required; or whether he would take this first opportunity to declare for the arts, tossing his career in science to the sharks (or so it seemed) with the promise of security chained to its leg.

Peter's customary deliberation at the moment of choice was nowhere in evidence this time. He produced no list of possible courses, perhaps because it seemed superfluous. "I'm so screwed with my...with the engineering bit. The engineering takes a lot of time." [9.12] It would require math and physics next quarter. He wanted to take computer science. His photography workshop ran for two quarters and so would necessarily continue. That would be a full program, unless he decided to foreclose an engineering major. When he mentioned the possibility of another major, he spoke abstractly. "I could major in psych...be no trouble: it's an easy major. I could major in communications. I could major in art history; I like that." [9.13] But none seemed even a likely possibility. When he opened the catalogue that morning to look at courses, he turned only to the listings of the School of Engineering. Suddenly he was casting about in earnest for a sense of how he might tolerate the life of an engineer.

> Right now...I want to take that...Engineer in Modern Society--that's the one that tells you what engineers do, all right? What they do, and stuff like that. I should have taken that. It's only offered in the fall, in autumn. Now I have to wait until my sophomore year. Meanwhile, I don't know if I want to get into engineering. (pause) It's a very bad situation. If I find out I don't want to get into engineering, I'm screwed. Right now I'm pretty sure I don't. But I don't know what else to do. [9.12-13]

The requirements of engineering constrained not just his interest in the arts but also his exploration of engineering itself. "I can't talk to my adviser about it...sort of...what I want in engineering," though his adviser was a member of the engineering faculty. "I want to be able to do things. To hell with you, you know, the theory. I want to be able to make things. * * * You know, if I want to build a stupid, strange machine, I want to know how to do it. That's what I want!" [9.19] But university engineering is too earnest, he thought, too demanding of formal understanding. That was what he had heard.

> P: People say it's still not really all that practical. I don't know if that's true. I know they have some things: like, I know they have a basic electronics course where they teach you that stuff. But they also have Electronics I, which is for the engineering student, not for the non-engineering student like Basic Electronics is. You see, [Engineering I] just gives you the theory...I think Or too much theory. Maybe not. I don't know. [9.19]

It was inconvenient to have his interests scattered all over. "I like too many things. That's another thing: There's my frivolity, you know. No...no discipline, you know; there's just too many things. (starting to laugh at himself) I can't concentrate on one thing." Then he took it back. It wasn't a matter of concentrating on something. It was that when you yield to the impulse to do a lot of things, you may be able to do them pretty well. "But that's not as good, I'd say...it's probably better to do something really well."

P: I used to do a lot of things really well. I used to be a damn good diver. I used to be a damn good...ahh...student: I mean I was really, you know, sharpy-sharpy. I suppose I still am. But, like, in terms of sports, I used to be damn good at diving. I was really going to be good at gymnastics. I always worked hard and stuff, and then...not too much any more. I don't know why. Yeah. Maybe I became too intelligent. Said, "Why am I killing myself this way?" * * * It just seems I haven't excelled, or done anything very exceptional, for a long time. And I thought I would. I thought my movies would be really good. I thought I'd take some really excellent pictures. I thought I'd do a lot of stuff like that. And I just haven't done it. [9.19-21]

What had brought on this rather critical set of reflections on himself was the need to choose courses. So Peter himself explained it. The thoughts seemed to crop up recently in the crevices of his life. "You know, you go in people's rooms [in the dorm] and just hang around and talk to people." Maybe it was important that "a lot of that time is not spent discussing things like this." [9.22] "* * * A lot of times you...when you sit and discuss things with people, you're not discussing anything relevant. Most of the time you're not even thinking about the discussion. You're sort of thinking about yourself, your relations to other people." [9.36]

Everytime he turned around Peter found questions about his own competence. They arrived in the mail, turned up in the darkroom, sprang from the pages of the university bulletin, sounded a counterpoint to casual conversation in the dorm. He speculated that even his dreams provided lodging for those doubts. In study, at least, he found a respite. "A lot of this comes from the free time, you know, when I'm bumming around, and...and I really think that's just basically it. When I'm not, you know...when I'm working on psych. I'm just working. Period." [9.36] In this moment of self-doubt, Peter was not prepared to make shark-bait of his chances in engineering. It hardly required a decision. He would begin the engineering sequence next quarter.

On the question of film making, there would be time enough at Christmas to seek the advice of his friends. Peter had been talking about the need to consult his friends since he first mentioned the possibility of transferring to seek a better chance at film making. With nearly a month in Chicago upcoming, he was looking forward to talking out his concerns about his future in film.

In Chicago, Peter's accustomed confidante was Darryl. They could talk for hours in any locale, but not on the telephone. Darryl had not even troubled to send Peter his phone number after he arrived at school in New Haven. He had remained largely incommunicado since the summer. So when Peter's phone rang just after dinner on November 15, it was not Darryl's voice that he was expecting.

P: Oh, guess what? My friend called me yesterday from Yale. Darryl Marsh.

LB: [looking at the entry in Peter's daily log, which read: "Phone call with Marsh and Bell"] I wondered whether you called him.

P: No, he called me.

LB: Yeah? What?

P: And...it seems our short movie got an honorable mention.

LB: Well!

P: It means it's in the top six movies in the country.

LB: How did he find out? (Do you mean you entered the long one ["Dindon"] and he entered the short one? Is that it?)

P: No, I don't understand. I don't understand anything. First of all: He found out because it seems they gave a press release to his [campus] paper.

LB: Yeah.

P: And the paper came to interview him. He didn't even know about it.

"Oh, guess what!" It was not quite the news Peter had waited for, nor did it come in quite the manner he had expected. It had caught him very much off his guard.

P: It's interesting. It's very encouraging. It's not a prize, I don't think. I don't think we get anything significant. But it's nice to know we got something, and it means it's, like...in the top six movies in the country.

LB: Well, how do you feel about that, Pete?
P: I think it's great! (pause) I'm not sure. I want them to tell me first.
LB: (laughs)
P: I mean, they haven't even told this place, man. No one here knows. Just my friend calls me up from New Haven and...
LB: Suppose it's true.
P: Be great. Be really great. I...
LB: I mean, will you be going in to the Communications Department and tell them to give you equipment and stand out of the way?
P: I just might. I'm not sure. I...I haven't thought about it, I'm afraid. It's just last night he called me up. I was sort of busy last night. I don't know. I just haven't thought about it too much. It's sort of a shock. I kind of...I kind of... I had kind of given up on it
LB: Yeah.
P: And now I find out it won something. I think it's great. I'm going to get more aggressive. Not necessarily now. Because right now there's...there're a lot of other courses I could be taking. But for next year, I would like to...I'm going to...I expect to get into film, and if they don't let me, I'll...do things. I don't know. This year I'm really busy. I would like to get my still photography down. And just in terms of the courses, I don't have the room for it.
LB: Uh-huh.
P: So I'm not...I notice I've calmed down, sort of, on the Communications issue. It's because I'm... there's other courses interesting too. I don't know. I just haven't thought about movies... I intend to discuss a lot about movies with Darryl on Christmas vacation. [10.25-28]

Section 3

The letter confirming that "Wizard" had won an honorable mention arrived before the end of November. Peter was set now in his determination to begin the engineering sequence. But the dikes of forgetfulness, which he had raised just a few weeks before against the thought of making movies, were leaking gloriously. Two weeks after Darryl's call, when he had to prepare a short talk to give in French class, he spoke about "how lousy the movie situation was" at the university.

LB: What do you mean, "the movie situation"?
P: First of all, the movies they show are shit. And, second of all, the movie program that they... of making movies, is shit.
LB: Aha.
P: I also discussed what I might do.
LB: What might you do?
P: I have two choices. I can make movies during the summer and spring, and stuff, you know. Or, what I'm really considering doing--and probably will do--is, next year: spend it at another place. And I could...
This place, I've been told, is really good about that. Think it's called "leave of absence," and you come back, you get credit for what you did.
So I'm going to go through the [catalogue of film programs in the United States] and find a good school: I can go to Wesleyan. Or I can go to a complete art school.
Hell, why not? Take a year. (And take all...don't take any art courses [here]. That's why I.m taking all sciences this quarter, just about.) And I'll take art and stuff then. Then if I decide I like it, I continue. If I don't, I come back and take the science and engineering, and I graduate two quarters late. [9.32-33]

Less than a week later, Peter did go to the Undergraduate Information Office (UIO) where the catalogues of other schools were kept. His search that afternoon was cursory. He had, after all, studied the catalogue of film programs before he arrived on campus. It was an authoritative reminder he was after. So when he

discovered that the edition of the catalogue in the UIO was two years out of date, he lost interest and looked only at the listing for the California Institute of the Arts--which L.B. had suggested he consider for its program in film production. "Yeah!" he remarked, referring to the stock of production equipment that the California Institute had assembled for student use. "That's the place, man!" [9.1.21] For it had been his contention just a week before that some school was the best place to learn film making. Schools that teach film supply equipment, which would otherwise be too expensive to use. One might learn to make films at a school that offered only the poorest instruction; one could never learn without access to equipment. But when he was reminded at the UIO of the university's vocational counseling service, Peter cut his inquiry short. There was an inquiry of greater moment, which the fate of his films in competition had left inconclusive, and which he found he might now pursue by other means. Once again: The Big Question.

Although he was pressed for time now, his last week before Christmas vacation, he made an appointment to take the Strong Vocational Interest Blank during exam week. And when he listed the most important obligations of his last week on campus, they were finishing the projects for his library and photography courses and taking the Strong Inventory.

Peter returned from Chicago around noon on 2 January, having spent nearly two-and-a-half weeks at home. The first few days there he had read, chatted with his family and a couple of friends, gone shopping and sledding, seen two movies, and done what he was inclined to call nothing or garbage. But then Darryl appeared, and the conversations became longer and more earnest, touching movies and the future. Or perhaps it was more like one extended conversation, interrupted by the need to sleep, by errands and miscellaneous obligations to his parents and brothers. It was a conversation whose setting was sometimes one house or another, sometimes the GTO, sometimes the discount photo equipment store in the Loop where they could gawk at a Beaulieu or buy a camera with Darryl's older brother, Dennis. It never once began before noon, because Peter liked to sleep in, and it frequently dwindled to an intermission only at three or four in the morning. This conversation was what Peter had repeatedly anticipated during the preceding quarter. During the nearly two-and-a-half week stay he logged some seventy-four hours of conversation with his friends, and more than a third of that time the talk had pertained to making movies.

Darryl was not the only one with whom Peter talked film, though he was Peter's accustomed collaborator. Dennis and his friend Tom were likewise steady collaborators. Both were about to graduate from the University of Illinois, one with a degree in accounting, the other with a degree in humanities. This vacation they had announced their intention to pack off to Hollywood, where they would try to get some kind of foothold in the profession. Apparently the announcement seemed only half-serious, "a lark sort of thing," Peter explained. "They're not going to really do it." Though they did do it. "But we discussed with them the idea of the four of us putting our money together, and making a movie as a group: the four of us. Because we've sort of been associated with each other, you know: they were in some of our movies, and we were in theirs." [13.2.1]

The substance of these discussions was often a mix of strategy and tactics. How to raise the money for production? What film format to use, Super 8 or 16 millimeter? "I said, 'No sixteen!' I said, 'Don't touch sixteen. Too expensive, way too expensive.' And we can do Super 8 with sound for two thou, and, you know, pretty good too." [13.2.1] Darryl had argued that if they made a movie in sixteen, it would take an optical sound track, which can be shown on any 16mm sound projector. "Darryl said, 'Well, make sixteen. We can sell it to a movie theater, maybe. Give it to the local...' I said, 'No way!' There is no way, it's just not going to work.' I say...my idea was: Two thousand dollars. We each put five hundred dollar (whatever), we get the best. We get a damn good Super 8 camera, as good as we ever want, with sync sound. Editable." [13.2.2]

Then there had been discussions with Darryl alone, late night drives around the city. Should he commit himself to film making, as he surely would be doing if he transferred to a school with a more adequate film program? His mother continued to advise that he regard his competence first.

> She puts it, like...you can't go into something you're not good at. In other words, if you're just bad...if you're bad at it, no two ways about it: you can't go into it. I don't care if you like it or not. If you just can't do it, then don't go into it.
>
> Now Darryl says, "If you like it, doesn't matter whether you're the lousiest in the world at it.

> I mean, that's what you've got to do. Go ahead and kill yourself doing it, but...you know... that's the way to do it."
> Now, of course, the real answer is some place in between. [13.1.16]

The answer in this case was not a decision so much as a criterion to apply in deciding. "Now if I'm decent in film, " I will probably go into it. Right now I believe I'm decent in film." [13.1.16] Having seen again, during vacation, the two films they had submitted to competition, Peter felt confident that he could spot the flaws. They stemmed from bad plot and the fact that they had rushed to finish (this, presumably, in the case of "Dindon"), not from inability. "And another thing that encouraged me was writing this plot, which actually was pretty good." [13.1.16]

Peter's appraisal of the plot at the time he sketched it out eventually came to seem unsound. But Peter needed no proof then to sustain his confidence that if he could somehow get into film, he would be happy. In fact, just then it seemed that "the only thing I'm going to be happy at is film," and though he conceded he knew little about engineering, he was certain that he did not want to do what his friends' fathers did; he wanted no part of chemical engineering. [13.1.15] He returned from Christmas vacation bouyant, full of plans for film making with his friends, and waving what he called his new master plan for his education. He would continue for the next year or two to take courses in psych or engineering, then go off to film school. If he liked it there, fine; if not, he would return. This plan was not so new, of course. It was just about the same as the strategy he had thought up when he learned that "Wizard" had won some recognition. Now he was planning to stay at the university somewhat longer, he no longer spoke of transferring to another undergraduate school but specifically to a film school, and his sense that he must choose engineering if he did not choose film seemed less urgent, less definitive. What was new was not the plan, but it appears, the sanction for it that he had received from his parents.

Not that his parents had expressed enthusiasm for his desire to leave the university. His mother reminded him that his university degree carried status, market value. His father had proposed an alternative--that Peter go to film school in the summer, at least for a start. Leaving the university was not such a prudent move, as they say it, and they were not ready to support it. Nevertheless, they had taken seriously that he intended to get his training in film making; they had been willing to consider how he might go about it. The mold had broken. It was not simple folly to propose a career in film. But was it foolish abandon to forget about one in engineering?

The Saturday after his return to campus, Peter stopped by the Counseling Center to pick up the results of his testing on the Strong Vocational Interest Blank. If he hae heard it from a palm reader he would never have believed it. "The lady said to me, 'Look at this: Movies, man! You combine artist and musician-performer: That's movies!" [14.1.23] No doubt the phrasing was Peter's rather than the counselor's. But the Strong is easily, and correctly, interpreted to indicate kinship of interest between the person tested and people who have successfully pursued each of a large number of vocations. The counselor had said something, apparently, that led Peter to believe his pattern of interests, as indicated by the test, would conform closely with the pattern of a group of professional movie makers. This conclusion could not be read directly from the results, but had apparently been inferred from the fact that Peter's responses in fact conformed to those of a group of artists and also to a group of performing musicians. That was not all. "Scored surprisingly low in engineering. I didn't get above the median, man!" [14.1.23] His responses conformed best with those of the computer programmers, which only lent the scores further credibility. Other reasonably good matches were with physicians, psychologists, and architects. Peter ruefully imagined a scene with his mother, as he showed her the scores.

> I was making a joke about that you know. Go to my mom: "See! You don't want me to be an engineer. It says I don't want to be one. You're not going to push me into anything, right?" And she says: "Right! You're going to be a doctor." (he laughs and then sighs--a gesture of mock-defeat) [14.2.5.]

Peter said he found the results interesting. And, indeed, they had been interesting enough that he had memorized the scoring pattern accurately--with one exception. He thought he remembered that two separate scales low-rates his interest in engineering, though there was just one scale that bore on engineering. But one can't be faulted for hoping. The results of the Strong had brought him as close as he might come to augury regarding his desire to pursue film instead of engineering. He learned that even the Strong could tell, his interests did not look very much like an engineer's; and that was some comfort. His response to both physics and calculus was chilly by the end of the term, and he decided not to continue with math in the spring. He adored his computer science course. Yet when he returned from Chicago after spring break, he reported a remarkable coincidence: that he and Darryl and Kurt Russell all had taken computer courses that term, and all had agreed that computer science was to be taken only in small doses; as a major it was likely to lose its charm. The reasons for majoring in engineering, or in any related area, had grown thin with the results of the Strong Inventory; by the end of the winter quarter they had evaporated.

But Peter knew only so much about professional film making as he had read, or had heard from such people as Alexia, who onwed a copy of the standard handbook in the field, THE AMERICAN CINEMATOGRAPHER'S MANUAL, which he could peruse in her room if he liked. The MANUAL contains listings of technical specifications for professional equipment and supplies; definitions of terms used among cinematographers, directors, editors, and film laboratory people; and brief explanations of techniques employed in achieving cinematic effects, common and uncommon. It is nearly indispensable, but it is not a course of instruction in making films as the professionals do. For that, Peter had decided, he would have to wait.

Professional experience, the chance to talk to professional film makers--those were something else. If there were a course that offered an introduction to the profession, would he be as interested in it as he was in the Engineer in Society? He thought about the question, having just returned from the conversations of his Christmas vacation, and said no, though he didn't know why not. Then he reconsidered. He might take the course, "if nothing else, just to learn how to go into [the profession], sort of. I would say, I could definitely benefit from it." Given that the course should aim at helping people decide whether professional film making was for them, what topics would he like the course to treat? He wanted to take courses from several different people in the industry. "What the people are like, what they do, would tell me if I want to go into it. If I want to. Whether I can is something that I think would have to be found out just by making films. And assuming that I want to, I would want to know the best way to do it: what training I need, what I should...you know...do to get into it." [13.1.18] And that brought to mind Dennis Marsh and Tom Manns, who were about to try it the hard way. Was there another?

At about this moment, one of LB's friends, Richard Davidoff, who was a student in the graduate film program, remarked that he could use crew for a film he would be making the next month. When LB mentioned that Peter was interested in film, Davidoff asked that Peter call him to arrange a meeting. LB had meanwhile told Peter that there was a graduate film crew he might be able to work with. Peter was delighted. The upshot of this intervention was both unpredictable and fortunate.

Davidoff, already an accomplished professional, was using his program at the unversity as a sabbatical of sorts. For several years he had worked as a photo journalist and a photo illustrator, later taking up the production of videotaped programs for public television. Now in his mid-thirties, he was taking the opportunity to get a grounding in film, a medium in which he had previously done nothing extensive.

The project he was about to begin was the major exercise of his year, a 16mm color film portraying certain characters and traditions of the Chinese New Year celebration in San Francisco. His plan for the filming included the use of sophisticated professional cameras, synchronized sound, multiple camera crews coordinated by walkie-talkies. Where he needed assistance, as with the implementation of the multiple camera scheme, he planned to call on fellow students and faculty members in the graduate film program, most of them professional film makers. When Peter received word from Davidoff two weeks into the winter quarter, he was jubilant.

LB: I've broached the subject of your working on the crew of Richard's film with him, and he did not hesitate to say yes.

P: You're kidding!

LB: No, he wants crew.
P: Eyaaaaaaaaah!!
LB: So it depends on whether you guys can work out...whether you're free during their shooting schedule, mainly. But he'd like to have you call him so that he can explain...
P: ...what to do?
LB: Right.
P: And find out what I'm capable of doing.
LB: No, I think that's not important. They...
P: They just want people around to help move things....*** They need people who know what they're doing and people who can listen to commands.
LB: Ahh, basically, yes. He would...the fact that you're interested is a bonus for him, because it means you'll be paying attention.
P: Ahh. Great. [14.1.1-2]

It was not as much responsibility as Peter had hoped; but as he began inquiring about the sponsorship of the project, about the equipment he would get to inspect firsthand, about the people he would meet and work with, his enthusiasm returned. Shooting was to begin in about a month. Until then, Peter's concern with film would express itself through more accustomed channels.

The day after he learned that he had a spot on Davidoff's crew, Peter set up an 8mm projector and held a showing of "Wizard" and "Dindon" for 18 of his dormmates, those who had waited around or who happened to be around at 11 that Friday night in mid-January. Alexia was in the audience. Now and then Peter would observe how unfortunate it was that his relationship with her rested solely on their common interest in film, a complaint that bore not on the lack of sexual opportunity with her but rather on the awkwardness of their inability to sustain a conversation on any other subject. He had come to rely on her willingness to discuss film, nevertheless, and his respect for her judgments grew. Later in the week he and Alexia went to see "The King of Marvin Gardens," and, at the coffeehouse where they stopped afterward to discuss the film, she offered her assessment of "Dindon": "She thought the photography was pretty good in several places. She thought the plot was lousy and not understandable. I agree with that. She thought...she remembered the photography and some things as being great: she thought the photography in the scene where the car pulls off [a night scene outdoors, photographed to simulate a view of the car through binoculars] was fantastic." [15.2.9] Somewhat grudgingly, Peter acknowledged that her judgments confirmed his. It was the first chance he had had to hear his work critiqued in some detail by another film maker. Earlier that evening he had been engaged in a critique of his own.

Peter was not the only one with a master plan. Darryl had announced his just after Christmas vacation. He proposed to leave for Yale the next fall as his parents expected, but to go no further than New York. There he would assemble the equipment to make a 16mm, feature-length film. He was proposing that Peter join him in his venture. Peter took two hours, on the afternoon of his showing, to write an extended reply.

P: First I went into a big thing about why it wouldn't work. And I really believe it won't work. And I listed like 10 reasons why it wouldn't work: Couldn't get any actors, never get enough money for the good equipment, wouldn't be able to market it for a theater (wants to be able to make a feature film). There's no way in the world--and he knows it--to make a feature film. He's never worked with 16mm before: he's going to make a million mistakes. And they'll be fucking expensive mistakes...you know, like...unlike what we've done, you know. Like 8mm, like: so you blow it, you know? So fine. He's shooting with sync sound: he makes a mistake--and he's going to do it...if he makes a mistake when he's editing--with stuff like that, man, he's out of it. He He doesn't know how to...He hasn't used the equipment before. I haven't used the equipment before. None of them have [i.e., not his brother Dennis nor Tom Manns]. It's too big.
You've got to have somebody who's experienced. Who's going to have the experience? A year or two from now? (smiling, he slaps his chest)

LB: How're you going to get the experience?

P: Working with [Richard Davidoff]. I've seen the equipment [he had by the interview, the next week, though not when he wrote Darryl]. And then, when [Richard] edits the film, I'm sure he wouldn't mind if I sat around. Maybe.
The whole point is you can't go into 16mm without experience. Or without the university's equipment. You just can't do it. And that's my point. [15.1.18]

Peter plainly saw his upcoming work with Richard as a remedy, important though not complete, for his exclusion from a proper film program. He would be getting experience with the kind of expensive equipment he could not hope to see otherwise. In the balance of his letter to Darryl, Peter laid out his own plan and then, as a counter, proposed that Darryl transfer to the West Coast and adopt Peter's more prudent scheme. "Then I said, 'Fine! You wait for me to get done with what I'm going to get done [i.e., whether or not Darryl was prepared to transfer West], and then I will starve with you in New York City or wherever you want to starve.' " [15.1.19]

Peter had retained one impression, weeks after his talk early in the fall with the undergraduate film maker. He remembered that the fellow felt slighted as an undergraduate. The film program favored graduate students, he believed. It had taken until his senior year to be admitted. But then "the graduates looked down on him; seniors were nothing." [11.57] Now Peter was to work with those graduate students.

He had become alert to the doings of the members of the film program. When the program sponsored a film preview at which the director of the movie was to speak, Peter attended and spoke to Richard there. "We just discussed movies, sort of, and this particular movie. He seemed to be interested in me, sort of. Asked a question or two about what movie-making experience I had, stuff like that." [15.1.7] And his interest in viewing movies leaped at this moment. Rarely was there a week that Peter failed to go to a movie. In the two-and-a-half weeks of Christmas vacation he had seen three. When he returned for the winter quarter, he made a deliberate effort to see films he did not know. The first week of the quarter he saw three, the next week, four. But then, after he learned that he would be working on Richard's crew, he saw five films a week, then six and seven.

It was almost a month until Peter began his work on Davidoff's film. In the meantime he played no part in the preparation. And when the time came, the adventure occupied no more than a day-and-a-half. Much of that day-and-a-half Peter spent alternately running errands and waiting.

At noon on Friday, Februrary 16, he dashed from his math class across campus to the offices of the film program. "I was in such a hurry to get there, because they had wanted me to be there from 11:30 to 12:00," but when he arrived he discovered that Richard and Carolyn, another of the graduate students, were also late. So he helped Carolyn check out the equipment and pack it into her car and Richard's. When he could, however, he stopped in the doorway of one of the editing rooms to watch a student, who sat attentively shuttling two small rolls of film through the new flatbed moviola again and again, adjusting one or the other a little to bring picture and sound into sync. He had never seen such a machine before, nor did he know how it worked, though he had known about moviolas and their uses. They are chief among the professional movie editor's stock of exotica, indispensable for the editing of sound films, much more expensive than the equally rare automated hot-splicers, and infinitely more intriguing in function. The aspiring film maker who can get his hands on a moviola, and who has a use for it when he does, has taken his first small step from the lunar lander to the surface of the moon. Peter watched until he felt he knew how it worked. It made his day.

The rest of it he spent in the car with Richard as they drove to San Francisco, then to Gasser's, to the film lab, back to Gasser's, in search of plastic cores onto which the film would wind in each of their three cameras. For better than an hour he sat in the car alone reading a photo magazine while Richard conducted his business with the lab. Later they met Carolyn and spent an hour setting lights for the indoor shots next day. From there, after dark, they followed the route of the Chinese New Year's parade, light meter in hand. It would be too dark to shoot with illumination from the street lamps alone. Back to Gasser's to rent Sun-Guns, battery-powered movie lights, one for each of the three camera crews. Even with the Sun-Guns, they would be shooting with perilously little light, shooting even though they could get no reading on the meter and pushing the

film in development later. It seemed chancy, not quite professional. "Like, you know, that's just what we do! (laughing) I mean, Marsh does the same thing. And so it was sort of interesting. It was reassuring to see that." [18.1.24]

That night they slept at Carolyn's apartment in San Francisco and returned the next morning for preliminary shooting indoors. Richard quickly asserted exclusive dominion over the camera, asking Peter not to touch it between shots, even not to try looking through the view finder while the camera sat unattended on its tripod. He worried that it might be moved accidentally. Peter thought that carried caution to an extreme, but he said nothing. As the day wore on, Peter attended to whatever was going on about him. He carried the tripod. "I learned what a pan-head tripod looked like, and how fucking heavy it was, and how they use spreaders and everything." [18.2.19]

After dinner, as it grew dark, Peter helped set up the third camera covering the parade. The first crew, Richard's, would be moving with the parade. The second was located in a fixed spot at ground level. The third crew had the sync sound equipment and was placed on a bridge above the parade route. Richard would direct the two remote crews by means of walkie-talkies. Crew three included one person, George, another graduate student, running the camera and the Nagra recorder, a second graduate student tending the walkie-talkie, and Peter, who would hold the Sun-Gun. In the setting up, it became clear that the large tripod was going to be impossible to situate securely on the brink of the bridge unless they dispensed with the customary placement of the legs, all three in a spreader on the deck. "We had to put two legs up on the ledge and one on the bottom, so we couldn't use the spreader. And we actually taped the legs to the concrete with gaffer's tape," an incredible feat. "I learned that gaffer's tape is even more than I thought it was. Even though I'd read about it being used for everything, it's even...it is...it sticks to anything!" [18.2.19]

Crew three was immobile, unlike the other two, and that meant they would have to wait for the parade itself to do their shooting; they could not look for covering shots or cutaways beforehand. So Peter waited some more. "I just sort of held lights. That was the theory: You go hold lights so no one would knock it down. And it turned out the lights were almost knocked down, so there's a good reason for it. ***And we saw the parade and we filmed a few things. And I just followed George, you know. He said, 'Somebody shine the lights,' and so I shined the light." [18.2.16]

The whole business was less glorious, more hectic and disordered than Peter had expected. It did not seem professional, and he was disappointed. But there were compensations. He got to meet and work with many of the students in the graduate film program. He even had the chance to discuss the possibility of transferring to find a better undergraduate film program with one member of the film faculty, who was also on one of the crews. He would not be a stranger the next time he wanted to enter the production building. In fact, he now had a chance to follow the film he had helped shoot through the rest of its production. And there were rarer delights: "It was, sort of, very impressive walking around with that camera, that 16mm camera and all that stuff. I loved it. There was some guy from the TV right next to us on the bridge, and he treated us as equals, and stuff. It was great, loved it." [18.2.17]

But chance had provided the rarest delight of the whole adventure that afternoon during the hours of waiting.

P: We were on the third story of this building, you know.

LB: Uh-huh.

P: And there was a balcony. And all you had to do was look over it, you know, and there they were, it turned out.

LB: On the street?

P: But actually I didn't find out about it that way. I just, you know...I'd be going up the elevator carrying equipment, and I saw some guys walking around with a tripod, and stuff.

LB: Yeah.

P: "Oh, it must be a TV crew," you know. "They're filming the parade."

LB: Yeah.

P: And I walked around the corner once, and there was this monstrous Panavision R-200 camera. And I said, "TV crews don't use Panavision!" (laughing)

And they had a limousine up there, and a girl was getting...they were filming stuff. The girl was getting out of it, and Hackman was running up, Gene Hackman. And they had fog machines at the other end of the street. They filled the street with fog. I don't know if it's going to come out as smoke or fog, or exactly what it's going to come out. It'd be interesting to see on the film. Because I saw what it looked like there.

LB: Yeah.

P: And Francis Ford Coppola was the director. Very impressive. Good guy. Cool. Very impressed me.

LB: Well, how could you be impressed by it? What did you see of him?

P: He was very calm (and I watched it for about an hour total) and he was very calm and he knew what he wanted, you know. He said, "You go. And you go." In other words...for example, they filmed another scene there, without fog. Some place. They had a girl run for a bus, a girl I'd never seen before, run for a bus, you know. And the bus pulled up, and they were trying to time it. So, you know, the bus would pull up, the girl would run after it, and then Hackman would run after her. And, you know sort of like, "You go. And you go." "Let's do that again." Very calm. Never lost his temper or anything. It was very good.

They were very professional...they...I was impressed with the professionalism of the whole thing. It was cool, and it was...

Great wonder! I was sitting there in the crowd, sort of. And Gene Hackman was waiting, then looked around and sort of saw me, sort of. And, you know, he had to give me this acknowledging nod. You know, you see someone: Yeah. (nods) You know, like that. And he did it! (laughing) So Gene Hackman has recognized me, and I guess...

LB: Did you nod back?

P: (laughing harder) Yes! * * *

I decided right then, man: Movies is the way to go! I've got to be doing that this spring, it's so great! It's so exciting. I mean, you know, it's cool. Movies are it!

I was sitting there smiling like an idiot the whole time! Just watching. [18.1.20-23]

The next afternoon Peter wrote Darryl a long letter, eleven pages, telling him all about it, letting him know just what he was missing.

FOOTNOTES

1. In case these seem to be distinctions without a difference, see Gerald Mast, "What Isn't Cinema," CRITICAL INQUIRY, 1 (December 1974), pp. 373-93.

2. In this and subsequent citations of this form, reference is made to the location of the quoted material in the interview transcripts. The form is (a.b.c.), where a is the number of the interview, b is the section of the interview transcript (which is omitted if the transcript is in one section), and c is the page number.

Chapter V
Narrative Structure and Educative Experience in Episode I

Narrative structure, or plot, is what defines the educational significance of any account of student experience, when viewed in a biographic frame. And plot is the set of events in their relations, causal relations, to one another.

The preceding episode is an account of Peter's decision to become a film maker. It is a narrative account and has a plot. If we examine that plot, explicate it, we will be prepared to say in what respects the experience represented in the episode was educative.

To explicate the plot of any story is to say what happened (and to relate that to the organizing principles of the piece). There is a trap here for the unwary. The terms in which a plot is explicated are often quite familiar: motivation, belief, intention. Part of our task will be to consider why Peter acted as he did. This is akin to the vocabulary and the questions we apply to the direct examination of our own experience and the psychology of others. But we are not doing psychology here, not in the usual disciplinary sense. We are doing a form of literary criticism. The object of interest is not Peter's behavior--which was vastly more complex during the period of the episode than the content of the stody; the object of interest is rather the construction of the story itself. For the construction of the story, the way it relates happenings, is what discloses the educational significance of events on the record.

Peter entered the university looking like an electrical engineering major. His parents had been urging him to exploit his talents by taking up the sciences. Peter himself was confident of his scientific aptitude. He had been identified in high school as an unusually promising science student, and had been selected to attend a summer program for such students at a nearby university. In high school he had taken four years of science, and mathematics through calculus. His scores on the College Board's aptitude and achievement tests were all very high, and those in math and science were perfect: 800 on the SAT mathematics section, and on the achievement tests in advanced mathematics and physics. At his admission to the university he indicated his probable major as electrical engineering, and was assigned an adviser from that department. And then, within six months, he had decided on a career in film. Today, four years later, he is following the course he decided on then. The decision was plainly a turning point in his life. What happened?

What Happened

What happened was a deliberation during which Peter came to terms both with his interest in film making--which had been of much longer standing, in any case, than his interest in electrical engineering--and with his ability. For six months Peter rehearsed the arguments and agonized in indecision, trying to discover whether setting out to become a film maker would be a prudent move. He began his deliberation in confusion--his conception of professional film making spotty, vague, and bookish; his own talents untried. By the end he had resolved enough of that confusion--had learned enough about himself and the business of film making--to decide. And the major in electrical engineering? It had been largely an artifact of the school curriculum, which encourages multiple-talented students to pursue their training in science as the first priority if they hold out hope of a career in science.

To watch Peter's deliberation progress, and to discern his advance expressed in his conduct, is to follow the plot of the episode. The progress of the deliberation itself is straightforward. It has two parts. The first begins as Peter arrives at the university, having just entered "The Wizard" and "Dindon" in a national contest for the work of young film makers. Thereafter Peter waits. He has done something--has collaborated in the making of two films and has submitted them to competition--and must wait to see the consequences. When he learns that "Dindon" has not done well, he puts aside the ambition of making films professionally and buries himself in school work. But then "The Wizard" receives an honorable mention, which leaves him at first confused and incredulous. And the next we know he has gone off to look for a good undergraduate program in film. End, part one.

The second part begins with the same act that ends the first. Peter has looked through the listings of college film programs before. This time, it seems, his search is different; enrolling in a film program has become an

option to consider seriously. But by now he has become attached to his friends and to the university; if he left he would feel the loss. Furthermore, if he transferred to a specialist program in film making, it might constitute a decision about his career. That same afternoon, putting the catalogs aside, he goes off to seek career counselling, and takes the Strong Vocational Interest Blank as a consequence. The results of the Strong encourage him to think of himself as a professional film maker, to take his interest in film making more seriously; it may not be just one of his great dreams, an unrealistic childhood ambition. And then, as if by coincidence, he gets the chance to work on a film crew; in the midst of his work he comes across another crew, genuinely professional, and concludes that he wants nothing more than to work among professional film makers. End, part two.

This division into parts is not arbitrary. It is based on the simplest convention governing our analysis and explanation of particular human actions. When we seek to explain how someone in particular came to do something in particular, we customarily do it in terms of the agent's power (i.e., ability or skill) to perform and his will (i.e., desire or interest) to perform this act.[1] In this episode we are examining a prudential deliberation that Peter himself has structured (as it happens) on two questions that embody this scheme of analysis. The results of the film contest serve as signs of Peter's power to make good films, and not just as a reading on the films themselves. Until he has received word from the contest, Peter is quite obviously occupied with the first of the two pertinent questions: Do I have the talent to make good movies? Then he turns to the second question: Do I really want to become a film maker? Have I the will? The answer to this question, unlike the answer to the last, must take the form of a decision. Once he decides that he does want to make films professionally, the episode of prudential deliberation is over. The two parts of the deliberation are marked out by Peter's turning from one of these questions to the other.

To say that Peter himself structured the deliberation is not to deny that others may have introduced the terms. Just after he arrived on campus, at the beginning of his deliberation, Peter explained that his parents had advised him on choosing a career. Indeed, the two had advised him differently. His father had said, "You shop around. You find out what you like. If you get behind * * * fine. You go another year." [2.1.15] His father believed it was of prime importance to spend one's life doing what one really wants to do. His mother advised that he look first to his talents. She believed "that you shouldn't try something unless you're good enough to do it. And she's not so sure that I'm good enough to go into film. She says, 'If you don't have the ability for it, then forget it.' " [2.1.14] It seems likely that Peter's parents introduced the terms in which he would conduct his deliberation; our evidence points directly, if not certainly, to that conclusion.

As one of the terms of Peter's deliberation, talent (or ability) served as a criterion of prudent career choice. His mother's injunction was to consider film making only if he could do it well--by itself, an unexceptionable piece of advice. But that principle, clear in the abstract, became a confused and elusive guide in Peter's thinking. Somehow it seemed that Peter had to have grounds for predicting success before he could justify his purusit of a career in film. His future success had to be demonstrated possible by success in the present. He had to give evidence of talent to justify his aspiration toward film. Consider how Peter habitually cast his ruminations about achievement, talent, and aspirations for the future.

Achievement and talent -- Peter was much concerned with how well he and others performed. Again and again he found himself attracted to people who displayed unusual competence. Especially when he chose male friends, or spoke of them with admiration, he referred to what they could do well. He suffered pangs of envy when he saw another fellow perform well. "It's hard for me, a lot of times, to watch someone and say, 'He's really good,' without saying, 'I wish I could do that.' " [8.22] Small wonder, then, that the desire to perform well marked his activity.

The notion of ability in the arts was of special concern to him. Was high achievement in the arts the consequence of inherent ability or of uncommon discipline and will to achieve? This was one of his favorite topics for speculation. When he spoke casually about his own work in the arts, without reflecting critically on what he was saying, he was inclined to talk as though achievement was the direct expression of a gift, a quality of the person. He believed, for example, that he drew unimpressively because he lacked the appropriate talent. Then one afternoon he was surprised:

P: Oh guess what? Guess what*** I was doing at [the office of the campus newspaper]?*** You know what I did?
LB: What?
P: I did graphics. I drew things! (he burst out laughing)
LB: Now why is that such an amazing...?
P: I didn't know I had it in me! It's great.
LB: What do you mean, you didn't know you had it in you?
P: I drew a graphic and they thought it was really good. So...I didn't know I could draw that well. Encouraging. [5.17-18]

Peter's explanation, if not surprising, is nevertheless remarkable plain. His work had evoked an admiring response from some staff members, hence it had virtue as a drawing. He didn't know he had it in him. "It"? Is "it" the ability to draw well or the ability to evoke admiration by drawing? For Peter this is apparently a distinction without a difference. Either way the ability was "in him," something to be discovered. It seems that if one "had it," one put pen to paper and produced admirable work; if not, technical facility was all one could hope to develop.

"I have a drawing in [the university newspaper]." Peter said two weeks later, explaining why he would never make a career of art. "It's not that good. It's lousy, man. I have no...I have very little...I have more artistic ability than the average person--a lot more--but I'm not by any means a good draw-er. Maybe some people...I'm not sure if it's a function of training or if it's a question of ability, but I have a feeling a lot of it's ability, and so...there's that." [7.30] Here is the fuller view of his notion of how artistic achievement and ability relate. Artistic ability is both general and specific. In the general form--the capacity for artistic conception or vision, perhaps--one can have it and yet not be able to express it in a particular medium. So Peter might contend that his artistic ability gets expressed in movies but not in drawing.[2] It appears, too, that artistic ability is fickle. Two weeks ago he had it in him to draw, but no longer. If he were challenged on this score, Peter would probably deny that ability is fickle; he was simply mistaken two weeks ago.

When one adheres to the notion that every piece of work reveals ability, and this seems to be the notion that Peter employed while waiting for news of the fate of "Dindon," then one is liable to quite variable estimates of ability. Because he held at the same time to a notion of artistic ability as talent (a gift) rather than as skill, Peter was especially vulnerable to the news that "Dindon" had not done well. He would be faced with denying his ability or deviating from his habit of viewing every piece of work as a direct expression of the maker's artistic gift.

The film contest -- Peter had hung a great deal on the outcome of the film contest. If he won, he would seriously consider a career in film. He would turn to the faculty in film production and demand access to their facilities despite the rule that made him ineligible to take the production course until his last undergraduate year. He would abandon the security of a major in engineering, setting himself loose to explore the arts and humanities--the useless subjects--and perhaps to take a specialist program somewhere else. The almost magical significance of a win--the authoritative testimony to his talent in film making and the implicit forecast of his success--would fall into place. All of this he made contingent upon his finding that "Dindon" had won.

But the contingency was artificial. None of the decisions that Peter had delayed actually required that he wait for the results of the contest. The most important consequence of the notice that "Dindon" had lost was, therefore, that Peter lost the pretext for putting aside decisions about his major and about how he would pursue film making either at the university of elsewhere. In fact, when he learned that "Dindon" had lost, Peter said he would make no decisions; he wanted to seek the advice of his accustomed confidantes, his film making friends and his parents.

The negative judgment had disappointed him, and the removal of his decision machine had confused him temporarily. But the negative judgment had also compelled him to reconsider the logic of his deliberation. His first reaction to the news was this:

P: I hate to commit myself to film. It's risky. Risky.
LB: What do you mean?

P: If the movie had won I would have done it [declared himself for film] for sure. The movie hasn't won and I...the doubts come up again. [8.5]

Which doubts? one wonders. The doubts about his ability to make good films? The doubts about the likelihood that he will succeed in film if he goes professional? Consider how he continues:

> We should have shot this stuff [the defective scenes] all over, right? But even if I had shot it all over, would it be really good? Or is it just getting better technically, but never achieving any sort of real feel for the medium...which is (I would probably say) innate [rather] than anything else. [8.5]

Peter is thinking faster than he can talk here. The grammatical irregularities in his speech reveal the connections he is making despite himself. Note how the thought flows under the speech. First, he switches grammatical subjects in mid-thought. We should have shot the stuff over, but if I had...He begins with his mind on action--what we should have done--but when he turns to speculating about the consequences of that action, his collaborators have vanished. Though the action is collaborative, the achievement is his alone. This is the first of his characteristic slips.

Second, he slips from assessing the achievement (the movie) to assessing his own abilities. Consider the line of thought if we supply plausible insertions to make the grammar come out:

> Even if I had shot it all over, would it be really good? Or [suppose I were to keep re-shooting]: is it just getting better technically but [not aesthetically; I might go on improving my work technically], never achieving any sort of real feel for the medium...which is (I would probably say) innate.

The slip here is double. He moves first (by dropping altogether the inappropriate grammatical subject) from what he fears might happen to the movie in reshooting to what he believes he must conclude about himself as a consequence; if the movie does not improve artistically then he must lack the ability to bring off such an aesthetic improvement. And then he leaps to amplify the grounds of his fear. "Feel for the medium, " the ability to think cinematically is innate, cannot be learned; you have it or you don't.

What, then, does it mean that "Dindon" lost? That he has no feel for the medium? No, he says. "Dindon" was so badly botched, so full of mistakes that he knew how to correct, that is not a good indication of his ability.

The next week, though he was full of doubts about his own abilities, he was no longer inclined to reason from "Dindon's" weaknesses to the inadequacy of his own gifts. "Dindon" did not permit a view of his talents because it had been made under the press of time and did not represent his best work. "The only way I'm going to find out if I've got it is to do a movie and do it right. Until it is done right; until I like it. Until I think it's finished. And that it shouldn't be improved. And then see how good it is." [9.18] None of the logical slips of the previous weeks is evident. He, not "we," was to make the film, work it over until he was satisfied, and then submit it to evaluation. That, he now said, was the only was to assess his ability.

If the film contest contributed in any way to the progress of the episode, it was by compelling Peter to wrestle with the question of how one might know whether he had the ability to make good films. He would have to work at a film until there was no doubt that it expressed his own cinematic vision, until merely technical impediments had been removed. Under those conditions, but none others, a judgment on the film might reflect the quality of his talent. It followed that getting his technique down had to precede assessing his ability, and to get technique down he would have to make movies.

The weekend on the film crew -- Peter's weekend on Richard Davidoff's film crew bore educational significance that would be difficult to overestimate. It was his introduction to professional film making. First, it served as an initiation to work with professional equipment. Even though Peter never looked through a viewfinder, he became familiar with three different cameras, with the standard recorder for recording sync

sound in the field, with tripods and panheads and spreaders and gaffer's tape--the paraphernalia which he had read about but never worked with before. He had the chance to watch the flatbed moviola in use. Familiarity with equipment is essential to the practice of any art, but especially to work in a technical art like cinematography. Second, the weekend served as socialization to work with a professional film crew. He had worked only with Darryl before and with Darryl he usually ran the show. On Davidoff's crew he played a subsidiary but useful role. He got his first taste of the long stretches of boring inactivity for which professional (especially studio) film work is notorious. Third, the weekend provided an introduction to the film production faculty members, who had previously seemed rather inaccessible, and to the students who were themselves learning film making. Thereafter, Peter had access to the editing rooms and the sound studio where he could, and did, stand by to watch editing and mixing in progress. These people and their working space constituted the focus of film making on campus.

There were other educational benefits that become obvious only in the light of our view of Peter's private life over the preceding six months. As soon as he realized the limits of what he called the "film situation" on campus, Peter felt frustration; he would not find it easy to act on his interest in film. He believed he would be excluded from classroom film making, and therefore barred from the use of university equipment, until his last year. He thought he would not be able to make films (except in the manner that he and Darryl were used to), would not see them made, would not have the chance to speak to film makers--and surely would be excluded from formal instruction. He had found even that the number of film series on campus was too small and the pickings were too slim for his taste. What he had been deliberating about during the fall was, after all, how he might find some opportunity to act on his interest, and what it might cost him to obtain such an opportunity. This was the point of his deliberations about transfer. It lay behind his fantasies of walking into the film production department and demanding access to their equipment. While he did manage to address his interest in film indirectly--for example, in his acting and photography classes--the weekend with Richard Davidoff gave him his first opportunity to act directly. Specifically, it offered him the chance to test his interest by acting as a member of Davidoff's crew, and vicariously, as he watched Coppola work. It happened also that watching Coppola's work provided the moment when his interest in film making was confirmed.

We have been examining the course of events that led to Peter's decision to declare himself for film. We have divided the course of the episode in two at its natural joint--the moment when, as a consequence of the report of the film contest judges, Peter let the question of his talent rest and turned instead to the question of his interest in professional film making. We have focused on Peter's habitual association of achievement and ability to show in greater detail the challenge that the response of the judges posed to his thinking. We have looked again at the concluding events of each of the two parts of the episode to suggest how each may be viewed as the resolution of the line of thinking that Peter had conducted until then. The purpose has been to show how the episode may be seen to cohere, and Peter's thinking to progress, if the events are viewed as moments in a deliberation whose outcome is an insight and a decision.

Choosing a vocation is as likely to be educative as any of the experiences in a person's life. That is because it is an essential mark of educative experience to open the door to more of the same; the work itself, a shaper of consciousness, is potentially educative.

We know, in Peter's case, that he has continued to pursue film making--one of those callings in which the educative potential of the activity is, we suspect, comparatively large. But there were more immediate consequences of his decision, which suggest that its payoff had begun long before his graduation.

Having decided in favor of film making, Peter talked his way into the university's film production course the next year. There he made a brief film, technically flawed but expressively subtle, which for the first time dealt directly with his own experience. It was about the alienation felt by a young man who, at times, cannot bear to hear his friends laughing. Their laughter invokes a childhood humiliation, from whose memory he seeks escape through isolation and sleep. The film was written and shot after my field work had ended, so I have no documentation about the thinking that was its antecedent. There is plenty of evidence from the year of field work, however, that Peter was sensitive about the laughter of others; and his parents told me of an incident from his childhood when he had felt deeply humiliated by the teasing of his playmates. His film dealt not with that incident but with something analogous. But because it treated this familiar feeling directly,

the film marked an advance in his capacity to use the arts: it was his first attempt to render emotion without disguising it either in abstraction or in fantasy. This is the sort of consequence that would mark as educative Peter's decision to pursue film making seriously; it gives evidence that the earlier process of deliberation functioned, not just to settle the question of Peter's major and his vocation, but also to place in his hands additional means of understanding himself and others.

Peter's decision to become a film maker is the outcome of a clear-cut, almost a paradigmatic, educational episode. The relations among the events of the episode make it so--the attempt to discover his own desires and abilities that culminates in a moment of insight, which, when acted upon, enables him to extend his command of film making and his understanding of himself.

By contrast, the next episode is far less clear cut. It is the story of how Peter surveyed his friends to test a hypothesis: that short boys tend to be sexually inexperienced because girls find tall boys more attractive. In some respects, to be sure, this looks to be a better candidate that the last episode. It concerns an inquiry conducted in the manner of the social sciences--a tradition of research with which Peter had become familiar through his reading and his university studies. Though he did not conduct the project for course credit, some of his dorm-mates had received credit for similar projects on the same sort of question. But in this second episode some of the marks of a typical educative experience are obscured. There is, most notably, no evidence of a moment of insight at the turning point of the story. Consider, then, in what sense the experience represented in the next chapter may be regarded as educative.

FOOTNOTES

1. This scheme of explanation, and its relation to scientific claims about ability and desire, are explicated by Stuart Hampshire, FREEDOM OF THE INDIVIDUAL, expanded edition (Princeton: Princeton University Press, 1975), chapters 1 and 2.
2. Two week later, discussing the implications of "Dindon's" poor showing in the contest, Peter did distinguish between a general artistic feeling and the specific capacity to work in a medium. [9.18]

Chapter VI

How Peter Came to Conduct the Sex Poll

Peter was a sexual naive when he entered college. But this is not the story of his initiation. It is the story of his attempt, one attempt among others, to learn the norms that pertain to sexual initiation. It is the story of an inquiry.

I.

At the end of winter quarter, midafternoon on the Wednesday of exam week, Peter and John Lerner, who lived across the hall, stood in Peter's room studying a small pile of computer printouts. John's roommate Gary looked over their shoulders. Peter's program had run for the first time the night before. Now he and John were taking their first close look at the results of the poll on which they had spent each evening for the past week.

The questions they had asked their dormmates ran one after another down the sprocket-punched pages of output. HOW MANY PEOPLE HAVE YOU HAD SEXUAL INTERCOURSE WITH? HOW OFTEN DO YOU MASTURBATE? WHAT IS YOUR ATTITUDE TOWARD HOMOSEXUALITY? They were direct questions, mostly about sexual preferences and sexual behavior. Under each question was a table that displayed the responses broken down according to the sex of the respondent and the region of the country where he or she had grown up.

Peter turned through the pages until he reached the set of responses for which he particularly wanted a regional breakdown. WHERE DID YOU FIRST EXPERIENCE SEXUAL INTERCOURSE? The columns of the table read: IN A CAR, GUY'S HOUSE, GIRL'S HOUSE, PARTY/PAL'S, OUTDOORS, OTHER. As they began to look for some sort of pattern, John suffered a dismal realization. The row that held the responses of males from the northeast contained just one respondent. It must be the same for each of the other questions. Worse, those were his own responses; he was from Massachusetts. How ironic. He, who had assured the whole dorm that their identities would be safely marked by the analysis, was the one it had exposed. They were chuckling about the need to destroy those tables when Gary suddenly whooped and was gone, trailed out the door by a streamer of sprocket-punched paper.

The sex poll project, whose culmination began with this small farce, descended from an idea that had occurred to Peter nearly a year before. His Advanced Biology teacher in high school had required an investigation to cap the year's classwork. Peter proposed an inquiry into sex roles, but his teacher declined permission on the grounds that sex roles were not a biological phenomenon. It was a galling refusal. Other students were pursuing interests much farther afield than sex roles. Darryl and Kurt had received his approval to make a time-lapse film of a sprouting seed. Peter knew--and could his teacher not discern?--that the sprouting seed was of no interest whatever to these two sophisticated science buffs. It was the shabbiest pretext for playing with time-lapse filming. What sort of project had Peter proposed? It is not clear. In the end he agreed, grudgingly, to construct an ant farm. This project posed tricky problems of carpentry, and by the time he had solved them and the container was finished it was too late to install the ants. His projects had implicated practically no biology. He took a C- for failing to finish and felt vindicated.

Sex role types figured prominently in Peter's dealings with his friends. There was, in the very fabric of his activities with Darryl, a strand of anxious interest in the caliber of the other's masculinity. When they were driving around it could emerge as a taunt: "If you're a man you'll run that light." Neither really took that sort of challenge seriously, Peter explained, and then again he did.

The making of "Dindon" had been laced with ideas about sex role stereotypes. One may regard "Dindon" as an exploration of stereotypic masculinity. Its two main characters are antagonists, competitors: one a study and the other what Peter called a "machine-man"--a body-building and weapons fanatic. Each embodies a different sort of masculine competence: the one, competence in the seduction and domination of women, and the other, competence in the use of physical force--usually directed toward dominating other men. Peter thought the characterizations ludicrous and disclaimed them. But it seems he never thought them fundamentally misconceived; there are studs and fighters among men and they do embody genuine masculine virtues.

Darryl's characters were unbelievable. They seemed to be trying too hard. Instead of embodying the appropriate competence, they affected it. Studs and fighters just would not act like that in real life.

The trouble was that Darryl was inexperienced and therefore modelled his characters too heavily on what he read. Peter conceded that Darryl's zest for reading had its use; it informed his opinions on literature, on films and film aesthetics, on the interpretation of dreams. But when he became caught up in Ayn Rand, in stories of great achievement and high adventure, he typically went too far. "It's just book stuff, you know? It doesn't really happen." [7.37] Darryl constructed unreal characters, Peter thought, because he tended to substitute books for experience.

From such excesses of mind Peter had been spared by his admiration for Tom Kirk. They had been best friends in seventh grade. They went to canoe camp together. They got in fights together. Peter spoke of him as one of the healthiest influences in his life. Kirk was not stupid and he had nothing against books. He got poor grades because he never tried. Instead of excelling in school, Kirk excelled on the streets. He was independent, daring. While kids like Darryl and Kurt Russell were diligently studying math, Tom Kirk was out on the highway hitchhiking to St. Louis. Instead of going to college, he was heading for the ranch country out west. [7.30-31] Everyone else was getting educated; Kirk (so Peter imagined) was getting experience. [9.10]

In high school Kirk had vanished into the crowd. He took up smoking and partying. He submitted to the conventions of the high school social scene, and gave up his claim to the status of free spirit. Peter had not seen him in more than a year. Still, he thought, if he could renew just one friendship this would be the one. Because by the age of twenty Tom Kirk would have done everything. [21.2.19-23]

II

The day he arrived at the university Peter offered an inventory of his interests: "photography and motion pictures, science, gymnastics, girls." He may have intended "girls" to sound a little roguish there at the foot of the list. If so, his conversation two days later spoiled the effect. He meant to pursue each of those interests deliberately. "Getting a good girlfriend is one of my major goals." In the light of that goal he chose to live in a coed dorm. In its light, too, he had decided not to apply to any of the Eastern men's colleges. Nothing had made him more uneasy during his visit to the Ivy League than the stockyard smell of young bulls penned together, all bellowing for the chance at a cow. "You'd get a date. Everyone would eat [around a large table]. And it would be, like, one girl surrounded by four boys. And they'd all be talking to her. Like everyone, you know. It was terrible. It was tragic." [1.1.1-2] The thought of competing with other boys was distressing. He felt he must be at a severe handicap because he stood only five-four, and he was certain that girls prefer tall boys. In any group of boys he would be the shortest; in a contest of first impressions he was sure to lose. So he chose a school that optimized his chances, and he kept an eye on the competition.

When he met boys Peter noted where they had come from and what they did well. One boy had been to a parochial school and played lacrosse. Another was a math major who played soccer: "He's starting in a game. He's a freshman. He must be good." [3.3.5] He said of Rob Blau, lanky, quiet, and self-aware, who quickly became his best friend on the Coast: "We're about equal in a lot of respects. The only difference between him and me is that he's more comfortable with girls." [5.2.21] So Peter watched him, how he draped his arm over a girl's shoulder, how he touched her waist and he guided her through a doorway, how he carelessly stroked her hair as he talked to her.

A boy was a bundle of competence with a history. Sometimes the competence was implicit and the history of small significance, as when Kerry Brand first impressed him as half of the couple, Kerry-and-Betsy. Sometimes Peter talked as though diverse competences came packaged in certain standard assortments. Frail, articulate boys who talked with a lilt were gutless. "Smart kids," like those at the university, were "nice kids": sexually inexperienced, socially ill-at-ease, soft. But he now lived in a dormitory, and he was faced with counter examples that left him a little unsettled. A boy he thought effeminate, and whom he condemned, fearlessly clambered up a rock wall that Peter himself approached with caution. It made him think. He was less surprised, though he still found it noteworthy, that some of these nice kids held their liquor when they drank and entertained the opposite sex in bed. He was intrigued by people who did.

Above all he was intrigued by Carla Hoffman Meister. When he first met her he studied her face, as he invariably studied the faces of girls. A girl presented herself as a personality type recorded in a lingering visual

impression. He looked at a girl with the eye of a cinematographer, sizing up her face as if she were being cast in a part. He continued to speak of one as "the dark-eyed girl" even after he knew her name; her face impressed him as menacing--"like a vampire"--and was therefore fascinating, because her eyebrows and lashes were dark while her hair was blonde. Many girls were not interesting subjects; they impressed him vaguely. Several were simply "nice," a few were "fattish." But Carla was something else. "It's really crazy. She's got stitches above her left eye. Horse kicked her." Carla's face had been marked by adventure. "She's trying out for the Olympics next year. In jumping. Horse jumping." [2.2.5-6] Nor was that her sole distinction. She drank conspicuously. She was said to have mastered the arts of seduction. She contrived to transform an innocent dorm-sponsored slumber party by posting signs that announced: WILD ORGY. Unfortunately, she had already provided herself with a boyfriend. Furthermore, she was tall and lithe. Peter dismissed the thought.

Meanwhile, it seemed that Carol Fiske liked him. He recalled an old pattern. He longed to get involved with crazy, unconventional girls like Carla, but they showed little interest in him; while some girl like Carol, who seemed ill-suited to a scenario of rollicking adventure and candid lust, stood directly in his path and asked to be noticed. Carol was one of the girls he had characterized simply, vaguely, as nice. He met her soon after he arrived. She had moved in down the hall. The first evening she was sitting crosslegged in the hallway, where she and several others cheerfully accosted those people they had not yet met. But after all Carol was nice, and she was interested in him, so Peter gung around with her. And in little more than a week, he announced decisively that there was "something brewing" between him and Carol. They were eating together, going occasionally to dances together, and talking: about themselves, about movies, about Shakespeare. Carol was interested in history and in literature, and she adored backpacking. She held out hope of a literary career, though she was chary about seeming too earnest; there was a danger of appearing pretentious when one professed at eighteen that she wanted to be a writer. She did not know if she would ever write well enough to make a career of it, and she would not consider a career in writing unless she could excel in it. There were plenty of mediocre professional writers; she would not increase their number.

Being with Carol did not soon make Peter comfortable about touching. It was not touching itself that troubled him, but first touch. He did not want to risk a gesture of rejection. He still felt awkward, unhappy with the role of initiator, which convention imposed on him. He was convinced the time had come to conquer this anxiety. And yet the conquest threatened to be perilous. He would rather wait for Carol to make the first move. One night they had gone to Rob's room to listen to Led Zeppelin, Peter's favorite rock group. While Kerry and Betsy sat holding hands and gazing into each other's eyes, Carol and Peter diverted themselves in converstion. They had devised some sort of plot, and were chuckling conspiratorially over it, when Carol offered him her hand. He clasped it, shook it, and stiffened in confusion when she failed to withdraw it. Hadn't she meant to shake hands? He began a set of mental gymnastics to quash the question. Then just before bed, when he was in the bathroom washing his face, he concluded that she had meant to hold his hand. Suddenly he felt terrible. He had been obtuse, gauche. He looked in the mirror and a dolt stared back at him. As punishment for this stupidity he sent the dolt to bed without brushing his teeth. [4.12]

Things were not going well. The girlfriend problem was becoming exacerbated. Not that he was lonely, or without the friendship of a girl he liked. On the contrary, the opportunity for friendship was increasing. By the end of October Kerry Brand, Betsy Dillon, Carol, Peter, and a shifting fringe that included Rob and two more girls had become an extremely cohesive group of friends. The conventional pairing off had given way to looser, more ambiguous pair ties in every possible combination. There were friendships galore. Peter called this group "the family," an appellation that quickly became common. Its chief familial characteristic, on Peter's account, was the liberty with which everyone talked to everyone about everyone. What Peter could not learn directly from Carol--because he could not bring himself to ask--he might learn indirectly through Betsy. By this route he discovered that he had not blundered unforgivably when he failed to hold Carol's hand. By this route too Betsy brought word that Carol did not want to tie herself exclusively to any one boy, Peter included. Peter was relieved; the pressure was off. Anyway he was worrying about the fate of his movies in the film contest. On the other hand, Peter's principal candidate for the role of girlfriend had just cancelled out. How was he to wear away his innocence? Or could one still find his way to bed with a friend?

It was mid-November when Carla --"good old raucous Carla"--suggested over the dinner table that the

potential of a coeducational dorm was going to waste. The sexes should be alternated bed by bed instead of just room by room. Peter took note. As he was talking to Kerry later that night he recalled Carla's suggestion. They happened to be sitting in the lounge where the traffic was continual. The ensuing discussion lasted three hours, while interlocutors rotating as some people stopped to discuss the proposition while other who had had their fill got up and left. But Peter and Kerry were most nearly insatiable; they remained. They had discovered in this proposal the same sort of emotional hazards that they felt "the family" presented: how to provide simultaneously for the differing satisfactions of everyone. But here the emotional stakes had been raised considerably; for the first time they seriously explored the potential of the dorm as a setting for sexual experimentation. How would the pairings be determined? they asked. What kind of personality would experimentation require? What would happen if...some people refused to try?...some were to anxious even to undress before their roommates?...some pairs had asymmetrical desires, only one person eager to sleep with the other, and no way to back out of the arrangement? Still the interest among those who passed through the lounge was strong. The next morning, when Peter rehearsed the discussion, L.B. recommended that he read THE HARRAD EXPERIMENT (see Appendix A for verbatim transcript of the recommendation).

When Peter boarded the plan for Chicago at Christmas time, he took with him a copy of THE HARRAD EXPERIMENT, which he had picked up at the bookstore. He started it on the plane and finished it a few days later. Doubtless his interest in getting a good girlfriend remained. But now something remarkable had emerged in addition--the chance to inquire speculatively into sexual friendship, and perhaps to try it experimentally, without having to play out some conventional boyfriend-girlfriend scenario.

III

Winter was the time of the sex poll. It was the season that competed least with the demands of difficult subjects and permitted the charm of study to show itself. Peter had scheduled the first quarter of the honors physics sequence, the last course in the calculus sequence, an introduction to computer programming, and the final term of his photo seminar. His program was well suited to the season and, excepting the photo seminar, he did brilliantly. Yet even winter had its attractions. The winds brought Pacific storms that turned the grass green and washed the air. Several times during the winter, always in the midst of a storm, Peter made the drive to the coast through a misty chill that smelled of spruce and eucalyptus. There he would stand barefoot on the polished beach, holding his breath so that the camera would not shake, while the surf foamed and seabirds dashed and pecked and turned in his viewfinder. He loved scenes of the shore during a storm. He would work for hours in the darkroom until he had extended the contrast of a print just past the bounds of a natural effect. The gray water grew nearly black, the spray above a wave sparkled, and the rain-wet sand glowed; against this sinister background the clouds and rocks and birds were etched with every contour apparent. He was working to project mood, as he also worked for mood in his pictures of the girls he knew.

Peter had planned to do photographic studies of his friends as his project for the year in the photo seminar. It was an uncommon sort of project; every other student in the class chose to do landscapes. Peter's photographs of his friends reveal more about the careful distinction he was drawing between masculine and feminine. The approach to male and female friends is utterly different. Pictures of girls are carefully composed and set. The lighting is dramatic, almost stagey, with deep shadows and intense highlights. These were character studies, but not of the girl he was photographing. His friends, his models, were actresses in effect; he tried to project, through their expressions and his lighting, a posture and a mood that he thought striking. One sees the girls gazing intently, or kittenishly, or pensively at the lens. The pictures of boys seem to project nothing at all. They are illuminated by available light, against the clutter of the dorm hallway or some odd corner of a room, with Kerry or Rob looking impassively at the camera. As portraits they seem unexpressive, almost like those photographs of civil war soldiers sitting immobile in their uniforms before a painted backdrop. In both cases one searches vainly--the eyes, the position of the head, the tension in the fingers--for some clue to the vitality of the person in the pose. It should be remembered that these photographs were made at the same time as the events of the following narrative.

When he returned from Chicago after New Year's, Peter was bearing the tale of Doug Zellerbach's attempt to dispatch his virginity. No happening from vacation, not even his plans for a future in film, evoked so detailed an account. It was the manner, rather than the fact, that had impressed him. Zellerbach, Darryl's

friend, had acted the part of the stud in "Dindon." Now he tried to do the same in real life. He had calculated, made the prescribed moves, and failed. Peter was delighted.

On New Year's Eve Zellerbach proposed a quick fuck to a girl he had met just that evening. He had decided that, as he was a high school senior, virginity was no longer fitting. Now the opportunity presented itself in the person of a lovely California sixteen-year-old. She had been drinking a little and could be assumed to have loosened up. Back home she had a boyfriend--"a twenty-three-year-old MAN!" said Peter, stressing Zellerbach's temerity--who, it could be assumed, slept with her, and plainly Zellerbach would never see her again. Perfect. So he made his move and she made hers. ("See, like, I don't know how movers work," Peter said). And soon they were baring themselves in the front seat of his car, parked on a darkened roadside in suburban Chicago. Outside the temperature was diving toward ten below. Suddenly the horn blared. Inside, undaunted, they went on shifting and turning. Again the horn sounded, and then again. They raised themselves and tumbled past the headrests into the back seat where they tried to begin their play again, but now to no avail. He was thoroughly distracted. "So the girl is, like, really nice. She says, 'Oh, I didn't know you were a virgin. Don't worry about it. I know you think I'm just saying this, but really it's nothing, you know.' " That salved the humiliation a good deal, Peter thought. [13.1.10-12]

The story as story is prosaic enough. What Peter savored, it seems, was the justice that it implied. Zellerbach was a pretender. "He's no great actor but he sure plays the part in real life." [13.1.12] It would be too much if some teenager who wanted to be a stud could just go out one night and become one. Studs learn their stuff through experience, not play acting. But then it was amazing how far play acting had gotten him; at least it had gotten him experience. Peter began by billing his story as funny and ended it with mixed feelings. Was it necessary to pull some childish stunt, to play a scene, in order to get a girl to go to bed the first time? Was that what girls expected?

What girls expect of boys, and why they do, became persistent questions during the next several weeks. On January 18, Peter met Rachel Strauss. She was the only girl in his physics discussion section. The night before, he had wandered over to Rob Blau's dorm, taking a break from his work on a physics problem. Physics was taking altogether too much time; he wished there were someone to work on homework with. Rob mentioned that he might ask Rachel Strauss who lived upstairs and whom he knew was taking honors physics. "I about feel over when he said 'Rachel.' " He had read a popular novel -- its title escaped him -- in which "some guy was in love with this girl named Rachel," and she had been great; "she must have created some sort of image in my mind." The next morning when he walked into class, there she was staring at him. She had dark eyes, black, curly hair, an intense look; and there was no place to sit on the side of the table opposite her. So he pulled a chair up next to her and sat down. [14.2.13-16]

When he thought about it Peter suspected that there was something unwholesome about his attraction to these "dark girls," as he called them. They looked exciting. They seemed to promise adventure. He imagined "going off some place and doing evil things," which were not necessarily overtly sexual things. They were just perverse, he said--acting out distorted desires. For instance, he found it fascinating (and perverse) for a girl to play the saxaphone; play sax was a masculine thing to do. So was playing hard-driving rock, especially playing drums in a rock band. (He had nearly registered for instruction in drums this quarter). He was intrigued by girls who seemed interested in, and capable of, activities that struck him as masculine. For instance, "I like the kind of girl who would walk into my room one day and say, 'We're doing this!" especially if what she was proposing to do was, in his word, crazy. That brought Tom Kirk to his mind; it was Kirk's kind of craziness that he sought in girls. Then, anxiously: "Do I want a masculine girl? Yes." [14.2.20-22]

Rachel stopped by Peter's room the following Tuesday night after dinner, as they had agreed. Peter slid another chair up to his desk and they began working the problem set that was due Thursday morning. He found they worked well in tandem, eliminating rapidly the false strategies and mistaken hunches that cost him so much time when he had to track them down by himself. Rachel was very bright. So when he caught an odd look on her face during the evening, and realized that he had been talking down to her, he was surprised. He changed his manner and later apologized. They still had not finished when they decided to stop at eleven. She agreed to return the next evening and join him for dinner; afterwards they would do the problems that remained.

But when Rachel appeared in the dining room on Wednesday night, it was to tell Peter that she could not work on physics with him; she had some other studying to do. She did not sit down.

He thought she had seemed indifferent the night before. Now she had not stayed for dinner and had offered no explanation. She seemed to tower over the table for the minute she stood beside it. When he noticed that she was wearing platforms he felt stung, and had trouble suppressing the thought that she had done it deliberately to hurt him. The next morning she waited for him after class, walked him to the post office, then left him as he checked for his mail. So that was it, he thought. He had examined enough omens to conclude that she would be no more than his friend. From the post office he went to lunch, and afterward rehearsed his week in an interview with L.B. The conversation that Thursday afternoon eventually turned, on Peter's initiative, to his perplexity over Rachel's indifference. It was during this conversation, Peter said later, that he decided to undertake the sex poll.

IV

As one might expect, the conversation was confused. It circled back on itself again and again, from abstract propositions about sex role expectations and their effects, to stories Peter had heard, to incidents from Peter's own past, to the pangs of anxiety that his experience with Rachel had aroused--and back through the abstract once more.

Peter was trying to deal, above all, with what girls expect in a boyfriend and with his sense that, whatever it was, he must not have it. On this latter he had a theory:

P: [speaking as though from outside himself] All these girls I like*** Why doesn't Nussbaum ever have any success with any of these girls? You know what I blame it on? My height. I really think that. They are all taller than me. That's bad. That's the one thing with boys and girls: No matter how liberated they get, girls want boys to be taller than them. Do you agree with that?

LB: Some.

P: A lot. And probably the girls that I like want boys to be taller than them.

LB: Why [those in particular]?

P: Because...I get the image of the Lauren Bacall-girl.*** It's hard to look at me as exciting. It's sort of weird. Because I'm ***really sort of a dominant person, pretty much do what I want to do. I rarely give in. And height normally goes along with that, [but] it doesn't in this case. [15.2.22-23].

In brief, then, Peter contended that the girls he found exciting--Lauren Bacall-girls--expect boys to stand taller than they do. All girls expect that, but the Lauren-Bacall-girl demands it as her due; her proper match is a tough guy. Peter sees himself as a tough guy, but without the stature that "normally goes along with that." Thus Peter's theory--which explains parsimoniously that his frustration is unavoidable. Cold comfort.

It is plain how completely Peter's vision here has been composed of types, how the vagaries of individual personality have been discounted. The view is remarkably simple-minded. Peter would concede that. He held his view with reservations. As the conversation proceeded he himself exposed defects in his view. He disliked talk, including his own, of sexual successes or conquests. He thought that seeing people as types--especially as movie-inspired types--made affairs confusing and people miserable. He acknowledged that when he ascribed merely typical tastes and expectations to the girls he liked, he could easily be wrong. He perceived that his own sense of beauty in women had changed, had departed from what he supposed to be the norm; if his tastes were mutable, a girl's tastes must be also. He saw too that if he assumed that girls typically prefer tall boys, he put himself in a bind; expecting to be rejected, he was sure to project defeatism and make himself unattractive. All this he said; he could see it; he knew it in principle.

Then he would think of the facts as they commonly appeared to him, a rainstorm of discrete recollections and the fabric of reasonable objection collapsed under their weight. Was it implausible that girls were generally indifferent to short boys? Could it not be so? And supposing it were, would he not have to face facts, however unpleasant? He had vague intimations of a life spent puzzling out arcane mathematical formulae.[1] So much for adventure. But he had not thought seriously about monastic celibacy. The facts were still to be established.

Peter offered a summary of the support for his contention: there had been a history. Once he and the smartest girl in eighth grade had tried to dance close. She stood as tall as an Amazon. After one dance she gave him up, walked away muttering, "It'll never work." That had hurt. Once in tenth grade as he and Darlene released their good night embrace she looked at him and said, "That's the way it's supposed to be." They were about equally tall, but this time she happened to be standing a step lower than he. Peter was appalled. He consulted Darryl, his accustomed confidante, who concurred in his belief. Darryl said that girls wanted, in his phrase, a great furry bear to snuggle against. Darryl knew, since he stood six feet tall. As Peter had it, girls Darryl hardly wanted to know would come and lean against him. By contrast, the girls in whom Peter was interested tended to be taller than he, and they did not seem inclined to come and lean. (One counter-instance strangely seemed to count on both sides of the issue: when he was a junior, a senior girl who was taller displayed strong interest in him; he avoided her because, he said, he was convinced the mismatch could only bring grief.)

In respects other than height, Peter thought himself a fine specimen of masculinity. He had spent a boyhood of adequate pugnacity and would not walk away from a fight even now. He had been a gymnast throughout high school and his build revealed it. He had worked at every competitive sport for which size was not essential. Looking at a photo of himself in T-shirt and shorts, he thought he would make a perfect football player, if only his legs were longer.[2] He just was built on too small a scale. When he considered it, Peter was convinced that his height alone accounted for his sexual inexperience, whether directly--because girls spurned short boys--or indirectly--because being short subverted his self-confidence. Darryl, who had talked it through with him, agreed.

But had he ever asked a girl whether she preferred tall boys?

No. But he had written Darlene about how miserable it was to be short and had just received her response. She offered sympathy. So there it was. "Rather than saying to me 'That's garbage! You're making it up. Girls don't care whether the boy is taller than them or not,' she said to me 'Think tall!" Therefore she must have believed it a fact that girls want boys taller than them." [15.3.12] Of the girls he knew in the dorm, he conceded he might ask Carol.

L.B. said he thought Peter assumed too much uniformity of attitude among girls. Research on people rarely revealed such thoroughgoing uniformity. As it happened, he said, there was now a lively interest among researchers in sex role stereotypes.

LB: There is some research on [sex role stereotypes]; there's a lot more coming up. Women's Lib has spurred a lot of women to do research on sex role stereotypes. There are almost no men doing it; almost all the stuff that comes out on sex role stereotypes is from women.

P: I was going to do that. And then my biology teacher wouldn't let me do it. [15.3.21]

The discussion of stereotypes continued for half an hour longer. The question of fact--What do girls want?--grew less urgent and the issue of its qualification--How strong and how uniform is the effect of stereotyping on girls' expectations--beecame somewhat clearer. For the shoe now threatened to fit the other foot. What about Peter's own stereotypic expectations? Was it Peter's sense of what virility demands, not Darlene's or Rachel's, that weighed on him?

Right. He did not like to make the first move with a girl. When he thought of becoming earnest, the fear of rejection gripped him. "I feel a force," he had said a moment before. [15.3.2] So then,despite convention, he would let the girl move first. He could not imagine how guys like Doug Zellerbach simply acted the conventional role. It was a major mystery how guys brought that off.

Was the mystery, L.B. asked, "how six-foot guys feel?"

Pause. "Can you...?" Pause. "How does a stud work his magic? I'll agree***: I don't understand that." [15.4.9] His mind was a tangle of stereotypes, he lamented. But so too were the minds of girls, and he resented it.

The interview closed with no further talk of fact or research, and no suggestion that Peter might conduct an inquiry into sex role stereotypes--none aside from that moment when he recalled that he had once proposed such an inquiry. The tape had run out.

It was four o'clock, a January afternoon, and Peter was in a hurry. He wanted to see about a movie review for the campus radio station. By dinner time he had to be ready to leave for San Francisco, where he and a number of other people from the dorm were to attend a rock concert. The talk had fallen into scraps.

L.B. spoke of a survey conducted in the mid-'60s by an undergraduate at the University of Wisconsin. Her female respondents had reported on their attitudes toward premarital sex, 60 percent saying that they had no serious objection. L.B. ventured (gratuituously) that with respect to social attitudes, students at the university probably lagged those at Wisconsin by a decade. Peter was incredulous. There must be 90 percent at the university now who would engage in premarital sex. And L.B. suggested that it should not be too difficult to conduct a similar survey and settle the question. "I said to your face, 'Yeah, I'll do it.' And you said, 'Great!' and that was it. And then I would have forgot," except that "the idea of height came in, and I said 'What an opportunity! Now I'm going to find out for sure.' " [15a.2.9][3]

The conversation concerning height and stereotypes took pace on a Thursday afternoon. Until Sunday Peter had little time free. There had been the concert Thursday night. Friday had been packed: math and computer classes in the morning, lunch, a nap, six hours of computer homework broken up by dinner and a shower and two hours at a gymnastics meet; then at one in the morning a conference cross-campus about his movie review for the radio station. It was nearly three when he went to bed. He spent all Saturday afternoon in the darkroom and Saturday night at the movies--two successive double features, after which he and his movie-friend Daphne talked until--"get this" he writes in his log--four-thirty in the morning. When he woke up Sunday noon he went to lunch, then returned and read a book most of the afternoon. It was THE SENSUOUS MAN, which he had borrowed from John Lerner. For days he had seen it lying on John's desk. He had reached for it now and then when the conversation in John's room got dull. But this day he decided to read it through.

Until that Sunday Peter had not attended much to John. John was quiet and laconic. He was not especially gregarious. But he liked to observe people's behavior, and it happened that he was now taking a course in the psychology of human sexuality. Around eight on Sunday night, Peter, John, Kerry Brand, and Theresa (Betsy Dillon's roommate) walked to a local coffee house where they began talking about premarital sex--to which Theresa was adamantly opposed--and ended in a debate over the relative merits of the pill and the condom. Months afterward John remembered that evening. It marked the start of his collaboration with Peter on the sex poll.

By the next evening, when Peter returned with Kerry from a concert of keyboard music--Peter's first classical concert--the sex poll had become a project in its own right. Peter's log for the night contains the first entry designated explicitly "sex poll." He and Kerry had been talking. They brimmed with a scheme to discover the norms of sexual experience among students at the university. It was to be a grand, comprehensive survey of undergraduates. The responses would be tallied and analyzed by computer using a program that Peter would write. To cover their expenses, they would talk the student newspaper into providing a subsidy in exchange for exclusive rights to publication of the results.

They began to make notes on the questions they would ask. Have you ever? they wanted to know; and if so, how many times? Have you ever french kissed? masturbated? genital petted? had intercourse? oral-genital contacts? group sex? They would ask what kind of birth control devices people were using, what kind they favored. Respondents would be classified according to the sexual orientation they reported: hetero-, homo-, bi-, or asexual. As they talked they grew increasingly delighted with the idea, and their delight infected those who stopped to see what the excitement was about. Soon the room bustled with people--as many as twenty at one time, Peter guessed--all volunteering questions. And with the arrival of the masses, the central topic of the inquiry began to shift. The questions of broadest concern were those that probed sexual preferences and sensitivities. What turned people on? they wanted to know; what bodily features did people attend to when they looked at others? The boys, who had begun listing their favorite parts of the female anatomy, were impressed as they saw the girls' list expand until it was a virtually exhaustive inventory of the male anatomy.

Peter in particular was surprised and edified.

It was especially encouraging to see how his dormmates were taking to the idea; enthusiasm was nearly universal. The general interest helped to forestall a feeling that surveying the sexual experience of other students was weird. On the contrary, it seemed that everyone else would do the same if they thought they had the chance.

Tuesday night Peter and Rachel were at work on a physics problem set when, by ten o'clock, Peter's room became so close with the windows shut that they both were nodding sleepily. They put physics aside. Peter revivied in the night air and made for the library where he hoped to find a particular back issue of PSYCHOLOGY TODAY. It was one of the magazines to which his parents subscribed. He remembered that PSYCHOLOGY TODAY had published a survey of the sexual attitudes and behavior of its readers, and he wanted to look it up now to see if it might provide some models for the items that he himself would soon have to write. But by the time he had located the issue the stacks were closed; he would get back to it the following week. For the present he returned to the reading room and began working out his own ideas for the items.

Wednesday night he and Kerry worked together again, elaborating on the ideas that had come up Monday night and trying to convert them into items. Some plainly were not promising. How were they to suggest the attractive quality, and not just the anatomical identity, of those parts of the body? These questions would be especially tricky. It would not be enough, for example, to ask simply whether someone looked at stomachs. And it might not be adequate to specify something like "good stomach" either. A person might find that a flabby stomach induced outright repulsion, but that stomachs were otherwise an indifferent matter. "How [were] we going to say this? We tried to give categories--adjectives--to each one: flat stomach, firm ass (stuff like this). That's ridiculous." [15a.2.5] In the end they would just abandon these questions.

At the same time they conceived a section of questions to get at moral and attitudinal matters. They wanted to know whether there were norms that linked kinds of sexual activity with kinds of circumstance. They considered an item that listed kinds of activity alongside a list of circumstances under which the respondent would engage in that kind of activity. If they had actually constructed an item at that moment it would have looked something like this:

If the mood was right, would you have sex

a) as a one night stand?
b) with a stranger?
c) with an acquaintance?
d) with a friend of the opposite sex?
e) with someone you love?
f) with someone of the same sex?

They were thinking of asking a similar question regarding kissing and petting as well. They would also ask "Would you participate in sex before marriage?" And also, "Would you ever, under any reasonable circumstance, participate in oral sex? anal sex? group sex? sex with animals?" [15a.2.2] These were notes on the items that they were thinking of writing.

Then there was the question that was all Peter's, "my great question. It's really well-worded, I think: tells me just what I want to know. 'In choosing a partner, rate the following characteristics [in each case]. Different age and [different] height.' " Here he would insert a scale of five units from "much younger" to "much older" or "much shorter" to "much taller." And then for each one they had to say: Is that a necessity, is it a plus, don't you care, minus, or disqualify. You see?" [15a.2.3] In addition, he planned to break down the responses to every item according to the height of the respondent.

Amid the talk of sexual preferences, homosexuality assumed a certain prominence. Peter discovered it as an issue when the girls were talking in his room about their individual tastes in male bodies. Listening to them, one might assume that they had long ago distinguished between the moral strictures that bind relationships and the psychology of preference that happens, in any one case, to determine one's choice of sexual partner. But when someone mentioned homosexuality among males, the girls responded with revulsion. It was intriguing. The same girls who affected a posture of liberation from sex role conventions, who gleefully affirmed

idiosyncracy as they pictured the ideal objects of their own desires, now regarded homosexuality between males with horrified disapproval. Peter and Kerry made a point of asking one of the girls they knew best to explain her feelings. She could say nothing; she felt as she did, and that was all. Here was interesting territory: it was located beyond the bounds of reasonable scrutiny. Peter was betting that height preferences were similarly located.

What about the taking of initiative? Kerry and Peter both wanted to know how girls stood on the conventional matter of who should make the first move. They considered a set of items querying whether the boy, the girl, or either might be the first to ask someone out, to touch the other, to begin sex play. They wanted to know both who, in the respondent's opinion, should be aggressive and who, in the respondent's experience, was in fact aggressive these days.

There was finally what Peter called, with only a hint of irony, "the most charming question: the 'first fuck' question." Though he was at a loss to explain its peculiar charm, neverthless both he and Kerry regarded it as indispensable. "It's really weird, we are really fascinated." [15a.2.1] Part of the fascination, it seems, was their mutual discovery of the quite disparate climates of expectation to which each had lived. Suburban Hinsdale and university-town Ann Arbor were very different places to develop sexual expectations, or so it appeared. Peter told Kerry that he had not yet had intercourse with a girl. Kerry was astonished. At Kerry's high school, sex was commonplace.[4] Where had Kerry first done it? Peter asked. At home, Kerry said, in bed. His parents had given their permission. Peter was astonished. How sensible it seemd to conduct one's sexual initiation at home, in one's own bed, in privacy. Trying to grab the conventional quick fuck on the conventional car seat was simply unnecessary. One need never suffer the conventional indignity.

V

At just this moment the sex poll fell into eclipse. It might have fallen into oblivion, so little had it progressed from its beginning. There were no data yet, no items written. For six weeks the poll remained a set of notes. Meanwhile Peter's life raced. The month of February brought midterms and more rain and, as diversions from study, one remarkable event after another.

The demands of photography and physics, both of which promised midterm evaluations, grew prodigiously. Peter had let slide a great deal of darkroom work for his photo seminar; that work had to be done. On weekends he spent hours on end in the darkroom, making the enlargements from which to assemble his portfolio. Midweek he spent hours reading his physics text and working problems. He studied by himself most of the time. When Rachel came on Wednesday afternoons they were all business. The Wednesday before midterm she brought with her another fellow from the class. Peter watched him work and wondered why she had bothered. When they got their tests back the next week, Rachel talked of dropping the course. She had gotten the lowest mark in the class. Peter walked her from the lecture room, masking his paper so that she would not see by how much he had outscored her. He knew now that she had a boyfriend, and it troubled him. He found he could lose himself in his computer science assignments, which had grown by now to the scale of writing complete programs. When he was not in the darkroom or seeing movies, he was likely to be working out the bugs in a program. The one due around midterms turned out to require substantial dedication. In his log he noted "23 hours on that fucking program" when it finally ran.

During these weeks he often took an hour in the evenings to talk with Kerry or Carol. The night before his physics midterm, after Rachel and her friend had left, Peter grew increasingly anxious as he tried to fall asleep; so he got up to wander around. He found Carol and they sat up talking until 3:30. They talked about his interest in Rachel, and his worry that girls expected a boy to be tall. He remembered it as "a super discussion." At this time too he managed to break the ice at last with Rachel. He wanted to know: had she suspected how he would feel when she wore shoes that increased her height? No, she said, she had not even considered that she stood taller than he did. Peter could hardly believe it; he was five-four and she must be--what?--five-ten. No, she said, five-seven. She had come to seem much less formidable.

On the weekend following midterms Peter went off to San Franscisco to work on Richard Davidoff's film crew and Carol and Betsy drove to the Sierra to ski. While Peter stood enthralled, watching Francis Ford Coppola film THE CONVERSATION, deciding that he must be a movie maker after all, Carol and Betsy were

in the mountains deliberating about their rooming arrangements, deciding that they wanted to live with Peter and Kerry in the spring.

Betsy had grown up with conservative sexual attitudes. Now she wanted to chance to liberate herself from them. THE HARRAD EXPERIMENT had played some part in this idea of hers, though it is uncertain exactly what part it played. It was Peter who had talked to her about it and piqued her curiosity. Carol had quite different sexual attitudes and wanted not to change her views but to act on them. At the dorm Sunday night, Betsy told Peter that she and Carol had something to talk to him about. She took Peter and Kerry aside the next afternoon and proposed that the four of them live together for the sake of sexual experiment. That night all four walked to the coffee house, where they discussed the plan further.

As four people they could claim two rooms in the dorm. One could be used as a study, the other as a common bedroom. What occupied them mainly were the tactical considerations of parental assent, which they felt to be essential. They decided that each should announce their plan as a fait accompli, pleading that conclusions conscientiously reached ought to be respected even if they were not approved. Peter rehearsed the line that was to clinch their presentations: "I hope***that when you realize that I have decided that this is what I want to do, you won't oppose me." [18.1.31] What pleased Peter most, and reassured him, was that the girls made a point of saying that they could conceive this sort of experiment with no one but Peter and Kerry. Peter could imagine only too readily his being excluded from, instead of selected for, such an adventure.

The scheme survived almost a week, until Carol's mother killed it by refusing her assent. Peter hardly knew where to direct his anger. He came to picture himself storming the fortress of her parents' house, advancing up their lawn in a tank, but with Carol (as he noted ruefully) strapped to the front. When he cooled he grew closer to Carol. The night of his birthday she lured him into her room, where she had set candles burning and the lights were out. A week later they slept together--though this conventional phrase of Peter's disguises the fact that he did not have intercourse with her nor did he sleep. He turned most of the night into one position and then another, trying to find one that was genuinely restful. But this time he enjoyed the luxury of not having to sneak away at dawn, as he had to once when he spent the night with Darlene.

VI

In the last week of the winter quarter the sex poll appeared again from the shadow of more urgent matters. As a feature of Peter's life, it had been transformed.

At the end of the quarter most students found exams pressing them to diligent study. Kerry could not be distracted now. His courses in chemistry, biology, and calculus required his time. John Lerner therefore became Peter's principal collaborator and remained so from then on. What permitted John his liberty is not clear. But Peter, who like Kerry was taking math and science, was free because he had caught up with the work in his courses and was going into finals with high marks on his midterms. For the most part, he confined his preparation to the day preceding each exam. In addition, he had a reason to complete the poll before the quarter ended. His access to the computer depended on his being registered in a computer science course and he had not decided to take one in the spring. Therefore, he risked having to tally the results by hand if he could not get the data on the computer by the end of exam week. He had seen other students hand tallying the results of surveys they had done during the term as class projects, and rejoiced in the thought that he would not have to suffer similar tedium. If he had been forced to hand tabulation, he would probably have abandoned the poll altogether. For Peter's interest in the results of the poll had dwindled close to extinction. [22.2.13] He wished to finish it chiefly for the sake of writing the program.

John and Peter conceived a strict division of labor. One would prepare the questionnaire and the other the computer program. It was an expedient arrangement, given the speed with which they would have to work, and one that honored differences in both competence and interest; for John, who had just completed his course in human sexuality, had no experience with computers.

They began on Wednesday evening working from eight until one. For the next week they devoted several hours each evening to the poll. By the weekend before exam weekthey had a questionnaire to administer. By Sunday night there were data to punch up and a preliminary version of the program as well. But the preliminary version, of course, refused to run.

Monday Peter was besieged by physics. He picked up a take-home exam at noon and was to turn it in by

noon on Tuesday. Nevertheless, around ten that night, with the exam half completed, Peter and John set out for the computer center in hopes of getting the program to run by midnight. Rushing on his bike through the rain and without a light, Peter saw a car turning into his path, clutched at his brakes, skidded his tires on the slick pavement, and was struck. He fell entangled with his bike, no more than bruised. But his weight had folded the rear wheel. He locked it near where he had been hit and dashed ahead with John. By midnight the program still had not run. He returned sodden, with his bike over his shoulder, to finish his physics final. When he finally went to bed it was 5:30. He was awake in time to deliver his exam to his instructor at noon on Tuesday.

That night the program ran. It broke down the data into a simple cross-tabulation, displaying the responses to each item according to the geographical region of the respondent's home. Peter was pursuing a hunch regarding the setting of one's sexual initiation: Was the setting more likely to be outdoors if one came from California, indoors or in a car if one came from the East or Midwest? The following afternoon John's roommate Gary ran off with the printout.

Before he left for Chicago Peter ran the poll again, this time breaking down the responses by the height of the respondent and by frequency of masturbation. Later he noted one of his hypotheses refuted, another confirmed. He had guessed that frequent masturbation was a sign of sexual frustration; frequency of masturbation should therefore be inversely related to the frequency of such activity as intercourse. Instead he found they were directly related. He concluded that masturbation marked an inclination toward sexual activity. Then he looked at the breakdown by height and decided that his dismal suspicions had received further confirmation. Short boys seemed relatively inexperienced.

Next quarter he would check the height question again on a new version of the poll and would reach the same conclusion. They were able to run the poll again because John had decided, on the basis of his work with Peter, to take a computer course himself. The new poll had been administered, rather haphazardly, to students in two other dormitories; the returns were light. The reader will find the breakdown by height of all forty questions of the revised poll appended.

VII

During the last week of the winter quarter Peter received a letter from home bearing new of Tom Kirk. His mother had hired him to pain the ceiling of his brother's bedroom. While he was there, she learned that he was also a student at one of the local junior colleges. He was working hard, hoping that his grades would be high enough to enter the University of Illinois. He wanted to be an electrical engineer.

FOOTNOTES

1. "This is all anti-positive thinking, but it still could be true. If it's true, I might as well...study physics more!" [15.3.20]
2. Peter confided to his own diary later in the year that his body had been a source of pride.
3. The placing of this incident in the narrative sequence is speculative; neither Peter nor L.B. recorded it in a log and it does not appear on a transcript. The substance of the incident is not in doubt: Peter's recollection is documented and concurs with L.B.'s. But it is impossible to be sure to what moment Peter refers when he says that the idea of height "came in."
4. This is clearly Peter's report of Kerry's report. There is no claim implied regarding the state of sexual activity among the high school students of Hinsdale or Ann Arbor.

Chapter VII

Was the Sex Poll Educative?

Perhaps Peter's construction of the sex poll was educative, but I doubt it.

That does not mean he learned nothing. Most likely, Peter increased his proficiency at computer programming. But programming has looked like a dead end in Peter's life. He had taken the course because he liked programming. It was a skill he though would serve him well in engineering. He thought he might even market it, working as a programmer during the summers. But he did not pursue engineering, as it turned out--except for a single course in electronics, which he took for fun. And, though the prospect had seemed unlikely, he found summer jobs that related to film making; his programming skills were unnecessary for these. Becoming a skillful programmer did him no harm, of course, but it has not functioned in his life as an educative experience: it has opened no doors.

Then what about Peter's sex role conceptions? It was worry about his supposed deviation from an essential norm that sent him off to survey his friends. And we have evidence in the episode that his ideas did change somewhat, that he learned something. Still we cannot be too sure. The action of the episode is rather complicated and its educational significance is not plain. Let us look more closely at the structure of the episode.

What Happens

In the course of the second episode Peter sets out to discover some of the conditions under which boys achieve their sexual initiation. He ends up, having conducted a survey of his friends' sexual experience, declaring that the results of the study do no much interest him. What happened?.

What happened, it seems, is that the sex poll came to serve another purpose in Peter's life. There are really two stories here. One concerns his getting a good girlfriend, as he originally put it. That is the larger of the stories, and its significance seems to hang on a constellation of Peter's beliefs about what it takes to be a man. What it takes, in his view, is experience--sexual experience, to be sure, but not sex alone; adventure probably translates the idea best, and especially adventure with women. The story of his getting a girlfriend begins as he arrives on campus knowing virtually no one; it concludes when Carol, whom he has come to trust, induces him to sleep with her.

The second story concerns the making of the sex poll. And this one is profoundly dependent on the first. Peter finds it difficult to snare the adventure he seeks. He compares himself unfavorably with other young men, wondering rather desperately whether his sexual inexperience is not the product of some competitive disadvantage. Fearing rejection, he resists taking any but the slightest initiative with a woman. Being bright and inventive, he has rationalized his hesitance with a plausible theory of the determinants of extensive sexual experience, the most important of which is the degree to which a person embodies the attributes of the conventional sex role stereotype. Young men who most accord with the type are "studs," whose conventional manner and appearance "work their magic" on young women--who consequently relieve the man of the need to risk rejection by throwing themselves at him. Men who deviate from the type are not so lucky; they have a more difficult time establishing an initial sexual relationship. He is one of the latter: he is shorter than the norm, which accounts for his inexperience. His rationalization protects him from having to face down his fear of rejection; hence he treasures it and does not want to give it up. But it also "dooms" him to solitude; hence he would be delighted to exchange it for a more hopeful prospect--preferably the news that he, too, could work magic on women.

For years he has tested the hypothesis informally among his friends. But now, fearing that Rachel is spurning him, he recalls that he had once tried to prove it right scientifically. His high school biology teacher refused to permit the project; this time, however, he is free to conduct an inquiry. So he undertakes the sex poll to learn for sure whether his height is a handicap.

But the hypothesis never transcends its origian as a rationalization, never takes on intellectual interest of its own. By the time Carol invites Peter to bed, the urgency attached to the results of the survey has dissipated.

As a rationalization, the hypothesis has become useless; there is nothing at the moment that needs rationalizing. The sex poll languishes until Peter, caught up in the fun of computer programming, revives it as an occasion to test his programming skills.

Where, then, are the marks of an educative experience? There are, granted, a great many features of the episode that appeal to the usual interests of educators. The episode plainly concerns important developmental matters. Peter is driven, as it were, by the desire to accomplish his sexual initiation and thereby cross the threshold of adulthood. There is evident the influence of his peers on his sex role conceptions. There is public endorsement of those conceptions implied in the movies, as in the Bogart-Bacall relationship of TO HAVE AND HAVE NOT. There is the directive influence of his high school biology teacher's term-project assignment, which first suggested the idea of an inquiry into sex-role conceptions. There is the influence of his reading--especially of PSYCHOLOGY TODAY, which supplied a model for the items on the survey questionnaire. There is the obvious efficacy of the instruction he received in computer programming, which he applied to the project with patent competence and pleasure. And there is, above all, Peter's recourse to scientific inquiry as a model for resolving insistent uncertainty. Even if his use of science is undisciplined, it nevertheless speaks volumes for the degree to which he has internalized an academic orientation toward questions. We have here, in short, the picture of an experience stimulated and shaped by a great variety of influences; it is a picture that gives evidence of the potency of the schools, the media, and the peer group in complementary interrelations. And yet this is not the picture of an educative experience.[1]

The episode begins as a distinctly educational one might. Peter is in a state of longing and confusion. He aims consciously at getting a girlfriend. He is also wondering, quite consciously, what it takes to have and hold a girlfriend. This wondering, which has a history, becomes more urgent as the longing for a girlfriend continues to be frustrated. Though the plot is double-barreled--the seeking a girlfriend is one part and wondering about the effect of stereotypes is the other--only the latter bears much educative potential.

For insight-conscious understanding--is the essential outcome of educative experience. There are many sorts of experience that do not result in insight, of course. They are not less important in our lives for that. Indeed, they may even resemble educative experiences in some respects, beginning in problematic confusion and ending with a satisfying and consequential resolution. Much of what we think of as developmentally significant has this nice, satisfying shape--but does nothing to extend or deepen consciousness. A young person's success at establishing an intimate relationship, for example, may begin in tribulation and fear of the loss of self; but having once succeeded, the person has taken a step that makes further intimacy less fearful and more rewarding. If, in addition, one thinks in terms of a developmental theory like Erik Erikson's, in which the achievement of intimacy admits one to the next stage of the life cycle, then the experience of attaining genuine intimacy is consequential.[2] But such developmental theories typically omit the requirement that a person understand what he or she is undergoing. This is not unreasonable as developmental theory. Every organism develops. Development, if conceived apart from the progress of consciousness, is as much a feature of the lives of pine trees as people. But, conceived apart from the progress of consciousness, no account of human development pertains directly to education. So, to return to the case at hand, Peter's pursuit of a girlfriend may well be a consequential event in his life, a turning point, and still fall short of the educative just because the experience does not culminate in insight. That is why Peter's ruminations, the reflexive concern with his own development, are crucial here. They hold promise of converting the significance of the episode from the developmental to the educational.

But that promise goes unfulfilled. The turning point of the episode as a whole is Peter's sleeping with Carol. The survey, which began as an attempt to find out whether height is a determinant of sexual experience in young men, is put aside at this moment, when it has not yet progressed beyond the planning stage. When Peter resumes his work on it, the project is no longer an inquiry but an opportunity to practice computer programming. If there was a moment of insight, it may be buried somewhere in the process of planning. Given what we know of the planning, this is a plausible supposition. Peter has, after all, an avid curiosity about the sexual experience of his peers. Furthermore, what he learns about their experience during the early planning of the survey tends to deny the stereotypic presumption that sexual preferences are uniform and that sexual

initiation follows obligatory patterns. There is no doubt that Peter was delighted and relieved at these discoveries; his tone of voice in recounting them bears eloquent witness. But, though his relief may have eased his anxiety with Carol (and others), what he learned in planning the poll seems to have had little effect otherwise; in particular, it seems not to have altered his understanding either of his own experience or of the way that sex role norms affect behavior. The ideas guiding the survey had, in fact, lost their savor by the time Peter had its results in hand.

Two years later I asked Peter about the poll. He had kept the computer output, which he pulled from a box under his bed. Unfolding the pages, he explained that the results of the poll had confirmed his belief. Short boys have less sexual experience than others. Perhaps I had caught him at a particularly grim moment. From his tone I gathered that he was not joking. The hypothesis he had contrived during his high school years still served him. On the one hand, it does not surprise us to find old rationalizations persisting among a person's beliefs about sexual matters; to reorder one's thinking about such emotionally charged aspects of one's experience is difficult, especially when it requires removing a workable defense. On the other hand, the persistence of the old formula despite his own experience in planning the survey--his discovery that sexual tastes and experience vary even in the face of stereotyped role expectations--tells heavily. It is persuasive testimony that Peter's experience in planning and conducting the sex poll did not result in a consequential insight, and had not yet become educative--no matter how important the experience may have been to his development.

In the biographic frame, an experience is educative only when it results in a consequential enhancement of consciousness.

FOOTNOTES

1. Such a judgment must, of course, be hedged a bit. It depends, first, on having sufficient evidence, and, second, on the length of one's hindsight. An experience may become educative only after many years, when its significance finally becomes apparent. Only a complete life is sufficient evidence to say with confidence that an experience came to nothing.
2. Erik H. Erikson, CHILDHOOD AND SOCIETY, 2nd Ed., (New York: Norton, 1963), chapter 7.

Chapter VIII
Educational Biography: So What?

Peter Nussbaum's education is of no particular interest in its own right. But discussing it has provided the opportunity to consider the course of an education naively. That is, we have managed to discover what is educative about some experience. At no time did we need to specify in advance the kind of practice that must (by definition) result in education--whether schooling, child-rearing, self-instruction, or whatever. Consequently, we could deal with the question of how one can tell education when one sees it. Strange as it seems, this question has not previously been considered by educational researchers.

The device that serves in lieu of a verbal definition--as a heuristic for identifying educative experience--is the structure of a biographic narrative. Taking a cue from John Dewey's theory of the educative, I have identified what seem the three essential marks of the structure of an educational episode: the story begins with the learner in a situation of relative ignorance or confusion, turns on a moment of insight in which disparate threads of the original situation are consciously pulled together, and as a consequence of which the learner is able to recognize and fruitfully solve future problems. And I have tried to show this conception work to distinguish educative episodes from others. I would now like to consider the significance of this approach. I shall do so with respect to three topics: the concept of education, the structure of narrative, and the assessment of educational outcomes.

Education and Development: What Difference is There?

It is obvious, I suppose, that when education is considered biographically, the domain of experience comprehended is large. There are no limits concerning the source of the instruction, the subject matter to be illuminated. For it is neither what one learns nor from whom that makes an experience educative. It is rather the role of that experience in one's life, its relation to what happened before and what will happen after, that tells the tale. The three marks of an educative experience concern the conscious character of the episode's turning point, its antecedents and its consequences. This structure of relations among events in a life defines--or, more accurately, typifies--an educative experience.

For many years the study of human development has worked roughly the same experiential territory, and more besides. To point up the conceptual significance of the biographic approach to education, let me contrast its assumptions with those characteristic of developmental studies.

Both biography and human development examines human lives. Both are formative studies, concerned with explaining how people get to be the way they are. But they typically regard these topics differently.

Biography is typically concerned with individual experience--with what individuals do, why they do it, and what happens to them as a consequence. In accounting for what individuals do, biography adverts to what is conscious and deliberate. That is why education is so prominent a concern of biographers: educative experiences enhance the capacity to act consciously and deliberately. Biographic studies of education, therefore, deal with the formation of an individual's consciousness through his or her experience.

Studies of human development, even when concerned solely with personality development, assume a larger domain; and this is hardly surprising. Human personality has long been thought to comprise not just conscious experience but also unconscious habits and mannerisms; and Freudian theory, which is the origin of disciplined study of personality in this century, is distinguished by its contention that the unconscious and preconscious aspects of human functioning often dominate the conscious. In studies of the development of the personality, conscious experience--especially as the origin of elements of the developed personality--plays a decidedly minor role. Part of the reason for this lies in the subsidiary place of consciousness in modern personality theories. But more important, perhaps, is the developmental hypothesis itself, which takes as its object not individual growth and experience but the general processes that underlie it. And this is the principal distinction between the subject matter of biographic and developmental accounts: while the biographer attempts to make the course of individual experience intelligible, the developmentalist attempts to discern the processes that determine the experience of many people.

The point of contrast is especially important. Biography deals with the experience of individuals as individuals. Studies of personality development treat individual experience as a manifestation of something else. This

is a consequence of the conceptual underpinnings of each approach. Biographical narrative makes individual experience intelligible by giving it the formal coherence of a story; the narrative structure that informs the record of one person's experience cannot be generalized, does not pertain to anyone else's life. In the biographic frame, every life is a different story.

In a developmental frame, by contrast, every life is (as it were) the same story. Developmental explanations are unavoidably general. Talk of development has always invoked a particular formative principle: the growth of an organism. All the potential for an oak is already in the acorn; if the seedling happens to sprout beside a rock, it may produce a uniquely formed oak--but the individual's unique form must be explained strictly according to the same processes of growth that govern the maturation of all acorns. Developmental hypotheses imply formation by unfolding, a natural process with its own direction, its own imperatives. Though individuals embody the process, the process is common to all individuals of a species. Developmental explanations of education are accounts of the interaction of human organisms during their formative years with an environment; there will be individual differences of organic potential and incidental differences of environment, which produce the ultimate idiosyncracies of adult individuals. But the differences all arise out of the same process, and the operation of the process is the chief concern of developmental explanations.

When we think of education as pertaining to the quality of individual experience, the biographic approach is appropriate and useful for showing how education happens. If we then wish to dig beneath individual experience, to conceive education as determined by general processes, the biographic approach is not appropriate; we need the more usual developmental conceptions and generalizing methods of the social sciences. The biographic and developmental approaches to education are thus complementary.

Narrative Structure: So What?

The function of biographic rendering is to make the events of a life intelligible. Biography performs this function by supplying a form for the course of events that is an education. So I have argued. But what sort of thing is this narrative structure, and how does it relate to the more usual topics of interest to educational researchers?

Narrative is a form of discourse. It has reached a state of refinement in the craft of historians, biographers, and fiction writers; but it is not their province alone. We are all narrators from time to time. And when we narrate, we are engaged in interaction.

All of our interaction is governed by norms. But not all norms are of the simple kind that urge or forbid an act (thou shalt not steal). Some of them are constitutive; that is, some of the define acts or statuses. So we understand that if one buys a pair of gloves, then one owns them; the tacit rule that links the act of payment with the status of ownership is a constitutive norm. Likewise, to take the gloves without their being given is to steal or to borrow them (one or the other, which one depending again upon a set of constitutive norms). The constitutive norms defining some statuses (like ownership) and some acts (like theft) are embodied in legal systems. But there are a great many more constitutive norms than those to be found in law.

Language embodies many. And indeed it is the linguistic norms on which we must draw to discover, for example, who is whose lover, who is a scoundrel, who is impatient, or bold, or knowledgeable. Or educated. Each of these concepts (or statuses) is value-laden. And each has reference to the empirical world as well. To see scoundrels in the world one must know what a scoundrel is; and, by the same token, knowing what a scoundrel is may well help to make an experience intelligible that would otherwise have been merely painful or confusing.[1]

Educational researchers and educators are members of the larger society, and their conceptualizations of their subject matter or their practice is likely to be shaped by the unconscious language habits of the community, just as everyone else's is. This has been widely seen as an impediment to research. The customary solution has been for researchers to permit one another to stipulate their definitions, after the manner of physicists naming an exotic new particle. So one finds distinguished scholar stipulating definitions for concepts that are already defined in the discourse and practice of the community. "Education" is one of the concepts often given this treatment. But the custom of stipulating a definition, harmless enough in the naming and characterizing of genuinely novel phenomena, does more harm than good in educational research where the

concept (like "education") is both value-laden and constitutive of ordinary activity. The importance of doing educational research lies, after all, in the importance of education as already understood in the community. We are certain to muddy the waters, to obscure the significance of research, by defining a concept as an artificial starting point when a genuine starting point already exists. The definition of "education" and other value-laden concepts subsists in the constitutive norms of community life. The definition of "education" is thus an empirical question. By rights, the concepts that guide educational research ought to be the ones already at large. And that means, I suggest, that the empirical study of educationally-relevant concepts ought to be a priority among educational researchers. There is, needless to say, scant precedent for such study.

What I have done with the concept of narrative structure in this study seems to me a preliminary to empirical concept study. Let me try to explain how.

We tend to think of concepts as words and of conceptual analysis as something that one does with a word. (So, for instance, Osgood's semantic differential, which purports to provide a method for the empirical study of value-laden concepts, is characteristically applied to the meanings of individual words.) But there are all sorts of embodiments of value-laden concepts--one has only to think of Michelangelo's Pieta. And even among the verbal embodiments, the uttering of words is the least of the matter. There are larger verbal structures that may embody value-laden concepts, structures whose meaning is in no way derivable simply from the words that make them up. Example: a sentence.

Narration is certainly one of the commonest linguistic forms in our repertoire. Why should we not consider narrative structure capable of carrying the meaning of a value-laden concept? I have argued that, in the literary tradition of modern biography, it does; that narrative structure is constitutive of educational significance. But education is not a technical concept originating in biography, and narrative is not a form of discourse used only by those who make a craft of it. Why should we not find people other than writers making use of narrative to render educational happenings intelligible? How do teachers and parents employ narrative in accounting for the progress of individual children? These are empirical questions. If we pursue them we will be defining education; and we will be defining it in such a way that empirical research into educational phenomena may use these findings as a starting point.

Biography and the Study of Outcomes

The practice of assessing educational outcomes dates back more than a hundred years. It has not changed substantially in conception since the mid-nineteenth century. The instrumentation is much improved, to be sure; and the techniques of statistical analysis have advanced dramatically. But the concept of educational outcomes and the assumptions linking them to school practice are essentially similar to those employed by nineteenth-century school people in England and America.

Since the mid-nineteenth century it has been customary to assess the effectiveness of schooling by having students perform tasks like those required of them in the classroom and by then ascribing the results to the program and practices of the school. I do think this is an unreasonable practice; it makes some sense to "assess outcomes" this way, if the purpose is to see whether students and teachers are performing such tasks in the classroom as they have been told to perform. But when the purpose is broader--to assess program effects or to estimate institutional impact--the old custom becomes conceptually inadequate. The usual apologies--methodological defenses of the procedure--are irrelevant to this objection. Empirical researchers have scarcely begun to consider whether the school effects we measure are the ones we ought to be studying. But what can such outcomes be if not the discrete bits of knowledge and skill, the habits, attitudes, and values we are now prepared to regard as outcomes?

It has been my intention here to suggest an answer. What we ought to regard as outcomes are not changes in behavior, but consequential, conscious changes in lives. I have tried to show here how we can identify such changes empirically and how we can render our observations intelligible. The impulse is strong, I suspect, to raise methodological questions about biographical studies of this sort. But it should be borne in mind that what I present here is not a new method. It is an old method, important just because it embodies without substantial distortion an important idea about how schools should conceive their aim.

As a method of approaching questions about the effects of schooling, biographical rendering is of limited

but definite value. First, it permits us to explore and discover (though at rather substantial cost in time and effort) educational significance in the experience of individuals; insofar as schooling plays a part in that experience, one can obtain a view of the kind of contribution it has made in fact. Second, it permits us to study the influence of schooling in interaction with other influences. The consequence of these two combined is that through the biographical study of the school's influence we can escape the question-begging identification of education with schooling, an association that has underlain the practice of outcome assessment for a century or more.

And then, perhaps most important, biographical rendering permits us to study the effect of schooling on individuals. For years, of course, psychologists have studied what are called individual differences. But, popular misconceptions to the contrary notwithstanding, the study of individual differences belongs to the study of species, of groups--not of individuals. Frederick McDonald has noted that for any psychological theory to win a significant place in educational thinking it must successfully take cognizance of the individuality of students. Yet he seems to believe that this is not a likely prospect; for the concern with individuality in education stems, in his view, only from "a vague, unanalyzed feeling...that the individual must not be sacrificed."[3] McDonald evidently doubts that the study of individuals as individuals has much basis. I doubt that he is alone in his skepticism, for, as he intimates, educational research as a whole has never come to terms with the bearing of individuality on education.

Biographical rendering provides us with the means of cutting this knot. We can, through biography, study the way in which the programs and practices of the school (and other institutional agencies) are selected, transformed by, and incorporated into, the lives of individual students. If we were to compile a body of biographical studies aimed at disclosing the place of school experience in the education of individuals, we would have a canon of examples for further consideration.

This would not be cumulative research in the ordinary sense, of course. But at present some of the most prominent educational researchers have begun to express profound dissatisfaction with the results of the more usual research strategies. Some have begun to advocate the collection of what they call "anecdotal evidence" as a supplement.[4] Though it is difficult to predict what benefits might come from the attempt to compile such a canon of examples, it is clear at least that it would set the substance of our concern with individuality clearly before us. That, I think, would be benefit enough. But a canon of biographical studies might do more. One historian of culture has recently argued that biographical narrative is, in fact, definitive of the modern concept of individuality.[5] Those persuaded by his arguments would find a biographical canon not just illuminating but, in some sense, paradigmatic of the idiosyncracy of educational outcomes among individuals.

There is, finally, the question of the implication of narrative rendering for our sense of what schools are supposed to be doing. We may be concerned with educational outcomes on two levels. There are first the actual behaviors we may seek to instill in learners: knowledge and skills; habits, attitudes, and values. When we select such things to teach we do so in the belief that they will do some good. But, over the years, we have had a great deal of trouble dealing with the question of what good these outcomes are to promote. They are not ends in themselves, we are firmly convinced. Yet, because our discourse about outcomes on this second level has not been very helpful, we tend to judge schools according to first level outcomes alone. I think we can do better.

I do not imagine that biographical narrative is a practicable means of evaluating school outcomes. But I suggest that it is a step towards coming to terms with what we're really after when we test for knowledge and skillls. The more clearly we can define second-level outcomes--outcomes in individual experience--so that we may at least be confident, eventually, that we can recognize education when we see it, the more intelligently we will handle evaluation procedures that are practicable.

FOOTNOTES

1. This set of ideas is a commonplace in philosophy, in the sociology of knowledge, in sociolinguistics. So, for example, Basil Bernstein writes: "Though language is not ordinarily thought of as of essential interest to students of social science, it powerfully conditions all our thinking about social problems and processes... It is quite an illustion to imagine that one adjusts to reality essentially without the use of language and that language is merely an incidental means of solving specific problems of communication or reflection. The fact of the matter is that the real world is to a large extent unconsciously built up on the language habits of the group." Basil Bernstein, "A Socio-Linguistic Approach to Social Learning," in CLASS CODES AND CONTROL, vol. 1 (London: Paladin Books, 1971), p. 142.
2. Frederick J. McDonald, "The Influence of Learning Theories on Education (1900-1950)," in THEORIES OF LEARNING AND INSTRUCTION, Sixty-Third Yearbook of the National Society for the Study of Education, Part 1 (Chicago: National Society for the Study of Education, 1964), p. 26.
3. See, for example, Lee J. Cronbach, "Beyond the Two Disciplines of Scientific Psychology," AMERICAN PSYCHOLOGIST 30 (February 1975): 116-27.
4. Karl J. Weintraub, "Autobiography and Historical Consciousness," CRITICAL INQUIRY 1 (June 1975): 821-48.

Appendix A

The Method of the Field Work

This chapter reports (1) how the students interviewed for the preceding biographical studies were recruited and selected, and (2) how the data used in the study were collected. The reader who wonders how representative the lives considered for this study may be, and how trustworthy the data are that undergird the stories, will find those questions addressed here.

Recruitment and Initial Selection of Students

Methods of recruiting and selecting informants for surveys commonly aim at assuring the generality of the study's conclusions. But this study employs a different sort of argument and a different method of data collection; its aim in selecting participants was consequently different.

The argument of the study begins, rather than concluding, with its general consideration. It assumes that the circumstances under which students became educated are "interactive"--that many influences are at work in the case of any achievement. From here it seeks to discover how these interactive circumstances manifest themselves in individual lives. Whether the interactions look the same or different in diverse lives is of no particular interest. Getting a good look at the circumstances of individual lives plainly demands that the students who participate be willing to open their lives to scrutiny and be capable of keeping them open for a long time. The aim of recruitment in this study was to locate some willing students, and the chief aim of selecting cases afterward was to assure that students who found the study hard to put up with were not compelled to participate anyway. No student who happened to get through this screening can be safely regarded as representative of his or her age group, school, sex, social-status group, locality--nor of any other standard demographic classification.

I had tried, at first, to make the group of recruits as diverse on these demographic characteristics as possible, but the search was unsystematic. I turned for volunteers to an eminent private university, a public high school, a private high school, and the shops and streets of the San Francisco Bay Area. At the university I walked into a freshman dormitory a few hours after its residents first arrived on campus, and made a pitch for volunteers to a clutch of students gathered in the hallway to listen. Afterward two volunteered, one male and one female, and both stuck with the study for the entire school year. At the public high school I asked a guidance counselor to solicit volunteers from among as diverse a group of students as possible. Seven appeared at first--all female, representing all four high school years and ages fourteen to eighteen; after a week, six were willing to continue interviews. At the private high school I attended the meeting of a group of ten students enrolled in a special urban experience program, and two male students volunteered. I spoke to one fellow working behind the counter at an ice cream store, explained--as in each case--what sort of study I was engaged in, and asked if he was interested; a student at another public high school, he agreed to be interviewed, but dropped from the study within two weeks. One fellow I picked up hitchhiking during school hours--he turned out to be a work-study student at a third public high school--and asked if he would like to join the study. After a preliminary interview at his home, his older brother, whom he had told about the study, asked whether he could participate as well; both continued interviews. In all, fourteen students had volunteered and twelve were apparently willing to meet for weekly interviews until the end of the year.

Initial selection was completed, in most cases, within eight weeks of the first interview, though in two cases it took me somewhat longer to decide that I wasn't getting what I wanted. According to an agreement that I struck with each student during the first interview, we would meet for several weeks during which they could get a sense of what the interviews would demand of them. At the end of two months we would continue with interviews only if there was mutual agreement to continue. Until then the student could opt out of the arrangement without feeling any obligation to explain, and by then I would have decided whether or not I wanted to continue. The two students of fourteen who used the escape clause did so within the first week.

Of the twelve students who remained, I eliminated seven by the end of the academic year. In one case I called off interviews after two weeks because I felt that I already had more sets of interviews with eighteen-

year-olds than I could use, and more cases than I could manage. In each of the other cases I had some doubt at least that I was eliciting full, candid accounts. Two students found the demand for candor discomfiting and their resistance to my questioning increased gradually over about twelve weeks. When it finally occurred to me that, in each case, I was doing a little worse each week I raised the problem with the students, who confirmed my sense that they really didn't feel like talking; we called it off. One student seemed to thrive on the opportunity to talk, so we continued until the end of the year; but he never did manage to pursue any matter very far, and that worried me. When finally I took into consideration the warning of a teacher and counselor that he was a chronic fabricator, a warning I had hoped I might heed by tracing back over topics to record possible inconsistencies, I decided I had best discard this fellow's case. In two more cases the willingness to talk seemed perfunctory, as though the students themselves were getting nothing from it; they would be only too glad to help me by talking if I would just tell them what I wanted. Both seemed happy enough to call off the interviews, one after two weeks and the other after six. The last of these seven students seemed to find candor extremely difficult but the interviews, the opportunity to talk, evidently satisfied a need. She was upset when I suggested after six weeks that we call off the interviews. Thus at the last there were five full cases from which to choose.

The criterion of selection was the willingness of the student to take me on as a confidant, and the gauge of willingness was my sense that the student was talking freely and openly--preferably in long unprompted monologues. The student's inclination to talk unprompted seemed an indication, good even if not infallible, that essential connections in the student's thought would remain intact; the more I had to probe and solicit, the less confident I felt that I was getting what I wanted. The inclination to talk unprompted, which marked the students whose cases I selected, undoubtedly sets those students apart. It may point to adolescents who are unusually self-possessed or unsually daring, at least in their dealings with peers or adults. The same bias may favor students who are atypically daring or inclined to take initiative in their own pursuits. To the degree that these suppositions are plausible, the claim that the students have typical stories to tell is implausible.

No doubt the manner in which uncommonly self-assured persons get their education is unusual. They more than other students may be prone to attract the attention and concern of teachers, to take what they want or what they can from classes without agonizing about the expectations of teachers or parents, to turn the activity of others in the classroom toward their own interests. More than others they may accept the company--and thereby be subject to the influence--of adults and of peers who are unusually accomplished; may venture into and learn to exploit the bookstores, libraries, museums, and concert halls that their contemporaries shun; may travel farther from home on their own; may pursue active interests in politics and the arts--and in business, if they can get hold of the capital--interests that would lead them to join groups of people linked by common endeavor instead of by the bonds that mark childish association (chance-determined, from the child's perspective: bonds determined by common age, by kinship, by nearby residence). Perhaps the same kind of person under some circumstances will be more prone to defy conventional wisdom or act imprudently--to break the law, take and sell drugs, attempt dangerous stunts, experiment with sex. Whatever capacities permit an adolescent to talk about himself freely, at length, to an initially unfamiliar adult with a tape recorder may also make his life especially eventful. That possibility makes the participants in this study unlikely examples of the ordinary course of education. Of course, if one set out to select those adolescents whose lives would most likely illustrate the interaction of schooling with other educative influences, he might do no better than look for the traits of personality toward which this selection procedure may be biased; but if he wanted a look at the typical fate of persons under the influence of schooling, he would surely employ some other selection procedure.

Collecting the Data

An inquiry into the part that schooling plays in the lives of particular students has an obvious starting point: the happenings of particular students' lives. The influence of schooling must surely appear within the matrix of these events. Therefore, data collection for this study was aimed at assembling a body of evidence concerning what was happening in individual lives over the course of several months.

"What was happening" can be inferred by discovering what students are doing--where, with whom, under what circumstances--and by attending to what they have in mind while doing it--what aspirations, what motives, what intent. So data collection was, first, an attempt to record facts of person, place, and circumstance, and to take testimony concerning motive and intent; it aimed at a rudimentary record of events. But "what was happening" is in part a construction of the student himself, out of what he remembers, what he attends to, and what he finds intelligible. The accounts that people offer, the way they talk about their experience, give evidence of what they are attending to, what they find intelligible. The question "What happened?" customarily calls for an account that assembles persons and circumstances into a narrative. Telling the story is a common--perhaps the most common--method of making the events of our lives intelligible to ourselves and to others.[1] Data collection was also, therefore, an attempt to record narrative accounts of what was happening.

The chief means of keeping track of the circumstances and events of students' lives, and of obtaining narratives of those events, was a series of interviews with each student. There were other means as well--interviews with parents, friends, and siblings; observation of the student in class, around school, at home, and in the midst of activities that he regarded as important; collection and examination of the student's school work; photos of the student's room; and, in some cases, talks with teachers and counselors. But most of the burden of data collection has rested on the interviews with the students themselves. The rest of this appendix concerns these interviews: where they were conducted, under what conditions, for how long, in what manner.

The Interviews: When, Where, Under What Circumstances?

The interviews that provided material for the study were scheduled with each student for the same day and hour each week of a given school term. Usually that time was the student's free period if his school day was divided into periods, or some uncommitted portion of his school day if it was not. When necessary, the interview was scheduled for some hour on the weekend, or after dinner on a school day. The regularity seemed important to the students themselves. When the interviews were called off for two weeks during the Christmas break, all three of the students who had been undergoing interviews since September (others began after the first of the year or ended before Christmas) seemed happy to take them up again. Matt said he was happy to begin again; Peter was distinctly more voluble than usual; Martha for the first time chose to let her guard down and talk about a subject that brought her to tears.

Ordinarily the interviews were conducted at school and invariably out of the earshot of anyone else. The California weather permitted us to do most of the interviews outdoors. Although we usually sat somewhere in the vicinity of the school, it was almost always a comfortable spot for private conversation--on the lawn away from the building, on a hillside overlooking the Santa Cruz mountains, at a picnic table under a tree or in the sun. On many of the interview tapes the ambience of the outdoor setting is vivid--the twittering of birds, wind in the trees, an intruding dog exploring the microphone, chattering of other students in the distance, the coming of a sudden rainstorm followed by the tattoo of drops as we continued under the eaves of the library. There is no sense of the clinical. On the other hand, when the weather was bad we talked in a little room off the library, in an empty classroom or office, and the ambience is the hollow empty classroom or else the void sound of a room too small to have audible character. The rest of the interviews were done at the student's home, in a park, at a coffee house or restaurant--and, on two occasions, in my kitchen and living room. A fixed location, when the student opted for one, nearly always accompanied a series of routine and ultimately useless interviews; regular meetings were one thing, routine interviews another. In retrospect, it seems that the inclination of a student to routinize even so incidental a feature of the interviews as their location spelled trouble.

Even when their setting was fixed, the interviews were done on location, as it were, and whenever possible it was the student who picked the spot. Although interviewing on location is not participant observation, it permits the observation of students in their own milieu and setting, an advantage over the clinical custom of conducting intensive interviews in the interviewer's office

During the first interview I told each student that I would cut the interviews off after an hour unless he or she wanted to talk longer, and that in the first few I would cut at an hour in any case. I did not want the students to feel the study creeping unavoidably into their time. Students whom I met during a free period had

virtually no choice about extending the time in any case. But the eventual desire of the student to exceed the hour, or to schedule the interview occasionally at a different time, when that seemed necessary--these boded well for the series of interviews. Extending the interview became fairly common--often to ninety minutes, sometimes to two hours. In fact, I eventually asked Peter whether we could return to the hour maximum; I had more data than I could manage. In the end, the series of interviews with Peter totalled thirty-two, only one of which fell short of an hour. The total for Matt was thirty-four, though most of Matt's did not exceed an hour. For Martha there were twenty-five taped interviews of about an hour. These three students were the only ones who began in September and ended in June; interviews with the other two students total twelve each of about an hour. The sheer bulk of data represented by any one series of interviews is remarkably large. The following section will give some notion of the conventions that guided each of these interviews.

The Conduct of the Interviews

My dominant concern in each interview was to get as accurate a record as possible of the student's doings since the last interview and then to have the student talk further about the events that seemed to call for elaboration, either in his judgment or in mine. As an aid to memory, I asked each student to note every day what he was doing, with whom, and for how long. For this purpose I furnished each with record sheets on which he could keep a log of his activity; they were calibrated hour by hour for every day of the week, and were pre-printed with the student's school schedule and any other activity (e.g., church choir practice) that came up at the same time every week.

In theory, each student arrived for his interview with a complete log of the week, which then served as the device that structured our conversation during the interview. In practice, the hourly record sheet was ill-suited to the habits of some students, who promptly and thoroughly neglected it, and it was well-suited to the inclinations of others. Whether the student took to the sheets or not, I used them in lieu of an interview schedule to guide review of the week's happenings. When students used the sheets, they had little trouble remembering what they had done during the week; when they did not, or used them sporadically, they sometimes could not account for chunks of time as large as two or three hours. Matt would frequently neglect the record sheets, Martha used them dependably, and Peter maintained his scrupulously. To help remedy Matt's forgetfulness, I would drop by once or twice a week to chat briefly about what he had been doing, but that came to seem unnecessary; he was not leading a secret life.

The weekly record sheets did not, of course, specify the questions to be asked in the interview. The questions and responses arose ad hoc out of the explicitly collaborative relationship between the interviewer and the student.

Every student in the study knew at the outset what its substantive assumptions were, and, if he wished, could refer to the written statement, "Information for Participants," to remind himself what kinds of queries were within bounds and what were not. By the same token, he knew the kinds of responses that I was looking for, and could shape his accounts to tend to confirm or disconfirm the initial assumptions. Here is the statement that each student informant received on the first day of the study:

> This study is an attempt to record and report in biographical form the manner in which students use school instruction, along with other sources of knowledge, to develop competence and to pursue their own interests. It assumes that a person's family, friends and acquaintances are among these other important sources of knowledge, though the details of private or urgent matters among family and friends are not within the province of the study.

I have little doubt that the students themselves accepted substantive assumptions of this sort as the working hypotheses of our collaboration. Because the study was designed not to test these hypotheses but to illustrate them, the customary objections directed against prejudicing subjects regarding the researcher's hypotheses do not apply. But these assumptions are not, in any case, hypotheses of the ordinary sort; they are not predicted outcomes, but principles for distinguishing relevant from irrelevant data. Any student who felt he was "confirming my hypotheses" by citing instances of interaction was simply making the appropriate distinction.

But "interaction" is an exceptionally abstract and special concept. I have no evidence that any student used it to guide his responses, and I never asked a student to attend to interaction. The questioning scheme that elicited examples of interaction was, typically, (1) "What happened?" or "What did you do?" (2) "How did that happen?" or "Why did you do that?" and, occasionally, (3) "Where did you pick that up?" These were the questions that students came to anticipate, and narrative answers were the sort they learned I wanted. It was in the sense of anticipating questions and discerning the appropriate form for response that students collaborated substantively.

I informed each student at the beginning of interviews that I was not a psychologist and was not interested in analyzing their remarks to discover underlying meaning. I said that I would not try to maintain the detached posture of a scientist, but that I knew they were doing something to help me and that I, in turn, was willing to do what I could to help them; they would have to let me know how I could be helpful and I would do what I could. My help most commonly was to provide transportation. Few of the students had cars, even if they could drive, and they often found themselves in need of a ride, usually when they could not make other arrangements with parents or friends. But help was also lending a hand in moving a motorcycle to the repair shop, borrowing books from the Stanford libraries, and--on one anxious morning--walking the hills in search of a family member who had disappeared from the house with a rifle the night before. Given that I know not only the student but also his or her family and friends, and on their own territory, the posture of detachment would have been difficult to maintain; I was invariably glad that I did not need to maintain it.

The consequence of this stance, and of the focus of the questioning on events, family and friends, feelings and intent gave the interaction between me and the students the character of a friendship, asymmetrical to be sure, but with fond feelings on both sides.

The informants and I maintained an agreement that we would be strictly honest. If they didn't want to answer a question, they were to say so and we would stop there; if they found themselves in deep water they were free to go no further. If they were interested in my reaction to something and they put a direct question I would answer it as directly as I could. This understanding was an attempt to avoid evasion by making it unnecessary.

With these preliminary understandings, which I hoped would establish the tenor of the interview sessions, I tried to conduct the interviews in a manner that maximized the students' opportunity to talk and minimized my own. What techniques of non-directive encouragement I knew, I used. But in acknowledgement of the possible shaping influnce of my own questions, I have often accompanied quotations from student responses with the probes that elicited them.

The Interviews: Some Examples

Because the interviews were not structured systematically, one can sense the tenor of the discourse only from examples. In the following pages I offer four brief excerpts from the interviews with Matt and Peter to illustrate our relationship in the interviews and the record of discourse that resulted. The four excerpts illustrate: (1) soliciting and offering a chronicle of events, (2) soliciting and offering an account of a situation difficult to talk about, (3) deliberately instigating action in the student's life, and (4) a monologue. The first, second, and fourth excerpts represent common sorts of discourse, the third, an uncommon sort.

In the quotations that follow, as in all the quotes from interview transcripts in the study, three spaced periods (...) signify that the speaker has hesitated; when a portion of the transcript has been excised, the resulting elipsis is indicated by three spaced asterisks (* * *).

Excerpt 1
A Chronicle of Mundane Events (Matt)

Background.--The following discourse is typical of the kind of talk that resulted from reviewing Matt's doings hour by hour. Although it is not apparent here, this review was structured by following a blank weekly record sheet. It is a verbatim transcription.

LB: So you crashed after dinner and--

M: For about an hour and a half or two hours.

LB: When did you wake up, do you remember?

M: Oh, let's see. Six thirty...going on seven a little bit, (laughs) and then after that I did homework until about nine-thirty...or was it ten-thirty...yeah. No, I just did it, you know, off and on.

LB: Yeah.

M: I read, and then...

M: Let's see...THESE DAMNED, FINE RUINS by Monica Sutherland I think it is.

LB: What's that?

M: It's about the earthquake. I'm just going through this book. I don't think it's a very good book at all; I wouldn't recommend it to anybody.

LB: Are you reading it for history (class)?

M: Yeah, indirectly kind of...and, you know, for my own head mainly.

LB: Yeah.

M: And it's not as good as THE EARTH SHOOK AND THE SKY BURNED by William Bronson.

LB: Uh-huh.

M: That's a really good book and it covers it really well. This other one, you know...this lady's from England, and...I don't know...there's some things in there that I just don't agree with...in direct conflict with the previous book I read. It was kind of strange. I don't know, it's not really that good a book: I was mainly reading that. And some of my Recreation, Recreation Education book. I finally got caught up in that. That was really interesting: Recreation, we had a little quiz--that was Tuesday, my first class Tuesday..yesterday. Well anyway, this quiz is on a little part of the book just three pages...three or four pages ahead of where I had stopped reading the night before, and so I wasn't prepared for it at all. I got about three out of five right, or something like this. It wasn't a disaster, you know, but it kind of freaked me. He goes, "Chapter three," and I said, "Wait a minute," you know, "I thought chapter three was supposed to be read Thursday, by Thursday." And like I was just at the end of chapter two and starting chapter three, but I think I pulled through okay. I didn't flunk it, at least...I'm pretty sure. I'll have the paper so you can look at it.

LB: Fine. Okay.

Excerpt 2:

Asking about a Difficult Situation (Matt)

Background.--Here, at the start of the second interview with Matt, I was trying to fill gaps in my knowledge about his family. I had already done three interviews with his younger brother, Randy, knew that his parents were divorced, that Randy and Matt lived with their mother, and that the two other children lived away from home. Walking to the interview site I had asked Matt whether he was as close to his older brother Dean as he was to Randy. He hesitated before saying they were quite distant. I had plainly stumbled into a difficult area but, still stumbling, I pursued the question at the start of the next interview. Again, elipsis points indicate pauses, not excisions.

LB: How long has...I mean, has it been all your life that you and Dean were distant?

M: Well, developing all my life...all our lives. It's just been strange. I remember a point in history, his history: he ran away from school when he was in sixth or seventh grade. And the principal came up to our house. I remember that day. And he just...I don't know, and...Dean just was onto something that nobody else seemed to be into, and just pulled away from everybody. And all his friends I've talked to just seem...they told me...well...he just seemed to be a loner...a loner. I don't know. It's just been a very strange situation. (laughs nervously) It's slowly...I don't know... it's changing. It's not getting any worse. It's getting better, if anything...I hope. I'm not sure.

LB: Uh-huh.

M: It's not going down any deeper. One time it got pretty severe, and it got into a big scene with the sheriff and all that, which I don't want to get into.

LB: Okay.

M: It happened about a year ago.

LB: Ah, but so far...well, how do you feel about the situation? I'm not much interested in the details of Dean's life as, you know, what it's done or not done to you.

M: Well...How do I feel? I don't understand.

LB: How do you feel about Dean?

M: Well, I love him as a brother, of course, but sometimes...I feel it's better for the both of us if we just stayed apart. It's good, of course...not complete separation. It's good for both of us to get together now and again...We're world apart, really. He's into a spiritual thing...so deeply. He just has these...I mean, they are very, very fantastic ideas about...about it all. Nobody else is really onto his ideas, and nobody interprets the Scriptures--of the Book--the way he does. And so he thinks everybody is all wrong, he is onto the right thing about...about most of them. He has so much faith...that he is going to get a motorcycle, and a lot of money is going to come his way. And I told him...I told him this: "Okay, Dean. Soon as you come roaring up on your BMW with..." What? "three thousand dollars in your hand," or whatever, "I'll believe you. I'll believe everything and anything you say." And he said, "Okay." And we left it at that.

LB: I see.

M: Happy little parting there.

LB: Yeah. What's Dean do?

M: Well, all he does is just live in (name of town), on Street, in an apartment...unfurnished except for a rug and a refrigerator...and curtains. And he is just "waiting on the Lord," in his words.

LB: Is he...he's not working at a job?

M: No. And he's doing things like cutting off his welfare, like...it's just cutting off his welfare, you know. My mother, as soon as she got wind of that, she just about went through the roof. [The family income then consisted of benefits from a federal manpower program, a bit of child support from her former husband, and Dean's welfare.] She was trying to manipulate him to make him secure...because she really cared about him. And Dean thought she hated him. And, I don't know, it's just a long drawn-out thing involving the separation of my mother and father. It's really heavily deep down psychological...psychological entanglement...that's really hard to undo.

LB: uh-huh.

M: [An inaudible phrase, to the effect that: if you have taken something elusive and have] tossed it out into the bush--have fun all day, you know, trying to get it back again. It's a weird analogy, but anyway...

LB: I got it. I got it. [having grown uncomfortable] Ah...well...so...tell me again, what's your sister doing?

Comment.--There were a number of occasions during the year when interviews turned to difficult topics. If the interviewer was never much more resourceful, he was rarely much less resourceful under similar circumstances.

Excerpt 3:
Instigating Action in the Student's Life (Peter)

Background.--Peter was just concluding a five-minute monologue reporting on a discussion he and some friends in the dorm had had about experimenting with co-habitation--an idea that struck him as both interesting and worrisome. He doubted that they could make such an experimental arrangement tolerable if any one of the experimental pairings failed to work out. But rumor suggested that another dorm house had already arranged to try it, and that took the scheme beyond the realm of mere hypothetical possibility. I decided

I'd risk stirring the coals by recommending a book, wondering whether he would read it.

P: I could be overestimating [the difficulties]. I haven't done too much thinking about it, except that night [of the original discussion], and what I said--all this stuff right now I've just said--we haven't discussed that at all.

LB: You know there is a book on the subject, the situation [I wondered whether he knew about it].

P: There is?

LB: Yes. It's called THE HARRAD EXPERIMENT, and it's about an experiment in co-ed living among freshmen at an exclusive college.

P: That's pretty close. That's us all the way.

LB: It happens to be a novel.

P: Ah.

LB: But it does explore the problems, among other things, when two people don't feel equally about each other [he was just worrying about this], what happens when people are just thrown together.

P: That would be interesting to read. I suppose the library would probably have one, or would they not? I guess it's more of a popular thing.

LB: Yeah, it's a popular thing. It's in paperback.

P: Uh-huh.

LB: I think the name of the author is Robert Reimer.

P: Robert Reimer.

LB: R-E-I-M-E-R.

P: HEROD EXPERIMENT is easy to remember. Herod is the...

LB: H-A-R-R-A-D.

P: Oh, wait. H-A?

LB: H-A-R-R-A-D, not H-E-R-O-D.

P: Oh. THE HARRAD EXPERIMENT. Harrad, huh. Robert Reimer. All right, I'll try to remember that.

LB: Yes. There are people who've been thinking about doing that sort of thing.

P: Yeah. It's an interesting thing. I don't know. It could be really good...it could be. For some people it could be the greatest thing ever happened; some people it could really destroy.

Comment.--Peter did remember the title and author, bought the book, read it, passed it around, and the co-ed living experiment entered the state of practical planning.

Excerpt 4:
Ruminative Monologue (Matt)

Background.--Matt, his brother Randy and his mother were living in a house whose interior bore plainly the marks of a recent fire. Randy had told me the story a few days before, and Matt was nearly finished with a twenty-minute narrative of his own version; he had not heard Randy's.

M: We lost everything. The only thing that survived, that really survived in that room, was my pack frame and Randy's electric guitar, which he got rid of, you know. It was a hard-shell case, and those cases are built just right. It was a little scorched but it was fine. But the sad part about it was we lost two pets, some really nice pets. And the old cat there: I go, "Here kitty-kitty-kitty," you know, and she comes deedle-deedle-deedle [making running movements with his fingers] running right out. She had enough sense to get out. But my cat was just so freaked, you know. He was trapped in the room, he had no way of getting out. And I heard him go. And he was yelling and screaming and all that. It was (phew) that cut deep. Like we didn't really know where the animals were. And I was just kind of praying deep down that they had gotten out, that they were

outside when the whole thing happened, but...that was just wishing into the wind, really, because it was so cold that night, of course they'd be inside. And they didn't make it.
(long pause)

LB: Well (breaking the silence) what little Randy said about it made me feel he felt very guilty about it.

M: Well, he really had no reason to be that guilty about it, cause we were all into candles...we all were...and I actually lit the culprit candle, you know, the starting point. It was my doing really.

LB: Do you feel guilty about the thing? Feel responsible for it.

M: Oh, yeah. Yeah, I feel very responsible. It's kind of, you know, it's just a passing phase...a bad dream...a nightmare. It's just...something in the past, and I just don't think about it now.

Comment.--Although the end of the monologue here was extended by probes, it still retains the connected character typical of student monologues. Most monologues, but especially this one, became revealing when read as one would read a lyric poem, attending to the traces of the mind in the ordering of parts, the choice of words, and the rhythm of phrases.

Final Selection of Peter's Case

Incredibly, perhaps, this collection of data still was not as complete as one might have wished. At the time of the interviews it was impossible to tell precisely what an event would mean, and therefore what information would be necessary months later when the narrative accounts were constructed. So at the time that the narratives were written, it became plain that, if an account was to show the moments when the influence of schooling, parents, friends actually came to bear on a student's action, it would need to be based on a record of much higher resolution than was typical for the five full cases of the study.

This may seem an astonishing claim. Those familiar with Robert W. White's study of three lives will recall that White based each of his accounts on fifteen to twenty hours of intensive interviewing; these interviews covered what White's subjects could remember of their lives to that moment, when they were in their early twenties.[2] The students of the five full cases of this study underwent at least three hours of interviewing for each month to be covered in the account. But even this level of intensity cannot bring into focus the minute-by-minute detail of an important happening, and such a level of detail was often required to produce a useful narrative account. Needless to say, this level of detail was never available in the record except when one of the crucial events of an episode happened during an interview while the tape recorder was operating. When crucial events happened under other circumstances--and that was almost always--the hourly log became an essential source of corroborating evidence. Only in Peter's case was this log sufficiently dependable to use for corroboration. Because his log was nearly complete, and because he was the most voluble of the students, Peter's record was the one that required the least guesswork to render as narrative. For this reason I chose to draw both of the episodes detailed in this study from his case.

FOOTNOTES

1. Consider: when something like an accident, something unexpected, happens, we may ask the person involved for an account: "What happened?" The story itself may interest us, but often we want to elicit information about the person's state of mind. If the person cannot give a coherent account, we have a good reason to suspect that he does not yet understand his circumstances.

2. Robert W. White, LIVES IN PROGRESS, 2nd ed. (New York: Holt, Rinehart and Winston, 1966), p. 96.

Autobiography and Reconceptualization

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Literally, reconceptualization means to conceive again, to turn back the conceptual structures that support our actions in order to reveal the rich and abundant experience they conceal. To some, this reflexive scrutiny may suggest a relentless descent into abstraction and introspection, and there are probably moments we can all recall when reflection drew us down and into eddies of confusion and anxiety.

The reconceptualization of curriculum is spared this paralyzing doubt which accompanies an infinite regression of questions because it is firmly anchored in the world. The concrete event that is experienced by a particular person is its mooring. Curriculum is the child of culture, and the relation is as complex and reciprocal as are any that bonds the generations. Curriculum transmits culture, as it is formed by it. Curriculum modifies culture even as it transmits it. Similarly, as with culture, we live curriculum before we describe it. The event and the thought about the event are never simultaneous, never identifical. We live curriculum as we drive to work, take a quick stop in the faculty washroom before class, make our way past students stuffing bulky coats into narrow lockers, past tiled walls and display cases into the room where the curriculum we describe is or is not experienced. Curriculum as lived and curriculum as described amble along, their paths sometimes parallel, often not, occasionally in moments of insight intersecting. So it is possible that experience and description diverge now and then and that paiens of praise to participative democracy are sung in autocratic classrooms, individualization degenerates into depersonalized programming, and inquiry method requires that I search for answers to someone else's questions.

Reconceptualization of curriculum requires a more than reflexive somersault that scoops up our old, flat, ideas and turns them over. It is a reflexive project that attempts to reclaim curriculum as we have lived it and to test our conceptual schemes and descriptions of it against the evidence of our experience. Tonight I may find that evidence in the image of my father bending over my textbooks at the dining room table, covering them with deep red, durable paper, rolled up and carried home from work on the subway just for that purpose. The evidence surprises me, presenting itself abruptly, like the ticket stubs from South Pacific wedged into the pocket of an old purse. Or it may be the memory of the young man with the curly hair and angular face who came to teach us junior high social studies and called us "people." "People did you finish the assignment" and "I want to ask you people some questions." Or it may be the day he asked us to grade ourselves for the term and Bobby Aaronson became a hero because he gave himself an F, explaining that he knew he had not done his best. It's Miss Leahy telling a thirsty third grade classmate to bit his tongue and drink the blood, and it's the penny that glowed in the puddle on Broadway and 118th Street as I walked out into the twilight after hearing Stravinsky's SYMPHONY OF PSALMS played in class.

My students tell their own stories, of speaking Spanish in a kindergarten where everyone speaks English, of talking to a kid from the "slow" class one day in the girl's bathroom, of understanding the discipline of natural science while rehearsing an ensemble scene from RICHARD III.

The Method Explained

The method is autobiography. Curriculum reclaimed in this maner is, of course, inevitably reconceptualized, even in the most meticulous and ingenuous retelling. The selection of some events and the exclusion of others, the repudiation of some feelings and the acknowledgement of others remind us that these accounts never can exactly coincide with our experience. The event-in-itself defies re-presentation, slipping away from our grasp like the landscape outside the window of a railway car. Nevertheless, the abstractions of primary experience presented in these autobiographical reflections are vulnerable to critical scrutiny. The writer can turn back upon her own texts and see there her own processes and biases of selection at work. It is here that curriculum as thought is revealed as the screen through which we pass curriculum as lived. Miss Leahy did make that sadistic comment. The student teacher (was he appended to Miss Leahy?) did call us "people," and my father did cradel his paper for my books under his arm and bring it home, battling the rush hour crowds

and his own fatigue to cover my books. Those things did happen then but why do I tell them rather than other tales? What principle of selection excludes the story about Mrs. Dobkin who called my mother to urge her to consult another pediatrician when I had been out of school for two or three weeks with a mysterious ailment? Why is Leahy's sadism a more successful candidate for recycling than Dobkin's solicitous concern? Perhaps one question may illuminate another. Why "people?" The designation flattered us, suggesting that we were all peers, even though we knew that the status the student teacher extended to us so generously was tentative because he survived from day to day only by Leahy's (yes, it was Leahy) leave. And even Bobby Aaronson's martyrdom was staged. We weren't real people and Bobby Aaronson wasn't a real martyr. We played at human dignity and our gestures confirmed our impotence and degradation. And finally, that's why Dobkin is in the piece, not because she cared enough to call but because she assumed that my parents needed her advice, that her pediatrician would be better than the one they had chosen and because they resented her patronizing intrusion even as they appreciated her concern. Tales of power, its use and abuse.

The gaps in the tale are brimming with information for the reader who is the writer of such an autobiography. And that information is not about what it was to be seven, nor is it about Leahy and Dobkin. It is information that pulls the past into the present, drawing it together to confirm what I anticipate will be my next move. Today, as I teach students who would be teachers and encourage them to be agents of their own visions and commitments, am I also posturing with my "people" while Leahy smirks?

How the Method Reconceptualizes Curriculum

Through this critical reflection upon educational experience, curriculum is reconceptualized in two ways. The first phase of this reflexive research is free-associative. The content that will be specified by that word, curriculum, is reclaimed by a reflective process that allows the mind to wander but notes the path and all its markers. In this essay Leahy, Dobkin, "people" are the souvenirs of that side trip. When the method has been extended by any students, they have been asked to write an essay that provides at least three narratives of events in their lives that they would call educational experience. The stories need not concern schooling, but they may. The persuasion of autobiography resembles that of fiction. Detail is required to demonstrate lawful possession of the tale. It is detail that reveals that my father brought the bookcovers back from the "place", the term we used to refer to the loft across the river that housed my father's manufacturing company. It is the shelter and authority of "the place" with its slamming presses, piles of cardboard from floor to ceiling that my father applies to the fragile binding of my social studies text. Anything brought home from the place contained a potency absent in items purchased at Woolworth's or at the corner candy store. These imports, the five hundred rubber bands, the packing tape, paper clips, the red paper were passports back to the world across the river, to the loading dock, to the union, to the machines, to the business, the commerce, the power of "the place."

The reconceived curriculum is the curriculum reclaimed by what Merleau-Ponty calls the body-subject. It is the relation of the knower to the known (and to the unknown) that is manifested in the concrete images of lived worlds. It is the body-subject who ran her fingers over the sharp folds and card corners of that bookcover, heard the music, felt the rain and imagined the salty taste of my own blood. It is the curriculum of bitten nails that were noted on the report card, of crayola cranberry vines decorating each page of the report on New England, of singing THE BATTLE HYMN OF THE REPUBLIC on the High School steps after chorus rehearsal the night Julius and Ethel Rosenberg were executed. This concrete reclamation reconceptualizes the curriculum, for it literally reconceives it by gathering it from the specific associations that represent our experience of it. The themes repeat themselves. The bitten nails, the energy turned back upon myself, expressiveness shunted into decorative margins. And those early stirrings of political awareness, of identification and protest, sentimentalized and nationalized and moved out of the building, after hours, on to the steps.

As we analyze the narrative we reveal interests and biases we rarely see because they are threaded through the thick fabric of our daily lives. This is the second phase of reconceptualizing that illuminates the ways we organize and interpret our experience by framing those choices in an aesthetic object, the autobiography. Within those pages those choices, which, when embedded in the activity of our daily lives seem obligatory and unavoidable, stand as expressions of our freedom. I organize my story as I organize my world, and it is

my story of the past that can tell me where I am and where I am going.

Because I question the reality of my own power, the brave but ultimately hollow gestures return to remind me that oppression is most insidious when the oppressed are placated with the false but flattering slogans and poses that disguise their experience. The possibility that schools may become places where students understand their own powers is never realized through rhetoric but through the choices and actions that fill the minutes we spend together.

The faculty bathroom is clean and has a door. I enjoy its privacy. The students' bathrooms have no outer doors, and when I visit them, demonstrating by egalitarianism, all conversation stops, cigarettes are quickly flushed, and I destroy whatever privacy peer solidarity and separate facilities have provided.

In schools, the exercise of power is institutionalized and disclaimed. Reclaiming it requires attention to the initiatives we take and the responses we make.

If "people" and " the place" have washed up on the shore to remind me of power the child didn't own, power the student merely imitated or borrowed, they also remind me of the power I now claim as teacher and as parent. And if, when I push it and prod it like a jellyfish, it turns out to have a real string, what use shall I make of it?

The Method Used

I have used this method of reflexive analysis with students in teacher education courses (Pinar, Grumet, 1976) in theatre courses (Grumet 1978) and in in-service work (Grumet 1978a). (The theatre students organized their reflective writing around the concept, theatrical experience in one case and around play, in another) While there is initial anxiety, for students have little practice in finding and telling their own stories, there is usually a rush of fluency once the choices are made. It is rare that these pieces are burdened with poor writing. People usually make sense when they know what they are talking about.

I attempt to reply to the pieces in ways that will extend both the concrete and abstract sources of information that the autobiographical exercise can offer. I footnote my comments which I append on a separate sheet; my questions sometimes request information drawing out the particular details that are not yet visible but may hold, I suspect, the clue as to why the story is important. I may help the writer to ascertain what is missing in the text as well as to recognize patterns and themes that often surface in each of the apparently disparate narratives. The writer of the piece maintains possession and authority over his own prose. He need not respond to any questions which call him into territory he'd rather not tread. It is his recognition and acknowledgement that establishes the authority of any of the interpretations I may offer. The essays initiate reflexive writing in other forms. Journals may be kept. Additional essays may follow.

This work is pursued in the aspiration that it will enable the student to become the active interpretor of his past as well as heighten his capacity to be the active agent of his own interests in a present that he shares with his community. As curriculum is reconceptualized through the selection and criticism that reorders educational experience into a usable past, it may also be transformed into a usable present by students who see themselves as responsible for the shape and texture of their own experience.

And So

Which brings me to the penny in the puddle. I can still see it glimmer, clean rain water on pebbly cement, its copper purity adding a pecuniary fallacy to the natural one that accompanied Stravinsky. Although it is not without some guilt that I dishonor this cherished moment with condescending labels culled from lit. crit., I cannot make use of this memory as an image of my current concerns. That evening provided the organic continuity that Pepper attributes to aesthetic experience, the music, the City, the rain, the penny all arranged around me, fused and glowing. But now I am the arranger and look to aesthetics not to create perfect wholes but to reveal those cracks in the smooth surface of our conceptual world that may suggest new interpretations of human experience.

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Life History and Educational Experience

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> That was the strange thing, that one did not know where one was going, or what one wanted, and followed blindly, suffering so much in secret, alway unprepared and amazed and knowing nothing; but one thing led to another and by degrees something had formed itself out of nothing, and so one reached at last this calm, this certainty, and it was this process that people called living.
>
> Virginia Woolf

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W.P.
Key West, Florida, 1978

One

The Trial

"Someone must have traduced Joseph K., for without having done anything wrong he was arrested one fine morning."[1] So begins Franz Kafka's THE TRIAL. Examination of this trial will establish the context for this autobiographic-theoretic study of life history and educational experience.

K. has done nothing wrong, nothing at least that he or the reader knows of. Yet he is arrested, he is tried, and executed. What is the nature of his arrest? Its explication will suggest the nature of arrest generally, a condition whose counterpoint is educational experience. First, let us examine the arrest.

When K. asks for what he has been arrested, his warders disclaim authorization to answer.[2] Further: "I can't even confirm whether you are. You are under arrest, certainly, more than that I do not know."[3] He then asks K. if he will be going to the bank today (where K. works), and K. wonders how he can go to work if he is arrested. The warder replies: "You have misunderstood me. You are under arrest, certainly, but that need not hinder you from going about your business. Nor will you be prevented from leading your ordinary life."[4]

K. responds angrily. He calls the arrest "ridiculous".[5] Frau Grubach responds with an almost sorrowful smile. Softly she tells him: "...and above all you mustn't take it too much to heart. Lots of things happen in this world!... You are under arrest, certainly, but not as a thief is under arrest. If one's arrested as a thief, that's a bad business, but as for this arrest... It gives me the feeling of something very learned, forgive me if what I say is stupid, it gives me the feeling of something learned which I don't understand, but which there is no need to understand."[6] It is the most direct advice K. will receive, but he does not hear it. He will do

exactly what Frau Grubach warns against: he will take it very much to heart. In fact, his case becomes an obsession with him. Relentlessly he demands to know the nature of his arrest.

This case is his life, and K's questions concerning it, the Court and the Law, are questions regarding the structure of human existence. Thus K. is a kind of metaphysician, although not the philosophical specialist the term often designates. Rather, K. is an ordinary man, everyman, every modern man.[7] The kind of metaphysician he is is the kind each human being is: one without training, one in the midst of an "examination", a "trial", i.e., a life. He is one who senses he must comprehend, however primitively, the meaning of what transpires. But many never consciously raise such questions, and in this K. before his arrest, is one of the many.

About K. Kafka tells us little, yet what he tells corresponds with what one imagines of the many. "He had always been inclined to take things easily, to believe in the worst only when the worst happened, to take no care of the morrow even when the outlook was threatening."[8] Further: "That spring K. had been accustomed to pass his evenings in this way: after work whenever possible -- he was usually in this office until nine -- he would take a short walk, alone or with some of his colleagues, and then to a beer hall, where until eleven he sat at a table patronized mostly by elderly men. But there were exceptions to this routine, when, for instance, the Manager of the Bank, who valued his diligence and reliability, invited him for a drive or for dinner at his villa. And once a week K. visted a girl called Elsa, who was on duty all night till early morning as a waitress in a cabaret and during the day received her visitors in bed."[9] Importantly Kafka tells us "it was not usual with him to learn from experience."[10]

What is representative about K. is not so much the particular details of his life, but the quality of them. They have a certain automatic quality; they are habitual. K. is not a reflective man. He does not examine the nature of his involvement at the bank, or with his colleagues, or why he is attracted to elderly men, or why he sees Elsa. It all happens. There is no reason why it does; it simply does. K. is a socialized, conditioned being.

Of course some of the details of this unexamined life are representative of many, especially of many men. The absorption in career, at the least the investment of much time in career is common enough. One's hours of relaxation are often spent with colleagues, making such hours a kind of appendage to the working ones. They are not discrete; they continue, though more casually one imagines, the quality of thought, as well as the content of thought, typical at work. Talk may turn to sex, but again it often bears the quality of "adjunct" to working life. K. is a man buried in his work, and thereby identified with the particular version of social reality constructed at the place of his work. In part this accounts for the flatness of his character, and the parochialism of his vision. Discussing his arrest with Frau Grubach he transposes the event into the social reality of the bank: "...my mind is always on my work and so kept on the alert, it would be an actual pleasure to me if a situation like that cropped up in the Bank."[11] In fact, he continues: "...if I had behaved sensibly, nothing further would have happened, all this would have been nipped in the bud. But one is so unprepared. In the Bank, for instance, I am always prepared."[12] Interpersonal relations and events are predictable at the bank; such an arrest could have occurred there without warning. It is that the arrest is unexpected and without precedent that seems to stun K. What infuriates him is the lack of access to the Law, the lack of explanations regarding his arrest. The laws by which judgments are made at the bank are knowable; explanations for actions taken are available. But it is not at the bank K. is arrested; it is at home.

At the bank K. is highly regarded, and in line for promotion. At home, where he lives, there is not such regard. He is alone. His private life, as we saw, is only a fragment of his working life. He experiences no love; he visits a prostitute to satiate his sexual need. His emotional needs are repressed. In fact, he exhibits classic symptoms of such repression: rigid adherence to schedule, even after working hours, and irritation at interruptions in the schedule. Interruptions threaten the social veneer which is the projected extension of his psychological encapsulation. If the veneer-capsule were to be punctured, as the arrest does, then the pressurized emotion explodes.

We observe an explosion when the warders first arrive to arrest him. K. insists "I shall neither stay here nor let you address me until you have introduced yourself."[13] Later, when the warder explains he has made the

arrest becaust it is duty, K. snaps back that it is a stupid duty.[14] At the first interrogation K. is reminded that he is late. "Whether I am late or not, I am here now."[15] Speaking to the examining magistrate, K. demands: "Listen to me. Some ten days ago I was arrested, in a manner that seems ridiculous to myself, though that is immaterial at the moment."[16] His rudeness becomes patronizing and self-delusive: "I am quite detached from this affair, I can therefore judge it calmly, and you, that is to say if you take this alleged court of injustice at all seriously, will find it to your great advantage to listen to me."[17] The result: " 'I merely wanted to point out,' said the Examining Magistrate, 'that today -- you may not yet become aware of the fact -- today you have flung away with your own all the advantages which an interrogation invariably confers on an accused man' K. laughed, still looking at the door. 'You scoundrels, I'll spare you future interrogations,' he shouted, opened the door, and hurried down the stairs.' "[18]

He has a right to explode, the reader may observe. The point here is not the rightfulness of the anger, but its quality. It is not anger conscious of itself. It is anger that is unfocused. K. aims at any moving target: the warder's duty, the magistrate's reminder of his tardiness. Whatever is said to him, he responds indignantly. There is no sense that K. has choice, whether to express his anger or not, or how to express it. He is petulant. He is his anger.

The character of this response indicates a threatened defense structure. It suggests the quality of his interpersonal relations. His reaction -- to the warders, to the magistrate, to the priest during the cathedral scene -- is exaggerated compared with the provocation. The warders are rather matter-of-fact. Not only the tone of their behavior is quiet and steady, their message itself, while a disturbing one, is not inherently a shattering one. Yes, K. may go to work as usual, in fact he may continue his life as he has done. K.'s response is nearly uncontrolled anger, refusing to talk with the warders until they "properly" introduce themselves, calling the magistrates scoundrels. His response to others generally are not commensurate with the others' responses to him. In fact, his responses suggest little sensitivity to others. Frau Grubach's view of the arrest we noted, and K. seems not to have heard it at all.[19] He is encapsulated; he is dissociated from others. Regardless the complexity and subtly of that which confronts him, he responds with irritation, abruptness, rudeness. He seems to possess no options.

Joseph K. is stunted psychologically and socially. He is dissociated from his subjectivity, and consequently clings to outer character structure, i.e. social role. To perpetuate its dominance, the suppression of his subjectivity, he adheres closely to a social reality in which order and predictability are pre-eminent characteristics. He maximizes this social support for his psychological alienation by working long hours, and spending time with bank colleagues after hours. The reader is not told, but it is plausible that it is the quiet stability often characteristic of the aged which attracts K. to the elderly men he visits at the bar.

One comes to understand the sense in which K. is in fact arrested. He is arrested psycho-socially. It is quite true such an arrest does not preclude going about one's business, leading one's life. One works and lives with others similarly arrested, and in collusion perpetuate the stasis.

At this point, however, K. becomes atypical. He will not settle for living with arrest, now that he is, in a sense, conscious of it. True, his motives are not high ones. In fact, he cannot be said to have motives, as these suggest some awareness of what moves one to act. K. is driven, evidently without choice or awareness, to comprehend his arrest. At this point he ceases being the unreflective "everyone" and becomes metaphysician. For this he is admirable; for this the reader empathizes with him. For this insistence of his, to understand his case, the reader urges him on, wishes for his success.

K. is inadequate to the task. He is stunted psycho-socially, and necessarily relatedly I think, he is stunted intellectually. His intellectual arrest is a familiar one. His rationality is a technical one only, capable of solving "problems" only, such as: where have I missplaced the car keys? Which tax deductions are most advantageous? It is a rationality of procedure, of technique. The questions posed begin "how", "who", and "what". "Who could these men be? What were they talking about? What authority could they represent? K. lived in a country with a legal constitution, there was universal peace, all the laws were in force; who dared seize him in his own dwelling?"[20] These questions typify his intellectuality. He asks them throughout the trial. Early in

the novel he thinks: "...far more important to him was the necessity to understand his situation clearly; but with these people he could not even think."[21] Here his compulsion to understand first surfaces, and his vulnerability also: he cannot think with the warders present. Midway through the novel -- he understands nothing more of his case, only that his position was somehow deteriorated -- he continues his questioning: "And there were so many questions to put. To ask questions was surely the main thing. K. felt that he could draw up all the necessary questions himself."[22] He never critically examines this method; being led by his executioners he maintains that "...the only thing for me to go on doing is to keep my intelligence calm and analytical to the end."[23] As we were told early in the novel, it is not customary for K. to learn from experience.[24]

It is true. There is no development in his character, only deterioration. "One winter morning -- snow was falling outside the window in a foggy dimness -- K. was sitting in his office, already exhausted in spite of the early hour... The thought of his case never left him now."[25] Others tell him he looks bad.[26] His obsession with his case infiltrates the hitherto insulated reality of the bank. The degree of deterioration is evident in the following passage.

> Had he really lost his powers of judgment to that extent already? If it were possible for him to think of explicitly inviting a questionable character to the Bank in order to ask for advice about his case with only a door between him and the Assistant Manager, was it not also possible and even extremely probable that he was overlooking other dangers as well, or blindly running into them? There wasn't always someone at his side to warn him. And this was the moment, just when he intended to concentrate all his energies on the case, this was the moment for him to start doubting the alertness of his faculties! Must the difficulties he was faced with in carrying out his office work begin to affect his case as well? At all events he simply could not understand how he could ever have thought of writing to Titorelli and inviting him to come to the Bank.[27]

His case appears now more important than his job; it is his case he worries will be negatively affected by his office work. Even so, his standing at the bank remains a preoccupation; he worries over Titorelli's impression on his colleagues. But it is his admission of loss of judgment, and concomitant concern over "other dangers" that reveal the scope of his debilitation. From the (rigidly) self-possessed and indignant young banker at the novel's beginning, K. has quickly become a self-doubting, frightened, nervously exhausted man by mid-point in his trial.

While his psychological and physical condition atrophy, his intellectual method -- a technical, narrowly cognitive one -- remains intact. In this there is no change, no indication of self-awareness or critique. He continues to trust in his intellect.[28] He continues to ask for help although he has been advised not to.[29] (" 'You cast about too much for outside help,' said the priest disapprovingly.") Both his intellectual rigidity and his futile appeals to others remain in the last passage of the novel.

> His glance fell on the top story of the house adjoining the quarry. With a flicker as of a light going up, the casements of a window there suddenly flew open; a human figure, faint and insubstantial at that distance and that height, leaned abruptly far forward and stretched both arms still further. Who was it? A friend? A good man? Someone who sympathized? Someone who wanted to help? Was it one person only? Or was it mankind? Was help at hand? Were there arguments in his favor that had been overlooked? Of course there must be. Logic is doubtless unshakable, but it cannot withstand a man who wants to go on living. Where was the Judge whom he had never seen? Where was the high Court, to which he had never penetrated? He raised his hands out and spread out all fingers.[30]

Of course there must be overlooked arguments in his case! Within seconds of his death he still permits self-delusive thoughts. He still looks for help outside himself, from someone unidentified, someone in a building in the distance who could not possibly assist him. Yet the emotional quality of this thought has altered some-

what. It is not as staccato in rhythm, not as petulant in mood. There is, in fact, a subtle tone of acceptance in spite of the questions, indicating, as they do, continued psychological resistance.

Joseph K. is arrested intellectually, psycho-socially; he is arrested biographically. There is no movement in his life; it is a life hung upon the social structure of the bank. Where he lives he transports the reality of the bank, evident in his perfunctory treatment of Frau Grubach and the warders. He has no self-identification. He is a banker. He is his rigid personality, his abrupt manner, his anger. His relationships are atrophied fragments of a whole he has forgotten. They are instrumental; he asks for help in his case (although regularly disregarding the advice given). Only with the elderly men in the bar is there any hint of friendship, and it is anonymous. Elsa is a whore; she has not time and K. does not take time to develop anything resembling a relationship. K. is his career, his socio-historical identity, and thus is an arrested being. He is incapable of self-reflection, of questioning the nature of his involvements. Not once does he consider his arrest possibly warranted in some way he does not understand. Not once does he question himself, only others. He is indignant and rude, complaining that the Law, the Court are in error, are illegitimate. Yet his growing preoccupation with them is his complicity, is his legitimation of their jurisprudence. (He observes this on one occasion, to no effect upon his behavior. "You may object that it is not a trial at all; you are quite right, for it is only a trial if I recognize it as such."[31]) The fact of his vulnerability, of his obsessive-compulsive response to his arrest suggests a man who unconsciously believes he is guilty, believes he must therefore mount an immediate and massive defense. It is an intellectual defense of a technical-instrumental order. It is a defense of an intellect dissociated from its companion realms: the emotional, the bodily, the erotic. It is focused outward, asking "who", "what", "how", never probing "why". Thus uprooted the intellect lacks direction, lacks the guidance of intuition. It spins wildly, asking the wrong questions at the wrong time, making mistakes of judgment, exhausting itself and the body. It seems it is only through this wearing-down that K. is able to move. But it is precious little movement. This stasis, this arrest, is the tragedy of Joseph K.

K. is reminiscent of each of us, in some degree. K. is a prototypical being of an urbanized, industrialized, cerebral twentieth century. His life history, with its emphasis on career and social identity, is reminiscent of many life histories. The pervasiveness of this reality, with emphasis upon career, on instrumentally-defined social relations, is a major constituent element of the historical present. There is some movement from this, some retreat from self-identification solely in terms of social roles, to what I will term a biographic identification, one grounded in one's life history, one's biographic present, in one's Self. Such psychic integration is what K. was without, what each of us is without in some measure, and toward which some are beginning to move. Such movement it is one task of this book to portray, however broad the strokes, however incipient the movement. Such movement is educational experience; it is learning, as K. could not, from experience.

But it is experience first. Living in his head, in social reality, as he does, K. has little experience. He can feel his exhaustion, but his anger he is too identified with to experience. His fear too repressed to know. Experience is available only through consciousness of it. As long as one resides in one's head, in one's ideas and fantasies, one's experience is attentuated. To permit experience involves a focusing of attention upon experience, focusing upon the body, the emotions, and then on thought as it emanates from body and emotion.

I have devised a strategy particularly appropriate for intellectuals, the purpose of which is to permit a loosening of identification with the intellect, provide access to experience, grounding the intellect in that experience. Thus grounded, instrumental thought does not disappear; it remains available to find the misplaced keys, to design a curriculum. But what also becomes available is an order of minding that permits and assists experience, permits biographic identification and movement. By examining one's life history, even a fragment of that history such as one's life in schools, or one's involvement in an academic discipline, one can begin to construct an etiology of one's present arrest, of one's case. This strategy is the regressive-progressive-analytic-synthetic method.

Arrest: Political, Psychological, Metaphysical

What do "life history" and "educational experience" mean in this context? The latter is experience from which one learns. The mundane senses of this common phrase are familiar: a child learns not to touch the hot burner. In this study I am interested in less, let us say material, and hence less obvious learning, although the

focus will be the school. The focus will be the school from the point of view of life history. With this perspective, and the questions I will ask from it, will come a more subtle sense of "learning from experience." From a perspective rooted in life history, one asks not about the structure and sequence of the curriculum for instance, but questions such as the following. I began school at age six and today, at age twenty-nine, I am still in school. What do I remember from these years? What stays with me?

Already I sense that the learning uncovered by this recollection will not be reducible to a series of skills or sets of information. As there is no free-floating experience-in-general, there can be no learning-in-general. There can be only learning-in-the-particular. There are only these skills as I acquired them or not, in what way and to what extent. How important were their acquisition to me then? How important are they now? These are questions I begin to answer by recalling the past from the past into the present.

What will I find out (the autobiographical study was made a calendar year before the writing of this first chapter) is that all those exercises and lectures and homework assignments occupied little time in my lived reality. While I may have spent six hours daily over the course of twelve years on their completion, in the context of my lived time, they seem only moments. In retrospect what I experienced in school, fundamentally, was the oppression of being forced to behave incongruently with my experience. That is, I learned how to disconnect behavior from "inner life"; I learned to give the appearance of attention when in fact I was absent, daydreaming of someplace or someone other than where I was and with whom I was. In retrospect I see that gradually I became estranged from my body, a young body forced to remain in one seat over long periods of time. I came to regard its messages, messages to move and exercise and to eliminate waste, as interruptions in what was essential: remaining seated, quiet, attentive. With recollection it becomes clear how literally accurate are the words "I lost myself"; I became my surface, a personality, a mix of acquired (consciously and not) manners and expressions that held social currency at the time. Estranged from my Self, from my body, I withdrew into thoughts, sometimes instrumental (how can I get Pat to go to the prom with me?), mostly free-associative. I grew silent, my mouth noisy with utterances of acquired opinions and prejudices. I withdrew into a social self, or social selves, and into social systems which supported them. Over time I became increasingly identified with the social self absorbed in career, an academic career. I became arrested.

My arrest, K.'s arrest, is multi-dimensional. It is political. One is constrainted by the limits of acceptable social behavior. One is conditioned to focus on the socially desirable, to delete those parts (which sociologist Alvin Gouldner terms "the unemployed self") without social "return". As a child one tends to be told what to do and when to do it, in school and out. One's guilt as a young person, one's nature as sinful (however secular the contemporary expression of this is: one must adapt to "reality") is assumed. One's case will be disposed of in ways of which one remains essentially ignorant. (One may work hard but good grades and promotion in the bureaucracy may or may not come.) Both school child and K. are oppressed by a vague bureaucracy which exercises a political control as mystified as it is complete.

The arrest is psychological. The conscious self which existed was nearly exclusively social. There was little conscious psychological life. Repressed, psychic energy escapes in gasps when unpredicted events in the external world preoccupied the social self sufficiently so that its "lid" on the unconscious loosens, and energy then escapes. K. loses his self-possession with the warders, with the magistrates, and by the novel's end, he has lost it altogether. To maintain the psychological stasis, K. extends into the nighttime the social reality of the bank, a reality which supports (in R.D. Laing's term) his false self-system. The conscious focus of the ego must remain outward, on his position at the bank, on those who arrest him. To become self-reflective invites disordering of the tenuous intra-psychic balance, as attention tends to intensify that which it lights. Thus the power of unconscious energy seeking expression would be increased, and the ego threatened. It is the flow of unconscious energy or libido outward that accounts in large part for the vitality of the individual. An ego congruent with unconscious forces tends to be more able to allow more energy to pass, tends to be less threatened by unpredicted events. The ego is incongruent with its unconscious to the extent it is primarily social in nature, a construction of conditioning. It limits severely the information it can take in, just as it limits what it can let out. Such an ego is always beleaguered, always "accused" in some sense; it is arrested. Until the ego become more congruent with its unconscious underpinnings, it will continue to be vulnerable to events in the

public as well as private world. "Acquittal" in this context means the development of a biographic perspective. One aspect of this work involves dismantling the individual's conditioned cognitive structure, his tendency to filter his experience through his intellect. This over-identification with the intellect, this hypertrophy of the intellect,[33] accompanies psychological arrest. It is the intra-psychic corollary of political arrest, of social authoritarianism. Jung notes this correspondence: "Over-valued reason has this in common with political absolutism: under its dominion the individual is pauperized."[34] Development of a biographic point of view can have political as well as psychological consequences.

Thirdly, the arrest is metaphysical. The questions K. asks of the Court and the Law are of the order the metaphysician asks of human life. What is the nature of this case, i.e., this life? How can one intervene in one's fate? In what sense is one primordially guilty? What are the means of absolution, if any? From this view of the novel, K.'s arrest is signified by his psychological and intellectual arrogance. Angrily he demands answers to thse questions, despite his contemporaries' advice. Intellectually, as noted earlier, K. utilizes a technical-linear rationality to seek answers to questions which are neither technical nor linear.

The intellect may be used in seeking metaphysical understanding, but intellect broadly conceived, an intellect sensitive to its intuitive basis. What is necessary is an intellect that does not demand understanding on its own logical terms, but is open to diciphering information which is non-logical. In psychoanalytic terms, this is information from the unconscious. This "region" corresponds to that which is characterized as metaphysical and spiritual in other traditions. Jung notes that what the West terms the unconscious is equivalent to what in Hindu philosophy is termed the superior or universal mind.[35] In this sense K. is estranged from God, falled from the Garden. Thus the correspondence between the psychological sense of his arrest and the metaphysical: to be alienated from one's psychic source, from one's unconscious, is tantamount to being estranged from the Lord. To be lost in a labyrinth of one's psychological experience is equivalent to being lost from the promised land. For the secular metaphysician, that promised land is understanding, but given THE TRIAL, clearly not understanding in a narrow cognitive sense.

Understanding

Given the historicity of the individual, no final sense of understanding can be attained. What attainment is possible is contingent upon the historical moment and the individual's developmental moment, a convergence Erikson discusses instructively in LIFE HISTORY AND THE HISTORICAL MOMENT.[36] Comprehension of this immutable fact frees one from reified conceptions of knowledge. Knowledge is always knowledge produced at a particular time, under particular circumstances, by particular people. The neo-Marxist preoccupation with the socio-economic determinants of knowledge and its distribution underscores the historical contingency of knowledge. Gouldner's and Duberman's acknowledgement[37] of the theoretician's presence in his theory also functions to concretize knowledge, i.e., make explicit its origins and functions in biographic and social realities. The present study I view as a contribution to examination of the contingency of knowledge production and distribution, especially as regard its biographic contingency.

The focus is the contingency of the theoretician. Gouldner has done pioneering work in this regard in his THE COMING CRISIS OF WESTERN SOCIOLOGY. He attends to what he terms "domain assumptions", assumptions of which the theoretician is ordinarily unconscious and which shape every aspect of his intellectual work. I am in fundamental agreement with Gouldner on the importance of unearthing these assumptions and critically examining them. The notion of "assumptions" is somewhat problematic however. It connotes a set of beliefs which are static. Of course stasis does tend to characterize beliefs, whether K.'s or academicians'. Thus the brilliant first book is followed by monographs which only extend its major theses. Often fundamental intellectual movement does not occur.

In my view it is that these assumptions become forgotten, as Gouldner notes, that makes them static. Becoming conscious of them tends to invite their dissolution, and the appearance of others. Of course, one must avoid taking to extreme this notion of movement; it is necessary to remain static, temporarily, in order to work. One must adopt a perspective and remain with it for a time, in order to achieve a coherent portrait of the phenomena under examination. "Adoption," however is precisely one's relation to perspective, if one is

to remain conscious of its contingency. Metaphorically, one stops on the mountainside, and remains stationary in order to see the view. From that spot one makes systematic notation of what one observes; one makes knowledge that is the description of this perceptual-intellectual act. Then one moves on. To remain is to forever write those monographs that only fill in detail. To remain is, in the Neitzchean sense, life denied. Movement, individual and historical, is life affirmed. Arrest, as K.'s fate makes explicit, is death. The epistemological issue in this instance is also a metaphysical one. Intellectual arrest means political, psychological, and historical arrest. As K.'s case indicates, there is an "ecology" of intra-psychic relations. One cannot be arrested psychologically without consequence for one's intellectual life. This "ecology" extends to inter-subjective and historical relations. History stands still for the dead. Social alienation is cause and consequence of biographic alienation. The condition of one dimension reverberates through the others.

We come again to K.'s significance for theoreticians of education and the human "sciences" generally. One's work resides, inescapably, in historical and biographic context. Further, the issues which K. embodies are issues contemporary theoreticians embody. The historical present is a time of trial. The academy, as has the culture, has become quasi-conscious of its arrest. (I am not arguing that this is a "new" phenomenon. There are levels of arrest. As one becomes conscious of one level, freed from it, one moves to a level that will someday be experienced as static. Absolute movement is not possible for historical beings. Yet aspiration for it, tempered with respect for everyday life -- you may go about your business K. is told -- is crucial to human lifefulness.)

The introduction of phenomenology to the social sciences is a significant event in modern intellectual life. Phenomenology functions to melt the stasis of contemporary social science. Regrettably it is becoming mythologized, and if this occurs to a sufficient extent, phenomenology will function to preserve arrest. However, if this danger is acknowledged and exorcised, phenomenology can function to return theoreticians to "the things themselves", to what in psychoanalytic theory is "primary experience". If this can occur, then the social sciences can avoid K.'s fate. Yet, the general question, whether this "dark age" will continue indefinitely or give way to, relatively speaking, an "age of enlightenment" is very much an open question. Its answer is being formulated now, in the lives of those incarnate in the present period. Thus the historical-cultural question concretized becomes an individual, biographic question. It is not that exclusively of course; the cultural cannot be reduced to the biographic. Notwithstanding, it is the individual where exists, at the present time, "the most room to move." Social and economic structures are sufficiently frozen as to force work in the individual realm. This is not an escape as some cultural commentators have insisted, but acknowledgement of the historical moment. Those who are working individually know the work reverberates in the public dimensions.

Given, however, that a present "everyman" is Joseph K., i.e., a conditioned being, he is primarily consequence of the economic and cultural. It is to the extent he can understand his case that he will escape this conditioned status and become determining. To the extent that he reclaims his subjectivity, identifies himself as primary and his socio-historical roles as secondary, he becomes Subject. This transformation cannot be strictly congitive, as K.'s case demonstrates. It involves cognition, but cognition "in its place", i.e. as conveyer and interpreter of immediate experience. Thus the understanding we seek is fundamentally a mind-body relation, a mode of being. It is, in Kierkegaard's phrase, a certain "relation of the knower to the known" in which inheres the Truth. Neitzche understood, if narrowly: an unhealthy body accompanies an unhealthy mind, and vice versa. The quality as well as the content of knowledge production is intimately associated with the lived quality of the theoretician's life. Thus the theoretician's examination of the biographic significance of his work is essential. Unless he attends to the character of his work, its symbolic function for his life and for the culture, likely it is that his work functions to maintain stasis. Unfortunately, this insight is available only once the initial and arduous step is taken; until then it is a statement veiled from the reader. K. cannot hear those who wish him well; he is encapsulated in his social role. He cannot be forced. Advice can be given; invitations issued. Nothing more. "More" is political oppression.

* * *

There exists no understanding-in-general. To speak of it in generalities has limited utility and considerable danger. One may not adopt "attitudes" or "qualities" and so enter the mode d'etre that is understanding.

To "adopt", first of all, is a rationalistic strategy. It means superimposition of ideas upon lived reality. At some evolutionary stage, for the individual and for the species, such work is appropriate. For the present reader, for Joseph K., it is not. K. is his ideas. His work now is to let go of ideas, and permit bodily-intuitive realities to release ideas to him. The pre-conceptual, as the term suggests, antedates, temporally and structurally, conceptualization. The mind returns to its ontological foundations in lived reality. It is as if it negotiates between this foundation and the public world, somewhat similarly as it said that the ego negotiates between super-ego and id in Freudian imagery. Duality, however, is just that. One negotiates amid the world, and it is an indissoluable whole, but with which one is not equivalent or reducible. This "not equivalent" is for some the source of alienation; it is the "transcendence of the ego" for Sartre, and the "transcendental ego" for Husserl. This antidualistic view is not the "interactionism" of Dewey. While he uses the term to denote the synthesis of the two poles (inner and outer environments), the term retains in its meaning a dualistic sense. It is dualism mended but not surpassed. One can conceptually wed two parts even if one's ontological foundations for the perspective remains, in lived terms, a dual one. While the material world's presence is indisputable, those dimensions of it, more importantly, the dimensions of the historical world we experience have their genesis with the Subject in the following sense. One's vision is framed in part by where one sits on the mountainside. Change one's ontological "spot", and one's vision of what is the world changes as well. Merleau-Ponty notes on this point: "...the text of the external world is not so much copied, as composed."[38]

This ontology becomes, in effect, a developmental "next step" for Joseph K. But such a step cannot be legislated or adopted; it must evolve. To adopt is to remain within the rationalistic-linear mode, in which ideas are super-imposed upon the lived subject, objectifying the individual. Understanding is not understanding if it is accepted as an idea in one's conceptual system. Understanding is understanding only when it evolves in the context of an individual life history. One comes to understand one's case as one lives it, as one goes about one's everyday business, attending carefully, unobstrusively, to what happens, and to what one thinks happens. (Both K. and the man in the priest's tale stopped their everyday lives to demand understanding, as if it were something ahistorical and material, as if it were something that could be given.) One brackets the "natural attitude", the perspective of everyday life. One watches, not judgementally but as would a court recorder, what transpires. It is true that the watching, to the extent it is not deliberately intervening and judgemental (one watches the judgments also; one cannot suppress one's self-condemnation without regressive consequences), changes what occurs. This changing is not manipulation. This changing is movement, the movement of life. It is of the order of the movement of morning to afternoon during the day, of the movement of season to season. This movement, because it is not designed or forced, allows one to see, more and more, the culturally conditioned dimensions of oneself. One comes to understand how the "great issues" of the century -- violence, oppression, arrest -- achieve actuality not in the abstract, but in the context of one's own life. They cease to be abstractions about which one reads, about which others lecture. Dissociation ceases. They become primordial, lived realities. Thus observed and understood, they begin to dissolve. New realities consonant with one's socio-historical destinies, realities increasingly those of a Subject, not objectified social roles, evolve.

For K. such talk is insubstantial, as elusive as his case. Given his encapsulation in a linear-rationalistic mode, he cannot see the possibility of movement and regeneration. As does the ego when threatened by release of repressed material, K. discredits new information, discrediting in the service of maintaining the static point of view that is his present. The beleaguered ego does not accept its own new information. It insists on coverting new experience into terms created in past experience. This condition is arrested development. The prognosis, as the novel suggests, is grim. One can issue invitations, offer advice, but a certain willingness to move, a certain receptivity must be present. This is a prerequisite for any educational enterprise, and those who design "educational environments" seem to act in ignorance of this seemingly constant fact. It is the same for oneself. One cannot force one's movement. Having done so distorts the movement, and allows the delusion that one can fruitfully force others'. One basis of fascism is intra-psychic.

Making It

Self-regeneration is considerably more complex than many popularized therapeutic and psuedo-therapeutic

techniques acknowledge. The oversimplification of these techniques, as well as the barely hidden commercial motives of many of their proponents, have led to the decidedly skeptical view many intellectuals hold of the "human potential movement." For many, encounter groups, meditation, and physical therapies (from rolfing to yoga to massage) are only the new indulgences of the bourgeoisie. In some measure this skepticism is justified. The motives of many participants are not authentically self-transformational, but regrettably many potentially helpful techniques are disdained along with their misusers.

University of Rochester historian Christopher Lasch, in a lecture given February 23, 1977 on the river campus, expressed this disdain characteristic of many intellectuals. He viewed the human potential movement as essentially a new form of "personality development", an old theme in American cultural life. What makes the phenomenon noteworthy in our time is its prevalance, and its function. This, he saw, as another variation of the theme of "making it". Lasch pointed out that life in a bureaucracy involves interpersonal skills at least as much as strict task competence. In fact, task competence is a necessary but hardly sufficient condition for employment. The sufficient condition is one version or another of an agreeable personality. Psychotherapeutic work, in such context, functions to eliminate or at least sublimate libido that surfaces in a socially disagreeable manner. In this way the preoccupation with self-work and understanding is primarily in the service of economic and social self-aggrandizement, as well as in the service of maintain-the-bureaucracy. In the former way the human potential movement is another form of "making it" in America, and lies in the tradition of Dale Carnegie, Norman Vincent Peale, and Benjamin Franklin. In the latter sense it functions to maintain the political-economic power of the ruling classes, and is thereby historically regressive.

In response to questions, Lasch sensed little evidence for a less-grim assessment. He allowed that some work in the aforementioned view was conceivably emancipatory, but given its intertwining with commercialism, there was little hope that this emancipatory potential would be realized on some broad social scale.

I accept this view almost intact, with one important amendment. At this time I see no significant alternative for Westerners. While necessarily discolored by vulgar currents characteristic of late capitalistic culture, the human potential movement represents the major regenerative cultural current at present. It does "represent" in that contemporary uses of techniques do fall short of aspirations. Nonetheless it is important in the following way. While the participant's use of say, zazen (the Zen Buddhist meditation), may parallel the basketball viewer's use of that game, the content of the activity differs. In that the content of the meditation is self-reflective, it at least offers the possibility of movement. Basketball viewing seems less usable, although Michael Novak and "inner game" proponents will disagree. One's motives for "spiritual practice" may begin as mundane, even vulgar, but with the practice may be precipitated biographic movement of the order transforming the initial motives. This, in fact, does occur to some extent. Not always, perhaps not in a majority of cases, but irrefutably in some. While such individual occurrences cannot lead immediately to sanguinity over this culture's future prospects, they do mitigate the grimness of Lasch's view. And given the cultural and political disappointments embodied in most communist countries, a Westerner has no significant option at this time.

There is a second, different order of response to this view many intellectuals take of self work. It begins by attending to the origins of the theoretician's observations in the structure of his lived experience. In Gouldner's term, the theoretician must unearth his "domain assumptions". To begin such a process reveals a self-evident fact. The intellectual is one who values pre-eminently his intellect, his rationality. While that is hardly all the prototypical intellectual values, it is often the medium through which he examines and expresses values that are ethical, political, aesthetic. In effect, to value the intellect fundamentally is to live a certain order of life, albeit with individual variations. But being an intellectual is a mode d'etre. It is predictable such an individual would find the very notion of self-work problematic. Part of what such work is about, when it is authentic, is the dismantling of the intellect's pre-eminent place in the intellectual's psychic structure. Such work involves loosening of the ego's identification with the intellect, ascribing to it the new position of instrument, in contrast to its former superior position as lens. To say, with Heidegger, that language forms a lens through which the world is viewed indicates one in whom the conceptual predominates.

This insight must not function in a reductive way, however. To recognize that Heidegger's view of concept-object relations is grounded in a certain contingent psychic structure is not to discredit the view. The point here is to disclose the psychic iceberg of which the theoretic statement is only the tip. No theoretician can

escape the symbolic relation between self and theory. This acknowledged, one understands that the intellectual's skepticism of the human potential movement, while rooted in an accurate appraisal of that movement's intertwining with the culture's more vulgar motives, is rooted as well in the intellectual's acceptance of the intellect as an ultimate value. Although an extreme expression, Joseph K. is a prototypical intellectual in that his fundamental value, through the duration of the trial, was that of a calm, analytical mind. That said it must also be said that K.'s mind is a narrow, unyielding one, a mind few avant-garde intellectuals would claim as representative. But for many academicians, K. is, regrettably, a prototype.

Misunderstanding

Before moving in the next chapter to establish a basis for a strategy offering the possibility of self-transformation without sacrifice of the intellect, I wish to deal briefly with one rather gross misunderstanding of self-work. This can be described in a general way as the acceptance of structure while altering content. One illustration is the aforementioned expression of bourgeois "needs" for new past-times in self-work. Another involves the commercial exploitation of meditative techniques. In the first case one remains in bourgeois consciousness, using the work as another device of self-delusion, social alienation, and status maintenance. In the second one remains a capitalist fundamentally, the relation between "guru" and meditation little different than the relation between salesman and merchandise. A mitigating factor, as noted before, is the possibility of authentic transformation, by accident as it were.

A more specific illustration of misunderstanding recalls K.'s absorption in career. He has not private life; the persona maintained is that of the young, aspiring banker. He demands recognition of this status from Frau Grubach, evidenced by his stern, rigid relations with her. He maintains social support for the persona by extending the hours spent with colleagues beyond bank hours. A major aspect, then, of K.'s arrest is an excessive involvement in career. This numbs him to other dimensions of his being: particularly obvious is the absence of bodily, erotic and intuitive imagery in his character. The absorption disallows him to establish an identity independent of his social role. Collasped as he is into this idea of himself, that of the aspiring young banker, internal movement ceases, coming against the dam that is this idea of himself.

Developmentally, a next step for K. is dismantling the place career occupies in his life-world. Such work means simultaneous cultivation of absent dimensions. A danger, if K. were persuaded to begin such work (certainly a moot point), that he lurch to the opposite end of his continuum. If his "devotion" to work is maintained through psychic repression (as the flatness and narrowness of his character indicates), then it is probable that a conscious withdrawal from the bank would bring a "flooding" of hitherto repressed material. This could take several forms: K. could suffer a "breakdown", likely if he were unable to make intelligible to himself his transformation. Another likely possibility would be K.'s adoption of a social role through which the surfacing material could be expressed. Certainly such roles exist, and existed then in Germany. Just a K. represents many of the middle-class during the World War I period in Germany, his "shadow" or opposite manifested in the hedonism of the period. Christopher Isherwood, for instance, writes of this period in his autobiography of the "Berlin years". So K. could devote himself to a pleasure-seeking life with the same unconscious single-mindedness. Again, this possibility involves no fundamental transformation; the pyschic structure remains, only the content changes. The former possibility, that of the breakdown in structure, does offer possibility of eventual self-transcendence. However, the risks and dangers are sufficient that, without the guidance of a R.D. Laing during the breakdown, this option seems an imprudent one.

I see both alternatives as unacceptable, an illustrative of misunderstanding self-work. This misunderstanding originates in identification with the intellect. If K. comes to think he is excessively involved in his career, he might well superimpose, through thought, another kind of life. But the structure of one's life-world cannot be legislated by the intellect. True, an idea can function to precipitate movement in that world, but this movement must take its own time, and its own "route". Otherwise, superficial change (K. the hedonist) or unmanageable change (K. breaks down) results. Fundamental self-regeneration is evolutionary, and for the impatient, imperceptibly slow. But such is the rhythm of unforced movement: like the movement of the day, from noon to evening, and the movement of the seasons, it is, at any given point, difficult to discern, yet, with

reflection over what has past, indisputable.

Lewis Mumford in his THE CONDUCT OF LIFE speaks to the place of career in a life as he speaks of Schweitzer:

> In philosophy or theology, in medicine or in music, Schweitzer's talents were sufficient to guarantee him a career of distinction: as one of the eminent specialists of his time, in any of these departments, his success would have been prompt and profitable, just to the extent that he allowed himself to be absorbed in a single activity. But in order to remain a whole man, Schweitzer committed the typical act for the coming age: he deliberately reduced the intensive cultivation of any one field, in order to expand the contents and significance of his life as a whole...yet the result of that sacrifice was not the negation of his life but its fullest realization...[39]

Embedded in this passage and in the life of K. is the notion that to the extent a career occupies a life tends to be the extent to which that life is reduced and made uni-dimensional.

Bourgeois indulgence

It is at this point that some neo-Marxists complain that this entire line of thought is tantamount to the bourgeoisie's continuing concern for the "quality of life". It is the same "need" for pleasing past-times that leads many to participation in the human potential movement. Before continuing with the misunderstanding of self-work this discussion is in the service of, let us focus briefly on this related misunderstanding, this primarily unwarranted criticism.

First, let it be acknowledged what is warranted. It is true that a concern for the quality of life, even when it transcends material preoccupations and focuses on intra-physic balance as reflected in worldly commitments, can be and is for many of the bourgeoisie only another way to make "the time pass". Those who need not labor for their economic maintenance, who refuse to labor, reflect the same primordial alienation from work and its significance for an evolving life that is extant among many in the working classes. For the former group, the mode d'etre is essentially languid. It is avoidance of encounter, not only with a form of labor, but with other human expressions and commitments as well. Thus understood, this version of life lived by the bourgeoisie is a negation of life, a retreat from intensive involvement. Thus the constant scan for new diversions, to avoid facing the basic negation. For these a concern for the quality of life is a pseudo concern, for the life lived is a false life. Theirs is, as has been popularly described, false consciousness, characterized by false needs. This mode of being is reflected in intellectual life by the dilletante, whose search for "knowledge" is hardly self-generative or even field focused, but in the service of diverting and "interesting" conversation later.

To focus on the dominance of career in contemporary life structures is not a bourgeois concern. To acknowledge it, to invite depassment (depasser) of that structure, suggests a structurally different life-world than prevalent at present. To so focus becomes not just another "interesting" thought to fit into an already narcissistic life, another way to pass time. It is instead an invitation to biographic-historical work that affirms movement. To dismantle a life structure that permits career dominance is to dismantle bourgeois life. Structurally speaking, bourgeois idleness is only "the only side of same coin", the other side of the compulsive preoccupation with career characteristic of K. It is equally singleminded in its unconscious way; it is equally arresting. Both sides are in a certain sense specialists, in the way Mumford notes Schweitzer was not. Both unconsciously invest themselves in one region: working and not working. To question this investment, to bracket this "natural attitude" in phenomenological reflection, invites its dissolution, and depassment. Such events have profound political consequences. With dissolution of the bourgeoisie comes dissolution of the proletariat; each depends upon the other to exist.

Early in the chapter when I described three complementary views of THE TRAIL, I noted how each view-- the arrest as metaphysical, as political, as psychological -- was dependent upon the other. Later I used the term "ecological" to indicate the inter-reliant configuration these dimensions create. Psychological arrest is impossible in an authentically politically-emancipatory culture. Metaphysical arrest is possible only in those psychologically arrested. Thus to work earnestly along one axis is to reverberate along the others. To initiate movement away from over-absorption in career is to initiate movement away from the political order that life

structure supports. The order of biographic-intellectual work we are describing here is inseparable from political action.

To return to the initial point of this section, this work is complex, and easily misunderstood. The misunderstanding I want to underscore is that of intellectual legislation of movement. One forcibly alters one's behavior, de-emphasizing, let us say, career. Deliberately one ceases to work at night, cultivates past times unrelated to career. Behaviorally the shift has occurred. But the structure of the life-world remains untouched. One remains a cerebrally-focused being. One remains one whose primary reality is ideas. The presence of bodily, erotic, intuitive dimensions remains muted, repressed. The change of behavior is trivial. Fundamental movement has behavior-change as accompaniment. Rarely it is reversed.

It is the character of the life-world which must change, and this occurs only gradually. The conceptual can be used to prod, as it were, non-conceptual elements of the world, but this prodding must never be aggressive enough that the conceptual does violence to companion elements, such as the intuitive. Their inter-relations are dynamic, inter-active, and the conceptual, if appropriate, must, say, be yielding to the body. Intra-psychic relations come to mirror the basic scheme of a phenomenological epistemology. Pre-conceptual, pre-categorical dimensions, which in phenomenological imagery constitute a substratum of primary experience, antedate, temporally as spatially as it were, the conceptual and the categorical. In parallel fashion, the self-work we describe in later chapters permits a shift in the role of the intellect. It ceases to be the exclusive reality, which then becomes multi-dimensional. It becomes an instrument, which can assist in shaping the life-world, but which itself is shaped by multi-dimensional reality. As the intellect becomes less autonomous in this sense, it becomes more subject to its non-conceptual bases. It becomes more grounded in "reality", less self-maintaining and hence less self-deluding. Thoughts now become evidence of what occurs in the hidden regions of the iceberg. They can be used in a way parallel to psychoanalytic process to disclose the nature and contents of the unconscious. Such disclosure permits movement, individual and, as Habermas has suggested, socio-political. Individual and cultural arrest are dialectically related.

For K. the misunderstanding I have described would seem a subtle one. There are others more subtle. For the present let is suffice to say that work with oneself is as complicated as it is arduous. One is nver able to embrace such work without ambivalence, ambivalence at once due to psychological resistance to movement, and due to sober assessment to the complexities of movement. Yet, there is no commensurately powerful alternative at this historical moment. Even for those who continue to insist that political work in the material world is the primary obligation, work with self is compelling if only to "lose" the social self. One is reminded of the psycho-analytic insight succinctly expressed by Jung: "No one can free himself from his childhood without first generously occupying himself with it."[40] So it is with the subjective self. Without such work, one cannot, to repeat Jung's verb, "free" oneself. Without such work, one remains arrested.

Two

Autobiographical Consciousness

Joseph K. is a being lost to himself, dissociated from his subjective experience, arrested. He is his social role; his thoughts are thoughts of social negotiation, not fluid thoughts of free association. Estranged from primary experience, his secondary experience impoverished and unimaginative, K. is unable to navigate his way.

In these respects K. is the exaggerated yet recognizable prototype of the so-called objectivist, the "realist" who wastes no time on aspects of his life not demonstrably related to success in the world. His mentation is argumentative; he is imaginable as a lawyer, as a philosopher doing conceptual analysis. He is an "empiricist" who looks everywhere but himself for understanding of what he observes. He experiments with this strategy, then that, with a lawyer, then reliance on his own wits. He is hardly a sophisticated experimentalist, but he is preoccupied with the consequences of behavior, with its prediction. He is appalled and finally undone by the inscrutable nature of events, events which are never deciphered by his technical rationality. During his case he appreciates even more the rule-defined character of social reality in the bank. Human behavior is predictable there. Knowledge of what is possible and what is not is relatively stable there.

Such a mode d'etre is suitable for the world of the bank, for social reality that is uni-dimensional and consensually created and maintained. But it fails to suit another order of reality, one not stipulated by others, one that must be understood, finally, by oneself. This is the essential reality of K.'s case, of K.'s life. What is the nature of this reality? To begin to comprehend this question K.'s objectivism is of no help. Clearly it is a hindrance. He dies by it, in his words, "like a dog!"

Objectivity implies its counter pole. It is not that objectivity is death, is arrest, although that is it charge to subjectivity on occasion. This book is not a tract extolling subjectivity, condemning objectivity. Clearly, at some ontological level, during some future historical epoch, they will be experienced as synthesized. Today they form a dialectic, and because during the present period the subjective is the antithesis that is repressed, it is appropriate for a theoretician of the human sciences to emphasize nearly exclusively the subjective. K. is possible only during a period when subjectivity is denied. The period we can aspire to is not only in which the objective is denied, but is balanced and finally synthesized with the subjective.

In this volume what is absent in K. will be portrayed. This subjectivity is not knowledge in a traditional objectivistic sense. That is, it is not, as William Earle argues, a set of correct opinions about oneself or about others; nor is subjective knowledge a science of universal, ahistorical laws. In THE AUTOBIOGRAPHICAL CONSCIOUSNESS: A PHILOSOPHICAL INQUIRY INTO EXISTENCE, Earle notes:

> For if what I knew of myself were only those universal laws or principles I exemplified, then even if my thought were true, it would ignore my singularity by knowing of that singularity only that which 'was predictable of many'. 'Knowing thyself' therefore must not be some form of knowing a universal 'thyself' or any conceptual cognition at all, but rather a reflexive elucidation of the singular being that I am. Nor can any such self-knowledge be properly characterized as objective knowledge. It cannot be knowledge in the sense of knowing an object, me, since any object as such is in essence precisely that which is not-me, the subject; to know a subject as an object is to know it as what it is not. Nor can self-knowledge be objective in the scientific sense, a knowledge that depends for its truth and validity on confirmation by other subjectivities. Whatever self-knowledge may be, it cannot be an opinion about myself that be substantiated only by public agreement.[1]

Educational inquiry is properly a human "science" in the fundamental sense of that term, the sense in which it is investigation of what is not yet known. The "frontiers" so often used to describe the exploratory nature of scientific inquiry are extant as well for investigators of the human case in any of its more specific aspects, such as education. Taken as a caution, however, Earle is correct. The science of education we have undertaken to create is not parallel to the sciences of nature, and precisely because education is not a natural phenomenon. Education is the psycho-social and intellectual development of human beings, and to the extent it is conceptualized as an exclusively objective phenomenon is the extent to which it is misunderstood. Education is fundamentally a phenomenon of subjects, and it occurs not abstractly according to universally demonstrable laws, but in singular beings whose fundamental character is their singularity.

The task for this writer is to portray singularity, subjectivity, self-knowledge. But the language available to him is that of social science, a language of universality and objectivity. He is caught, with his contemporaries, in K.'s bank. Glimpses of what exists "outside", which I have described to our colleages (many of whom have yet to take an interest even in the windows), have seemed to them indecipherable. Nonetheless it is necessary to divest myself of the language of abstraction, and attempt to write subjectively. For this attempt I choose autobiography. Through this mode I will work to capture the texture and rhythm of subjective experience. In order to so write, I leave the bank for a time, and this departure will be evident to the reader as he leaves chapter three for four.

Earle speaks to this and related points.

> And while science and certain theoretical forms of philsophy look for explanations of phenomena, 'Know thyself' does not enjoin me to find explanations of myself and what lies outside myself, in which is not me. 'Knowing' is not necessarily explanatory, but it might be regarded

> as elucidation: that is, raising to explicit, reflexive consciousness that which is already implicitly grasped. It might be an effort to excavate the implicit, buried sense of existence of a singular being by that singular being -- in a word, the 'autobiography' of the singular being. 'Know thyself' invites me to become explicit as to who I am, what it is for me to exist; what my singular existence has been, where it is now, and what lies before me. 'Ontological autobiography', we shall call it, with no particular emphasis upon its 'graphical' or recorded character; it is a question of a form of consciousness rather than of literature.[2]

The "form of consciousness" of which Earle speaks is suggestive of intellectual, and comprehensively, biographic movement. The regressive-progressive-analytic-synthetic method is not primarily to develop knowledge of oneself and the character of one's intellectual work for knowledge's sake. We are not seeking to build a "body of knowledge" of the subjective genesis of intellectual interests as much as a method by which one furthers one's intellectual and biographic development. This movement is from the parochial to the panoramic, from the exclusively legalistic and technical to the poetic and imaginative, from the self-alienated to the self-knowing. We seek, as Earle suggests, a form of consciousness.

This form is one of self-self relations. In classic psycho-analytic imagery, it is an ego sufficiently reflexive to take note of its superego-id negotiations. It is an ego open to but not overwhelmed by its id, open not overwhelmed to the prohibitions of superego. It hears the infinite variation of self-sabotage of which the superego is capable, but is not sabotaged. It notes that this is in fact the voice of superego, a voice not to be fought, but to be recorded, and not necessarily expressed behviorally. Similarly, surfacing material that is threatening to the ego's sense of itself and its social milieu can be permitted to surface. The ego works to open itself to this surfacing, counteracting as it were, repression. The flow of id is the flow of libido, and its hyper-regulation is the diminishing of energy that can be biographic movement. This process is akin to and overlaps with the free associative process; it is the "raising to explicit, reflexive consciousness that which is already implicitly grasped" of which Earle speaks.

The nature of self-self relation is foundational of self-other relations. The personality in which superego predominates will find unsettling personalities in which this imbalance is not extant, in which, possibly, the id predominates. This is, of course, oversimplification, but given the present context, not distortion. Similarly, the self in which the ego is more vulnerable to material surfacing from id, vulnerable in that this surfacing is regularly uncontrolled, may find academic work in disciplines explicitly defined and ordered less possible, less satisfying, than work in a field which permits more, let us say libidinous (not meaning lewd but energetic) expression. Again, these are oversimplications. The point is that the root of K.'s conduct lay not in the Law but in the structure of his relation to himself. From this root came the behavior so inappropriate to his situation.

One danger in research of the order described here is reification. That is, as one examines one's relation to self, work, to others, one situates current themes and problematics in the past. One achieves explanation, and takes the knowledge possessed as the work's end. What is prized is the words, is the explanation: what is forgotten is the non-conceptual reality of which the words are only representations. Explanations and related understandings are significant only as they are useful, only as they contribute to release from past patterns, as they raise hitherto buried material into explicit consciousness, thereby surrendering it. The aspiration of this work of recognizing one's work is emancipatory, is release from the past, release from arrest, into movement. Explanation and conceptual knowledge generally of one's self-self relation are reified as they are taken for end-states. One remains arrested, albeit with new information, but the structure of self to self remains unchanged. What is necessary then is loosening identification with this material, and the initiation of movement. This is the mode of consciousness of which Earle speaks.

The danger, then, is that autobiographies of individual educational experience be written for their own sake, without regard to their developmental consequences for the writers themselves. The potentially emancipatory process becomes reified as the words become taken for "the things themselves", for the phenomena themselves. The process becomes furthering as the information learned is valued for its possible liberative functions. Autobiography, as Earle notes, is important not as a genre of literature, but as a form of consciousness.

As I reflect this morning on the synthetical section of the method as I completed it a year or so ago, I understand its brevity. At the time it seemed it "ought" to be lengthy. It ought to be a kind of culmination. I was distressed by its brevity. A month or so later it became clear, as it does again this morning, that I slipped from "autobiographical consciousness" into one of the objectivist, one concerned with information, with material form. As I reread the few words that had come, I entered again a lived perspective, not one based in imagined responses of others. I realized a certain state of mind had evolved from the work. What was crucial was the state of mind. A more comprehensive view of the work came, as I wrote the sixth chapter, on biographic function.

Today I note that this work is never completed. This seems a truism on the surface, but the sense of it this morning is vivid and original. It is as if the pull of the culture, perhaps it is the pull of being human, of being in a body, that pulls one to the material plane exclusively. Subtly one leaves oneself, and focuses absent-mindedly on "solid objects". One's experience of objects, of others, thins out until it seems no longer present. Continually the task is to return to the immediate experience of the object, of the text, of the lecturer. Continually, it is as if it is the middle of the night, and only with vigilence one remains awake. A few minutes without explicit consciousness of one's situation, and sleep takes one away.

This remaining awake Earle terms "divestment". It is, he suggests, roughly what Descartes intended by "doubt", what Husserl termed "suspension of the natural attitude". Earle writes:

> Or divestment may be taken as a 'purification' of the soul too engrossed with what it is not, too much caught up in that deceptively tempting and deceptively rewarding domain of the impurities of existence, where the poor soul futilely sought itself. (Divestment) is a regressive shift of attention from objects or affairs back to the ego that was engrossed with them.[3]

Of course one never divests completely the material world. But one can become clearer regarding one's participation in it. One can understand more completely how one helps create the social reality one lives in. One can be released from certain social realities, and comprehend hitherto unknown strategies to confront unchanging material structures. What is necessary is reflection upon one's presence in the world, and in non-critical ways that permit transformation of the presence, and concomitantly, of the world.

Degenerative Tendencies

> There has always been a degenerative tendency in philosophy to ape the mathematical or natural sciences. In its preoccupation with the universal, it begins to take on the character of a system of logic or mathematics, and thereby turns the singular, existent, and the historical into the illustrative; in its preoccupation with the objective, the not-me, it looks like some generalized natural science, confined by methods of experiment, observation, and hypothesis and either resting on the latest results of the science or contenting itself with common sense. In either case it turns the subjective into the inaccessible and irrelevant. The net result is that each ego, as it is for itself first-personally, becomes invisible to philosophy; that ego is not a universal, nor is its singular historical life irrelevant to it, nor is it subject of public observation and experiment like an object, nor is its own singular life characterizable for it only through 'hypotheses'.[4]

This same tendency is evident in the social sciences as well. Education is commonly thought to be a phenomenon that is observable, measurable, generalizable. I recall reading portions of an earlier paper ("Self and Others") to a doctoral seminar in education at the University of Rochester. The questions asked all evolved around: what has this to do with education? The paper, autobiographical in character, was unintelligible, given these students' backgrounds in social science, and given their current training in the College of Education. Even the philosopher of edcation present was unable to see a relationship between an autobiographical account of educational experience and the study of education. That is exactly how invisible the ego becomes to much of present-day social science.

Descriptions of life as it is experienced become relegated to literature, to traditions like existentialism, and viewed by mainstream educational researchers as esoteric. It is not hyperbole to note that this characterization

discloses how estranged from immediate experience contemporary research traditions have become. Joseph K. is not idiosyncratic. As Roth suggested, he is indeed "everyman". Easily one imagines him a researcher, as easily as one sees him a banker.

It is the process of reduction to social role which illustrates disdain of "autobiographical consciousness". This disdaine has its genesis in the internalized disdain of the Other. The child comes to view himself as others view him, as well as how he is for himself first-hand, without social mediation. By the time, maturationally, the individual begins to retrospectively untangle the threads of his present experience, to discover their discrete roots, he is a split being. "Hopefully" he is a split being, for without a schizoid character, a tension produced by the "me-not-me" co-existence, reflexive awareness and examination are impossible. "Hopeful" is appropriate here; Joseph K. is not split. He is his role. The absence of a last name also indicates his impersonality, his loss of self. His presence is exclusively social, and his thought is intelligible only in social context, i.e. the bank. For the Joseph K.'s the concept of arrest is only an affront, a threat to social standing, not a call to examine developmental status. For the Joseph K.'s, accounts of lived experience are esoteric, and have life only as a category, as "fiction."

This loss of self to role is based in loss of self to others. One abandons one's experience of self and substitutes others' experience of oneself. It seems an "ontological insecurity" that permits abandonment of self. Frightened of what I am for myself, which, particularly during the early years is so opaque, I welcome the friendly definitions of me my parents and friends so freely offer and often impose. Open to the friendly, I accept helplessly those definitions of me the unfriendly confer. Self-estranging as it is, becoming to me who I am for others is securing, comforting in some deep way, if not comfortable. The work of adhering to the lived complexities of my individual experience are given up for the lazy stability of social roles. This stability quickly becomes arrest. In order to maintain myself, to maintain movement in my life, I must keep others' views of myself secondary. Not dismissed, but secondary. Earle writes:

> ...what I am for myself has an absolute priority over what I am for another... And though at the same time I may be indirectly apprehended as an object by someone else, my possible objectification to another can have no effect on my own first-personal subjectivity. My subjectivity therefores underlies any derived objectification, and remains logically and ontologically prior to any of its derived appearances or modes.[5]

In lived terms, this statement remains aspiration. As I type this morning, as I watch dawn, I am an object for myself. The alien fluid that is introjected objectifications of myself by others already partly embalms me. This awareness of the death in me is essential to proper effort. Only those who glimpse their developmental status, who experience themselves as self-alienated, who can see "false consciousness" in others, only these will take interest in work to remember themselves. For others it is esoteric, inexplicable work.

I write "proper effort" for the following reason. If one disclaims one's connection to Joseph K., if one projects onto him (and onto those he represents) arrest, one becomes delusively self-accepting. This tendency can be detected in some work that is designated as humanistic psychology. What is discernible is that as some humanistic psychologists discovered the profound rejection of the human self characteristic of mainstream academic psychology, they fled obsessively to the seemingly safe psychological poles of affirmation and acceptance. The obsessive quality of this movement led some to misunderstand the role of acceptance in development. Many acted to affirm all that they were. What was legitimate in this action was realization that acceptance is necessary to psychological movement, and that rejection of self maintains arrest. Defenses exist due to threat, and only through the reduction of threat can unconscious defense mechanisms dissolve, and conscious protective mechanisms be developed and employed, mechanisms which do not censor excessively the contents of the unconscious. What seemed lost to some humanistic psychologists was awareness that use of self-acceptance is of value only as it allows movement, as it helps initiate and sustain transformation. To focus only on acceptance means acceptance of the introjected "not-me" as well. Of course, this portion must be psychologically accepted for it to be exorcised, but awareness must never be lost that the acceptance is a technique in the service of a long-range emancipatory commitment. What I observed, in some of the literature

and in some measure at some of the meetings of the Association for Humanistic Psychology was a compulsive, unconscious, undisciplined acceptance of self as an end-state. Those I observed do not live as Joseph K. lived, in terms of customs of everyday life. But structurally, in terms of the biographic function of their customs, i.e. to maintain arrest, the lives are identical. The accepted becomes the taken-for-granted, the unconscious, and the arresting.

What is necessary is reflexive awareness of one's intra-psychic relations, in classic psychoanalytic imagery the relations among ego, id, and superego. By acting to accept these relations, less is submerged in unconsciousness, more raised to explicit awareness. One observes, for instance, how what had seemed before like increased self-acceptance was in fact the denial and suppression of the superego. Its activity remained of course, now only buried from conscious view. What had seemed self-acceptance was in fact identification of the ego with aspects of the id, and denial of aspects of superego. By cultivating a "transcendental ego" from which one observes superego-ego-id relations, one allows already repressed material to surface, possibly to be released. This fundamental process, the raising to explicit consciousness material hitherto buried from view, is a significant element of an emancipatory model. The other significant element involves the determination of action: upon what material will I act, and what material will I permit to pass unacted on. For example, frequently what surfaces during such psychological work is repressed anger, fear, hurt, sadness, as well as joy, love, steadfastness. To act on the former is quickly socially irresponsible, although often inevitable. More specifically, working with the regressive-progressive-analytic-synthetic method one discovers that one's present commitment to the piano originated in attraction to a high-school music teacher. This previously unknown information may function to drive one from the instrument. Yet, one may permit such information, and such feeling (the wish to abandon work whose initial motives were interpersonal and sexual not musical), but to continue study, to observe if the original contingent motive has achieved an autonomous energy and commitment of its own. To experience disconfirming information during self-work is not to be disconfirmed necessarily. The "transcendental ego" makes note of the information; behavior may continue as before. The quality of piano performance will no doubt alter as the quality of intra-psychic relations deepens, but the fact of piano performance may well not. Or it may.

Appropriate to note here is the notion of discipline. To permit repressed material to surface is not equivalent to acting unreflectively upon such material. To accept this material so that one is compelled to act on it perpetuates unconsciousness. One accepts material in order to see it clearly; then a conscious, considered decision regarding its function in one's life in the world is necessary. Discipline in this sense is a commitment to observe what surfaces regardless its content. One watches but does not identify. One experiences an anger that if identified with would lead to physical violence. If one identifies with it, one is driven to act or edit. Identification means stasis, perpetuation of masking from awareness of the contents of unconsciousness. What is crucial is the discipline to watch these contents without becoming them. It is this discipline I saw absent in some humanistic colleagues, in psychology and in education.

The surfacing and release of unconscious material is transformative. One need not hasten to abandon the piano (or physics) upon realization of its origins in one's life history; one need not attack he who embodies the parents toward which one begins to feel his hatred. By experiencing the realization oneself, or in a disciplined dyadic (or group) setting, ontological state will alter, and future behavior will of itself be altered. One need not deduce, in logical fashion, the "implications" for one's situation. These "implications" are set in motion during the process, and the situation altered, and altering, from that moment on.

The capacity to observe must be distinguished from dissociation. K. is dissociated. He refuses, not consciously by the time we meet him, to feel his emotional-bodily life. No doubt he observes to some limited extent his thought-life, but it is a life essentially denuded of its emotional content. Thus dissociation is the ego's denial of emotional content threatening to it. Dissociation is identification with the contents; such identification forbids biographic movement. Particularly for the intellectual classes such confusion of observation and dissociation is likely. These classes tended to achieve intellectuality at the expense of their sexual-emotional lives, and in fact used and use intellectuality in order to flee from psychic material generally. For these individuals the work of Janov and other "feeling" therapists, work which focuses on emotional discharge

such as screaming, physically beating pillows and other objects, is useful. A danger with the repressive-progressive-analytic-synthetic method is that it could be employed by the hyper-cerebral individual without altering his intra-psychic balance. Of course that danger exists also in psychoanalysis and other free-associative-based psychotherapies. It is important, as much as this is possible, to permit oneself to feel what is unearthed as one focuses on one's involvement with schools and academic disciplines. Otherwise, cognitive understanding may be achieved, but it will be "objective" information, not transformative in its biographic function. Although in fundamental respects parallel, the regressive method is not psychotherapeutic, and I will not focus on felt content in an explicit, isolated way. Nonetheless this aspect of recalled material in the upcoming autobiographic section will be evident. It is an essential aspect.

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In the passage quoted earlier, Earle notes: "My subjectivity therefore underlies any derived objectification, and remains logically and ontologically prior to any of its derived appearances of modes." The imagery embedded in this observation is parallel to that of the epistemological formulation Merleau-Ponty cites as fundamental in a phenomenological view. That is, the "pre-conceptual" precedes the conceptual. This writing, this thought, is in this sense the tip of an iceberg which is my subjectivity. One's academic work is objectification derived from a subjectivity that is, until raised to explicit consciousness and articulated, pre-conceptual in nature. It precedes then, spatially and temporally, what is conceptualized. This basic structural relation between self and knowledge makes appropriate study of self as well as study of knowledge. As psychoanalysis has demonstrated, what is unexamined functions uncontrollably, and often in sabotaging ways. Intellectual effort unaware of its origins and functions in psychic life is effort necessarily diminished in scope and depth. Dissociated from its subjective bases, it often focuses on itself, creating conceptual labyrinths unrelated to ontological reality. Conceptual analysis in philosophy often illustrates this consequence.

Earle speaks of the relation between subjective knowing and objective knowledge.

> If we have before our eyes a distinctive realm of being (each man's life), and if that realm is considered from a certain point of view (as it is for himself) and with a certain purpose (understanding it), we have isolated a domain that is subjective and not objective, in which the singular takes precedence over the universal, and in which there is no question of explaining but only of a responsive understanding: in a word, our own singular and unrepeatable destinies as they are for ourselves and one another. Since all of this is, it constitutes a domain of ontology; and since it is and must be of primary concern to ourselves and indeed supplies the foundations for any so-called objective knowledge, it consigns all other modes of knowledge to the secondary and derived. Not only is it primordial itself, but it must equally well be a primordial interest of anything that seeks to be more general. And since it has its own form of expression and communication -- its own methods, as it were -- those methods must take precedence logically over all others.[6]

It is not just that the subjective constitutes a separable domain, discrete, and for most contemporary researchers, in some way inaccessible. The subjective is prior to and foundational to all efforts at objective knowledge. The character of this domain determines the character of knowledge production in the objective realm. Gouldner understood important aspects of this fact, indicated by his insightful discussion of "domain assumption" in his THE COMING CRISIS OF WESTERN SOCIOLOGY. In a certain sense, what he calls for in that volume -- a reflexive sociology, a sociology of sociology -- is parallel to this call for a reflexive, autobiographic examination of learning, of knowledge creation, of participation in academic institutions. Such examination, as Gouldner understood, is the precondition for the transformation of sociology as it is, in this context, for the transformation of education. Autobiographic study which is, in Earle's word, "ontological" in nature, brings to explicit awareness processes before unconscious, and by such process, re-constitutes one's fundamental point of view. Because all learning, all research, in fact all action in the world can be traced back to one's ontological point of view, to transform this perspective is to transform action in the world, to transform the world.

As noted earlier, this transformation often is not dramatic, often, for the impatient, barely discernible. At any one point of time the change may not be discernible, but with retrospective examination, the fact of

change is clear. Such transformation is authentic, not the forcing of surface changes through alteration of outer structures, for instance, legislation of an altered research program for American sociologists. An authentic research program must mirror its ontological, pre-conceptual foundation in the subjective domain.

Authentic movement occurs in the subjective domain, and given the antecedent relation of this domain to social action, it properly occurs here first. Thus the legitimacy of notions such as "cultural lag" and "historically regressive". There is movement in the subjective domain, which at a primordial level is at once historical and cultural movement, even if its manifestation in the customs of life, including methods of research, follows. Because historical movement occurs first in preconceptual, non-material realms first, the conceptual-material structures of any culture are inevitably "behind the times". Because actual movement occurs in embodied individuals whose specific destinies involve articulation of this movement, involve making material what is for the masses still immaterial and pre-categorical, there exists always an "avant-garde", regardless of sub-cultural context: artistic, intellectual, scientific. There is inevitable frustration of these concretely-existing individuals as they bear the dissonance between actual historical movement as they live it, and the lagging social and material structures. What tends to occur, of course, is oppression of the avant-garde by the masses who tend to cling to what is materially, who are in many cases insensitive to historical movement, to the subjective domain. (I do no refer specifically to a particular economic or social class such as the proletariat or the bourgeoisie. Estrangement from subjectivity occurs throughout the socio-economic order.) The avant-garde, in some historical periods, comply with oppression, as K. did, by recognizing its jurisdiction in a sense, and responding defensively. In other epochs, what occurs is an attempt by the avant-garde to impose on the masses material structures which evolve in their own sub-cultural contexts.

Freire, for one, notes this danger in his PEDAGOGY OF THE OPPRESSED. The educator committed to humanization must resist the temptation of imposing upon pupils knowledge; he must refuse "to bank". It is not mere information pupils require, it is a dialectical relation to themselves, from which derives comprehensions of the dialectical nature of knowing and knowledge. In Earle's term, it is "autobiographical consciousness" which allows one to observe his complicity in the oppressive political and economic reality. The oppressors' existence as a class is contingent upon the willingness of the oppressed to accept the status of both. This acceptance is not conscious of course; it constitutes, in Freire's word, "mystification". To de-mystify requires awareness, not conferred by the educator, but discovered together, of the actual roots of the peasants' excessive afternoon drinking and fighting. To inform the peasants their fighting is a form of horizontal violence extant because vertical violence, from oppressed to oppressor, is inconceivable, is useless. Through use of photographs and dialogical encounter the pupils come understanding of the actual origins of this behavior. This is the reflexive process. It is education in its only genuine sense, one's coming to consciousness of one's subjective participation in and creation of social structure. It is transformation of self-self relations, from the arrested self which views itself as an object, as other (usually oppressors) view it, to immediate experience of self as fluid, evolving, primordial, determiner of social structure.

Given, however, the anti-dialogical character of many educators' pedagogy, even the autobiographical method would be employed to objectify students' subjective experience. Hence this writer's anxiety over the increasing interest in this work. I ask that educators interested in the autobiographical, work with themselves. The nature of the self-self relation is central to this method, and systematic attention to oneself is a prerequisite to work with others. It is true that for some educators working with others stirs work with oneself, work that cannot be conducted in solitude, and for these educators special caution must be observed.

Scientific

I have been asked on numerous occasions about the scientific nature of this work. In what way does it transcend the individual and become a contribution of the "body of knowledge"? Earle speaks succinctly to part of the answer.

> Though philosophy has always tended to regard anyone's personal life as of 'merely autobiographical significance,' would it not be radically absurd for any existing man to look upon his own life in any such fashion? The 'thinker's thought may be independent of the thinker's life' if it is to achieve universality; but is there not another form of thought that in principle is not merely

> dependent upon the thinker's singular and personal life but identical with it, and would this not be 'autobiographical'? Needless to say, that thought could hardly be about the same subject matter as thought that can be called universal, nor could its aim be the same. It would therefore be a radical mistake to suppose that the value of ontological autobiography would be in the contribution it makes to our knowledge of something called 'mankind'; that is just what it does not, cannot, and should not aspire to do. It might, however, have the value of being essential to the singular man himself; and since that is what each thought is anyway, the service it offers could hardly be trivial.[7]

This last point can be extended: who is this "mankind"? It is a concept without a concrete or lived referent. There exists only singular beings with singular lives. The value of knowledge is its multi-dimensional function in the lives of individual, unrepeatable beings. In kernel form, this is the theory of curriculum developed from this work of the past five years. The matter of function if complex, described in some detail in the chapter entitled "biographic function". Suffice to say now that there is, concretely, no mankind. Because concrete reality is basic, and abstractions like "mankind" derivative and misleading, autobiographic study merits a central place in the study of education. It is an autobiographical posture that allows experience to be educational.

Just as there is no mankind, there is no education analogously aggregate and abstract. It is the same point Heidegger developed in regard to experience. There is never free-floating, unowned experience. "Experience" is intelligible only as it is acknowledged as the experience of someone. Analogously, there is never education-in-general; there is only my education, yours, hers. Astonishingly enough, this fundamental fact is obscured in the present epoch. Education is researched as if it were rainfall, analogously observable and measurable. Clearly this pseudo-empiricism has passed its zenith, and the end of its tenure imaginable. What is inevitable during this initial stage of transition are tracts which will seem excessively subjectivistic. But they are necessary, balancing in a sense the excessive objectivism of mainstream educational research.

This research performs an obfuscating function, one parallel to that performed by traditional philosophy. Earle notes:

> In its obsession with the universal, philosophy has frequently been driven to an aspiration to know the most universal of all: transcendental conditions of being, knowing, saying -- conditions that are supposed to make any particular being, particular truth, or particular utterance possible. But even if we should grant that some knowledge were possible, it would remain an open question whether its possession were precisely what the Greek oracle commanded, or, as Kierkegaard might have put it, where it were instead the opposite, a distraction from the concerns of a 'subjective thinker,' a flight to just those things it is not essential to know.[8]

Just so. As the body of knowledge social science creates on the subject of education grows, the less the student and the teacher seem to know. This body focuses analogously on the conditions which make possible teaching and learning. In consequence, most educational research omits the "subjective thinker". It serves then, as a distraction from human learning occurs -- not according to conditions, but according to the biographic situation of the individual. This notion of "biographic situation" requires some explanation at this point; it is at the core of this theory of curriculum.

Just as the present moment is a new historical moment (granted in many respects reflective of past moments, nonetheless in some essential respect new), it is a biographic moment. In fact, historical process ceases being an abstract concept and becomes a lived reality in the context of concrete, individual lives. It is how historical process becomes humanly significant -- its surfacing in human lives. Any historical moment is a situation in that it is possible to identify issues which comprise the tension that inheres in the moment. Such issues are described in superficial form daily in the media. The point is, on any given day, during any given period, issues that must be lived through are discernible. So it is in individual lives. Characteristic of the present epoch is inattention to these issues. Often it is only within the context of psychotherapeutic relationships and other intimate relationships (some marriages for instances) that we permit ourselves to, in semi-free

associative fashion, speak of the issues which concern us.

These issues make the present moment meaningful. True, the issues of any given day can easily sound trivial to those for whom they are not issues. This is possible in part because attention is paid often to surface issues. The automotive repairman was rude, for instance. Once this specific incident is understood regressively, that is in the context of one's life history, it then becomes intelligible as another expression of an enduring biographic issue: being vulnerable to the proletariat. (Of course the information "I felt wounded by the repairman's rudeness" could indicate any number of issues. I arbitrarily choose this one to illustrate "biographic situation.") Upon examination you experience this vulnerable state as a kind of guilt, further, a guilt that is class contingent. You left your proletarian upbringing, and not "cleanly", that is at considerable psychic cost: estrangement from family and childhood friends, denial of the proletarian in yourself. The repressed guilt and anger over this loss surfaces when contact occurs with one who "reminds" you of this unresolved issue. Through focusing on the surface issue, one uncovers it biographic significance.

The studies Madeleine R. Grumet and I have conducted at the University of Rochester indicate issues of similar significance comprise one's academic life as well. One's academic-intellectual present is meaningful in the same way; it is comprised of issues, often unrecognized and unarticulated. What is felt is a vague and nameless anxiety. Essential to disclosing the meaning of the intellectual present is situating it in the biographic present. Given identification with role, with linear-technical rationality, a focus exclusively on conditions, on the public world, typically one has little if any sense of the biographic function of one's work. Working with the regressive-progressive-analytic-synthetic method, attending to immediate experience, one begins to situate this experience in one's life history. Sufficient number of details not strictly related to one's life in schools are recalled so that, during the analytic work, one begins to discern the biographic significance of academic and intellectual work.

So it is necessary, in order to comprehend the issues which constitute the meaning of the intellectual present, to examine not only this intellectual present, but to look to the side as it were, to the ground that is the biographic present, in which the intellectual is situated. In a sense this process can be likened to studying the sun by examining its light on the ground. The ground is the life-world, and as I attempt to glimpse this world, the place of the intellect, and its academic expression, become visible.

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Early in his THE AUTOBIOGRAPHICAL CONSCIOUSNESS, Earle makes a point (in two slightly different ways) which is appropriate to attend to now.

> Evidently the (Delphic) oracle felt that wisdom did not lie in knowing what was above the heavens or below the earth, but rather in knowing something a good deal closer to the knower: himself. Philosophy, in addition, was not said to consist of the possession of such knowledge, but rather its love, which to the Greeks meant not so much a distant admiration for a beautiful thing as the striving for its possession.[9]... (this essay's) preoccupation will be the circumscribing of that 'knowledge which it is essential for the knower to know'. Needless to say, it does not aspire to offer that knowledge, but only to discover its domain, to point toward that region where essential knowledge may be found.[10]

Earle's title, in this respect, is significant. It is not static knowledge that is essential; it is certain consciousness of, a certain relation to knowledge and knowing, that is essential. The danger I continue to see in the inclusion of the autobiographical section upcoming is the reader's possible excessive attention to the details of the life history. What is crucial is the consciounsess of self and situation to which this work contributes. The details may be interesting or boring to the reader. They must be included, to escape abstraction, to portray concretely an existing individual in self-reflection. The reader is urged to read the section with an eye to what self-self and self-situation relationships it suggests. My aspiration, in a word, is to refer you to yourself. The danger is reification. The words themselves must not be taken for essential knowledge. The analytic section is best forgotten as it is synthesized. The synthetical work means release from identified issues, movement into "new" issues, into a hitherto unlived biographic-intellectual present. (The monographs cease; the new book

begun.) Arrest is just this reification, the excessive fascination with the information itself. One must be willing to leave particular insights if one aspires to movement. What is crucial is not possession of knowledge, but its love.

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Much academic work, in its very conceptual structure, veils it biographic significance. Earle notes:

> What does seem certain is that the natural sciences and certain modes of philosophic thought are virtually designed to make us forget who we are.[11]... Hence the very posing of the question 'What is man?' is itself an invitation to forget who we are; we are not merely examples of that universal category, but chiefly singular individuals existing mortally with other singular individuals, all of us having to choose freely whom we are to become and what we are to do.[12]

While this view exaggerates human freedom, the point regarding the universal is not exaggerated. From a lived point of view, it is self-alienating to regard my experience only insofar as it exemplifies an abstract category. It is a retreat from immediate non-conceptual experience, experience that is sensory or emotional in nature, to experience that is conceptual and derivative. The tendency is toward hyper-cerebralism, alienation from ontological bases of conceptual formulation. Love-making can serve as an example. To regard making love as illustrative of the category devalues it as it thins attention to the immediate sensory-emotive experience. To value love-making involves coming "down out of the head", with its endless thoughts and fantasies, into the body, into the immediate experience of the presence of another. The "scientist", always observing the present as indicative of the atemporal, the universal, misses the particular as consummation of itself. Instead of making love he generalizes. If I view my life as only an instance of middle-class life in general, I will miss my life.

To the extent that educational research imitates the methods and aims of the natural sciences is the extent to which it will fail to realize its fundamental raison d'etre: that understanding that is praxis. Because human phenomena, unlike natural phenomena, are not essentially generic, any methodology which makes exclusive use of generalization is certain to distort. On this point Earle writes:

> There is a second reason why the methods of the natural sciences are the least appropriate to the inner sense of human life. Science as such, and therefore natural science too, aims at something universally true. Its proper subject is classes of things, not things in their singularity. This is in turn a function of its interest in laws or rules. On the other hand, human existence is inherently an interest, choice, and preoccupation with the singular. Human beings first and foremost give themselves proper names.[13]

To the scientific mentality this last fact seems trivial. In this attitude is clear the inappropriateness of scientific method to profound study of human life. One's name is everything but trivial. It is who I am. It refers to my identity independent of social identities: husband, professor, proletarian. If one's identity has not been lost to social role, then these titles indicate aspects of the singular being I am. They become conduits through which I give social form to the unique energy that is each individual's presence in the world. Inverted, however, the name is insignificant; the title is. Legitimation occurs then according to title or role, and thus independent of biographic identity, it functions to dehumanize. In this sense the phenomenon of dehumanization is just this valuing of the concept -- the role -- over the single irreducible being, a being whose historical-biographic designation is his name.

In this context, to remember oneself is to shift attention off one's roles and onto one's name, and to whom the name refers. This shift can mean attention to the body, after all, one's fundamental material manifestation in the historical world. This can mean that the body becomes always present, in background awarness. Such consciousness of body assists the ego to remember its individuality and identity. My life is in significant respect to this body. The duration of my life is bodily. I do not live, at least in this world, apart from it. This is not merely a commonsensical fact to be recalled periodically; it is a fundamental fact of human existence whose relegation to the commonsensical permits delusion regarding the character of human life: that the body is notable only as it interferes with role performance. For the individual not lost to role and abstraction, the

body becomes an everpresent reality, a guide, not only in what can seem a superficial sense of dictating the rhythm of daily life, but as well in shaping that life's character. Intuition, a word usually employed to refer to "inner voice" and "vision", is characteristically associated with the body, not only the head. In some traditions it is located in the solar plexus, an area where the umbilical cord used to be, a cord, literally, to the source of bodily life. The guidance of a primordial "mother" -- intuition -- is often regarded as situated here.

Attention consistently in the head, estranged from other regions of the body, is necessarily estranged from intuition, from guidance. This estrangement is the delusion of living in one's and others' ideas, not in reality, a reality which is profoundly non-conceptual in nature. The conceptual is the instrument by means of which we express this reality, but it is not the reality itself. Confusion of this essential point was K.'s "mistake". His concern was to "be calm and analytical to the end." Reliant only on his social self, on his ideas of himself and social reality, he never apprehended the nature of his case. This "mistake", this identification of reality with his ideas of it, is recorded in the academic efforts of many, capsuled in the epistemological formulation that ideas create reality. Of course, in the deluded state, they do. In actuality, as the phenomenological formulation has it, it is the pre-conceptual (reality) which precedes and informs the conceptual. The conceptual is a tool; for it to be regarded as more is an idolatry. In lived terms, it is our trial.

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If the means and ends of natural science are inappropriate to profound study of human life, what means and ends are appropriate? In answering this question, once again the contingency of the reply must be acknowledged. The delusion that occurs, time and again, hidden it seems in the characteristically strident tone of much theoretical writing, is atemporality. The theoretician answers as if he were at the end of History, as if he were somehow outside it. There is a crucial, modest sense in which one can be. It is the sense in which I can glimpse my life, that I seem momentarily to stand outside it. This is heightened reflexivity. It is the transcendental ego, the perspective that can observe the workings of psychic and social machinery without distorting participation in it. Earle speaks to this point in the following way.

> Even the phenomenon of memory, when sufficiently analyzed, discloses that the consciousness of the past is possible only to that ego ... that is not a series of disjunct episodes, but one that perpetually has one foot in the past and the other in the present. What could do that but a self dialectically divided between time and the timeless?[14]

What is essential to maintain in awareness is that the timeless, transcendental view is necessarily expressed in temporally grounded, historical language. The dialectic is inseparable. I see, in moments, the panorama outside time, but I can describe this vision only in the language of my everyday, limited historical location. So I must use the language that is my language, this historical personage alive in the present epoch, trained in language forms current in the present epoch, in a field in its particular stage of deterioration and regeneration. All this functions to make contingent an answer to this question, an answer that is in its core dialectially transcendental and historical.

Appropriate means by which human education can be studied involve descriptions and analyses of concrete existing individuals in concrete situations. Autobiography and literary forms generally avoid lapse into abstraction and generalization which swallow singular beings. The ends of such study are the understandings which evolve from seeing that which was before hidden. It is understanding which in some measure transcends conceptual comprehension. It is a coming to consciousness which in its essence is praxis. Understanding that is heightened awareness necessitates cultural transformation because it is fundamental transformation of the ontological conditions which permit any given cultural structure. Thus this work is at once political and intellectual. It is research conscious of its relation to historical moment, and grasps reflexively the individual's relation to that moment. It understands that historical movement and biographic movment are inseparable, dialectically related.

This views of means of ends, although stated in more extreme form, is found in THE AUTOBIOGRAPHICAL CONSCIOUSNESS.

> In short, (literature) shows to us to ourselves, not in order to teach something about all men, or to moralize, but simply to show what might have happened. This showing, or pure expression, raises

> human existence to explicit consciousness; and that itself, I am convinced, is the only form of comprehension we can achieve or have any good reason to seek.[15]
> Would it not be more appropriate, then, to read literature of authentic excellence as disclosing that character, decision, and singular situation of the person who is shown in the particular work, and of him alone, and to rid ourselves once and for all of the ambition to transform these singular illuminations of singular existences into tracts for the times, into contributions to some hoped-for general theory of human nature, into teaching, allegories, and all the rest, which only makes us forget who and where we are?[16]

The "illuminations of singular existences" which are a raising of "human existence to explicit consciousness": this indicates appropriate means and ends. The means involves focusing on the singular being; the end is coming to consciousness, a process, as we noted, that is praxis. Authentic political action, action that is not just superficial organization change imposed vertically, is rooted in actual historical movment, and necessarily related to coming to consciousness. But it is not an end-state as the phrase suggests; rather a certain reflective relationship between self and situation.

Three

Method

"Whole, Bright, Deep with Understanding"

While Cremin appears to reduce educational theory to social theory ("...the theory of education is the theory of the relation of various educative interactions and institutions to one another and to society at large."[1]), nonetheless he calls for studies which honor the perspective of individual lived experience. "...it is as necessary to examine individual life histories as it is to examine the configurations themselves. An educational life history focuses on the experience of education from the perspective of the person having and undergoing the experience..."[2] The point is never developed, however. Given the grammar of the sentence, and the focus of the book, this is understandable. One does not "have" or "undergo" an experience, not from the perspective of lived experience. While not strictly equivalent to it, one is experience. To dissociate oneself from experience, objectifying it into a category distinct from oneself, reifying it so that "it" becomes "something" one can possess or go under: such a conceptualization is reflective of the hyper-cerebral, self-estranged perspective of mainstream social science. Developmentally, it is a long journey from an understanding which regards the perspective of experience as an aspect of a theory of education to an understanding that any theory of education is a symbolic representation of experience. The latter understanding cannot be regarded as an "aspect", one "direction' for educational theorizing to take, but as the primary ground of all theorizing, including theories of school and society. From the investigations we have conducted at the University of Rochester, I would insist that any theory of institutions unselfconscious of its derivation from lived experience, from the biographic situation of the theoretician, is doomed to triviality.

Development of this point can be achieved by examining some of its intellectual origins. Such an examination is parallel to Erikson's aim in LIFE HISTORY AND THE HISTORICAL MOMENT.

> It is in the nature of psychoanalytic inquiry that I should apply the very concept which has been suggested for discussion to the history of its emergence in my life and work experience; and that I should do so in some self-analytic detail: for in the way I may also be able to illustrate some motivational dimensions in the formulation of a new idea.[3]

More than "motivational dimensions" will be revealed by such work. In fact, such a characterization of the phenomenon is an inversion. What would be disclosed is the genesis and evolution of ideas in the life history of the theoretician, and in the analysis their function -- psychologically, and comprehensively, biographically --

would be revealed. Life history is never properly in the service of an idea: vice versa. The authentic relation between thought and experience becomes evident in the demonstration of the regressive-progressive-analytic-synthetic method. For now, a description in a sense one step removed: a description of some of the intellectual origins of the method. Then, a description of the method itself, focusing on procedural (although not excluding theoretical) considerations.

Some origins have already been disclosed, i.e., the configuration of themes associated with THE TRIAL and THE AUTOBIOGRAPHICAL CONSCIOUSNESS. Now a focus upon two theoreticians' reflection upon biographical bases of conceptual construction. Their reflection is not systematic, but anecdotal. It is an interest in systematic reflection that led to development of the method. But it was reports of the following kind that provoked the studies that led to the formulation of the regressive-progressive-analytic-synthetic method.

The notion of biographic function of intellectual interests is evident in an unselfconscious way in an autobiographical essay written by John Dewey. "My deeper interests had not as yet been met, and in the absence of subject matter that would correspond to them, the only topics at my command were such as were capable of merely formal treatment."[4] Although Dewey does not comment, it is unlikely he understood this during the time of which he speaks. Likely it is that in retrospective reflection does this situation make itself clear.

The situation is this: there is a certain agenda, an agenda that is at once intellectual, emotional, bodily, one which in a synthetical way I characterize as biographic. This agenda becomes expressed in the socio-historical world according to a complex configuration of forces, including individual volition and choice. Erikson suggests the structure of such a configuration in his discussion of psychosocial identity.

> Psychosocial identity, then, also has a psychohistorical side, and suggests the study of how life histories are inextricably interwoven with history. The study of psychosocial identity, therefore, depends on three complementarities -- or are they three aspects of one complementarity? -- namely, the personal coherence of the individual and role integration in his group; his guiding images and the ideologies of his time; his life history -- and this historical moment.[5]

What is crucial, in my view, is the agenda, for it is this pre-public, pre-categorical pressing of libido that determines in varying but considerable measure, the character of the final biographic synthesis. Today a Dewey might have been drawn to Zen Buddhism rather than to Hegelianism. Historical circumstances alter inexorably, but the biographic "need" for an absolutist perspective remains. Educationally speaking, it is this biographic predisposition that it is useful to focus upon. Through certain forms of self-work the nature of one's biographic movement can be made conscious, and its expression and recreation through the form of academic disciplines understood and participated in more profoundly.

In the passage quoted Dewey's deeper movement was frustrated during the time recalled, and so, symtomatic of arrest, he was absorbed in "merely formal treatment." In another passage in the same essay Dewey discusses what philosophic point of view permitted him to proceed.

> There were, however, also 'subjective' reasons for the appeal that Hegel's thought made to me; it supplied a demand for unification that was doubtless an intense emotional craving, and yet was a hunger that only an intellectualized subject matter could satisfy... But the sense of divisions and separations that were, I suppose, borne upon me as a consequence of a heritage of New England culture, divisions by way of isolation of self from the world, of soul from the body, of nature from God, brought a painful oppression -- or rather, they were an inward laceration... Hegel's synthesis of subject and object, matter and spirit, the divine and the human, was, however, no mere intellectual formula; it operated as an immense release, a liberation.[6]

Thus in a phrase is contained the proper biographic function for intellectual work. Studies that are biographically proper function to provoke movement and release from arrest, a phenomenon recognizable enough to warrant a dramatic word such as "liberation". It is precisely that, a release from blocked movement. So freed, one experiences intellectual ferment, as libido flows, in relative terms, uninterrupted, as is transmutated into thought. It is not that the conceptual system (in Dewey's case Hegel's) acts merely as conduit through

which energy flows. But if intellectual movement is to occur, the relation between system of thought and libido must be dialectical, as both become a sort of "ingredients" then mixed in the creative act into something new, a synthesis of primary experience and secondary experience (thought) which moves the thinker further through his issues, further down his "life stream".

Because his own thought products now have their origins in a life-affirmative, self-extending process, they have the potential to function similarly for others. Of course their precise conceptual content is extremely important. But so is the character of their origin, their function for the thinker himself. The issue at this point is reminiscent of Kierkegaard's description of the knower's relation to what is known.

> When the question of truth is raised subjectively, reflection is directed subjectively to the nature of the individual's relationship; if only the mode of this relationship is in the truth, the individual is in the truth, even if he should happen to be thus related to what is not true.[7]

The veracity of the statement is secondary to the "veracity" of the relationship between statement and he who states.

Also in the Dewey passage is indication of the significance of life history to the shape of intellectual movement. Dewey cites his embodiment of New England culture, his "inward laceration", the intellectual equivalents of which were issues of self estranged from world, soul from body, nature from God. Of course, not any conceptual system would function to heal this fundamental self division. Because Hegel's system wed elements which, thematically speaking, were dichotomized in Dewey, Hegelianism could function in ways that for Dewey were developmentally furthering. Thus it is not only the structure of a given conceptual system -- in this instance the synthesizing nature of Hegel's system -- but as well the content -- the particular thematic elements that were indeed wed -- that permit a theoretical point of view to be meaningful for a particular student. This "fit" betwen life history and conceptual perspective is educational experience. If texts and teachers are not to be oppressive, or of mere technical use, then such a criterion must be constantly employed to determine educational value.

In another interesting passage Dewey discusses what is in effect a psychological function of intellectual interests that, if common to others, accounts in part for the adamancy if not dogmatism that seems to regularly accompany a developed theoretical point of view.

> Probably there is in the consciously articulated ideas of every thinker an overweighting of just those things that are contrary to his intrinsic bent, and which, therefore, he has to struggle to bring to expression, while the native bent, on the other hand, can take care of itself. Anyway, a case might be made out for the proposition that the emphasis upon the concrete, empirical, and "practical" in my later writings is partly due to considerations of this nature. It was a reaction against what was more natural, and it served as a protest and protection against something in myself, which, in the pressure of the weight of actual experiences, I knew to be a weakness.[8]

To the extent one's articulated point of view functions as a balancing weight, one must rigidly maintain its density in order to maintain the balance with the inexlicit native bent. This rigidity is dogmatism.

The emphasis upon the concrete in Dewey's writing balanced the native predisposition toward abstraction, i.e. Hegelianism. The strength of this predisposition is suggested by the strength of his emphasis upon the concrete. As this writer reflected upon this matter in regard to himself, it seemed accurate. In the present study for instance, the contrast between the autobiographical section and the theoretical chapters can be viewed as contrasts between concrete and abstract, and an effort to create balance.

What may be possible, through reflection upon one's work in this light, is, over time, the incorporation in a conscious way of those buried elements which the written work attempts to balance. Native bent can be viewed as thesis; a written perspective the antithesis. Dewey maintained a balance by maintaining a dialectical tension. By maintaining a tension, by his admission; his theoretical perspective emphasized the concrete, the empirical, the "practical" over the abstract, the ideal, the speculative. It is conceivable that through reflexive examination of this dialectic, he could have allowed a synthesis, which, embodied in his writing would have

meant a broader, more comprehensive, more profound point of view.

While one's own achievement may not be regarded as equivalent to Dewey's, what is structurally true for Dewey may be true for any student. Regardless which specific themes comprise the dialectic between native tendency and balancing intellectual interests, regardless the profundity and social value of the dialectic, in terms of the individual's development -- intellectual, biographic -- raising to explicit consciousness this relation between knower and known could have furthering consequences. The method is one strategy by which one might examine this relation between self and knowledge, with favorable developmental consequences.

As the various psychotherapies, perhaps most prominently psychoanalysis, have demonstrated, unconscious behavior tends to be more rigid, less sensitive, less effective than behavior of which the individual is conscious. So it is for utilitarian reasons, as well as developmental ones, that one seeks psychotherapy, i.e. consciousness of the issues in one's life, and some release from unconscious self-injurying "acting out" of these issues. When Dewey writes "Social interests and problems from an early period had to me the intellectual appeal and provided the intellectual sustenance that many seem to have found primarily in religious questions"[9] one expects analysis of social problems and perhaps participation in them to be more shrewd, more understanding than analysis and action without them. Of course, Dewey's comments are in retrospect, and we do not know to what extent he was self-conscious earlier in his life. But this point is as tangential as it is moot. What is central is the possibility that heightened awareness of self, and the relation of self to self, of self to work, and of self to others that accompanies such awareness, can be efficacious in a "practical" way as it is developmentally furthering. Cultivated awareness can function to dissolve intellectual blocks and initiate intellectual movement. That such regeneration is provoked at the levels of primary experience is confirmed in another passage from the Dewey essay. As well, the intellectual equivalent of psychosocial identity is indicated.

> ...I seem to be unstable, chameleon-like, yielding one after another to many diverse and even incompatible influences; struggling to assimilate something from each and yet striving to carry it forward in a way that is logically consistent with what has been learned from its predecessors. Upon the whole, the forces that have influenced me have come from persons and from situations more than from books -- not that I have not, I hope, learned a great deal from philosophical writing, but that what I have learned from them has been technical in comparison with what I have been forced to think upon and about because of some experience in which I found myself entangled.[10]

This passage is significant in several respects. First, aforementioned, it susgests the importance of primary, or in Suzanne Langer's term "actual" experience in intellectual movement and development. Also indicated is the role of secondary, or, again in Langer's word "virtual" experience in intellectual development. It is technical. As Dewey suggests, the technical is important, but derivatively so. Without movement at preconceptual levels, technical competence is insignificant. Intellectually arrested, the technical is self-sabotaging; witness Joseph K. Primary experience by itself is primary experience. To become educational experience it must be made use of. This reflexive process is pointed to in the last sentence when Dewey writes "...but what I have learned from them (philosophical writings) has been technical in comparison with what I have been forced to think upon and about because of some experience in which I found myself entangled." It is crucial not to have only thoughts about thoughts, but thoughts originating in experience. From experience one works to articulate this experience in words and conventional political action. In such self-reflection does experience become educational.

Also in this passage is the suggestion of the intellectual equivalent of psychosocial identity. This is indicated in the first sentence. Also pointed to in this sentence is the "barebones" of the process of identification. One is receptive to others' points of view. (This is suggested in the allusion to the chameleon.) This is important, this receptivity. Ordinarily one observes others categorizing others according to their established, rigidly maintained perspectives, closed to influence. Such "sophistication" guarantees arrest. One must be willing to hold one's own point of view in abeyance and, as Dewey knew, "yield" to another. Regularly, as he describes, one crystallizes what has been assimilated into a consistent perspective, continuous with its thematic predecessors. Intellectual identity, like psychosocial identity, is not properly a frozen phenomenon. There is continuity, but

there is transformation as well. Such movement, as has been described, is not linear, but diagonal as it were. One moves more deeply into repressed material, integrating what was before dissociated and unconscious.

A theory of learning that honors lived experience is also evident in the passage. The dialectic between passivity and agency is acknowledged. The intermittent periods of instability, the conscious efforts to retain something continuous and consistent throughout the flux of experience: this is a description of intellectual development as it is lived. The acknowledgement of the centrality of primary experience and the technical role formal study plays correct the deformed view of learning now predominate in mainstream learning theory. Such corrections become possible when an autobiographical voice is assumed, and from this perspective, one's experience described.

Carl Jung's reflection upon his life and work are also provocative of a theory of lived educational experience.

> My life is what I have done, my scientific work; the one inseparable from the other. The work is the expression of my inner development; for commitment to the contents of the unconscious forms the man and produces his transformations. My works can be regarded as stations along my life's way.[11]

In a more explicitly psychological way than does Dewey, Jung is conscious of the symbolic status of intellectual work. Intellectual movement accompanies biographic movement, both of which accompany commitment to lived experience (of which unconscious content is a major "portion"). Arrest is signified by exclusive attention to the social world, denial and ignorance of the lived world.

The notion of biographic agenda, of a series of tasks and issues through which one must work, or deny and ignore, is embedded in another passage. Jung writes:

> Today I can say that I never lost touch with my initial experiences. All my works, all my creative activity, has come from those initial fantasies and dreams which began in 1912, almost fifty years ago. Everything that I accomplished later in life was already contained in them, although at first only in the form of emotions and images.[12]

Retrospective analysis lays bare a pattern often invisible while one is immersed in it. But to K., lost in role, dissociated from what is individual in him, attuned to only what is common with others, the notion of pattern is meaningless.

To he who attends to himself, an individual path becomes discernible. Jung mentions such a notion in a letter:

> ...all of the books that I have written are but by-products of an intimate process of individuation, even when they are connected by hermetic links to the past, and in all probability to the future... real work is completed in silence and strikes a chord in the minds of only a very few.[13]

This individual route is detectable through cautious examination and understanding of primary experience. Such examination requires solitude and silence. This notion mirrors Kierkegaard's descriptions of the importance of solitude, of remaining alone, in order to hear the voice of God, or in Jung's terms, one's own voice, the voice of the Self.

In another letter Jung underscores the priority of self work, and the possible delusion of unexamined social action.

> ...I quite agree with you that those people in our world who have insight and good will enough, should concern themselves with their own 'souls', more than with preaching to the masses or trying to find out the best way for them. They only do that because they don't know themselves. But alas, it is a sad truth that usually those who know nothing for themselves take to teaching others, in spite of the fact that they know the best method of education is the good example.[14]

Of course, the self-knowing may well choose a life of social service, but it is also true that often those who take upon themsleves a calling to intrude in the lives of others are precisely those who have failed to intrude, or

study, their own lives. Such people are the psychic equivalents of untrained surgeons. At the same time it must be acknowledged that for many it is work with others that is medium through which they work with themselves. The order of meditative work and explicit work with self characteristic of Jung is biographically inappropriate for many. But the fact of appropriate medium is crucial. It is a judgment properly made of one's work. Regardless one's work in the world, ascertaining its biographic function is essential, for oneself and others.

Jung understands that self-study occurs in social context.

> As nobody can become aware of his individuality unless he is closely and responsibly related to his fellow beings, he is not withdrawing to an egoistic desert when he tries to find himself. He can only discover himself when he is deeply and unconditionally related to some, and generally related to a great many, individuals with whom he has a chance to compare, and from whom he is able to discriminate himself.[15]

Self work occurs in social context yes, but this is not to say, with Mead for instance, that human being is finally social being. As we have seen, the individual, like the social scientist, who focuses on what he shares with others to the exclusion of what he shares with no one, is bound to miss himself and others. While it is true that self work occurs in social milieux, it is not reducible to social transactions. What is important about these transactions is their biographic significance. I ask: what does this event, and my response to it, tell me of its significance, tell me about where and with what and whom I should be moving? It is interesting that so-and-so thinks that, but what is vital, from the perspective of educational experience, is the individual's use -- broadly understood -- of that statement. In a general way, it is appropriate to ask, with Eliot: "Why, for all of us, out of all that we have heard, seen, felt, in a lifetime, do certain images recur, charged with emotion, rather than others?"[16]

Our studies indicate an answer. Certain images, certain texts, certain conceptual systems (like Hegelianism) are biographically significant. They function in meaningful biographic ways, i.e. to heal an "inward laceration" through study of a conceptual system which in its structure synthesizes what is dichotomized. Biographic situations differ, in structure and in themes. But the fact of biographic situation, of biographic issues becomes indisputable. Through their study and understanding, one moves into "new space", which then is reflected, as well as created, in intellectual interests. Newman understood at least half the dialectic:

> For myself, it was not logic that carried me on; as well might one say that the quicksilver in the barometer changes the weather. It is the concrete being that reasons; pass a number of years, and I find myself in a new place; how? the whole man moves, paper logic is but the record of it.[17]

Cognition can as well spur the movement, if used cautiously and delicately. Articulation of movement intensifies the movement, as the free associative articulation of images, etc. during psychoanalysis allows material to be released, thereby releasing the patient from a "frozen place.".

Movement recalls the image of chameleon Dewey cited. Yet something -- is it the chameleon itself? -- remains untouched. Discerning the continuity is discerning one's biographic, and its subset, intellectual identity. A danger remains that identification engenders arrest. The emphasis is properly upon the gerund, on moving. Intellectual understanding is important as it affirms movement, to the extent to which enlarges and enriches experience. "(Philosophic discourse)...is a comment on nature and life in the interest of a more intense and just appreciation of the meanings present in experience..."[18] The contemporary emphasis on the truth-value of discourse, its verifiability, is excessive, and distorts the multi-dimensional function of intellectual work. Relatedly, Dewey writes:

> Poetic meanings, moral meanings, a large part of the goods of life are matters of richness and freedom of meanings, rather than of truth; a large part of our life is carried on in a realm of meanings to which truth and falsity as such are irrelevant.[19]

If intellection is reflective of the biographic "place" of the individual, then thought that seems nonsensical to one may well have truth-value for the thinker. Tolsoy understood this point.

> As my body has descended to me from God, so also has my reason and my understanding of life, and consequently the various stages of the development of that understanding of life cannot be false. All that people sincerely believe in must be true; it may be differently expressed but it cannot be a lie, and therefore if it presents itself to me as a lie, that only means that I have not understood it.[20]

Obviously there are limits to this view (the sun shines today regardless what you say), but they are commonsensical ones. The fact of similar meanings, of intelligible experience articulated in dissimilar and at times nearly indecipherable language is acknowledged in the common phrase "I know what you mean." When conceptualization reflects the non-conceptual, the latter remains present, providing a kind of ontological background to the conceptualization. Thus it is sometimes easier to comprehend another's point of view when he is present, and his presence, and his words' place in that presence are discernible. While physically absent, i.e. in writing, it is necessary to convey, through logic, through the rhythm and tone of words, as much of the writer's presence as possible. Then, even if the language is unfamiliar, it may be possible for the reader to say: "I know what he means." The logical understanding is important, but educationally speaking, at least as important is reference to one's own experience. Of course it is essential to be able to render, in the writer's words, the writer's perspective. But equally important is being referred to one's own experience, the experience of the reader, to articulate in his words that which the writer has described. Otherwise, the reader's understanding is merely technical and logical.

> Axioms in philosophy are not axioms until they are proved upon our pulses: we read find things but never feel them to the full until we have gone the same steps as the Author...Nothing ever becomes real till it is experienced -- even a Proverb is not proverb to you till your life has illustrated it.[21]

It is this complex process of situating thought in experience, and understanding its psychological, biographical functions that is one aspiration of the regressive-progressive-analytic-synthetic method. Though overstated, Jung condenses the significance of such situating when he writes: "Experience, not books, is what leads to understanding."[22] Dewey acknowledges this as well, although he says it is experience and books that form the ground of understanding.[23] It is the individual, irreplicable being who, through reflection and action, comprehends this experience. Attunement to primary experience is central; it is the veil which mediates my experience of the world. Olney writes: "It is to that taste of myself that one first awakes in the morning, not to the world. In experience as in logic, a sense of the subjective self must always be prior to a sense of the objective world."[24] That is why "He (Socrates) always brought the inquirer back first of all to give an account of the conditions of his present and past life, which he examined and judged, considering any other learning subordinate to that and superfluous."[25] Not only, I suspect, is this view acknowledgement of the ontologically prior status of primary experience, and of the profound shaping of intellectual expression biographical situation creates, but as well an understanding that what is possible is a "...profound subjectivity that goes so deep that it becomes transformed into an objective vision of the human condition..."[26] For Jung it is a layer of "collective unconscious" that is the intersubjective trans-historical experience of the species which becomes accessible to he who preoccupies himself sufficiently with layers of personal unconscious that he gets through them. In a word, understanding of self allows understanding of others. Of course, even exclusive study of others becomes at some developmental point study of self, as one discerns the subjective origins of one's, say, anthropological research. Whether we start with others or ourselves, at some point we find that we study ourselves. With Montaigne one can observe: "We seek other conditions because we do not understand the use of our own, and go outside of ourselves because we do not know what it is like inside. Yet there is no use our mounting on stilts, for on stilts we must still walk on our own legs. And on the loftiest throne in the world we are still sitting only on our own rump."[27]

In part it was recognition of this fact of "my own legs" that moved me to devise a method by means of which I might come to understand the relation of that fact to my educational experience, and to my intellectual life generally. It seemed that an objective understanding of the issues concerning me would come only through intensive subjective study. At some developmental -- and corresponding epistemological -- point the two -- subjective and objective -- become a dialectic whose synthesis is ineluctable. Simultaneously, I thought of working to extend myself intellectually, in some sense "improving the quality" of my intellectual work, and I became forced to examine the ontological and biographic ground of the work. There is technical proficiency, but without one's own voice, without an intellectual-biographic agenda, such competence is, in the educational sense, meaningless. In the vernacular, I found an expression of this sense.

> You've got to live right too. It's the way you live that predisposes you to avoid the traps and see the right facts. You want to know how to paint a perfect painting? It's easy. Make yourself perfect and then just paint naturally. That's the way all the experts do it. The making of a painting or the fixing of a motorcycle isn't separate from the rest of your existence. If you're a sloppy thinker the six days of the week you aren't working on your machine, what trap avoidances, what gimmicks, can make you all of a sudden sharp on the seventh? It all goes together.[28]

To perfect means to be in a certain relation to self, work, and others that progressively reveals the nature of one's case, which at some point becomes revealed as "the" case. To be perfect means to be in movement, and progressively conscious of movement, its relation to others , to the historical movement. It is what a character in Virginia Woolf's THE YEARS wishes for:

> There must be another life, here and now, she repeated. This is too short, to broken. We know nothing, even about ourselves. We're only just beginning, she thought, to understand, here and there. She held her hands hollowed; she felt that she wanted to enclose the present moment; to make it stay; to fill it fuller and fuller, with the past, the present and future, until it shone, whole, bright, deep with understanding.[29]

Procedure

The past hangs over the present as fog veils a highway. Because it is omnipresent, because we could not bear to live through it, it hangs as if invisible. Only through regression, returning to that spanking in front of the class and the attendant shame, can one live through that pain, discern, as if it were embedded in one's musculature, how it infiltrates the present. So much so that, in significant degree, the past is present. Very generally stated, it seems to be so that to the extent one is unconscious of the past one is caught in the past. One is arrested, developmentally, and, in a sense, temporally. In schools one becomes increasingly identified with one's role as educator, less attentive to educating, and learning. Subtly one gives up one's own voice, and nearly exclusively relies on others, reporting this research then that, perhaps making a summary criticism of it all which cements a psychological and intellectual nihilism, though unclaimed and unconscious. The emphasis is upon form; one judges severely the artless attempts by students to articulate in their own words issues long "resolved" by serious theoreticians. Death hangs in the academic air, obscured by repetitions of life and open inquiry that are in fact only slogans, as true as admissions brochures. The configuration is repression, unconsciousness, role-identified behavior, intellectual and psychological arrest. Like K. the response to one's case is self-sabotaging: increased committee meetings, longer hours in the office, more reading, less time writing and thinking. "Lived experience" become an enigmatic phrase associated with a theoretical alternative.

An initial recognition of this situation is required for work to commence and the situation transformed. Then, commencement, and with work that is by its nature difficult to describe. Structurally, description is possible. Regression, progression, analysis, synthesis. It is work to uncover the genesis, in life history, of the present biographic situation. But thematically, it cannot be described. We find we can both speak of our third-grade teacher, but in our own terms. My hope is to refer the reader to his experience, his third grade teachers; the description of mine is only a provocation. Olney speaks to this function of autobiography. "The act of autobiography and the act of poetry, both as creation and as recreation, constitute a bringing to consciousness of the nature of one's existence, transforming the mere fact of existence into a realized quality and a

possible meaning."[30]

The realization of this quality can come through disclosure of the past, an exorcism in a sense which shifts it outside, there, visible, apart from oneself. This feels as literal as it is figurative. It is as if one sets on the paper in front of one the past inside one's body. Record, beginning with earliest memories, your past in schools. It is essential to return, as much as this is possible, to this past, to allow yourself to be there with your mother as she walks you to kindergarten on opening day, as the teacher greets you, with a warm welcoming smile, or a callous, automatic one. What is crucial is to bring to the present the multi-dimensional reality (visual, tactile, mental, emotional) that was. This is regression. One becomes juvenile, and feels censorship, censorship that often is the present ego's attempt to maintain dissociation and denial of its earlier forms. This censorship spreads to the method itself, becomes resistance to performing self-reflective work at all. Record this resistance, and so bracket it, release it. Record everything that happens while regressing. Recording cultivates the ego's reflexive capacity, or in Husserlian terms, a transcendental ego, a perspective that observes all, and judges nothing. Cultivation of this capacity, this point of view, permits movement. But it is slow and arduous work. It requires commitment to self. What is involved is a fundamental restructuring of one's relation to self, an opening to the contents of one's unconscious, an attunement to one's voice and to articulation of that content and voice. But the easiness of these phrases belies the difficulty, the self-intimidating character, of this work. The attempt at self-transformation initiates profound appreciation of the problematic character of socio-political transformation. Arrest and oppression hang like fog one has forgotten to see, as omnipresent as they are subtle.

The work is not always strenuous. The range of human emotion comes to consciousness: laughter, excitement, pleasure are relived. But the overcast is dense, dark, unsettling. In contrast to the regressive work, the progressive seems lighter, even pleasing. Mediation on what may come, or what one wishes to come, can be as determining a force as what one has been. Perhaps because it is not yet present, because one did not flee from it, deny it, the disclosure of one's images of the future seems, in contrast to the regression, facile and pleasant.

But there is resistance throughout. There is denial of the future, fear of it, a wish to somehow escape it. My view is that flight from the future is associated with capture by the past. My work suggests that work with the past, release from it, allows loosened identification with fear of the future, and allows heightened intuitive senses of where one may go. This recording, transposing in a sense, of what is embedded within, onto the paper, allows increased freedom to choose (rather than be forced to) future options. One's freedom is heightended, and one's responses to unanticipated biographic and historical events are made proportionately more fluid and life-affirmative.

If articulation of past and future is "one half" the task of emancipation from arrest, then an understanding that is absolving and releasing is the other. Thus the opportunity one makes for oneself to examine what has been recorded in the regressive and progressive stages. In a sense it is a return to the ego's perspective, and the ego's necessity to integrate "new" information. Now the task is critical reflection of what has been free-associatively recalled and lived through during the prior steps. It is imperative that this analsis not be a reduction of the primary experience articulated in the regression and progression to static conceptual categories, a restoration of the intellect to its experience-diminishing, pseudo self-aggrandizing position. Fidelity to the quality of experience accompanying the return to the past and inquiry into the future must be maintained. It is the seemingly sophisticated comments of the world-weary intellect that must be bracketed. A new naivete is one hopeful consequence of the work. It must not be lost to the pseudo sophistication of an academically-trained intellect.

The analysis lays bare the thematic connections between present, past, and future. One comes to see themes that endure, and require honoring in ways unexpected and unprecedented. The analysis must be of an order that simultaneously distances and grounds one in experience, making it more present and complete, and discernible and intelligible. This process occurs idiosyncratically, and general guidelines such as these can function to worry more than guide. If the interest and concomitant commitment to educational experience are present, then only this sketch of the method will be necessary.

The synthetical occurs throughout, as articulation of the past and release from it, occurs. As one focuses

upon one's imagined future, one releases material that while buried helped maintain arrest. As one analyzes material one has uncovered remembering past and calling forth future, one achieves an understanding that is at one intellectual, emotional, bodily, and the heightened reflexivity and increased freedom to act engender a state of praxis that is synthesis. Nonetheless, a separate occasion, or series of them, that focuses on integration, on a reconceptualization of one's biographic situation through the lens formed by understanding past and future, can deepen the integration. This process seems to occur "below" states of consciousness and articulation, and words may be sparse. The lived sense of synthesis is unmistakable, however.

The regressive-progressive-analytic-synthetic method is an autobiographic strategy by means of which one may understand the nature of one's life in schools, and the function of school in one's life. It is a research strategy that produces knowledge of the character of lived experience of schools, and so contributes to our knowledge of schools and the educative process. This knowledge is knowledge of the individual, a point of view that insists upon the primacy of such knowledge, and upon the derivative status of generalization and social categories. The method of currere, as I have characterized it in earlier papers, is a research method that is an alternative to those of contemporary social science, not only in procedure but in the order of knowledge thereby produced. It is knowledge that makes explicit the developmental as well as epistemological bases of its production. It is knowledge based in the concrete rather than the abstract.

As well, the method is formulated to engender development in the researcher. It is a method self-conscious of its possible functions in the lives of researchers, the researched, and the academic community. It is a strategy whose aspiration is not only contribution to a "body of knowledge" but a contribution to the biographic-intellectual and thus political emancipation of those who use it. Understood is that the character and probable functions of knowledge have very much to do with the conditions and strategies by which it was produced. Knowledge is in this sense the tip of a socio-biographic iceberg. The character of that tip is in large measure a function of the character of the experience of those who are its creators. This method attends explicitly to the experience of knowledge creation.

What follows is a demonstration of the regressive-progressive-analytic-synthetic method.

Four

Regressive-Progressive-Analytic-Synthetic

Regressive

April 10, 1975 day one

I didn't attend kindergarten.

Mrs. Lawrence was my first-grade teacher (I'm fairly sure). She wasn't tall, and she had lots of wrinkles on her face and on her hands. She must have been on her way to the sixties. That's all I remember from that first year: this vague picture of Mrs. Lawrence, and -- wait -- being in the back seat of a car with her, and she has a bandage on her throat. Her husband had slit her throat, and she came to school with her neck bandaged. Maybe the memory of the car was the end of the year, when mother invited her for lunch.

Now I recall something else, but I can't tell if it belongs to the first year or third. I think it might belong to the third, although I used to tell it in a quasi-boastful way in later years as if it occurred on the first day of the first year. Behind me a seat or so in the row to the left sat a girl I like very much, and she is urging me to throw the paper airplane I have in my hand at the teacher who stands in front of the class talking. I throw it, and the teacher reprimands me, but I am gleeful and unrestrained and throw another. Either with that one or the next, I am sharply asked to remain after school. The sharpness of the command as well as its frightening eventfulness sober me immediately.

After school I am taken to the principal who is informed of my mischief and who telephones my mother to come after me. Then I'm taken back to our classroom where I'm paddled, only a couple of times, but it stings and I'm shocked (my favored status, which I now recall have had, drops to censure). Mother comes, there she is at the bottom of the stairs, arms outstreched, and I run into her big body sobbing.

Second grade.

Her name was Miss Standard, sort of tall (probably 5'9" or so, but then, I was small) and plump, and old, sixty at least. She was tired most of the time, but warm and firm, and I think I liked her.

Third grade.

Third grade was Mrs. Boyd, and I remember her being in the forties or early fifties, tall (taller than Miss Standard), angular, sharper, less motherly, and very fond of me. Her fondness started I think with my mother, whom she either knew or knew of, but ended with me. I became quickly spoilt by it, and when we returned to Huntington for a visit (we had moved mid-year from West Virginia to Emporium, Pennsylvania), I recall being brash, bragging how much more advanced we were in Emporium. As I said it I knew I'd done wrong, although I'm not sure I knew then what it was.

Mrs. Olsen was her name in Emporium but I can't see her. I can see inside the school. I had a locker; it was in the basement. The hallway was old and dark and crowded, and I don't remember having friends. As with the other years, I can remember nothing of what we did all day, all those days of childhood. Yes, I do remember I kept up the piano lessons I'd begun in West Virginia.

Fourth grade.

Fourth grade found me in Pittsburgh, Pennsylvania in the part called Wilkensburg. The school was old and on the hill behind it were coal mines, or what seemed like mines at the time. There were holes that disappeared into the ground, with coal-black stones all about. We changed classes that year, and we moved from class to class in straight lines, quietly. My teachers I don't remember except my home-room teacher, whom I can see indistinctly, as short, maybe 5'5", short hair, slightly masculine. And yes, Mrs. Tipton (we changed it -- behind her back -- to Mrs. Tip Ton and giggled). She was plump, but not too plump. She taught writing, and she liked my writing, in fact I now remember she liked me, which always made me feel a bit guilty for making fun of her name. "You're ready to move on to fifth-grade level work in writing" I remember her saying to me. "Big boys don't fill in the whole space between the lines with their letters. Capitals come three-quarters of the way, and small ones half-way." I was pleased and embarrassed simultaneously, pleased at being rated ready to move to the next level, and unhappy because I wasn't doing it correctly already. I also recall taking geography that year, but the teacher and the curriculum escape me. I didn't do well that year with marks (except for writing, in which I got A and A-), not that Mom and Dad made trouble over it, I don't even think I was aware of not doing well that year. It was several years later, in high school perhaps, that I came across the grade card for that year, and noted it had mostly Cs on it.

April 12, 1975 day two

Light, windows that show a large lawn of grass, and inside, light, bright, talking with others, with animation. Looking over homework papers, comparing grades, a touch of competition, maybe more than just a touch on second thought, A-s I remember getting often, and a smiling, graying Mrs. Minor, midwestern and, now that I focus on her, hurt. She smiled, but even with fifth-graders, she waited a little, to see what would come, if it would be friendly or not. When friendly, and I was friendly, indiscriminately friendly, she smiled deeply, with warmth, but this would leave her quickly. She was serious, understanding, slightly sad and knowing, preparing us (I'm sure she wasn't conscious of this) for what was to come, for what had been her future.

Outside the one-story brick, windowed school, on the worn-out part of the lawn, we played softball and baseball. Behind the school was concrete; I can see circles of us playing what I don't remember. Much energy and excitement, accepting (at least) unaware of social class. Looking forward to summer.

Sixth grade.

Miss Claptom. Near retirement, large, weighty. Very strict, demanding, but with compliance came rewards in marks and in emotion. Mother was very fond of her. She lived in a long block from us, with her sister.

We worked hard, I do remember that. At whatever we did. That was my first year of homework, and I can

see me at the kitchen table, with inadequate overhead lighting, making outlines of the geography text. Still I can see the print and pictures in that book, and I remember the satisfaction of giving myself to a task. A task only slightly mental, a continuing connection to the concrete world as my one hand held firm the text, the other moved the pencil, my forearm on the surface of the table, my eyes on the text, on the writing paper, on the marks made by the pencil, at times to the aquarium to the left, to the fishes' world of free-floating movement. I always got As on these outlines, and eyeglasses for working so long in bad light.

Miss Claptom taught us knitting, all of us. She forced even the most resistant (and these were we boys of course). I sat toward the back on the left side of the room. Across from me to the right sat Margaret Polk, with beautiful blond hair. In knitting her scarf (the class assignment) she used light blue yarn, so much like her, and it became soiled. She made her stitches so tight and small, sometimes the yarn would screech slightly as the needles moved. I can't see the scarf I made.

We played jacks that year. Not all of us, but most. Margaret was really very good at it. I wasn't bad, but then it wasn't good (my first memory of "social pressure" although I don't think I could have identified it so at the time) for us boys to be too good at what the older kids (there were seventh and eighth graders in the same building) made clear was a girls' game.

It was either that year or the one that followed when I got into my only fight, although I stretch the concept of using it. But it was close. Jeff Leight, a smartass if there ever was one, as tall as I but more muscular (he was close to being a "tough"), teased me about my grandmother, who lived with us and to whom I was devoted. I went blind with anger and hurt, and we scuffled for a minute or two, and I think I must have run away. Jeff was ready for a fight; I was stunned by the momentary entrance into a reality I didn't know and was terrified of.

April 15, 1975 day three

Seventh year. The same building, Emerson, old like a castle, I thought, with two spirals over the entrance, brick, a concrete playground in back and a dairy behind that. Robert Pinya I think his name was. My best friend. I remember walking down the hall with our arms around each other's shoulders. We did like each other. He always smelled a little, didn't take many baths I figured, his family was poor. Thin, short, and very good at school. In homeroom we were seated according to the grades we received, and Robert always sat at the front of the first row, usually with all As, although I recall that one six-week period he got two As and three Bs. (I sat almost always at the back of the first row, usually with two or three As, but once I got all As; I was pleased. I remember being self-confident, and not surprised at the performance.) Jeffrey Pandle sat in the front row, always. Jeffrey was incredibly arrogant and snobbish. Thick glasses, aggressive, remarkably sure of himself. Once Mrs. Calder whom we had for a double period (English and Reading I think) called him on it; he was seared with embarrassment. Susan Ninning, tall, solidly built, blond hair, light-blue glasses, also snobbish (due to money rather than intelligence although she had this also), usually sat near the front, at least in front of me in that row. The seating arrangement didn't change much all year.

My classes: Sciences was third period with Mr. Nosner. Neil Nosner, probably six feet, two-hundred thirty pounds, football player-like, in fact he was coach of something. He lived near us in the village; we attended the same church. He always seemed slightly embarrassed by me, now that I think of it, as if he saw something in me I didn't, or something in himself which he projected onto me. Both perhaps. I think maybe that "something" was a certain suggestion of femininity. He was quiet, soft, and gentle, and yet an athlete in a sub-culture where macho was king. (We lived in central Ohio.) Possibly a conflict in him, it occurs to me now.

Geography was sixth period, with Mr. Mansfield, near retirement, tall, slightly bulky, uncontrollably bored now that I see him, a bachelor, with striking white hair. He always sat at his desk, and read from used-many-times notes, nor maybe directly from the book. Strict, and the most painful time of that year happened with him. It was the class after the semester holiday, and he returned our mid-year exams, one important part of which was a map of South America which we had to draw free-hand, with capital cities, major rivers and so on identified. We were seated alphabetically, and he called us one at a time to his desk. I was confident; I like geography and I knew that the map was accurate and that other half of the exam, short-answer questions, I'd known. He called my name, I went up, and there was a B on the paper, a perfect paper from what I could

see, nothing missed on the short-answer part, nothing labelled inaccurately on the map. He said the map wasn't enough, and it was true, it was a bit misshapen. That took ten seconds for him to say so, and I went back to my seat, shocked. After the person then standing at his desk sat down, I got up and went to him with the exam, asking why I'd gotten a B when the exam was perfect, except for the map which was only slightly off. He became angry, and told me, roughly, to sit down. I did, even more shocked, humiliated I suppose. I don't remember if I ever tried to discuss it with him again; when the end of the year came I had all As in geography, except for a B on the mid-year exam.

Mrs. Calder had us for English and Reading. I remember spelling lists; we read stories I suppose, a textbook I would guess, but this is lost. I remember especially the spelling lists, and that she was an easy grader. I sat next to Nancy Moran, and through Nancy I had an emotionally similar (to the one with Mr. Mansfield at mid-year) episode. I was popular with classmates that year. I remember being very, now I would say compulsively, outgoing, and friendly, and went after everyone's approval and affection. With those in homeroom I was nearly universal popular, I think. I say "I think" because I found out through Nancy that I was far from popular with the crowd she hung out with. I recall being, again, shocked and indescribably hurt. That piece of information she gave me, and she gave it gently and only at my insistence, marked the beginning of a slow-to-set-in and I'm still working-to-get-out-of withdrawal, and deeply-rooted timidity.

This fact strikes me now, and I'm stopped, back there. I'll come at it again tommorow.

April 20, 1975 day four

Last night I dreamed about Janet Meloon, Ralph Grambling, and Jeffrey Pandle's name came up. There are people from the seventh year in school, and whom I haven't thought of in years. I met them in a big-city hotel, at an academic meeting. I was sharing a room with my department chairman. I ascribe this dream to the fact that I'm working on this year, and so this material was called to the surface. Its precise psychological meaning escapes me, however.

Seventh year continued. I had my first girl friend in seventh grade. Pam Peck. Small, blond hair, lived in Minerva Park; I can see her now. She smiled a lot, and didn't take herself seriously, yet in a nice, socially comfortable way that seemed like modesty then (although I doubt I knew the word). I bought her a friendship ring, and the friendship lasted much of the year, maybe half. I remember going to my first party while we were together.

Math, seventh period, with Mr. O'Donnelly, who was in his late fifties, overweight in his belly, a war wound someone said accounted for the periodic jerks in his neck, up to his mouth. "Jerks" isn't the best word I suppose, but while tactless it is accurate. His whole head would move; I can see him now. He was very strict and very hard. I studied hard for math class, got an occasional A, but Math was one of the Bs that stayed on my grade card, seating me at the end of that first row rather than closer to the front. At the end of the year I must have been doing well: I recall being selected to be on one of the teams. There were only a few, acknowledgement of accomplishment in his class, who would compete to score the highest on the end-of-the-year exam. Susan Ninning, Jeffrey Pandle and I were one team. We didn't win, and while I worried a bit I would be the one to pull down our score, I recall I came in second behind Susan with the boastful Mr. Pandle third.

April 21, 1975 day five

Eighth year. I see a hall, on the second floor. It was wide. Of course everything was much larger than at Emerson, which was old and small, compared to Hanby, which had been the high school, now given over to the seventh and eighth grades. There were probably five hundred or so at Emerson, and I would guess there were twelve hundred at Hanby.

I was the youngest no longer. Being an eighth grader meant being the oldest in the building.

Just recalled something I hesitate to record. What was common for a couple of months was, during change of class or in the morning before classes began, was to make a fist and strike another in his genital area. The girls pretended not to notice, but some laughed and openly enjoyed it. I remember John C., not especially conceptual, solidly built; he would go on to be macho in high school, with a loud car, and a girlfriend whom he

inpregnated. Anyway, John surfaces in my memory as the most enthusiastic at this, and he hit ... more effectively than anyone, although the rest of us got in memorable jabs once in a while. I think several of us ganged up on John once, and worked him over, in revenge. The practice itself went on for a couple of months I would guess, until teachers put a decisive end to it.

I went part of that year without a girlfriend, but sometime after mid-year I fell in love with Sue Schott. She was tall, nearly as tall as I and taller than most of her girlfriends, and thin, timid and retiring, repressed as I see her now. With Sue I got into heavy kissing and petting ... that takes me off school. School.

Mr. Flagler's science class. I see him, tall, something of a stomach, somewhat good looking, and this I recall because he was obviously aware of it (I wouldn't have recognized his narcissism then). He wore sport shirts (most teachers had worn white shirts and ties), and he wasn't very bright. He would plod on, then become very serious, as if it required all his concentration and energy to explain eighth-grade science to us. We might have done one or two very elementary experiments. It was an easy and dull course. I think I was caught up in puberty that year, and was preoccupied with sexual fantasies.

Being preoccupied brings to mind Mr. Molnar's math class. He was short, maybe 5'9", maybe a little taller, wiry, compact, in body and emotion and intellect. At times he seemed to spit his words out, in a terse way. He was very controlled, and he controlled the class tightly, maybe slightly ponderously. One had the sense he wouldn't hesitate to strike one at any moment, although he never had provocation; in fact I don't think he was angry once all year. I can see him explaining something to do with math and I'm looking at him. He tended to talk seated on his desk, his left leg on the desk, his right on the floor bracing him; he wore sports shirts too. I am sitting there, watching Mr. Molnar, worrying about going to gym and taking a shower, that's it. I was modest then, and a bit chubby, and self-conscious. Several of us are in math class talking a little nervously about taking showers. It would be the first time we had disrobed in school. As it happened, it was considerably more anxiety-provoking in expectation than in reality. I can't remember doing anything in gym, although I recall the physical space where I went with Sue to a dance. I got Bs in Mr. Molnar's class because it didn't really interest me. When I would see him later, he become manager of the local swim club, I would sort of shy away from him, as if, no not "as if", I was guilty that I hadn't done my best for him. He couldn't have been more oblivious to such a thing; he always seemed preoccupied himself, with something more important than math.

Finishing that paragraph I think of Eddie Jones and Jim Ebbefield. Eddie had dark hair, an overly circular mouth--his teeth stuck out when he smiled, and he smiled a lot. He was slightly chubby, but not flabby, almost muscular; and Jim, he was smaller than Eddie (who was shorter than I), tightly built, red hair, green eyes. They went to the same church as did I (Methodist), in the same Sunday school class. Somehow that year I got their ire, although it was playful, until I teased them into seriousness. Anyway they chased me a few times after school, all the way home, which was some distance. Once I teased them into seriousness, and they really were out to get me, and I ran hard, all the way home, and past it, into the woods in the back of my house where I often played. I lost them in there.

Mrs. Pickeringham taught English and History. She was small, about the same height as Jim, and slender, and aging, on her way to sixty. She wore glasses, and often smiled in a... I was going to write "cynical" but I can see her smiling and cynical it isn't, not undercutting; it was knowing. Yes, that's it; she smiled as if she knew, maybe it was a touch condescending, and it was this aspect I first recalled as cynical. When she was serious, which she was maybe half the time, she was quite serious, and sort of humble. I can see her asking a question, and we took it quite seriously; she had power. She placed her desk in a corner of the room, straddling the corner, facing us, and we sat in row (no one put a class in a circle until my senior year) straight and orderly, facing her desk, facing the corner. I don't think it struck me as odd then, but it does this morning. It was indicative of her quiet individualism. I really was very fond of her.

April 22, 1975 day six

The debates. I can remember standing in front of Mrs. Pickeringham's class, arguing for Kennedy-Johnson. I don't recall what arguments I used; I probably got my information from campaign brochures. It was around

that time I was interested in William Jennings Bryan and Woodrow Wilson. Both were sort of heroes to me I suppose, Wilson more (even though I felt some deep affinity with Bryan) probably because he had won his elections, although he would lose later, something more momentous than elections. Anyway, Jim Ebbefield and Eddie Jones, who were in the class also, argued for Nixon-Lodge, and while I was more eloquent, the class voted Republican. It was a conservative community, Westerville.

What else I recall from her class is Edgar Allan Poe. She read aloud to us, with considerable skill. I can see her bending over the book, simulating ... not feeling terror as she reads.

It must have been her history class where we held the debates. I don't remember anything else from the class. Except the text, fat, big, the top half of the cover blue, the bottom gold, and an eagle imprinted over both.

Oh yes, reading. It was boring, SRA, reading this story, answering questions, then onto the next. This color to that; I think purple might have been the top, I'm not sure, but it was the self-competitive aspect that made the course tolerable. The teacher's name and image are gone; I do recall the sex -- female -- and that she was middle-aged.

Mr. Greight. I didn't have him as a teacher, but his reputation among students was so high that I recall taking special note of him. Average height, crew cut, light hair, wore simple on-the shoddy-side clothes. He had a large family, maybe five or six kids. Gentle, warm, timid. When I later took an after-school job at a local pharmacy, he and his wife (more often his wife who was sort of loud, had short hair, odd compared to most women I saw) came in, and afterward I would hear the other clerks describe their situation.

Eighth year was less successful academically than seventh. I think I might have gotten two As and three Bs. I was less happy that year. Nothing precise I can link it to. Might have been the size of the school. At Emerson one knew more of his fellow students. Of course, there had been many I hadn't known, but at least I recognized faces. At Hanby there were enough people so that even by year's end one met, rather saw, many who remained strangers, their faces unfamiliar. My first brush with large crowds, degrees of anonymity, and I think of what was to come: Ohio State and 50,000 students in one spot.

Ninth year, first year of high school. The first scene that come to is a group of us standing by our lockers in the hallway before classes in the morning. Sue, whom I had become more deeply involved with over the summer, Sue Manning, a tall slender not very mental friend of Sue's and maybe Janet Meloon. There were five sometimes six of us together. Now I would say we were frightened, that we stood together in the mornings to fortify our sense of social grounding.

I was frightened, but it had to be done; there was no escape. The most frightening aspect was that we freshmen fell from being the oldest in the school to the youngest, the least developed physically and sexually, the least conscious of status systems. Some of the upper classmen took advantage of it. On the bus one Jim Dudley bullied me. He called me names and shoved me a couple of times. I was frightened, and unable to respond. I dreaded getting on that bus for maybe a couple of weeks. I became so unnerved by it that I discussed him with my father, which was humiliating for me. (Everything in my non-home life must go well, and if it didn't, it was my responsibility.) Dad didn't take it seriously, said it was traditional for upperclassmen to bully underclassmen, and that I would probably occupy Dudley's seat in a year or so. He did say, which comforted me (the future did not), that he would intervene if he didn't stop soon. He advised patience, courage, and friendliness. A day or so later the bus driver announced a seating arrangement. I was incredulous: fate had place me in the same seat as Dudley! My heart sank, but when I sat next to him he ignored me. He was cold and distant, but the bullying was over.

I tried out for the basketball team, which I didn't make. Sometime during that year I had become interested in the sport; I recall reading University of Kentucky coach Rupp's book on the game, and every other book I could get. I also read all John Tunis' novels on Indiana basketball, and all the other fiction I could find in the school and public libraries on the subject. I can see myself spending every study hall I could in the library, looking for new baseketball books, fiction and non-fiction.

Study halls were awful. They were large; I recall rooms 200A and 200B, two large study halls on either side of the library on the second floor. Strict quiet was maintained, and one required a pass to leave, for the bathroom say, and leaving was definitely disapproved of. Two memories: in one of these study halls I was

seated next to someone named Dwayne. He sat in front of me, maybe to my right. On whichever side he wasn't sat Jeannie Scarfpin: pretty, smart, decidedly more mature, one of the "famous" upperclassmen. She was controlled, pleasant, and occasionally she smiled at me, which penetrated and I'd have to say paralyzed me, so that I returned I imagine a rather feeble smile. She would smile a lot at this Dwayne, who was huge to my eyes, probably around 6'5" and 180 lbs., very smart, also famous, handsome, muscular, a letterman in football, basketball, and track. Definitely he was a big deal at our school, in suburban Columbus, Ohio in 1962. I think I must have been even more shy with him than with Jeannie, but for different reasons. I admired him, and I remember consciously wanting to be like him, and I thought if I worked hard I might attain his condition by the time I also was a senior.

Which helped move me to try out for basketball.

April 24, 1975 day eight

I see the gym, filled with us, running mostly, for endurance I suppose. I didn't have much, and recall becoming more tired than I have ever been before, and being surprised at how much my body could take. I was cut fairly early, second cut I think.

Sometime during this year, after listening to the marching band, I decided I wanted to play an instrument, in order to be in the marching band. I began lessons that year (with Mr. Miller), and the next year I made the band, and a year after that -- I confess to feeling a little pride as I recall this -- I edged John Moore, something like 55½ to 54½ in a challenge it was called, from first chair in the band. My motive for taking up an instrument was the marching band, and I chose the alto saxophone as my instrument because Mr. Bleecker had said that was the instrument the band needed most. Interesting that these non-musical motives should evolve into musical ones, and my initial interest in being in a band should become a rather serious interest in music.

Mrs. Wadsley was my English teacher, a young, thin, tall, interesting-looking woman, who smiled a great deal, was vivacious and spirited. She made English one of my favorite subjects. Mr. Detamonth taught General Science. He knew my parents from church, me from church, and he took a personal interest in me, a negative one I must say. As I see him there always seemed a touch of disapproval whenever he spoke and worked with me. He was my gym teacher too, a subject I had trouble taking seriously, except we played basketball, which he and the other physical educators rarely allowed, perversely it would seem, since we loved to play basketball. For some reason -- was it Mr. Detamonth -- I had trouble with General Science, or with, that's right, with the unit on eletricity, which seemed ugly and esoteric to me, and incomprehensible. I feigned interest, and he took me to the locker room (which always smelled badly I thought but which he seemed to like) where he tried to explain the stuff. I disliked those sessions, but felt obligated to pay close and grateful attention, since he was making an extra effort with me.

I cannot remember math, although I must have taken it, or government or history ... I simply cannot recall any of the other courses or teachers. Onto the next year.

Tenth year. A configuration of memories comes immediately to mind as I type that. Mrs. Galt, Mr. Amble, the marching band as we march out onto the lighted football field before a game, Sue, saxophone lessons, Mr. Rice, Mrs. Mosca.

Mrs. Galt is surely the most important influence that year, her name and face bring the strongest emotional response. I can see her, tall, slender, graceful, hair carefully combed and styled, talking to us in her deeply southern voice, about medieval Europe. (Here I lapse into wondering where she is now. I imagine her writing me a letter, coming across one of the books I've edited; she's in New Jersey or somewhere in the Northeast last time I heard, when I wrote her. I was a sophomore at Ohio State then, no, it couldn't have been that year, I was reading and deeply involved with Sartre and Camus; it must have been the junior year. She always had such high hopes for us, for those of us in her honors twelfth-grade government class, which was filled with her best students from tenth year. Now I'm ahead of myself. Funny, I feel I almost miss her.)

Anyway, tenth year, and her history class was very mixed, and as I go back now, after recalling the twelfth-year class, I feel slightly angry, so many of that heterogenuous class didn't appreciate her, although they were

always quiet. I think she must have interested everyone as a woman if not as a teacher. I got As in the class, including mid-year and end-of-year exams. Most of her tests, not all of them, were short-answer.

April 25, 1975 day nine

Tenth year continued.

Mrs. Galt. I see her, standing in front of the class. Now on her desk. Adjusting her contacts, brushing her hair, looking out the window, all the time talking, describing Charlemagne, et al. I am invariably interested in what she says.

The text is fat, has glossy paper, much print on a page, but many pictures too; I find it a bit dry. Maybe she did also. We read it, but she gave complete notes; it was her lectures that comprised the course.

I sat in the front seat, second row from the door, which was to my right as I faced front.

What else that year. Mr. Amble. Fifties, gray hair, pencil-line moustache. Fine features, impeccably dressed. He was sure to tell us he had a M.A. in English from Columbia.

Mrs. Galt's classroom was on the second floor, on the east side of the southeast wing, one room from the end of the hall; Mr. Amble's was on the first, at the end of the northeast wing. I sat next to the windows (which were on my left), Mr. Amble in front of us, seated at his desk. Occasionally he'd stand, and very occasionally write something on the board.

Most of the year he told stories. About people he'd known. Maybe most of them had some sort of moral, some sort of educational significance, but I'm afraid it was lost on us. Nonetheless the stories interested me in some way, and then he was a friend of my parents via the church. For many, however, his class was incomprehensible, and so was he. People made jokes outside his class, and I remember laughing at some of them, and immediately feeling vaguely disloyal. He had the ability to enlist one's emotional support, that is, if you gave yourself to him first. I'd have to say he was snooty and easily ruffled, like an old woman some said.

Perhaps some of this got back to him, but for whatever reasons we spent the last six weeks doing grammar. It was odd, as if suddenly he'd decided we'd done nothing all year. With a fury we did grammar.

I still liked him, in spite of the grammar. (Later, at Ohio State and introduced to structural and transformational grammar I still was bored.) It was -- I don't know -- maybe my parents' influence (they certainly liked and respected him), maybe some desire on my part to be close to a teacher (though I never became close to him), maybe some crazy unhappiness at leaving school: whatever it was I ended up going over to his house regularly the summer afterward, and did -- yes -- grammar exercises in a workbook.

Mrs. Mosca. I didn't take Biology my sophomore year (like "everybody else"); I think Mr. Detamonth left a bad taste in my mouth regarding the sciences, but then I can't say I ever had a particularly good taste for them. And he was one of the two Biology teachers.

Anyway, not taking Biology left an empty spot on my schedule, and in it went General Business. An odd choice at the time, although recent interest in the area makes it a little more understandable. Odd then because the "bright" kids didn't take it, and because I hadn't shown any previous interest in it. I think I took it partly because I knew it would be easy, and I wanted my grades raised (again I was grade conscious after a two-year lapse.).

My friends that year began to change. I still went with Sue, although things had cooled. Now I spent more time with Fred Peck, Roland Tates, and Lee Johnson, also Sharon Hollins, who shared my, rather from whom I developed interest in pigeons, horses, and later, politics. Peck and Tates were very bright, and had finished their ninth year with all As. I had finished with all Bs, maybe one A in something.

I wanted higher marks, and Mrs. Mosca was one teacher who gave them to me. Of course I studied, but the material was easy. I can't recall anything specific we learned, although I can see the text: fat, dry-gloss paper, not much print on a page. The class was made up of vocational students who, as I think of them now, came from the lowwer-middle class. I was then conscious of class distinctions; I do recall some awareness of differences in dress, personal style and a sense of social presence between these students and those in my geometry class, an elective with college-bound students.

Mrs. Mosca was of average height, and always bored with herself. Always dissatisfied; I wonder if she was at all conscious of how pervasive it seemed. Unimaginative teaching, answering already-written questions by going

methodically through the room, student by student, as we sat in rows. I sat in the next-to-the-last row toward the door (on the right as I faced front) and in the next-to-the-last seat.

I didn't know anyone in the class; people weren't outgoing, although even in other classes our desire to know each other was checked by tightly organized classes and quick changes-of-class. I do recall Harriet Mission, short, blond hair, make-up, not very bright (I was becoming conscious of that distinction). She was someone I knew through Sue, in the category of an old friend.

Mrs. Mosca asked early in the year why I was in class. I don't know what I told her, something about being interested. I know I didn't want to be thrown out.

April 26, 1975 day ten

English, history, general business. Ah yes, Mr. Casey and Geometry. Short, crew-cut, brownish skin. White shirts, ties which were too short. Slight belly. Happily married I would guess. It was clear he was satisfied teaching geometry. Mumbled slightly, no, maybe I should say he swallowed his words a bit. It was always as if he had more to say than he was able.

Theorems. Proving them. A "C" either the first or second six-weeks period, and newly grade conscious, I panicked, studied hard, got an "A" next time, then Bs the remainder of the year. The text: I can see it on the table, the top half light red, the bottom white with red lines superimposed.

Theorems were difficult logic for my mind. I couldn't see the point.

I can see the rooms where we met, for Mr. Casey's, Mrs. Mosca's, and for Mr. Bleecker.

Band. It was ninth period. Fatigue at the end of the day. Relaxation, always the temptation to let go too much, with performance suffering. Mr. Bleecker the same, at times his temper gets hold of him; he shouts, face red and (it seemed) with apology.

I can see him there conducting. He wrote notes to himself, and would read them to us. Reminders.

Patsy Mullen sat third chair in the alto saxophone section. I would become interested in her, though not that year.

What else that year? History, English, business, geometry, gym (I don't remember it, but it must have been there). What else?

Yes. Spanish. Did I begin it my freshman year? I must have, having had three years of it, and one of Latin my senior.

Mrs. Farthing. Astonished I'd forgotten her until now. My first infatuation. I can't imagine I omitted her from my account of ninth year.

Mrs. Farthing. Her husband managed restaurants. Short, very attractive to me. My name is Guillermo.

I worked hard in Spanish. In the book, and in class where we worked orally most of the time.

April 28, 1975 day eleven

Español.

I've got a photograph I come across each time I move (it's loose in a box filled with other artifacts from the past): David Birckenbaker and someone else and I playing cards, in Spanish class.

It's hard to recall that specific class, maybe because I did have three years of it, same teacher, same room, and memories are mixed. But it's funny I don't have many images. One from the third year (fairly sure), when I sat nearer the window, and I'm not especially prepared. I don't know the answer to the question I'm asked. David Malikowski answers it, and yes it's David who's the third in the photo with David and me. He sat in front of me.

Mrs. Farthing aroused great loyalty. Doing my homework was nearly an expression of fidelity to her, especially that third year. She was moody and demanding; once she cried, and so much then I wanted to take her into my arms. Not to care about Spanish meant not to care about her.

As I write I have considerable feeling in my stomach. Of tragedy, of caring for wrong things, of resentment. She cooled over the three years, and by that last year she was cold at times. She had -- it seemed remarkable -- bad breath.

She told us of her semester in Spain, in Barcelona I think, of the family she stayed with. There were photographs.

There's more but I don't want to write about it.

Eleventh year. American history, biology, English (Miss Stekel), Spanish III, band, what else?

The English teacher -- what a shock! Miss Stekel was tall, colored blond hair, much make-up, tight sweater dresses which ended above her knees. I can see her breasts still, her thick lipstick. She was quite the actress. Distanced, cool, always slightly sexual. Nonetheless the part was never broken, never lost control, momentary spontaneous laughter quickly subdued, hidden by a hand over mouth and the remembrance of how she wants it to be.

She had been Otterbein College homecoming queen the year before.

Born and raised in New York City.

Handouts, tests, papers. We worked in her class, and liked it. She earned and kept our respect. I got As, occasional Bs, through effort. Fred Peck was in my class; Roland? No, he was with Mrs. Titchner's honors class. (She had a M.A., intellectual, extremely serious, inaccessible.) Miss Stekel and Mrs. Titchner seemed to know who the other was, and regarded each other with respect. That raised our opinion of ourselves as her students. She was constant in her moods. Going to her class would bring me up if I were low; restrain me, make me a little serious if I were exuberant (only occasionally the case).

I was very fond of her. Admired her I think. Felt loyal to her, and wouldn't have said anything disrespectful in her absence.

Biology. Large desks for the trays with dead frogs in them. That was the highpoint of the year: dead frogs with pins in their intestines.

I didn't get Mr. Detamonth, but Mr. Stake. A big, hulking man, like Mr. Nosner, but none of the athletic shadow Nosner had, the earthiness of the locker room blended with timidity and a clean gentleness. Mr. Stake wore very white shirts and bowties, and there was nothing earthy about him. Quiet, gentle, curly hair. His wife and kids probably had the major place in his life. Probably attended a fundamentalist Christian church.

I like him, mildly; he didn't encourage nor did he elicit strong emotion.

Mr. Stake had a subtle sense of sympathy. He knew this course was an important one for us college-bound students. He didn't compromise; he made it hard, nonetheless he had a touch of sympathy for our position.

I was "out-of-phase." Nearly everyone in my class had taken biology in their sophomore year, and we were now, in their junior year, taking Chemistry. Of course I took general business. So this, my eleventh year, found me with sophomores in biology, and I remember being by myself, sort of lonely, and experiencing my classmates as younger than I: a new, interesting, slightly saddening experience.

April 29, 1975 day twelve

American history. I. 1800: Jefferson vs. Burr A Burr ties... Still I can see Mr. Dusken's outlines on the board. Everday we'd come in and the outlines of the book we had, rather, we supposedly had read, were on the board. We copied while we read, with some elaboration.

He was an assistant football coach. Used to be muscular I would guess, but now in his mid-thirties he was mostly just fat, although it was still distributed fairly equally over his upper frame, not collapsed in his stomach.

High voice: repressed I would say now. Small eyes which receded. Frightened and bullying. Sarcastic. A bachelor. Always serious about those outlines, I must admit. Hardly ever strayed. Didn't believe in discussion, but then no one had since I could remember.

Long short-answer tests. I confess to maintain an interest in American history despite him.

I recall marching on the practice field (not much grass left on it), it being a warm autumn afternoon, and I remember the excitement of being in the band mostly gone now, the instrument clammy with sweat, pulling against my neck, Mr. Bleecker angry and shouting. We wanted to go home, but had to practice: the game was only two days away.

Patsy. Well-developed, blond hair, intelligent, sensitive. Sue and I were mostly habit by then, and I almost thought nothing of asking Patsy to the Junior Prom. When I did I was criticized by old friends, and Sue was hurt. She went with someone else.

That year it began to occur to me that high school isn't interminable, nor was adolescence. College and

leaving home became imaginable realities.

Twelfth year. Mrs. Galt comes to mind first. I was invited to be in her honors government class. Made up of the honor society and a few smart but troublesome (hence not elected to the society) favorites of hers.

The mention of honor society: my freshman year, the ceremony of induction had great impact upon me. Just as for pep rallies, everyone in the school meets and fills the gymnasium. Then a short speech describing the importance of the honor society, whose members are elected by the faculty, for intelligence, achievement, etc. I was impressed; I wanted it. I was elected my junior year.

As I think now, seventh year was a sort of apex: good marks, and many friends. I lived in the world the teachers made. Then Nancy, the fall from public approval, lessened interest in marks, focusing on a few friends. "romance", then in high school being harassed by Jim Dudley and the internalization of disapproval. Slow, constant work to regain respect. Election to the honor society represented more than academic success.

May 5. 1975 day thirteen

In Mrs. Galt's class we sat in a circle, the first time in school I recall doing so. Only one text for the year, not the bulky one the other classes used, but Robert Heilbroner's THE WORLDLY PHILOSOPHERS. I still have that copy. She had taken economics the summer before, at Ohio University I think, in anticipation of the class. My guess is that as she moved left in her politics she correspondingly emphasized the economic. It was the first such emphasis in my young intellectual life.

We. I mean they (I kept quiet nearly the entire year) discussed religion also, and John Moore, Harry Simpson and Keith Jackson were atheists, which shocked the rest of us, especially me, active in the Methodist church, and a supporter of Goldwater the year before.

My respect for Mrs. Galt transferred to these people and their discussions. Others come to mind: Dan S., short, red-haired, freckled, Dietra D., Shirley S. maybe Ruth L. I watched and listened mostly, intrigued but distant, not comprehending. This same group met at her house on occasion. This wasn't announced formally, but someone mentioned it. A touch of envy maybe.

Not much though. I had a niche. Roland, Fred, Dennis, soon Judi my girlfriend. I was going to Capital University or to Otterbein College. First chair alto saxophone in the band. A red convertible to drive. That year feels good as I recall it. Parties, being on one's own, dates, necking in parked cars.

I read WAR AND PEACE that year. Late in the year, I began it in March maybe, and finished it in July, in Huntington, where I was helping Dad work on the house mother owned there. It's after graduation; I'm still reading, nearly through. I can see the spot in our house where I read. On the couch: I can feel again the comfort and security of being at home, being in their care, not really on my own yet.

I loved that book. It may be, if I were to list novels according to the pleasure I took in reading them, one of the most important. I've been close to rereading it for years.

What other classes that year. Chemistry. In my bedroom upstairs, listening to "Peter, Paul and Mary", studying for ... is it the mid-year exam? Oh god, just remembered, I cheated on my end-of-year term paper. I copied maybe twenty pages from the BRITTANICA on alchemy (which I had no interest in then, but took a genuine interest in ten years later). It wasn't altogether an uncommon practice then, but it clearly wasn't acceptable to Mr. Pervis, the teacher. Short, slender, not terribly bright, methodical; he seemed to think I didn't quite belong in his class, being a senior. The ambivalence probably went deeper.

Anyway, I studied hard for the course, which came less easily than biology in which I'd gotten a "B", and it came less interestingly, but after a couple of Bs in the first semester, all As, and an A for the year. In fact, I recall I got all As as yearly averages that last year. It was a successful year, and I was pleased.

So much so -- I do want to return to Mr. Pervis briefly before going on to other subjects -- that the following occurred soon after graduation. A Friday evening perhaps, and it had just rained. It had rained hard, and the leaves were still burdened with moisture, the air moist, the sky cloudy and fluid. I found myself walking, dazed: I don't know if I would have talked sensibly had someone stopped and questioned me. I ended up at the high school, and tried to open the doors; they were locked. Shock. They wouldn't open; I couldn't get back in: I was out, I am out. Scenes from the past four years (four years I thought; one fourth of the time

I've been alive) in my head, and panic. Panic that it was past. I pulled at the doors, began crying, my knees bending, sliding to the concrete, crying, shaken. Maybe five minutes passed. Silence. Stillness. I couldn't remember having been that still before, that calm. I wandered back home, the rain still dripping off the trees, the air clean and fragrant. I felt at peace.

Next day I had a psychological explanation that satisfied me. High School had filled my life for four years, and with the exception of a difficult first year, it had been good, very good. Leaving, which coincided with leaving home, wasn't easy. Graduation is too much an empty ritual, too formal and too public to permit private catharsis.

I remember graduation vaguely.

May 5, 1975 day fourteen

The first thing I think of this morning is Mr. Pervis again. I see him, white shirt, the sort that snapped underneath the collar, to make the tie stand out from it. I can see the same dark sport coat he wore everyday, and his thin $6.95 trousers. Why do I remember this about him? Is it my mood this morning? Now I see him smiling, feel his warmth. I think I get mad when I recall him because I thought then (not consciously) and it seems so striking in retrospect, that he was hiding. He was frightened of himself, and kept all that he was and could be under the tight reign of that role, dress, and habit. Being in his class, seeing constantly the flicker of life behind the mask, behind the explanations of the periodic chart, the flicker that reminded me at some level that life had something to do with the viscera, and with something underneath the social forms that filled our lives in the school building. I returned his smiles, more than matched them, automatically, mechanistically. So identified was I then with my contingent, temporary self, my public self, that something truer practically leapt out of me when conditions were right, when they beckoned it. I didn't know then what was happening to me when I responded to Mr. Pervis' humor and warmth, except that it seemed perfectly alright to copy my paper out of the BRITTANICA. It wasn't serious, was it? It wasn't finally true or real, any of this we were doing? Reality lay elsewhere -- but I speak way beyond the self that existed in 1965, and such words would have stumped and frightened me. What I knew then is that I turned in a copied paper, Mr. Pervis knew it wasn't my work, he let me know he knew, reprimanded, threatened me (I think he did; perhaps it was I who suggested I could be dropped from the honor society for this misdeed), and finally pretended it was an acceptable piece of work (below my usual though, a "B") and somehow I was through the trauma of my senior year.

In that class too I was with students a year younger, and in a few cases, two years younger. It was pleasant and, as I think of it now, odd. Odd because I felt freed (again, I'm sure I couldn't have articulated this) from some sort of social responsibility, although what I mean by this isn't clear. Somehow relations with students a year youngers weren't as serious, didn't implicate one as much, or in the same way, as action among one's contemporaries did. (Peculiar that those a year younger aren't regarded as contemporaries.) I remember being freer, more fluid, less concerned how others regarded me, how my behavior affected then, than I was with my peers.

Why? As soon as I ask it, I think of Nancy and seventh grade. The shock of her announcement (that others, the most socially prestigious, did not like me), which made evident a considerable incongruence between my senses of others' response to me and their actual response, drove me inward, watchful behind my public self (which altered to become cautious and reserved) of others' responses. Being with these younger students, with Dan and Mickey (who were in class with me and whom I was friendly with), I was less interiorized.

I've been striving for a balance betwen caution and exuberance since. Unaware of the importance of Nancy and her announcement. Certainly I'd forgotten the history of my social status during those years, apex in seventh, dip in eighth, slow building back to something like an apex in the senior year.

I had Miss Stekel, now Mrs. Moring, again my twelfth years. She remained constant, professional, good-humored, maybe slightly looser. Maybe a bit more difficult in class; I got As and Bs again, mostly As. Beowulf. I can see the text, a survey of English literature. Then Keats and the Romantics in the spring of the year, I not terribly interested, Mrs. Moring slightly cynical. Then Shakespeare, and Mrs. Moring serious; Shakespeare an effort but important.

May 8, 1975 day fifteen

First chair alto saxophone in the band. John Moore, class president, student council president, again placed second, and didn't challenge. He also joined Hi-Y, of which I was President that year. Vice-President of Future Teachers of America, Mrs. Galt the advisor, Donna Willow -- handsome, bright -- was President.

At Honor Society induction I was asked to make a little speech. It was fine at the time; now it seems over-enthusiastic and right-wing.

I took speech class with Mr. Nettles. Young, and to our eyes, sophisticated. He did drama, in fact drama was his major interest. We made different kinds of speeches; I enjoyed these, too much so from Nettle's point of view. He seemed to regard me as in bad taste, but he kept this view reasonably disguised, and it would have been the last thing to occur to me, to call him on it. I had internalized by then the sense that something wasn't altogether right with me. Nettle's judgment didn't seem wholly wrong, just unwelcome. I recall running into him after my brief talk to the student body assembled in the gym for the induction; he smiled in a condescending way.

I was right-wing politically. A close friend during those years, dating back to sixth grade and hamsters, pigeons, and horses (which I kept, except for horses), Sharon and her family were, if not members of the John Birch Society, then certainly sympathetic to it. Like the proverbial water dripping on stone, her mother's perpetual talk turned me from a Kennedy Democrat in 1960 to a Goldwater Republican in 1964. The suburb of Columbus I was coming of age in was conservative politically and of course culturally; my politics weren't peculiar. But they were decidedly to the right of Mr. Nettles'.

The subject I see I've left off is Latin I with Mrs. Cameron. I had had enough of Mrs. Farthing, or enough of my emotions associated with her. I think she'd gotten harder inside, crystallized in more material form, less spontaneous and self-disclosing. Like a rejected lover, my sense of loyalty, and my interest in Spanish, receded.

What interested me about Latin I don't know. Something about the Roman era, and something of the schoolmarm pulled me. Mrs. Cameron was sort of motherly and methodical, and I liked that. She seemed flattered and puzzled that I enrolled. Most of the class were freshmen. She let me go easy. Sometimes -- in the years preceding this would have been unthinkable -- I wouldn't make it to school on time. I'd miss the bus, not often, it was about a mile walk, but I can remember walking several times, handing in forged and genuine excuses, and Mrs. Cameron, after initially looking worried that she was being taken advantage of, smiled and was (or pretended) disinterest. Without much work I got mostly As.

Reminds me, the Latin class does, of the contrast between my first year of high school and the last. The first, every period was tightly scheduled, a sense of anonymity, a sense of oppression (epitomized in the case of Jim Dudley). The last year, the rules were relaxed for me. I could be late for class and not expected to supply a slip; I was excused from classes occasionally, and anytime from study halls (I just never went I think). I can see my standing in Mr. Amble's room (where I had tenth-year English) during fifth period, around the noon hour. Maybe it was my lunch period, and I'd arranged to take it alone. A time of solitude, and in a crowded building it was indeed a luxury.

May 12, 1975 day sixteen

Thirteenth year, freshman year of college. The first image that comes to mind is the dormitory building where I lived that year, then the sidewalk outside it, the campus generally, then the room where I lived, with Fritz and Kit. I'd forgotten about Fritz til now. He was a music student, preparing to teach in public school, from southern Ohio. He didn't seem to take himself very seriously, and while I liked him, I don't suppose I took him very seriously either. There he is standing by the mirror, adjusting his shirt, his tie. Much of the time he seemed to be in front of that mirror, in varying stages of undress. He had a girlfriend back home, very pretty, classically blond. Kit was taller than Fritz, taller than I, with many pimples, a pre-theology student from Detroit. He was very serious about his theology, and it was conservative, which wasn't dissonant with mine for a time, until I fell in with Andy. Andy was considerably more worldly than anyone I'd been friendly with before. Kit and I were close for a time, but as time passed our paths separated, at least that's how I viewed it; he didn't I think, and tended to criticize me.

People. Becky. Susan. Eating breakfast at the refectory with people. My hair grew, which I only remember because I saw a photograph from that year a few years ago. I became friendly with...Haskine, that's not it; I've forgotten his name. Mouhandam is close to his name, and Sherif was indeed his first (this just came to me). We studied geology together, a course requiring unfathomable amounts of memorization. "All nighters" we called them. It's the night before an exam, three a.m., and we take a break to go eat hamburgers at the all-night place across the street. I didn't like geology, but a science was required, and it sounded less unpleasant than biology or chemistry.

Doris. Tall, heavy, lower-middle class, had money trouble, lived in a private house off-campus, sort of sad, ingratiating; we had geology lab together. She wrote once after that year, when I was studying at Ohio State, and she was working to support her family near Akron.

Professor Kurowski. English 101, 8 a.m., M-F, the flunk-out course. Out of eighteen enrolled over half did fail first semester. He was -- I would say later -- "beat", irreverent, post middle-class, political, and in 1965, he was to me from another planet. The inexplicable thing (inexplicable then) was I liked him, from the start.

I had never experienced such earnestness before. I recorded nearly everything he said in class, followed his suggestions carefully regarding writing, and somehow managed to submit adequate work. After an initial B-, I got As. We read American literature; I have my notes still, and in face used them when I taught a survey of American literature at Nassau Community College on Long Island some six years later. The notes are excellent because he was right on target. It is true he was morose and embittered (personally and politically), and that this distorted his vision. But it was the distortion of a generation and a period, and without knowing it, we were getting the kernel of what was happening culturally on the east and west coasts. Professor Kurowski was fired at the end of the year.

The major assignment of the year was the research paper, and the book we all read and on some aspect of which we had to write the paper, was CATCHER IN THE RYE. He was less emotionally involved with it than he was with other works we read; he taught it as if it were a classic: with distance and considerable respect. We all purchased THE CATCHER CASEBOOK, a collection of criticism of the novel.

I sent him a Christmas card the year after, with a brief (very brief, given my timidity) note telling him how important he had been to me, and continued to be.

I went with Sue Washington, pretty, blond hair, from a conservative, though largely happy Presbyterian family in northeastern Ohio.

May 13, 1975 day seventeen

Sue. Home to dinner with me, and our home must have seemed somewhat parochial, though she didn't seem to notice at the time. I say this in light of seeing her family (I think she introduced us) at the end of the school year, several months after we stopped going together. I remember her being passive, polite, cooperative, and soft. And smart. She didn't comment much even when I broke off, although at some point, somehow, she communicated her displeasure.

Becky Cummings followed Sue. Becky was tall, horsy some would say, athletic, president of her dorm, and bright. What I recall about Becky is that she didn't know how to kiss very well, and that she played her hand carefully with me. Some deep change was occurring in me the second half of that first year; she patiently watched and supported it. After we separated for the summer she wrote nearly daily, perfumed letters, carefully affectionate. Unless she underwent a major personality change, she would have made a loving, supportive wife.

We met once after we broke off, sometime early in my sophomore year at Ohio State. She had come to use the library. No, it must have been my third year, because I remember how controlled she had to be. I had been transformed (from her point of view) into a wild-looking hippie, with anger on my face. We exchanged courtesies quickly. I departed, shocked at the distance between us.

May 14, 1975 day eighteen

A tall, gray-haired man, smiling, walking, conversing with student, but looking ahead, at me, into my eyes.

Daren, my alto saxophone teacher. That's how I'd gotten to Capital, with a music scholarship; Daren had said I had promise. (I'd studied with Stuart, his student, while in his high school. One Saturday Stu took me

to Capital, to Daren's studio, and I made some sounds. Not many, as if they hurt his ears. I can see him nodding knowingly.) I recall the day I mentioned to him whatever it was I mentioned that let him know I was no longer a saxophone major. He was angry with me, exclaimed "that's why you have the scholarship!" and dismissed me.

I still wanted to go into politics at that time. I couldn't imagine music as an entry to politics. One day I leveled with myself, told myself I'd have to be a history major, or government major, so I enrolled in an introductory history class with the campus kooky professor (Kurowski was too serious to be made fun of). After hearing that characterization of the history man, I switched classes, my mistake to soon glare at me via Professor B., who stringently read his notes to us, and demanded them back verbatim on exams. I detested him, and away flowed my interest in history.

But my French teacher. Young, French, blushing, charmante. Standing close to me, blushing slightly, saying "ou" over and over, until my lips near hers, and I wanted French, France. I wanted Mrs. S., that is clear now, but motives were muddled then. Instead I switched majors from history to French, and asked about studying in France next year. That's when I was confronted about the music scholarship, which was promptly taken. Hurt, as if rebuked. Immediate plans to transfer. Soon I was awarded a non-specific scholarship for just a little less. But I couldn't be moved.

Was it over with Becky then? Evenings with Andy, and since he was planning to transfer to Hanover College in Indiana, so was I, but he was following his worldliness, I didn't know how to, or was frightened to, so after a visit there (it was lovely, on the banks of the Ohio River, and yes, Mrs. Farthing had gone there), I looked into Otterbein, in Westerville.

But I'm not ready to go to that summer. I recall Mr. Days, not that's not it, but some similarly monosyllabic name. Thin, dried out, like I imagine my superego to be by itself. I was vulnerable to it, and to him. At the time I was still sympathetic to Norman Vincent Peale, though I'd stopped reading him while in high school. I was still "practicing" I think. Well, my first short paper for Religion 101 either dealt with or mentioned Peale, and it came back marked "C" with biting criticism. I was hurt. The details aren't discernible, but what seems clear now is that we were involved neurotically with each other. He was trying to castigate me, and so change me; I was hurt and castigated and changed and resenting it, but due to lack of imagination or autonomy unable to protect myself.

Sitting in the library, looking out the window. A Saturday morning. Autumn. So this is my life I recall thinking. Satisfaction. Again, later in the year, in the stacks, a sense of belonging. Doing what I want. Affection for the university.

Those two moments stand out over all the others of the year. Profound sense of being present. Of being above the everydayness of historical experience.

Fleeting visual images of the stadium, of physical education, simply of being there, the old distaste.

Movies of the first day. The blue Dodge stationwagon, Mom, Dad, my long blond hair, in shorts, smiling, shocked and not knowing it. None of us realizing it was our last day together, as parent and child. I left them psychologically, or began the departure, that day.

I don't remember leaving in the Spring. Everything had changed. Loss of innocence. Avoiding people, feeling rushed, slightly disturbed. I moved myself I think. Back home, to work in the pharmacy where I'd worked as a high-school student, take two classes at Otterbein: French and government.

May 15, 1975 day nineteen

Summer 1966. Working at the pharmacy. It wasn't government, but American history, with Dr. Carr. Only four in the class. I was an auditor. I didn't take the class seriously. He didn't interest me, neither did the texts.

French was interesting. Professor Dickson, whom I told of my interest in French. We saw movies of France, the dialogue was printed, and served as the text. It wasn't challenging.

Otterbein was quaint. I liked that about it, but another part which wanted something else led me into Columbus and Ohio State.

It's early in the Fall, and I'm still working. Professor Dickson phones to ask why my plans had changed --

was it he? It would be two years later before a professor again took a personal interest in me.

May 16, 1975 day twenty

Summer 1966 continued. Writing alternative undergraduate programs in the upstairs study. Majoring in languages. French and Spanish. French and Italian. German and Russian. Writing to graduate schools. In politics. A catalogue from the Woodrow Wilson School at Princeton. Reading a biography of Wilson that summer. He took a summer off from Princeton and cycled in England. I could see him, cycling, grinning, being restored. I think he was a sort of model to me then.

The autumn at Ohio State. I lived a thirty-minute walk from campus, sharing a room with Lee Johnson, a high-school friend, in the home of Don Rosen's (another such friend) aunt, an unmarried woman near sixty.

Being alone in the room, listening to Barbra Streisand sing; I'd joined a record club. I'd bought my first disc a year before -- Vivaldi's Four Seasons -- then more followed, somewhat indiscriminately, though I quickly discovered I liked the Baroque and disliked the Romantics on the whole.

I was lonely. A love affair breaking up: she in school in Illinois, where I visit once. The growing distance between us clearer, and melancholy sets in. I think Bonnie was my first disappointment in love. There was rationality here; I see us in the car, I describing the life I see for myself (active, public, probably political), with emotion (as if disclosing something precious and vulnerable) and Bonnie, shaken a little, almost apologetically, saying that that isn't what she can see for herself, which is a life centered around home, children, church.

Mrs. Stone. A survey of American history. Notes on the blackboard which we copied. But unlike Mr. Dusken in high school, so full of life. Her humor wry. Short, long brown hair, mostly unwashed, in a pony-tail, drab brown dresses, uninterested in everything but the mind and its recreation of American history. I met with her once in December, near the end of the course, on the oval, on the Northwest corner bench, the autumn nearly completely past, and I feeling the oldness and death of winter. Mrs. Stone preoccupied, as she may have been all the time, and I frightened. I think I asked about majoring in history, about graduate study, maybe I asked about the course. She spoke seriously, even respectfully (as if I were capable of understanding her as a peer), and I recall being moved, the part of me that is serious and highminded is the word I think of here, and I felt committed to it, which is to say, history.

French was taught be a graduate student who was uninspired. Drill, reading, a large class (thirty compared to six at Capital and four at Otterbein). I grew bored quickly.

Philosophy 101. Professor Casen. Probably 500 in the old lecture hall. University hall. We read Bertrand Russell's little PROBLEMS OF PHILOSOPHY, which after effort I mastered, something else I couldn't bring myself to work at and which I've forgotten, and Mary Warnock's little book on the philosophy of Sartre. This excited me; in fact I would call this book and Sartre's work my first genuine intellectual excitement. I think of a candle, a lighted candle, and walking in areas of a room I hadn't walked before, or if I had, without light. That was what reading Warnock was like, what being given words for experience heretofore ineffable was like. "Pour soi", "mauvais fois" went through me like knives slitting cloth, and I moved through an opening that hadn't been there before.

May 19, 1976 day twenty-one

A graduate student conducted the Friday discussion meetings of Philosophy 101. He was tall, thin yet substantial, very English, at first glance, possessed. He paced back and forth, the volume of his voice rising and falling as his excitement rose and fell. I remember little of what he said, and I can see the others' faces, slightly embarrassed, frightened he might ask a question.

Due to a college requirement, I took Algebra, my first television class. We watched the TV and a middle-aged balding man scribble this formula, then that one, on his writing board, and we (in a room holding forty) copied intensely. We had an instructor, a handsome woman in her early forties, with a M.S. plus I would guess, a mother of maybe three, whose husband had something to do with the department or the university, via whom she had contracted this part-time assignment. She treated us kindly if not fondly, although she was

consciously distant and "professional" at the same time. I worked hard in the course, but managed only a "B", and not a high one at that.

Health Education 101. Which brings to mind H.E. 301, which I took the following autumn and got a "D" in. But, back to 101. It was a university-wide requirement, and some 500-700 of us sat in this lecture hall lined with TV sets, and watched this -- here I'm tempted to say something uncharitable. Dr. B. lectured as if he were very aware of the size of his audience, and this fact made him feel very important, his listeners unimportant. And because I knew intuitively that I was much brighter than he was or could hope to be, his pretension seemed all the more offensive.

This class was held on what was then the west campus, bringing to mind Pomerene Refectory. Sort of a twenties brick structure, patronized by medical and nursing students, and students from the English and philosophy departments. Inside, dark and cool, and the coffee good. As I remember this I feel warm, contended, slightly excited. I very much enjoyed coming to Pomerene in the afternoon, drink coffee, read, watch others. I was intrigued by the variation, from the white-coated energy and expansiveness of the medical students to the dark-colored clothing and modds of the literary intellectuals. Later that fall I would attend my first meeting of the Committee to End the War, but those fall afternoons I'm not sure I knew where Vietnam was exactly.

Sitting in Pomerene I feel happy, and relaxed. As for my study of others, it wasn't altogether disinterested contemplation of the human condition. I know I didn't realize it then, but I was lonely, and -- this also is only clear in retrospect -- unhappy. I am reminded of sitting in the steam room in one of the men's gyms. That fall life was something of an interpersonal vacuum (Bonnie in Illinois; Lee my roommate not deeply connected). Sitting in a steamroom, hot, foggy, suffocating. I must have gone swimming beforehand; I'm not sure. Sitting in the steamroom, surrounded by other bodies, alone.

I met Jack that autumn quarter. I've been thinking of this since beginning this period of time. The meeting has to be the most important event of the time; I tense when I think of it. I can see him now, dressed dandily, handsome, self-possessed and confident. I night I met him I was on my way to one of the concerts in the great artists' series (all that was left of my musical studies the year before). I stopped by to see Tim, whom I'd known at Capital and who also had transferred to Ohio State. He was studying that night; he was always studying (and on a Friday night), and Jack was one of his roommates. Bill was the other, whom I just remembered and whom I haven't thought of in...maybe six years. I was uneasy that night. Maybe I was aware I was lonely. Jack identified with what I did not. If I were the head, he was the body. I recall feeling intimidated; I was surprised when he told me (a few meetings later) his response to me was similar.

We became close friends quickly. I moved in (they lived in a suite for four) winter quarter. I acquired his habits; he acquired mine. I took to drinking beer, great quantities of beer (and especially great for one who had never drank really, and who came from a non-drinking family), trying to pick up girls, playing basketball regularly. As for Jack, he began to study, and began to enjoy studying, and we began discussing what we read. I think Jack was my first intellectual buddy, the first to share my interest in academic studies.

More than that. Before, I did academic work, it was like a job, somehow estranged from the rest of my life, at least my interpersonal life. With Jeff I was able to exteriorize into public space what occupied me internally, what hitherto had been exclusively a private matter, between me and books. Studying became another order of experience once I found another to talk and listen to, someone who was also interested in examining everyday experience according to what we read and heard in class. I suppose it's possible to date the initiation of the process of finding my own voice, of cultivating my own point of view, to these discussions with Jack.

What did we discuss? History was his major also, and what intrigued us was William Appleman Williams' revision of American history along more economic and inevitably Marxian lines. Then Marx and Engels, and this formed the substance of our exchange for the duration of the friendship. We began attending meetings of the Committee (to End the War in Vietnam); Jeff took an immediate and intense interest. He was my instructor in the history of Vietnam, and I remember listening to him at considerable length. My politics were heading to the left, but not as quickly as his. At the beginning of our friendship, the winter of 1967, I was still largely appreciative of Lyndon Baines Johnson. By fall 1967 I was no longer.

May 20, 1975 day twenty-two

Winter quarter 1967. Playing basketball outside during a summer-like break in the weather. I took four five-hour courses, two in English, one in history, one in introductory psychology, although I'm not sure. At quarter's end -- no, I'm thinking a year ahead.

Winter quarter 1967. Deepening friendship with Jack, continuing discussions and drinking. I think I took psychology.

Spring quarter 1967. A junior-level philosophy course, social ethics, with Professor Casen again. Instead of five hundred, there were thirty. He smelled at that distance, and was boring. The readings were in a text, excerpts from larger works by Hobbes, Bentham, et. al. I tried to write something about social good, and went to see him about it. I can see us, standing before a tall window; he definitely lived in a world I couldn't imagine. From some reason, I wasn't intimidated by him. Perhaps it would have been efficacious to have been; I received a "C" in the course, which deflated my 3.78 average.

It was that quarter I took a graduate-level course in history, the philosophy of history, with Professor Clinton Robertson, a tall, thin man noted on campus for his left-wing politics, and especially his vocal opposition to the war. I'm afraid I didn't connect.

Spring was bright. The sun was bright. Many conversations, filled with fewer abstractions, more personal content. My relationships with my parents were in a critical phase; issues of autonomy/dependence being acted out on both "sides". Conversation with Jack amplified my feelings of autonomy, and clashes resulted. The spring was dominated by the private, the personal, and the academic receded into the background.

That summer I took a construction job at Jack's urging. I'd never done any hard physical work before. Pounding nails in the morning, reading Bertrand Russell (especially his pieces on religion) during lunch. My colleagues were kind and instructive. I was awkward and naive; they initiated me in several areas. The summer was important pyschologically. The adolescent break with my parents was made and maintained. It was extremely painful.

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By autumn 1967, when Jack and I took an apartment together, I'd moved from Goldwater right in 1964 to essentially Marxian left. From conventional Protestantism to atheism.

Fall quarter. Health Education 301. I remember this because the instructor attacked me in class. A middle-aged, vigorous, prototypical central Ohio woman, "wholesome" in that remarkable inverted way only some people in that region can be. It was hard-line, old-time nutrition as well, much meat and over-cooked, neglected vegetables. The conflict came when I contested her negative view of marijuana. She was outraged. It was a class for undergrads preparing to teach in the public schools. (I had changed my mind; rather, decided to hedge my bets. Since my marks had fallen, I wanted an alternative in case I wasn't admitted to graduate school.) I speculate now it was this fact coupled with the anger with which I defended it that outraged her. I wondered if she might try to get me expelled from the College of Education. She didn't, but she nearly failed me. I fulfilled all the requirements, got As on the exams, and a "D" in the course. I regarded myself fortunate.

That course had no intellectual significance. Two courses that quarter did: the philosophy of literature, and Existentialism and Phenomenology, both graduate courses , taught by Robert Grant. He remains my model of ideal professor, which I realize as I write this. What distinguished him was twofold: intelligence and scholarship. No, that's not enough; it was those two, but it was as well his sensibility. How to be more precise. His manner, his articulateness, sense of taste and humor, and underlying seriousness compelled attention and respect. And yet not a finished "product"; rather, an opennes, a willingness to disclose that his, as well as "the", search was still in progress. What was crucial was the question "what is the meaning of life?", still eluded us. As I recall this, I slip back into that class, to the meeting when he discussed that question, asking what order of question it was. First, was it sensical? Is "life" a phenomenon that "has" a meaning? To ask this question, and it is one that is not simply definitional, that's not its motive, is to ask a fundamentally metaphysical and religious question. Existentialism as truncated Christianity. Life is metaphysically meaningless, there is no Christian God; one must take hold of one's own life, project oneself into the world and hence into history, giving historical form to one's life. By the constitution and manifestation of this project, one's biography, one's life takes on meaning. One becomes one's own God, laying out a "divine" plan which gives

importance to individual acts.

Today I realize that the present project has its intellectual roots in those courses. No other question has struck me as deeply as "what is the meaning of life?" I see I have accepted, if only as hypothesis, the Existentialistic, and specifically Sartrean "answer" to the question. Life in general has no meaning; there is no God in the conventional Christian sense. Only Life in particular has meaning, and it acquires this only as one takes responsibility for the limitless possibility that is a life. One creates a form, a fundamental project, and by living this work out, experiences meaningful life.

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In Existentialism I understood Kierkegaard the most easily, and understood Husserl with the greatest difficulty. Nietzsche intrigued me most, but it was Sartre's writing that seemed to speak most completely for me.

May 21, 1975 day twenty-three

It was a Friday night, late autumn, the leaves almost gone. Reading NAUSEA. Feeling present with Antoine. After finishing, I looked up at the reading room in the library, and like the tree in the novel, everything... everything existed. It hung, the blond-haired girl in her seat opposite, her book, her posture all of a piece. whose predominant "characteristic" was presence. Everyone in the room, seated at tables, in reading chairs, the room itself became a totality from which I was severed. Only I had life, and I was stuck, knee deep, in a huge bowl of dough. I wasn't what I saw; I was in it, and I wanted out.

I walked out of the library. Raining, a dark, chilling night. The trees glared at me, the sidewalk vibrated upward to me, the campus oval was a picture I was looking at, and stuck in, but was not. I was not it.

I walked round and round the campus, amazed and slightly oppressed by everything: the buildings, the space between buildings, trees, human beings, cars, all that I saw hung heavily, ready to collapse into a thick paste. And yet, unlike paste, every element of the whole was distinct, worthy of attention, and inexplicable. For several hours that Friday evening, the world was new.

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The other book we read in philosophy of literature that affected me deeply was THE TRIAL. Differently though. I couldn't identify with K. I couldn't empathize with him, as I could with Antoine. I was intrigued in a more mental way, by the image. A trial, life as a trial, and one's life as one's case.

(The conclusion will appear in 3:1).

FOOTNOTES

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The Rough Theatre of Science Teaching
Rationality and Artistry

Roderick Fawns
Melbourne University (Australia)

Graves crystallizes for me the improbability that current science teaching can be an effective instrument of general education.

IN BROKEN IMAGES

He is quick, thinking in clear images;
I am slow, thinking in broken images.
He becomes dull, trusting to his clear images;
I become sharp, mistrusting my broken images.
Trusting his images, he assumes their relevance;
Mistrusting my images, I question their relevance.
Assuming their relevance, he assumes the fact;
Questioning their relevance, I question the fact.
When the fact fails him, he questions his senses;
When the fact fails me, I approve my senses.
He continues quick and dull in his clear images;
I continue slow and sharp in my broken images.
He is a new confusion to his understanding;
I in a new understanding of my confusion.

Robert Graves

Before our science classes we often appear sharpest in the understandings of our broken images and dullest in the confusions of our clear images.

When we look about us for an education whose impact is immediate, for a comprehensive and penetrating pleasure, we see one of the major opportunities and responsibilities of science education in the compulsory years to be effective in teaching "about" science as well as "in" science -- science as an active humanity concerned with basic social values.

The problem is to resolve the conflict between the existence and the essence.

Meaning and relevance we readily concede to be more than just a property of the "new course content" or recommended "approach", and we regularly express concern that the dynamics of the representation are mistaken for the dynamics of the matter to be represented. However, little attention seems to be given in teacher education or research to the developing personal critique of science teaching performance which encompasses social, aesthetic as well as rational values.[1] Like perception, the quality of the performance is felt to be inaccessible, related to previous experience, guided by only partly specifiable clues towards the achievement of a coherence sensed by each of us and only communicated in broken images.[2] In any case, doesn't the artist always rise above the prescriptions of the theorist?

Perhaps, but the use of theory is not restricted to prescription or prediction and it is likely that there is other human experience expressed in non-scientific theories which may at least structure or clarify the problem. Such theories we could predict to be testable against experience but certainly less objectively.

Science teaching which engages compulsory classes directly, often seems to me to bear an affinity to the tradition of popular theatre. This theatre takes many forms but there is one factor that is common -- a roughness. Salt, sweat, noise, smell: the theatre doesn't pick and choose, the audience has to be the cast, the teacher more the director-producer.

If the audience is restive, then it may be more important to confront the trouble makers, or improvise a

joke - than to try to preserve the unity of style in the scene. In the luxury of high-class theatre (form 6 prac. and discussion) everything can be of a piece. In a rough theatre any offering must be used, developed, recycled and reviewed at another level. The arsenal is limitless: the aside, the topical reference, the local jokes, the exploiting of accidents, the tempo, the noise, the relying on contrasts, the shorthand of exaggeration. This popular theatre, freed of unity of style, actually speaks a very sophisticated and stylish language. The class seems, often inexplicably, to have no difficulty in accepting inconsistencies of language, or in darting between realism and suggestion, fact and metaphor.

Here is part of a live script from the rough theatre of a form 3E ("lowest ability") science class investigating nothing less than 'The Nature of Light'.[3]

(Apparatus which includes a light globe and a razor blade occupies the centre of the room)

T	What is this this thing you're calling the light?	)	
	What is it made of? Is it made up of - is it made of liquid, stuff	)	
	like water and runs around the room---	)	Spontaneous use of a
		)	classroom idea - notice
S	Nah! It's solid, it's solid.	)	how it is met to expose
T	It's a solid. Uh? It shines and hits you in the face and you feel it do you?	)	its weakness.
S	No! (chorus) It's a gas!		
	It's like a white powder.		
T	It's a sort of gas, what is a gas made of?		
Davis	Particles.		
T	Particles, what are they called -- anyone know?		
	What are gases -- come on girls -- made of?		
(S	atoms)		
T	These particles in a gas. Who	)	
(S atoms,	atoms) has seen some gas?	)	
S	I have.	)	Levels of Analysis by
S	No one has seen gas.	)	Teacher - complex seeing -
T	You blow againat your hand. You can feel that gas. It's made of um! --	)	concrete resolution.
S	Air atoms.		
S	Hydrogen atoms - gas - atoms Sir! Sir!		
S	You cannot see gas unless you're right in it.		
T	Noble		
Noble	Sir, why can't you see gas?		
T	You can see some sorts of gases.		
S	See!		
T	Right! Hands down.	)	Humour or sarcasm? - at this
Noble	Sir, can I draw the curtains?	)	point it is hard to tell - but
T	Listen, listen that's all you come here for Noble is to draw the curtains.	)	the reflex, the level of response is unexpected -
	(Laughter)	)	paradoxical surprise - ...easy? ... perhaps

T(with measured slowness)	We'll do a special lesson for you Noble. You can come and sit on your own and we'll draw the curtains for you - that will really suit you well - drawing the curtains. Noble, we will draw the curtains but we'll do something more important once we've done it. Now listen - let's go back in time again those 300 years.	)))))	The seriousness of the venture emphasized without confrontation. Noble moves next to the teacher who senses the audience is with him and breaks to establish the illusion.
Noble	Sir, are we going to do something with that chart on light bulbs over there on the wall?		
T	Yes, something on light bulbs. Do you want to go over and read them? O.K.! Off you go (Noble goes over to the chart).	))	Noble breaks back - teacher intends using the whole room as a stage.
T(almost confidentially)	Something about 300 years ago -- To yourself please Noble -- 300 years ago these early scientists didn't have much apparatus but Gino said they 'had good brains.' All they did, they didn't do many experiments but they used to make --	)	A theatre of narrative - no precipices of disbelief to scale - gentle reasonableness. Notice how earlier insights are recycled - progress as in curves - "good brains" - enhances the narrative. Engaged responses?
S	Materials----guesses,	)	
T	Guesses! Yes guesses what's the word for these scientific guesses, not estimates ---- begins with "Th".	))	
S	Theories! Theories!	)	
T	Great! They use to make these theories. Years ago talking about light there were two great men, great people. One of them very famous whose first name was Isaac.		
S	Isaac Newton.	)	The illusion breaker is not confronted - the interjection is turned into an almost serious question. Even the firm response is respectful .... you know it...
T	Isaac Newton. Great. Isaac Newton.	)))	
Noble	He made the light bulb.	)	
T(reflective	Did he make light bulbs? We'll see about this.		
Noble	It says up there ---		
T(firmly)	I don't want to know what it says - you read it you know it ---		
T	Isaac Newton is one of those people like Davis over there who thinks light is made of....	))	Recycles Davis' hunch but new, now it is a 'movement'!
S	Particles		
T	There was another man who lived at roughly the same time.	)	A clever chip - low ability!! funny enough to break the illusion - the teacher now has to move quickly to maintain the sense of the narrative. Look at the question! 'Who believes....?" High risk? And look who offers--enthusiasm focused. Note the essential repetition to associate waves with...Huygens...mainly for Noble.
S	Magnus Pike (laughter)	)	
T	No it wasn't Magus Pike. He was a very important scientist in his day. His name was Christian Huygens. He believed that light wasn't particles but rays like waves. Who believes that light is waves? Who wants to be Christian Huygens?	)))	
Noble	I'll be him. I'll be him.	)	
T	Hands down.	)	
	Given you've had a lot to say and you've said most of it. Noble you think it is	)	

Noble	*Yes, Yes!*	)	Noble is placed on the 'stage' (he actually wasn't sitting). Can Noble do it... or be led to it? Everyone knows its a risk... At least it's a statement - small beginnings.
T	Right stand up Noble.	)	
	Now there were often meetings between the great men and Old Isaac would come along and say Christian you know light is really particles, your thinking is a load of rubbish." What do you think Huygens would say?	)	
Noble	He would say, "No it isn't --- it's made of waves."		
T	Good and you'd say, well I think it's made of particles because --- This is your system. Particles bound around the room and particles bounce around room - go on tell him.		
Davis	Particles bounce around the room.		
T	That's his theory - why do you think it is waves?		
Noble	Because it flows around all the room. If it was particles it would bounce to one wall which would be dark and the other end might be light.		
T	Oh!		
Noble's mate	If it was waves, flow around the room it will be light all at the same time and it will get to the corners as well'.	)	Noble does it! - a magic moment? The teacher in the audience. Davis defends well but Noble has a bigger question. Should the teacher have explained the fallacy in Noble's argument?
Davis	No! No!	)	
T	Good point, good point.	)	
Davis	Light doesn't get to corners.	)	
Noble	Sir - what would happen if the particles bouncing around the room bumped into one another?	)	
T	What would they do then?		
Noble's mate	Nothing just sort of...	)	At this point the teacher and class are lost in the image of colliding particles of light. Look at the questions being asked by the class! Low ability??
T & Noble (speculatively)	Explode! Explode into little pieces?	)	
Noble's friend	Sir, Sir. He say light's a particle but just say it goes to one corner of the room. What happens then?	)	
T	Only one particle?		
S	There may be lots.		
T	There may be millions of particles.		
S	Sir, how long would it bounce around?		
T(now speaking vigorously	I don't know---------Well done! You boys listen great. We'll now go on to an experiment. Well done, Noble, well done, Davis, and our two assistants. A good chat it was. Now my turn to talk - these great men had their followers - these two and others were particle men perhaps these two were wave men.	)	Moving on, while the excitement is there. "Well done...like a football coach, appropriately understated. 'A good chat it was.'

T	If nothing else had been said there would still be these two groups of people today.	)	
	There are not. Something happened.	)	He doesn't tell ... he hasn't at any stage. Should he?
	Someone proved his point.	)	
S	Whose?	)	High engagement as they approach the 'experimental .....proof' and for this also the teacher has
T	I'm not telling.	)	props (simple apparatus in the centre of the
S	I know, it's the wave man's theory	)	room). The girls have said nothing - how do you
T	Listen carefully and we'll see.	)	feel about that?

Notice how script-like the transcript is:

1. There are no long teacher monologues and an attempt is made to give members of the class significant spaces. The teacher is a narrator to the lesson the class is shaping.
2. There is simple, direct engagement between the teacher, the class and the issues. There is one play - not two. The teacher-producer and the class are in the same theatre if not on the same stage! Fantasy and invention are legitimate methods. What is important is that reality be correctly understood and accurately represented and in this area that is a subjective judgment.
3. The whole narrative is convincing because it is complex enough - language stylish yet plain - stylish because it is plain, yet it works at several levels. It has certain epic qualities. It draws its dramatic effect as much from the structure of the content (the relationship between basic ideas/facts/principles) as from the structure of the enactment (scenes, pace, level). The two are separable in theory but rarely in practice here.
4. The coherence of the narrative cannot therefore be summarized in terms alone of externally imposed structures or the quality of the relationships between the teacher and individuals in the class. It is also intimately related to "what" questions around what is worth teaching -- questions of economy and power? There are scenes clearly discernible and meaningful but also powerfully related.
5. The relevance, meaning of the narrative, is that attributed by all participants, individually and collectively. Scientific 'literacy' is certainly being offered but not in any narrow sense for reasons of higher productivity. Relevance can be seen perhaps as a quality of the performance.
6. There is great personal respect and commitment to the learning and enjoyment of the class. It is young teaching - a very high level of intellectual and emotional energy is invested in the lesson. He says what he has to say to particular people, in particular situations, to reach a particular end for particular reasons. He sees the dialectic as potentially dramatic and not just valid.

This analysis of the lesson was made in the partial light of clues or distinctions proper to the dramatic theory of Bertolt Brecht.

Brecht's importance to modern theatre is accepted, Demetz (1962), Gray (1976), Williams (1968), Brook (1977), indeed held to be "conclusive" by Williams in a particular dramatic world - that of the individual against society - represented in three or four great plays - Mother Courage, The Good Woman of Setzuan and the Life of Galileo and the Caucasian Chalk Circle.

What is this theatre's intent? First of all it is there unashamedly to provide happiness - a 'theatre of delight' and any teacher that can give delight has earned her place. Along with serious, committed and probing work there must be irresponsibility. But fun for fun's sake is seldom enough. Brecht's unique aim was to create a precise effect on an audience for whom he had total respect.

The effect he called 'alienation' - an estrangement from what is being observed in order to see it anew but differently to establish more complex seeing. In analysing and separating the object into individual parts, he believed the thinker produces at first merely dissociated elements but he has set a dialectical process in motion and the true recognition of an object hitherto mistakenly seen is only reached when the negation is negated. Brecht's great success as a craftsman of the theatre springs from his ability to represent complex processes and actions in a single memorable "object" or "gesture". "Truth is Concrete" was a sign he had placed over his work table for many years. Bretcht's intention was not merely to make the familiar unfamiliar, but to lead on to a fresh vision of reality in a more real sense. By suspending belief he hoped that the illusion itself would become analyzable.

Alienation, central to Brecht's dramatic theory, also embodies many elements of social criticism - it is apparent in the fact that everything is something different from itself, that my activity is something other than mine. Brecht's theory of the "alienation of alienation" is thus related to, but in other respects clearly distinguishable from the theory of alienation described by Freud and Marx (Israel, 1971).

After long experiment, Brecht created a dramatic form in which men are shown in the process of producing themselves and their situation. The pure naturalist form of theatre, he felt, depended on a single materialist view, in which man discovers the truth about himself by discovering his real environment: the literal presentation of this environment is then a means to human truth. He felt there was drama in showing men in the process of producing themselves and their situations as opposed to discovering themselves in a given situation.

Clearly it's a theatre of consciousness. "Since the audience are not invited to throw themselves into the lesson as into a river, in order to let themselves be tossed indeterminately back and forth, the individual events must be tied together in such a way that the knots are strikingly noticeable. The events will not follow upon one another imperceptibly, but rather they must be able to pass judgment in the midst of them." The parts of the representation, therefore, are to be carefully set off against one another by giving them their own structure, that of lessons within the lesson. (A Short Organum for Theatre 1948).

Such teaching would seldom seem linear nor would it mysteriously grow, its progress would be more in curves, and sudden leaps. The classes would give the illusion of being slower paced, with room to move; they would be reflective given time to talk and compare. The drama is drawn from the activity (including investigations) but mainly from within the narrative of the lesson.

Brecht's theatre proceeds by distancing and demonstrating. What he seized upon was the exclusion of all direct commentary, alternative consciousness, alternative points of view in fact of argument in the narrative in much of contemporary theatre.

Brecht's Life of Galileo is intended as narrative -- rough theatre. As in previous lesson, different levels of meaning are interwoven. In Scene 3 Galileo's momentous act of scientific investigation - is isolated, interruped, alienated by his friend's concern and the paradox of Galileo's (and science's) naivety is seen differently - a more complex seeing.

Galileo: It is proved. The fourth can only have gone behind Jupiter, where it cannot be seen. There you have a star round which another revolves.

Sacredo: But the crystal sphere to which Jupiter is attached?

Galileo: Yes, where is it now? How can Jupiter be attached to anything when other stars circle round it? There is no framework in Heaven, there is no fixity in the universe. There is another sun!

Sagredo: Calm yourself. You think too quickly.

Galileo: Quickly! Rouse yourself, man! What you have seen, no one has seen before. They were right.

Sagredo: Who! The Copernicans?

Galileo: And the others! The whole world was against them, and they were right. This is something for Andrea! (Beside himself with excitement, he runs to the door and shouts) Signora Sarti! Signora Sarti!

Sagredo: Galileo, calm yourself!

Galileo: Sagredo, excite yourself! Signora Sarti!

Sagredo: (turns the telescope away) Will you stop roaring around like a lunatic?

Galileo: And will you stop standing there like a cod-fish - when the truth has been discovered.

Sagredo: I am not standing like a cod-fish, but I tremble lest it may in fact be the truth.

Galileo: What?

Sagredo: Have you entirely lost your senses? Do you really no longer know what you are involved in, if what you see there is true? And you go shouting about for all the world to hear: that the earth is a star and not the centre of the universe.

Galileo: Yes! And that the whole, vast universe with all its stars does not revolve round our tiny earth - as must be obvious to everyone.

Sagredo: So that there are only stars there! And where then is God?

Galileo: What do you mean?

Sagredo: God! Where is God?

Galileo: (angrily) Not there! Any more than he could be found on earth, if there were beings up there and they were to seek him here!

Sagredo: Then where is God?

Galileo: Am I a theologian? I'm a mathematician.

Sagredo: First and foremost, you are a man. And I ask you, where is God in your universe?

Galileo: In us or nowhere.

Sagredo: (shouting) As the heretic Giordano said?

Galileo: As the heretic Giordano said.

Sagredo: That was why he was burnt! Not ten years ago!

Galileo: Because he could prove nothing. Because he only stated it.

A CLUE STRUCTURE TO A CRITIQUE OF TEACHING ABOUT SCIENCE

Perhaps we can review and clarify Brecht's position (although this can really only be done by studying the plays and the critics) by contrasting the purpose and dynamics of his epic-narrative theatre with the dramatic-active theatre which he attacked.

Active Theatre	Narrative Theatre
The Key meaning is in the action - the movements and interactions of the class - often naturalistically portrayed.	The Key meaning is in the narrative - what the teacher and class say and how they describe themselves and the situation- often as historical-social representation
Involves the student emotionally in the stage action	Makes the student an observer, but
consumes his capacity to act by	awakens his capacity to initiate by

Active Theatre	Narrative Theatre
appealing to empathy	demanding decisions from him
offers experience	offers a view of the world
suggestion	argument
the student is drawn into something	he is confronted with something
the student stands inside, experiences with others	he confronts and studies what he sees - thinks above the flow
feelings are preserved	feelings driven into become realization
man is assumed to be predictable if not known	man is an object of investigation
man is unalterable	man is alterable and altering
suspense is awaiting the outcome of the interactions	suspense at the process
one scene exists for another	each scene for itself
growth	montage
linear progress	in curves
evolutionary inevitability	sudden leaps
thought determines being	social being determines thought
dramatic power is drawn from the dynamics of the theatrical representation and the actions performed	dramatic power drawn from the debate from the dynamics of representation and matter represented
exciting, full of action and tensions	slow paced, reflective, giving time to reflect and compare

This is clearly over schematic and expresses more perhaps differences in emphasis. Certain questions now need examination: Are all distinctions meaningful? Is there any coherence in these two forms? Is one closer (clue structure need as a sort of checklist) to the style and ideology of current science teaching under the influence of Piagetian theory, which confers on psychological fact a pseudo-independence from social facts and confers on social facts the appearance of being mere expressions of individual personality (Schwab).[4a]

Such a contrast may be immediately useful in offering one critical framework against which a critique of current approaches to social representation of science - games, simulations, roleplays or historical case studies may be developed.

I believe Layton (1973) is right, science education like the classics, must re-establish itself as an effective instrument of general education by widening its role to include the classroom analysis of the external relations of science, the science-society interface will require a different self-consciousness associated with new theoretical support.[4] However we are bound to experience in the current economic climate continuing attempts to render science education accountable to only a limited number of outcomes. The questions of, who is the audience of science education and who speaks for us, remain. So does the question of whether we mirror society or represent society in the criticism of school science materials (Fawns, 1979).

The Science Masters' Association as far back as 1961 were urging in support of curriculum reform that "Science should be recognized and taught as a major human activity which explores the realm of human experience, maps it methodically but also imaginatively, and by disciplined speculation, creates a coherent system of knowledge. As a human quest for Truth it is much more subjectively human than is often realised. Science is concerned with basic values and is an active humanity". (SMA policy statement 1961). The bid for science as culture has only really just begun, and meanwhile the question of how we value and how we represent this age remains, but hopefully less resistable.

FOOTNOTES

1. One approach to the tacit-reflexive (personal theory building) dimension of pre-science teacher education is presented in a paper presented to the Conference of the South Pacific Association of Teacher Education, 1978, "Theory out of Practice--a direct approach to Curriculum Studies", R.A. Fawns.
2. Science Teacher Education Project (McGraw-Hill 1974) and the Australian Science Teacher Education Project 1976. Materials provide useful external theory in the "Art of Science Teaching" but where is the personal knowledge of the "Performing Art of Science Teaching".
3. The lesson (part only) was recorded at Heathland Comprehensive School in London's western suburbs near Heathrow Airport. The young Physics teacher is in his third year of teaching. The tape is available from S.T.A.V. Services at $5.00 per copy.
4. (a) Look to Vygotsky's "Thought and Language" for a break from the Piagetian nexus, pp. 20-24, M.I.T. Press, 1962.
   (b) Look for example to the Dramatic Theory of Bertolt Brecht variously reported in Williams & Brook and in other places and attacked in Szczesny.
   (c) Look for example at the significant writing of the seventies in the social analysis of science. Exciting times.
   - Markwick, R. - Is Science a form of witchcraft? NEW SCIENTIST, 5 September 1974.
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Reconstructing the Introductory History of Education Course: Childhood, Family, and Schooling

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Since the 1950s, history of education has undergone a series of revolutions in content, perspective, and style. Instead of assuming that educational matters, particularly those related to the establishment and maintenance of mass compulsory schooling, were not worth serious historical investigation, historians began to critically examine the state of educational history. Although devastating, these excursions into the historiography of education by scholars outside faculties and departments of education produced immediate beneficial results. The critiques convincingly demonstrated that new perspectives and assumptions about the nature and function of education were needed to break the historical study of education out of its intellectual rigidities, which by emphasizing chalk and desks, the internal logic of institutions and pedagogical ideas, and school laws, had created a modern morality tale of prejudices, ignorance, and greed, overcome by humanitarian crusades.[1]

The new history of education as initiated by historians appeared at a fortunate moment for many educational historians. The debates over the nature and function of public schooling in liberal democracies had raged on during the 1930s without conclusion. The war years and the renewed international conflict in the late 40s and early 50s had led many young scholars to become disenchanted with the assumptions and concerns that had shaped educational history from its appearance as a professional and academic subject in the nineteenth century. The criticisms and alternatives offered by the historians provided post-war educationists with both a justification and a program for new historical studies of education.[2] This new life was also being breathed into those other areas generally grouped under the term "educational foundations," i.e., philosophy of education, sociology of education, and comparative education.[3]

Besides the desire to move away from old problems and ideas, the new generation of scholars were sensitive to the assessment of their disciplines by the staff in other faculties and by the growing public scepticism regarding the performance of public education.[4] Although scholars in educational foundations could deny any responsibility for the practices of public schools, the fact that their teachers and service and administrative staff were trained by institutions in which they served made the denial sound hollow and self-serving. The demonstration that education, and particularly schooling, could be studied in ways compatible with the highest standards of scholarship suggested a way out of their dilemma, namely that educational history could be assimilated into history and that educational historians (as well as the other educational specialists) could stand in their own right as academic critics of existing educational ideas, practices, and institutions.

The "new" history of education was soon caught up in the storm of social criticism that swept through western societies in the late 1960s and early 70s. This second revolution spoke not the language of disciplinary criticism but rather the rhetoric of the new left. Rather than an academic wasteland, educational history became a meeting place of historians concern with patterns of mass behavior, changing social values and attitudes, and developing institutional forms and practices, and of ideologically committed activitists who sought radical socioeconomic change by unmasking the benevolence of liberalism and by rendering contemptible the most sacred myths surrounding schools and other public instruments of uplift.[5]

What came out of this wedding of scholarly interests and ideology was an often exciting and illuminating scholarship that created the image of the educational historian as radical thinker.[6] In their quest for the societal basis for educational thought and practices, these historians made substantial use of the newest techniques in quantitative history and/or assumptions of the critical approaches in sociology and philosophy.[7]

As a result of this double revolution, many of the topics of conventional history of education, for example, the history of educational ideas, virtually disappeared from undergraduate courses and historical publications, since explanation of collective behavior was deemed more significant than the explication of ideas. But as with many revolutions of thought, the new educational historians, academic or radicals, were themselves overtaken by unexpected circumstances in the form of declining enrollments and stagnating pedagogical technology.

The criticism leveled at public education in the 1940s and 50s had been aimed at the apparent failure to "educate" in traditional ways the growing numbers of youth who were attending schools for longer and longer periods of time. The critics of the 1960s reproached schools and their staff and promoters not for their failure to live up to worthy ideals but because under the cover of democratic and humanitarian rhetoric they worked for the benefit of the powerful by keeping the poor, the working classes, minorities, and women in their places. By an astute mixture of educational opportunity, an ethos of competition, and a psychology stressing the individual's responsibility for personal success, the schools and their personnel had socialized, trained, and indoctrinated people to accepte patently unequitable social and economic conditions as natural.[8]

In either case, the new historian of education could attempt to extricate himself rom the situation by posing as the objective scholar or the social activist who was not one of those responsible for maintaining a clearly failing if not immoral institution.

Unfortunately such a detached stance hardly met the needs or expectations of intending teachers or their fellow students in other faculties. The criticisms of institutions included universities -- and not just faculties and departments of education -- and, to use an expression of the times, if one weren't part of the solution, then one was part of the problem. If schools were failing either to educate in the conventional sense or to liberate in the new left sense, educational historians, who were at least partially responsible for the staff of these schools, were asked to make their discipline relevant to new practical purposes. Increasingly the new educational history, no matter how scientific or radical, failed to provide the relevant answers concerning the daily demands of classroom management, instructional organization, and motivation. In addition, the new scientific nature of educational history with its emphasis on the interpretation of aggregate data seemed far removed from life in the classroom.[9] Finally the radical critics, by questioning the assumptions and results of a century and a half of campaigning for extended and compulsory schooling had rendered problematic their own work since the demographic and social changes of the 1960s and 70s seriously undermined the basis of support for and faith in schooling.[10]

Educational historians working outside the faculties and departments of education have for the moment escaped the charge of "irrelevance" since their students are generally not intending teachers; however, if the general decline in the numbers of students electing history courses continues, then it seems certain that even the most topical and specialized courses will have limited attraction.

Within faculties and departments of education, educational foundations appears to serve a dwindling clientele; and within educational foundations, educational history is frequently judged to have the least to offer in matters essential to the maintenance of schooling. The closing or redistribution of educational foundations departments are frequently the end of history of education courses. If the sole criterion of relevance in teacher education is the advancement of pedagogical technique and classroom management skills, then history of education cannot make a significant contribution to the undergraduate program. Fortunately, most students do not hold such a narrow view of their professional courses. Neither need we concoct contemporary versions of the old nationalistic histories -- although enrollments seem to be holding up best in these areas.

Rather it is out of two new and attractive historical specialities, childhood and family life history, that we can construct viable history of education courses. There is, of course, no idea of conflating educational and childhood/family life history, but rather incorporating the new areas into a specific history of education course.

This approach draws upon the substantial student interest in children, adolescents, and families, which are, moreover, essentially linked to the central institution in teacher education, the school. Although this relationship is conventionally explicated in sociology of education, historical investigation and the linkage promises new perspectives on a range of institutions and practices generally considered essential to an understanding of modern western society. Students of education find no problem in accepting the proposition that because compulsory schooling requires the attendance of children and youth and because the family, or its substitute, is crucial in the development of values, attitudes, and behavior that people bring to the school, an understanding of how these social categories have fared and have been linked over time will provide educators with the means of giving point to their activities and of appreciating more fully the broader significance of their work.

Besides student interest in and acceptance of the relevance of childhood and family history to an understanding of schooling, we have the advantage that childhood, adolescence, and family are dominant themes in the lives of students. Whether in their reading, popular or scholarly, or in their private conversation or in the mass media, the significance of relationships between children and parents in influencing, if not determining, behavior is not debated but assumed. Actions and motives are connected to childrearing practices, to parental love or the lack of it, and to the ways in which individual families interact with society.

Unlike the school -- notwithstanding the importance attached to it by most educational historians, the family and the first two decades of our lives are subject to intense personal concern to almost everyone. A major theme of twentieth century thought is the crucial nature of those years spent at post-secondary institutions in determining one's identity and place in life. Thus, the linking of schools with childhood, adolescence, and family life, will make a prima facie case to students that the subject is relevant to themselves as persons and as teachers.

To restate the argument, it is important to recognize that higher education does not merely provide students with job credentials but also enables them to achieve personal growth or integration. The incorporation of childhood and family life history into educational history promises to tap a profound and perennial human interest which will establish the relevance of history of education.

PROBLEMS OF HISTORY OF CHILDHOOD AND FAMILY

It is now necessary to discuss several major problems in teaching and course organization as identified in a recent survey of psycho-history.[11] A central difficulty arises out of the personal interest that we have in our own childhood, adolescence, and family. We are frequently prone to understand such matters in terms of our individual experiences, thus making the idiosyncratic universal culturally and temporally. Although understanding other societies and times is only possible through the prism of our experiences, the point of history is, at least, to enable us to comprehend our experiences in new ways.

A closely associated problem is the possible therapeutic uses of childhood and family life history. Students and instructors sometimes hopes that such courses will give them insight into their personal experiences and thereby become the means of improving their lives. It was noted earlier that personal development, especially cognitive development, has been traditionally understood to be a desirable result of education; therefore, the issue is not the legitimacy of personal experience in such courses but how it is to be used.

A danger in eliciting private experience is the temptation to work with the emotions often associated with such sensitive matters. Such intervention in the inner lives of students would raise serious ethical problems, namely those of respect for persons, abuse of one's professional position, and tampering with matters outside one's competence. Although such concerns are serious problems, they can be avoided by discipline and sensitivity on the part of the instructor and by a course organization that renders irrelevant confessional exchange.

Even a cursory view of the literature in the new specialities will make the reader aware of the diversity of methodologies and subject matter.[12] The extensive use of psychological models in history of childhood and of sophisticated social scientific and statistical techniques in history of family life poses serious difficulties in organizing undergraduate courses.

Regarding the social scientific form of family history, there is available a well developed technique for introducing students to a critical understanding of such literature. Analysis of sophisticiated statistical procedures and results is usually beyond the professional training of most historians and inappropriate in introductory history courses. Since the essential characteristic of social scientific studies is in the use of theoretical constructions and not statistics, the proper approach to these studies involve the analysis of the major concepts employed to organize and interpret historical phenomena. Although it should not be expected that every educational historian will be an analytic philosopher, there are excellent works that will introduce staff and students to the satisfactions of conceptual analysis.[13] Educational historians are particularly fortunate in that most contemporary philosophy of education courses make extensive use of conceptual analysis and that consequently they may expect many of their students to have some understanding of the approach.

There is, of course, no suggestion that conceptual analysis is easy but rather that with effort and good will even finely wrought social scientific studies can be critically examined and comprehended. Such investigations

both enable us to see the limitations of these studies and to appreciate the ways in which concepts in scholarship and ordinary discourse structure our understanding of reality.

The function of psychological models in historical studies is related to the previous consideration of concepts and to the problem of disciplinary integrity. The importance of psychologists, and especially psychoanalysts, in current research and writing in childhood history means that psychological theories as well as historical studies incorporating them must be introduced to students in an organized manner. These materials are included because they are central aspects of childhood history and without an appreciation of their nature it is impossible to understand the historical work that uses them. As with the case of social scientific history, the key to comprehending psychological models and their significance in childhood history is the analysis of concepts.

In a first course, it is best to assume that students will have had little experience with either historical or psychoanalytic materials, which, therefore, must be introduced in a carefully limited manner. As an optional course in a program for intending teachers, its purpose should not be to train historians or psycho-historians or psychologists, but to provide students with sufficient knowledge and analytic skills for reading psychologically-oriented history profitably.

Some psycho-historians have argued that specific psychological models are indispensible to childhood and family history, and that consequently courses must be organized according to a given psychological perspective. In his important study of the teaching of psycho-history, George M. Kren has observed that "to begin a history course with a theoretical framework is strategically self-defeating, if not methodologically unsound."[14] The unsoundness results from a mistaken emphasis on what should be a small part of historical inquiry in an introductory course and from a belief that specific psychological models and theories are indispensible to research in childhood and family history.

To read psychologically-oriented history effectively, students must understand the major models that historians and psychologists-turned-historians employ in their work. This does not assume that the models are "true" or that they are the only ones that might be used historically, which, of course, effectively eliminates the claim that a specific model is indispensible to the historical study of childhood and family life.

A more controlled introduction is secured by the use of lectures describing the principle psychological theories being used by historians who are working in areas relevant to both childhood/family history and educational history and by readings that illustrate the results of combining psychological models and historical inquiry.[15]

Students need to understand the manner in which childhood and family history relate to broad academic and popular interests. Contemporary interest in minorities has extended beyond the traditional fields of ethnic, linguistic, and religious studies, to include the "mute" of history, i.e., the poor, the oppressed, women, and children. The development of quantitative techniques for collecting and systematizing descriptive data about past collective lives and behavior has generated new materials for historical interpretation.

The history of childhood and family raises an interesting problem in historical theory, namely that, on one hand historians are concerned with public events and institutions, while on the other hand, they are convinced that there is a crucial relationship between the experiences of children and their actions as adults. The common sense view that the experiences of children and youth are linked to adult public behavior does not offer much assistance to the historian. What is needed is a theory that postulates logically consistent and plausible connections between earlier and later periods of individual human life and then a model that demonstrates how thost "dynamic interconnections" function to relate private experience and public events.[16] It is not necessary, and indeed seems a mistake to this writer, to assume that the theory and model are "true" anymore than the historical knowledge, i.e., interpretation, thus constructed is true. From this perspective, historical knowledge is at best convincing, usually plausible, and, of course, always open to revision.[17]

Whatever the model and theory, an adequate historical study requires explication of the assumptions concerning human nature, motivation, and cause. As difficult as it may seem, a tightly organized course integrating childhood, family, and educational history, can provide the systematic introduction postulated above.

THE COURSE

A pedagogically sound introduction to the relevant portions of childhood history can be provided within a relatively short time. That this is possible is based on the principle that only the really signfiicant theories require explication. At least in North America only three models of childhood have gained major historical attention and, therfore, it is possible to limit our study to the works of Lloyd deMause, Erik H. Erikson, and Philippe Aries.[18] Besides any interpretative power of their models, these scholars represent positions that have generated a wide range of studies both supporting and disputing their views. The richness and subtlety of their arguments offer exciting and conflicting explanations that demonstrate to students the potential of historical study.

MODELS OF CHILDHOOD

In the matter of integrating historical interpretation and models, half-way measures are self-defeating. The most ambitious and bold model, and thus the most apt to arouse student interest, is deMause's "psychogenic theory of childhood." An historical interpretation of heroic proportions, it argues that "the central force for change in history is neither technology nor economics, but the 'psychogenic' changes in personality occurring because of successive generations of parent-child interactions."[19] The interactions produced successively six historical modes of childhood, child-rearing practices, and adult psycho-types, that are marked by rising levels of sensitivity and care.

In postulating his psychogenic theory, deMause has made the most vigorous case for the centrality of childhood experience for understanding public events. Combining the grand scope of his theory with an energetic exposition and determined logic, deMause's model offers a clearly stated position that can be effectively used to demonstrate the function of "cause" and other central concepts in historical understanding. Although deMause's own writings are limited[20] (thus allowing students to conveniently read them), his activity has made him a central figure in a network including a journal, a press, and an institute. These agencies, under deMause's leadership, have produced a sizeable literature that generally supports his views on a wide range of issues.

The crucial aspects of the introduction to the deMausean model are a straightforward presentation of the theory, assignment of appropriate readings, and explication of the function of concepts and evidence in the interpretation. The total historical scope of psychogenic theory, i.e., from the beginnings of human life to the present, provides a background against which the more limited models of Erikson and Aries can be placed.

Although grandly historical, the psychogenic theory is essentially psychological and developmental and, thus, is best followed by the work of Erik Erikson. The Eriksonian psycho-social theory of personality development is non-historical in that it is concerned with the manner in which individual confront and understand their worlds and thereby acquire some sense of dignity, worth, and competence. Instead of historical stages marked by childrearing practices and adult psycho-types, Erikson postulated an eight-stage theory of individual development. In traversing a series of life stages, each with it own characteristic conflict, crisis, and potential growth, the human organism confronts people and institutions that are in principle read "to make him part of an ongoing cultural concern." There can be no fundamental gap between man and institutions because "the human life cycle and man's institutions have evolved together."[21]

The essence of the Eriksonian psycho-social theory is that the developmental stages hold universally without exception as to time or culture. The applicability of the theory has attracted historians in search of means to give greater scope and interpretative power to highly personal evidence from childhood and family life. The linking of life stages and institutions allows for an interaction of psychological development and cultural conditions resulting in the emergence of specific personality traits. Consequently, specific cultural and historical factors work as general limits to the ways in which the crisis and growth of each stage are resolved.[22]

These limits are, of course, quite broad and not impenetrable, which allows for both a significant range of human personality within a particular culture and historical moment and for the emergence of great men who symbolize the central issues of their time and place by providing new understandings and solutions. In this light, Erikson's concern with great men, e.g., Luther and Gandhi, can be understood as both an attempt to see how central crises are resolved in individual lives and how these resolutions represent patterns of contemporary

behavior and perceptions as well as portents of future configurations.

There is little need for an extensive introduction to Erikson's work. Lectures explicating the psycho-social theory of personality development and restricted readings are sufficient preparation for the application of Eriksonian theory to historical evidence and for the examination of historical studies based on the theory. The historical scholarship may be drawn from either monographic or journal articles. In the interest of economy, one or two required articles with a short bibliography of books available in the university library provide an introduction to the use of Eriksonian theory interpretation.[23]

Since a major objective is to initiate students into historical analysis and synthesis, the historical studies examined must clearly contribute to this process and should not be so extensive as to detract from it. Once the Eriksonian model is introduced, data used in the deMausean studies can be placed in it. To the extent that different conclusions can be derived about the same evidence, this procedure serves to related purposes; first, by demonstrating the importance of assumptions in historical interpretation, it aids students in understanding the nature of historical knowledge; and secondly, it provides a practical initiation into historical analysis by examining the logical consequences of assumptions.

A useful pedagogical move is the use of short extracts, from a variety of sources -- historical, psychological, biographical, and anthropological. These extracts may be co-operatively analyzed in class. If we claim that analytic skills are acquired, then we must provide the opportunity for their acquisition. The opportunity should include examples of analysis in scholarly writings, classroom demonstrations of analysis by the instructor, and student analysis. The class-as-group analysis may be supplemented by dividing the class into small analytic units (approximately six students) that are responsible for the analysis of different extracts. Where possible, the instructor must be able to work briefly with each group in order to establish the procedure in analysis. At the conclusion of the group work, the students are then brought back to report on their work. Given experience and some initial success in analysis, students can be expected to examine concepts and written material critically without constant encouragement.

The extracts can be used with deMausean theory separately to illustrate the essential characteristics of each childhood mode. Despite the force of deMause's writing, establishing that a particular pattern of actions or a body of pedagogical or childrearing views represents a given mode requires considerable analysis and explication. Materials drawn from literary and biographical sources offer opportunities to clarify the main ideas of the psychogenic theory of childhood and to demonstrate how the theory can be used to give significance to discrete pieces of human behavior and languages.[24]

With Eriksonian theory, the personal experiences of students become relevant. Since Erikson constructed his psycho-social theory out of clinical and field work with the ill and the normal of society, his ideas are part of the students' world. Its focus on personal concerns such as identity and intimacy has the potential for disturbing students and must be approached in a disciplined and sensitive manner. Despite the possible dangers, personal experiences are especially pertinent to comprehending Eriksonian theory because they are the concrete examples that give life to theoretical abstractions. The use of personal experience is justified pedagogically in this context as a means to achieving the cognitive objectives of historical understanding.

With the psychogenic and the psycho-social models mastered, students are prepared to appreciate how models of childhood allow for substantially different explanations of the same historical data. For example, the common practices of wetnursing and swaddling babies and of apprenticing young children are seen as forms of abandonment by deMause. An Eriksonian reading of the evidence could lead to quite different conclusions. Since children were unswaddled within twelve months and since the crisis of the first life stage (oral-sensory) is trust versus mistrust, the practice should not retard psycho-social development. The security and containment of swaddling might be conducive to a sense of "consistency, continuity, and sameness of experience" that fosters the development of hope, the basic virtue of this initial life stage. Furthermore, only in the second stage (muscular-anal) does the issue of autonomy, which might be connected to exploration and initiative, become crucial. Consequently, the prevention of movement need not be viewed as psychologically retarding but could be seen providing a familiar and protective environment.

As for wetnursing, this practice in the early modern period was obviously beset with major dangers for children, and it is possible to see these as either abuses of the practice or the results of endemic health

conditions. The more cynical reading of the evidence by DeMause and Hunt can be balanced by placing the practice within the framework of the Eriksonian life cycle. As with swaddling, wetnursing falls principally within the first life stage. Although Erikson stresses the mother's role in fostering the initial social development of the child, the role is not necessarily limited to the biological mother. The key to the relationship is the provision of sustenance and care that enables the child to grow in a sense of security and regularity of life.

In the case of apprenticeship at age seven, this would coincide with Erikson's fourth stage (latency) with its stress on industry and the development of competence when the human organism is first ready to master tools and to engage in socially significant activities. It is also the time at which all societies provide some systematic instruction for their young. In this manner, the Eriksonian theory can be used to construct alternative interpretations of historical data, and students come to understand that historical knowledge is not founded upon verities but is a construction of experience known as interpretation.

It is generally unnecessary to do this comparative interpretation for the students, who now thoroughly immersed in the process and the theoretical frameworks, make such observations themselves. These contrasting interpretations are examples of the group and individual activities possible. As in the earlier effort study sheets of extracts are employed to structure and guide students in their work. Moreover, with curiosity aroused, many students enrich the course and the discussions with new information that they have themselves sought regarding certain childrearing practices and the various historical conditions and cultural circumstances which might offer alternative ways of explaining them.

Students are now ready to tackle Philippe Aries and his cultural relativist model of childhood.[25] CENTURIES OF CHILDHOOD requires detailed classroom analysis especially given the often difficult nature of its material. Aries organized his historical investigation into the transformation of western society between the late Middle Ages and the eighteenth century around the "concepts" of family, childhood, and adolescence. Aries argued that since the Middle Ages western society has been characterized by a growing separation of age groups, family units, and social classes. Related to the growing societal distinctions in matters of wealth and power, Aries saw a radical transformation of another institution, the school, that allow for the changing sentiment about family and children to take new and powerful forms. The retreat of the family from the network of social relationships that had been the essence of medieval society and the rise of a perception of family life that stressed romantic and parental love were made possible by the creation of the "new" school which shared these norms and values. Thus the three transformed institutions -- family, childhood, and school -- supported and enhanced each other's essential characteristics.

The underlying assumption in Aries thesis is that our world is socially constructed, that phenomena are ordered and given significance by man, and that "concepts" are the means by which we turn our reality into actuality. The notion that knowledge is socially constructed does not suggest that the world can be whatever we wish it to be but rather that the significance or meaning of a series of events or sensory experience depend not on themselves but on how the observer orders and connects them. Major concepts assist us in ordering a vast array of data, in limiting our perceptions so that we can focus on manageable portions of our phenomena, and in determining what counts for relevant reasons and evidences in human inquiry.[26]

Given the centrality of concepts in Aries' work, students because of their earlier introduction to conceptual analysis are prepared for a cooperative analysis of major concepts in CENTURIES OF CHILDHOOD. The central concept "childhood" as used by Aries is carefully emptied of all but its essential meaning. Cooperative analysis has determined that the criteria of "childhood" as demonstrated by the evidence throughout the book are dependence, protection, segregation, and delayed responsibility. Additional analysis suggested that dependence and protection are necessary and sufficient conditions and that segregation and delayed responsibility are subsumed under them. Each "condition" is then used to trace the evolution of "childhood" as developed by Aries. Students are then able to grasp more adequately the connections between childhood and family postulated by Aries and to comprehend the religious, demographic, and intellectual changes that shaped institutions and processes serving children and young people. The explication of such connections and functions is best developed cooperatively.

To supplement the conceptual analysis, slides including the paintings and iconography used by Aries are used to introduce students to the variety of historical evidence available. Such examples and others including

architecture are examined not to establish the correctness of Aries' thesis but rather to demonstrate the assumptions in historical analysis and interpretation that give such "monuments of history" significance in human experience. Indeed, it is important to extend our consideration of cultural artifacts as embodying ideas to other historical periods and issues if we are to demonstrate how such evidence can be effectively used in historical interpretation. Case studies questioning Aries' interpretation and evidence apparently contrary to the thesis are also examined.[27]

With the preliminary study of Aries completed, we turn to a three-way comparison of the models of childhood. Since Aries and deMause offer theories of historical change, they can be compared directly on their interpretation of historical evidence, including those previously examined during the comparison of the Eriksonian and deMausean models, as well as other pertinent aspects of childrearing such as "overlaying" and infant mortality. This allows for explication of two theories of historical change that employed social and psychological explanations of evidence.

The Eriksonian model can be handled in a different but compatible manner as demonstrated in the earlier comparison with the deMausean model. In this case, we must move beyond the problems of swaddling, wet-nursing, mother surrogates, and apprenticeship to consider the societal functions of work, play, institutions and symbols.[28] In particular, Eriksonian theory provides a different psychological perspective for examining the various childhood modes of deMausean psychogenic theory. Such comparisons allow for testing the relative fit of the models over a wide range of data.

INSTITUTIONAL EXPRESSIONS OF CHILDHOOD

An essential characteristic of modern industrial societies, capitalist or socialist, is the central place of compulsory schooling within the total web of institutions. The relative significance of the major institutions has varied over the centuries since the Middle Ages. Institutions have not only gained or lost authority and power; they have expanded or contracted in their membership.

Since the course being described is offered as history of education, it is necessary to demonstrate connections between childhood and family history and institutional forms of education. An initial consideration is the distinction between education and schooling. It is a commonplace that schooling is an institutional form of education which stresses cognitive over all other development. Given the centrality of schooling in modern thought and institutional life, it requires a good deal of analysis to be able to comprehend that relatively sophisticated societies have been able to function without compulsory - or even widespread voluntary - schooling.[29] All of us have become so accustomed to the manner in which schools support and complete our institutional life that it is difficult (perhaps even impossible) to understand how these educational functions were met by community (Aries milieu), religion, work, and associations. Connected with the consideration of the educational functions of institutions is the lack of career definition for many occupations in societies without compulsory schooling.[30]

We are so accustomed to occupational networks, cultural activities, social and political life, and communication structured by training provided by formal education that it is absolutely necessary to explicate the distinctions between the two sets of societal circumstances. Pedagogically the examination starts with the changing intellectual categories of western society since the Middle Ages. Fortunately, the traditional topics of educational and intellectual history offer an abundance of primary sources and monograph literature. In particular, the writings of major educational theorists and practitioners - from Erasmus to John Dewey - are readily available and provide an excellent opportunity to introduce students to the difficulties and joys of intellectual history, especially the critical analysis of creative thought.

With the skills of conceptual analysis and experience with the criticism of historical interpretation developed examining the theories of deMause, Erikson, and Aries, students are prepared to explicate these primary sources with reasonable success. The explication follows two lines: first, educational ideas provide evidence of changing perceptions of children, family life, and educational practice over approximately five centuries; and secondly, the decided shift from education to schooling in the late eighteenth century is related to new views of social organization, human nature, and the rational control of human conduct.

The first line of study, which grows logically out of the consideration of Aries, can be linked to the second

topic - the rise of modern institutions that have come to control so much of our lives. The work in this area, while substantial and growing, is manageable by means of one of the excellent general studies.[31] The shift from education to schooling (and particularly as we understand it) marks a new concern for institutional life, the control and organization of children and youth in settings intentionally conceived and conducted. Considerations of these matters by significant educational theorists and practitioners can be studied as a case of the rise of modern institutionalization.[32]

It is then possible to view the establishment of systems of state schools and their internal organization and practices as concrete expressions of values regarding human nature, proper social organization and behavior, and the limits of societal control of individuals. This leads to the various interpretations of the establishment of common schooling in the nineteenth century.[33] the implications of the kinds of school systems established regarding the principles of adminstration and allocation of resources; the internal organization of schools, i.e., the operation of schools as social systems; and the curricula and methods of instruction as expressions of ideas about knowledge, learning, childhood, and social behavior.[34]

All of these topics have a substantial readily available literature. Although the original point of interest have been the nineteenth and early twentieth centuries, there is a growing literature, historical and sociological, which examines educational development since 1945 with considerable critical insight.[35] Such work can be supplemented by an immense and growing body of government and privately sponsored studies, policy proposals, and legislation.[36] This material can be organized most effectively around the critieria of childhood arising from the analysis of Aries, CENTURIES OF CHILDHOOD.

However the institutional transformation is explained, the emphasis on dependence, protection, separation, and delayed responsibility are clearly major components of modern societies which include a range of "minorities" not all based on age. Consequently, the criteria provide a means of comprehending how institutions "serving" children, youth, and families, come into being, exercise control over their clientele, and relate to the network of modern institutional life.

Against this background of modern institutional life, the theories of deMause and Erikson can be used to offer alternative interpretations of historical data. The major thread of the course is the historical development of institutional life as it relates to children, youth and families. This perspective gives Aries a particular prominence since his work is the introduction to modern institutional development. The essentially ahistorical character of deMause and Erikson places some limits on their use; however, good use can be made of their theories to construct alternative interpretations of evidence, events and institutions.

CONCLUSIONS

The explication of a history of education course incorporating childhood and family history has now come full circle. The starting point was a central feature of all modern and modernizing societies, that is, compulsory mass education in the form of schooling, and the requirement to understand how that feature came into being. The societal factors related to schooling are children, youth, and families. Since history is concerned with societal rather than biological conditions, it was necessary to convert them into ideas, that is, childhood, adolescence, and family.

An examination of the ideas of the leading theorists of childhood was needed to understand childhood, adolescence, family, as concepts, that is, to perceive how societal categories are constructed and consequently come to construct our world. Since history depends on evidence for the material out of which its interpretations are constructed, the growing literature of childhood, women's, and family history are used. Accompanying the development of these categories was the growing institutional life of the nineteenth and twentieth centuries. All of these threads - childhood, adolescence, family, and institutions - are pulled together in the common school.

FOOTNOTES

*The teaching experience providing the basis for the organization and conduct of the "model" course was acquired separately by the author at the University of Calgary and Patricia T. Rooke at the University of Alberta, and then cooperatively in a course at the University of British Columbia in the summer of 1978.

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10. Ivan Illich, DESCHOOLING SOCIETY (New York: Harper and Row, 1971); and Everett Reimer, SCHOOL IS DEAD: ALTERNATIVES IN EDUCATION (Garden City: Anchor Books, 1972).
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24. For example, Ernest H. Shepard, DRAWN FROM MEMORY (Harmondsworth: Penguin Books, 1975); Christopher Milne, ENCHANTED PLACES (Harmondsworth: Penguin Books, 1976); Molly Weir, SHOES WERE FOR SUNDAY (London: Pan Books, 1970); Harry Boyle, MEMORIES OF A CATHOLIC BOYHOOD (Don Mills, Ontario: Paper-Jacks, 1974); Janet Hitchman, THE KING OF THE BARBAREENS (Harmondsworth: Peacock/Penguin Books, 1966); and Elizabeth Cragoe, YORKSHIRE RELISH (London: Hamish Hamilton, 1978).
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26. See Gordon Leff, HISTORY AND SOCIAL THEORY (Garden City: Anchor Books, 1971); and Jack W. Meiland, SCEPTICISM AND HISTORICAL KNOWLEDGE (New York: Random House, 1965).
27. For example, Hanawalt, "Childrearing Among the Lower Classes of Late Medieval England," and Ilene H. Forsyth, "Children in Early Medieval Art: Ninth Through Twelfth Centuries," JP 4 (Summer 1976): 31-70.
28. Erikson, TOYS AND REASONS: STAGES IN THE RITUALIZATION OF EXPERIENCE (New York: W.W. Norton, 1977).
29. This point was at the heart of Bailyn's criticism of much of the writing about "education" in Colonial America and needs to be kept in front of us at all times. We should not, however, fall into the opposite error of conflating "education," "socialization," and "experience," which greatly undermines the possibility of making logical and significant distinctions among the processes of becoming human.
30. Excellent examples include: Joseph F. Kett, RITES OF PASSAGE: ADOLESCENCE IN AMERICA, 1790 TO THE PRESENT (New York: Basic Books, 1977); John R. Gillis, YOUTH AND HISTORY (New York: Academic Press, 1974); and Daniel Calhoun, THE INTELLIGENCE OF A PEOPLE (Princeton: Princeton University Press, 1973).
31. For example, David J. Rothman, THE DISCOVERY OF THE ASYLUM: SOCIAL ORDER AND DISORDER IN THE NEW REPUBLIC (Boston: Little, Brown, 1971).
32. Besides the major theorists usually examined in textbooks, e.g., Locke, Rousseau, Pestalozzi, Herbart, Froebel, and Dewey, students should be directed to both minor figures and societies that provide excellent examples of ideas in action. See for example, Carl F. Kaestle, ed., JOSEPH LANCASTER AND THE MONITORIAL SCHOOL MOVEMENT: A DOCUMENTARY HISTORY (New York: Teachers College Press, 1973); and Harold Silver, ed., ROBERT OWEN ON EDUCATION (London: Cambridge University Press, 1969).
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35. Besides the classic critiques of Edgar E. Friedenberg, THE VANISHING ADOLESCENT (Boston: Beacon Press, 1959) and Paul Goodman, GROWING UP ABSURD (New York: Random House, 1960), see for example, Paul C. Violas, THE TRAINING OF THE URBAN WORKING CLASS: A HISTORY OF TWENTIETH CENTURY AMERICAN EDUCATION (Chicago: Rand McNally, 1978); Brian Jackson and Dennis Marsden, EDUCATION AND THE WORKING CLASS (Harmondsworth: Penguin Books, 1966); and Allen Graubard, FREE THE CHILDREN: RADICAL REFORM AND THE FREE SCHOOL MOVEMENT (New York: Vintage Books, 1974).
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Number and Mathematical Thinking

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In the Spring of 1978 at the Curriculum Theory Conference at Rochester Institute of Technology, I was asked the rather innocent question: What is number? As I searched for a reply, I had no idea just how troublesome that question would prove to be. My answer at that time was simplistic and premature, but as I watched children wrestle with arithmetic later that summer I began to see the complexity and importance of that seemingly innocuous question. The question has rarely been addressed by educators or math curriculum specialists. Yet to fully understand the process children undergo while learning mathematics, educators must understand number.

This understanding of number does not come easily. The literature in the field of mathematics serves to underscore the complexity of the problem. The problem of defining number has persisted for at least 25 centuries and has been a recurrent problem in the field of mathematics to this day.[1] It is no small coincidence that children also have great difficulty understanding this thing called number.

This paper develops a working definition for number and argues that children cannot understand number without exercising mathematical thinking in approaching number problems. The paper has four sections. The first section is a study of the problems that have been encountered by mathematicians while attempting to define number. This historical study begins with an analysis of the definitions of the ancient Greek mathematicians and ends with an analysis of the definitions of two early 20th century mathematicians (Russell and Frege). The second section is a study of an alternative definition that has evolved from the writings of Jean Piaget during the last half century. The essential difference between the first definitions (as a body) and Piaget's definition is analyzed. The third section is a study of the nature of mathematical thinking and its development in children. The fourth section is a study of some of the problems that have arisen in pedagogical practice as a result of educators' ignorance of the nature of mathematical thinking. Finally, in this fourth section, I can offer an example of an affective interchange between teacher and child. The interchange uncovers the heart of mathematical thinking.

Historically, a definition of the nature of number has given philosophers and mathematicians great difficulty. Three of the difficulties at issue during the past 25 centuries of western thought will be studied in this paper. The first difficulty is whether or not one (the unit) can be described as a single entity separate from the many (the multitude). Its solution is important, because it allows for the use of zero, irrationals, and fractional notations in our modern numerical system. The second difficulty is whether number is a real phenomenon or is constructed in the process of human thought. This second, basically philosophical difficulty, suggests a study of the most effective strategies for teaching and learning about number. The third difficulty is the nature of the relationship between cardinality and ordinality in number (it will be studied in section II of this paper). It is this relationship that children struggle with incessantly in their attempt to understand number. These difficulties have never been adequately studied, especially in relationship to one another. This paper will look at the nature of these difficulties and some of the successful as well as unsuccessful attempts at solutions,

The first difficulty was originally encountered by the Greeks. The following definitions, formulated by three renowned Greek mathematicians, serve as an example of the difficulty:

> "A number is a finite multitude." EUDOXUS
> "A number is a 'limited multitude' or furthers a set (composed) of units.' " ARISTOPHANES
> "Number is 'the multitude' composed of units." EUCLID[2]

The weakness of these definitions is clear--"one" (or a unit) does not qualify as a number. Instead of describing one as a number, the Greeks described one as the "arche" or source of number. Unfortunately, these definitions created insurmountable difficulties in performing mathematical operations. Eudoxus, Aristophanes, and Euclid were all prevented by their definitions from going beyond the one to the "nought" (or

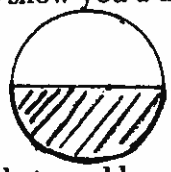
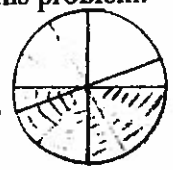
zero), negative numbers, or fractions.

It is important to note that children have the same difficulty. They find numbers beyond one (zero, fractions, negatives) slippery concepts to comprehend. To see this difficulty, consider Leanne, a nine year old, as she struggles with fractions.

Question No. 1	Use >, <, = to make 20/40 1/2 a true sentence.
Leanne:	20/40 is bigger than 1/2.
Interviewer:	Why do you think that is so?
Leanne:	Because 1/2 is one-half of a whole but 20/40 is made with numbers bigger than a whole.
Interviewer:	What part of 40 is 20?
Leanne:	One-half. Oh I see. 20 goes into 40 twice and 1 goes into 2 twice, so it's the same!

Leanne is beginning to see fractions as ratios. Looked at in this way, the appropriate correct answers make sense. However, this method is also used by Leanne to explain 7/9 as smaller than 1/2, because "seven goes into nine once, but one goes into two twice." Leanne is seeing fractions as whole numbers and has persistent difficulty seeing them as a proportion.

Consider the next sequence:

Question No. 2	Use >, <, = to make 1/2 6/12 a true sentence.
Leanne:	6/12 is bigger than 1/2.
Interviewer:	Let me show you a different way to look at this problem.
	1/2 is  and 6/12 is 
	Now what would your answer be?
Leanne:	Yes, I see. 1/2 = 6/12.
Interviewer:	Can you make 6/11 1/2 a true sentence?
Leanne:	Yes 6/11 is bigger than 1/2 because there are 5 left over instead of 1 left over like in 1/2.
Interviewer:	I see. Can you make 6/14 1/2 a true sentence?
Leanne:	Yes, 6/14 is bigger than 1/2, because there are 8 left over instead of one.

Leanne, even when shown the fractions as part of a whole number, invents a rule that allows her to see the fractions as whole numbers.

Zero as well as fractions, created problems for the Greek mathematicians. Because one (the unit) was the source of number, there could be no place for zero. This weakness was also found in the Roman numerical system which had no place holder. It became difficult to perform many operations with such a number system. Just imagine the difficulty with dividing CXIX by XXIV. These beliefs and weaknesses taken alone are unimportant, but classical thought has always greatly influenced western thought. It was at least a thousand years before western thought could escape classical parameters and consider the "absurd," the "irrational" and incorporate zero fully into the number system. Simon Stevin (1548-1620) was the first "modern" thinker who considered one in his definition of number. To Stevin, the unit was not just the beginning, the "arche," but a part of the material of number. Stevin supported his theory with the statement that "a piece of bread is bread," because the material of a piece of bread is identical with the whole of bread.[3] Soon after Stevin, Wallis (1616-1703), though the influence of Descartes, embellished Stevin's premise. Wallis identified the importance of ratio, and the role of fractions in defining number. He eliminated the controversy over whether zero or one was the conceptual origin of number. Wallis' impact was powerful. In his conception of number, the nought was the "arche" of number. The systematic use of zero as a place holder was important, because mathematicians were free to use number in abstract as well as concrete visible forms. This continuous historical difficulty with the complexity of number not only parallels the developmental difficulty a child has understanding number, but helps to clarify to adults some of the reasons for a child's difficulty.

This is not the only difficulty number poses. Underlying the controversy between accepting 0 or 1 as the "arche" of number is the more subtle difficulty of whether number is a real phenomenon or is constructed in the process of human thought. Clearly, the Greek mathematicians mentioned believed number to be an item explainable in realistic terms. Bertrand Russell was a modern thinker who embraced this belief in the reality of number. However, after considerable reconsideration, Russell changed his opinion:

> "The doctrines of Pythagoras, which began with arithmetical mysticism, influenced all subsequent philosophy and mathematics more profoundly than is generally realized. Numbers were immutable and eternal, like the heavenly bodies; numbers were intelligible: the science of numbers was the key to the universe. The last of these beliefs has misled mathematicians and the Board of Education down to the present day. Consequently, to say that numbers are symbols which mean nothing appears as a horrible form of atheism. At the time when I wrote the "Principles," I shared with Frege a belief in the Platonic reality of numbers, which, in my imagination, peopled the timeless realm of Being. It was a comforting faith, which I later abondoned with regret."[4]

Russell's original belief in the reality of number was based on an honest admiration for the work of Gottlob Frege. Frege, at least up to the time of Russell's remarks in the early 1930's, was the mathematician who had presented the clearest modern definition of number.[5] A quick look at Frege's work will show why Russell was led to change his belief.

Frege's approach to the definition involved a separation of the "psychological" and the "logical" aspects of definition in general.[6] The separation was not possible within the confines of our linguistic system. More pointedly, he thought that words put together to form sentences involved a clouding of the logical definition of number. In order to increase the precision of his definition and clearly move it from the psychological to the logical, Frege was to invent an ideography that allowed a clear mathematical description.[7]

Russell at first refused to accept Frege's rejection of the linguistic system. Instead, Russell attempted to support Frege's ideas within a contemporary linguistic framework.[8] Russell's mathematical definition of number follows: "A number is nothing, but a class of similar classes..."[9] The number 2 becomes the class of all couples, the number three the class of all trios, and so on. Put another way by Russell, number is a "collection which is the number of one of its members; or,...a number is anything which is the number of some class."[10] To summarize, then, the number of something is a classification of finite objects that can be corresponded with a similar class. Here the astute reader will find a dilemma between Frege's definition (that can only be well understood by a logician) and Russell's definition (that becomes more confusing with each new clarification attempted).

After extended work with Whitehead in the preparation of PRINCIPIA MATHEMATICA are communication with Wittgenstein, as influenced Russell set about with intellectual rigor to reconsider his earlier definition. In reviewing his work, he explained his new approach:

> ...it is said that every word occurring in a sentence must have some meaning. ...This way of understanding language turned out to be mistaken. That a word 'must have some meaning'--the word, of course not being gibberish, but only which has an intelligible use--is not always true if taken as applying to the word in isolation. What is true is that the word contributes to the meaning of the sentence within which it occurs... [11]

This statement leads to two conclusions. The first is that number must be understood within the context of a linguistic system. This system employs the use of subject and predicate as a central rule. The use of the predicate implies action in any definition. For example, consider the sentence: "The number is, then, a classification of finite objects that can be corresponded with a similar class." In this sentence, the phrase, "...corresponded with" states that number is created via a classification of objects. This definition gains legitimacy because of its psychological action-in this case the action of corresponding classes to similar classes. Moreover, and this is the second conclusion, if "the word contributes to the meaning of the sentence within which it occurs," then number must contribute to the meaning of the system (sentence) within which it

occurs.* Now number is not a separate distinctly "real" phenomenon. It is constructed by psychological action. Russell has relinquished his view of the reality of number. However, for pedagogical enlightenment, a clearer more precise alternative definition must be forged. The alternative definition, in turn, will lead to a solution to the third difficulty (the relationship between cardinality and ordinality in number).

An Alternative Definition of Number

Russell's own reversal of opinion on the reality of number underscores the endless difficulty mathematicians and logicians have had defining number. No person has been able to define number in other than purely logical terms. Frege's purely logical definition has little practical use and no use at all to math educators. More often than not, in modern times, even logicians have listed number as an "indefinable phenomenon." It is now necessary to look for a definition outside the stringent atmosphere of pure logic.

Because number is a cornerstone of mathematics, its definition has considerable importance. Pedagogical necessity dictates an acceptable definition in order to clarify the methodology for the successful learning of number. Jean Piaget's exhaustive work on the child's concept of number and the biological aspects of knowledge provide a rich body of material that helps establish such a definition. Piaget does not build his definition of number with descriptions of objective phenomenon. To Piaget number lies inert and unavailable to the human mind without some kind of cognitive action. It is the nature of this cognitive action that becomes the central focus for an alternative definition of number.

This alternative definition has two elements. First, "number is a classification of finite objects that can be corresponded with (or matched with) a similar class (number's cardinal component). Number exists in classifiable "sets" or "nests".[12] Any particular number is included in or nests in other numbers. It can be seen that 2 nests in 3, and 3 nests in 4, and so on. Therefore, any particular number is classifiable into sets. The action that verifies this classifiable cardinal component is one-to-one correspondence (matching). Second, number is a series of ordered relations (number's ordinal component). Any particular number, then, is part of a continuous series--five becomes part of the order 4, 5, 6, in the same way that 20 is part of the order 35, 30, 25, 20. The action that verifies this ordinal component is one of ordering as follows: N+1+1+1... or first, second, third, and so on. Each element of number explicitly displays cognitive action. These two active elements become synthesized in a definitive relationship of parts to wholes and wholes to parts. This synthesis becomes the alternative definition of number. In the following explanation part three synthesizes parts one and two completely:

1. Cardinal number is seen as a classification that can be corresponded as follows: if n is a set of any number of things and n' is a similar set of different things so that n=n' then n as well as n' is a cardinal number. This idea of cardinal number is created by classifying a given number of things in a set. An individual actively constructs a system (classification) to establish a number of things.
2. However, it is also known that n, in the series n+1+1+1+1 or n-1-1-1, is also a number in its ordinal sense. This is only marginally different than the idea of "inclusive nesting" where number exists as 2 inside 3, and 3 inside 4.
3. The difference between ordinal and cardinal number becomes marginal, because number is never completely one or the other. Number is a reversible system of part to whole and whole to part relationships. Both the cardinal and ordinal components of number are available to cognition, because they clarify this fact that number is at once a whole that can be separated into parts and a part that can be joined with other parts to make a whole. In this way, 45 is a number made of many parts, i.e. 30 1/4 +

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*This can be explained by an example using a linguistic model. Consider again the sentence, "The number of something is, then, a classification of finite objects that can be corresponded with a similar class." If "the word contributes to the meaning of the sentence within which it occurs," then cardinal number must contribute to the meaning of the sentence or system within which it occurs. A particular number occurs in a system, i.e., 4 exists in the number sequence 2,4,6,8,10...; number also becomes a system unto itself (4 is known alone and as a member of the above system). There is the "number system" and the "system that is number." Hence ordinal number takes some of its meaning from cardinal number and vice-versa.

14 3/4, 9x5, or 40+5, and a number that is part of bigger wholes, i.e., 45+1, 45+45, and 45x2.

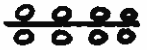
In more precise terms number is a synthesis of classification and ordered relationships of phenomena into a part to whole and whole to part schema or system. The mind, once classifying elements of a large framework into a system (as has been seen with number), then looks to compare the classified set to all that remains outside the set. Seen here is a process Piaget calls reversibility whereby if the whole can be broken into parts, then the inverse (i.e., the parts can be rejoined to create the orginal whole) is a necessary logical corollary. This necessary logical corollary, reversibility, leads to the building of a logico-mathematical structure of number. The structure of number is built by classification and order. These are action words that imply an interactive connection between the individual and phenomena. This interactive connection becomes the essence of mathematical thinking and the major component of the logico-mathematical structure of number. Number, now psychologically defined, serves as a vehicle for exemplifying the growth of mathematical thinking and logico-mathematical structures.

Mathematical Thinking (Building Logico-Mathematical Structures)

This section will focus on the growth of logico-mathematical thinking and the growth of logico-mathematical structures. Again a look at the work of Piaget will be helpful. For Piaget, numerical structures, or more clearly arithmetical structures, "are acquired through experience of objects, hence by empirical learning,"[13] but for Piaget empirical learning alone is not enough to promote knowledge. Piaget defines two types of knowledge. The first type is characterized by practical structures. For the purpose of this paper, this thinking will be called practical-mathematical thinking. The second type is characterized by logical structures. For the purposes of this paper, this type will be called logico-mathematical thinking. These two types of thinking are not completely different, but they are at different levels and have different characteristics. Practical mathematical thinking forms the base from which logico-mathematical thinking grows. Practical-mathematical thinking relies heavily on objects and concrete images to develop. It is with this type of thinking that number is seen as a label or a sign for objects and phenomenon. Logico-mathematical thinking builds from this experience with objects when the mind begins to classify and order the number of objects. It is the interaction of individual and phenomenon that, during classification and ordering, begins to make a system of number. There can be no logico-mathematical thinking without practical-mathematical thinking, but practical-mathematical thinking is never enough to create knowledge. It must be expanded and reshaped by the logico-mathematical thinking that begins when the child truly interacts with phenomena.

When the dynamic relationship between these two kinds of thinking is not fully understood, the resulting confusion leads to misinterpretations of Piaget's work. Often classroom teachers, erroneously, feel they are developing children's thought á la Piaget by exposing children to numerous manipulative devices. The type of knowledge drawn directly from objects themselves (or casual experience with the objects) is practical-mathematical knowledge. It is valuable for developing eye-hand coordination, heightening perceptual acuity, and promoting visual memory. It is this kind of activity that is often the cornerstone of errant progressivism. The banners of the British Infant School movement displayed the catch phrases, "I do understand," or "learning is doing." These are comforting phrases, but they speak only to part of what mathematical knowledge is. Another level of active thinking is necessary to enlarge and deepen practical knowledge and thereby to transform experience. This transformation of experience promotes logico-mathematical knowledge when the experience is made sensible by some logical cognitive action. This logical cognitive action involves a series of verifications, integrations, and reflections that begin to codify and clarify the experience. This logico-mathematical thinking is not defined by the experience, but transforms the experience for the mind through this series of verifications, integrations, and reflections.

In the case of children, experience is first performed at random for its own sake. This generates the kind of knowing seen as practical-mathematical. However, later on the actions are coordinated and used to form certain schemas. For instance, a child playing with eight objects may stack them or rearrange them in groups of various configurations, but these actions have little or not system. However, as time passes the child may start to coordinate the actions in such a way that he or she knows that a circle  of objects can be

matched exactly one object for one object and further that two lines  of objects can also be matched one object for one object. The coordinating of these objects transforms them for the child. The objects are no longer eight miscellaneous objects, they are now a system of eight discreet, but interrelated parts.

Number, being a system, is in this way--little by little--constructed. As Piaget says:

> "Construction of number is carried out in close collaboration with construction of class groupings (inclusions and classifications) and of order relationships (seriation of linking up asymmetric transitive relationships), and both of these types of construction obviously necessitate the handling of objects and consequently, experiment. For example, it is only after much groping that any subject succeeds in making a connection, item by item, between collections of objects, and he will take longer still to discover that the numerical sum of each collection remains the same even through the spatial arrangements of its components is altered."[14]

The last sentence is most instructive; the child must be drawn to reflect upon his or her actions to see that "...the numerical sum of each collection remains the same even though the spatial arrangements of its components is altered." The child is drawn to this awareness by a process of discovery and interaction. Each new active discovery results in the formation of a schema. The schema of matching objects (one-to-one correspondence) is built during a process of corresponding, including, and ordering objects. This interaction of the child with phenomena results in schemas that are the first stage of a continuous building operation. The interaction must result from more than pure experience. Logico-mathematical thinking develops through reflections that are encouraged by a third party. In the classroom, the third party can be either the teacher (or other adult) or other children. The interaction used to force reflection on the eight objects, for instance, might take the form of questions; i.e., "If I remove this stone, do we have the same number remaining?, or "What would show more stones, a circle or a straight line?" The interaction might take place as a result of discussion among peers. This last form of interaction is potentially fascinating and often very shocking to the child's schemas. Examples of these unpredictable potential interactions abound in a good classroom.* When these interactions bring about a defense of a point by a child, the potential interactions give way to true interaction. All of these interactions (communication, questioning, defense) realize their potential only when they force reflection and the corresponding coordination of schemas.

During this process of coordinating schemas, logico-mathematical thinking is invoked and new structures are built. The coordinations eventually form a system of thought. Just as Russell knew that words contribute to the meaning of a sentence, just as the synthesis cardinal and ordinal number contribute to the meaning of the number system, so too does the coordination of schemas contribute to a system of thought. The mathematical thinking that makes a system of and defines number is interactive and transformative in this way and becomes increasingly refined during the process of schematic development.

This thinking through transformative interaction is basically a progressive process of organizing information into a system. When information is received it is organized into schemas during logico-mathematical thinking. It is the opposite of the ingestion of information. Ingestion of information does not involve verification of input, or the integration of the elements of the information, or reflection on the mental processes used in the integration and verification. This ingestion of information may effect a growth in practical-mathematical thinking, but it does not effect a growth in logico-mathematical thinking.

In order for information to become coordinated into schemas and to build toward a system of thought, it must be connected with existing schemas. Logico-mathematical thinking transforms information into a shape that fits existing schemas or the existing schemas are transformed into a shape that accepts the information. This process takes place gradually. The process of transformation information is constant, but usually involves very small transformations at any one time.

The ingestion of information is a passive acceptance. Included here is the daily practice in schools of

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*We see more adept children impatiently pushing their understanding of phenomenon on another child. We also see the abrupt communication of "that's not right," or, "you have it wrong," from child to child.

acquiring information by rote memorization (for example, 1+1, 1+2, 1+5, etc.). It is a characteristic of practical mathematical thinking. The transformation of information that goes beyond practical-mathematical thinking to logico-mathematical thinking is an active acceptance or, at times, an active rejection of information. The child thinks heuristically about the information and either rejects it as unacceptable or fits it into his or her internal system. This internal system is a series of corrdinated schemas that allows the child to compare, classify, codify, integrate, and create from the continuous interrelationships that the child enjoys with the environment. This process is labeled by Piaget as adaptation, and is composed when assimilation is integrated with accomodation.

Pedagogical Practice and Instructional Alternatives

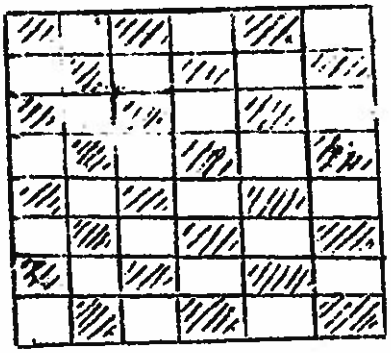
Schools are replete with curriculums and approaches that encourage the ingestion of information. When teachers teach arithmetic and the number system, the development of practical-mathematical thinking always takes precedent over the development of logico-mathematical thinking. An approach must be used that attempts to ensure the consistent interaction of the child with phenomenon (in this case number). Teachers miss this opportunity for interaction by following some very common, but indefensible approaches to learning about arithmetic. This section will examine two of the approaches to learning about number that lead away from logico-mathematical thinking and, concurrently, away from an understanding of number as the system that it is.

Two approaches common in elementary schools are instruction via workbooks and instruction via drill. Each, of course, has its place in learning about number. However, the two approaches are overused or improperly implemented. Workbooks are created, at their worst, as a series of skills that in hierarchical fashion attempt to reveal the increasing complexity of the number system. At their best, workbooks attempt to engage the child in a process of "thinking about the number system." In the first case (the worst), workbooks fail to create an interactive process between the student and numerical operations, because it assumes that number exists in real terms for the child to absorb. The point that is missed is that the numbers and numerical operations on the pages truly have no reality. What the author of the workbook enjoyed that the children do not is an opportunity to construct number as she or he saw it. Since number is only a psychological reality, the meaning of the workbook page will lessen the farther it is removed from the author's frame of reference. The child is then forced to interact with someone else's sense of number. Invariably the author's number system develops too quickly or too slowly for it to be an interactive experience for the child. In the second case (the best) the author seems to understand the pitfalls of the first problem. The best authors create workbook problems that will engage the child's structures and the structure of arithmetic in an interactive process. Unfortunately, although aware that number exists only as a result of a psychological process, the best authors perceive it possible to adjust number in such a way so as to engage the child's cognition. This attempt at learning also misses the point. The point missed is that workbooks are never able to adapt themselves to a particular child or group of children. Since no author can know how each child will interact with number nor could he or she adapt the workbook to thousands of individual learning modes, the workbooks are only minimally useful. It is the teacher who must create opportunities for this interaction.

Drill work, much maligned in the past, is now apparently in vogue. Drill work does have its place. The child does need repetitious experience with information to allow the strengthening of structures. However, drill is almost exclusively a process of passive acceptance (ingestion of information). When the teacher loses a clear picture of when the information (drill data) is appropriate for the child, he or she loses sight of the purpose of drill. That purpose is to automatize subordinate aspects of number. Drill can never take the place of a series of coordinated actions by the child. It is the coordiantion of the subordinate schemas in the drill that give sense to the repeated action. Too often lost is the motivating initiative that allows the child to take the drill information and mold it (transform it) into existing cognitive structures. The misuse of drill encourages a passive acceptance that imprints the information as part of short term memory. The resulting experience is a constant battle to remember the meaningless drill. The teacher misreads the signal and makes quantitative changes in the process instead of qualitative changes. The quantitative change is usually more drill to imprint the facts indelibly in the child's memory.

What are the alternatives? How can number, now psychologically defined, serve as a system that is not only created by mathematical thinking, but also (in part) creates this thinking. To teach number and arithmetic as a field of knowledge apart from the child is folly. It is necessary to do quite the opposite--work from the child and move into the field of number. More specifically teachers need to observe how children construct numerical operations into coordinated schemas. From the viewpoint, it is possible to carefully extend and challenge the child's existing structures of knowledge to force a movement from practical-mathematical thinking to logico-mathematical thinking.

In the following sequence, three children were asked to transform a collection of colored unifix cubes into some kind of pattern.[14] One is shown below. From the pattern, it can be seen that the child has an understanding of a repeating pattern. A few questions reveal more information about the child's structural grasp of the numerical aspects of the pattern. Observe the following sequence of questions:



I: Can you tell me about your pattern?

David: It changes color every other one.

I: Which way are you going?

David: I go across the top.

I: Can you see any other patterns in your design?

David: Yes, diagonals stay the same color. Oh, and if I start in the corner (right upper) the diagonals contain first one (element), then two (elements), then three (elements), and so on. And the greens contain two (elements), four (elements), six (elements), and so on.

David is able to divide his whole pattern into various parts. He is even able to make this separation numerically and focus in two directions (horizontally and vertically). He can focus on the reds and the greens separately or together as seen in his statements about the diagonal. The ease with which he answers indicates that he is accepting new information about his present pattern into existing schemas. Each new insight is achieved by coordinating the relationships within each part. In this way he increasingly sees the whole system that his pattern represents. Each part has more meaning when a new relationship is discovered. All these relationships grow from the organization of practical-mathematical thought. The interactions that take place utilize David's developing logico-mathematical thinking to create a richer whole pattern from his original pattern.

As David separates out the diagonals (with one element, two elements, three elements, and so on), he sees the two green elements in relationship to the three red elements and chooses to ignore their color differences. However, as the following will show, his present structure allows him to perceive the ordered relationship of the diagonals, but does not allow him to see the complete system wherein the diagonals increase and decrease according to a certain pattern. Follow the sequence further:

I: Can you go beyond the diagonal that has six greens?

David: Well I don't know.

I: Will you try?

David: Okay. Let's see (he counts the next one). The next one is six, too. Then it (the quantity in each diagonal) goes back the other way--5,4,3,2,1. Oops, no that doesn't work right.

I: What's wrong?

David: I end up one short of where I want to be down in the corner (he counts and deliberates). Oh there are three sixes in the middle.

I: Can you explain it all to me now?

David: Yes. I see the diagonals keep adding one at the top, but losing one at the bottom until they get to the bottom corner (lower left). So it goes--1,2,3,4,5,6,6,6,5,4,3,2,1.

The questions forced David to actively work out a more involved series of parts in the pattern. His struggle is evidence that he could no longer fit the pattern's information into his existing schemas. David, however, was brought into deeper interaction with his pattern with the help of the teacher. The pattern that David originally built with his practical-mathematical thinking was transformed into a more sophisticated system by his continued interaction. David used what he knew about number, diagonals, and perimeter in such a coordinated way that he constructed a system that allowed him to understand why there were three rows of sixes. Thus, the new structure is built upon the old through David's transition from practical-mathematical thinking to logico-mathematical thinking. Children function easily at the level of practical-mathematical thinking. The pedagogical challenge is to help children transform experience by invoking logico-mathematical thinking. This transformation has taken place for David, but great care must be taken to avoid forcing too much at once. A few more questions of David will serve to illustrate this point:

I: So there are thirteen diagonal rows?

David: I guess.

I: What would happen to the diagonals if you added a seventh vertical row?

David: I'm not doin' this no more.

I: We'll just add another row.

David: I don't care about it. I'm tired of doin' this thing.

David was pushed into too great a state of dissonance. He unequivocably rejected any further thinking about data. David's emphatic statements that ended the discussion become essential elements that illustrate active rejection. The emotional dissonance, body language, and other non-verbal cues that children display become important parts of the process of mathematical thinking. Each factor serves as a signal that active rejection is at issue, but we as pedagogues know little about how to read and evaluate these signals.

We have seen the importance, at least in the case of number, of interaction to the thinking process. We have also seen how this interaction lays the ground work for children to transform experience by moving from practical-mathematical thinking to logico-mathematical thinking. I would like to end this paper with a suggestion. The suggestion is that we turn our attention to the emotional and cognitive signals that children send out about their state of mind. The line that separates challenge from frustration in the learning process is not easily recognized or maintained. A sharpened attention may allow us to understand more about the process of active acceptance and active rejection, and thus, learning in the interactive mode. David's confidence in verbal response allowed him to signal us in the interview. However, at different ages, in different environments, and for different personalities verbal communication may be non-existent or much more difficult to interpret. This presents great difficulty for us as teachers and demands that we appreciate our role. We must understand that the child and the environment constantly interact. Part of our purpose, then, is to learn more about the nature of this interaction--not only for children, but for ourselves as well.

FOOTNOTES

1. Klein, Jacob. GREEK MATHEMATICAL THOUGHT AND THE ORIGIN OF ALGEBRA, trans. by Eva Brann (Cambridge, Mass.: The M.I.T. Press, 1968), p. 18.
2. IBID., p. 51.
3. IBID., p. 191. It is hard to imagine today how daring Stevin's statement was. His argument was an attempt to temper the influence of Greek thought on European culture. In Stevin's time, some governments had outlawed the use of zero in the market place. It was felt that such an appalling display of convenience made a mockery of traditional mathematical thought. It was against this prejudice that Stevin criticized "The Golden Age" of Greece and referred people to the stronger mathematical work of the Arabic and Egyptian civilizations.
4. Russell, Bertrand. THE PRINCIPLES OF MATHEMATICS (New York: W.W. Norton, Inc., 1903). In his introduction to the 1930 reprinting of "The Principles" Russell explains that his collaboration with Dr. Whitehead led him to the abandonment of his previously held belief in the reality of number.
5. Gottlob Frege wrote his symbolic proof of number in 1879. It title is BEGRIFFSSCHIFT, A FORMULA LANGUAGE' MODELED UPON THAT OF ARITHMETIC, FOR PURE THOUGHT. Frege's work remained relatively obscure until Russell's use of it in his "Principles." However, Jean van Heijenoort, in his SOURCE BOOK IN MATHEMATICAL LOGIC, 1879-1931, called it "perhaps the most important single work ever written in logic."
6. As Frege explains it in van Heijenoort's SOURCE BOOK IN MATHEMATICAL LOGIC, 1978-1931 (Cambridge, Mass.: Harvard University Press, 1967), pp. 5 and 6, his intention was to create a purely logical proof for arithmetic. He held that, since all propositions have some psychological genesis, the best method of proof would reveal those that are more or less pure. Arithmetic and, thus the concept of number, proved difficult to remove from his psychological genesis supported by facts of experience. He then devised a system of argument and function to replace subject and predicate in order that he could express "relations that are independent of the particular characteristics of objects..." This was to be his "logically pure" system.
7. IBID., p. 5.
8. Russell, OP. CIT., p. 114.
9. IBID., p. 116.
10. This explanation of number by Russell appears in "A Definition of Number" in James R. Newman's, WORLD OF MATHEMATICS (New York: Simon and Shuster, 1956), Vol. I, p. 542. It's confusing use of number as part of the definition of number becomes its major weakness.
11. Russell, OP. CIT., p X (introduction).
12. Piaget's use of the concept of nesting to describe number is found in Sarah Campbell's PIAGET'S SAMPLER (New York: John Wiley and Sons, 1976), p. 12, as part of some autobiographical comments written for that book by Piaget. The concept is treated in greater depth in Piaget's masterful work BIOLOGY AND KNOWLEDGE, trans. by Beatrix Walsh (Chicago: University of Chicago Press, 1971), pp. 306-318.
13. Piaget, Jean. BIOLOGY AND KNOWLEDGE, trans. by Beatrix Walsh (Chicago: University of Chicago Press, 1971), pp. 310. My definition of number is basically a combination of Russell's classification theories, and my own theories based on children's mathematical work during the ages of 5 to 9. For a more involved treatment of parts and wholes and how it applies to children's developing reason see Piaget's JUDGMENT AND REASONING IN THE CHILD, trans. by Marjorie Warden (Totowa, New Jersey: Littlefield, Adams and Co., 1976).
14. A common device used in our classrooms are unifix cubes. We found, sometime ago, that their power as a learning tool was in their potential to show pattern. When the patterns created are studied for their numerical aspects, endless possibilities arise. These can be seen in David's pattern. The cubes are various colors, hollow, plastic, about 1" x 1" x 1", and each one can be connected with another. They are available from most school supply companies.

Reconstructing Child Development for Curriculum Studies: Critical and Feminist Perspectives

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Theory and research related to child development has been central to contemporary curriculum inquiry. Psychodynamic, behaviorist, and cognitive-developmental schools of thought have explicitly or implicitly guided the direction of the modern school curriculum (Kohlberg and Mayer, 1972). This has been particularly true in early childhood education (DeVries, 1974; Kaufman, 1976, 1978; Bushell, 1970; Biber and Franklin, 1967), science education (Kaufman, 1971), and mathematics education (Copeland, 1979). Curriculum theorists often disagree as to which developmental perspective best articulates to a given set of pedagogical requirements, however the need for a developmental foundation generally goes unquestioned.

Recent critiques of the school curriculum have generally been concerned with a macroanalysis centered on the relationship of the school and society (Apple, 1979). Whereas inquiry into the socio-cultural dimensions of curriculum has provided insightful analysis, a microanalysis focusing on the socio-political implications of contemporary child development is generally lacking. Because the child development community has yet to develop and articulate a political critique of their discipline, it is essential for those concerned with the broad issues of curriculum to reconstruct child development theory and research.

The purpose of this essay is not an attempt to settle the internal theoretical and methodological quarrels of developmental psychologists. Adherents to psychodynamic, cognitive-developmental, and behavioral conceptulizations will continue to have in-house debates. Such polemics only serve to continue the positivist assumption that by a process of rigorous science a "true" model of the child will emerge.

The goal of this essay is to provide a critique of widely held theories of child development from a perspective outside the domain of traditional developmental psychology. More specifically, the paper posits a critical and feminist social science critique of child development knowledge. Such an analysis is an application of what Buss (1975) terms a "sociology of psychological knowledge."

We believe that critical and feminist social science provide a unique lens to examine child development knowledge within the context of historical, social, and political realities. We hope that as a result of this analysis, students of curriculum studies will more adequately be able to examine the inherent assumptions and bias in curriculum. It is our contention that child development knowledge often describes what is and in so doing provides rationalizations for existing social relationships. We argue that critical and feminist social science provides an analytic lens to explore the social transformations necessary for an emancipatory curriculum.

We have organized our analysis into four traditional aspects of child development: (1) theory construction and methodology, (2) cognitive development, (3) sex-role socialization, (4) cultural reproduction and knowledge transmission. Before we engage in our critique, it will be instructive to provide a brief description of critical theory and feminist social science within the context of reconstructing child development.

Reconstructing Child Development

Despite major advances in our understanding of child development, psychological knowledge related to the developmental process has generally reflected a lack of a historical, political, and social perspective.[1] Although problems related to the status, care, and education of young children have become important policy issues in modern industrialized societies, a critical analysis of child development theory and research as applied to social

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issues has not been readily available from outside the discipline of developmental psychology. More than ever before, consumers of child development theory and research are asking how adults can assist or retard children's development, what constitutes quality child-care, and what strategies should be employed in early education that would enhance a child's intellectual and emotional growth.[2]

Within the past decade there has been a rapid proliferation of child development knowledge. In addition to teachers and child welfare workers, knowledge generated from contemporary child development research is being utilized by a range of people associated with the helping professions, e.g., parent educators, counselors, and psychotherapists. Child development research in the form of popular parenting "primers" provide parents, mainly mothers, with the latest approaches to child rearing (Clark-Stewart, 1978). "Family-circle-type" supermarket magazines continue to reach millions of readers with elixirs on how to produce brilliant children free from emotional problems.

Because the child development community has yet to develop and articulate an ideological critique of their discipline, it is essential for the helping professions to reconstruct child development theory. An uncritical acceptance of child development knowledge limits the practitioner's vision of helping and prevents the empowerment of women and children.

Critiques of various "schools" of thought in child development have for the most part come from within the psychological community. Every contemporary text on child development, as well as a host of reading books, describe the major theoretical conceptualizations of the developmental process.[3] Students of child development are constantly asked to judge the adequacy of psychodynamic, cognitive-developmental, and behavioral theories. The term student of child development is used in the broadest sense to include both the producers (researchers) and consumers (parents, teachers, parent educators, and counselors) of child development theory. Students of a psychodynamic orientation criticize cognitive-developmentalists for not taking into account the affective components of development while the behaviorists accuse both psychodynamic and cognitive-developmental theories for their "mentalist" approaches.

Traditional interest in studying child development has been based on a simple assumption: children are seen as the raw material for cultural continuity. Child development theory and research has generally focused on the process by which a child becomes an adult in the dominant culture. Issues of debate among child development specialists have typically focused on epistemological questions, methodological procedures, and the interpretation of empirical data. Within the field of child development, few arguments address the question of theory as a set of historical, social, and political conditions.[4]

We provide a critical and feminist social science perspective on various theories of child development. Critical theory and feminist social science will be utilized as the primary mode of critique. We believe that critical and feminist social science provide a unique lens to examine child development literature within the context of historical, social, and political realities.

Whereas developmental psychology has provided the major thesis of child development knowledge, critical theory and feminist social science are now in the position of providing the anti-thesis. The article attempts to explore the internal contradictions of many widely accepted psychological theories of child development. It is not our position to suggest which theory is "right" or "wrong" but to use critical theory and a feminist analysis to gain new insights into the complex social relations related to the discipline of child development; both in theory and practice. We believe psychology is valid only when integrated within a macro-sociological analysis capable of explicating the dialectical relationships of the individual and society.

Critical Theory

Critical theory is a comprehensive mode of sociological inquiry that analyzes the ideological basis of science and socio-economic institutions. Ideology within the context of critical theory refers to a socially constructed and maintained belief system that concentrates and legitimates the power of one social group over other segments of society. An underlying assumption of a critical social science perspective is that dominant ideas found in advanced monopoly capitalist societies serve to support and legitimize certain political powers and interests. Theories, therefore, are not neutral or value-free.

Critical theory evolved as a formal mode of inquiry at the Frankfurt Institute of Social Research during the years 1923-1950. A detailed account of the history of the "Frankfurt School" can be found in Martin Jay's DIALECTICAL IMAGINATION (1973). The Frankfurt School consisted of a group of politically unaffiliated Marxist scholars seeking to reintegrate the Hegelian roots of Marx's thought. Through the work of such luminaries as Adorno (1950), Fromm (1961), Horkheimer (1972), and Marcuse (1955), critical theory integrated psychology and social analysis to critique various social institutions. The main thrust of critical theory is to reveal within a social context, i.e., sociological, the ideological basis for human knowledge (Habermas, 1971).

The origins of critical theory began with the now classic work of Georg Lukacs' HISTORY AND CLASS CONSCIOUSNESS (1968). Lukacs represented a particular school of Marxist thought. Rather than emphasizing isolated and narrow economic variables to understand Marx's concept of alienation, Lukacs centered his analysis on the relationship between psychology and society. Lukacs argues that there is a structural identity between mind (consciousness) and society. Because of the dialectical relationship of mind and society, a critique of society must include a psychological dimension. Central to Marxist thought is the idea that the societal relations of production shape not only the society's institutions but also the modes of thought related to those institutions.[5]

The method of analysis used by critical theory is that of the dialectical critique. It is in the method of dialectical analysis that critical theory returns to the Hegelian roots of Marxism. The "facts" of science need to be viewed as a product of history. Human beings make history, therefore an understanding of "objective facts" needs to be analyzed as an inseparate interdependence of the subjective and the objective. Positivist social science requires the subject to be a passive observer of "objective" reality. Critical social science on the other hand requires the subject to become self-conscious of their role in formulating knowledge. In a dialectical analysis, the "is" (objective) and the "ought" (subjective) or "facts" and "values" are inseparable.

As Lukacs states:

> The historical character of the 'facts' which science seems to have grasped with such 'purity' makes itself felt in an even more devastating manner. As the products of historical evolution they are involved in a continuous change. But in addition they are also precisely in their objective structure the products of a definite historical epoch, namely capitalism. Thus when 'science' maintains that the manner in which data immediately present themselves in an adequate foundation of scientific conceptualization and that the actual form of these data is the appropriate starting point for the formation of scientific concepts, it thereby takes its stand simply and dogmatically on the basis of capitalist society. It uncritically accepts the nature of the object as it is given and the laws of that society as the unalterable foundation of 'science.'
>
> In order to progress from these 'facts' to facts in the true meaning of the word it is necessary to perceive their historical conditioning as such and to abandom the point of view that would see them as immediately given: they must themselves be subjected to a historical and dialectical examination. (p. 7)

Within the context of child development, critical theory provides a sociological basis to examine the ideological foundations of child development knowledge. By analyzing the social basis of widely held theories of child development, students of developmental psychology may become more self-conscious of their activities. Such an analysis attempts to explore and understand the relationship between child development knowledge (cognition, language development, socialization, personality development) and the existing social structure. A sociological analysis of child development knowlege attempts to place theory and practice within the context of social relationships.

Feminist Social Science

Feminist social science represents a broad constellation of thought that attempts to uncover the nature of social relationships thát place women in powerless roles, and ignore women's experience in ways "that appear to justify existing relationships between the sexes" (Parlee, 1977; p. 5). Millman and Kanter (1975) view

feminist social science as a reassessment of the "basic theories, paradigms, substantive concerns and methodologies of sociology and social sciences to see what changes are needed to make social theory and research reflect the multitude of both female and male realities and interests." A feminist critique of social institutions seeks to expose the interest base of research and theories in legitimating the present patriarchy and male ideology. Far from being monolithic, feminism exhibits a wide range of perspectives in analyzing the social organization of the sexual class system.[6]

Due to the biological and historical relationship of women and children, a feminist social science is unique in its position to provide a framework for a critique of the ideological foundations of child development knowledge. The principal issues of contemporary theories of child development propose a psychological construction of femininity that maintains women in politically powerless roles. Who is better able to critique the ideological basis of the estate of childhood than women who have been forced to produce children and to reproduce the ideas that continue to oppress them?

We will be examining child development theory, research and practice from two feminist social science perspectives.[7] One is a feminist critique of Marxist oriented sociology and the second being principally derived from positivist social science methodology.

Feminist critiques of Marxist thought can be found in numerous works (Firestone, 1971; Beauvoir, 1952; Millett, 1970; Mitchell, 1971; Rowbotham, 1973; Smith, 1977; Foreman, 1977, Weinbaum, 1978). These critiques share a view that under capitalism women not only produce children to fit into the world of work they also reproduce the ideas that support a sexual class system. This means that women in a capitalist society not only reproduce the ideas necessary for their children to enter the public work world, but in so doing also reproduce the ideas inherent in the ideology of women's oppression. Marxist-feminists view that only in understanding the concrete experience of family members--mother, father, children--will we ever be able to transform the capitalist social structure. They argue that a Marxist-based social revolution will need to address itself to the contradictions found in both our private and public lives,

Marxist-feminist social science, represented primarily by the work of Mitchell and Rowbotham, criticize traditional Marxist sociology for only identifying the conditions of the material world with commodity production. Marxist-feminist social science seeks to analyze the interconnection of the partriarchy and capitalism with the goal of a total transformation of all social institutions for both sexes. Critical of traditional Marxist sociology, Mitchell calls for an ideological analysis of women and families. To accomplish this, Rowbotham and Mitchell reject the classical Marx-Engles formulation that women's oppression can be derived from the material world of commodity production. (Material does not include family.)

Mitchell identifies bearing children, bringing them up, and maintaining the home as "women's natural vocation" as the ideology of the patriarchy. Traditional Marxist analysis views the family as an abstraction or category of inquiry. The family is the unit of analysis while ignoring the interactions of family members. The family, in its concrete form, consists of real people whose socio-political dynamics seem to have escaped the categories of Marxist historical analysis.

The work of Shulamith Firestone (1970) reflects an alternative interpretation of family social relationships. In the DIALECTIC OF SEX, Firestone identifies the historical basis of the patriarchy in the biological contingencies of birth and prolonged dependence of human infants on adults for survival. The reproductive differences between males and females, according to Firestone, led to the earliest division of labor and the origins of class. However in her case for a feminist revolution, Firestone indicates that humanity has begun to outgrow nature and although the sex class system originated in biological conditions we now have a human technology available to overcome our biology. Firestone calls for a "...revolt of the underclass (women) and the seizure of control of human fertility--the new population biology as well as the social institutions of childbearing and childbearing" (p. 11).

What can a Marxist-feminist social science inform us in the area of child development? We feel child development research is generally removed from a social context. The institution of mother and child is cut off from other social relations. The analytic lens of traditional schools of child development research holds mothers as responsible for the social and intellectual future of their children and in so doing creates an ideology

which works to oppress women and maintain male power. A Marxist-feminist analysis suggests that developmental trends need to be re-examined as a function of mother-child interaction that is itself part of an ideology of motherhood--namely the quality of a mother-child dyad is the all-encompassing relationship that will determine the child's future. Marxist-feminists posit that mother-child interaction is reflective of a broader set of social relations found in monopoly capitalism. Marxist-feminists seek to overcome the apparent split between the family and the marketplace.

Another strand of feminist social science stems from traditional positivist social science. The emergence of this scholarship began with social scientists, using traditional methodologies, asking questions about women's attitudes, and behaviors then incorporating their findings into the orthodoxy of their disciplines.[8] Recently the attention of feminist scholarship has moved to exploring the underpinnings of positivist social science, and how the notion of value-free social science has been used to maintain a particular social order damaging to women. The political nature of traditional scholarship is described by Judith Long Laws as the fiction of scientific objectivity serving to perpetuate patriarchal knowledge as truth.[9] For feminists, the ignoring, distorting and trivializing of women's experience within the social sciences is used to justify the existing relationships between men and women. These dominant ideas are assumed to be facts and not relative truths while the relationship between knowledge and the social structure is dismissed. Millman and Kanter suggest that feminist social scientists begin with the assumption that "questions of knowledge and how people know and see in the world is affected by their particular location in the social structure" (1975, p. 1).

The results of this analysis lead feminist social scientists to question a basic assumption made in social science. That being that the social realities of men and women are the same and therefore research by and about men can inform us about human nature. The outcome of such an assumption is that actors within the social and organizational structure are indeed actors and not actresses. It is the findings of traditional child development research that are applied by practitioners in real social settings. Since these findings, until recently, lacked a feminist perspective, they have biased the practice towards a male ideology.

What can a feminist social science inform us of in the area of child development? It can provide a visibility, a voice, a system of meaning to persons and situations which have previously been ignored within the social sciences. The researcher's appreciation of the female construction of social reality leads her to call for more comprehensive theories in the area of linguistics, moral development, sex-role socialization, mother-child relationships, and the process of schooling. It is the practitioner who will be able to make social use of these new visions.

Theory Construction and Methodology

Contemporary theories of child development generally trace their conceptual foundations to philosophical inquiries into the process of change, the acquisition of knowledge, and the nature of childhood. The origins of present day disagreements among the various theories of child development can be found in the traditional debate between empiricist and rationalist cosmologies. Inner biological or rationalist explanations of developmental change is generally reflected in psychodynamic (Freud, 1924) and cognitive-developmental (Piaget, 1967) formulations. Noam Chomsky's theory of transformational grammar (1972) can also be characterized as inner-biological. Outer experiential views are represented in the behaviorist tradition of Sidney Bijou (1961) and Robert Sears (1951). Empiricist perspectives provide both an explanation of development and a circumscribed method of inquiry.

The dualist approaches of contemporary child development have become the primary level of critique from within the professional child development community. The first few chapters of most introductory texts include a survey of the epistemological roots of the mainstream theories of child development.[10] As in the case of most "historical" retrospects in bourgeois social science, the analysis is essentially ahistorical. Discussions of various epistemological perspectives are generally divorced from specific social conditions. Epistemological analyses of child development theories often reflect undimensional notions of either/or dualisms. For example, although several researchers in child development recognize the dialectical and phenomenological aspects of Piaget's theory, his work is often characterized as predeterministic (Ausubel and Sullivan, 1970).

As a result of the ahistorical analysis of child development theories, students and practitioners do not have

the opportunity to reflect on the socio-economic consequences of a given theory. Clinicians that practice child development theory are usually uncritically trained in one of the two "schools" of thought. Child development professionals are for the most part ignorant of the material conditions that brought about the subject-object split in Western philosophy and the sociological dimensions of the split.

In addition to the epistemological foundations, child development theorists attempt to provide a conceptualization of that aspect of the life-span termed childhood--a chronologically defined period from birth to the onset of puberty. Rather than drawing on purely epistemological perspectives, the theoretical roots of childhood are generally derived from social critics such as Rousseau and Locke. Whatever deep philosophical differences separate the idealist notions of Rousseau from the realist position of Locke, the two intersect in their male ideology. No one would deny the opposite conceptions of the idealist and realist philosophy of childhood, however neither perspectives recognizes the dialectical relationship of childhood and women. As a result, women and children are traditionally tied to each other's activities.

A comprehensive overview of the traditional dualistic conceptualizations of child development theory and research into organismic and mechanistic models is outlined by Overton and Reese (1973). In addition, Overton and Reese provide a paradigm analysis of the methodological assumptions underlying two models. They argue that the organismic and mechanistic models are mutually exclusive and the best that can be expected is a form of peaceful coexistence. Similar conceptualizations can be found in the work of Ausabel and Sullivan (1970), Baldwin (1967), and Langer (1969). Organistically derived theories are often characterized as pre-formulationist or pre-determinist. Theories emanating from mechanistic foundations are constructed as linear and causal, i.e., machine-like.

The epistemological roots of the three major schools of child development, i.e., cognitive-developmental, psychodynamic, and behavioral, are found in every contemporary introductory text in child development, developmental psychology, and early childhood education. Texts related to the growth and development of children are most often organized along three themes. The first represented by what is generally termed the "ages and stages" approach. For the most part this type of text is chronological in nature--pre-natal to adolescence--with particular areas of development represented by a particular theorist. For example, Piaget's work may be used to provide a theoretical foundation for logical thought processes developed in the middle years, while Chomsky's work in transformational grammar serves as the theoretical framework in language development during early childhood, and Erikson's theory is often involved as the basis for adolescent development.

A second format is generally referred to as a topical approach. Rather than being organized along maturational dimensions, the topical approach explores the development of particular psychological processes. For example, the topic language development is treated as a unit and usually several theoretical positions are discussed--in the case of language development one would find the work of Chomsky (1972), Bernstein (1973), Brown & Bellugi (1964), and McNeil (1970).

The third, and perhaps the least common approach, is a comparative theories text. In this variety the major schools of thought become the organizing principle. In several cases, comparative theory texts become authoritative voices in the child development community.

Each of these three approaches to the transmission of child development knowledge lacks an historical perspective. Indeed every introductory child development text justifies its existence on social relevance--"children are our most important resource." After an exhaustive review of introductory textbooks related to the field of child development, developmental psychology, and early childhood education, we found that all three organizational formats lacked a historical and cultural analysis. Kuhn (1962) points out the dangers of knowledge being transmitted by means of the standard textbook. Our professional training programs still operate on an apprenticeship model, where future members of a given profession are introduced to the basic ideas of the profession through the words and deeds of acknowledged masters. Professionals in developmental psychology often define themselves as Piagetians, Eriksonians or Chomskyians. Such model of training serves to reproduce the status quo.

An exception to the ahistorical approach to developmental psychology can be found in the work of Klaus Riegel. His work has long focused on the relationship of developmental psychology and political ideology. His essay "Influence of Economic and Political Ideologies on the Developmental Psychology" (1972) outlines

a political economy of the organistic and mechanistic models. Riegel's analysis focuses on the connectio between economic and political ideologies on the formulation of developmental psychology. Mechanist trends are traced to a capitalist mode of production, whereas organismic perspectives are more commonl found in political economics that adhere to a more mercantilistic-socialist ethos. Riegel suggests that mechani tic views of development imply an extension of capitalism's model of continuous quantitative growth in whic individuals are evaluated against a set of standards established by the ruling class. Organismic perspective on the other hand, suggest qualitative developmental models that encourage multidimensions measures. B locating the ideological bases of the two models generally advanced in child development theory and research Riegel posits a sociological critique of child development knowledge.

A central figure in the mechanistic school of child development is Sidney Bijou (1961). Along with hi colleague Donald Baer, Bijou has elaborated a theory of child development based upon the principles of be havior analysis. Applied behavior analysis is most closely identified with the operant "camp" of behaviorism suggested by the work of B.F. Skinner.

Operating within the methodological principles of orthodox radical behaviorism, Bijou describes chil development as a series of functional behaviors contingently reinforced by environmental consequences. The organism is merely a host for public behavior (Baer, 1976). To insure a rigorous science, the methodology of behavioral analysis is one of strict positivism. Using very small samples, behavioral analysis operationally defines microbehaviors to measure change. As Skinner (1974) argues, "methodological behaviorism might be thought of as a psychological version of logical positivism or operationalism..." (p. 14).

There are several excellent psychological critiques of the behavioral analysis approach to child development research. However a psychologically-based critique of another form of psychological knowledge does not permit a critical analysis of the theory in use--i.e., a sociological critique. Such a critique is found in the work of Steiner Kvale (1973). Kvale argues that the application of a natural science experiment as a "paradigm for psychology is merely a pretext, a smoke screen for a more fundamental...technological paradigm for the study of man and society" (p. 143).

Kvale goes on to identify several internal contradictions of the positivist social science methodology. He notes that the methodological foundations of contemporary physics is no longer grounded on a Newtonian conception of the universe. Modern theoretical physics, as a mode of inquiry into the natural world, shares few methodological similarities with "modern" behavioral psychology. Kvale goes on to suggest that although behavior analysts mimic 18th century natural science, in reality it is technology and not physics that provides the methodological paradigm for psychological research. By uncritically accepting the positivist paradigm, each generation of behavioral scientists reify the ideology of the "PROFESSIONAL PSYCHOLOGIST." The process of becoming a psychologist schooled in such a traditional establishes a mode of truth seekings where one cannot question or reflect upon the experimental procedure. Psychologists define their profession by its mode of inquiry. Theory and method are one.

Organistically based theories of child development are most often associated with the contributions of Piaget, Gesell, and the Freudian school. A critical analysis of Piaget's theory of development is presented in the section on cognition. Keeping in line with the general topic under consideration of theory construction and methodology, we will examine the Freudian school of ego psychology most often associated with the work of Anna Freud and Erik Erikson. A critique of Erikson's theory is treated in the section on sex-role socialization.

Ego psychology has long been central to curriculum development. This is particularly true in early childhood and guidance education (A. Freud, 1979). Ego psychology, as represented by the work of Anna Freud, embraces the general theory of psychoanalysis but places greater emphasis on the development of the ego functions. Ego functions being that part of the personality structure mediating between the internal demands of the subjective and external cultural reality. Ego functions, such as rational and logical thought, serve adaptive ends. It is through the ego functions that subjective needs are subverted to the demands of the culture. As the adaptive aspect of the human personality, ego functions are essentially conservative. Acknowledging the role of the unconscious, ego psychology places primary emphasis on adaptive modalities. Neurotic symptoms are viewed as a result of poorly developed ego functions.

The ego psychology school of psychoanalysis is very appealing to American analysts. Rather than emphasizing the deep-rooted unconscious sexual motivations found in orthodox Freudian thought, ego psychology focuses on the pragmatic and the testing quality of the human personality. Because of its pragmatic nature, ego psychology became the primary training model for the helping professions in England and the United States. Generations of social workers, guidance personnel, nursery school teachers, and parents were provided an ego psychology view of psychoanalysis in professional schools or through community-based mental health seminars.

A critical theory analysis of the ego psychology movement within psychoanalysis is found in the work of Jacoby (1975), Poster (1978), and to some degree Lasch (1975). The Neo-Freudians shifted from a psychology of the unconscious to one of the conscious, from id to ego, sexuality to morality, and most importantly from libido and depth psychology to surface and cultural psychology. Whereas the core of orthodox psychoanalysis is the recognition of the subjective experience, for ego psychology it is conformity. Neo-Freudians (A. Freud, Adler, Horny, Erikson) provide the conceptual framework for a psychology of conformity. The revolutionary potential inherent in Freudian psychoanalysis is eclipsed by a psychology that views the environment as static. Therapeutic and educational interventions derived from such a perspective place primary emphasis on socially accepted norms of behavior.

In contrast to mechanistic and organistic conceptualizations of childhood, women are beginning to articulate a feminist theory of children grounded in the experience of everyday life. Central to this experience is the sexual division of labor which places women and children in a position of political powerlessness within the capitalist patriarchy (Firestone, 1971; Eisenstein, 1979; Hartstock, 1975).

Using data from Philip Aries' CENTURIES OF CHILDHOOD (1962), Firestone traces the notion of the estate of childhood with the evolution of the nuclear family. Prior to the nuclear family and formal schooling, childhood as a class of individuals distinct from adult life did not exist. Firestone draws on Aries' analysis of children's clothing during the 16th and 17th century. In addition to providing an historical account for the "myth of childhood," Firestone posits a class analysis into the ideological function of culturally defining the estate of childhood. As a result of this ideology, the oppression of women and children became intertwined. Children and women were banished to the privacy of the home, assigned inferior roles, and set apart from publically participating in the culture.

For Hartstock (1979), feminist theory "is a mode of analysis, a method of approaching life and politics, a way of asking questions and searching for answers, rather than a set of political conclusions about the oppression of women" (pp. 58-59). The power of feminist theory grows out of everyday women's experience. The personal is political. The political emancipation of women becomes directly tied to a social transformation of childhood.

Cognitive Development

Perhaps the most investigated areas of child development are the various mental processes of cognition. However within the two paradigm system described in the previous section, the construct of cognition implies two different systems of meaning. In the learning theory orientation of behaviorism, cognitive development generally refers to the internal organization of stimulus-response events. By breaking down complex behavior into elementary units of analysis, learning theorists attempt to construct the cognitive maps of internal cognitive organization necessary for completing a specific task. The goal of learning theory is to provide a detailed stimulus-response model of thinking and reasoning. Adhering to a positivist methodology, learning theorists often use laboratory animals to formulate a micro-analysis of behavior. Whereas Bijou, as representative of the behavior analysis position, focuses his research on the analysis of environmental reinforcers, learning theorists attempt to describe, in empirical terms, internal cognitive organization.

Cognition within the organismic paradigm is generally described in biological rather than mechanistic metaphors. Jean Piaget, perhaps the most well-known child development psychologist, suggests that the development of intelligence follows the basic biological principles of adaptation.[11] Although opposed to an a priori position of pre-formed ideas, Piaget's theory posits of a model of development where the individual acquires a predetermined set of logical-mathematical structures. For Piaget, the structural foundations of

cognition are rooted in formal logic and mathematics. One might view Piaget as a mental embryologist at tempting to trace the biogenesis of adult human intelligence.

Piaget suggests that the development of cognitive processes are neither simple copies of external objects no an unfolding of pre-formed structures within the child, but rather involves the formation of a set of logical mathematical structures sequentially constructed by continuous interaction between the subject and the external world. By rejecting the subject/object dualism, Piaget proposes a model of cognitive development akin to the biological process of adaptation. From a biological point of view, the intellectual adaptation of a child to its environment consists of the twin functions of assimilation and accommodation. Assimilation is the integration of external events into existing structures of the mind. This is not a passive "taking in" but requires an active mental transformation of a reality event into already existing mental structures. At the very same instant in time, internal cognitive structures undergo a transformation to fit the demands of the external event or object. Piaget terms such internal transformations accomodation. Accommodation and assimilation are simultaneous activities. There is no assimilation without accommodation and vice versa.

Piaget describes the actual structures of thought as being logical-mathematical in nature. Logical-mathematical structures represent formal algebraic expressions of reasoning. For example, based on clinical investigations Piaget has identified 16 binary operations that describe the process of children's thinking between the ages 6-11. In the final analysis, thinking for Piaget is the application of formal logical-mathematical structures on to reality.[12]

Susan Buck-Morss (1975) presents a unique critical theory analysis of Piaget's theory. Drawing on Lukacs' HISTORY AND CLASS CONSCIOUSNESS (1971), Buck-Morss argues that Piaget's theory of cognitive structures represents an instance of psychology-society identity. Abstract formalism (symbolic logic), Lukacs suggests, is a particular logical structure of Western capitalism. Therefore, the so-called value-free construct of pure logic and mathematics is itself a product of history. As a product of history, the form of cognition (Piaget's logical-mathematical structures) is itself social in content.

Although a number of articles and books critical to Piaget's theory have recently appeared, Buck-Morss' critique is unique in placing the theory in the context of history (Riegel & Rosenwald, 1975). Using a dialectical analysis, Buck-Morss examines Piaget within a holistic socio-economic lens. She suggests the need to conceptualize theories of cognitive structures other than formal logic and mathematics. Such a theory should be based on the content of thought; not simply on abstractions of the content.

Robert Gagné (1968) offers an overview of cognition from the more behaviorally oriented school of learning theory. Learning theory adheres to a mechanistic model, however its primary goal is to describe the internal stimulus-response events of cognitive activity. In many respects, learning theory attempts to "translate" organismic theories of cognition, i.e., Piaget's theory, into a behaviorist language. One might say that learning theory is the more liberal wing of the basically conservative behaviorist tradition. However, regardless of the surface differences that separate learning theory from the more orthodox behavior analysis, both schools ascribe to the fundamental presuppositions of behaviorism.[13]

Gagné describes a model of human intellectual development based upon the idea of cumulative learning. Such a model proposes that new learning depends upon the combining of previously acquired and recalled learned entities. The entities are acquired in a cumulative learning sequence and are relatively specific. The model assumes that complex cognitive principles are formed from the combination of simpler principles. For Gagné, intellectual development is conceptualized as a building of increasingly complex and interacting entities of learned capabilities. The entities which are learned build upon each other in a cumulative fashion. Learning is additive where the sum of the parts is equal to the whole.

Kvale (1976) argues that learning theory represents an ideology legitimizing educational technology. He also suggests that it is not positivist natural science, but industrial technology that forms the basic paradigm for the psychology of learning.

Kvale goes on to note that there is an immense gap between learning theory in the psychological laboratory and educational practice in the classroom. The lack of correspondence between theory and practice is so great that Kvale suggests that the disappearance of learning theory would hardly be noticed in the day to day learning that goes on in schools. So irrelevant is learning theory to educational practice, that it is not likely to have

any practical applications in the foreseeable future.

Learning theory, according to Kvale, serves social functions other than the study and improvement of learning. Drawing on the work of Habermas (1971), Kvale posits that learning theory is not concerned with the conscious intentions of individual psychological researchers, but in the broader, often unconscious, social functions or social interests in which their research activities are embedded. Learning theory has the ideological function of providing a technological approach to learning.

For Kvale, it is social practice and industrial production that constitute the basic paradigm for the psychological theories of learning. He situates the psychology of learning in a social and historical context. Using critical theory as a mode of analysis, Kvale concludes that the development of learning theory cannot be explained by the philosophy of science, but must be located in the development of the forces and relations of industrial production.

In recent years, the area of moral development has also become an important part of the cognition literature. First investigated by Piaget (1976), a cognitive-developmental approach to moral development has been vigorously pursued by the research of Lawrence Kohlberg (1977). The stage theory of moral development advanced by Kohlberg follows the structuralist perspective of Piaget. As with Piaget, Kohlberg is not specifically interested in moral content but rather the moral reasoning behind a given moral act. By splitting content from process, Kohlberg ignores the human problem of the political consequences of a given moral position.

A cognitive conception of development is not simply an increased knowledge of the cultural values but rather a transformation of a person's structures of thought. Kohlberg adheres to an invariant sequence of stages similar to that of Piaget. In the area of moral development, these stages are characterized by three modes of moral reasoning: (1) egocentric, (2) social, (3) universal.

During the egocentric or preconventional level, the child responds to cultural rules of good-bad or right-wrong. However the child interprets these rules in terms of self-serving consequences (punishment, reward, or exchange of favors). In the societal or conventional level, the child perceives the values of the family, group, or nation as valuable in its own right. There is an orientation toward loyalty and maintaining a given social order. In the final stage, the universal or post-conventional level, there is an effort to define moral principles apart from the individual's identification with a group's principles. There is an appeal to ethical universality, justice and the dignity of humankind.

As with Piaget, Kohlberg splits the form and content of moral development. His central concern is to enhance the individual's reasoning patterns or judgments. The relationship between moral judgment (the form) and moral behavior (content) is not defined. By suggesting that moral judgment is a necessary but not sufficient condition for moral action, Kohlberg's theory becomes asocial and apolitical. As in the case of Piaget, Kohlberg is not specifically interested in the content of thought but simply abstractions of the content.

The separation of form from content by Kohlberg is critiqued by Edmund Sullivan (1977). Appealing to the work of Habermas (1968) and Lukacs' (1968), Sullivan attempts to show the context of a mode of thought is embedded in certain societal interests. That is to say within a social context Kohlberg's theory of moral development is structurally tied to the class interests of dominant groups. Using the Frankfurt School's notion of critique, Sullivan analyzes Kohlberg's theory to expose its ideological function.

Kohlberg, like other cognitive-developmentalists, are primarily interested in the development of abstract and universal laws. What then follows is a thought-action dichotomy. Sullivan suggests that such a split causes the form of thought, i.e., the stages, to take on a life of their own. By having thought precede action, Sullivan feels that Kohlberg eliminates the inherently dialectical process. For Sullivan, thought directs actions and action directs thought. If as Kohlberg suggests, thought is emphasized over action, then the dialectic collapses and the two separate.

Sullivan goes on to show that the appeal of the work of Kohlberg (and Piaget) is tied to the demands of contemporary Western society. Starting with the work of Dewey, schools have attempted to integrate the idea of moral and ethical education. For Dewey and other liberal educators, the attainment of ethical values act as the guiding principle of schooling in a democratic society. However, rather than specifying a particular moral context, the liberal ideology emphasizes process over content. Pragmatism becomes an end in itself

divorced from concrete reality. Sullivan points out that in a culture such as contemporary American society, schools are forced to deal with deep moral issues related to racism, sexism, and classism. Kohlberg's theory offer a concept of universal justice that avoids the ever sticky problem of value relativity.

Kohlberg's cognitive-developmental theory of moral development is subject to a feminist critique by Carol Gilligan (1977). Gilligan examines the underlying assumptions of Kohlberg's work and suggests the theory has not given adequate expression to the experience of women. She seeks to identify in the feminine experience in a women's construction of social reality.

Gilligan presents the limitations of several stage related developmental theories, i.e., Freud, Piaget, Erikson, Kohlberg. She concludes that the very categories by which development is assessed are derived within a male perspective. Divergence from a masculine standard is interpreted as a retardation in development. Both in the work of Freud and Kohlberg, women are seen as developmentally incomplete and often classified with children.

Using moral dilemmas that directly touch the lives of women, i.e., abortion, Gilligan finds a distinct moral language and sequence of women's development. Her research reveals that women impose a unique construction on moral problems. This construction seems to proceed from an initial concern with survival, to a concern with goodness, and finally to principled understanding of nonviolence as an adequate guide to the just resolution of moral conflicts.

Sex-Role Socialization

The essential nature of womanhood and manhood has been pondered in all ages by philosophers, poets, visionaries, and most recently developmental psychologists. Sex-role identification is one of the most intriguing problems being investigated by contemporary behavioral scientists. What is the nature of the developmental process that provides the culture with a differential male and female psychology? The question takes on a political dimension when the results of sex-role socialization research is often invoked to justify an unequal distribution of power.

The oppression of women has been used as a primary control mechanism for the human socialization process. Pandora released evil in the world, Eve caused the downfall of Man, and Demiter made the earth barren. These are only a few of the "myths" that blame women for all that is wrong in the world. The general equation of WOMEN+SEX=SIN is the singular means the patriarchy has constructed to maintain the unequal separation of the sexes.

In this section, we have chosen to deviate from the manner in which many traditional child development texts and readers are generally organized. Most contemporary texts have a major section labeled "Socialization." Subsumed under this heading are often topics such as the family, schooling, peer relationships, and sex-role identification. We have taken the liberty to title this section simply "Sex-Role Socialization." We are of the opinion that the dominant socializing process that reproduces a structurally unequal and oppressive sexual organization is that of sex-role socialization.

As in the case of general theory construction and cognition, theories of sex-role socialization are typically defined by a mechanistic or organistic paradigm. Social learning theory presupposes a mechanistic view, while psychoanalytic approaches subscribe to a biological foundation. Detailed accounts of the various theories of sex-role socialization can be found in Maccoby (1974) and Goslin (1969).

Because of its pervasive influence on the training of child development practitioners, we have chosen to focus on the contributions of Freudian and Neo-Freudian theories of sex-role socialization. The theories of Freud (Sigmund and Anna), Erikson, and Bowlby form the psychological foundation for the training of most child development professionals. This includes social workers, child psychotherapists, teachers and parents. We have chosen not to include an analysis of the literature related to social learning theory or cognitive-development theory. Neither of these theoretical approaches have captured the imagination of professional training modes in child development. For example, the publication list of the Child Welfare League of America, which represents the professional training interests of child-care workers in social work, is exclusively psychoanalytic in orientation. The work of Anna Freud, Erik Erikson, John Bowlby, and René Spitz continue to dominate the professional literature related to sex-role socialization.

Freud's classic 1925 essay titled "Some Psychological Consequences of the Anatomic Distinction Between

the Sexes"--sometimes known as the biology is destiny essay--is central to our critical and feminist analysis. Starting with his Three Essays on the Theory of Sexuality (1962), the inability to comprehend female sexuality constantly disturbed Freud. The Oedipus Complex and Castration Anxiety provided a rich and comprehensive analysis of how boys acquire a male identity, however female sex identity constantly eluded Freud. Even in his final years, he was unable to totally understand the female psychological experience.

Freud suggested that the analysis of female sexuality must begin before the onset of the Oedipus Complex. During the genital stage, the little girl finds as a source of pleasure her clitoris. However, she soon notices the penis of a brother or playmate as being superior to her own small organ. Freud then goes on to posit that the psychological consequences of such a comparison is that the little girl becomes envious of the little boy's penis. For the boy, such a distinction has only future consequences when he fears the possibility of castration. For the girl, the psychological consequences are immediate. Why, however, does the girl reject her mother who was her original love object and take on the father as a love object? Freud suggests that the girl holds her mother responsible for her lack of a penis. The little girl gives up her wish for a penis and substitutes a wish for a child. With this new wish, she takes her father as her love object. It is through self-hatred that the girl takes on the female psychology. As a result, women always remain psychologically "daddy's little girl."

Feminists generally condemn Freud's analysis because of its biological determinism and lack of social context in the development of the female psychology.19 A major exception to this condemnation of psychoanalytic theory is represented by the Marxist-feminist Juliet Mitchell (1974) in her volume PSYCHOANALYSIS AND FEMINISM,

Mitchell argues that Freud was not a biological determinist but rather was concerned with the transformation of our psychological needs from initially being biologically based to that of culture. For Mitchell, Freud's analysis of women is an analysis of the patriarchy. Psychoanalysis is a psychological reconstruction of humankind's history. According to Mitchell, Freud provides a "mental representation of the reality of society." Rather than viewing Freud's work as a conservative unchangeable description of reality, Mitchell sees the possibility of a revolution of consciousness that could transform the nature of human sexuality. Freud's analysis of the pre-oedipal drama indicates that humankind has undergone transformation in the past and will continue to transform.

Contrary to Firestone, Mitchell argues that biology is no longer relevant to an understanding of the distinction between the sexes. She explores the richness of psychoanalysis as a basis for a new definition of humankind. Mitchell overlays a Marxist analysis on the Freudian conception of sex-role identification. Capitalism as a particular mode of social organization provides a particular expression of the patriarchy found in no other historical epoch. She calls for an integration between the analysis of contradiction in the economic mode of capitalism and the ideological mode of the patriarchy. Mitchell announces: "It is women who stand at the heart of the contradiction of the patriarchy under capitalism...It is not only in the ideology of their role as mothers and procreators but above all in the very psychology of femininity that women bear witness to the patriarchal definition of society." (412-413)

Mitchell calls on women to organize themselves to change the patriarchal ideology of human society. Marxist-feminists would be mistaken if they believed that a transformation of the political economy would mean a transformation of the patriarchal ideology. Her call for a cultural revolution is a call for the overthrow of the patriarchy. In the final analysis, the "task of feminism is to insist on their birth."

Erik Erikson, as representative of a Neo-Freudian interpretation of psychoanalysis, provides a fairly restrictive view of the female experience in his classic essay "Inner and Outer Space: Reflections on Womanhood." (1964). As with Freud, Eriskon acknowledges that a completely formulated theory of female psychology does not exist. However he identifies the crucial period for the understanding of womanhood as the period from youth to maturity. It is during that period "when the young woman relinquishes the care received by the parental family and the extended care of institutions of education, in order to commit herself to the love of a stranger and to the care to be given to his and her offspring."

Contrary to Freud's psychosexual perspective which locates the genesis of the female psychology in early childhood, Erikson sees the identity of womanhood beginning in the pre-adolescent years. He then goes on to describe a well known "naturalistic" study conducted with 300 pre-adolescent (10-11 years old) boys and

girls. The children were given the task of creating a motion picture scene with a variety of life-like toys. The were told to arrange the "props" to tell a story. Erikson sees such a procedure as a variant of the projecti technique. The manner in which the children arrange their scenes would reveal their inner psychologic organization.

Erikson found that the young girls typically constructed interior scenes. People, animals, and furnitu were mainly within an enclosure and the configurations reflected passive and static positions (sitting or stan ing). Boy's scenes on the other hand reflected exterior configurations. High towers, automotive objec and people moving along the street characterized the boy's constructions. Erikson then goes on to conclud that the organization of the play scenes parallel the morphology of the genital differentiation of the sexe In the male, the external organ that is active; while in the female, internal organs that are passive.

For Erikson, women's fulfillment is found in her inner space "...the woman's productive inner space ma well remain the principal criterion, whether she chooses to build her life partially or wholly around it or not." (p. 604) In the final analysis, for Erikson biology is destiny! Women are nurturant rather than productive intuitive rather than intelligent, and if they are at all "normal," suited to the home and family.

In an attempt to transcend the traditional sex-typing arguments found in psychological research, severa feminist social scientists are calling for a critical analysis of androgyny (Kaplan and Bean, 1976; Johnson 1977; Hefner, Rebecca, and Olehansky, 1975). Johnson (1977) suggests that the construct of sex-typin itself is part of a "masculine" paradigm. She argues that the masculine paradigm promotes differentiatio between the sexes. She cites data that seem to indicate that femininity with its maternal principle encourage androgyny while the masculine paradigm promotes differentiation and stratification between the sexes.

Johnson does not view androgyny as a blending of stereotypical masculine and feminine traits, but rathe as a person who sees the world in human terms; not sex-typed terms. She believes that a feminine paradigm with its emphasis on the maternal principle would reverse the dominance principle that characterizes the patriarchy.

Johnson cites studies that suggest that sex-typing is a masculine issue. This concern has the effect of creating and maintaining male dominance over women. Homophobia, and a double standard of sexual morality are men's issues. Johnson notes that several studies indicate that when the mother is the more dominant parent there tends to be decreased sex-typing in both boys and girls. She interprets such findings on mother dominance as suggesting that when mothers have authority in a family, a female maternal paradigm prevails. Such a paradigm is generally associated with decreased sex-typing and an increased egalitarian ideology. Johnson calls for a more androgynous society that stresses the maternity for men and women.

A similar position is posited by Hefner, Rebecca, and Oleshansky (1975). They indicate that although both men and women are trapped in culturally defined stereotypical roles, men are the oppressors while women are the oppressed. The authors describe a dialectical conception of sex-role development which could produce a transcendent stage from the present asymetrical and polarized situation. Their dialectical analysis reflects a more radical critique than that posited by Johnson. Emphasis is on the nature of contradiction rather than a description of static traits.

A three stage model of sex-role transcendence is offered. Stage I--undifferentiated--is characterized by a generalized globalness and no conception of sex-roles and sex-typed behavior. During the undifferentiated stage, the child is unaware of the cultural expectations on behavior. Stage II--polarized--children learn to connect role prescription. Strict adherence to feminine and masculine roles are highly valued. Individuals are expected to conform to specific roles. In their analysis of Stage II, Hefner, et al. provide a radical critique of traditional social science methodology and research related sex-roles. Stage III--sex role transcendence--is described as the ability for individuals to behave in a manner not defined by "appropriate" sex-typed characteristics. They see stage III as an ongoing dialectical process continuing throughout the life-span. Transcendence would go beyond situational flexibility as generally described in the literature related to androgyny.

Perhaps the most significant and far-reaching research into the psychology of the maternal principle and the emotional development of the child is the work of John Bowlby (1956). Bowlby's maternal deprivation theory is the most widely held position on the relationship of parental care and the child's future mental health. Through the work of Bowlby, René Spitz (1965) and Mary Ainsworth (1966), women have been made

to believe that it is essential that an infant must experience a warm, intimate, and continuous relationship with his or her mother. So pervasive is the maternal deprivation theory, that it was invoked by former President Nixon in his 1971 veto of the Comprehensive Family Development Act. The maternal deprivation theory is a classic example of how theory becomes ideology.[14]

Drawing on the theoretical foundations of psychoanalysis, Bowlby sees the absolute need of infants for the continuous care of their mothers; father "plays second fiddle." In varying degrees, maternal deprivation will bring about anxiety, excessive need for love, feelings of revenge, guilt, and depression.

Bowlby suggests that it is only through the institution of the family that a mother-child relationship can be established. He cites evidence that in many cases a "bad" home is better than a "good" institution. Bowlby sees the primary purpose of the family as an institution to preserve the art of parenthood. The politicalization of such a position was reflected in Richard Nixon's veto message of the 1971 Comprehensive Family Development Act. The Act would have established universally available day care in the United States. Nixon viewed such legislation as having family weakening implications.

Bowlby calls on psychiatrists, social workers, and child-care workers to support the family as the primary vehicle for early child rearing. Outside care must be "regarded as a last resort to be undertaken only when it is absolutely impossible for the home to be made fit for the child." For all practical purposes, the position of Bowlby along with the work of Spitz, Ainsworth, and most recently Freiberg (1977) has become the theoretical foundation for child-care policy in this country.

This position is challenged by Rochelle Wortis (1971). Wortis provides a feminist argument in which she suggests that the maternal deprivation theory isolates the mother and encourages the domestication and subordination of adult women. In addition to presenting a general critique of the Bowlby hypothesis, Wortis analyzes the impact of the maternal deprivation theory on child-care legislation, child-rearing practices, and employment practices on women.

Contrary to popular belief, Wortis cites evidence that the so-called happy and secure American home described by advocates of the maternal deprivation theory by and large does not exist. In a majority of instances, home and family are highly restrictive environments for mother and child. Recent studies (Hoffman, 1961) seem to suggest that the present social and economic strain of many families have a negative effect on the physical, intellectual, and social development of the child.

Wortis views the present nuclear family as a psychological prison that confines women and children to social and productive isolation. She calls for analysis of the present ideology of the family that would bring about a transformation of women's status in the society.

Cultural Reproduction and the Transmission of Knowledge

Implicitly or explicitly children are seen as the raw materials for cultural continuity. On a personal level, one may firmly believe in the uniqueness and specialness of the experience of childhood, however social institutions are organized to transmit the norms and values of culture and to reproduce the knowledge of the adult society. That is, society is organized around a conceptionalization of childhood that can be characterized as childhood continuous. The dilemma of childhood unique vs. childhood continuous represents a central issue in the process of child development. Berlak and Berlak (1979) describe the dilemma as:

> The dilemma childhood continuous - childhood unique is a way of representing a cultural tension between two conceptions of childhood. The childhood unique orientation views the early years of life as qualitatively different or a special period of life which is to be respected and nurtured so it may flourish. From the childhood continuous perspective the differences between childhood and adulthood are largely quantitative; children are seen as incomplete adults, not as creature with quite distinctive and remarkable qualities.

The development of a child's intellect and the process of socialization do not take place in a neutral environment. Through such vehicles as language, the school, the family, and the media the culture is reproduced. Society's sanctioned child-care givers (parents, teachers, social workers, counselors) generally have a deep commitment to the child as a unique person. However culture is a collective experience. As a collective, individual

perceptions, beliefs, and subjective feelings are often subordinated to the needs of society. How society organizes itself to insure cultural transmission and the continuous reproduction of knowledge is the focus of this section. The critique will focus more specifically on language development, and the process of schooling. Within traditional child development research, language acquisition and schooling have become central areas of inquiry.

The relationship of mind, culture, and language has been a constant source of fascination for philosophers and psychologists. Recently two distinct subfields have emerged in linguisitics--psycholinguistics and sociolinguistics. Psycholinguistics, as a field of inquiry, was revolutionized with the linguistic theory of transformational grammar proposed by Noam Chomsky (1972). Representing the syntactical school of thought, Chomsky suggests that human beings are born with a specific univeral system of linguistic rules or grammar. For Chomsky, an in-born characteristic of humans are the rules of language construction. The theory of transformational grammar essentially reflects a general rationalist foundation.

Sociolinguisitics, on the other hand, is organized to look at the symbolic meaning system of a language, i.e., a semantic analysis. Generally considered a subfield of anthropology, Basil Bernstein (1973) has applied sociolinguistics to better understand the process of knowledge reproduction in a stratified socio-economic system. Recently sociolinguistic analysis has been utilized by feminist social scientists to examine the differential semantic basis of communication between men and women (Thorne & Henley, 1975). Feminist sociolinguistics has added a new dimension to the growing literature on a class analysis of the male and female experience.

Chomsky traces the presuppositions of his theory to classical rationalism. Universal grammatical forms, posits Chomsky, exist as innate psychological structures of the mind. Chomsky terms this innate organizational system the deep structure. The specific content--the spoken language--he calls the surface structure. The deep structure of human language is universal while the surface structure is unique. Specific rules, called grammatical transformations, govern the transformation of deep to surface structure. Chomsky believes the transformational rules give meaning to a sentence. That is, the syntactical organization of a sentence determines meaning.

As a rationalist, Chomsky sees the acquisition of all knowledge as an innate capacity of the mind. Modern rationalists, such as Chomsky and to some degree Piaget, do not subscribe to the a priori, in-born categories of knowledge first suggested by Kant in the 18th century. Contemporary rationalist epistemology posits the mind as a system of organizational structures that construct knowledge from environmental data. In other words, humans are born with a number of organizational systems (forms) in such areas as language, logic (Piaget), and morality (Kohlberg) that the child uses to construct knowledge.

Rationalist-based schools of psychology have been subject to critique by more dialectically conceptualized systems. However, quite often introductory texts and readers in child development group dialectical theories of child growth and development with phenomenological positions.[16]

Divisions of the human condition into two either/or categories serves to continue an unbridgeable split between subjective and objective realities. It is within this context that Riegel (1972) provides a critical analysis of Chomsky's epistemological perspective. As in the critique of Piaget and Kohlberg, Riegel indicates the dualistic character of epistemology that splits form and content. Chomsky's constructs a performance and competence splits the world and mind in two. Riegel suggests that such a split represents an "unbridgeable gap." "The absolute split between observables (content) and ideas (form) in Platonic philosophy prevents any developmental interpretation."

Riegel demonstrates that Aristotle provides an epistemology where form and content are "mutually interwoven"--i.e., dialectical. In contrast to Plato, Aristotle posits a "ceaseless movement between matter (content) and form." Riegel sees Chomsky's theory as ahistorical and adevelopmental. As a result, transformational grammar has limited emancipatory possibilities. Within the Platonic tradition, "the teacher functions like a midwife, assisting in the delivery of knowledge which already rests implicitly in the mind."

In the final analysis, Riegel views Chomsky's theoretical foundations as abstract formalism (see Buck-Morss on Piaget) that does not take into account the individual's experience and actions. Therefore, although Chomsky is often cast as a champion of the subjective and critic of Skinner's behaviorism, his own theory lacks a

revolutionary perspective.

Language as a mode of cultural reproduction and a vehicle for knowledge transmission has been extensively investigated by the British sociolinguist Basil Bernstein (1972). Following in the tradition of anthropologists Edward Sapir (1921) and Benjamin Whorf (1956), Bernstein has attempted to explore the relationship between symbolic systems and social structures. Bernstein draws on the theoretical foundations of Durkheim, Marx, and Mead to formulate a sociolinguistic thesis for cultural transmission.

In contrast to Chomsky's work, Bernstein's theory is sociological and concerned with forms of speech as a socialization process. Bernstein identifies the basic agencies of socialization as the family, peer groups, school and work. From a sociological perspective, Bernstein's central concern is a class analysis of how symbolic systems--linguistic codes--regulate the social distribution of knowledge.

Bernstein has identified two class based linguistic codes or symbolic meaning systems. Restricted codes, found primarily among the working and lower class, are context bound and tied to a local social structure. Elaborated codes, generally found among the middle class, have more universalistic meanings. Bernstein argues:

> "...restricted codes have their basis in condensed symbols, whereas elaborated codes have their basis in articulated symbols; that restricted codes draw upon metaphor whereas elaborated codes draw upon rationality..." (p. 128)

Restricted codes are not to be viewed as inferior forms of communication, but rather as a system of unspoken cultural and historical relationships. One can say that the language of love in a very real sense is a restricted code. Farnham-Diggory (1969) provides two outstanding examples of restricted codes; one from Tolstoy's ANNA KARENINA, the second from Malcolm X's autobiography:

Tolstoy's Love Scene:

"I have long wished to ask you something."
"Please do."
"This," he said, and wrote the initial letters: Wya: icnb, dymton. These letters meant, "When you answered: it can not be, did you mean then or never?" It seemed impossible that she would be able to understand the complicated sentence.
"I understand," she said, blushing.
"What word is that?" he asked, pointing to the n which stood for never.
"The word is never," she said, " but that is not true."
He quickly erased what he had written, handed her the chalk, and rose. She wrote: I c n a o t.
His face brightened suddenly: he had understood. It meant: "I could not answer otherwise then."
She wrote the initial letters: s t y m f a f w h. This meant: "So that you might forget and forgive what happened."
He seized the chalk with tense, trembling fingers, broke it, and wrote the initial letters of the following: "I have nothing to forget and forgive. I never ceased loving you."
"I understand," she whispered. (Tolstoy, ANNA KARENINA)

A Harlem Conversation:

There was an example of this that always flew to my mind every time I heard some of the "big name" Negro "leaders" declaring they "spoke for" the ghetto black people.

After a Harlem street rally, one of these downtown "leaders" and I were talking when we were approached by a Harlem hustler..He said to me, approximately, "Hey baby! I dig you holding this all-originals scene at the track...I'm going to lay a vine under the Jew's balls for a dime..got to give you a play...Got the shorts out here trying to scuffle up on some bread...Well, my man, I'll get on, got to go peck a little, and cop me some z's. And the hustler went on up Seventh Avenue.

> I would never have given it another thought, except that this downtown "leader" was standing staring after that hustler, looking as if he'd just heard Sanskrit. He asked me what had been said, and I told him. The hustler had said he was aware that the Muslims were holding an all-black bazaar at Rockland Palace, which is primarily a dancehall. The hustler intended to pawn a suit for ten dollars to attend and patronize the bazaar. He had very little money but he was trying hard to make some. He was going to eat, then he would get some sleep. (THE AUTOBIOGRAPHY OF MALCOLM X, p. 310)

Bernstein goes on to argue that schools are predicated upon elaborated codes and its universalistic system of social relationships. What is transmitted in such a system are the values of the middle class. Power relationships, as embodied in the class structure, are maintained through a social control of symbolic systems. Bernstein extends Marx's critique of the capitalist mode of production to the appropriation, manipulation and exploitation of cultural capital in the form of symbolic systems. Such controls prevent the working class from extending and changing the boundaries of their experience.

Perhaps one of the most interesting aspects of contemporary sociolinguistics is the emergence of a uniquely feminist perspective. Within the past few years a number of books and articles have appeared that focus on the differential language system of the male and female experience. Rather than investigating cultural or class based differences in language, feminist sociolinguistics has turned its attention to the social control of male dominance in language. Thorne and Henley (1975) provide a comprehensive summary of the issues and problems being investigated by feminist sociolinguists. They present a systematic exploration of "sex differences in language and speech to the social differentiation of the sexes, the structure of male dominance, and the division of labor by sex."

Thorne and Henley point out that anthropological studies of non-Western culture have traditionally analyzed gender differences in language. However, such an analysis has only recently started to take place in our own culture. Following Bernstein's social control thesis, Thorne and Henley suggest that language transmits every type of inequality--"it is part of the 'micropolitical structure' that helps maintain the larger political-economic structures." Women's speech is described as being more polite and conveying inferiority, immaturity, and triviality. On the other hand, male speech has more positive connotations that convey power and prestige.

Central to their analysis of language, gender, and society, is the theme of the division of labor. They report several studies that demonstrate that language is sex-typed. Recent investigations have found that the different spheres of social activity have sexually differentiated vocabularies and lexical forms.

They call on sociolinguists to acknowledge sex as a dimension worthy of inquiry as is class or race. They suggest that inequality is not just a matter of income, race, or education. Sexual inequality is one of a variety of sociological problems that can be explored through a linguistic analysis. Thorne and Henley feel that feminist oriented sociolinguistics can shed light on the social structure of our society.

Conspicuously absent from any radical critique of education is an analysis of the relationship between various theories of child devleopment and the process of schooling. This is particularly true in early childhood education where theories of child development provide the basic conceptual foundations for the preschool curriculum. Early childhood educators such as Biber and Franklin (1967) argue that the theoretical concepts concerning the development of the child can serve as a framework. They further argue that contemporary early childhood education is primarily directed to the needs of the disadvantaged child and that developmental and psychodynamic theories of child development can serve to elevate the cognitive and affective functioning of this population. Implied in their argument is a tacit assumption that specific theories of child development can provide a means for social reform. They attempt to build an articulation between child development theory and social policy.

Drawing on the foundations of psychodynamic (Freud, Eriskon) and developmental (Piaget) theories, Biber and Franklin set forth a psychological rationale for preschool education. Underlying their position is the belief in the universal nature of childhood. They see the basic psychological characteristics of drives, curiosity, and capacities as being found in all children regardless of life circumstances. They argue that preschool educational experiences should be congruent to available theoretical concepts in child development; specifically psychodynamic and developmental concepts.

Biber and Franklin outline principles derived from psychodynamic and developmental theory which they regard as essential in the planning of early childhood education programs. They address the question of economic and social disadvantage as a problem in the lack of articulation between psychological theory and educational practice. They argue that basic knowledge about the development of the preschool child is "relevant to all children in any life circumstance."

Numerous books and articles address the issue of translating theories of child development into educational practice.[17] Developmental psychologists concerned with applying the basic principles of Freud, Erikson, or Piaget in educational settings have generally failed to understand the structural relationship between the process of schooling and a society's political ideology. Sociologists, on the other hand, have long recognized the functional relationship between school, society, and ideology. Except for the insightful contributions of John Dewey, American psychologists have generally failed to examine the underlying ideological significance of a given theory of child development and how that ideology gets built into the "hidden curriculum" of a child's schooling.

Within the past decade, the writings of Jean Piaget have provided a vast reservoir of ideas related to educational practice. Each year two or three books and numerous articles appear on how to apply Piagetian theory within a pedagogical context. Kaufman (1978) argues that any application of Piaget's theory must reflect an epistemological analysis. It is posited that the epistemological foundations of Piaget's constructivism is mutually exclusive to the presuppositions of scientific materialism which forms the foundation of contemporary educational practice. Kaufman goes on to suggest that any application of Piaget's theory should be examined within the light of the overriding function of schooling which is to support and maintain the political ideology inherent in a capitalist economy.

Kaufman traces the common philosophical roots of psychological behaviorism and corporate capitalism. He suggests that capitalism and behaviorism share a common mechanistic and materialistic world view. Piaget's theory, on the other hand, had its roots in a more dialectical conceptualized epistemology as suggested by Hegel and Marx. For Kaufman, any pedagogical application of Piaget must reflect a consistent ideological foundation as is found in socialism. Kaufman finds in Piaget emancipatory possibilities not available in materialist based psychological theories.

Kaufman argues that materialist conceptions of the universe forms the overriding model from whence emanate the theories of behavioral psychology and capitalism. Educational practice based on such a foundation includes class stratification in the form of tracking, normative and quantitative measures of intellectual achievement, and an unequal process of education. On the other hand, Piaget's constructivism provides a model of pedagogical principles that suggests a holistic and dialectical model of development. Such a model emphasizes qualitative measures of cognitive competence rather than quantitative measures of cognitive performance. In the final analysis, Kaufman suggests that any genuine application of Piaget to educational practice must be accomplished within a congruent political ideology such as socialism; both of which share a common dialectical conceptualization.

Following a similar argument to that of Kaufman, Huebner (1978) outlines the emancipatory potential of a "genetic" Marxism. Huebner suggests whereas Marx described the ideological basis of social, economic and political structures with a historical and dialectical frame, Piaget has done the same thing from the perspective of the history of the individual. A Marxist "revolutionary practice" has as its origins biological and social givens and activities of the infant."

Huebner points out the similarities between Marx and Piaget in reference to activity and the appropriation of nature. For Piaget and Marx the central aspect of human life is the active and dialectical interchange with the environment. Individual history and social history are driven by the forces of dialectical contradiction.

Huebner calls for a political-economy of school curricula which would have as its primary focus the raising of consciousness and the development of a critical methodology that would "inform and be informed by our practice as educators." Such a methodology would be social, dialectical, and materialistic. According to Huebner, social refers to the collective aspect of human life, dialectical refers to the recognition of internal contradictions, and materialistic refers to the respect for the body of the person and the body of the world.

Arguing from a feminist social science perspective, Lightfoot (1977) explores the continuing conflict between families and schools as a more specific battle between two populations of women. Women as mothers and as teachers suffer from an idealized cultural image which masks the demeaning low status offered to them by the culture. The socialization process of becoming a mother or teacher encourages feminine traits leading to accusations of overprotecting parent or emotionally involved teacher. It has been suggested by psychodynamically oriented theories of development that overprotection by the mother and emotional involvement by the teacher could have negative consequences on the development of the child.[18]

Lightfoot argues for a fuller exploration of the social context of the schooling process to include a recognition of the long ignored role of sexuality in the classroom as well as teacher-mother interactions. Lightfoot notes that parents have particularistic expectations for their children while teachers have universalistic expectations. Othen elementary school teachers are placed in the position of urging children to reject their family, and community traditions. Parent's values and skills are seen as inadequate for socializing children into the mainstream of American society. Because all mothers and the vast majority of elementary school teachers are women, the conflict Lightfoot describes are largely women's issues. At the slightest mention of social decay, mothers and teachers become the objects of blame.

Child development research tends to evaluate the competence of mothers harshly while teachers are viewed as inheriting the mothers' failures. "The school becomes the first place where mothers experience public evaluation and scrutiny, where teachers voice approval or disapproval of the mother as reflected through the child." Women, either as mothers or teachers, are ultimately blamed for a child's cognitive and social retardation.

Women are pitted against women for the lives of children, yet each are devalued in the society. Neither population has achieved a state of consciousness to identify male power and privilege as responsible for their low social position. In the final analysis, mothers and teachers are required to socialize and educate children to serve the needs of a male dominated society and at the same time distrust one another.

Using a functional analysis of families and schools, Lightfoot sees that these institutions at times serve different goals. She feels that a dynamic tension between family and school will not necessarily be detrimental to the child. She finds that a total congruence of family and school goals would reflect an authoritarian society. She calls for a "creative conflict" between family and school.

Lightfoot's suggestions for resolving the mother-teacher conflict lack an emancipatory transformation of both populations of women and the institutions within which they are oppressed. In seeking a cultural transformation, Lightfoot assumes the possibility for transcending these socio-political barriers in individual-personal transformations and not in a structural transformation of the nuclear family or in the organization of educational institutions that reproduce the cultural myths which support a male dominated society and which perpetuates the alienation of women from each other.

Conclusions

Within the past decade, theory and research related to child development has become the cornerstone for contemporary curriculum development. This is particularly true in early childhood education. The writings of critical theorists and feminist social scientists have too infrequently informed the concerns of curriculum studies. The following represent a summary of our inquiry into class and sex bias in child development theory and research:

1. Areas of social inquiry in child development have been overlooked because of the use of positivist models of investigation; alternative models can open new areas for examination, about both boys and girls.
2. Child development research often assumes a "single society" with respect to sex and class, in which generalizations can be made about children, yet they may inhabit different social worlds, and these must be taken into account.

3. Certain methodologies and research situations may systematically mitigate against the elucidation of certain types of data, yet these data may be the most important for explaining the phenomenon being studied.
4. Child development research often describes what is and therefore helps provide rationalizations for existing power relationships. Critical and feminist social science explore needed social transformations and encourage a more just and humane society.

The following represent significant areas for curriculum studies that can be gleaned from a critical and feminist social science of child development:

1. developing the power of the person for self and social production:
2. evolving social relations of the person;
3. developing the relationship of self activity to social activity;
4. evolving functions of language as manifestations of social relations and consciousness; including class and sex consciousness.

FOOTNOTES

1. See Sears, R.R. "Your Ancients Revisited: A History of Child Development" in REVIEW OF CHILD DEVELOPMENT RESEARCH, Volume 5. Also, Senn, M.J.E. "Insights on the Child Development Movement in the United States" in MONOGRAPHS OF THE SOCIETY FOR RESEARCH AND CHILD DEVELOPMENT, Vol. 40. Sears and Senn use a chronological approach to the history of child development rather than a historico-critical analysis.
2. See Clark-Stewart, A. "Popular Primers for Parents" in AMERICAN PSYCHOLOGIST, 33(4), 1978.
3. Child development and developmental psychology textbooks are generally organized along three lines: (1) Ages and stages--chronological. See Mussen, Conger, Kagan, CHILD DEVELOPMENT AND PERSONALITY, 1974 or McCandless and Trotter, CHILDREN, 1977. (2) Topical development of various psychological processes such as cognition, socialization, language development, etc. See Ausubel and Sullivan, THEORY AND PROBLEMS OF CHILD DEVELOPMENT, 1970. (3) Comparative theories. See Baldwin, THEORIES OF CHILD DEVELOPMENT, 1967 or Langer, THEORIES OF DEVELOPMENT, 1969.
4. A major exception to an ahistorical analysis of development is reflected in the work of Klaus Riegel. A complete bibliography of Riegel's work can be found in HUMAN DEVELOPMENT, Vol. 21, No. 1, 1978.
5. See Brown, B. MARX, FREUD, AND THE CRITIQUE OF EVERYDAY LIFE, 1973.
6. The contemporary women's movement is represented by a wide spectrum of theoretical and methodological perspectives. A fully developed sociology of feminist theory has yet to be articulated. We believe the following represent some of the more established perspectives on the women's experience: (1) Spiritual feminism. See the journal FURIES and QUEST for literature related to spiritual feminism. (2) Martriarchist feminism. See Stone, M. WHEN GOD WAS A WOMAN, 1976. (3) Marxist or socialist feminism. See Eisenstein, Z. CAPITALIST PATRIARCHY AND THE CASE FOR SOCIALIST FEMINISM, 1979. (4) Radical-lesbian. See the periodical OFF OUR BACKS.
7. Absent from our critique of child development is an analysis from a racial perspective. See Myers, L.W. A STUDY OF THE SELF-ESTEEM MAINTENANCE PROCESS AMONG BLACK WOMEN. Unpublished Dissertation, 1972, and Williams, M. and Newman, P. BLACK WOMEN'S LIBERATION, 1970.
8. See Rossi, A. "Sex Equality: The Beginnings of Ideology" in THE HUMANIST, 1969, Bernard, J. THE FUTURE OF MOTHERHOOD, 1974, and Horner, M. "Toward an Understanding of Achievement Related Conflicts in Women" in JOURNAL OF SOCIAL ISSUES, 1972.
9. "Patriarchy as Paradigm," paper presented at Annual Meeting of Association of Women in Psychology, Pittsburgh, 1978.
10. We use the term "mainstream" to mean widely accepted or generally approved theories within the child development community--i.e., theoretical knowledge typically found in introductory or survey courses in child development or developmental psychology.

11. A comprehensive and annotated collection of Piaget's work is found in Gruber, H. THE ESSENTIAL PIAGET, 1978.
12. See Rotman, B. JEAN PIAGET: PSYCHOLOGIST OF THE REAL, 1977.
13. A statement of the fundamental principles of behaviorism is presented by White, S. in "The Learning Theory Approach" in CARMICHAEL'S MANUAL OF CHILD PSYCHOLOGY, 1971.
14. See Steinfels, M.O.B. WHO'S MIND THE CHILDREN for feminist and class analysis of day-care in America, 1973.
15. See Weisstein, N. "Psychology Constructs the Female, or the Fantasy Life of the Male Psychologist" in Morgan, R. SISTERHOOD IS POWERFUL, 1968.
16. See Ausubel and Sullivan, THEORY AND PROBLEMS OF CHILD DEVELOPMENT, 1970.
17. See Rohwer, W.D. "Cognitive Development and Education" in CARMICHAEL'S MANUAL OF CHILD PSYCHOLOGY, 1971.
18. See Freud, A. PSYCHOANALYSIS FOR TEACHERS AND PARENTS, 1979.

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Images of the Evolving Curriculum

Sandra Wallenstein

The future is wide open in terms of possibilities for conceptualization in curriculum theory. But in terms of what will probably happen, the options become narrower; and if you subscribe to behaviorist theory, the options become predictable.

There seems to be a huge gap between what I want to see happen and what most of us expect will happen. When I start thinking about my slim chances for closing that gap, I lose the motivation to live out my dreams; I lose the impetus to dream. On the other hand, when I start becoming obsessed with actualizing a particular dream, too often it's either a 'let down'[1] when I get it or else I get 'burnt out'[2] in the process of trying to get it. There seems to be a real liability to considering the future at all.

It's no wonder then that society is suffering from a condition I describe as prophobia. It means fear of the future; fear of flying; fear of falling; of facing things less known than what we already know. It would be too simple however, to attribute our resistance to future visions solely to a lack of confidence in their outcome. There are other explanations; like the chaotic state of our psychic and physical senses. We are barraged with input through the media and technological accomplishments such that we are barely capable of deciphering what all this input is; much less capable of deciding whether we want to encounter it in the first place or determining what should take its place. Toffler coined the term 'future shock'; I prefer to view it as overloaded circuitry of our nervous system. We are both speaking about a state of constant overstimulation; prototypical of the individual living in American cities.

My relationship with my car is a perfect example of prophobic behavior. I live with the expectation that it will run smoothly, but beneath this I harbor the fear that it will break down; that the sputter I hear under the hood, the tire that looks low, will eventually stop the car from functioning. I choose to ignore the warning signals because I don't know how to fix the car. I am only interested in the car as a provider of transporation, not in the car itself. My attitude toward my car is similar to the one I have toward many aspects of my environment; Use it as long as it lasts.

The point I am making is not that we should know how to fix our cars if we expect them to work for us in the future. Car maintenance, for the time being, belongs to the realm of car mechanics. And car mechanics cannot afford to be prophobic about cars. The point here is that I cannot, as a curriculum theorist, afford to close my eyes to the future of education as it manifests in schools, prisons, homes, or other environments. McDonald puts it succinctly when he said, "Curriculum theory...might be said to be the essence of educational theory because it is the study of how to have a learning environment."[3]

The answer to this problem is not evident. If it was, we wouldn't need a field to study it. When people ask me questions ranging from what I would change in a classroom to what I would do as the director of N.I.E. I draw a blank. My confusion and silence do not imply disinterest. There are too many answers and no adequate places to begin. The process of writing however, provided me with an opportunity to penetrate my thoughts about learning environments, specifically because it is a solitary activity. During the month of July I developed many images regarding positive learning experiences in a daily written meditation. These images are the bulk of what I will present in the remainder of this paper. They are now divided into four sections; each section generates an aspect of the whole spectrum of learning environments. The division into sections also enables me to intersperse analysis of the images while they are still fresh in the reader's mind. The method employs both intuitive and analytical techniques.

SECTION 1

1

There are no bells every fifty minutes; no desks and chairs in straight rows. The windows are open and the smell of flowers wafts through the room. The gerbil crunches paper. This group of students and teachers is studying cancer. What is it? What does it look like in the body? What are the theories about how it is caused? In order to understand cancer in more detail we are led to the internal structure of the human body. Each person constructs a model of the body. Then we go through the body outlining the passages of the different

systems; the circulatory, digestive, nervous; and when this is completed we take a look at what cancer looks like growing in the body. We discuss what it means to be tense in a part of the body; what happens to the muscles, the blood cells, the energy. We look at different theories like rolfing and bioenergetics that describe ways of releasing tension. We discuss how these theories might relate to cancer. We look at a wide range of research from genetic recombination studies to faith healing accounts in order to understand cancer.

Elaborating on the model of the human body, we could use electric circuitry to demonstrate the various metabolic processes. For example, the circulatory system could be designed in green wire, the digestive in red, and the nervous system in blue. When a particular system was being activated, it could light up by attaching a tiny light bulb to the wires.

Considering the concrete steps to doing the body project: An initial approach would be to scan children's books written about the body. Moving on to theorists in body language and medical texts. This body project has the potential of tapping artistic modes.

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Everyone has a voting machine in their home. Everyday a series of questions come up on the screen which present what Congress has been debating. There is a small statement accompanying the pro and con positions and a third option stating that no position is adequate. Each person votes by pressing a lever and the results travel into a central tabulating machine which processes the data and relays the results to the screen.

A group is learning how computers work at their most basic level. They are not so concerned with specific programs, but instead looking at the fundamental level of electronics. Why does this piece of information get transmitted through this wire to this spot?

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These first images spotlight major areas of control in society, that of medicine, law, and electronics. But rather than depicting alienated individuals who follow the doctor's orders rather than their own body signals, who don't both voting because they mistrust the political machine, and who wouldn't go near a computer, I have created scenes which connect individuals to the technology of their age. These are environments which stimulate creative exploration of this world. They demystify medical research and computer technology by appointing these very phenomena as prime targets for investigation. What I have in mind here is people regaining control of their lives by gaining access to the knowledge they have been denied and then, with this knowledge being able to make intelligent, responsible choices about the future of their community, society, and planet. The advantages are twofold: 1) People feel more connected to life because, in fact, they are and 2) Their input adds to the potential for coming up with solutions to the problems we face as a society.

SECTION 2

We are outside in a circle exploring worms. Joanne is shooting us. Jim is helping her make a movie of our exploration. We are imagining what the life of the worm is like.

A small child cries with frustration. She has fallen off the ladder of the jungle gym. The teacher, Michael, walks over to her and gently picks her up. Now she is rocking in his arms. He continues telling the story of Skylab to the group of children seated around him. One child wants to know why the satellite will fall into pieces, if there are people inside, and how it got up in the sky. An endless spectrum of questions. Jessica climbs out of Michael's arms and moves into the circle between her friends.

We are talking about what we want to do when we get older; with our time, with ourselves. Someone says he wants to be a . And then we talk about what it means to be a anything; about whether some roles are better than others, and in what ways.

Some students are excited by the challenge of finding their own answers to questions they have framed. Whatever the search entails: following hunches, spending weeks in the library, apprenticing, they are moved to explore rather than resigning themselves to a predestined curriculum. Autobiographical work is helping to reveal their interests and orientations. They have created a collected autobiography; a collection of autobiographies that comprise reflections of past, statements of present, and visions of the future. Together these individual stories can be seen as one larger story, enabling each person to see their life within a larger context, to see how their desires are similar to or different from other people's. The stories situate a sub-culture within the society.

Others are working on community projects. Rather than isolated apprenticeships, groups of students are undertaking projects related to the community in which they live. For example, they have set up a community resource center which is staffed by both students and people in the community. Its purpose is to answer questions and research problems that people from the community bring to the center.

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This second collection of images has to do with broadening our understanding of other people, ourselves, and nature; developing compassion and acceptance for differences.

The exploration of the worm is really getting at my belief that humans must reestablish a balanced relationship with animals and the natural environment in order to survive. Susan Griffin, in her book WOMAN AND NATURE, lays the groundwork for my belief by outlining the historical events that led to man's destruction of and alienation from nature and woman.

Both the images of Joanne shooting a movie with Jim helping her and Michael, the teacher, rocking a little girl are examples of changing sex role behavior. The male teacher is developing his gentler side while the female filmmaker is developing her executive skills. Obviously, these kinds of changes have already begun to take place in schools. The important point here is that people are supported for non-traditional behaviors, for experimenting with the less familiar parts of themselves.

The community work is another means for getting outside the insular four walled education to experience different life styles through communicating with people from different backgrounds.

In previous paper I have expressed the significance that autobiography can play in tuning us into our motivations, beliefs, and behaviors. Dwayne Huebner sums it up in the following way:

> Retrospection about the threads of continuity and change composing an individual is the discipline of biography. These same threads projected into the future become the concern of the educator. Might it not be possible, then, that insights into curriculum planning are to be sought in the discipline of biography, as well as within the discipline of psychology?[4]

Autobiographical work can be used as a mirror to reflect who we are and in comprehending who we are, we then have the choice to struggle to extend and enhance ourselves.

SECTION 3

This class is focusing on images of the future. We all sit down and write, then share afterwards.

I see space ships carrying ordinary people into space; a whole network of space transportation: space stations, shuttles, rockets capable of travelling for distances. What will it be like to not be bound to earth by gravity? When I imagine space habitats, I think of beings walking on the stations, bound to matter. What will it be like to float around, to skate without skates? Will the problems that we have here regarding ownership extend into space? No, of course not. This is my fantasy. There will be no such thing as ownership of space or things. What will humans do there? Explore, explore new territory. Go further out into space. Explore new sensations, change forms, mutate. Celebrate the joy of opening up. What about missing the past; old friends and family? Awareness will be different; that is, not so limited. We'll be able to contact people, to experience different countries, different points in time so that the fifty year span we are so attached to now, will exist in a much broader perspective. How will we keep ourselves alive? We won't depend on resources the way we do now. For example, we won't have to eat processed food. It will be more a matter of taking in energy. Energy will provide different kinds of nourishment like energy we take in through light and sound and that which comes from matter.

Another future image zeroes in on tiny nuclear families all over the world; each with its own ideal physical setting. An environment that includes natural beauty as well as interesting work and children. Paying the bills is no problem and the fears that accompany meagre finances are down away with. I'm not proposing a Brave New World utopia where everybody gets the same thing. There will be variation. People can choose their jobs, but most essentially, there will be enough resources to go around.

The result of a conversation between two students: Given the present economic, political, and spiritual situation this country is in, what could happen? We envisioned three outcomes: 1) The good one would be

the rising of an underworld group of people who had found a solution and a way of articulating it to the world. It would be a planetary solution. A group of people (scientists, healers, politicians) who had been working together secretly finally felt the time was right to surface their ideas. A United Nations that was effective; that spoke in moving languages to all peoples. A United Nations that headed up international research and solving of problems. A global attempt to solve the issues of unequal distribution of goods and resources, an attempt to balance power on the earth. Curriculum in schools would not be so provincial, that is, limited to that particular location. Curriculum would challenge people to understand the situations in foreign parts of the world.

2) The other fantasy, the catastrophic one, envisions an all out nuclear war leaving the planet uninhabitable by people (or at least large portions of it). The survivors don't know how to operate the technology that is left. There is famine. No places remains to grow food.

3) A third option is that life proceeds just the way it's been proceeding. Nothing changes. And in thirty years we are still afraid of imminent nuclear war (by a terrorist).

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These images are the most expansive; they adopt a global perspective of where we are heading. They view life on this planet almost from an aerial view. And because of this deeper and longer vision, they are more difficult to assimilate with our notion of reality. Concepts of space travel and international agreements to share resources are beyond our scope of influence. However, I think it is useful to communicate our visions of these sort of global developments. It gives us a larger context in which to understand our individual lives and it opens the door for sharing a more long range vision.

SECTION 4

It is the autumn of 1979. Barb, David, and I are in San Diego working on a National Science Foundation grant to study the effects of pesticides on farm workers. We are meeting pregnant women who have been exposed to pesticides. When they give birth, we'll be checking the babies for birth defects. I'm taking a crash course in Spanish and timidly trying to speak. Everyday we go out to the fields and the clinics and in the evenings we write up what we've learned. This project provides the chance to combine social action with what I know about communication skills and teaching. It gives me a chance to see how different people live. It is reciprocal education (for us and the farm workers) in a broader context than the classroom.

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A month from now I am going to the zendo every morning to sit. In fact, I'm living close enough (in a pretty place) to walk there. Going to the zendo at ten of six in the morning is a very quiet, centering way to start the day. Following that I begin writing; working on my dissertation. I am becoming more and more articulate about the learning process that is going on inside me. The distracting thoughts that used to float in and disrupt my writing flow are being contained. The writing is coming alive and I see people around me identifying their own learning process in different forms. I have stocked up on good food so that I don't have to go out when I'm hungry. I'm not feeling so angry anymore about past traumas and relationships. Therapy has provided a safe space to get the anger out and be done with it. Related to this, my fear of animals has dissipated and I am feeling close to them once again.

I am at an institute whose purpose is to study the problems of the world. (It's something like the one Robert Hutchins set up when he left Chicago.) My closest friends: Barb, David, Denah, Bill, Peter, and others are with me working on projects. The things we create are disseminated into the world.

I am travelling around Europe, lecturing, giving small discussion groups on the significance of reflective autobiography; really using this method as a tool to talk about larger things like evolution, like what we as a species are doing on this planet. I'm travelling in much more formal clothes than these shorts I'm wearing now and the clothes help me to reach people who are foreign to me now.

I am in the 'deep south'; in Texas and Alabama talking about curriculum theory. I'm talking with people who have thought about these things from another perspective again. Why am I doing this? To effect the structure of schooling somewhat, but I'm more interested in the whole being of the human, in seeing what we are becoming as a species.

These images differ from the earlier ones in that they project one individual, Sandy Wallenstein, into future settings. In this respect, they represent possible continuations of my life and anticipate the potential of my being.

The focus of the images for the most part is on life work. This work manifests in a range of geographical locations and structural settings. The nature of the work is not contained to one project or discipline. It includes writing a dissertation, lecturing in curriculum, working in health education, and researching world problems and human development.

The other major aspect of these images pertains to my personal well being. Here I am referring to the daily rituals which contribute to my sense of health and enjoyment; rituals like meditation, exercise, and eating nutritiously. Along with this orientation, goes the determination to become a person who is less afraid (of animals, whatever) and more willing and able to express who she is.

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In conclusion, parts of the images I have described in this paper have already materialized in reality since the time I wrote them, but the majority remain as images. And in terms of their significance to me; it has diminished with respect to their particular form and increased with respect to the values and themes they generate. Let me recapitulate for a moment the themes that were generated:

1) the demystification of technology
2) the liberation of oppressed peoples
3) a global perspective of emancipation
4) clarification of personal values

What then, do these themes tell us about the future of curriculum? They begin to articulate the values I would find necessary in a reconceived curriculum theory. It will involve another paper to explain what I mean by the demystification of technology, the liberation of oppressed peoples (and consequently, life structures) and why I find these issues so crucial to a new theory of curriculum. Perhaps the most I can say is that these themes taken together embody a multi-dimensional freedom. They allow curriculum to play an evolutionary role in the reproduction of society, as opposed to the social maintenance role it now plays.

FOOTNOTES

1. Translated as disappointment.
2. Translated as exhausted.
3. James McDonald. "Curriculum Theory," in CURRICULUM THEORIZING, edited by William Pinar. Berkeley: McCutchan Publishing Corp., 1975, p. 12.
4. Dwayne Huebner. "Curriculum as Concern for Man's Temporality," in CURRICULUM THEORIZING, OP. CIT., p. 242.

AIRLIE: SACRALITY, PARADIGMS, AND THE AXIS MUNDI

Sacred stone on soft skin of speaker,
Under a sweater, concealing full growth,
Womanhood. Finicking hair in sloth,
Refusing slacks or a manly sneaker,
Showing a slinky leg or hem of the weaker
Sex. Profanation so immense that both
Of us looked skyward, for we were loath
To say: "Escape, or change? Which is bleaker?"
By letting sky hang low, we must carry
Voices and memories of our teacher,
Pressing forms on thought that are obliquer
Than shunted pickers in a quarry
Whose energy of youthfulness quite shuts
The passage down into the cleft it cuts.

I celebrate the transformation you
Know as history. In fields the holy ground
Is richer than a movie reel. A clown
Paints moons with absolutes and snakes the view
With his third eye, that warranted the blue
Hiatus between man's agonies: round
And square, dominance and flushed foreground.
But what fool does and what the past can do
Is drink up waters for initiates.
Our abstractions search for the concrete real
So ready and so raw that they can squeel
Calendars to verify all of our dates.
We come and go transcended by four spaces square,
A labyrinthian power everywhere.

A tulip poplar blurs my view of wields
Beyond the walls, a giant straight
Edge from the sacred earth mothered by weight
Of years, paradigm of history, yields
A shift from the past, stopped; a sword that shields
The bearer. The stony shoulder of late
Neglected pike reveals its roots that ate
Into the burdened terrace of the fields.
In mythless time I am at one with willow
Or slender sassafras or sycamore
That sheds its bark but holds its fruit till hoar
Frost. But crisis dueling on my pillow
I slip into the past that rends the air
By taking up the tulips that the poplars bear.

PRETEXT: Essay review of IDEOLOGY AND CURRICULUM, by Michael W. Apple. London: Routledge & Kegan Paul, 1979, 203 pp.

Beyond Hegemony

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IDEOLOGY AND CURRICULUM, by Michael W. Apple, is a collection of articles previously published in educational journals, thematically bound together by a neo-Marxist analysis of schooling. The book focuses upon the complex interrelationship between an economic system characterized by inequality and schooling policies and practices, especially those functions, values, assumptions, and behaviors which are expressed in the hidden curriculum. His analysis explores the linkage between the unequal distribution of cultural capital and inequality endemic to a capitalistic economic structure.

Linkages between social and economic factors and schooling practices occur, according to Professor Apple, within a holistic social construction of reality--an ideology. Central to his analysis is the concept "hegemony," a conceptual tool which he draws from the writings of Williams, Gramsci, and others, and defines as "...an organized assemblage of meanings and practices, the central, effective and dominant system of meanings, values, and actions which are lived." (p. 5) He views ideology as a pervasive belief system which serves as a gyroscope for perception and behavior; it seeps into the conceptual pores of individuals during the process of socialization along with modes of thinking and developing knowledge. Ideology, in short, is not only "out there," but also "in here."

Professor Apple focuses upon a variety of forces which define schooling and which relate to the American ideology. He explores such factors as the school's consensus ideology, the influence of the factory model, emerging systems management models, the debilitating uses of labelling, the attempt to objectify the behavior of individuals through clinical language, the over-emphasis upon competition, and a variety of other overt and covert policies and practices. He analyzes all of these factors within schooling as being symbiotically combined in a corporate ideological system rooted to social inequality.

IDEOLOGY AND CURRICULUM might more accurately be titled A NEO-MARXIST VIEW OF THE FOUNDATIONS OF AMERICAN EDUCATION.[1] The book's theme will be familiar to those readers already acquainted with Professor Apple's deep commitment to the examination of social practices through spectacles not customarily worn by American educationists. Indeed, he proudly announces the purchase of his conceptual gear from some of the au courant European social critics. Readers are provided with the opportunity to study Professor Apple's neo-Marxist approach by analyzing the various ways in which he applies his criticism. While his analysis would not move intellectuals nurtured in the classical tradition so well defined by Julian Benda, nor would interest behaviorist technicians, it should provide curriculum theorists with some important points of departure for analyzing a school system which is increasingly being perceived as a fortress under seige.

Unfortunately, his stress upon the need for a rigorous historical analysis of social forms and practices is not applied in his own work. Such an effort would surely have been rewarding to both supporters and critics of his theme. While some sections are repetitious--an unfortunate consequence often characteristic of collections of previously published articles--the book is worth reading, for it reveals both the weakness and strength of the perspective. To the degree that it forces the honest reader to rethink his/her assumptions about education, Professor Apple's aim to awaken intellectual ferment and social awareness is achieved. I must confess, however, that rooting American ideology primarily to the reality of economic inequality limits rather than expands the contribution.

The concept "hegemony," in my judgment, represents both the strength and weakness of Professor Apple's approach. He rejects the simplistic notion that equality in society is maintained soley by the conscious manipulation of the dominant social group--a notion which has often served as a strawman for erstwhile apologists of the capitalist system who wish to reject any Marxist analysis out of hand. However, while the concept "hegemony" liberates his analysis from a form of "conceptual paranoia" which has characterized less

intellectually sophisticated critics of the American ideological system, in my judgment it leads Professor Apple into an intellectual cul-de-sac. Certainly any view of ideology which assumes a cohesive, omnipresent system is bound to give scholars pause. The concept "hegemony", itself, engenders the kind of reaction one would expect from a centipede thinking about walking: a stoic, immovable, silence.

I wish to stress that my critcisms emerge from an authentic appreciation of Professor Apple's work. It is good to read a book about education that both enlightens and enrages. Though I am not converted, I have fallen under the spell of his profound concern for social justice. Alas, I do strongly agree with his central conviction that all education is a political act, and I share his deep dismay with educators who deny the inherent political nature of teaching by withdrawing into a mythical curricular playpen where they build curricula with conceptual tinker toys. In view of some of the reactionary stupidity currently bandied about in the popular press and seriously utilized by legislators to change educational practices, Professor Apple's assessment strikes an important chord. Narrow-minded ax-grinders who care more about test scores than meaningful learning, more about minimum competencies than the development of a capacity to appreciate life, and more about discipline than providing equality of educational opportunity, surely need to be attacked. Indeed, the time for committed educators to feel and to exhibit a social consciousness is now.

Although I do not view myself as a defender of the economic status quo, which I could not dare label at this juncture in our history, I disagree profoundly with a number of Professor Apple's convictions about the roots of social inequality. I remain, for example, uncertain as to the causes of the present day unacceptable forms of inequality in our society. Having been disillusioned, like so many others, with the failure of the Johnsonian efforts to establish equality of educational opportunity in the United States, I remain suspicious of any proposal which offers a ready-made all-encompassing perspective. The history of socialist societies surely does not offer encouragement. Individuals searching for a modern social system which does not create rampant alienation among the citizenry are soon to be disappointed.

Unfortunately, while rejecting an idealogical system that places individualism at its core, Professor Apple avoids the more basic dilemma confronted by those individuals who attempted to devise and implement a socio-political and economic system which offers both an honest liberty and an actual equality of opportunity for all. "Liberty, Equality and Fraternity" makes a better slogan than a plan of action. The struggle to weave through these three profoundly important elements of a just society and to explore the problems created when these concepts are juxtaposed should be at the heart of any ethical study of society and schooling.

Because of my own ideological bias, I take particular offense at his lack of sensitivity towards some of those educational liberals who are attempting to humanize schooling. While he questions innovations such as the "open classroom" and the focus upon the "whole child," noting that they frequently lead to greater stratification in the school, he defends programs designed to provide equality of educational opportunity to such disenfranchised individuals as cultural minorities and women. If the establishment of the latter programs which he supports, may produce "political battles" that can bring us closer to social justice, why does he reject other needed progressive reform? Professor Apple does not lead us out of this quagmire; he merely wallows in it with the rest of us. How do we decide which efforts are "bourgeois tinkering," and which are not? Why are study groups about labor history within factories or schools less dangerous to his advocacy than open classrooms? It is a reflection of my own bourgeois spirit that I believe that individuals who advocate revolutionary changes should do so without reservations.

Professor Apple's view of the American ideological system as rooted to a corporate ethos embedded in acceptance of inequality not only seems simplistic, but is also a conceptual cop out. If I were to select a bête noir to blame for the continuation--and, in some cases, aggravation--of social inequality, it would be the uncontrolled patterns of technological development in evidence around us. Indeed, capitalism as an economic system appears to be as vulnerable to disintegration due to technological developments as do other factors in modern life. While it is true that capitalism accompanied, or helped to generate, rapid technological development, and while historically it has caused unpardonable human suffering for some individuals, the ills produced by rampant technological change with its disruption of institutional life and community sentiment, and the resulting value crisis, seem to be more significant at this time than any particular economic system. It therefore seems unwarranted to blame the ideology which supports the corporate nature of our society for most social

injustice.

Professor Apple seems to be romancing rather than married to the ideology of the neo-Marxist of Western Europe--an ideology which, to some of us at least, appears to be naive, a bit passe, and not very useful in unravelling the dilemma which faces American civilization. Perhaps the fault lies not so much with Professor Apple as with his relationship to the sources of his intellectual criticism. Although he appears to be adequately knowledgeable of the neo-Marxist social criticism developed by European scholars, his work lacks a sense of the neo-Marxist tradition which has been historically nurtured. His angle of vision appears to be based on the selected writings of some social critics, rather than on full participation in a neo-Marxist intellectual tradition. This criticism is warranted, moreover, in view of Professor Apple's own belief in collective understanding that emerges from collective effort. He does not appear to be a member of the "...concrete groups of people affiliated with a larger social and intellectual tradition..." (p. 157), and this lack of vital membership prevents his work from reflecting a holistic perspective. Perhaps it is because of this lack of full membership in a neo-Marxist tradition that Professor Apple is able to richly reflect a sense of excitement for American pluralism. Indeed, on a second reading of his book, I became convinced that Professor Apple is a closet Deweyan who is suspicious of the tradition of Pragmatism because it has been so misused by some American scholars.

Regardless of the source of his criticism, however, the book serves to help one reaffirm one's commitment to the battle against reactionary forces, as well as the whitewash efforts of some liberals. I must say, however, that though I will stand at the barricades with Professor Apple, I will not serve in his regiment.

My major criticism of Professor Apple's work rests upon his monistic model, that is, a paradigm that conceives of the school as swimming in a sea of ideological hegemony. This diadic model of the school tied to society by an ideological umbilical cord distorts the educational enterprise and possesses inherent limitations as a conceptual base for analyzing social practices because it inhibits in-depth analysis.

Dr. Apple stresses, for example, that ideological hegemony produces common sense assumptions about reality; indeed, it produces a foundation for perception. Yet, if such were true, Dr. Apple suffers from the same paradox experienced by that other enfant terrible, Jean Jacques Rousseau, who so admired the noble savage and denigrated the products of the European civilization but was himself a product of that which he saw as corrupting. Could Rousseau serve as a reliable witness for natural goodness? Similarly, can Professor Apple serve as a reliable witness concerning the ideological distortions of our system when he has also been nurtured within its sea? I am sure that Professor Apple, like the rest of us, must approach his analysis with a certain degree of scepticism, for he is not only liberated by the culture in which he was nurtured, he is also condemned to wear the distorted spectacles that this culture provides. The issue is especially important, for it may prevent him from finding other than "ideologically programmed means of perceiving." For example, he perceives an all-encompassing hegemony while almost naively assuming that one can escape from its tentacles by changing one's questions. He writes: "We ask our students to see knowledge as a social construction, in the more disciplinary programs to see how sociologist, historians, anthropologists and others construct their theories and concepts. Yet in so doing we do not enable them to inquire as to why a particular form of social collectively exists, how it is maintained and who benefits from it." (p. 7) Later, he adds: "And honest information about countries that have organized themselves about alternative social principles is hard to find." (p. 7)

Hegemony, if I understand it correctly, would envelop conceptual realities, value systems, and perceptual frames of reference. On that assumption I would have to assume that "how," "why," and "who" questions are as much victims of distorted ideological perspectives as "what" questions. Having made an important claim, Dr. Apple withdraws from it by believing that some sorts of questions (and not others) are ideologically liberating. If one accepts the concept of hegemony, how can one be confident that a dicussion of ideology is not of itself ideologically distorted? He adds: "While there is a danger of reducing all school knowledge to ideological knowledge, ...this would be an analytically silly assertion (is one plus one ideological?") (p. 157) If one believes in ideological hegemony, it would seem worth considering. "One plus one" in the Hopi culture, for example, takes on very different meaning in view of the fact that the spatial and temporal ways of perceiving among the Hopi differ markedly from the perceptual world of the Indo-European linguistic tradition. Similarly, "honest" views of other societies are not the issue: rather, at issue is that such views have internal ideological integrity and serve as part of the "sea of awareness" which serves as a gyroscope for perception.

I not only reject the idea of hegemony on the grounds that it inhibits meaningful analysis, but also on the grounds that while there is a dominant ideological configuration in nation-states such as the United States, such an American reality is not monistic but forms an ideological matrix. Various ideological strands and networks exist in all modern complex societies, and while some may be more pervasive than others, an ideological pluralism remains. To deny such a pluralism would, in fact, trivialize all the authentic and intense conflicts which are ideologically rooted in our society. One merely has to observe the conflicts which emerge when defenders of "morality" encounter "values clarification" buffs or when "facilitators" run into "back to basics" advocates to realize the depth of ideological differences that exist in education today.

Williams and I, in BEYOND BELIEFS: IDEOLOGICAL FOUNDATIONS OF AMERICAN EDUCATION,[2] attempted to study the ideological forces which influences the schools in the United States.[3] Our analysis focused upon six ideological systems and their teacher role models: Scientism--the Behavior Modifier; Romanticism--The Artist; Puritanism--the Moral Exemplar; Progressivism--the Facilitator; Nationalism--Cultural Model or Patriot; and Educationism--the Educationist. While our ideological matrix attempted to focus upon major ideological forces which give direction to the American educational enterprise, we readily recognized that others existed and would continue to emerge. This ideological pluralism and an analysis of it seems to offer a manageable means of dealing with educational and societal reality as well as to permit, at least intellectually, the discovery within our own ideological world of some keys to the door of social justice. The dangers of Scientism, which Dr. Apple clearly identified in the processes of objectification and labelling, outrage the Puritan as well as the neo-Marxist. Similarly, the Romanticism taught at counter-institution rock concerts should not be ignored for either its liberation or its peculiarities. The concept of hegemony, however, tends to prevent one from seeing both the qualities and defects inherent in ideological systems.

Another defect in the Apple model is that it places an unfair burden upon the school as a center for deliberate education. A great deal of deliberate education occurs in other settings: the church, the home, the youth organization, the mass media. Education in these settings all influences the ideological worlds of the citizenry. To place the school at the crux of the problem seems somewhat naive in view of the power of, for example, the mass media. It would seem that the medium designed to create greedy consumers deserves more responsibility for our current ideological state of affairs than the wounded creature that is public education.

There is, of course, some fundamental difficulty in dealing with the fact of the inherent inequality which occurs in the school or any other setting in which education occurs. I fully recognize that pedagogy continues to dominate formal education even when andragyny would be more appropriate, yet I am not certain that any formalized educational system can fully liberate individuals from its inherent inequalities. Teachers and students perform roles which carry implications about social stratification. Even in the most open-ended, decentralized expression of the role of teacher, for example, one continues to see the teacher as a facilitator and the students as--what should one say?-- "facilitatees." An authentic egalitarianism in education escapes my comprehension.

A more appropriate model to observe and critically study schooling would seem to be to analyze it in relationship to the various communities which exist in an urban society; to analyze the school as a setting in which a variety of cultural and ideological forces converge. Similarly, the study of a modern nation-state as viewed ethnographically should encourage the detection of cultural and ideological pluralism. Observing our social system as reflecting an ideological matrix with a variety of strands permits, in my judgment, the possibility of finding within our own social world the answers to our unique problems.

Professor Apple has provided us with a refreshing perspective in viewing our schooling practices. What is needed, and he would agree, is that such a perspective should be analyzed and dissected and criticized by other educationists. It is through the conflict of intellectual and ideological traditions that the improvement of educational policies and practices will emerge. Without significant disagreement, the process of sifting and winnowing becomes trivialized. Because Professor Apple is willing to place his views clearly and honestly for others to dissect, he deserves the respect of those of us who disagree with him. What we need to do, however, is to continue to search for intellectually legitimate criticisms of his work, and thus, sustain a dialogue about the foundations of education which is desperately needed in education today.

FOOTNOTES

1. For other useful explorations into ideology see Richard Pratte, IDEOLOGY AND EDUCATION (New York: David McKay Company, Inc., 1977), Peter L. Berger and Thomas Luckmann, THE SOCIAL CONSTRUCTION OF REALITY: A TREATISE IN THE SOCIOLOGY OF KNOWLEDGE (Garden City, N.Y.: Doubleday & Company, Inc., 1966), David Apter (Ed.) IDEOLOGY AND DISCONTENT (New York: The Free Press, 1964), Daniel Bell, THE END OF IDEOLOGY (New York: The Free Press, 1960), Sebastian De Grazia, THE POLITICAL COMMUNITY: A STUDY OF ANOMIE (Chicago: University of Chicago Press, 1966) and Robert E. Lane, POLITICAL IDEOLOGY: WHY THE AMERICAN COMMON MAN BELIEVES WHAT HE DOES (New York: The Free Press, 1962). Of course, Karl Mannheim's IDEOLOGY AND UTOPIA: AN INTRODUCTION TO THE SOCIOLOGY OF KNOWLEDGE (New York: Harcourt, Brace, Jovanovich, Inc., 1936) is the classic in the field.
2. Normand R. Bernier and Jack E. Williams, BEYOND BELIEFS: IDEOLOGICAL FOUNDATIONS OF AMERICAN EDUCATION (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1973).
3. Also see Normand R. Bernier and Jack E. Williams (Eds.), EDUCATION FOR LIBERATION: READINGS FROM AN IDEOLOGICAL PERSPECTIVE (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1973).

PRETEXT: Essay review of IDEOLOGY AND CURRICULUM, by Michael W. Apple, London: Routledge & Kegan Paul, 1979, 203 pp.

Education and Personal Political Development: The Contribution of Theory

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During the late 1960's and early 1970's I taught elementary school in Washington, D.C., Brooklyn, N.Y., and Philadelphia, Pa.; I organized and taught in an alternative school in rural New Hampshire. I assumed - as did many others - that teaching children in city ghettoes and in alternative schools would make a significant contribution to more equitable futures for the students and, thereby, to a society that was more just. I believed that through education (traditional or alternative) teachers could not only ease the social pain of poverty and discrimination, but by this work in schools we could transform society.

I do not think I was completely wrong about this; but I do think I was terribly naive. Of course, one result of naivete is often ineffective activity.

As a doctoral student in education in the middle 1970's, I read voraciously: psychology, psycholinguistics, and the history of science; philosophy, sociology, and social history; I also read revisionist educational histories and educational theory - sociology of knowledge, and the political economy of schooling. Among the works in education that made the deepest impression on me were those by Michael F.D. Young, Pierre Bourdieu, Samuel Bowles and Herbert Gintis, and Michael Apple. One message all these authors seemed to be attempting to transmit was that schools could not do all that I hoped they would. While education can foster mobility for individuals, for example, it does not foster equal relations between the classes; while schooling may enable the "best and the brightest" to escape poverty, there are structural (economic and political) contingencies and constraints that would remain imperative and powerful in society, even if every Black, Puerto Rican, and white working-class child were taught to read and went to college.

A part of this message from these authors was that my belief in the socially transformative power of education in U.S. society was an illusion - indeed, an ideology, that deflected my own critical attention from the more fundamentally powerful economic and political assumptions and activities that caused the economic maldistributions of power and goods in the first place. I began to challenge my old ideas and to look for ways to explore these new ones.

An educational theorist most influential at this point, as I began my subsequent explorations as an educator and researcher, was Michal Apple. I read the papers he has collected in IDEOLOGY AND CURRICULUM as they were first published, and they influenced my thought and my work. I began to view my tasks as an educator as Apple wants us to:

> ...one of our basic problems as educators and as political beings...is to begin to grapple with ways of understanding how the kinds of cultural resources and symbols schools select and organize are dialectically related to the kinds of normative and conceptual consciousness 'required' by a stratified society (page 2).

Schools, then, were an active agency of social legitimation and indoctrination; and an important task was to assess the contribution of curriculum, and of every day discourse and educational experience, to this process of cultural domination and control. As I began my several research projects, I listed to Professor Apple some more:

> ...[A] basic act [of educators and researchers] involves making the curriculum forms found in schools problematic so that their latent ideological content can be uncovered. Questions about the selective tradition [in school curriculum] such as the following need to be taken quite seriously. Whose knowledge is it? Who selected it? Why is it organized and taught in this way? To this particular group? The mere act of asking these questions is not sufficient, however. One is guided,

> as well, by attempting to link these investigations to competing conceptions of social and economic power and ideologies. In this way, one can begin to get a more concrete appraisal of the linkages between economic and political power and the knowledge made available (and not made available) to students (page 7).

In my first two research studies, I asked questions of power and ideology about elementary and secondary school textbooks (see Anyon, 1978 and 1979). I found, as Apple had theorized, that there were indeed deep social ideologies embedded in school knowledge. In a third study, I attempted to assess what the curriculum (and curriculum-in-use) was like in elementary schools in different social class contexts (see Anyon, 1980a and 1980b). I found that in the sites I studied, cultural capital is -- as Apple (following Bourdieu) had argued -- unequally "distributed" among the schools and social classes. In all my work, I was careful to situate educational phenomena in what Apple had called "the larger nexus of forces" in which schools operate.

A further concern of IDEOLOGY AND CURRICULUM, with which I myself have not grappled intellectually but which is becoming increasingly important, is the social import of "scientific" traditions reflected in systems management, behavioral objectives, and technically and positivistically oriented educational evaluation done by educational 'experts.' As the 1980s begin, as educators seek to compensate for dwindling enrollments by attempting to extend their influence (e.g., ways of thinking and acting) into additional spheres of social life (for example, into trade unions and other adult education centers; into university program evaluation and management; and into big government and various industries) it is increasingly important for us to be 'wide awake' regarding the ethical import and consequences of the management and evaluation perspectives we inherit. Apple has identified not only the control, but the ideological functions of these technical procedures.

> ...[T]he real issue is...that systems techniques...are systems of control. What is of equal importance is the fact that the belief system underlying them and a major portion of the curriculum field stems from and functions as a technocratic ideology which often can serve to legitimate the existing distribution of power and privilege in our society. The very language used by a number of proponents of systems management in education conveys their assumptions. While change is viewed as important, it is usually dealt with by such notions as system adjustment. The basis of the system itself remains unquestioned. The use of systems procedures assumes as its taken for granted foundation that the institutions of schooling are fundamentally sound. That is, while the 'quality of instruction' is often poor, the same general pattern of human interaction is sufficient for education, if the institution can be 'tuned up,' so to speak. The problems of schooling are to be solved by 'modest inputs of centralized administration, along with expert services, research and advance.' The lack of quality in education is viewed in terms of only a lack of technical sophistication and can be effectively solved through engineering. The increasing disaffection with much of the obligatory meaning structure of schooling by students, and the growth of scholarship on the relationship betweeen schooling and inequality [however] belie this perception (pages 111-112).

In part because of the past theoretical stimulation of Michael Apple, we have seen an increased political depth and scope to such studies as he alludes to above "on the relationship between schooling and inequality" (see, for instance, not only my own research, but that of Nancy King, Linda McNeil and Joel Taxel).

Today, as I comment on my educational intellectual development and Apple's contribution to it, I can look ahead as well. I can see further changes in my own thought and in Apple's too. As he argues in his final chapter, "Beyond Reproduction," it is not enough to look for structural determination and social and cultural domination and ideology in schools. And as I have attempted to show in my most recent work (Anyon, 1980b), it is possible to go beyond the identification of mechanisms of reproduction and control into the more subtle and complex areas of contradiction, resistance, and social change. We must put the people -- and the possibilities -- back in history and in theory. Indeed, we can return (dialectically of course, with considerably more insight) to our schools and students and attempt to engage them -- using what we now know -- in more effective efforts at social change.

As I and others working to this end (Paul Willis, Geoff Whitty, Henry Giroux and Madeleine McDonald, for example) try to assess the interventions we can make against a process of social reproduction, we will continue to look to Michael Apple -- and also to each other -- for insight, theory and advice.

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The Qualitative Detour: A Reality More Real than Appearances

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In THE EDUCATIONAL IMAGINATION: ON THE DESIGN AND EVALUATION OF SCHOOL PROGRAMS, Elliot Eisner wisely rejects the notions that all educational phenomena can be understood through science and that all educational problems can be solved through technology. The central problem for those who would study educational phenomena is first to make sense of observations and then to tell others about this understanding. Eisner accurately points out that the predominant model for educational inquiry is quantitative. The quantitative model has the advantage of simplicity, clarity and familiarity. All of us can count and add, find means and standard deviations, determine correlations and understand tests of significance. Tables are ostensively unambiguous. When observations are reported quantitatively all can agree that there is a difference between means, especially since the researcher is willing to state the odds that his conclusions may be wrong. While the results of quantitative inquiry are usually clear and easily understood, they are often not particularly enlightening. As Eisner mentions, summary tables of numbers which represent data are three or four levels of abstraction away from the actual observed phenomena. This abstraction necessarily distorts any representation of the experience of the classroom participants as well as the experience of the observer or researcher. Often such distortion brings into focus details which might have been overlooked. However, equally as often, the distortion which results from successive abstractions obscures that which we might have otherwise seen. Before dismissing quantitative inquiry, it should be noted that its methodology has been carefully and rigorously developed. The definitions, axioms and theorems of quantitative models exist to be examined by anyone who wishes to challenge them. We can be confident that researchers who use quantitative methods have determined that the conditions of their research satisfy the assumptions of the methodology which they use to report their observations.

Eisner, in the first part of the text, reiterates much of what we have heard before, particularly from the reconceptualist literature. Education in the United States is dominated by a scientific epistemology, schools are preoccupied with control and standardized outcomes, curricular priorities are determined according to what tests can measure quantitatively. More science, and particularly more technology, of education is commonly understood to be the solution to a wide range of educational problems resulting from a variety of social forces. Obviously, if technology is going to solve our energy problems, why shouldn't we expect it to solve our educational problems as well. If only we could write our objectives more clearly and measure the outcomes of instruction more precisely, then we would have a logically consistent and complete system which could accommodate any number of external perturbations.

The strength of Eisner's book rests on an alternative way of seeing what is happening in schools. Eisner maintains that while certain things are seen more clearly through a scientific lens, a large part of what happens in classrooms is more clearly viewed from the artist's perspective. Paul Ricoeur has written that both poetic language and scientific language reach reality "through a detour that serves to deny our ordinary vision and the language that we normally use to describe it. In doing this both poetic and scientific language aim at a reality more real than appearances" (p. 67). In his attempt to help us understand a "reality more real than appearances," Eisner suggests an alternative to the language of science, of central tendency, standard deviation, correlation and variance. His alternative is the language of art criticism. Eisner names his model or heuristic for understanding classroom reality an educational criticism and while, for me, it is the most important and interesting part of his book, he devotes only the final third of the text to it. "Educational criticism is composed of three major aspects or dimensions. One of these is descriptive, another interpretative, and another evaluative" (p. 203). Although these aspects are linguistically distinct, they are necessarily intertwined in the act of criticism. The critical act itself is more than the sum of its descriptive, interpretative and evaluative

parts since each part informs and extends the others. This point became clear to students in my Theories of Teaching class when they naively attempted to write educational criticisms in an analytic manner; that is, first the description, then the interpretation and finally, the evaluation. Once students attempted criticism, it was easy to see that description without interpretation is impossible if only because the human observer selectively "sees" and makes choices about what to describe. At the same time that description forms the basis for interpretation and evaluation, interpretation and evaluation extend description.

Eisner distinguishes between connoisseurship or the art of appreciation and criticism or the art of disclosure. It is possible to be a connoisseur and not be a critic, but the reverse is not true. An educational critic cannot be a casual observer of classroom scenes. In order to make sense of his observations, the critic must have a deep understanding of educational theory and practice gained not only from reading but from actual experience as a classroom participant. In general, the critic's task, according to Eisner, "is to function as a midwife to perception, to so talk about the qualities constituting the [classroom] that others, lacking the critic's connoisseurship will be able to perceive the [situation] more comprehensively" (p. 191).

"The point of educational criticism," Eisner suggests, "is to improve the educational process" (p. 209). In order to understand how improvement might result from an educational criticism, we need to consider the forms that these criticisms take. The examples of criticisms in Eisner's book are texts written in language more literary than scientific. "The descriptive aspect of educational criticism is essentially an attempt to identify and characterize, portray, or render in language the relevant qualities of educational life" (p. 203). "The interpretive attempts to provide an understanding of what has been rendered by using, among other things, ideas, concepts, models, and theories from the social sciences and from history" (p. 211). "The evaluative aspect of educational criticism attempts to assess the educational import or significance of the events or objects described or interpreted" (p. 211).

Because an educational criticism takes the form of a written text instead of numerical tables and graphs, several levels of dialectical relationships are created. The first of these is the relationship between the private experience of the educational critic as he observes or participates in classroom events and the public expression of that experience which he creates through the written language of his text. According to Ricoeur, experience as experienced cannot be transferred from one individual to another. What is transferred, though language, is the meaning of that experience. Because it is written, the event as experienced by the critic becomes distinct from meaning as expressed through the text. Meaning itself contains a dialectical relationship between what the critic intended to say and the meaning of the written text itself. According to Ricoeur, "With written discourse the author's intention and the meaning of the text cease to coincide. Writing...becomes synonymous with the semantic autonomy of the text. The text's career escapes the finite horizon lived by its author" (p. 29). The description or interpretation of classroom events, once written, assumes an existence of their own separate from the intentions of the educational critic. The criticism then shares, with all written discourse, the possibility of multiple interpretations by multiple readers. Unlike quantitative inquiry where all are led to see the same thing, qualitative inquiry contains the possibility that each of us will understand different things.

When considering the text as read we are confronted with still another dialectical relationship; that is, the relationship between explanation and understanding. Explanation takes the form of validation of our initial guess at the text's meaning. Given the context of the discourse, a particular interpretation must be more probable than any other interpretation. "Understanding has less than ever to do with the author and his situation. It seeks to grasp the world-propositions opened up by the reference of the text. To understand a text is to follow its movement from sense to reference: from what it says, to what it talks about" (Ricoeur, p. 87). It is clear that the text of an educational criticism is separate and distinct from the situation that gave rise to it. Because of this it can, as Ricoeur suggests, speak of "a possible world and a possible way of orientating oneself within it" (p. 88). The text simultaneously refers back to the actual world that it describes and forward to the possible worlds created by its separation from that actual world. The text of an educational criticism is not a static mirror of the actual classroom event, but it is a mirror which reveals the potentialities of the world in which that event occurs. While the range of possibilities inherent in the text of the criticism is what is most significant, at the same time it is what is most problematic. The implications of the written criticism for educational practice are not at all clear. We do not yet know what possible worlds are opened to different

actors in the educational scene, to teachers, parents, students, administrators, through the reading of a particular criticism. We do not know what possible ways each may find to orient himself in these worlds and whether any collective action or improvement in the educational process will result.

It would seem that the written text of educational criticism is no more immediate than the numerical tables and graphs of quantitative inquiry. Each proceeds through levels of abstraction. The difference is that the levels of abstraction in quantitative inquiry have been reasonably well articulated through the definitions, axioms and theorems of the methodology. The mathematical symbols used in quantitative inquiry idealize the world in a way which is readily apparent because they are distinct from the symbols of our everyday language. Because the symbols used in qualitative inquiry come from our common language it is more difficult to see that they also idealize the world. It remains for Eisner and other qualitative researchers to articulate the dialectical nature of the levels of abstraction present in their written texts.

Criticism, according to Eisner, is the art of disclosure. What is it that is disclosed by an educational criticism? One would hope that the answer is an educational or classroom reality more real than appearances. But if we are to understand criticism as an alternative method of inquiry, then we need to understand the complex dialectics of event and meaning, sense and reference, understanding and explanation as they function in the written and read text of the criticism. These dialectics, which have been suggested by Ricoeur, are, I suspect, the qualitative counterparts of the definitions, axioms and theorems of quantitative inquiry. The role of educational criticism as a way of understanding classroom reality cannot be fully demonstrated without an understanding of the complex relation between the writer of the criticism and the reader or, in other words, the relation between the criticism as written and the criticism as read. It is this complex relation that Eisner neglects in his book. It is because he neglects it that the students in my class who attempted to write criticisms of their own were left with the feeling that such writing would have little impact on their own situations, much less on more general educational situations. It is not enough to invite us to pursue an approach which is complementary to the prevailing scientific model. That approach must be examined with the same degree of rigor and completeness that one finds in discussions of the theory of quantitative models.

It is too often the case that those who write about the American educational system give us lengthy statements of problems, but offer us few solutions to those problems. This is not true of Eisner. He has offered us an alternative to the quantitative, "standardized test" methodologies that we currently use to understand and evaluate educational practice. His concept of educational criticism should not be quickly dismissed nor readily accepted. It deserves some critical attention of its own, both from Eisner himself and from other students of qualitative inquiry.

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Can Art Stimulate Program Development?

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When I was a graduate student at Harvard in the mid-sixties, I worked on a social studies curriculum project which attempted, among other things, to teach high school students how to clarify and resolve controversial public issues through discussion. My major responsibility was for the final project evaluation. To do this we had to define the qualities of a "good" discussion of a controversial issue and figure out a way to measure these qualities so that we could evaluate and compare the performances of our "experimental" and "control" groups in discussion. Simple? Only a graduate student with little experience in measurement and statistics would take on such a horrendous assignment. Four of my predecessors had earned doctorates in the process of failing to develop an adequate "instrument" to evaluate discussion performance. Maybe I could do better?

I tried, and my efforts yielded a section of the final evaluation report for the project and a dissertation for me, but I did not get much closer than my predecessors to developing a valid and reliable quantitative measure of the qualities of "good" discussion. Moreover, I finally realized that in trying to "solve" this problem we had undertaken an impossible task. As we achieved higher scoring reliability for our measures our confidence in their validity diminished. If we had directed all the conceptual energy and talent and time we invested in developing our discussion analysis scoring system into an effort to sensitize social studies teachers to the nuances of classroom discourse, we might have made a significant contribution to both teacher education and social studies curriculum. I said as much in the concluding section of my thesis, where most researchers make their obligatory pleas for "further research" on the problem. My conclusion was that we had gone far enough. It was time to strike out in a new direction.

As I read Elliott Eisner's THE EDUCATIONAL IMAGINATION I recognized a kindred spirit - a man who fully appreciated the futility of efforts to quantify quality, which is what we were trying to do. Of course, it can be done if you are willing to entertain the two concepts as virtually synonymous, which is not such a far-fetched idea in a society that equates intelligence with the number of correct responses to multiple choice items on a timed test of verbal and mathematical "comprehension", or sexual satisfaction with the number of orgasms achieved within an eight hour period or happiness with the size of one's bank account.

When I got to his chapters on "educational connoisseurship" and "educational criticism" I felt that we were on the same wave-length. It occurred to me that as a result of countless hours of listening to discussions on tape and analyzing their characteristics -- their virtues and their faults -- my colleagues and I had become "connoisseurs" in our field. That is, we had become experts in "appreciating" the qualities of a discussion and in discerning the obstacles to productive dialogue. We had also moved beyond connoisseurship into "criticism" -- that is, we could illuminate the significant features of discussion and could show people how discussions went astray through real or fictional examples. We even created "model" discussions on tape to illustrate the important elements of "good" discussion. Coming from a background in the social sciences, however, it would never have occurred to me to think of us as "connoisseurs" or "critics." At best we might have considered ourselves as experienced "experts" in the analysis of discussion. Is there a difference between an "expert" and a "connoisseur?"

THE EDUCATIONAL IMAGINATION is packed with claims about the modern educational enterprise with which I found myself nodding in agreement as I read through the book. Lest the reader miss any of these points, Eisner provides a summary discussion of them in his concluding chapter -- "A Final Word." No less than twenty-two propositions are set forth and discussed here. It is not easy to find the core of such an elaborate exposition of educational ideas. Yet, if I understand Eisner's drift correctly, the book is essentially an argument for the relevance and utility of a paradigm rooted in literary and artistic criticism to the enterprise of program development and evaluation in education.

In developing his argument Eisner goes to great pains to lay out for the reader his own perspectives on the history of American curriculum and curriculum development in this century. In doing so he makes no bones about his own bias toward the arts and humanities in terms of both curriculum content and process, as evidenced, for example, by the chapter in which he describes his own art education curriculum project at Stanford. I must admit that I share Eisner's concern for the denigration of the fine and performing arts in the public school curriculum. Only in rare instances, Waldorf schools for example, do we find art, music and movement integrated into the curriculum. To me, doing art and music and learning to appreciate what others have done are more generally useful life skills than learning how to fit mysterious numerical symbols into even more mysterious formulae. Like Eisner I do not wish to replace the scientific and cognitive with the aesthetic and intuitive, but I would like to see a fairer balance between the two modes. I also share with Eisner and Dewey a belief in the intimate relationship between knowledge and personal experience. Neither experience nor personal knowledge can be packaged and passed on from one person to another, as any parent of a teenager must surely know, though curriculum developers apparently do not.

Neither does Eisner attempt to conceal his preference for phenomenology and hermeneutics over positivist social science: "To deal with the newfound appreciation of experience will require methods that differ markedly from behaviouristic psychology. In this realm one can use the ideas of Simmel, Dilthey, Schutz and others who are concerned with experience and meaning," he asserts. (p. 18). The "problem" that Eisner wishes us to consider is set forth at the conclusion of his introductory chapter: "It is ironic that although most people regard both teaching and educational administration as arts, the conceptual tools for studying the arts and criticising them have seldom been used to assess them in education." (p. 19).

Much of what follows serves as a critique of the dominance of positivist social science, quantitative research methods and testing in modern education. Again, I agree with Eisner's general position although most, if not all, of this has been said before, and quite recently, too. Such criticism seems to be the current fashion and the positivists appear to be on the defensive for the time being. Or are they, with considerable justification, simply ignoring their critics, secure in the knowledge that the growing political demands for accountability in education will keep the lion's share of research funds flowing in their direction?

The other line developed in THE EDUCATIONAL IMAGINATION is the argument that curriculum planning, construction, implementation and evaluation are more akin to artistic creation than to rationalized industrial production. This argument culminates in an exposition of the concepts of "educational connoisseurship" and "educational criticism" and their relevance to curriculum development and evaluation. For the remainder of this review I should like to focus on these concepts and discuss their relevance and utility for program development and evaluation as I conceive of them.

"To be a connoissuer" says Eisner, "is to know how to look, to see, and to appreciate." The key to connoisseurship is "knowledgeable perception...the ability to perceive what is subtle and important." (p. 193). Connoisseurship then is the basic pre-requisite for "criticism," which Eisner defines as "the art of disclosing the qualities of events or objects that connoisseurship perceives." The task of the critic is "to create a rendering of a situation, event or object that will provide pointers to those aspects of the event, situation or object that are in some way significant." (p. 197). Eisner then goes on to discuss the uses of metaphoric language in rendering aspects of educational life more accessible and intelligible to an audience. He concludes with three exemplary educational criticisms. of educational settings (classrooms) done under his direction at Stanford.

Suddenly we find ourselves in the recapitulations of the last chapter. "Wait!" I want to shout. Is this all there is? What are we supposed to do with these pieces of educational criticism? Appreciate them? Sure. One reads almost like poetry; another portrays a teacher who really knows how to draw kids out of themselves and who truly listens to what they say. But how are these portrayals supposed to be used to stimulate reflection and discussion about important curricular issues? How do they relate to the process of program development that is ongoing in schools and classrooms? Who is the audience for these accounts? How does one judge their validity? Who is qualified to judge?

Slowly, the seductive appeal of the paradigm begins to fall apart as question after unanswered question races through my mind. Just how appropriate is the analogy between evaluating an educational program and writing a critical review of a concert and art exhibit anyway? We know, for example, that the audience for a critical review is the potential listener or viewer, and perhaps the performer or artist (though I wonder how

many artists or performers modify their work in light of published reviews). But who is the audience for an educational critique? Eisner suggests an answer in his chapter on evaluation:

> The problem of disclosing the character of educational events and the quality of what children are learning can, I am arguing, be conceived as an artistic problem. How can the results of an educational evaluation be communicated so that the complexity and ambiguity and richness of what happens in schools and classrooms be revealed?....
>
> To capture this richness and therefore to help the public understand and appreciate the problems as well as the achievements of a classroom or school requires the construction of an evaluational landscape. Such a picture will probably employ a wide range of information secured from a variety of sources and revealed through different types of reporting procedures...
>
> One of these procedures is likely to be what I have referred to as educational criticism. Such criticism would be aimed at helping parents, let us say, understand what has happened during the course of the school year in a particular school.... (pp. 186-7).

But how many parents care to know what the school year was like, except for their own offspring? Critical reviews of plays and films, for example, serve to alert potential viewers to particular offerings and to suggest why they might (or might not) be worth attending. Schools minister to a captive audience; rarely do they have to "sell" themselves to their clients. And what is the public's interest in this? Perhaps a sympathetic (to teachers) portrayal of life in classrooms might soften some of the harsher public criticisms of the schools, but is the purpose of educational criticism to provide better public relations for schools? More importantly, if educational criticism is intended, as Eisner suggests it is, to provide an evaluative basis for program improvements, would not the teachers (and perhaps the students as well) be the most likely audience for a critical portrayal of school and classroom life?

Eisner suggests (and I agree) that film can be a powerful medium for educational criticism and cites Frederick Wiseman's "High School" as a notable example. He criticizes the film, however, for being too polemical, for presenting a one-sided interpretation of high school life -- a highly unflattering interpretation at that. I've used the film many times with my classes and other groups over the years and the reactions of the vast majority would tend to support Eisner's judgment. He suggests that a more balanced, "circumspect" portrayal would be better. Better for what? For whom? These questions are unanswerable in the absence of an explicit conceptualization of how educational criticism should be used to stimulate critical reflection, dialogue and action in the service of program development.

Although I share Eisner's preference for the artistic portrayals of classroom life that are created as "educational criticism" over the sorts of analyses that emerge from, for example, Flanders' Classroom Interaction Analysis scheme, I do not see, as Eisner seems to imply, that the practical utility of "educational criticism" is self-evident. "Educational criticism" is certainly a contribution toward making interpretations of school and classroom life more vivid and meaningful to an audience, but in the absence of a direct linkage to a process of program development, are these portrayals anything more than interesting pictures? Is "educational criticism" more than a call for the application of literary skills to educational life? Eisner argues that it has much to offer to the enterprise of program evaluation, but how?

It is easy to find fault with metaphors and analogies. No two situations are ever identical so one can always find specific examples of "bad fit." Besides Eisner's intention is not to prove the correspondence between painting or composition on one hand and curriculum design and development on the other, but rather to suggest an alternative paradigm to the industrial R & D model. I think it is a provocative and interesting alternative but basically the wrong one. In the remaining paragraphs of this review I shall try to explain why I think it is wrong and suggest a more appropriate metaphor.

Several years ago, my colleague, Roger Simon, and I began to elaborate our ideas about program development in a series of papers which, unfortunately, ended with two.[1] Our position was that the problem of program development is essentially a problem in the construction of a social order. The ideals of that order, we argued, are typically embodied in a constitution-like statement in which the core group of founders attempts to

set forth its "vision" of what the program is about. If this vision is taken seriously by those who are charged with developing an operating program based on this constitution, then the day-to-day operation of the program must be regularly reviewed in terms of its congruence with the principles set forth in the constitution.

The task of evaluating a program is thus far more complex than an industrial model would suggest. It also involves a different mode of reasoning. One cannot simply make an "objective" comparison between constitutional principles and current practices to see how well they fit. Both the practices and the principles have to be interpreted and judgments have to be made as to the relevance of particular principles to particular practices. The most useful and relevant analogs to this process can be found in the judgments and procedures involved in case law and constitutional law. What is "significant" in a particular "case" or school situation is what the lawyer or critic wishes to call to the attention of the judge in order to construct a persuasive interpretation of a complex and ambiguous set of events and relationships.

Obviously there is considerable artistry involved in this: the use of metaphoric language would play a major role in creating a persuasive interpretation. Facts and "hard data" are important as well, but their power lies in the extent to which they can be harnessed in the service of an interpretive image of reality. The power of statistics lies, to a great extent, in their use to support general beliefs and values that we are already committed to. In this, too, there is much artistry.

A colleague once observed in a session in which we were discussing a thesis draft with a doctoral student that the ultimate test of the quality of an argument is its power to persuade the reader or listener that the situation could not be other than the way it is presented. This seems like a sound principle for a thesis, but it is of questionable value for an educational critique. In order to be able to imagine different ways of doing things, we must first be able to see the existing situation in different ways. If we wish teachers, in a school, for example, to reflect on their situation with a view toward developing a more conceptually coherent program each person must be able to "see" the existing situation from the perspectives of all the significant actors in the setting.

A very promising approach to facilitate such "seeing" is being developed at OISE by Roger Simon and his associates under the rubric of "dramatic analysis." Utilizing data gathered via participant-observation and interviews and drawing on literary conventions such as plot, characterization and motif, they construct "dramatic" narratives in the form of a playlet or short story that attempt to capture the significant features of the relationships among the actors in an educational setting.

As lively and readable interpretive portrayals, the "products" of dramatic analysis and educational criticism appear to have much in common. But the similarity ends there. The test of the adequacy of a dramatic portrayal lies in the responses of the audience to it. If the portrayal generates "good talk" among the actors concerning their practices in relation to their understandings about what should be happening, the portrayal is deemed to be effective (i.e., useful). Of course, if a portrayal doesn't "work" in this sense, it can be used to stimulate discussions among students of school and classroom "culture," a usage that Eisner suggests for educational criticism. Certainly the process of collecting data and constructing either a dramatic analysis or a piece of educational criticism should be a valuable learning experience for the researcher, but the value of the product is problematic and depends not only on how it is used and how people respond to it, but on one's conception of what program development is about.

As I see it, a work of art need have no purpose beyond itself -- that is, as a vehicle for the expression of the artist's vision of a slice of reality or of deeply felt emotions or abstract ideas. A program design, on the other hand, exists primarily to give social meaning and purpose to the activities of teachers and students in an educational setting. The artist can be totally indifferent to the social or political implications or consequences of his or her work. The program designer must attend to the social and political meanings and implications of her/his work. Program designs do more than prescribe content or "skills" to be learned. They suggest or spell out how teachers and students are to interact with each other and with certain specified materials; they either reinforce traditional hierarchical relationships and passive attitudes toward the material to be learned or they attempt to replace them with more egalitarian relationships and a more active, critical learning posture. In brief, I would argue that program development and evaluation are inherently political processes.

To sum up, it seems to me that what program designers do is more akin to what legislators and political

strategists and constitutional committees do than to what sculptors or composers or novelists do. I would like to suggest that designing a program is more like drafting a constitution for an organization than drafting the score for a symphony or the outline for a novel. Nor is a constitution a blue print as the industrial R & D model would suggest. Rather it is a statement that attempts to set forth the core principles and values upon which organization is grounded and the organizational structures within which people are expected to work out their relationships to each other and to objects in their environment. A constitution thus provides the framework within which people negotiate and legislate these matters.

In focusing on the expressive problem of communicating ideas about educational settings, THE EDUCATIONAL IMAGINATION filters out too much of the political and social character of those settings and of the process of program development. Eisner is not insensitive to the political implications of how one goes about developing a curriculum, as evidenced by his critical reflections on the conduct of his own project, but I think he stresses the design and the product too much and pays too little attention to the social order that is brought into being when a "program" is actualized. He appears to favor a more collaborative approach to program development but the image of the "connoisseur-critic" seems oddly at variance with such an approach. The image fits too well Paulo Freire's characterization of the "banking concept" teacher as the "one who knows." Teachers have been over-awed too long by self-styled "experts" from universities, R & D centers, publishing houses, etc., all telling them what to teach, how to teach and how to "be" in the classroom. If educational criticism is to be of any value in the service of program development, it seems to me that the "critic" must set aside any pretense of being an "expert" on what is important and significant in education. Otherwise teachers will simply react to their interpretations rather than engage their own critical facilities in reflecting upon their situations.

While educational criticism may serve to weaken the traditional theory-practice dichotomy in educational discourse, the concept of connoisseurship seems likely to widen the gulf between the university expert and the school practitioner. Eisner's suggestion that everyone can develop the skills of connoisseurship seems to echo past calls for teachers to be curriculum developers, researchers, skilled group therapists or whatever the current fashion may be. Such pleas simply ignore the constraints under which teachers labor and the centrality of specialization to the modern educational enterprise.

As a forceful, articulate commentary on curriculum development and modern education, THE EDUCATIONAL IMAGINATION, provides a healthy antidote to the mainstream R & D approach and should be read by any serious student of curriculum. As a pioneering effort to point the way to a new direction for critical inquiry in education, it is disappointing. It provides us with a perceptive analysis of what is wrong with the present state of affairs in education and offers a creative vehicle for expressing that analysis but stops short of telling us how the analysis and the vehicle may be linked together to take us to a better educational world.

FOOTNOTES

1. The two papers referred to here are: "The Irrationality of Rationalized Program Development." INTERCHANGE, 4:4, 1973, pp. 63-76; and "From Ideal to Real: Understanding the Development of New Educational Settings." INTERCHANGE, 5:3, 1974, pp. 45-54.
2. This is a gross oversimplification of a very complex concept. It is discussed more fully in terms of its theoretical dimensions and applications to program evaluation in the following papers:

   Roger Simon and Don Dippo, "Dramatic Analysis: Interpretive Inquiry for the Transformation of Social Settings." JOURNAL OF CURRICULUM THEORIZING, 2:1, 1980, pp. 109-134.

   Roger Simon, "Program Portrayal and Reflexive Inquiry." Paper presented at the 1980 meetings of AERA, Boston.