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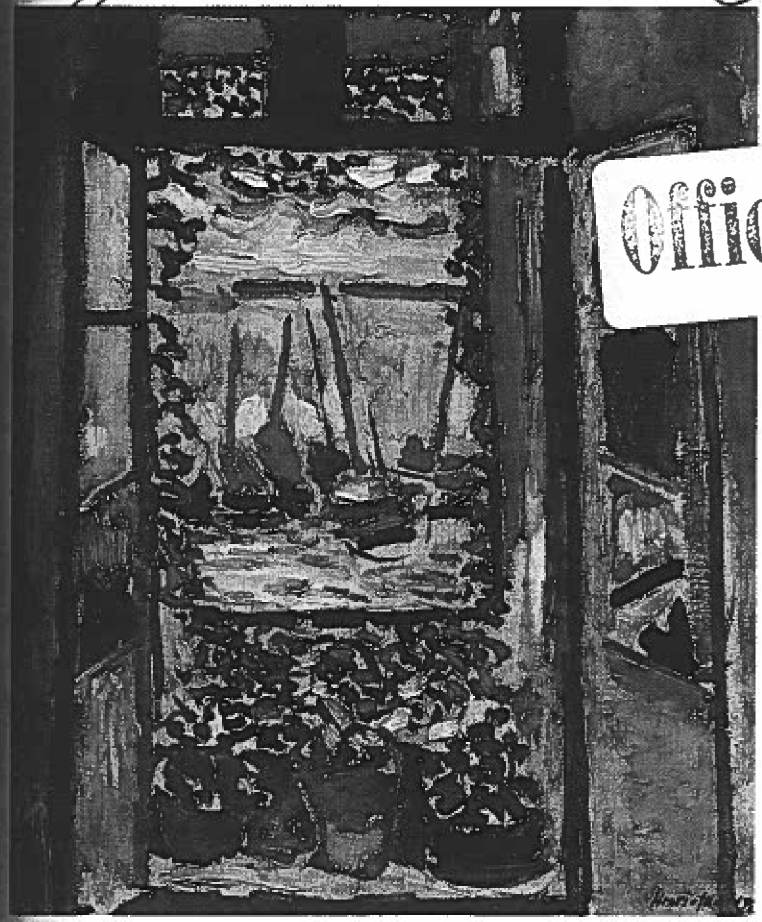

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W. M. R.

Essays

CURRICULUM THEORIZING IN AUSTRALIA

Colin J. Marsh
Murdoch University

Introduction

It always seems difficult to make balanced, insightful comments about the state of the field of a subject in one's own country. For a start, it is difficult to disentangle influences which may have had their source in other countries. For example, this might be the "germ" of an idea, from which local colleagues have used and developed into a far more sophisticated concept *or* it might be something more tangible such as a curriculum package which has been adapted to suit the special characteristics of the local situation.

There is also the matter of visibility. How do you evaluate the contributions of a curriculum theorist in Australia when he or she does not have the opportunity to receive visibility via a journal article being reprinted in various Readings on Curriculum publications, or in cases of great eminence and scholarship, where there are very few professional associations to bestow awards and citations.

The field of curriculum is very young in Australia, certainly no more than a decade,[1] and it is difficult to come to a clear understanding of what a curriculum theorist actually does in that particular context. Presumably an American curriculum theorist spends a considerable amount of time (along with teaching classes and supervising postgraduate students) reflecting upon what happens to curricula, or what should happen, when they are implemented in

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schools. Theorists are concerned with a myriad of questions relating to practice in schools and for which they might be involved in collecting data or involved in establishing the worth of a set of principles.

It might also be presumed that American curriculum theorists want to communicate their findings and do so via numerous conferences and seminars, and through their writings in scholarly journals and books. The network of communication channels also reaches into various research and development agencies, state and federal government bodies and private corporations willing and interested in funding major research studies. It is always dangerous to stereotype and there are undoubtedly many American curriculum theorists who would disagree with these statements, but at least it provides some basis for examining the counterpart role in Australia.

Who are the curriculum theorists in Australia?

This question might best be answered by looking briefly at personnel involved in education systems in Australia. They certainly are not *classroom teachers*. Teachers are employed either in large public, state education systems or in private education systems (Catholic, non-Catholic church schools, alternative schools). In many of the education systems, curriculum policy matters are determined centrally, and in some cases, curriculum materials (teachers' handbooks and student texts) are developed, printed and distributed for nominal costs to teachers operating in these systems.

There are few opportunities for teachers to be involved in curriculum theorizing, even though some systems have supported school-based curriculum development (SBCD) and have had some successes with this in individual schools. Open plan designs for elementary schools have become the dominant architectural design since the late 1960's and this provided a potentially conducive physical environment for teachers to interact on curriculum planning matters (for example, in team teaching, and developing integrated subjects) but few schools seem to be operating in this manner.

One state system which has been particularly successful with school-based curriculum development initiatives during the 1980's has been the Education Department of Victoria. A change of government in 1982 led to the establishing of school-based structures such as school councils and regional education boards. This has produced in a short period of time a remarkable devolution of curriculum decision-making powers to individual school communities.

In all states over the last five or six years many teachers have been encouraged to convert earlier diplomas of teaching into Bachelor of Education degrees, and an increasing, although small number, are now venturing further into Master's degrees. Their involvement in these degree programs has enabled some to study curriculum theory and to be involved in theory-related problems and curriculum projects. But the overall stance of teachers is:

> that they tend to dismiss any suggestions that their actions are theory-based and give little credence to research evidence which suggests that they or their colleagues use particular models or theories.[2]

It certainly is not the *senior administrator* in the various educational systems. These officials have to grapple with many educational problems but most are associated with stretching the funds to provide a uniform standard of education across vast geographical areas. They have to be efficient, practical leaders and to be able to delegate powers in systems which tend to be highly bureaucratic and structured. As a visiting distinguished U.S. scholar remarked in 1955:

> not only do the syllabi and the examinations promote uniformity of achievement, the whole atmosphere of the schools seems to be designed to produce uniformity of behavior.[3]

Recent appointees to these senior education positions (Directors-General) have tended to go to persons with

higher degrees, and many of them now hold doctorates in education (especially education administration). Few have academic qualifications in curriculum, even though it is often the Directors-General who initiate curriculum changes. In the past, a number of curriculum changes have been implemented by Directors-General, based upon their visits to overseas countries, especially the USA during the 1920's-30's and the 1950's-60's. The fact that these eclectic borrowings were often poorly implemented and short-lived in Australian education systems attests to these officials' inability to conceptualize important curriculum implementation factors. As an example, it is little wonder that overseas borrowings, such as the Dalton Plan, foundered when implemented in the late 1920's into Australian state systems which enforced uniformity of standards through an inspectorial system. Since the 1970's, Directors-General seem to be more willing to enlist the support of senior colleagues with expertise in curriculum before making curriculum decisions, although few if any of these experts are interested in curriculum theory as such.

It is doubtful whether all but a handful of teachers seconded to *head office curriculum branches* in the various education systems might be classed as curriculum theorists. The teachers seconded to head office positions, usually for limited terms of 2-3 years, are singled out because of their above average teaching or organizing abilities, and not because of any special interests or talents in curriculum theorizing. Even though these curriculum officers are in a position to reflect upon theoretical and practical issues as they go about their assigned tasks of revising syllabi and writing teachers' handbooks and student workbooks, they tend to have too little academic background to get very involved in theoretical concerns. They are often brought in to write materials according to a very tight publishing schedule and so they tend to be highly task-oriented. But there are exceptions and there appears to be a growing group of young and talented teachers who received their first impetus into curriculum theory

concerns through their secondments to curriculum branch positions. Since then, they have undertaken higher degrees, majoring in curriculum and they are now competing successfully for lecturing positions in tertiary level colleges or as administrators in head office branches of the education systems.

It is likely that you will find some curriculum theorists among the *tertiary level academics* with positions in the sixty universities and colleges in Australia. However, the subject of Curriculum Studies has only been included in Schools/Faculties of Education over the last ten years or so and, therefore, the number of appointed positions in curriculum is still quite small. At least four universities have education faculties which specialize in curriculum[4] and they offer advanced curriculum theory units to Masters degree students and also offer doctorates in curriculum. Most Bachelor of Education degrees offered at Universities and colleges now include one or more units in curriculum.

Networks of curriculum scholars are only just beginning to emerge in Australia. The small number of curriculum specialists spread across the country means that for any one institution there may be only one such person together with a small number of higher degree students (most of whom undertake their studies as part-time and not full-time students). Annual conferences are one such source of interaction for curriculum scholars and the Australian Association for Research in Education (AARE), the Australian equivalent and affiliate to AERA, has held annual conferences since 1972. However, the programs at the AARE conferences are dominated by educational psychologists and measurement specialists, and because there are no special subject divisions (such as the Division B of curriculum studies at AERA), it is extremely unlikely that more that 2-4 papers are ever presented in any one year on curriculum theory topics.

A more recent initiative has been the formation of a national professional association of colleagues interested in curriculum studies. Commencing in 1979, under the title

of Curriculum Interest Group (CIG), it has subsequently blossomed into an association with over 500 members and it now holds biennial conferences and produces a twice yearly journal, *Curriculum Perspectives*. Through the conferences, and more especially through major articles and 'dialogue' articles in *Curriculum Perspectives*, it now is possible, more than any time previously, for curriculum theorists in Australia to communicate and debate their points of view.

To balance this tone of optimism, it also should be pointed out that some other official network systems for curriculum in Australia have not fared so well. A promising new institution, the Curriculum Development Center, commenced operations in 1975 under the leadership of Dr. Malcolm Skilbeck, to promote curriculum development, dissemination and publishing, and research and scholarship in curriculum. With a small staff of only thirty and an annual budget of $3 million, numerous curriculum projects were commenced and various conferences and seminars were hosted. Even though CDC had to continually contest rather different and often opposing points of view from state education system leaders, the agency appeared to be making very good progress through the 1970's and into the 1980's. Unfortunately, the resignation of its director, Dr. Skilbeck, and decisions by the government of the day to downgrade its activities of CDC almost led to its demise in 1981. It has recently been rejuvenated under the present government but its activities are now directly controlled by the Minister of Education and other national agencies such as the Commonwealth Schools Commission and the Department of Education. Not so fortunate were research agencies such as the Education Research and Development Committee (ERDC), a major source of funds for education researchers, which was summarily wound up in 1981 by the government of the day.

What are the curriculum theorists saying?

The curriculum theorists in Australia are small in num-

bers and come predominately from universities and colleges, with a scattering from head office positions in education systems. Their prespectives on curriculum theory reflect the various routes from which they have come, including educational sociology, educational philosophy, educational psychology, the social sciences and humanities and administrative science. Their contributions to curriculum theory can be only gauged from what they have communicated to others, via their lectures, presentations to conferences, and academic articles and books which they have authored.

In this paper, attention is focused only upon *books* that Australian curriculum theorists have produced and this in itself produces a fascinating picture when it is viewed historically since the beginning decade of the twentieth century. An analysis of articles published in journals by Austrialian curriculum theorists would necessitate analyzing numerous overseas journals as well as Australian ones, and is beyond the scope of this paper, although it is anticipated that these details would corroborate, in general, the pattern described below.

Table 1

Number of Curriculum Books Published in USA, UK, and Australia - 1900-1979

Decade Beginning	USA	UK	Australia
1900	11	4	-
1910	12	1	-
1920	87	-	-
1930	110	2	2
1940	74	1	1
1950	121	2	0
1960	260	19	1
1970-79	334	61	5

Data derived from: W.H. Schubert, *Curriculum Books: The First Eighty Years* Lanham: Uni Press of American, 1980.

In Table 1, a list is included of books published by Australians in Australia for the period 1900-1979, together with comparative details for USA and the UK. These figures are based upon listings compiled by Schubert[6] and it would seem that the number of curriculum books written by Australians pales in significance compared with those written by their counterparts in the USA and the UK. As listed in Table 1, the number of Australian curriculum books appears to be very limited indeed in the early decades of the twentieth century, and that situation hardly improved except during the last decade. It is interesting to note that on the British scene, the number of curriculum books published also started very slowly, but during the 1960's it was developing much faster, and very dramatically in the 1970's.

However, Table 1 does not give the complete picture as Schubert's criteria for inclusion were book titles using the term 'curriculum' and written in English. The development of curriculum books by Australian authors has followed a more complicated pattern as depicted in Table 2 (page 24) The early books published in the 1920's and 30's dealt with curriculum matters but their titles were usually aligned with the term 'teaching.' Thus, of the six books written during that time, only two contained the term 'curriculum' in their respective titles although the other four dealt specifically with curriculum matters. The theme of books on 'teaching' (although dealing with curriculum) seems to have continued through into the 1940's-80's, but in the 1960's there developed a number of books which focused on matters of general curriculum. This dichotomy of the 1960's was further complicated in the 1970's by a split into four main areas of concentration, namely Specialized Curriculum Topics, books based on Curriculum Projects, Specific Teaching Techniques and Specific Teaching Areas (see Table 2).

To fully appreciate the curriculum theorizing which has occurred over the decades, it would be necessary to examine all these books carefully, but it is possible to

select out a small sample which represents particular levels of development. To this end, five have been sampled (see Table 3, p. 26) for closer study and for the latter three, questionnaires were circulated to these authors to obtain their comments about curriculum colleagues who had influenced their writings, and about their expressed intentions in writing their respective books. This information was collected for the last three books analyzed (Wheeler, Musgrave & Marsh) but it was not possible to do this for Mackie and Browne (deceased).

Alexander Mackie, *The Groundwork of Teaching* (1919)

Despite the title, this was the first book on *curriculum* written in Australia. Mackie lectured at and became principal of the Sydney Teachers' College before being appointed as the first Professor of Education at the University of Sydney. His chief concerns in the book appear to have been twofold, namely to promote a social needs orientation to curriculum planning and to indicate how a variety of teaching procedures based upon psychological principles should be used.

In this slender volume of 166 pages, Mackie contributes only two chapters, the other eight being written by five colleagues from the Teachers' College. Nevertheless, there is a unity about the writings and an emphasis upon providing a schooling which promotes the interests of the children and yet prepares them as future members of the community. For example:

> The school is a form of social life, and its occupations and lessons are intended to form the physical, mental and moral character of the young, to fit them for living as useful members of the community, and in so doing to promote their welfare and happiness.

There is also a strong emphasis in the book upon the need for teachers to produce lessons which reflect important psychological principles such as children are active

learners, children have individual rates of learning, and children have different levels of achievement. Mackie maintained that it was necessary for a teacher to have available a repertoire of different kinds of lessons (Information lessons, Expression lessons, Drill lessons, Problem lessons, Aesthetic lessons and Exhortation lessons) so as to accommodate these various psychological principles.

This book is likely to have had considerable impact upon educators in Australia during the 1920's and early 1930's. Mackie's book seems to have been influenced heavily by some of the child study psychologists of the time (for example, A. Gesell[8]) and by educators who emphasized a social inheritance for children. At the time it represented the latest thinking about aims and purposes of a curriculum and child development principles.

G. S. Browne, *The Case for Curriculum Revision* (1932)

Browne's book was selected out of four written in the 1930's because it illustrates very well the pressures on curriculum which were occurring at the time. Browne, a Vice-Principal at Melbourne Teachers' College, had spent a year visiting educational centers in the USA and the UK, and his report to the Director of Education in the state of Victoria was the basis for a book which was finally published in 1932.

The foreword of the book, written by the Director of Education in Victoria, M. P. Hansen, alerts the reader to the problems which that state was facing at the time, especially pressures by political leaders to control policies of the state education system:

> Indeed, I feel it is my duty in the light of events during the last few years to advise the public of certain dangers to which a highly centralized system of education under political control is exposed.[9]

> These advantages (of a centralized system) are gravely imperilled if publication and discussion of educational problems are forbidden on the ground that possibly questions of policy may be involved.[10]

Hansen was objecting to the Minister of Education in Victoria who was exerting considerable political influence over the policies of the state education system, even to the extent of forbidding education officers from making statements on educational matters in any public medium. It is not surprising, therefore, that Browne's comments in his book are hard-hitting and aggressive, and his plans for revising the curriculum in Victorian elementary schools call for far more involvement and discussion by teachers (in opposition to the Minister for Education's directives) in planning curricula via a central executive committee, district committees and subject committees.

Browne seems to have been greatly impressed by observations he made in educational practices in the USA, but he had little to say about the UK. The theoretical underpinnings of his book are clearly those of John Dewey, as revealed by such passages as:

> We cannot blind ourselves to the fact that at present we do not give our scholars enough practical training in citizenship, initiative, responsibility and self-discipline.[11]

> Too often in the past we have been content to teach children 'what' to think instead of 'how' to think.[12]

In the introductory chapters in his book, Browne elaborates upon various aspects of Dewey's experimentalism[13] and he makes his points by comparing the traditional (and undersirable) approaches in Victoria with what could and should be done. In the remaining chapters he sets out his "curriculum revision plan" including details for each of the elementary school subjects. The book, in summary, is an interesting combination of assertions about a particular philosophic orientation to education, and detailed, practical examples of how one might achieve this end.

It appears that no general curriculum books were written in Australia during the 1940's and 1950's, except for brief detailed handbooks for teachers working in parti-

cular philosophic orientation to education, and detailed, practical examples of how one might achieve this end.

It appears that no general curriculum books were written in Australia during the 1940's and 1950's, except for brief detailed handbooks for teachers working in particular education systems (for example, see Ellwood in Table 2). During the 1960's there was a sudden surge in the publication of curriculum books, when three general curriculum books and five books on specific teaching methods were published in Australia between the 1950's and 1960's (see Table 2).

D. K. Wheeler, *Curriculum Process* (1967)

Wheeler's book is the Australian equivalent of Taba's *Curriculum Development*. Wheeler completed his book in 1965 after a sabbatical period working with Hilda Taba at San Francisco State University, and it is understandable that he should draw heavily upon the planning principles enunciated by Taba. Although he does elaborate goals more fully than Taba (for example, into ultimate, mediate and proximate categories), his book covers the same social needs orientation and follows the same rationale: curriculum process elements of examining aims, goals and objectives; selecting learning experiences; selecting content; organizing and integrating learning experiences and content; and evaluating the aims, goals and objectives.

Wheeler's purpose in writing the book, according to a recent personal communication with the author, was:

> to present a unified, coherent and logical approach to the theory of curriculum.[14]

He seems to view curriculum theorizing as the establishing of explicit criteria to use in the process of orderly, purposeful curriculum development rather than studying the various value orientations implicit in such undertakings. This is evident throughout his chapters, including:

> Emphasis on the individual, on society, on subject matter and on learning processes are all necessary. What must be guarded against is emphasis on one to the exclusion of the others.[15]

> General aims, whatever their nature and however expressed, are mere brass and cymbals until they are operationlly expressed and matched with education sequences which produce actual outcomes close to the intended behavior or behavior patterns.[16]

Just as Tyler[17] and Taba[18] have been standard textbook fare for many tertiary students in the USA during the 1960's and 1970's, Wheeler has served the same function in Australia and his book has been widely used in universities and colleges. The curriculum process cycle can, of course, be applied to any subject field and does provide the steps for those involved in curriculum development. But the criticisms of the Tyler approach as being rational/managerial/technological[19] apply equally to Wheeler's approach.

P. W. Musgrave, *Society and the Curriculum in Australia* (1979)

This book was one of seven written about general curriculum in Australia during the 1970's, and one of three authored and published by Musgrave during that decade. It is interesting to include here because it was one of five books in a series on curriculum commissioned by Dr. Malcolm Skilbeck, Director of the Curriculum Development Center.

As a sociologist by training, it is not surprising that Musgrave's stated intention for writing this book was to provide

> an account of the development of the Australian curriculum, from sociological and historical perspectives.[2]

The definition he provides of curriculum in an early chapter of his book indicates that he may have been influenced by the writings of contemporary sociologists overseas, such as M. F .D. Young and P. L. Berger:

> Curriculum consists of that selection from the whole stock of knowledge available to a society which those in power in the educational system aim to pass on to succeeding generations.[21]

In various chapters he points to some of the unique aspects of Australian society (such as the influence of the waning British connection, and a distrust of authority in moral and academic matters) and he relates the effects that these and other elements have had upon the direction of curriculum in Australia. He uses Beeby's[22] four stages of change in educational systems (Dame school stage, stage of Formalism, stage of Transition, and stage of Meaning) to demonstrate how changes have evolved in curriculum in Australia during the nineteenth and twentieth centuries.

Musgrave's slender book of 160 pages was only intended as an introduction to curriculum and, therefore, he might be excused for not developing a curriculum theory beyond the raising of particular sociological issues. However, a significant contribution of the book is its historical analysis of curriculum in Australia, a topic which had not received more than a scant few pages hitherto from other Australian curriculum authors.

C. J. Marsh, *Curriculum Process in the Primary School* (1980)

This book was the first curriculum book published in the 1980's, although subsequently three others have been published (see Table 2). It, too, was commissioned as an introductory volume, in which the focus was to be upon the skills and activities needed by classroom teachers to become active participants in curriculum making.

The author provides a framework for the practical curriculum-making skills by analyzing them in terms of four major approaches or value orientations to curriculum. These approaches (Social interaction, Information processing, Personal development, Behavior modification) draw upon the categories described by Joyce & Weil[23], Eisner and Vallance[24], and McNeil[25]. Various examples are used to amplify these four orientations as applied to the process elements involved in developing a curriculum. By the example used, it is evident that the author is favorably disposed to American curriculum writers such as Eisner, Walker, Fraenkel and Taba, although he doesn't state his preferences explicitly, nor does he elaborate upon or develop, a particular orientation to curriculm theory.

What are the future prospects for curriculum theorists in Australia?

At a general level it might be concluded that the future for curriculum theorists in Australia looks to be most promising. The number of books written on curriculum is increasing (see Table 1), and there has been a steady increase of articles written by Austrialian curriculum specialists appearing in *Educational Leadership, Curriculum Inquiry* and *Journal of Curriculum Studies*. Further, the establishment of a national curriculum organization, the Australian Curriculum Studies Association (ACSA), should enable curriculum colleagues far more opportunities to maintain a dialogue on theory issues. There is an increasing demand for curriculum courses at tertiary level and this should lead to more curriculum staff being hired in universities and colleges, even though economic conditions are presently causing nation-wide contractions in staffing levels.

A closer examination of the details presented in this paper might lead the reader to come to a less than positive conclusion about the contribution of individual Australian curriculum theorists. For example, how significant have been the various curriculum books written by Australians? To what extent are the books written in the 1960's and beyond being used in other countries, especially USA and the UK? To what extent are they being cited in curriculum journals?

It might be concluded that Australian curriculum books focus too much on classroom activities, and upon applying theoretical principles to classrooms, without un-

dertaking the vital task of critiquing and perhaps discarding extant theories and formulating and shaping new theories. The theorizing may come at a later stage, of course, and it can be argued that much theorizing can grow out of case study work and classroom observation.[26] Schubert[27] refers to curriculum books which attempt to provide procedures for curriculum development as being *synoptic texts* and many of the Australian books seem to fit this categorization. In his listing of synoptic texts, which he maintains have dominated curriculum writing during the 1930's-1960's, Schubert includes Taba's *Curriculum Development* and Saylor and Alexander's *Planning Curriculum for Schools*.[28] Australian curriculum books tend to be very similar to these patterns although their format of limp covers and a length of less than 200 pages is far less impressive visually, than the hard-cover, large, American volumes, such as the 733 pages of Tanner and Tanner's *Curriculum Development*.[29]

It is interesting to note that Wheeler's *Curriculum Process* is the only book written by an Australian curriculum specialist which has so far been published by an overseas publisher (University of London Press), and at 320 pages, it is well beyond the typical 150-200 page limit of other Australian curriculum books. It, too, is the only book produced to date which devotes the entire volume to expounding a particular theoretical orientation to curriculum. Australia has yet to produce its equivalent to theorists such as Harry Broudy[30], Philip Phenix[31] or Henry Giroux.[32]

Perhaps some excuses can be offered for the short-falls by Australian colleagues in curriculum theorizing. The size of the market for academic books (and journals) is likely to have been one major factor. Book publishers in Australia are not interested in publishing large, hard-cover books on curriculum. Often, these books publishers will undertake extensive market research before they will even agree to produce a slender volume of 150 pages, and books of readings on curriculum (although published regularly in the USA and UK[33]) are summarily dismissed as non-viable by

Australian publishers. Understandably, book publishers cannot embark upon publishing activities if they can't be assured of a sound market, and the Australian market is very small. But these decisions by publishers create a "no-win" situation for curriculum specialists. Unless they can communicate their ideas on curriculum, they are unlikely to refine their theories, and this process won't ever get started unless they can find a publisher.

Finally, another excuse which might be offered is that curriculum theorizing in the 1980's is not widespread in other countries either! Using Pinar's classification of curricularists into traditionalists, conceptual empiricists and reconceptualists,[34] it seems that colleagues in the first two categories are not writing very many new books on curriculum. Revised editions of well-established books (for example, R. C. Doll[35]) are still being marketed as are revised editions of books of readings (for example, G. Hass, J. Bondi & J. Wiles[36]), but the overall output is quite limited. By contrast, writers in the reconceptualist category are publishing at a steadily increasing rate (for example, W. F. Pinar[37], H. Giroux, A. Penna, W. F. Pinar[38]).

Although Australia has curriculum colleagues working from reconceptualist/phenomenological/existentialist orientations, their publications to date have been limited to journal papers.[39] Several sociologists have attracted international attention for their writings within the emancipatory framework such as Sharp[40] and Pusey[41], but that is the present extent of contributions in this area. It may be, as Westbury[42] points out that reference to fatality and choice for theorists, that Australian curriculum specialists, working closely with school people and whose positions are tied in to heirarchical centralized education systems, do not have the same opportunities to develop theoretical positions as the sociologists.

Curriculum theory has a foothold in Australia at the present time. Whether this scaling point enables a veritable fortress to be erected or whether it remains as nothing more than a resting point up the cliff face, remains for future curriculum theorists to decide.

Table 2.

Books Published in Australia on Curriculum 1919-81

1920s-30s

Curriculum /Teaching

Author	Title
J. Smyth	The Rural School in Australia (1914)
A. Mackie	The Groundwork of Teaching (1919)
J. Elijah	The Principles & Techniques of Teaching in Elementary Schools (1924)
Institute of Inspectors, NSW	Education Efficiency (1928)
P.R. Cole	The Primary School Curriculum in Australia (1932)
G.S. Browne	The Case for Curriculum Revision (1932)
E.G. Biaggini	English in Australia (1933)
P.R. Cole	The Method and Technique of Teaching (1933)
P.R. Cole	The Education of the Adolescent in Australia (1935)

1940s-50s

Author	Title
W. Ellwood	A Handbook for the Elementary School Teacher (1946)
Tas. Ed. Dept.	Curriculum for Primary Schools (1948)
A.J. Law	Modern Teaching (1940)

1960s

Curriculum (General)

Author	Title
W. Connell et. al	Foundations of Education (1962)
D. Wheeler	Curriculum Process (1967)
P. Partridge	Society Schools & Progress (1968)

Teaching

Author	Title
J. Cole	Principles & Techniques of Teaching (1962)
L. Blake	
O. Jones	The Primary School (1966)
G. Bassett	Teaching in the Primary School (1967)
B. Harley	A Synthesis of Teaching Methods (1967)

1970s & 80s

Curriculum (General)

Author	Title
D. Dufty	Teaching about Society (1970)
P. Hughes	The Teachers Role in Curriculum Design (1973)
P. Musgrave	Knowledge, Curriculum & Change (1973)
O. Howie	Education for Survival (1976)
P. Musgrave	Contemporary Studies in the Curriculum (1974)

Specialized Curriculum topics/problems

SBCD/School & Community

- F. Golding & D. Pond ,General Studies in the Open Classroom (1973)
- K. Tronc ,Focus on Change: The Open Area Primary School in Aust. (1974)
- K. Tronc ,School & Community (1976)
- R. Fitsgerald et. al. ,Participation in Schools (1976)
- J. Walton, R. Morgan ,Some Perspectives on SBCD (1978)

Teaching (general)

Author	Title
M. Mackie	The Beginning teacher (1973)
D. Edgar	The Competent Teacher (1974)
C. Marsh,J. Pears	Developing Classroom Flexibility (1980)

Specific teaching techniques

Inquiry

Author	Title
N. Pryde	Inquiry Teaching in the Social Studies
O. Whitehead	Enquiry Learning in the Social Studies (1978)

Table 2. (cont.)

1970's & 80's

Curriculum (General) cont.

Author	Title
K. Piper	Curriculum Style & Social Learning (1979)
P. Musgrave	Society & the Curriculum in Australia (1979)
C. Marsh	Curriculum Process in the Primary School (1980)
L. Brady	Curriculum Development in Australia (1984)
C. Marsh	Curriculum: An Australian
K. Stafford	Practices and Issues 1984
C. Marsh	Curriculum: An Analytical

Curriculum Projects

ASEP

Author	Title
F. Owen	The Impact of ASEP on Schools (1978)

SEMP

Author	Title
CDC	SEMP Teachers Handbook (1977)

Intercultural Studies

Author	Title
D. Dufty	Seeing It Their Way (1975)

Individual Differences

Author	Title
G. Bassett	Each One is Different (1964)
G. Bassett	Indiv. Diffs.: Guidelines for Ed. Practice (1978)

Multi Cultural/Inner City

- L. Claydon, Renewing Urban Teaching (1973)
- B. Bullivant, Educating the Immigrant Child (1973)
- L. Claydon et. al., Curriculum & Culture (1977)
- C. Turney et al. ,Inner City Schools (1978)
- J. Smolics ,Culture & Education in a Plural Society (1979)
- B. Bullivant ,Race, Ethnicity & Curriculum (1981)

Ed. Administration

- M. Walker ,Theory & Practice in Ed. Administration (1970)
- M. Mackie ,Philosophy & School Admin. (1977)

Creativity

- M. Poole,Creativity Across the Curriculum (1980)

Moral Curriculum

- P. Musgrave ,The Moral Curriculum (1978)

Evaluation

- K. Piper, Evaluation in the Social Sciences (1976)
- CDC Curriculum Evaluation (1977)
- J. Maling-Keepers ,Educational Evaluation Key Characteristics (1978)
- E. Davis, Teachers as Curriculum

Simulation Games

Author	Title
R. Teller, J. Rees	Teacher Tactics (1975)
K. Tronc	A Principal's Workbook (1977)
C. Marsh	Simulation Games in Action (1979)

Specific Teaching areas

e.g. Science

Author	Title
F. Gardiner	Structure of Science Ed. (1975)
R. Linke	Environmental Ed. in Aust. (1980)
C. Oates et al.	Science Ed: Aust. Practices & Perspectives (1980)

e.g. Social Studies

Author	Title
R. Traill	Teaching the Social Sciences (1972)
P. Partridge et al.	Social Science for the Secondary School (1969)
D. Dufty	Teaching About Society (1971)
C. Marsh & M. Print	Social Sciences::Skills & Teaching Methods (1975)
W. F. Connell et al.	Studying the School Community (1978)

Table 3.

SUMMARY OF DETAILS ABOUT THE FIVE CURRICULUM BOOKS SAMPLED

Decade	Title of book	Size of book and publisher	Emphases	Colleagues who* influenced their writing at the time	Intended Purpose* of Book
1910's	The Groundwork Teaching (1919) A. Hackie	167 pp Teachers College Press, Sydney.	1. Social needs 2. General Principles for curriculum making	None cited in the book	To acquaint student teachers in NSW with general principles of curriculum making & teaching (inferred from Preface).
1930's	The Case for Curriculum Revision (1932) G.S. Browne	183 pp. Melbourne Univ. Press, Melbourne	1. Social needs 2. Specific examples of application to teaching areas.	J. Dewey A. Gesell (as cited in the book)	To demonstrate why and how curriculum revision planning should be undertaken in Victoria.
1960's	Curriculum Process (1967) D. K. Wheeler	320 pp. Univ. of London Press, London	1. Social needs 2. Amplification of the process elements involved in developing a curriculum	H. Taba, G. Saylor, B.O. Smith	To present, a unified, coherent and logical approach to curriculum planning.
1970's	Society and the Curriculum (1979) P. W. Musgrave	160 pp. George, Allen & Unwin, Sydney	1. Relationship of Curriculum development to social and economic development 2. Power, influence & curriculum change.	M.F.D. Young T.S. Kuhn, P.L. Berger	To provide a sociological analysis of curriculum developments in Australia
1980's	Curriculum Process in the Primary School (1980) C.J. Marsh	239 pp. Ian Novak, Sydney.	Introduction to the skills of curriculum making for teachers analyzed within a framework of 4 major value orientations to curriculum.	B. Joyce, E. Eisner, D. Walker H. Taba	To provide teachers with the necessary theoretical principles and practical skills to undertake school-based curriculum development activities.

*Data obtained from questionnaires received back from the authors (December 1982)

FOOTNOTES

1. M. Lawn and L. Barton, "Curriculum Studies: reconceptualism or reconstruction?" **Journal of Curriculum Theorizing** (Vol. 2, No. 1, 1980), p. 47, suggest that curriculum studies as a field of study has only been in existence in the United Kingdom for the last fifteen years.
2. C. J. Marsh and K. Stafford, **Curriculum: Australian Practices and Issues** (McGraw Hill, Sydney, 1984), p.23.
3. R. F. Butts, **Assumptions Underlying Australian Education.** (ACER Melbourne, 1955), p. 68.
4. These universities include Macquarie University (NSW), University of New England (NSW), Deakin University (Vic.) and Murdoch University (WA), University of Sydney (NSW).
5. An interesting analysis of papers presented in AERA's Division B in 1981 is described in E. Vallance "A self portrait of the curriculum field, 1980 (Confessions of a program chair)." Paper presented at the annual meeting of the American Education Research Association, New York, March 1982.
6. W. H. Schubert, **Curriculum Books: The First Eighty Years** (University Press in America, Lanham, Maryland, 1980).
7. A. Mackie (Ed.) **A Groundwork of Teaching** (Teachers' College Press, Sydney, 1919), p.20.
8. A. L. Gesell as quoted in G. S. Browne. **The Case for Curriculum Revision** (Melbourne University Press, Melbourne, 1932), p. 15.
9. M. P. Hansen, Forward in G. S. Browne. **The Case for Curriculum Revision** (Melbourne University press, Melbourne, 1932), p. 11.
10. **Ibid.**, p.12.
11. G. S. Browne, **op. cit.**, p. 20.
12. **Ibid.** p. 21.
13. W. H. Schubert refers to Dewey's writings and others of this period as "experientialists", and this is possibly a more appropriate functional term. T. Harbo "The curriculum field today: a Scandinavian point of view". Paper presented at the annual meeting of the American Education

Research Association, New York, March 1982, also refers to a similar influence upon Norway's curriculum development during the 1920's and 30's.

14. Questionnaire response received back from D. H. Wheeler in December 1982.

15. D. K. Wheeler, **Curriculum Process** (University of London Press, London, 1967), pp. 21-22.

16. **Ibid.**, p. 53.

17. R. W. Tyler, **Basic Principles of Curriculum Instruction** (University of Chicago Press, Chicago, 1939).

18. H. Taba, **Curriculum Development: Theory and Practice** (Harcourt, Brace and World, New York, 1962).

19. M. Lawn and L. Barton, **Op.cit.**, p. 47.

20. Questionnaire response received back from P. W. Musgrave in December 1982.

21. P. W. Musgrave, **Society and the Curriculum in Australia** (George, Allen and Unwin, Sydney, 1979), p. 17.

22. C. E. Beeby, **Quality of Education in Developing Countries** (Harvard University Press, Cambridge, 1966), conceptualized four stages by which educational systems change, based upon his experiences as educational administrator in the South-West Pacific region.

23. B. Joyce and M. Weil, **Models of Teaching** (Prentice-Hall, Englewood Cliffs, NJ, 1972).

24. E. W. Eisner and E. Vallance (Eds.) **Conflicting Conceptions of Curriculum** (McCutchan, Berkeley, California, 1974).

25. J. D. McNeil, **Curriculum: A Comprehensive Introduction** (Little, Brown & Co., Boston, 1977).

26. W. A. Reid "Trends in curriculum theorizing in England since 1970." Paper presented at the annual meeting of the American Education Research Association, New York, March 1982), p. 7.

27. W. H. Schubert, **op. cit.**, P. 330 and in W. H. Schubert "The return of curriculum inquiry from schooling to education", **Curriculum Inquiry** (Vol. 12, No. 2, Summer 1982)

28. **Ibid.**, p. 330.

29. D. Tanner and L. N. Tanner, **Curriculum Development: Theory and Practice** (Macmillan, New York, 1975).

30. H. S. Broudy, B. O. Smith and J. R. Burnett, **Democracy and Excellence in American Secondary Education** (Rand McNally, Chicago, 1964).

31. P. H. Phenix, **Realms of Meaning** (McGraw Hill, New York, 1964).

32. H. A. Giroux, **Ideologies, Culture and the Process of Schooling** (Falmouth Press, London, 1981).

33. W. H. Schubert, **Op. cit.**, p. 330.

34. These categories are described in W. F. Pinar, "The conceptualization of curriculum studies." **Journal of Curriculum Studies,** (Vol. 10, No. 3, July 1978), pp. 205-214. See also J. L. Miller, "Curriculum theory: A recent history." **Journal of Curriculum Theorizing,** Vol. 1, No. 1, 1979) pp. 28-43. and T. M. Brown, "How fields change: A critique of 'Kuhnian' view." **Journal of Curriculum Theorizing,** (Vol. 3, No. 1, Winter 1981, pp. 5-13).

35. R. C. Doll, **Curriculum Improvement** 4th ed. (Allyn & Bacon, Boston, 1978).

36. G. Hass, J. Bondi and J. Wiles, **Curriculum Planning: A New Approach,** 3rd ed. (Allyn & Bacon, Boston, 1974).

37. W. F. Pinar (Ed.), **Curriculum Theorizing: The Reconceptualists.** (McCutchan, Berkeley, California, 1975).

38. H. A. Giroux, A. N. Penna and W. F. Pinar, **Curriculum and Instruction,** (McCutchan, Berkeley, California, 1981).

39. For example, N. Gough, "School-based curriculum development: whither curriculum theory?" **Curriculum Perspectives,** (Vol. 2, No. 1, Oct. 1981), pp. 41-46 and S. Grundy, "Three modes of action research", **Curriculum Perspectives,** (Vol. 2, No. 3, October 1982), pp. 33-34.

40. R. Sharp and A. Green, **Education and Social Control** (Routledge and Kegan Paul, London, 1976).

41. M. Pusey, **Dynamics of Bureaucracy** (John Wiley, Brisbane, 1976).

42. I. Westbury, "Fatality and choice in curriculum theory." A paper presented at the annual meeting of the American Education Research Association, New York, March 1982.

MASCULINITY, FEMINISM, AND THE MALE ELEMENTARY SCHOOL TEACHER: A CASE STUDY OF PRESERVICE TEACHERS' PERSPECTIVES

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For a number of reasons (e.g., tradition, money, social status), few men choose elementary teaching as a profession. For years, many have recognized the need to have more men teaching in elementary schools. This awareness has taken on new significance during the last two decades as the feminist movement has influenced both society and schools. Feminism challenges many of our traditional social roles, and schools have long been seen as a potentially important factor in socializing our young people. To a large degree, the teacher is an agent of culture for children. S/he overtly and covertly teaches our children values, norms, attitudes, and ideas that reflect and/or influence the social context within which schools operate. Since male elementary school teachers would serve as an alternative occupational role model, an increase in their numbers would ideally promote a healthier and more balanced view of society to our children.

While the absence of men in elementary education continues to exist, there is little research that explores the perspectives of those few men who have chosen to enter this field. What perspectives do men, who are entering elementary education as a profession, have toward gender identity and the changing sexual/social roles in our society? Since teachers serve as role models, men's perspectives toward masculinity are of particular interest. Perhaps most importantly, in what way are male elementary school teachers' perspectives manifested within a given classroom?

In an effort to address these concerns, this paper reports the findings of a case study of six male preservice teachers enrolled in two different elementary teacher education programs. Several studies (e.g., Becker et al., 1961; Lortie, 1975) have found that perspectives concerning one's occupation are largely formed early in one's career. It follows then, that a crucial period for examining the development of perspectives is during teachers' preservice education. To facilitate this discussion, the paper is divided into four main sections. The first two provide a context within which the study's findings can be presented. The first section addresses the role of teacher as mediator of culture, and the second briefly examines the socialization of males in our society. The third section presents the study's methodology and findings. Finally, the implications of the study's findings are discussed in an effort to more accurately understand the relationship between schools and society.

Teacher as Mediator of Culture

Sarbin (1954:225) states that a role is "...a patterned sequence of learned actions or deeds performed by a person in an interaction situation." As an individual enters the teaching profession, s/he quickly learns that teachers fulfill many possible roles such as: observer, dispenser of knowledge, facilitator of learning, counselor, manager, and evaluator. One role that is often overlooked in teacher preparation textbooks and among those people in the field is the teacher as an agent of culture, one who consciously or unconsciously transmits societal norms and values to our children.

Although this role is not always overtly discussed, at different times in our nation's history it has been strongly encouraged. For example, by the turn of the century the influx of various immigrant groups had already turned this country into a uniquely pluralistic society. This heterogeneity, however, conflicted with the prevailing belief in the superiority of Anglo-Saxon culture. The primary institution chosen to meet this challenge, and thus develop a homogeneous society, was the schools. In 1909 Ellwood Cubberly, a leading educator at the time, expressed the then prevailing attitude:

> Our task is to assimilate these people as part of the American race, and to implant in their children, so far as can be done, the Anglo-Saxon conception of righteousness, law, order, and popular government, and to awaken in them reverence for our democratic institutions and for those things which we as a people hold to be of abiding worth. (Pucinski, 1972:76)

Naturally, the primary cultural agent within the schools was the teacher.

Numerous educators and sociologists have illuminated the way in which schools and teachers transmit cultural knowledge to our children (e.g., Apple, 1979; Friedenberg, 1963; Henry, 1963; Spindler, 1963; Waller, 1932). However, it is extremely important that we rocognize the dynamic quality of this transmission. Teachers do not merely "pass on" an exact, predetermined body of cultural norms. In addition to transmitting culture, teachers also interpret and (to some degree) alter its quality:

> We know that education is much more the determined than the determining factor in human culture. However, to a degree, it is both. For civilization is not a dead mass of material which can be moved like furniture from the house of the deceased into the house of the heirs. While passing from one generation to another, civilization changes its character according to the spirit of those who transmit—for transmission of values is not just a process of "handing down," it is at the same time reinterpretation; it involves choice and selection; it is continual renaiscence....Thus, the teacher, who is the transmitter, must also be the interpreter, the selective agent, the reviver and regenerator...(Ulich, 1952:21)

It is crucial to understand that teachers are not simply a vehicle for, but are mediators of culture. As mediators, they reflect not only the past, but also lead into the future. As a number of educators have noted (e.g., Grant, 1977; Lather, 1984; Postman and Weingartner, 1969), teachers

play a potentially dramatic part in the development of our emerging culture. In recognizing this fact, we not only legitimate the power and uniqueness of individual teachers, but also become aware of the complex dynamics involved in the socializing role teachers play in our children's lives. As previously mentioned, the feminist movement has had a significant impact upon our schools and society. Keeping this recent social development in mind, the question that arises is: In what way do men, who are entering elementary education, act upon their role as mediator of culture within the classroom? However, before addressing this question, it is helpful to briefly examine the socializing process of men within our society.

Male Socialization - Traditional Emerging Roles

Teachers, like all people, cannot be seen as separate from the broader social world from which they come. In examining the perspectives of individual men who are entering elementary teaching, it is important to have some insight into the socializing process that confronts most men in our society. Although our sexual identity is determined through genetics, our gender identity is the result of cultural influences such as parents, schools, media, and peer relations—an individual's socialization (Mead, 1935). As a number of individuals (e.g., Brown, 1956, 1958; Fauls and Smith, 1956; Gilbert, 1957; Goldberg, 1976: 172-182) have noted, "Demands that boys conform to social notions of what is manly come much earlier and are enforced with much more vigor than similar attitudes with respect to girls" (Hartley, 1947:7). While few adults seem concerned if a young girl is acting like a "tomboy," young boys quickly learn it is not okay if they exhibit feminine or "sissy" behavior. What messages do young males receive from our culture regarding their masculinity?

Traditional Gender Identification

A number of individuals have noted that in our society there exists a set of values which boys (more than girls)

are socialized to embrace (e.g., Farrell, 1974; Goldberg, 1976; Pleck and Sawyer, 1974). This masculine ethos, though subject to variation and exceptions, is pervasive within our culture. For example, through various avenues (e.g., mass media, peer relations, school, church, family structure) boys soon learn that men are supposed to be: active (both physically and mentally) logical, aggressive, strong, competitive, leaders, quick decision-makers, powerful, in control, visible, self-confident, independent, and charismatic (i.e., a hero). Often the summons to adapt masculine characteristics implies a repudiation of alleged "feminine traits" (e.g., emotional, intuitive, sensitive, passive, cooperative, weak, dependent, humble). Boys learn that by embracing masculine qualities, they will be allowed to do something that girls cannot—live in a "man's world":

> In every known human society, the male's need for achievement can be recognized. Men may cook or weave or dress dolls or hunt hummingbirds, but if such activities are appropriate occupations for men, then the whole society, men and women alike, votes them as important. When the same occupations are performed by women, they are regarded as less important. In a great number of human societies, men's sureness of their own sex roles is tied up with their right, or ability, to practice some activity that women are not allowed to practice. (Mead, 1949:159)

When a society expects men and women to conform to rigid cultural roles, there are costs for both society and the individuals within it.

Although these masculine characteristics give men more power (and hence more choices, options, and perhaps greater freedom) then women, there are often negative consequences in being "on top and in control." First, once a boy enters school, he is put in almost daily conflict with his environment. Numerous articles and books have illustrated the greater difficulties boys face upon entering the classroom than girls (e.g., Frazier and Sadker, 1973: 86-94; Goldman and May, 1970; Le Trippot, 1968; McFarland, 1968; Palardy, 1969; Sexton, 1974; Shaw, 1966; Werry and Quarry, 1971). The school code demands propriety, obedience, cleanliness, quiet, and too often, mental passivity. This code is, of course, in direct opposition to what boys are supposed to be like. "Many schools and academies are dehumanizing and unmanly places. Boys who succeed in them often do so by grossly violating many codes of honor and the norms of boy culture" (Sexton, 1970). This conflict between their socialization and their daily environment often creates mental distress among many boys at an age when they are not able to understand what is happening to them. In addition, since most elementary school teachers are women and the school code often reflects traditional "feminine traits," some suggest that boys learn to resent members of the opposite sex, and that this resentment may plant the seeds of misogyny among some individuals.

While the need to actively compete in order to achieve, get ahead, and eventually succeed in this "man's world" may offer a few individuals great feelings of accomplishment for most men, this striving to "be on top" results in feelings of insecurity and anxiety. Boys soon learn that they must be good at sports, smart, and before too long, attractive to the opposite sex. Failing to meet up to these standards can produce great feelings of stress in boys. As they get older, sports give way to a career, and the pressure to "have the right answers" and "get it on" with women increases (Bradley et al., 1971). Since only a few boys and/or men in any given social group can be "leaders," most have to deal with a bruised self concept. Many research studies have noted the high level of stress men suffer from in their attempts to gain status and be successful (e.g., Bartolome, 1972; Gari, 1970; Goldber, 1976; Gould, 1974: 96-100).

In addition to fostering a high level of anxiety within men, their socialization also makes it more difficult for men to work through these feelings. Most men in our society are socialized to hide their emotions. At an early age,

boys are told "not to cry" and to "be tough." Later, they learn to repress most of their emotions. The typical "hero" in the eyes of many men are individuals who are: "cool," independent, self-contained, and emotionally invulnerable (Collier and Gaier, 1956). As a result, men often suffer from self-alienation. Men tend to over-identify with their external achievements and in the process ignore their internal experiences of living. In their frantic efforts to create an external image of "being together," many men, unfortunately, lose contact with their inner selves. As a number of individuals have suggested, without this introspection life can quickly lose its meaning (e.g., Frankl, 1955; Watts, 1970). Perhaps for this reason, many more men than women die (through illness or suicide) shortly after retirement (Journad, 1974: 21-29; Schmale, 1958).

These feelings of alienation are exacerbated by men's inability to develop intimate relationships with other human beings. Boys/men *do* things together, while girls/women spend time relating to each other. Rarely do men receive messages that it is okay to be very close with one's friends or lovers. Men's ability to develop personally meaningful relationships seems greatly hampered through their traditional socialization:

> We (men) always need an excuse to talk (e.g., an activity or object)...Talking personally and spontaneously involves revealing doubts, plans which may fail, ideas which haven't been thought through, happiness over things the other person may think trivial— in short, making ourselves vulnerable. That was too risky. (Fasteau, 1974: 19-21)

While many men seem to have a difficult time relating to women (e.g., Bradley et al., 1971: 13-25; Pleck and Sawyer, 1974: 30-52), their ability to develop close relationships with men seems even more crippled through their socialization. Although boys often enjoy feelings of comradeship during their school years, for the most part, these friendships remain on a superficial level. Perhaps due to homophobia, men tend to look at each other as friendly (or unfriendly) adversaries rather than as confidants or loving supporters (e.g., Bradley et al., 1971: 36-38; Clark, 1972: 368-382; Michael C., 1974: 75-77):

> Though he (men) too has needs for dependency, he learns that it is unmasculine to act in a dependent way. It is unmasculine to be frightened, to want to be held, stroked, and kissed, to cry, etc. While all of these expressions of self are acceptable in a girl they are incompatible with the boy's sought after image of being tough and in control. (Goldberg, 1976:176)

Even with the help of consciousness raising groups, many men feel that they are unable to open up to others (e.g., Levine, 1974). This inability to communicate and develop deep personal relationships increases men's sense of loneliness:

> If a man is reluctant to make himself known to another person...because it is not manly thus to be psychologically naked—then it follows that men will be difficult to love.... Some men are so skilled at dissembling, at "seeming," that even their wives will not know when they are lonely, bored, anxious, in pain, thwarted, hungering for affection, etc. And the men, blocked by pride, dare not disclose their despair or need. (Jourard, 1974: 26)

The result of this socializing process often leaves many men psychologically isolated and crippled. Although men in our society do enjoy greater opportunities than women, on a subtle put powerful level, their gender socialization has been equally oppressive and limiting.

Androgyny: An Emerging Alternative

At first, the feminist movement seemed to be only about women: their sex roles, their place in society, their economic opportunities, and social/political freedom. Men saw themselves as either threatened by this movement or, at most, supportive of the changes it promised to bring women. However, as feminism gained momentum in our

country, some men began to question more than just how our society affects women. A few individuals began to actively question their own masculine roles, and the socialization that produced those roles and expectations. For example, some have suggested that men's personal (as opposed to economic or political) oppression of women stems from their own self-alienation:

> Men have been afraid of women and have, therefore, dominated them, unconsciously, for very much the same reasons I believe that they have been afraid of their (creative) processes. Remember that the dynamic psychologists are apt to think that much of the relationship of men to women is determined by the fact that women will remind men of their own (creative) unconscious, that is of their own femaleness, their own softness, their own tenderness, and so on. And, therefore, fighting women or trying to control them or to derogate them has been part of this effort to control these unconscious forces which are within everyone of us. (Maslow, 1971: 87)

In their effort to discount anything associated with feminine characteristics, some men have discovered that they have cut themselves off from their full creative potential, and in the process, have prevented themselves from becoming fully developed human beings. These individuals have begun to realize that their efforts to become "all man" resulted in their becoming half human. In response, a few have joined support groups, and have struggled to find a new identity and a healthier way to live (e.g., Bradley et al., 1971; Farrell, 1974; Goldberg, 1976).

Today, a number of men and women are engaged in a transformation of gender identity. Singer (1977), for example, draws upon Carl Jung's notion of archtypes in her analysis of androgyny. In Jung's (1959) view, archtypes are universal and collective images that have existed throughout human history, and, therefore, their presence suggests strong, unconscious psychic contents. "(A)ndrogyny, in its

broadest sense can be defined as the One which contains the Two: namely, the male [andro] and the female [gyne]" (Singer, 1977: 6). Jung and Singer are not referring to physical characteristics in their use of the terms male and female, but a form of consciousness. The anima (male consciousness) and animus (female consciousness) are unique and polarized, and they reflect our traditional notions of gender identity (Jung, 1959). However, rather than being locked into traditional patterns, Singer (1977) suggests that each individual has the power to develop the talents and capabilitites of both the animus and anima that is within all human beings. In this sense an individual can become both logical and intuitive, strong and vulnerable, rational and emotional, confident and humble, powerful and weak, active and passive; and, therefore, gains the ability to draw upon whatever characteristics are necessary depending upon the given situation that confronts him/her. In doing so, s/he becomes integrated and thus fully human.

What is being suggested is that on a deep (and often unconsious) level we are neither male or female but in reality, possess the qualitites of both. However, in most cultures, men have been socialized to identify solely with the anima while women have been tracked into identifying with the animus. While this separation has dominated human history, it is important to note that the notion of androgyne is also considered an archtype. Zolla's (1981) historical research has illuminated the androgynous tradition as it has travelled through numerous cultures including: Shamanism, Taoism, Greek and Indian mythology, Jewish mysticism, and Christianity. Since it is our cultural socialization that has, to a great degree, determined our gender identity, Singer (1977) and others suggest that we need to move beyond this socialization if we are to ever become healthy and whole:

> The differentiation of the Masculine and the Feminine within the individual makes possible the flow of dynamic energy, the lightning leap between the

> positive and negative poles of being. Conscious awareness of these forces within, of their continuing separation and reunion, is an essential part of the inner development of the androgyne. (Singer, 1977: 322)

Singer emphasizes that androgyne does not imply a static state of consciousness. To the contrary, it reflects a constantly evolving awareness. Working through one's socialization is not an easy task, nor is it possible to completely accomplish this task alone. While each individual must be primarily responsible for his/her own development, as members of a culture, we can decide to move in new directions or to continue old perceptions and traditions.

As formerly mentioned, teachers play a potentially important part in influencing which direction(s) our society (and hence our children's socialization) will take. Within elementary schools, men are particularly noteworthy since they, by their mere presence, offer children an alternative occupational role model. However, beyond this physical presence, in what way do men, who are teaching in elementary schools, mediate cultural knowledge towards gender identity to children, given the dynamic transformations that are taking place within our broader culture?

The Study and Its Findings

A concept of perspectives as it has come to be used in the literature, captures the ideas, behaviors, and contexts of particular social interactions (Becker et al., 1961; Cornbleth, 1982; Grace, 1978; Hammersley, 1977; Sharp and Green, 1975). Unlike more abstract beliefs or ideologies, perspectives are set in the concrete world of actual situations and have reference to a particular activity(ies). Perspectives towards teaching take into account how the situation of the school and classroom is experienced; how this situation is interpreted given the teacher's background, beliefs, and assumptions; and how this interpretation is manifested in action.

As previously mentioned, perspectives often develop during one's professional preparation. Accordingly, the study reported here inquired into the perspectives of six male preservice teachers. Our purpose was to gain insight into the beliefs and actions that beginning male elementary teachers developed toward the gender identity among children and themselves as mediators of culture. After a brief discussion of the methodology used, three portrayals which emerged from the field data will be described.

Methodology

The methods used to collect and analyze data were those associated with field studies (Bruyn, 1966; Glaser and Strauss, 1975). This research approach was used because it allows for the generation of analytical categories which are grounded in recorded data, as well as for an examination of existing theoretical notions found in professional literature. This grounded theory research is free to combine a variety of data gathering methods in developing an analysis of social phenomena.

The sample group for this study was located in two different settings. After securing case histories of nine possible informants, six were chosen as the primary, although not exclusive, sample group. These students[1] were enrolled in a large, southeastern state university, and three were enrolled in a small, midwestern university. Care was taken to include students: who were teaching in elementary classrooms (field experience); who seemed likely to be successful in their practicum sites;[2] from a diversity of social, economic, and cultural backgrounds; who expressed varied interests; and of different ages. These individuals were selected following guidelines of theoretical sampling—that is, on the assumption that differences among the participants would facilitate the discovery of theoretical questions, categories, and interrelationships (Glaser and Strauss, 1975).

Observations and interviews (both formal and informal) were the two main methods of data collection. Data were

recorded in field notes during two university quarters at the southeastern university and one semester at the mid-western university. Each student in the sample group was observed in his practicum site at least once, lasting from two hours to the entire school day. One to three follow-up observations were made of four students from this sample group. Students were observed teaching different subjects within a variety of settings (large group, small group, and individual instruction). Rather than predetermining specific items to look for, a number of general questions were used to initially guide these observations: How is the classroom organized? What types of interpersonal dynamics exist between the pupils and students? What information, opinions, and/or beliefs are exchanged between the participants? More specific observation questions concerning their role as mediators of culture were developed from reviewing field notes and were used as the basis for follow-up observations.

Interviews were conducted before and after each observation. Students were interviewed at least four additional times during the field work. At first, interviews did not have specific, predetermined questions, but were structured around various areas of concern such as: perceptions of teacher roles, the relationship between schools and the broader society, perceptions of field experiences, views about being a man within elementary education, attitudes towards feminism and the education of children, etc. As field notes were analyzed, more specific questions emerged and were then asked during interviews to gain deeper insight into situations and to clarify ambiguities. Responses from the sample group were cross-checked with other men enrolled in these programs.

Glaser and Strauss' (1975) "constant comparative" method of analysis was used as a guide for understanding the data. Throughout the fieldwork, interview and observation notes were reviewed daily. Incidents and bits of information were at first coded into tentative conceptual categories. As these categories emerged, questions arose

that were used to guide further investigation into the field. The findings from these investigations were then compared to the initial categories. Through this constant comparison of data, analytical categories crystallized. Special attention was given to data that challenged original conceptualizations. In addition, the decision to address issues of feminism and masculitity was not made previous to the field work. The significance of these concerns arose only as the data began to be analyzed. This return to the data source, followed by modification and/or new generation of ideas, continued until the findings could be presented in some detail. As suggested by Glaser and Strauss (1975), the analysis presented in this paper takes a narrative form, using examples from the data to clarify concepts and to demonstrate the interrelationship between analysis and social reality. From this perspective, analysis is not a static product. The data presented in this paper are not designed to "prove" the infallibility of the analysis generated. Rather, the goal is to illuminate concepts and thus provide a basis for further discussion and debate. Presenting the analysis in narrative form reflects its "ever-developing" nature.

The Portrayals

Each of the nine men who were initially contacted for case histories understood their unique status as men within elementary education. In addition, they all seemed to recognize (on some level) their role as mediators of culture. Each mentioned that, "as a man," they would probably be important role models for children in the practicum sites.

The men in this study mediated cultural knowledge to the children in their practicum sites through both their interactions with the school curriculum and the pupils in their field placements. Based upon the data collected, three portrayals were developed. It is important to remember that although each informant generally reflected a particular portrayal, they were not locked into a pre-set way

of being. In describing these portrayals, their lives have been temporarily frozen, and the reader should not forget the dynamic character of peoples' beliefs and actions.

Rick and Sam: The Traditionalists

In spite of the fact that they had chosen an alternative occupational role in our society, these men expressed traditional perspectives towards gender identity and the roles men and women play in our society. Their choice of careers can be partially understood from examining their case histories. Rick and Sam saw themselves as leaders and expressed the desire to eventually become school administrators:

> Most of the principals around here are ex-coaches. They have had little experience in actual classroom teaching. However, that's beginning to change now, and they are looking for more people with classroom experience. So I decided it would be a good thing to go into elementary education. (interview with Sam)

Sam's father was a school administrator, and he was following his father's advice in going into elementary education as an avenue into a leadership position. Rick's motives were slightly different. He chose to go into elementary education, in part, because of his religious convictions. Being a "born again Christian," he expressed strong desires to serve his "...fellow man." Eventually, he expected to teach in "...and perhaps run," a Christian school (interview with Rick).

When asked about their status as a man within elementary schools, both had definite views. For example, each felt that it was important to present a strong male image to the children:

> I think it's (being a male elementary school teacher) particularly important for the boys. After all, most of their teachers are women. They really need a strong role model at this age. They need to see what it's like to be a man. (interview with Sam)

When asked, for a definition of "being a man," Sam and Rick mentioned qualities such as: being athletic, competitive, strong (both physically and emotionally), and in control.

As role models, they were particularly aware of their interpersonal relationships with the children and how these relationships reflected upon their male image. For example, Sam and Rick thought it was important for them, as male student teachers, to have a well disciplined classroom. "If we (men) can't control these kids, who can?" (interview with Rick). Sam, who was placed in a fourth grade class, made it a point to play with the "guys" but not the girls during recess, and for the most part, these activities involved contact sports (observation of Sam). For each individual, "acting like a man" was important:

> Rick (who was placed in a first grade class) was walking down the hall and a little boy in his class tried to hold his hand. Rick, however, quickly let go and told the boy to "move along." (Later he was asked for an explanation of what happened.) "Oh, that's Tim. He's tried to hold my hand a couple of times, but I never let him. If he does it again, I'm going to have to talk to him about it. (He was asked why.) He's got to learn that men just don't hold hands." (observation of and interview with Rick)

Not only was Rick's behavior determined by his traditional perceptions of what is "manly," but it never occurred to him that perhaps he was teaching Tim something much different— that little boys shouldn't hold hands with adults.

In spite of their own decision to choose an alternative occupational position, both Rick and Sam believed that women and men should play different roles within society. While they were in favor of equal-pay for equal-work, for the most part, they felt men should assume leadership positions within society while women should become housewives, teachers, nurses, etc. Rick was particularly vocal about this subject. During one interview, he mentioned that he didn't like some of the new textbooks that showed

women occupying non-traditional occupational roles. From his perspective, God meant for women to be subject to a man's will. He explained that this is why God made Adam before Eve. He emphasized that men should respect women and listen carefully to their ideas, but that in the end God intended for men to make the final decisions. While Sam paid little attention to the women's movement in this country and felt it was basically ineffective, Rick resented its intentions because he felt it undermined the "...natural order of things" (interview with Rick).

Tom, Frank, and Mike: The Neo-Traditionalists

Unlike Rick and Sam, these men saw the women's movement as a positive force within society. Each recognized that women have been subject to various forms of oppression, and they viewed their struggle as an opportunity to improve their situation within society. However, during interviews, it became clear that, in reality, these men saw feminism as something strictly related to women. From their perspective, the value of feminism is that it helped women become more like men:

> I agree with a lot of what the women's movement is trying to do. I think it's a good thing that women are finally able to be more assertive and get more opportunities in business and politics. After all, it's only fair that they get a chance to compete with everyone else. (interview with Frank)

Each of these men were aware of their alternative occupational role, and each mentioned that they hoped their being in elementary education would "...teach the children that it's okay if people choose different types of jobs than traditionally expected" (interview with Mike). However, it is important to note that both Mike and Tom mentioned that eventually they hoped to go into school administration.

Frank's, Tom's, and Mike's attitudes towards feminism were reflected, to some degree, in their classroom dynamics. For example, each mentioned that as part of their teacher role, they should encourage the girls in their class to be more active, and they tried to give them more opportunities. However, Tom was the only informant who seemed to act upon these beliefs:

> Tom was watching the children play when Linda came up to him and complained that the boys wouldn't let her play in their soccer-baseball game. Tom went over to the game, and told the boys that anyone who wanted to play had the right to play. Later, he told Linda that he was glad she said something and "...stood up for herself." (observation of Tom)

Mike and Frank explained that they each made a special effort to ensure that both girls and boys where chosen for leadership roles concerning classroom responsibilities (e.g., being in charge of classroom clean-up, collecting lunch money, etc.); however, subsequent observations failed to fully support their statements. While it was true that girls in their classes equally shared in classroom responsibilities, this delegation of responsibility seemed to result from everyone having to "take his/her turn," rather than from an attempt to equalize leadership roles among boys and girls.

While each of these individuals' perspectives reflected some sensitivity to female roles and identity within their classroom, none of them mentioned the need to alter traditional conceptions of masculinity or male roles. When traditionally masculine tasks needed to be finished, both Mike and Frank tended to choose boys over girls in their class.

> Mike's class was building a miniature greenhouse in the classroom as part of a unit on plants. When it came time to choose the builders, Mike only asked the boys if they wanted to participate. (observations of Mike)

Similar to the views expressed by Rick and Sam, these men felt that it was important to project a strong male

image to their students. For example, Frank almost echoed Sam's previous statement:

> I remember when I was a kid in school. I always wanted to have a man teacher, but it never happened until I got into high school. (He was asked why having a male teacher was so important.) Because kids need to be able to interact with men. Young boys need to be able to identify with someone of the same sex. (interview with Frank)

Tom and Frank were defensive about being men in elementary education. They resent society's view "...men who go into elementary teaching aren't real men" (interview with Frank). Both mentioned that they felt a need to project their masculinity during their student teaching.

Finally, although these men intellectually legitimated feminist concerns regarding our society, they made little effort to address these issues in their curriculum. None of these men taught any lessons that touched upon gender identities or sexual/social roles within society even though each of them were placed in middle level grades (4-6). In addition, they often used the masculine "he" when referring to both men and women. When using resources that reflected sexist attitudes or sterotypical roles, these men rarely asked the class to critically analyze them:

> Frank's class was studying pioneer life, and as part of the unit, Frank was reading *Caddie Woodlawn* to the class each day. He often led discussions about the lifestyle of pioneer times based upon the day's reading, but never once mentioned gender roles within this historical context. For example, Caddie was as adventurous and active as her brothers; however, she was naturally (for this time period) expected to grow up into a "conventional" women. The historical/social context of Caddie's portrayal was never discussed as part of the book's analysis. (observation and summary of Frank)

When this omission was mentioned to Frank at the end of the unit, he said it was a good point, but that he just never thought about raising "...issues like that," in his class. When asked if they examined textbooks for possible sexist implications, these men said that they had done so in their education courses, but not during their student teaching. "It seems to me that most of the publishers already do that sort of thing for you" (interview with Tom).

The portrayal of Frank, Mike, and Tom reflects a mixed profile. In this sense, they were neo-traditionalist. They clearly recognized the value of feminist influences within our society, but their awareness of its implications for gender identity and curriculum content were limited. To these individuals, feminism only addressed overt behavior related to the women in our society and to a minor extent the girls in their class. Their views of masculinity reflected traditional conceptions of manhood such as achievement, strength, and a competitive edge. The gender identity of the boys in their classes was not seen as a concern. In addition, more subtle implications of gender identity (e.g., classroom tasks that reflected traditional sexual roles, feminist analysis of materials) went unnoticed.

Bill: A New Direction

Bill was somewhat unique compared to the other men enrolled in these teacher preparation programs. First he was a little older than the rest. He had obtained a B. A. degree in sociology during the early seventies and had worked in a number of different settings before deciding to enter elementary education. During one interview, he mentioned being influenced by the anti-war movement, the women's movement, and Eastern philosophy. However, unlike Frank, Mike, and Tom, these social movements had a direct effect on his own gender identity:

> During the anti-war movement I really began to question the whole military mentality I grew up with. (He was asked to explain.) Well, I guess I was a pretty

> typical American boy. I did a lot of fantasizing about being a war hero, played a lot of (contact) sports, did a lot of rough-housing, and thought it was always inportant to "be cool." When I got older I realized that the whole John Wayne image of being tough, war-like, and always giving orders just seemed really sick to me. I like what Helen Caldicott says about our leaders often seeming like little boys with their war toys. When I married Ann, I learned how to get in touch with my own feelings. After a while I became more sensitive to other people and discovered that I could be nurturing as well as strong. To a large degree, I think America's notion of being a "real man" is pretty neurotic. From the Eastern perspective, it's way out of balance. (interview with Bill)

As a result of these personal experiences, Bill felt that it was important for both boys and girls to get a "...complete and holistic view of what it means to be a human being" (interview with Bill). He mentioned that being a male elementary school teacher offered him a good chance to present children with alternative views and opportunities.

Bill's views concerning gender identity and sex roles within society were reflected in both his interactions with the children and the curriculum taught in his class. Like Tom, Bill considered it important to encourage the girls in this third grade class to participate in traditional "all male" activities; however, he also encouraged the boys to get interested in activities that are usually considered "woman's work:"

> As part of an art activity, Bill had the girls and boys building models and sewing clothes. Some of the boys initially objected to the idea of sewing since they thought "only girls" did that. Bill told them that he didn't believe there was such a thing as "...girls work, especially not in my class." Later, during an informal conversation with the class, Bill mentioned that he got a lot of satisfaction from working with Ann, his spouse, and that they shared responsibilities for raising their child and household duties like cooking, washing, and cleaning. (observations of Bill)

While Bill's personal mannerisms and appearance reflected typical male traits, he made a sincere effort to balance these off and show kids his "feminine" interests.

Perhaps the most unique quality of Bill was that he took his concern for social ideology and interjected it directly into the curriculum. He would regularly examine the textbooks that were used in his class for sexism, racism, or other prejudicial implications. If he found misinformation or sterotypical portrayals, he made an effort to analyze these points with his pupils. While teaching a unit on careers, Bill went far beyond the typical content that covered the "types" of work and directly explored issues related to gender roles and identity:

> Bill had arranged for two guest speakers to come into class today. One was a female bank executive and the other was a male nurse. In addition to discussing the responsibilities, difficulties, and satisfactions that arise from their work, Bill asked them to present their experiences as alternative role models within their given work settings. (observation of Bill)

Later in the unit, Bill examined our society's negative view of "housework and parenting" and then explored the skills, dedication, and hard work that this job requires. As part of this exploration, Bill summarized an interview with John Lennon that appeared in *Playboy* magazine in which he discusses his experience as a "housefather." While this unit covered topics such as un- (and under-) employment and the structure of classes in society, the issue of gender was central throughout the unit.

Although Bill was a unique preservice teacher, his beliefs and actions are noteworthy. While small in numbers, the perspectives of individuals like Bill reflect an important shift in social perceptions within our schools and society.

Conclusions

Space does not allow for a full discussion of the issues raised as a result of this study's findings. However, three conclusions are worth emphasizing. First, the findings clearly illustrate the role of teachers as mediators of cultural knowledge, rather than merely the instruments of cultural transmission. Each of the informants in this sample uniquely interpreted his function as an alternative occupational role model, and as a result, the children in the classes received different views of gender and sexual/social roles in our society. While these men reflected traditional values and beliefs, some also reflected the emerging views as stimulated by the women's movement in our society.

Recognizing this mediator role is important. Often, proposals for changes within our society are based upon unexplored assumptions, and as a result, are overly simplistic. The findings of this study, for example, question the notion that just having men in elementary education will automatically present a healthier, more balanced view of occupational roles to the children in our society. While Bill's perspectives toward gender identity and sexual/social roles in our society exemplify the powerful views to children, the perspectives of the other men in this study do not suggest that the mere physical presence of men in elementary schools will stimulate much change. From a feminist perspective, the presence of men such as Rick and Sam would serve as a regresssive force within our society. The real question isn't whether an indivudal is male or female, but what perspectives teachers have towards gender identity and sexual/social roles. In influencing children's views of society, a teacher's perspectives are more significant than his or her sex.

Finally, the study's findings can give us insight into the relationship between classroom life and the broader social context within which schools exists. Clearly the findings help dispel the myth that schools are somehow "neutral and objective" vis-a-vis the social order of society. However, unlike some individuals who suggest that schools merely inculcate children with the attitudes and skills necessary for them to fulfill the needs of those who control society (e.g., Althusser, 1969; Bowles & Gintis, 1977), this study's findings would tend to support those who argue that schools are important ideological battlegrounds where the "controlling" influences are not so easily determined (e.g., Bates, 1980; Giroux 1983; Whitty, 1981). For example, Apple (1982: 14) asks:

> (do) schools...simply...reproduce the ideological and "manpower" requirements of the social relations of production? Or do they also embody contradictory tendencies and provide sites where ideological struggles within and among classes, races, and sexes can and do occur?

The activities of the men in this study did not merely promote the interests of the "ruling class," but reflected the complex ideological conflicts that exist within our broader society.

Women in our society have been struggling for centuries, and within the last two decades significant new momentum has occurred. As a result of this social action, individual men such as Tom, Frank, and Mike reflect a shift in perspective towards women's role(s) in society. Bill represents those few men who have gone one step further and have altered much of their previous conceptions of gender identity. In this sense, the study's findings support those who suggest gender issues are as important as class in analyzing our social order (e.g., Apple, 1983; Lather, 1984; Wickham, 1983).

In particular, the findings illuminate the vulnerability of hegemonic forces within society. As Gramsci (1971) pointed out, important social change could be stimulated from within many different sectors of society and not just within the economic domain. Bill's perspectives toward gender identity and social/sexual roles, and the activities he developed for his classroom illustrate this vulnerability. With support from his cooperating teacher, Bill was able to

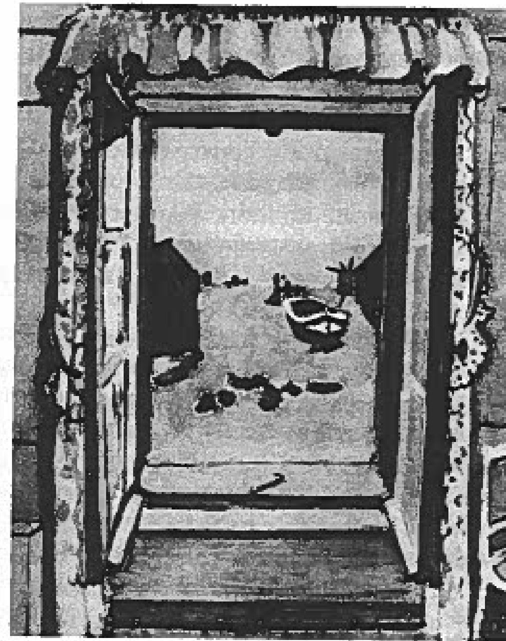
stimulate a strong "counter-hegemonic" (Lather, 1984) inquiry among his students through his presence as an alternative occupational role model, his interpersonal dynamics, and the curriculum taught in his class. While Bill's actions alone do not represent a major transformation of society, they are extremely significant when seen as part of a broader feminist movement within our culture.

On the other hand, the concerns of Sam and Rick offer insight into how other segments of society are reacting to this emerging force. Sam, the most traditional of these men, chose to ignore it on the assumption it isn't very powerful. Rick, however, actively opposed it. His response actually reflects an additional power base that is also emerging within our society; the new right or fundamentalist Christian movement. From his perspective, feminism isn't a liberting force. To the contrary, he believes it will eventually destroy the spiritual harmony that God intended. Rick applauds those who are developing alternative schools based upon "Christian" principles. He supports efforts to weaken public education through tax vouchers so that people can have the money "to create their own schools." From his perspective, the "ruling class" is forcing a "humanistic" world view upon our children, and one of the most powerful components of this ruling force is feminist ideology.

One of the values of qualitative field study is that close examination of a singular setting can yield insights into the subtleties of social reality often missed in more generalized, quantitative research. In this way, our understanding of the social world can be refined. As Bowers (1982) notes, too often educators have been overly dependent upon abstract language systems in developing their theoretical understanding of our social world. This dependence upon abstract actors (e.g., classes, workers, etc.) has "...prevented them from testing their theory against the phenomenological world of people involved in concrete social and cultural relationships" (Bowers, 1982: 546). It is through the study of actual lived experience that our understanding of a given phenomenon will crystallize. Pinar (1975: 391) states:

> Theory (conceptual understanding), at least in part, becomes the rendering of experience into words, the translation of the private "lebenswelt" (human experience) into public language. It is, so to speak, the translation of practice into theory.

As previously mentioned, the findings of this particular study offer insight into the way in which schools reflect gender-related perspectives, conflicts, and forces within our society. To assume that schools are separate from this society or merely mirror its most powerful forces is naive. Schools are dynamic social settings, and as such, they are ripe for investigation into our social consciousness. It is an investigation that needs significantly more attention.



Fenêtre ouverte: *Étretat* (1921) — *Matisse.*

NOTES

1. To enhance the reading of this paper, the following word guide is provided. *Student* - One who is enrolled in a college level teacher education program, *Pupil* - a child enrolled in an elementary or middle school.

2. Care was taken to choose men who, from early field experiences, showed that they would most likely be successful during their student teaching. As Barrows (1978) notes, men often have difficulty in completing their student teaching. Their failure rate has been noted in both the United States and Great Britain. Barrows' (1978) study suggests that perhaps some of their difficulty stems from their participation in an alternative occupational role.

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TOWARD UNDERSTANDING 'COMPUTER APPLICATION'

Ted T. Aoki
Professor Emeritus
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Introduction

I have labeled my paper, "Toward Understanding 'Computer Application'." The title appears simple, perhaps, even simple-minded. Ten years ago, even five years ago, I would not have thought such a title worthy of a talk, for then, I would have assumed that everyone understands what computer application is. Today, I am provoked to ask the question "How shall we understand 'computer application'?" I am provoked by what I see as partial blindness of high fashion in the world of curriculum wherein I see bandied about with almost popular abandon expressions linked to the computer without a deep understanding of what they are saying.

Within the Faculty of Education wherein I dwell, I have experienced in the last quarter century three waves of technological thrusts. We first witnessed the grand entrance of educational media instruments such as the overhead projector, the film projector, the slide projector, the listening labs. The hold of this instrumental interest led to the hiring of Ed. Media professors and to the creation of media resource centers, which now exist as mausoleums of curriculum packages and instructional hardware. The most atrocious instrumentalization of a school program within my knowledge during this wave was the "Voix et Image" French as a second language program (the slide tape program) my children underwent in junior high school. The second wave within our faculty was the TV thrust. Educational TV was looked upon to deliver the message. Today, we see, in our faculty classrooms, platforms mounted in corners, empty holding places for TV monitors that no

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longer sit there, monitors that for some reason could not replace professors. They stand as museum pieces in the wake of unfulfilled hopes of dispensing education via TV. Today, the third wave is insistently upon us. The times are such that *Time* magazine is led to announce without qualm the computer as the man of the year. In our own Faculty of Education, a Computer Needs Committee proposes the creation of a teaching department in Computer Education. The Provincial Minister of Education doles out millions of dollars as matching grants to schools buying Apples, Comodores, IBM's and the like. In schools "computer literacy" curricula have the teachers in a semi-panic. And, in the U.S.A., the Commission on Educational Excellence announces "computer science" as a component of the New Basics.

Reflecting this ferment the curriculum world picks up on in-language of alphabets—CL (computer literacy), CAI (computer assisted instruction), CE (computer education), FUC (friendly use of computers)—all implying *application* in schools of the *micro-computer*. Computer application is the focal curriculum third-wave activity.

In all this frenzy, the term, computer application, itself is assumed to be readily understood and stands naively unproblematic. I choose to question.

But what am I questioning when I ask what computer application essentially is? I wish to press for an understanding by entertaining two questions:

How shall I understand computer technology?

How shall I understand application?

Hopefully, these questionings will lead me to a deeper understanding of what we mean when we speak of computer application.

Understanding the Computer as Technology

Acknowledging the micro-computer as a high-tech product, I pose the question: "How shall we understand computer technology?" In dealing with the question, I lean heavily on Heidegger's well-known essay, "The Question Concerning Technology" (Heidegger, 1977).

We are aware of the commonplace answers to the question. The first says that the micro-computer is a high-tech tool. As a tool, it extends man's capabilities in rule-governed behavior. It is a sophisticated man-made means empowering man to achieve specified ends. Hence, as Heidegger would say, this means-ends embedded interpretation is an instrumental definition of computer technology.

That computer technology is a human activity is another commonplace interpretation, one that is related to the fore-going instrumentalist definition. According to Heidegger:

> To posit ends and procure and utilize the means to them is a human activity. The manufacture and utilization of equipment, tools and machines, the manufactured and used things themselves, and the needs and ends that they serve, all belong to what technology is. (Heidegger, 1977, pp. 4,5)

Computer technology as human activity is what Heidegger refers to as an anthropological definition of technology.

Today, so pervasive are the instrumental and anthropological understandings, according to which computer technology is both a means and human activity, that they can be referred to as the current conception of computer technology. This conception, rooted in man's interest in means, reflects his will to master, to control and to manipulate.

Pointedly, Heidegger says that this current conception is uncannily correct but not yet true. What does Heidegger mean by this? According to him:

> the correct fixes upon something pertinent in whatever is under consideration. However...this fixing by no means needs to uncover the thing in question in its essence. Only at the point where such an uncovering happens does the true come to pass. For that reason the merely correct is not yet the true. (Heidegger, 1977, p. 6)

Accordingly, the instrumental or anthropological conception of computer technology fails to disclose its essence, although the way to the true is by way of the correct. And since the essence of computer technology is not computer technology as means, we must seek the true by understanding computer technology not merely as means but also as a way of revealing. As a mode of revealing, computer technology will come to presence where revealing and unconcealment can happen; i.e., where truth can happen.

If, as Heidegger suggests, the essence of computer technology is not computer technology, we must let go of the seductive hold of the whatness of "computer technology" when we are inclined to ask, "What is computer technology?"

How, then, is this essence revealed? It is revealed as an enframing, the ordering of both man and nature that aims at mastery. This enframing reduces man and beings to a sort of "standing reserve," a stock pile of resources to be at hand and on call for utilitarian ends. Thus, the essence of computer technology reveals the real as "standing reserve," and man, in the midst of it, becomes nothing but the orderer of this "standing reserve." But by so becoming, man tends to be forgetful of his own essence, no longer able to encounter himself authentically. Hence, what endangers man where revealing as ordering holds sway is his inability to present other possibilities of revealing. In this, it is not computer technology that is dangerous; it is the essence of computer technology that is dangerous.

Hopefully, our exploration, albeit brief, allows us some sense of what it means to understand the computer as technology in its correctness and in its essence. We turn, now, to explore what computer application essentially means.

Understanding Computer Application

Understanding computer application as a technical reproduction.

In the prevailing way of thought in Western culture, the very idea of making "application" problematic befuddles many. They ask, is not application simply application? What is there really to query about except how well application is accomplished?

Those who see application as non-problematic are apt to be caught up within a theory/practice nexus wherein *practice* is thought to be *applied* theory, a secondary notion deriving its meaning from the primacy of *theory*. Within this scheme of things, the term application is seen as a linear activity, joining the primary with the secondary. Within this framework computer application in a mathematics curriculum, for example, is understood as a linear and technical act of joining the computer with the mathematics education curriculum. Applying is to bring into the fold (plicare) or crucible of a concrete situation.

But when a phenomenon like computer technology is enfolded in a situation like a mathematics education curriculum, how should we understand application? The traditional view has been that we understand application as the problem of applying computer technology to a particular situation. Application here means adapting the generalized meaning of computer technology to the concrete situation to which it is speaking. Hence, applying is reproducing something general in a concrete situation. This reproductive view of application embraces the view that application is separated from understanding, and, in fact, follows it. It is an instrumental view.

Understanding computer application as a hermeneutic problem.

For another view of application, I wish to turn to the work of Hans-Georg Gadamer, who in *Truth and Method*

explored the hermeneutic problem of application. In it he recollects the early tradition of hermeneutics which, according to him, "the historical self-consciousness of...the scientific method completely forgot" (Gadamer, 1975, p. 274). Gadamer confronts squarely the hermeneutic problem of application in the context of understanding, interpretation, and application, which, to him, are all moments of the hermeneutic act.

He states that "understanding always involves something like the application of the text to be understood to the present situation of the interpreter" (Gadamer, 1975, p. 274) and that application is an "integral or part of the hermeneutical act as are understanding and interpretation" (Gadamer, 1975, p. 275).

Within this view the task of application in our context is not so much to reproduce computer technology, but to express what is said in a way which considers the situation of the dialogue between the language of computer technology and the language of the mathematics education situation. Application thus is an integral part of understanding arising from the tension between the language of computer technology on the one hand and on the other, the language of the situation. Computer technology is not there to be understood historically, but to be made concretely valid through being interpreted. What is being said here is that computer technology, to be understood properly, must be understood at every moment, in every particular situation in a new and different way. Understood in this way, understanding is always application, and the meaning of computer technology and its application in a concrete curriculum situation are not two separate actions, but one process, one phenomenon, a fusion of horizons.

The question concerning application surfaces the hermeneutic problem of the relationship between the general and the particular. At the heart of this problem is the notion that the general must be understood in a different way in each new situation. Understanding is, then, a particular case of the application of something general to a particular situation.

We can now see that a serious shortcoming of application as reproduction is the way in which the engagement in reproductive activities can obscure the demands to understanding the situation itself makes. What the situation demands must not be ignored, for the general risks meaninglessness by remaining detached from the situation.

Ignoring the situational prevents the person in the situation from recognizing that application as technical reproduction is forgetful of the being in the situation. Mindfulness of the situation allows the person in the situation to recognize that application is a hermeneutic act, remembering that being in the situation is a human being in his becoming. This mindfulness allows the listening to what it is that a situation is asking. In a human situation, which is often a situation of action, it asks of us to see what is right. But in order to be able to see what is right in a situation, one must have his own rightness, that is, he must have a right orientation within himself. Not to be able to see what is right is not error or deception; it is blindness.

Within this view, application is not a subsequent nor a merely occasional part of understanding but co-determines it as a whole from the beginning. Here, application is not the mere relating of some pre-given generalized notion of the particular situation. In our case, then, to understand computer technology, one must not seek to disregard himself and his particular hermeneutic situation. He must relate computer technology to this situation, if he wants to understand it at all. And if, as it has been earlier given, that the general must always be understood in a different way, understanding computer technology will necessarily have to be re-stated in each new subject area situation.

Interpretation is necessary where the meaning of "computer technology" in a situation cannot be immediately understood. It is necessary wherever one is not prepared to trust what a phenomenon immediately presents to us. Thus, there is a tension between the appearance that presents immediately to us and that which needs to be revealed in the situation.

Hopefully, the meaning of application is clearer. It is not the applying to a concrete situation of a given general that we first understand by itself, but it is the actual understanding of the general itself that a given situation constitutes for us. In this sense, understanding shows itself as a kind of an effect and knows itself as such (Gadamer, 1960, p. 305).

For those of us confronted with the application of computer technology in curricular situations as the task at hand, understanding of application as a technical reproduction problem shows itself as instrumentally reductive, and inadequate. Understanding of application as a hermeneutic problem seems to overcome the shortcomings of the technical by vivifying the relationship between computer technology and the pedagogical situation.

Conclusion

Understanding "Understanding" as Essential to Understanding Computer Application.

As I begin to talk about concluding, I need to point to my neglect in my addressing, thus far, a key term in the title I have chosen for this paper. I have mentioned so far the "computer" and "application." I now feel inclined to say a word about "understanding," the third term of the title, for one of my agendas leading to the coming into being of this paper, such as it is, was to flirt with the question, "What does it mean to understand both epistemologically and ontologically?"

Within the frame of this questioning, I have been guided by a minding of how a coming to appearance of any phenomenon is also a concealing, of how in the very appearing of the phenomenon is concealed the essence of what is, and of how a way to understanding the essence of "what is" without violating the appearance of the phenomenon or the phenomenon itself is to allow the essence to reveal itself in the lived situation.

I feel that as a novice I have begun to come to understand that in my question "What is it?" to be caught in the

"it" (i.e., being caught by the question "What is *it*?")is to surrender to the "it." But, I am beginning to understand, too, that only an authentic surrender to "it" frees me from my own caughtness, allowing me to see before me even for a moment the "isness" of the it (i.e., being caught by a different question of "What *is* it?" is to dwell in an epistemological world; to be caught in the question "What *is* it?" is to dwell in an ontological world of the is and not yet. This appearance beckons me to move beyond mere flirtation.

My exploration of computer technology and application was situated to some extent in the question concerning understanding. I feel that my reaching for a fuller understanding of computer technology and application was simultaneously a reaching for a fuller understanding of understanding. In this reach for an understanding, it is well for me to remember Gadamer who, quoting Heidegger, said:

> We live in an era, according to Heidegger, when science expands into a total of technocracy and thus brings on the cosmic night of the forgetfulness of being. (Gadamer, 1982, xvi)

A Lesson Learned from Carol Olson

To be allowed to sense concretely what computer technology essentially is, I wish to turn to Carol Olson, a doctoral student in our department, to reveal what she has taught me.

Carol has been for 12 years a child of haemo-dialysis technology. She and her three siblings had been sustained by a dialysis machine at the University of Alberta Hospital, a teaching-research medical institute.

She recently wrote of her experiences with technology:

> We acknowledge our indebtedness to technology; we refuse to be enslaved by technology.

Deep understanding seems to come to those who come to know and feel the limits of one's horizon, for it is

at the point of limit that a phenomenon reveals itself through the dialectic of the being that is and the being yet to be.

I somehow feel that the children of technology, like Carol, are the first to see beyond technology for they know technology with their life blood. It is people like Carol who are able to say authentically, "We acknowledge our indebtedness to technology."

So she understands deeply, with her life-blood she understands, that most people understand technology as "applied science," i.e., as "means to ends," strictly an instrumental interpretation. She acknowledges that this interpretation is correct, but not yet true. These understandings she has for she understands that the truth of technology is in the essence of technology, as Heidegger insisted, in the revealing of things and people as only resources, as standing-reserves that can be objectified, manipulated and exploited. Demanding this of subjectivity, man within the world of technology becomes being-as-thing, no longer human.

So through her own experiences in the teaching-research ward of the hospital, Carol knows, for she writes: "Within technology, we become 'standing-reserve'—units of labor" (as in concentration camps); "teaching material and interesting care" (as in the teaching-research hospital.)

Carol struggles against such narrow determination of life. She knows the strong presence of the overwhelming power of consensus among medical personnel and the presencing of the machine itself. To become *empty* in such a situation is, according to her, to block our spiritual pain. One who is spiritually empty knows only physical pain, that pain which leads one to ask, "More Demerol, please."

So when she refuses to be enslaved by technology, it is her spiritual presence that speaks, calling for the right even in pain to live life humanly beyond the technological (Aoki, 1983).

What Carol teaches us is the significance of that which is beyond the technological in the technological.

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Poissons rouges (1914) — *Matisse.*

ART AND SOCIETY: TOWARD NEW DIRECTIONS IN AESTHETIC EDUCATION

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I. Introduction

This essay is intended to provide the outline for an alternative conception of curriculum theory and development in the arts based on the view that cultural production and social action must become a significant part of educational activity. I will suggest that a revitalized vision of the aesthetic—one that incorporates a Marxist conception of the relations between art and society—can provide one promising perspective with which educational practice may be conceived and constructed. It is my hope that both the activities of those employed by schools and the philosophical understandings that guide curriculum theorists ultimately can be strengthened in the process of formulating this alternative tradition in the arts and education.

To this end, a central undertaking is the articulation of a relationship between the arts and the larger realms of social interaction. In one form or another, defining the contours of this relationship occupies the majority of this paper; section II deals specifically with this issue. By beginning with a summary of the classical tradition in aesthetic theory that has shaped contemporary notions of aesthetic experience, we will subsequently see how the perspective of a Marxist aesthetic offers a counter to that tradition. In section III, I briefly indicate how, by utilizing the insights developed in the preceding analysis, a way of thinking about and acting with the arts can be created that heightens our own (and our students') social consciousness, political sensitivity, and sense of personal power. In my view, these insights offer a promising perspective from which to explore alternative educational practices in the arts.

II. Art and Social Life

Questions regarding the social parameters of art have captured the attention of philosophers at least since Plato. With the rise of industrial/technical society, though, answers to these questions began taking a noteworthy and lasting shift. Whereas ancient philosophical traditions hypothesized some quality, function or essence that all arts shared, beginning with the writings of Lord Shaftesbury in the 18th century, this older tradition gave way to a more modern, distinctly psychologized, position.[1]

One of the defining characteristics of classical aesthetic theory is the tendency to move the focus of attention regarding the possibilities of appreciation from the art object itself toward a consideration of the psychological states or conditions which must prevail within the appreciator. Rather than some quality or component of the work of art being necessary for an aesthetic experience to be possible, meaningful, or of value, the dispositional traits of the percipient have become the basis for these aesthetic possibilities. This emphasis has spawned what have come to be called "attitude theories" of aesthetic experience.[2]

Such attitude theories—through the operation of distanced, disinterested perception[3]—remove works of art from historical and social contexts, at the same time that the appreciator is dislocated from the fund of beliefs, meanings, and actions that comprise his/her daily existence. "Art," in this view, names an abstracted, autonomous domain, divorced from other pursuits, interests, and involvements. As one contemporary proponent of aesthetic education has remarked, our experience with works of art concerns "the realm of appearance enjoyed for its own sake, [and consequently] demands no commitment to action."[4] Again, this same writer has commented that "it is naive to believe that art cannot endanger morals. It can if the viewer is unable to perceive art objects aesthetically, and the untrained perceiver is likely to have this infirmity."[5] "To perceive art objects aesthetically," as instructed in this passage, means to regard them with the aesthe-

tic attitude—i.e., in a way which divorces them from any important social or personal context. In many ways the legacy of classical aesthetic theory is succinctly captured in the almost mystical remarks of Clive Bell that,

> ...to appreciate a work of art we need bring with us nothing from life, no knowledge of its ideas and affairs, no familiarity with its emotions. Art transports us from the world of man's activity to a world of aesthetic exaltation. For a moment we are shut off from human interests; our anticipation and memories are arrested; we are lifted above the stream of life...[6]

The effect of views such as these has been to abstract aesthetic experience from our more usual or common interactions, giving it a life of its own. Yet certain core problems seem endemic to classical aesthetic attitude theories which admit of no clear or obvious solution.

First, in their more strictly interpreted versions, these theories simply do not explain the level of significance—the depth of feeling, emotion, and thought—that art works are capable of provoking in their admirers. Understanding the formal, surface qualities of Coppola's "Apocalypse Now," for example, simply does not disclose the full significance of this work.[7] When we abstract from our experience of this film those social, political, and personal events that inform the meaning of the images that flow across the screen, it loses an important part of its aesthetic significance and power.

Second, what these approaches to works of art miss, in a sense, is the content of the aesthetic experience, as can be seen in a variety of Formalist theories that are derivative of the classical traditon.[8] Attitudinal theories result in virtually content-less experience, leaving the percipient to savor only those presentational features immediately perceptible during the actual encounter with the art work. A sustained analysis of how aesthetic content may go beyond such a delineation of presentational features is disallowed.

As a result, third, something of importance is lost about the nature of aesthetic value when attitude theories form the basis for aesthetic experience. Whether in their more prescriptive or suggestive versions, they share an essential conceptual orientation which severely limits how aesthetic objects may prove valuable. Essentially, these theories reduce aesthetic value to an appreciation of the art work's formal structure, valuing only the depiction of surface features which exist (the qualities of line, shading, brush stroke, symmetry, etc., in painting, for example).

That separation of art from our personal and social lives which represents an important aspect of classical aesthetic theory, and the rather denuded, encapsulated, and ephemeral nature of art which follows from this view, must be rejected. For in separating art from life, in severing the ties among aesthetic experience, ethical deliberation, and social conduct, we sacrifice its personal and political potency, relegating it to a merely decorative or ornamental function.[9] One clear alternative to this tradition may be found in a Marxist aesthetic.

There is a danger, especially bothersome in the case of a seminal thinker like Karl Marx, that his particular views on aesthetic matters will be interpreted apart from the larger corpus of writing that comprises Marx's collective work. Yet to fully understand the nature of Marx's writings on aesthetics, one needs to see how they are part of that larger body of writing. This obviously requires a more extended analysis than is possible here.[10] Thus, the contextualization of Marx's writing on art in this essay will be necessarily brief, undertaken following a review of his more specific ideas on the arts and aesthetic experience.

Attempts to arrive at *the* true, faithful, or unmediated version of Marx's general thought are notorious and controversial. This commitment to faithfully recounting Marx's own view is especially problematic in the case of the arts, since one is obliged to admit early on that neither Marx nor Engels provided anything like a fully developed aesthetic theory. This lack of a comprehensive theory of art is

itself something of an enigma. For Marx evidently had an abiding interest in the arts, especially literature, from the beginning of his formal schooling (e.g., his study of the history of art and literature at the University of Bonn and of aesthetics at the University of Berlin). This interest continued through-out his life, as Marx reportedly knew portions of Shakespeare's plays from memory, and as late as 1857 sought to comply with an offer from the *New American Cyclopedia* for an article on aesthetics—an undertaking that was, however, not to be completed.[11] Whether we subscribe to the view that this lack of a systematic aesthetic theory is due to "the fact that Karl Marx had more urgent tasks on his hands,"[12] or to some other set of circumstances, the fact remains that no treatise on aesthetics was ever formulated by Marx of the sort that might parallel his analysis of political economy.

One of the first events in Marx's professional life relevant to piecing together a view on art concerns his reaction to attempts at censorship of the press. Rather than reacting simply to the specific question of press censorship, Marx saw this issue as intimately related to the status of literature generally in bourgeois society. The division of labor and other changes brought about by a capitalist economy contributed to what has been called commodity fetishism. Because of fetishistic quality of social life, activities and objects of all kinds—including works of literature and the arts—could become regarded as commodities, to be "purchased" and "used" as such.[13] Within such a society, "the bourgeois...tries to use in literature, the same criterion which he applies to sugar, leather, and bristle. He considers freedom of the press a 'thing,' and this is contrary to its character."[14] In reducing literary works to the status of things, their value becomes transformed and debased. As Marx put this, "the exchange value of a palace can be expressed in a certain number of boxes of shoe blacking. On the contrary, London manufacturers of shoe-blacking have expressed the exchange value of their many boxes of blacking, in palaces.'[15] In a society suffused with and enamored by the exchange value of commodities, the role and value of art becomes mutated.

The tendency for literature to be reduced to the status of a commodity for trade, thus, propelled Marx's reaction to attempts at censorship. In addition to the view that literary works are nothing more than goods to be bought and sold on some market, commodity fetishism propounds the view that literature is a means of subsistence for the writer. Yet literature, Marx wrote,

> ...is an *end in itself*, so little is it a means for [the writer] and for others that he sacrifices *his* existence to *its* existence, when necessary...The freedom of the press consists primarily in not being a trade. The writer who degrades it by making it a material means deserves, as punishment for this inner slavery, censorship; or rather his existence is already his punishment.[16]

Further, Marx asked rhetorically,

> ...is a press true to its character, *is it free* when it degrades itself to the level of a trade? A writer naturally must earn money in order to be able to write, but under no circumstances must he live and write in order to earn money.[17]

The corrupting influence of the process of commodification in bourgeois society is at the heart of Marx's concern here, lest the writer become a tradesperson and literature a means of economic survival. For Marx there were evidently two distinct types of writers and literary works. Whereas Milton "produced Paradise Lost for the same reason that a silk-worm produces silk," another author will "fabricate books under the direction of his publisher," as a result of which the latter author's work is "from the outset subsumed under capital."[18] Literature, to be faithful to its nature, must be organically conceived and carried out, rather than undertaken as a means of capital accumulation.

Marx's first article on freedom of the press, written in 1842[19] captures an important duplicity involved in the

Prussian government's attempt to reintroduce and enforce state censorship. In its censorship instructions, the government had said that, partly for the sake of national unity, criticism of its measures must be "well intentioned and not spiteful or malevolent."[20] In this rationale Marx saw the pitting of one class against another, in spite of official declarations to the contrary. Marx said of the censorship instructions:

> A law like that is not a law of the state for the citizenry, but a law of a party against another party. The tendentious law cancels the equality of the citizens before the law....One person may do what another person may not do, and not because the latter lacks the objective capability for the action...but rather because his intentions are suspect.[21]

Criticizing attempts at instituting a broadened conception of censorship, Marx exposed the presumed attempts at promoting patriotism and unity as the pitting of one group, the state, as represented by the censors, against the people, as represented by the press.

Marx also protested the censorship edict because it mandated a grayness or dullness of style, as well as a flattening of what was considered appropriate content. In disallowing inquiry which fails to aim at "Serious and restrained pursuit of truth,"[22] Marx saw an unjustifiable constriction of what constitutes the "pursuit of truth." He provides a rather poetic taunt of the censorship edict under discussion:

> Every dewdrop in the sun glitters in an infinite play of colors, but the light of the mind is to produce only one; only the *official color*, no matter in how many individuals and in which objects it may be refracted. The essential form of mind is *brightness and light* and you want to make *shadow* its only appropriate manifestation. It is to be dressed only in black, and yet there are no black flowers. The essence of mind is *always* truth itself, and what do you make its essence? *Restraint*. Only a good-for-nothing holds back, says Goethe, and you want to make the mind a good for nothing?[23]

The truly creative spirit, in pursuing truth, does not flourish in some neutral, aseptic realm where passion, color, and commitment are excluded. The genious, the impassioned writer of true literature, sees and reveals life in all its colors, using language, images, and concepts that, contrary to the edict of 1842, indeed may be unrestrained.

Literature and the other arts are to be the agents, then, in the pursuit of truth, a role which places a premium on discovering and deciphering those realities wherein truth presumably resides. Rather than thinking about the arts as vehicles for the exploration and expression of aesthetic form—as is the case with at least some proponents of classical aesthetic theory—Marx saw literature as committed to an impassioned, unrestrained search for truth, a search compromised by the censor.

Yet what constitutes the arena for this search, and the resulting emphasis of realism, in Marx's view? A number of the important principles of realist art in the Marxian sense are to be found in the responses of Marx and Engles to the drama *Franz von Sickingen*, by Ferdinand Lassalle.

This drama deals with a 16th century German uprising in which the insurgent peasants are led by the petty nobility, as personified by von Sickingen. After a few cursory comments on some formal features of this work, Marx comments more substantively on the conflict represented in it. Marx admired Lassalle's attempt to draw analogies between 16th and mid-18th century Germany, but was critical of the explanation for von Sickingen's actions. Rather than von Sickingen failing in his role because of some flaw in his character, as Lassalle apparently intimates, Marx declares that the tragic hero

> ...went under because it was as a *knight* and a *representative of a moribund class* that he revolted against the existing order of things....The fact that he began the revolt in a guise of a knightly feud means

> simply that he began it in a *knightly* fashion. Had he begun it otherwise he would have had to appeal directly and from the outset to the cities and peasants, i.e., precisely to the classes whose development was tantamount to the negation of the knights.[24]

The tragedy of von Sickingen occurs not because the hero was somehow personally defective or incapable, but because he represented the collision of modern ideas with the material interests of a reactionary class, interests which capture his real social roots. Continuing his criticism of Lassalle's drama, Marx says that rather than giving the *aristicratic* representatives of the insurrection so much play, the author ought to have allowed "the representatives of the peasants and the revolutionary elements in the cities" a more active role.[25] What Marx is essentially suggesting, hence, is that Lassalle's drama did not fully or accurately reflect the actual historical currents which created the revolutionary situation discussed in the drama. The author's treatment of the event was not, in short, sufficiently realistic.

Engels' criticism of *Franz von Sickengen*, while on the whole more laudatory than Marx's follows the same outline. In recalling a specific scene in the drama, Engles echoes Marx's recommendation that greater emphasis be given to the peasants:

> In accordance with *my* view of drama, which consists in not forgetting the realistic for the idealistic, Shakespeare for Schiller, the inclusion of the sphere of the so wonderfully variegated plebian society of that day would have supplied...entirely new material for enlivening the drama, an invaluable background for the national movement of the nobility in the foreground, and would have set this movement in the proper light.[26]

After discussing another possible modification in Lassalle's work, it becomes clearer what the "proper light" might consist in: "This is," Engels admits, "only *one* way in which the peasant and plebian movement could have been incorporated into the drama. At least ten other ways of doing this just as well or better are conceivable."[27] What Engels is suggesting is a reworking of *Franz von Sickingen* so that the ostensibly central historical movements of the peasants which underlie and shape this tragedy could be more clearly delineated and exposed. Again, we see an emphasis on realism within art as a key feature of Engles' treatment of literature.

Central to the view of literature discussed above is a concept with wide-ranging application (and mis-applications) within a Marxist Aesthetic, the notion of typicality. We may understand 'typicality' as the view of Marx and Engels that

> ...progressive literature had to reflect truthfully the deep-lying, vital process of the day, to promulgate progressive ideas, and to defend the interests of the progressive forces in society. The modern term the Party spirit in literature expresses what they understood by this. They felt that the very quality that was lacking in Lassalle's play—the organic unity of idea and artistry—was the *sine qua non* of genuinely realistic art.[28]

To express typicality is to capture, in artistic form, the main social and historical currents in the era depicted, in a way which captures their essential—if hidden—nature and qualities. Connecting this emphasis on realism and typicality with Marx's insistence on a sense of commitment which accompanies those who seek the truth, we have the view that "only partisanship in art...can give the modern artist that precision and concentration of will, that creative 'one-sidedness,' which is essential to genuine art."[29] Whereas capitalist society conceives of literature as a commodity and a means (something to be marketed as a product and produced by a craftperson), and limitations on literary activity through censorship reflect the disguised pitting of one class against another (the result of which is a

barrenness of content and style), the true literary genius, whose writing represents an organic pursuit of the truth, depicts the typical characters within typical circumstances and situations, displayed in all their various colorations.

Further insight into Marxist realism and typicality is provided by Marx and Engels in their first collaborative work, *The Holy Family*. This collection deals in part with a critical appraisal of Eugene Sue's *The Mysteries of Paris*, and its analysis by Szeliga, a Left Hegelian. More generally, *The Holy Family* can be seen as a treatise against "speculative aesthetics" as a whole, since many of the authors' comments apply to "not only Sue's novel but also the entire moral and aesthetic creed of the 'dominant personality' of the nineteenth century—the bourgeois."[30]

Marx and Engels begin their discussion of Sue's novel and Szeliga's reaction to it with a more general discussion of "speculative construction *in general*." The authors say that, starting from real material objects such as apples, pears, and strawberries, the general idea "Fruit" may be imagined. The speculative philosopher will suppose that this general idea somehow captures the essence or being of these separate physical entities, and that thus, "The Fruit" is itself a real, objectively existing entity separable from the speculator herself/himself. Apples, pears, and so on, are perceived as mere instances of the real subject "Fruit". Individual apples and pears thus become "no more than semblances whose true essence is 'the substance'—Fruit."[31] Having postulated an idealized category to which individual objects are mere semblances, the speculative philosopher now faces something of a problem—how to move from the ideal category to the material object. He/she must explain why there is such diversity among objects which, ideally, belong to the same category. To do this, Marx and Engels, say, the idealist proclaims that "Fruit" is "not dead, undifferentiated, motionless, but a living, self-differentiating, moving essence....The different ordinary fruits are different manifestations of the life of the '*one* Fruit'; they are crystallizations of '*the* Fruit' itself."[32]

Thus real, physical objects, which we perceive through our senses as objectively existing, become mere signifiers of an allegedly deeper, abstracted reality. Real fruits, in this scheme of things, become the miraculous creation of the imaginary powers of the mind; they are created out of abstract reason which is considered external to the person involved in this idealized activity, as the product of Absolute Subject.

This same sleight of hand occurs, Marx and Engels argue, in idealist aesthetics. In the case of *The Mysteries of Paris* the "real relations" of law and civilization are dissolved into the category of "Mystery." This idealist category then, like the category of "Fruit" in the previous illustration, becomes a self-existing Subject which is incarnated in real situations, actions, and experience. Two examples will indicate how this process of transformation occurs in Sue's novel.

During the course of the novel's progression, there is a transition from the "low world" to the "aristocratic world" through the figure of Rudolph. The disguises which Rudolph has at his disposal allow him to move about freely in the lower strata of society, just as the title of Prince permits him access to the aristocratic. As Marx and Engels say of one aspect of Rudolph's transition, "on his way to the aristocratic ball he is by no means engrossed in the contrasts of contemporary life; it is the contrasts of his own disguises that he finds *piquant*. He informs his obedient companions how extraordinarily interesting he finds himself in the various situations."[33] The variability of Rudolph's disguises, their apprehension as one aspect of the idealist characterization of Mystery, becomes the guiding spirit behind this transition from one world to the other; the realities of contemporary life itself go unnoticed and unexpressed. The latter are transformed into the necessary background within which abstract Mystery unfolds, rather than being central to the content of Sue's novel.

The novelist's treatment of sensuality represents another speculative construction. Marx and Engels tell us that

"it is not *sensuality* which is presented as the secret of love, but mysteries, adventures, obstacles, fears, dangers, and especially the attraction of what is forbidden."[34] Countess MacGregor, another character in Sue's literary work, becomes "a *person of abstract reason.* Her 'ambition' and her 'pride,' far from forms of sensuality, are born of an abstract reason which is completely independent of sensuality."[35] In the view of Marx and Engels, true sensuality —inspired by "the rapid circulation of the book" and "the nerve currents which connect the organ...of sensuality with the brain"—becomes transformed into another aspect of mystery within this idealist novel.[36] Thus, for the critic Szelig, "dancing" (another Idealist category since it doesn't denote a specific dance but only dance *in general*) is perceived as "the most common manifestation of sensuality as a mystery."[37]

In both the above examples—Rudolph's use of disguises and Countess MacGregor's representation of a pseudo-sensuality—it is not the real flesh-and-blood experiences of people in concrete social situations that are elaborated upon by the novelist, but the Idealist categories they speculatively represent. Not the lived experience of lower class and aristocratic people, but the ability of Rudolph to move among them by adopting various disguises which contribute to the development of the Mystery; not the actual elements of human sensuality, but their embodiment of other categories and aspects of Mystery. It is the latter which become the center of Sue's novel and Szeliga's criticism of it. Speculative construction, imagined categories, are center stage for the novelist operating within an Idealist Aesthetic framework; social, historical conditions and concrete experience have little place. Commenting on the distinction between an idealist aesthetic and the criticism leveled against it by Marx, Liftzhitz says: "The self-development of sensuous, concrete reality, or its subordination to an alien force: fight or submission; such in the final analysis is the fundamental distinction between the aesthetic—philosophical ideas of Marx and those of Szeliga and Sue."[38]

Realism, typicality, the depiction of actual occurrences in real situations characterize the central tenents of the view of Marx and Engels on literature and art. Literature must capture the central social and historical trends of the time, depict the real material conditions of the day rather than use them as a backdrop for the exploration of some set of Idealist categories, and must reinforce or propel progressive ideas. To capture such social and historical trends in their progressive guise is not, however, to reduce the political value of art to any sort of proselytizing. As previously noted, it is the organic unity of artistic excellence and political sensitivity which lies behind the authors' notions of typicality and realism in the arts. Whereas "tendency literature" was used to describe certain politically biased art by the Young Germany movement, Engels states that this term is used by him in another way: "the tendency," Engels says, "must be born of the situation and the action themselves without our attention being expressly drawn to it..."[39] In a correspondence addressed to a writer, Engels says:

> I am far from believing that you are at fault for not having written an authentic Socialist novel, a tendency novel as we Germans call it, promoting the author's own political and social views. That is not at all what I meant. The more carefully concealed the author's opinions are, the better it is for the work of art."[40]

Art is not an arm of political propagandizing, but a vehicle for the expression and elucidation of real situations and events, *within which* one's political and social views are, of necessity, exemplified.

What can we conclude regarding a possible Marxist aesthetic theory, one that combines Marx's comments on the arts with his general theoretical constructs? What is the relationship between art and social life for Marx?

First, we should recognize the peculiarity of the latter question for the methodology of historical materialism generally. For it asks us to determine how the categories and "society" may be superimposed on actual lived experience and human action, a request that Marx and Engels would no doubt reject as an example of "idealist construction." There is no universal, abstract relationship between "Base" and "Superstructure."[41] Rather, there are particular artistic works which exist within specific socio-historical circumstances, which exhibit various relations and which, in general, follow certain tendencies.

Second, a Marxist aesthetic theory must be cognizant of prescriptive nature of art as discussed above in the authors' insistence on realism and typicality in art. While rejecting political proselytizing as the essence and purpose of art, Marx and Engels repeatedly point to the necessity of creating works which typify the development of social and historical forces. In their criticism of Lassalle's *von Sickingen* and Sue's *The Mysteries of Paris*, for instance, they repeatedly insist that literature typify the important elements of social life; yet this typicality is not to be indulged at the expense of artistic integrity or aesthetic excellence.

Third, in rejecting the notion of literature as a commodity, a means, and a part of commercial trade, a Marxist aesthetic theory proclaims the importance of an impassioned, partisan pursuit of truth. The truth that is possible for literature to pursue is, of course, partly revealed in Marx and Engels' emphasis on typicality. In addition, their opposition to idealist construction in general, and in the arts in particular, mandates the "development of sensuous, concrete reality." As in their more general views regarding historical materialism, the artist must begin with real people in actual situations and conflicts, rather than seeking to illustrate some speculative, idealist category such as Mystery or Insurrection, for example. The work of art must deal with particular interactions of those involved in actual activities, and yet somehow capture their socio-historical essence, thus ascending "from earth to heaven."

Fourth, while a Marxist aesthetic stresses the typification of actual events within concrete historical circumstances, and in this way places value on the progressive nature of art within an historical materialist framework, at least the more vulgar forms of Socialist Realism are a one-sided misinterpretation and simplication of Marx's thought. Such interpretations seize upon a selective portion of his views while effectively discounting others. They highlight the insistence on realism without recognizing the complexity of typicality in the broad sense; stress the importance of progressive content while forgetting the essential Marxian unity of such content and aesthetic excellence; reduce cultural activity to an epiphenomenon, a reflection of the base, a view which glosses over the complexity of notions of "uneven development" and dialectical relations in Marx's thought; and to reduce art to "tendency writing" or political propaganda, a view rejected by Marx and Engels in their own writing on art. As one commentator has pointed out:

> Vulgarized dogmatic views on the character of the link between art and politics are profoundly alien to the Marxist-humanist understanding of art. A truthful and diversified representation of reality cannot be replaced by any didactic illustration of political slogans. Such substitution cannot be lead to a belittling of artistic truthfulness and hence undermine art's social impact. The socio-political significance of progressive art is determined by its truthfulness, its convincing reflection and profound revelation of the leading trends to be observed in the life of society.[42]

Fifth and last, a definitive, unassailable version of a Marxist aesthetic is at best evasive and probably impossible to conceptually pin down. There do appear to be, however, a range of possibilities which legitimately fall within the framework outlined above. Those views which stress the importance of searching for the truth by depicting actual experience in its typical configurations and complexities,

in the process combining progressive content with artistic mastery, would seem to characterize something central about the nature of art in a Marxist aesthetic. As a form of ideology, works of art can profoundly illuminate the major currents of social life; in evoking progressive images of social import, they provide a means of expression to some of our most important political acts.

The view that the arts are an important aspect of social life, connected with material interests and realities within multiple of complex dialectical, and even contradictory relationships, forms a striking counterpoint to classical aesthetic theory with which we began this section. How might this view affect the possibilities for aesthetic education within schools?

III. Aesthetic Theory and Educational Practice

In many respects, the current educational situation in the U.S. seems hardly supportive of new directions for aesthetic education. With the nearly obsessive concerns of the "back to basics" movements in the last decade or so, the arts came to be perceived by many as an educational frill, to be curtailed or eliminated altogether in times of fiscal uncertainty. Recent reports on the status of American schools have also been mixed in their analysis of the role of the arts in public education. The Carnegie Commission tells us: "Now, more than ever, all people need to see clearly, hear acutely, and feel sensitively through the arts." Such practices "are no longer just desirable. They are essential if we are to survive together with civility and joy."[43] The authors of *The Paideia Proposal*, on the other hand, include "The fine arts" as integral to that body of organized knowledge which all students are to acquire.[44] At the same time, this group also says that while works of art may be dealt with in seminars where discussion of Socratic dialogue dominate, "they need an additional treatment in order to be appreciated aesthetically—to be enjoyed and admired for their excellence."[45] The report goes on to stress the importance of the performance aspect of

the arts as well. In this way, *The Paideia Proposal* appears to lend support to certain aspects of classical aesthetic theory, in insisting on a particular mode of *aesthetic* appreciation, while at the same time emphasizing the traditional reliance on the creation of aesthetic artifacts, within art education.

A Nation at Risk, the report of the National commission on Excellence in Education, offers perhaps the bleakest vision of the role of the arts in contemporary education. The Commission makes little mention of the arts in its analysis, excluding them from what it calls "the New Basics." It says merely that "the high school curriculum should also provide students with programs requiring vigorous effort in subjects that advance students' personal, educational, and occupational goals, such as the fine and performing arts and vocational education."[46] *A Nation at Risk*, then, relegates the arts to a personalized, vocational and occupational function, on the periphery of the secondary school curriculum.

In sum, the recent past seems not to offer the sort of fertile ground from which new approaches to the arts and aesthetic education might flower. Even the occasional support evidenced for the arts in schools seems to hearken back to that vision of aesthetic experience which, as we saw earlier, is both conceptually and socially wanting.

Yet there are some signs that support for some artistic events in schools is substantial. For example, in a survey conducted in 1981, 70% of the respondents expressed support for arts education in schools, on a full-credit basis. In addition, public expressions of support for the teaching of art actually increased between 1975 and 1981, just as the "back to basics" movement was gaining momentum. Again, in 1981, 75% of those surveyed favored regular financing of arts courses in the public schools.[47]

While public support for arts education does seem substantial, two other phenomena reflect mitigating social and economic circumstances which may undermine such expressions of support. First, financial information on who

attends performing arts events is rather interesting, to say the least. In 1978, the U.S. median income was $14,476. The same year, the median income of those who visited art museums was about $18,000, while for opera goers, the figure was $21,000. At the same time, over 80% of the art museum audience had attended college while those whose education stopped with high school comprised only 15% of the museum audience; the figure for those who did not attend high school was about 5%.[48] These sorts of factors support the view that there exists in the U.S. a "cultural elite," whose levels of income, status, education, and leisure time combine to make the experience of art an exclusive, privileged, class-based activity. Second, there is an apparently general presumption that art appreciation is made possible or enjoyable because of native talent, rather than being dependent upon education or training. As Laura Chapman reports in her recent book, this attitude is even shared by the cultural elite:

> What is striking about the cultural elite is their reluctance to acknowledge that formal education in art is really essential for one to enjoy and understand art. Equally striking is their belief that the creation of art hinges on talent more than on training...these attitudes would be harmless enough if it were not for the fact that the cultural elite is not just a social class defined by statistics; increasingly, it has become a well-organized lobby seeking to influence national and state policies on the arts and arts education.[49]

At the same time that art appreciation has become the province of a privileged class, the view that it does not require training, acquired sensitivity, and educated judgment is entrenched in our culture.

These tendencies are hardly surprising. Recall the major tenets of classical aesthetic theory, as outlined at the beginning of the previous section. Art, on the assumptions of this theory, is an abstracted, isolated, and socially and morally ephemeral phenomenon, the appreciation of which mandates the adoption of a particular set of psychological dispositions (disinterestedness, distanced perception, morally cleansed attention, etc.). Given such tendencies, the creation of a cultural elite that can partake in such atypical, personally removed experiences is understandable. Because art has been "lifted above the stream of life," it has become the almost exclusive domain of those with appreciable wealth, power, and status. Indeed the appreciation of aesthetic productions then becomes itself a mark of social status and privilege.

The notion that education in the arts is incidental to their appreciation and evaluation also lends support to the notion that art constitutes an elitist domain. For if art appreciation is possible primarily because of some inherent capacity on the part of only some of the populace, and if this capacity remains relatively unaffected by formal training, those who lack this alleged capacity will remain excluded from the experience of art. Moreover, since large segments of the population in fact remain excluded from the art world, we have the makings of a self-fulfilling prophecy regarding legitimate appreciation experiences. Limited by both a perceived lack of "naive talent," and a lack of exposure to the arts in their personal lives, the majority of citizens soon learn to discount art as a life force.

The reintegration of aesthetic value and social conduct outlined in our discussion of a Marxist aesthetic can provide one important counter to the sort of elitism fostered by contemporary approaches to the arts. If we can incorporate such a perspective into aesthetic education, moreover, we may work toward cultural shifts that could propel larger social changes as well.

What I want to stress, initially, is the rejection of that separatist notion that characterizes the place of art in classical aesthetic theory. As Raymond Williams has expressed this, "we have to reject 'the aesthetic' both as a separate abstract dimension and as a separate abstract function. We have to reject 'Aesthetics' to the large extent that it is posited on these abstractions."[50] Instead, based on the view that aesthetic forms are one of several types of material productions, I want to urge recognition of the arts as

one sort of lived experience, as part of the social totality from which creation and appreciation, as generic human processes, spring. This does not mean that aesthetic production is identical to other kinds of productive activity—any more than, say, the material production of automobiles is identical to the production of political party platforms. Yet from a more global perspective, if we perceive of social life as composed of multi-faceted, historically variable and personally complex sets of processes, we may be able to carve out a space for aesthetic understanding as a productive force in its own right.

The changes necessary for this to take place within educational institutions are numerous. First the distinction between the "fine arts," on the one hand, and the "popular arts," or crafts, on the other, must be seen as a spurious one. We have tended to place the former in special arenas—museums, institutes, and galleries—which helps ensure their separation from the rest of social life for most of us. Conversely, we tend to denigrate products of craft as somehow un-artisitc, or at least on a lesser aesthetic plane as compared with Renaissance painting, opera, or ballet. The logic of the analysis of aesthetic forms as productive, fundamentally social and moral phenomena presented here, entails the legitimation of the popular arts and crafts as a piece with other forms of artistic expression.

Second, the separation of art in schools—as an elective, frill, or "special subject"—needs to be overcome. This entails not only the increased availability of courses in the arts, but a change in their orientation as well. As noted already, arts courses currently tend to emphasize the performance or constructive nature of art—as exemplified in the creation of paintings, drawings, poetry, dramatic performances, and so on. While such creative ventures are obviously crucial for aesthetic education, it is equally important for students to develop appreciative and evaluative capacities with respect to the arts. That is, not only do the arts serve as a vehicle for the expression of one's own ideas, emotions and perspectives; they also create oppor-

tunities for investigating the perspectives and values of others.

Third, and related to the importance of developing appreciative capabilities, an important part of broadening the significance of the arts is tied to their communicative potential. While works of art can be regarded from a number of vantage points, it is their capacity to communicate a particular point of view, set of values, or perspective on the world that is most telling if we are to realize their social and ethical connotations. Through a variety of symbolic arrangements, they communicate something to their audience that can enhance, modify, or transform the way we see and understand ourselves, others, and existing social arrangements. Paying attention to the communicative nature of aesthetic forms means, then, understanding how they make a statement about some aspect of our own and others' lived experiences.

Fourth, inasmuch as works of art provide a kind of communicative agency, their latent connection to our actions outside the aesthetic encounter must be emphasized. Stated differently, "the aesthetic encounter" must itself be seen as isolated and in the end unsustainable. To accomplish this, it is crucial that students see the aesthetic image, social consciousness, and ethical conduct as conjointed. There are at least two possible avenues for this expanded perception. On the one hand, the aesthetic image can become a crystallized vision of what is true, good, or proper—a representation of society, personal relationships, or political practices in what is regarded as their proper light. Such visions offer alternative conceptions of what ought to be—conceptions that, in their illumination and insight, may prove existentially provocative. On the other hand, works of art can provide a critique of current situtations and predicaments—a way of challenging the accepted order of things. Now in practice these two possibilities often coincide: the affirmative image emerges with the critique of current situations, or the vision of alternatives implies a grounding for a revised aesthetic

vision to become incorporated into schools. Our students need encouragement to use aesthetic forms to illuminate or challenge a contemporary issue (the patterns of sexism, racism, or social class exclusion, for example). Their visions of justice and fairness may become the framework for artistic ventures, exploring them with the insight provided by symbolic forms which the arts provide.

Fifth, this revised conception of aesthetic education entails a withering of the divisions between the arts and other curricular areas. Not only do we need to infuse the arts with greater social and ethical significance, we need also to investigate the aesthetic components of the language arts, social studies, the humanities, and the natural sciences.[51] Integrating aesthetic expressions into the other curricular areas of schools is, of course, fraught with peril. For it is all too easy to regard the arts as an instrumentally useful tool with which to articulate preconceived ideas from the sciences and humanities—e.g., the occasional visual display of an abstracted idea or concept, the use of the arts as depicting central themes, etc. Instead of such instrumental uses of aesthetic forms, what I am urging is the development of our awarenss of how scientific, social, and humanistic enterprises all have aesthetic components or aspects. For example, we might show how the patterns of geometric shapes in nature have both mathematical and aesthetic qualities; or show how the development of historical trends is related to developments in the arts of a particular society, etc. The basic notion here is to increase our understanding of how aesthetic, humanistic, and scientific matters are intertwined.

Sixth, more attention needs to be paid to the aesthetic qualities of teaching and evaluation generally.[52] We have been obsessed with quantitative, technical, and individualistic forms of pedagogy and evaluation, to the detriment of other modes and approaches.[53] Both as teachers and teacher educators, we need to uncover the aesthetic dynamics of our interaction with others, and how we evaluate student achievement.[54]

The aim of these proposals is the reintegration of aesthetics into social life, the rejuvination of the aesthetic image so that its social, ethical, and political import may become manifest. This process will require both a greater sensitivity to the aesthetic qualities of all experience, and a revised theory of aesthetic forms that contextualizes their creation and significance. In the end, this process will necessitate and help evolve a revised education and social order within which the arts—as perhaps the highest forms of human acheivement—can flourish.

NOTES

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2. I have explored the nature of attitude theories of aesthetic experience more fully in Landon E. Beyer, "Aesthetics and the Curriculum: Ideological and Cultural Form in School Practice," Ph.D. thesis, University of Wisconsin-Madison, 1981.

3. See Stolnitz, op.cit.; Edward Bullough, "'Psychical Distance' as a Factor in Art and an Aesthetic Principle," **The British Journal of Psychology,** Volume V, 1912; Jerome Stolnitz, **Aesthetics and Philosophy of Art Criticism** (Boston: Houghton Mifflin Company, 1970); George Dickie and Richard J. Sclafani, editors, **Aesthetics: A Critical Anthology** (New York: St. Martin's Press, 1977), Part Six and Part Seven; for some of the philosophical underpinnings of these concepts, see Immanuel Kant, **The Critique of Judgment,** translated by James Credd Meredith (Oxford; 1928), and Arthur Schopenhauer, **The World as Will and Idea,** translated by R. B. Haldane and J. Kemp (London: 1883).

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5. Harry S. Broudy, **Enlightened Cherishing: An Essay in Aesthetic Education** (Urbana: University of Illinois Press, 1972), p. 48.

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8. See, for example, DeWitt H. Parker **The Principles of Aesthetics** (Boston: Silver, Burdett and Company, 1920); and Stephen C. Pepper, **Principles of Art Appreciation** (New York: Harcourt, Brace and World, Inc. 1949).
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11. Baxandall and Morawski, **op. cit.**, p. 5.
12. Mikhail Lifshitz, **op. cit.**, p. 7.
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15. **Ibid.**, p. 52.
16. cited in **Ibid.**, p. 52
17. cited in **Ibid.**, p. 51.
18. Karl Marx, **Theories of Surplus Value** (Moscow: Progress Publishers, 1963), p. 401.
19. "Comments on the Latest Prussian Censorship Instruction," written in February 1842 for the Deutsche Jakrbucher, edited by Arnold Ruge, published in 1843 in the Swiss Anekdota when Jakrbucher was censored and forced to stop publication. See Lloyd Easton and Kurt H. Gudda, editors. **Writings of the Young Marx on Philosophy and Society.** (Garden City, New York: Doubleday & Company, Inc. 1967).
20. **Ibid.**, p. 79.

21. **Ibid.**, p. 80.
22. **Ibid.**, p. 70.
23. **Ibid.**, p. 71.
24. Marx and Engels, **On Literature and Art** (Moscow: Progress Publishers, 1976), p. 99.
25. **Ibid.**, p. 100.
26. **Ibid.**, pp. 105-106.
27. **Ibid.**, p. 197.
28. **Ibid.**, p. 26.
29. Lifshitz, **op. cit.**, p. 59.
30. **Ibid.**, p. 67.
31. Marx and Engels, **The Holy Family,** (Moscow Progress Publishers, 1975) p. 68.
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35. **Ibid.**, p. 78.
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39. Henri Arvon, **Marxist Esthetics** (Ithaca: Cornell University Press, 1973). pp. 36-37.
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42. Avner Zis, **op. cit.**, p. 66.
43. Ernest L. Boyer, **High School: A Report on Secondary Education in America** (New York: Harper & Row, Publishers, 1983), p. 98.
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48. **Ibid.**, pp. 171-172.
49. **Ibid.**, p. 8.
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52. See Elliot W. Eisner, **The Educational Imagination** (New York: Macmillan Publishing Co., Inc., 1979); and Maxine Greene, **Landscapes of Learning** (New York: Teachers College Press, 1978).
53. Michael W. Apple and Landon E. Beyer, "Social Evaluation of Curriculum," **Educational Evaluation and Policy Analysis**, Volume 5, No. 4, Winter 1983.
54. I have explored some of these issues in Landon E. Beyer, "Aesthetic Experience for Teacher Education and Social Change," **Educational Theory**, Volume 35, No. 4, Fall 1985.

TRANSVESTITE'S RETURN: THE SYNTAX EXCHANGE OF THE VISUAL AND VERBAL ARTS

Joseph Milner
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Art and literature are twin handmaidens of culture and, in spite of the invidious comparisons of their prowess which surface in cliches like "a picture is worth a thousand words," they have always served society in a complementary rather than a contentious fashion. But these twins are, of course, night and day to one another in many respects. Art is space-bound but temporally free; literature is bound in time but not by space. They are clearly mirror images of each other in this regard. In a like manner, and because of the space-time dichotomy, they are perceived in opposite ways. The visual art form is directly and immediately apprehended. One takes in the whole at once in a global fashion, then begins to absorb it in a partial way. The verbal mode must be apprehended by indirect means, and, over a period of time: the reader must turn the letters into words and these words into images; he is constrained to decode the pages one at-a-time. The pictorial mode, too, is generally displayed and consumed in a public manner; the verbal is packaged for single, private consumption. But the most intriguing difference between the two art forms may be revealed by the recent and fascinating investigation into the two hemispheres of the brain. Neuropsychological research, popularized by Robert Ornstein and others, suggests that the left brain works along verbal, linear, analytical lines, while the right brain responds globally, relationally, spacially.[1] Thus, literature is fodder for left brain activity; art falls into the domain of the right hemisphere. This may explain a persistent tendency in the two art forms throughout the twentieth century to become mirror images of one another, to move into the obverse mode. They seem to possess an envy for the riches that reside in their counterpart form: the precision of one, the accessibility of the other; the flow of the one, the holism of the

48. **Ibid.**, pp. 171-172.
49. **Ibid.**, p. 8.
50. Williams, **Marxism and Literature, op. cit.**, p. 156.
51. See, for example, Elliot W. Eisner, editor, **Reading, the Arts, and the Creation of Meaning** (Washington: National Art Education Association, 1978); Peter Abbs, **English Within the Arts** (Toronto: Hodder and Stoughton, 1982); Masha Kabokow Rudman, **Children's Literature: An Issues Approach** (Toronto: D.C. Heath and Company, 1976).
52. See Elliot W. Eisner, **The Educational Imagination** (New York: Macmillan Publishing Co., Inc., 1979); and Maxine Greene, **Landscapes of Learning** (New York: Teachers College Press, 1978).
53. Michael W. Apple and Landon E. Beyer, "Social Evaluation of Curriculum," **Educational Evaluation and Policy Analysis**, Volume 5, No. 4, Winter 1983.
54. I have explored some of these issues in Landon E. Beyer, "Aesthetic Experience for Teacher Education and Social Change," **Educational Theory**, Volume 35, No. 4, Fall 1985.

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other. So the artist of the visual form might naturally seek to make strong contact with the hemisphere that form has generally failed to touch; the artist of the verbal mode might reach out to the global nature of the right hemisphere which earlier writers had seldom contracted.

The transvestite yearnings of these twins has not in the past been wholly kept in check by clear sense of definition or boundary. Even in the ancient world, technopaegnian (iconographic) poets like Simmiad of Rhodes (who in 300 B.C. constructed a poem in the configuration of an egg), and Dosidas created verbal art forms which stretched toward visual mode. The technopaegnian continued as an androgynous form through the Middle Ages and is represented in the seventeenth century in the craft of George Herbert, who used the shapes of the altar and angel's wings to add an iconographic dimension to his worshipful verse. This increasing visual tendency through the "Gutenberg Era" is plotted in John Hollander's *Vision and Resonance*, whose "chapters move along an axis from the aural to the visual."[2] Hollander marks modern poetry's expanded use of techniques like the pause and enjambment as testimony to the rise of the printed poem. He understands the movement from "utterance" to "text" as one that is essentially captured in the change of the basic poetic analogy from "music to picture."[3]

The increasing intensity of the move from auditory to visual art, especially poetry, is ever more difficult to ignore in the twentieth century. McLuhan's arguments make us better understand the verbal artist's impetus to switch media. Ezra Pound, an early exponent of imageful, concrete poetic expressions, was much influenced by what F.S.C. Northrop in *The Meeting of East and West* has called the dominance of the aesthetic component in Eastern art. In his exuberant devotion to the East, Pound celebrated the vehicles which had been too truculently ridden by the tenor-centered poetry of the West.[4] He learned to appreciate aesthetic component for its own sake and featured the cherished image through lines of verse cinemagraphically: The classic haiku-like "In a Station of the Metro,"

focuses the reader's (viewer's) attention on two scenes—a pan of the subway crowd and a closeup of the simple petals on the single bough.

William Carlos Williams can be seen as a major figure in this visual movement because of his concern for the power of the image set apart. Hollander suggests that his visual bent is seen most stikingly in poems like "The Red Wheelbarrow," where he "etemologizes his compounds into their prior phenomena."[5] He says that "so much depends upon a way of seeing, trained and framed by photography's way of cutting out rectangles of scene, and upon poetry's way of cutting and framing bits of language."[6]

The sense of the structural visability of the poem was even further explored by e.e. cummings, who was beginning to exploit visual ambiguity rather than the traditional aural kind which was lost wholly on readers who eyed but never mouthed their words. At the formal level cummings went far beyond the line-boggling enjambment of Williams and others to the welding of total pictures, such as that presented by the word arrangement of poems like "Stadium" which hardened back to the technopaegina of the sacred poets. (He may, indeed, have used such seemingly profane images rather than the traditional altars and angelic wings as a way of denying the exclusive rights of the sacred poets to this iconic style.) At the micro or letter level, too, it is clear that he was aware that poems were most often seen but not heard. His work with the eye pun which arises out of manipulation of type makes visual play penetrate each dimension of the poem. In "1(a," cummings lets the reader's eye discover the relationships between I-ness and one-ness both through letter enjambment (isolating the "one" of loneliness on a single line) and through the ambiguity of the typeface 1 as either the first arabic numeral or the twelfth letter of the lower case Roman alphabet. Moreover, "1(a" not only plays on the visual pun of the one and I, but as a structural whole presents the picture of a slowly descending leaf.

While cummings achieved visuality at both the macro

and micro levels of the poem, the Concrete Poets have taken the macro approach to fruition in their graphic designs. Eugen Gomringer of Switzerland was one of the earliest of this consciously international set who wanted to eliminate some of the unnecessary boundaries of language and so responded with "word constellations" like "Silencio" and "Avenidas." He championed a kind of poetry which the reader could perceive "as a whole as well as in its parts."[7] "Forsythia," a concrete classic, is also clearly more pictorial than verbal; we only come to the verbal dimension of the poem after we view its bushiness. This extrordinary emphasis on the visual arrangement of the verbal elements of the poem grew to an intense level in Vaclav Havel's "Estrangement." Although as a dramatic artist he was articulate and verbose enough to have managed a rather well-done play, "The Memorandum," here Havel only suffered the J and the A key (in the midst of well over 100 labyrinthian dots) to slap down on the carbon ribbon of his typewriter. All that surpasses these non-verbal forms of poetic communication is the "found" poem which uses the coincidental intersticies of a lunar photo, containing 6 row, by 8 row hash marks, as the stuff of its "Space Shot Sonnet."

The visual arts seem comparatively less distressed in this non-print age by the limitations of the visual mode, but transvestite tendencies are to be found in twentieth century art as well. From the century's onset, art has shown increasing restlessness with the representational mode, attempted to escape the spacial bounds of the form, and sought means of avoiding the limitations of the pictorial. Picasso and others used their multifaced, Cubist form to elude the entrapments of perspective and space. The work of Kandinski, Pollock and other Abstract Expressionists further obliterated the notion of pictorial, known space so that the viewer no longer had a totally occupied and united visual field, but a set of parts or sections which had to be "read" in piecemeal fashion. Even the hard edges of Kenneth Noland's and Morris Louis's color field art created a kind of partiality which further forced the viewer to a linear, gradual reading of their paintings.

But long before these attempts to escape the spacial limitations of the canvas, the Futurists under the leadership of Emilio Marinetti sought to have both literature and painting "freed from traditional syntax."[8] Gino Severini's work as a part of this movement shows a distinct affinity for letters. His "Dynamic Hieroglypic of the Bal Tabarin"[9] works as both art forms as once. Its color and image offer the rhythm of the dance in an unmediated fashion, while the letters which do not emerge at first view soon begin symbolically to articulate and accentuate the joy of the ball. The viewer thus finds himself seduced into the linear mode of perception, "decoding" the VALSE, POLKA, and other dances written into the "text." Carlo Carra's "Patriotic Celebration," a collage of letters,[10] is a clear example of this same thrust. His visual presentation is flooded with letters which jut out in every direction, almost forcing the viewer to spin the canvas so as to allow it to convey verbally the full impact of the festive occasion.

The work of Stuart Davis is particularly interesting as it celebrates the letter. As a pop artist, early in his career Davis was clearly fascinated with these symbols as transmitters of the full impact of the culture. In "Lucky Strike" (1921) he lets the letters speak for art much as the marketing expert lets them push cigarette sales.[11] They are his pitch, his hype on art. Forty-three years later Davis still had not lost that fascination with the verbal realm, for in "Switchsky's Syntax" he tells us more than even the emblazoned "CHAMPION" can say about the shift in art's basic language.[12]

The verbal mode gains strange power in the Dada expressions of Duchamp in such well known works as "The Bride Stripped Bare by Her Bachelors, Even."[13] The visual presentation is so enigmatic that the "communication" established by the title dominates; the anxious and uncertain viewer of necessity seeks guidance from the verbal mode. The plentiful and rhythmical words seem almost a line of

poetry, but the end word, "even," reintroduces his enigma and leaves the viewer at sea once again. In "LHOOQ" Duchamp once again makes use of his title, by involving the viewer/reader in the multiple verbal layers of his naughty pun.[14] He equals the pictorial violation of the divine Mona Lisa's smile (the drawn-in mustache) with the foul suggestion found in the duplicitous use of those letters. The sacred anagram can also be read as a French vulgarity, as low a blow as the vandalization of the visual. Like cummings who "crossed over" to the syntax of the visual mode by creating eye puns, Duchamp is here using conventional verbal puns, a staple of the opposite mode.

Rene Magritte is playing with language even more obviously in "The Art of Conversation."[15] He uses the letters of his own first name to form a crumbling monument which speaks verbally as well as visually of his own morality. Moreover, he turns the cliched description of one's ability to exchange small talk with friends into a statement about his visual art form. He seems to be admitting that as an artist he depends on conversing through the verbal medium. He is subtly, cleverly telling us how he is using those four letters of his name.

The work of Charles Demuth brazenly shifts into the letter world at even more levels than did Duchamp and Magritte. In "I saw the Figure 5 in Gold" he uses the blazened numeral as the center of his art.[16] Its golden power generates an aesthetic explosion in him and wholly dominates his visual presentation. A second level at which Demuth is paying homage to the verbal mode is found in the referent of his title. He is trying to capture the experiences as it had previously been stated by the word artist William Carlos Williams: his title is a direct quote from that concrete poet's work. Finally, his devotion to the verbal mode and his openness to a kind of aesthetic duality are reflected in the fact that Williams was a radical kind of poet, one who had devoted his artistry to honoring the visual image, the discrete concrete chunks of reality upon which so much depends. Demuth's "Love, Love, Love" is

passing over into the verbal mode in much the same manner.[17] He presents a highly lettered surface which must be absorbed by the reader of the picture in both an immediate and in a delayed, decoding fashion. In his title, again, he directly mimics the verbal artist; the triple restatement of "love" seems clearly to point to Stein's imagistic view that "a rose is a rose is a rose." For Stein, Williams, Pound and that very special school of aestheticians, the object is to be honored as mere object; its object-ness must be sufficient. As if to beat Stein at her own game, Demuth takes not the rose (the solid object with poignant shape, color, feel and smell) but the difficult, protean abstractions "love" and reifies it into a state of full objectification. He paints the work; he honores the poet; he celebrates the objectness of even the abstract.

Robert Tauschenberg's work displays a verbal crossover which follows his near obliteration of the syntax of his art form; as such it is analogous to that visited upon music by John Cage's "Silence." Rauschenberg began a string of works in 1949 which moved away from all of the basic syntactical features of art other than color.[18] His "Monochromatic" which followed during the early fifties left merely one solid hue as the evidence of his encounter with the canvas. His "White Painting" series of 1951 is the most spectacularly blank until the next year he conceived his "Erased deKooning Drawing" which is wholly void, a complete denial of his form's syntax. By the middle fifties he was turning to the power of the letter. In "Gloria" he plays with both letters and Warhol's notion of popular image repetition. Some of this interest is forecast in his very early "Lily White" where his rather plain canvas is "activated" by numberals in a maze of lines and focuses on the one word "FREE" which seems the exit point of his canvas. The height of his concern for the verbal mode is seen in "Painting with Red Letter." Here he celebrates his specialness of the letter and the power of the color that gives it body. His sixties work continued to make some use of letters as they appear in collage and in found objects,

but his trespass into the letter world was never so strong as it was in the early fifties' experiments.

The full pop work of Andy Warhol, Robert Indiana and Roy Litchenstein centers on the popular culture about them and in so doing makes the letter a powerful vehicle of expression. Although Warhol was clearly working to break down other barriers, his uses of the label in his mass production art, which featured Brillo, Campbell Soup and Coke, attempt as well to rearrange the basic elements of painting. Just as the picture label tells even the untutored infant the soup maker's message without need of literacy training, Warhol conveys meaning through his large Campbell letters without depending on the conventional syntax of visual art. He goes further in this exposition of art's limits in "Close Cover Before Striking" where he again makes use of the world of advertising.[19] He presents the functional match pack and its verbal instructions as the immediate object, but we move quickly to the vivid, memorable Coke inscription which tells us the reason for the object's existence. We suddenly find ourselves reading the art.

Indiana does not offer so many layers of picture and inscription to penetrate, but his use of the letter is all the bolder because his art is so evenly balanced between both worlds. His "LOVE" is a clear example of how the object for him has become the letter itself.[20] Line, color, space are all invested wholly in his four letters. Little else matters. Litchenstein's comic art also trespasses deeply in the the lettered world. Comic books and newspaper comic sections are the tradition from which he draws "WHAM," and "I can see the whole room."[21] This is particularly true in the latter where the viewer enters only through the keyhole perspective; all but the narrow slot is blackened with the lettered caption dominating the canvas and the imagination. It's what we can't see but are told by the print that allures.

Terry Allen's "Texas goes to Europe" offers a very late bit of pop art which has some of the word play found in

Demuth's and Magritte's art.[22] His visual of Europe is fetching, but what captures us is his title and the word litter which pelts the map of Europe with the ravenous names of Texas towns. The full play and delight of Allen's work would be lost without his clever title which suggests the ugly American abroad, and his devilish, oxymoronic placement of dusty, rawbonded Lubbock where some splendid cosmopolitan European city's name should appear.

Joan Snyder shows us in four of her recent pieces of transvestite tendency which these earlier visual artists have exhibited as a group. In "Love Your Bones" we see her flirtation with orthography.[23] Her canvas is alive with interesting shapes which approximate letters yet look more like squiggles or bones. The rhythm of her muted colors makes her squiggles serve only as contours over which the perceiver's eyes rock along. In "Strokes for Pink" the squiggles are clearly moving into more definable patterns or strokes; some are recognizable letters. With "Mistory" the verbal mystery is solved, for her canvas now seems to present itself as ancient papyrus to be deciphered. The history sits in front of us to be read though in feminist terms her *mis* or even *mys* has replaced the male dominated record of the past. Finally in "Small Symphony for Women," Synder reveals her intention of moving into another medium of artistic communication by use of the musical term to name her art and by the use of squiggles which have turned into letters of a full blown poem. Because we are compelled by their miniature size to squint at these squiggle-letters, we are all the more conscious of the fact that we are reading.

But the letter takes charge most completely in David Smith's VACANT. In his caustic attack on contemporary art in *The Painted Word*, Tom Wolfe points to Smith's blank canvas with the letters VACANT standing as its sole occupants.[24] Wolfe uses the piece to point to the vacuous, incommunicative nature of the visual arts today. He suggests that because the critics' word (theory), which was all these contemporary artists were able to paint, was

missing, there was shallow artistic silence; there was nothing to paint but the fact of nothingness. Tom Wolfe may indeed be correct, but the use of the verbal mode to express the nothingness seems quite as important as the message itself. It is as if Cage were to place a SILENCE sign on top of his piano.

Such transvestite tendencies are not restricted to art/literature alone; syntax exchange of like magnitude has been noted only recently between music and art as well. Raymond Ericson has made a strong case for this transference of music, pointing to John Cage's "Notations," Albert Fine's "Supermarket Song for George Brecht" (with its King Kong stamps featured in the composition), and others in which the scores have a clear appeal to the eyes.[25] The strength of the move from ear to eye in that medium is most easily seen in the oddity that some of the recent scores have lately been "exhibited" in the Drawing Center in New York—sound confirmation of the syntax shift in the world of music.

The recent art assemblages of Judy Chicago mirror the shift in syntax seen in music. While the scores of contemporary music have taken on an unusually strong visual character, the manner in which her art is formed and performed conforms in essential ways to the patterns of music. The manner in which "The Birth Project" has been conceived, gestated and delivered resembles the creative process of both composer and conductor of music. Like the composer, she sets down on paper her notation indicating the exact manner in which her art should be performed. And like the conductor, the original creator's interpreter, Ms. Chicago fusses over the performance of her visual orchestra. She prompts, revises, prods, and consults with her secondary creators much as the persnickerty conductor lords his faithful interpretation over the members of the philharmonic.

The art/literature relationship may, however, have moved a step beyond that of art and music. A new corner seems to have just been turned. An androgynous form has

perhaps, replaced the transvestite mode. For in John Hollander's intricate and exciting shapes such as "Swan and Shadow" and "A State of Nature" (New York State), he has managed to keep the letter alive as more than a mere edging or outlining device.[26] His shapes incorporate verbal utterances of nuance and power. But most strikingly the letters and words he uses to carve out a shape in "Love Letter" are turning the nubile, protean style back upon itself for the outlined shape is the letter L itself.[27] He seems to consciously or intuitively be stating the very limits of his art form in the work of art itself. The Transvestite returns.

ENDNOTES

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2. John Hollander, **Vision and Resonance** (New York: Oxford University Press, 1975), p. x.
3. **Ibid.**
4. F.S.C. Northrup, **Man, Nature and God** (New York: Pocket Book, Inc., 1962), pp. 248-251.
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8. Thomas B. Hess and John Ashberry, eds., **The Avant-Garde** (New York: Macmillan Company, 1968), p. 81.
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13. Calvin Tomkins, **The Bride and the Bachelors** (New York: Viking Press, 1965), p. 205.
14. John Fleming and Hugh Honour, **Marcell Duchamp** (New York: Viking Press, 1972), P. 15.
15. Suzie Gablik, **Margritte** (Greenwich, Conn: New York Graphic Society, 1970), p. 27.

16. Charles Demuth, **A Collection of Watercolors and Drawings** (New York: Sotheby Park Bernet, Inc., 1976), plate 55.
17. Charles Demuth, "Love, Love, Love" **Art Forum** Vol. 17, (Nov. 1978),p. 55.
18. Robert Rauschenberg, (Washington: National Collection of Fine Art, 1976), pp. 2, 32, 64, 75, 91.
19. Warhol: Close Curer..." Rosenthal Art Slides, Vol. I, 1962, p. 116.
20. Robert Indiana, "Love" Art News. Cover of magazine. May 1974.
21. Edward Lucie-Smith, **Late Modern:** The Visual Arts since 1945 (New York: Praeger, 1975), Plate 125 and Henry Geldzahler **New York Painting and Sculpture:** 1940-1970 (New York: Dutton, 1969), p. 211.
22. Terry Allen "Texas Goes to Europe" 1974 (Landfall Press No. 3).
23. Joan Snyder "Love Your Bones," "Strokes for Fink" "Small Symphony for Women"; Reproduction from WFU Showing 1978.
24. Tom Wolfe, **The Painted Word** (New York: Strauss and Giroux, 1975), p. 111.
25. Raymond Ericson, "Music Notes: Composer as Painter," New York Times Nov. 4, 1979, II, p. 21.
26. John Hollander. **Types and Shapes** (New York: Atheneum, 1969), pp. 15,25.
27. **Ibid.** p. 7.

LOOKING AT, TALKING ABOUT, AND LIVING WITH CHILDREN

Russell L. Dobson
Judith E. Dobson
J. Randall Koetting

Fantasize for a moment that you are traveling to a particular mountain for a backpacking trip. You become aware of the mountain as it comes into view. you have seen other mountains or pictures of mountains, and you have studied about mountains in school where you learned the appropriate label (word) for the object. Upon arrival and while preparing for your backpacking trip, you experience this mountain: the temperature, sounds (wind, leaves rustling, quietness), and fragrance (pine needles, clean air).

During the hike up the trail, you become more aware of this mountain's uniqueness. Discovering a variety of wild flowers or colorful mushrooms encourages lingering moments for inspection and awe. The trail crosses streams with tumbling waterfalls and small pools that seem to capture the rays of the sun at just the right moment and angle. Perhaps you catch a glimpse of a deer or other animals. Camping for several days at a lake encourages rest and reflection. When departing from the mountain and glancing back for a last "look," you see something quite different from your original view. You have experienced this particular mountain; it has become a part of your perceptual base. When attempting to share your perceptions and experiences with friends, words do not seem to capture the magic of the adventure. If you are unable to express this total experience with the mountain, then why expect more of words when speaking of children?

If a teacher is asked to describe a particular child, the description (communication) will be given in words, either written or orally. The worth of the report and the competence of the teacher are often assessed by the technical language used.[1]

16. Charles Demuth, **A Collection of Watercolors and Drawings** (New York: Sotheby Park Bernet, Inc., 1976), plate 55.
17. Charles Demuth, "Love, Love, Love" **Art Forum** Vol. 17, (Nov. 1978),p. 55.
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If a teacher is asked to describe a particular child, the description (communication) will be given in words, either written or orally. The worth of the report and the competence of the teacher are often assessed by the technical language used.[1]

The power of words (languaging) is probably the most overlooked, least understood, and ultimately neglected phenomenon in the field of education. Words serve to produce a paradoxical situation: both the freezing and unfreezing of reality. With the technical emphasis in the field of education on the operational definition of terms along with the use of observable behavior to explain the human condition, words tend to provide more of a freezing function.[2]

Educators invent words to serve as tools and their perceptions become controlled by these creations. Language which is intended to explain or describe reality becomes reality. What can't be explained (or for that matter programmed into the computer) is too often ignored and ultimately dismissed. We are suggesting that the way we talk about a phenomenon determines what we see before we look. The language of a field encourages human encounters to be *a priori*. If we are to pursue the reality of the teaching-learning act, educators must uncover the meanings of words blurred by custom and usage.

More than half a century ago, E.K. Wickman (1929) concluded from his studies on teacher perception of children's behavior that no act of misbehavior had been committed until someone judged it as such. Assuming the validity of this premise, it seems reasonably safe to assume the opposite, that no act of behavior has been committed until someone has judged it as such. The reporting of perceptions (reality) requires judgment which in turn reflects the value posture of the one doing the reporting.

The encouraged mode of perception in teaching is one of value-neutrality in the form of observation.[3] Certain behavioral characteristics of children are classified and labeled, and the teacher is trained to see these. The result of this activity is that the field of teacher education abounds with an "if-then" mentality which is a reduction of the cause-effect model borrowed from natural science.[4] If a child exhibits a certain behavior, then an appropriate treatment is prescribed.

Patterns of thought or the usage of language schemes

borrowed from the natural sciences simply do not summarily fit the social sciences. Exactness and precision are needed when dealing with things (natural sciences) for purposes of prediction and control. However, latitude and flexibility are needed when dealing with humans for purposes of growth, evolvement, emancipation, and understanding.

If the cause-effect model borrowed from the natural sciences was transferable in its entirety to the social sciences, then economists could be more accurate in predicting inflation and interest rates, and certainly political scientists would be more accurate in forecasting the outcomes of elections. If the model is not applicable in those social sciences that lend themselves to exactness, why have educators become so infatuated with the power of the cause-effect concept in the study of children? The ultimate thrust of the cause-effect model is prediction and control; emancipation and understanding are secondary concerns.

Apple (1975) contends that "two major problems in education historically have been our inability to deal with ambiguity, to see it as a positive characteristic, and our continual pursuit of naive and simplistic answers to complex human dilemma" (p.127). He continues, noting that phenomenologists seek to cast aside their previous perceptions of familiar objects and attempt to reconstruct them. The work of the phenomenologist is to see the phenomenon as it is rather than as suggested. The basic question becomes one of whether or not "familiar" educational constructs for viewing and speaking of children are adequate relative to the potential children possess.

Tranel (1981) supports Apple's contention about educators' unwillingness to deal with ambiguity when he states:

> The cause and effect model was first discredited in physics by Heisenberg's conception in 1927 of the "uncertainty principle." If, therefore, this model is inapplicable in the world of material substances, it is

> all the more inappropriate and misleading in the unique world of the individual, where measurement and predictability are inherently precluded (p. 425).

Professionals must deal not only with what they see but also with *why they see what they see.* This is a simple notion, just simple enough to be almost totally overlooked and neglected. The way educators look at (perceive), talk about (language), and live with (experience) children is an area worthy of critical analysis. The remainder of this paper presents a set of assumptions relative to perception and language and provides a model for explaining the interplay of perceptions, language, and values and the effects of certain mixes on the educational experiences of children. The paper is concluded by providing an alternative model for looking at, talking about, and living with children.

Assumption

1. The way educators talk (word usage) affects what they see (perceptions). This phenomenon also works in a reciprocal fashion. Causal priority does not seem particularly important.
2. Perceptions and language are reflective of the philosophic posture (value system) of the person observing and talking.
3. The interplay of these three variables (perception, language, and value system) determines the nature of the teaching-learning experience (communication).
4. The language of a profession can *a priori* determine perceptions and consequently human experience.

Perceptions, Language, and Values

When teachers are asked to picture and describe a "good student," without exception the description falls within the range of the two constructs of intelligence and behavior. Educational decisions are made and instructional experiences determined on the basis of whether or not students are smart or dumb, fast or slow, and good or

omery.[5] The education profession could not have been less imaginative. As a consequence of these constructs, with their inherently limited vision, there have evolved essentially three sets of metaphors used in talking about children: 1) military, 2) industrial, and 3) disease. Examples of the language associated with each of these three metaphors are: 1) military metaphor—target population, information system, centralization of power, line and staff, scheduling, discipline, govern, maintain, objectives, strategy, training, firing line, in-the-trenches; 2) industrial metaphor—management, cost effectiveness, efficiency, institutional planning, programming, output measure, product, feedback, defective, input-process-output, quality control; and 3) disease metaphor—diagnostic, prescription, treatment remediation, monitor, label, deviant, impaired, referral procedure, special needs.[6]

Hueber (1963) classifies values into five frameworks: 1) technical, 2) political, 3) scientific, 4) aesthetic, and 5) ethical. Technical values have resulted in an ideology almost totally concerned with activities that produce defined ends, usually in the form of predetermined behavior. Political values tend to promote the notion that a person's worth can be judged by his/her influence. Power and control become the end. Scientific values promote activities which produce new knowledge with an empirical base. Aesthetic values tend to generate activities that can be felt and lived by children. Ethical values promote the idea that educational activities are life and that life's meanings are witnessed and lived in the classroom. None of these value systems is inherently evil; however, the exaggerated dependence on some to the exclusion of others is dangerous. Current educational ideology reflects almost completely a technical and political value system. In summary, educators use essentially three constructs, three metaphors, and five value systems when looking at, talking about, and living with children.

An Alternative

We are suggesting the need for alternative constructs and language for viewing and talking about children in order to enhance their educational living experiences. We believe these new constructs and language can be derived from aesthetic and ethical value systems. Among the sources in the literature are the work of Eisner (1979), Berman (1968), Macdonald (1968), Leonard (1973), and Dobson and Dobson (1976, 1982).

Aesthetic and Ethical Viewing

Rogers (1951) presented the theoretical formulations of his theory of personality and behavior which were used (in part) as the conceptual framework of viewing children from an aesthetic and ethical value base. Central to looking at children is the premise that "the best vantage point for understanding behavior is from the internal frame of reference of the individual himself " (p. 494). Too often, teachers observe children's behaviors and evaluate them from their own or an external frame of reference. When viewing children's behaviors, teachers must be cognizant of the premise (Rogers, 1951) that behavior is goal directed and is in response to the private world of children, their realities. Granted, children's goals and their realities may be only partially in their consciousness and, therefore, not completely in children's awareness. However, there is the potential for children to become aware of and understand their personal goals and realities. The teacher, on the other hand, will never completely understand the private world of children. Rogers continues, "...no matter how much we attempt to measure the perceiving organism—whether by psychometric tests or physiological calibration—it is still true that the individual is the only one who can know how the experience was perceived" (p. 484).

The importance of self-concept is stressed by Rogers (1951) when he states, "Most of the ways of behaving which are adopted by the organism are those which are

consistent with the concept of self" (p. 507). The child who perceives self as inadequate academically, socially, or personally will generally behave in such a manner at school as does the child who perceives self as adequate in these areas. Purkey (1978) states that "one's self-concept is a complex, continuously active system of subjective beliefs about one's personal existence" (p. 30). The self-concept serves as a guide or a reference point for one's behavior (Glock, 1972). Therefore, all that children experience is filtered through and mediated by their concepts of self, images they have learned from significant others over the years. If the self-concept serves as a mediator of perceptions, thoughts, and actions, then the images children hold of themselves are of utmost importance.

Aesthetic and Ethical Language

Macdonald (1968) opens the way for the ethical talk when he suggests that the curriculum be assessed with moral constructs; these constructs can be extended to view the instructional act as well. Among his suggested moral constructs are dialogue, promise, forgiveness, service, beauty, vitality, and justice.

Creating an instructional experience that is sensitive to open communication requires that educators take into consideration the notion of *dialogue*, which implies that what everyone has to say carries equal weight.[7] This does not imply that children have all the decision-making power, but rather that what children have to say is important and must be seriously considered.

That teachers should *promise* that educational experiences have personal meaning for the learner is a basic human learning right. Teachers must be secure enough in themselves to promise caring and follow through on the personal, psychological, social, and emotional needs of children. Too often caring exists without a concomitant demonstrated promise on the part of the teacher.

Risk taking is necessary in learning and growth. School environments that function solely around the right-

wrong answer and behavior syndrome might do well to entertain the alternative of "goofing up." There is a vast difference between "goofing up" and being wrong. *Forgiveness* becomes a necessary variable in such an environment.

One major purpose of schooling is to foster the unlimited potential of the child to love, to learn, to create, and to grow. If educators accept this basic premise, then one function of the school is to provide *service* to the participants. All decisions and activities are actions geared toward providing service; administrative convenience and teaching comfort become secondary in importance.

Judgment without *justice* is an inhumane activity that degrades the dignity and worth of the individual. Rules or guidelines are a necessary part of a smoothly functioning school and are created to help, rather than hinder individuals. When rules cease to fulfill this obligation they should be eliminated. To establish a single rule that would take into consideration all the complex variables associated with a given situation would be an horrendous, if not an impossible task. Each situation has its own elements of justice and rules. Rules must be used only when they facilitate an individual's growth.

The concept of *beauty* as it relates to children lies in their potential to extend, create, and grow through personal meaning, rather than in their being judged on outcomes determined and desired by an outside agent. When children become mere objects or pawns of their school environment, then the vehicle for extension and realization of beauty is subjugated.

All of the constructs previously mentioned are dependent upon the moral constructs of *vitality*, *emancipation* and *praxis*, i.e., as inhabitants within schools gain new understandings, they must be willing to change the existing structure of the school.

Aesthetic and Ethical Living Experiences

The focal point of the school experience is the person, and what happens or does not happen to the person is a

matter of aesthetic and ethical consideration. Teaching is first and foremost a moral enterprise because we intervene in people's lives. What we decide to do to, for, or with children is value based and of primary importance. Macdonald (1968, p. 38) illuminates the significance of the person when he states "...a person has worth not because of his unique individuality but primarily because he is a person." He goes on to say, "A person is not to be thought of as a bundle of needs, or interests, or unique purposes that can be directed or guided or developed to someone's satisfaction" (p. 30).

In considering the value base of the relationship of persons in a classroom setting Frymier (1972, p. 13) suggests "...there are languages of conditional relationships and the relationships without conditions: the first is a language of "control"; the second is a language of "love and growth".

The language of the technical model applied to the classroom experience suggests scientific accuracy and predictability (scientific values) and the nature of this model has an interest in control (political values). The historical roots of these orientations have been outlined by others (Apple, 1979; Giroux, 1980; Kliebard, 1975). Tabachnick, Popkowitz, Ziechner (1979-1980), in their research on the student teaching experience, observed that students were engaged in the "routine and mechanistic teaching of precise and short term skills and in management activities designed to keep the class quiet, orderly, and on task" (p. 16).

Dobson, Dobson, and Koetting (1982) have written that the language of the technical model applied to teaching effectiveness research has contributed to simplistic input/output understandings of educational experience ("student as product" orientation). The technical model, along with the language of technical rationality, suggests that the "right mix" of technique and content will significantly increase student performance. Teaching is viewed as a "science and technology" with identifiable skills that lend

themselves to short-term teaching goals that focus on a utilitarian perspective. Tabachnick, *et.al.* (1979-80) suggest that this view leads to managerial understanding of teaching.

A case has been established that aesthetic and ethical considerations have been slighted, if not totally ignored, in the creation of living experiences that occur in classroom settings. In light of this condition Greene (1973, p. 6) suggests that if teachers want to be themselves and achieve something meaningful in the world that they subscribe to a proposal "...which is nothing more than to think what we are doing."

The method we propose for beginning the search for conditions that reflect aesthetic and ethical values in the classroom setting is the awakening of consciousness through dialogue. According to Freire (1981) an education experience that places dialogue at its center starts the dialogical process. "It is a questioning process about possible 'thematic universes' expressing the relationships of the persons involved in dialogue with the world" (p. 86).

A dialogical situation serves the purpose of clarifying the teacher's and learner's thoughts with one another; in this process they no longer learn in isolation, but rather in world contact with one another. This is a process involving not only the cognition of a given situation, but it is also a process of reconsidering their own ways of approaching the situation under study. When teachers and students reflect on their being through the building of new structures of meanings they become aware that they are building themselves in the process. For Pritzkau (1970) dialogue is, "...conversation between two or more persons in which each transcends his solitude and accepts his aloneness and that of the other person, thereby seeking a form of transaction which maintains the maximum freedom of each" (pp. 11-12).

Dialogue for Freire (1981) corresponds to a dual process of denunciation and annunciation. As he expresses:

> Our pedagogy cannot do without a vision of man and the world. It formulates scientific humanist conception which finds its expression in a dialogical praxis in which the teachers and learners together, in the act of analyzing a dehumanizing reality, denounce it while announcing its transformation in the name of liberation of man (p.338).

Denunciation and annunciation are both hope and action. Hope is the belief in our inner capabilities for becoming whomever we decide to be, guided by value considerations. Action is the actualization of one's hope. It is one's intent to direct the course of his/her life through the use of human freedom.

It is immoral to expect teachers and learners to continue to leave their "person" outside the door as they enter the classroom. Teachers and learners need not be expected to assume a posture as they don the mask of their assigned roles. Dialogical praxis is a process for dealing with human qualities (internal manifestations of beliefs and values) that persons bring to the arena of human interaction.

Conclusion

Edelman (1973) suggests that language used by educators tends to establish their reality and subtly justify their actions. This function is not unique to any one philosophic position. Well-intended proponents of differing positions sometimes are more concerned with rhetoric than with what is best for children and society. We are suggesting that responsible educators might well afford to spend time and effort in examining the value base(s) of their perceptions and professional language used in "looking at and talking about" children. Only then will the roots of their philosophic stance be uncovered which influence the kinds of living experiences provided for children.

FOOTNOTES

1. Technical reports by professionals tend to "fix" objects (humans) in their environment. See Arnold Wesker, **Words As Definitions of Experience** (Great Britain: The Writers and Readers Publishing Cooperative, 1976). He states: "Words not so much used, as poured like concrete: so that they become literally, unthinkable."

2. See Wesker, **op. cit.** He suggests that language is not passive, not neutral, not something we can ever take for granted. Either we use language justly or we will be badly used by it. Also see Michael Apple, "Scientific Interest and the Nature of Educational Institutions" in William Pinar (ed.), **Curriculum Theorizing: The Reconceptualists** (Berkeley, Calif.: McCutchan Publishing Corp., 1975) and Paulo Freire, **Pedagogy of the Oppressed** (New York: The Seabury Press, 1970).

3. The non-neutrality of methods of inquiry is of critical importance to our discussion. See Jurgen Habermas, **Knowledge and Human Interests** (Boston: Beacon Press, 1971)

4. Apple, following Kaplan's notion (1964), points out that educators have borrowed the reconstructed logic of science and applied it to curriculum development and research. See Michael Apple, **Ideology and Curriculum** (London: Routledge and Kegan Paul, 1979).

5. Bloom argues that in order to improve the schooling experience we must remove from our minds certain constructs relative to our perceptions of children. See his article entitled "New Views of the Learner: Implications for Instruction and Curriculum" **Educational Leadership,** 1978.

6. For further discussion of these metaphors and their relationship to research on teacher effectiveness and efficiency, see our article "The Language of Teaching Effectiveness and Teacher Competency Research," **Viewpoints in Teaching and Learning,** 1982.

7. For an explication of the notion of dialogue within the educational setting, see Paulo Freire, **op. cit.,** particularly chapter three. For the implications of Freire's notion of dialogics for education, see J. Randall Koetting, **Toward a Synthesis of a Theory of Knowledge and Human Interests, Educational Technology and Emancipatory Education: A Preliminary Theoretical Investigation and Critique.** Unpublished Doctoral Dissertation, (University of Wisconsin-Madison, 1979), especially chapters four and five.

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Tanger: *Paysage vu d'une fenêtre* (1912) — *Matisse.*

BEYOND 1986: EDUCATION FOR SURVIVAL

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> This we know. The earth does not belong to man; man belongs to the earth. This we know. All things are connected like the blood which unites one family. All things are connected. Whatever befalls the earth befalls the sons of the earth. Man did not weave the web of life, he is merely a strand in it; whatever he does to the web, he does to himself.

Introduction

Many futurists believe that our species is in the midst of a crisis and that western civilization is moving toward an historic watershed. It is important that we understand the factors that will influence this change. To address cultural and educational needs of the coming generations, a new vision of reality involving fundamental changes in our thoughts and perceptions is necessary.

This paper is designed to:

1. describe important, present conditions of our species;
2. identify implications for an alternative vision of reality; and
3. consider implications for education.

The strength of our species is the ability to solve problems. In Ross Mooney's view, the problem-solving mind is our primary adaptive instrument—our means to life continuing and developing.[1] Though we are good at solving problems, if we are to survive, we at least must address the

right problems. Unfortunately, contemporary American education seems to ignore many of the vital issues that bear on survival and the future of mankind. Those who plan and construct the school curriculum must identify and address these issues if youth are to have the opportunity to solve future problems.

The "age of exuberance" of the past 400 years flourished on the abundant natural resources available to Europeans by the discovery of a second hemisphere and the invention of technologies necessary to exploit them.[2] The environmental problems of the present are the result of approaching or exceeding ecosystem capacities which form natural limits to growth. Interrelated aspects of current environmental problems include overpopulation; depletion of fuels, vital minerals and water; degradation of land by overuse and erosion; loss of wildlife habitat to development; extinction of species and consequent loss of planetary gene pool; diversity and stress on ecosystem tolerance; limits for toxic byproducts of human activity, (such as oxides of nitrogen, which form acid rain, and carbon dioxide, which contributes to atmospheric heating through the "greenhouse effect").

Limits to Growth

Meadows, et. al., in *The Limits to Growth* suggest that there are both physical and social requirements for continued economic and population growth. Physical requirements include food, raw materials, fossil and nuclear fuels and the ecological systems of the planet which absorb wastes and recycle important basic chemical substances. These ingredients are in principle tangible, countable items, such as arable land, fresh water, metals, forests, and the oceans.

There are also social requirements. Meadows, et. al. state:

> Even if the earth's physical systems are capable of supporting a much larger, more economically developed population, the actual growth of the economy

> and the population will depend on such factors as peace and social stability, education and employment, and steady technological progress.[3]

Much is presently known about the physical requirements the ecosystem capacities need to sustain a population. Overpopulation is such an acute problem because it increases according to the pattern of "exponential arithmetic." Exponential growth increases by a constant percentage of the whole in a constant time period. For instance, yeast cells which divide into two cells every ten minutes, for each cell, there will be two cells (an increase of 100%) by the next ten minutes there would be four cells, then eight, then sixteen, etc. Exponential increase is deceptive because it generates great numbers in a short period of time. A French riddle for children illustrates another aspect of exponential growth—the apparent suddenness with which it approaches a fixed limit.

> Suppose you own a pond on which a water lily is growing. The lily plant doubles in size each day. If the lily where allowed to grow unchecked, it would completely cover the pond in 30 days, choking off the other forms of life in the water. For a long time the lily plant seems small, and so you decide not to worry about cutting it back until it covers half the pond. On what day will that be? On the Twenty-ninth day, of course. You have one day to save your pond.[4]

It is useful for mankind to think of exponential growth in terms of doubling time or the time it takes a growing number to double in size. What are the limts to growth on planet earth? World population since 1650 has been growing exponentially.

"The global lily pond in which four billion of us live may already be at least half full. Within the next generation it could fill up entirely."[5]

A fundamental law of nature, first recognized by Thomas Malthus in 1798, is that population growth is limited when resources are finite.[6] "The universe may or may not be finite," states ecologist Garrett Hardin, "but prudence demands that we assume that the portion *practically* available to humankind is finite....The analytical...must be that of a closed system."[7]

The potential number of humans the earth's resources can support is not known since authorities disagree on resource reserves; and the potential of technological invention to extend resource availability is also unknown. The National Academy of Science estimates that the maximum population is 30 billion, projected to be approached in the late 21st century.[8] Salk and Salk project that a maximum of about 11 billion could be reached by the same date. Their model assumes growth stabilization as resource limitations become more acute. If the projection considers more than a subsistence level of economy for the future population, the above estimates are much too high. In fact, some ecologists believe that at a European level of technological life,[9] global carrying capacity has already been exceeded.[10]

The greatest population pressure on environmental resources is in areas where there are no known resources to sustain the impending numbers of people, even at the barest level of subsistence. Few underdeveloped nations are underpopulated. At present growth rates, the population of southest Asia will double in 27 years; Latin America will double every 24 years. Whereas the industrialized areas of the next century, the underdeveloped nations of the world, which now support approximately 2.5 billion, will have to support approximately 40 billion.

Of course, for this level of population to be reached, there must be some supporting level of resources, and few scientists have ventured to predict that such resources will be available. Instead, the higher population growth rate in the third world portends an ever-widening gulf between the rich and poor nations of the world.

Food

Inadequate data are available to determine exactly how

many of the people of the world are under-or malnourished. There is, however, general agreement that the number is very large. Perhaps, the percentage of the population of the less industrialized countries is as high as 50 to 60 percent. Robert McNamara claims that,

> Among the 2 billion people living in the more than 100 developing countries that the World Bank serves, there are hundreds of millions of individuals barely surviving on the margin of life, living under conditions so degraded by disease, illiteracy, malnutrition, and squalor as to be denied the basic human necessities. These are the marginal men, men and women living in absolute poverty, trapped in a condition of life so limited as to prevent realization of the potential of the genes with which they are born, a condition of life so degrading as to insult human dignity—and yet a condition of life so common as to be the lot of 40 percent, some 800 million, of the peoples of the developing countries.[11]

Certainly the race for food is one of the most publicized aspects of the population explosion problem, but according to Heilbroner, more threatening is the consequence of urban decay.

> For the torrent of human growth imposes intolerable social strains on the economically backward regions, as well as hideous costs on their individual citizens. Among these social strains, the most frightening is that of urban disorganization. Rapidly increasing populations in rural areas of technologically static societies create unemployable surpluses of manpower that stream into the cities in search of work....The cesspool of Calcutta thus becomes more and more the urban degradation toward which the dynamics of population growth are pushing the poorest lands.[12]

Heilbroner envisions the descent of large portions of the underdeveloped world into steadily worsening social disorder. He identifies aspects of the worsening social disorder as shorter life expectancies, further stunting of physical and mental capabilities, political apathy intermingled with riots and pillaging when crops fail. He expresses concern that such societies easily fall prey to dictatorial governments serving the interests of a small military upper class:

> Thus the eventual rise of 'iron' governments, probably of a military-socialist cast, seems part of the prospect that must be faced when we seek to appraise the consequences of the population explosion in the underdeveloped world. Moreover, the emergence of such regimes carries implications of a far-reaching kind. Even the most corrupt governments of the under-developed world are aware of the ghastly resemblance of the world's present economic condition to an immense train, in which a few passengers mainly in the advanced capitalist world, ride in first-class coaches, in conditions of comfort unimaginable to the enormously greater numbers crammed into the cattle cars that make up the bulk of train carriages. To the governments of revolutionary regimes, however, the passengers in the first-class coaches not only ride at their ease, they have enriched their lives by those who ride behind them. How long will the rest of the world permit this social injustice to continue? The problem of war as the second of imminent dangers is great indeed.[13]

Problems of Development

The context for future economic development is that of finite and ever more inaccessible natural resources. Meadows, et.al, call for an immediate reduction of 75 percent in the rate of usage of natural resources. They see no prospect of providing for the rest of mankind the current standard of living in the U.S. and Europe. Non-renewable natural resources, increasing pollution, and nuclear problems add to the problems of development.

Nonrenewable Natural Resources

Despite the certainty of our knowledge that there is a limit to increased demands on planet earth, little is known of how much time our species has to adjust to a "no-growth" life style. There are so many variables with which to deal. The consumption of nonrenewable natural resources, such as petroleum, iron, copper, nickel, chromium and lead, is now a crucial problem. If the current rate of consumption continues by the year 2050, some minerals may be exhausted.

Other nonrenewable natural resources are productive farmland and aquatic habitat. The prospects of increasing global food production are dim because of the precarious present condition of the resource base. Unfortunately, the world's biological systems are under great stress. (1) Agricultural production is diminishing where land is being degraded, (2) fish catches are declining due to systemic stress, (3) deserts are encroaching on farm land and soil erosion is widespread (especially in third World Countries) and (4) fuel is increasingly scarce in the Third World, causing more and more villagers to burn cow dung which they once used as fertilizer on the fields.[14]

The consequence of soil depletion and degradation will be lower food production, with severe consequences for a critically limited sustainable human population.

Increasing Pollution

The ultimate certainty of environmental deterioration and loss of nonrenewable natural resources is another threat posed by population and economic growth.

1. The few kinds of pollution that actually have been measured over time seem to be increasing exponentially.
2. We have almost no knowledge about where the upper limits to these pollution growth curves might be.
3. The presence of natural delays in ecological processes increases the probability of underestimating the control measures necessary, and therefore of inadvertently reaching those upper limits.
4. Many pollutants are globally distributed; their harmful effects appear long distances from their points of generation.[15]

Pollution is more than a nuisance; it can destroy the productivity of biological systems. Too much waste is toxic to life in the soil, in the oceans, and in fresh water lakes and streams. There are limits to the ability of natural systems to reintegrate the by-products of human activity. Nature can only tolerate so much waste. Oceans are becoming massive sinks for humankind's waste. Oil, chemical effluents, radioactive waste, organic waste from humans and animals, pesticides, and other wastes are routinely dumped in the oceans. The decrease in fish catches, major fish kills, and oil spills are reported with increasing frequency in the news media.

By-products of human activity are putting great stress on the ability of the atmosphere to maintain the protective ozone layer, without which all life would be subject to destructive ultraviolet radiation from the sun. The burning of carbon compounds, including wood and fossil fuels, add to the carbon dioxide in the atmosphere and contribute to climatic change. The same fuels, when burned, release nitrogen and sulfur compounds which form acid rain which is destroying the productivity of lakes and soils.

The present rate of extinction of plant and animal species is higher than at any other time during the history of the earth. Diversity of global life is diminishing. If too many species are lost, the complex interconnecting biological web could begin to unravel. All living animals depend directly or indirectly on plants for food. Plants depend on soil isolation: forms support other forms of life.

Nuclear Problems

Meadows et. al, referred to the social necessities for

continued population growth and economic development, specifically, to the factors of peace and social stability. Population growth has intensified competition for limited resources and has led to greater social instability. Technological advances have exacerbated this problem by providing governments with means of mass destruction never imagined in past generations. These means include chemical, biological and nuclear weapons.

There is a vast difference in destructive power between conventional and nuclear weapons. During the Second World War, Hiroshima and Nagasaki were each wiped out by a single atomic bomb. The explosive power of those early primitive atomic weapons was equivalent to one-hundred times the amount from conventional explosives. Today, one hundred times the amount of explosive power can be packed in a single warhead weighing less than one-fifth of either of the first two bombs. No one knows what the exact number of existing nuclear warheads is today, but according to an authoritative United Nations report, it is probably in excess of 40,000, with the explosive power ranging from 100 tons up to more than 20 million tons equivalent of chemical high explosives.[16]

Nuclear war would be an unutterable disaster to all inhabitants of planet earth. Nuclear war not only threatens all human civilizations but the stability of the earth's climate and the ecosystem. Given the knowledge of the potential for such a cataclysmic disaster, it is unlikely that government leaders of any nation would actually use such weapons. But insane leaders have emerged in the past, and it is known that severe circumstances can lead normally sane people to commit insane acts in desperation. Further, there is the chance of the initiation of conflict by accident or by international blackmail.

Heilbroner suggests that competition for resources may lead to aggression:

> Yet two considerations give a new credibility to nuclear terrorism: nuclear weaponry for the first time makes such action possible; and 'wars of redistribution' may be the only way in which the poor nations can hope to remedy their condition.[17]

In other words, a terrorist nuclear attack could be waged on a city in an advanced nation that had refused to pay ransom for natural resources taken out of Third World nations.

The description of global problems could be continued in both the physical and social arenas but it is already clear that the problems are many and all are related to population growth. Major reconnaissance studies of the future have unanimously concluded that, as human population is rapidly approaching global carrying capacity, the most significant characteristic of the future is going to be ecological scarcity.[18] Societies have historically evolved cultural traditions which protected and preserved the environmental resources necessary to sustain their populations. Today's global technoculture, primarily a product of Western European values, lacks the tradition of ethics of restraint. The necessary ethics emmanate from the science of ecology which has developed a model of the relationship between our species and the supportive ecosystem.

Ecological limits have been reached by human populations in the past but, "In previous times during periods of crisis, it was only individual nations and certain cultures that were threatened. Today the destiny of all humanity is at stake."[19]

Educational Implications

It is imperative, given our circumstances, that education helps the young gain an understanding of ecosystem relationships and the consequences of changes. Learning environments should help students understand the human species in a reciprocating relationship with the environment. Students need to explore the possiblities of future environments, to search answers to such questions as "What do we hope that we can become?" and "What do we want our environment to be like in the 21st Century?"

A great barrier to the kind of education that is needed is that we are trying to apply concepts of an outdated world view to the contemporary scene. This concern is expressed by outstanding writers in a number of fields such as the physicist Fritjof Capra,[20] social forecaster John Naisbitt,[21] biologist Rene Dubos,[22] economist Robert Heilbroner,[23] futurist Alvin Toffler[24] and many others. The mechanistic view consists in breaking up thoughts and problems into pieces and arranging these in a logical order. The belief that all aspects of complex phenomena can be understood if reduced to constituent parts is the dominant attitude in science and is followed in other disciplines as well. Cartesian methods of scietific inquiry aim at an "objective" description of nature that is "value-free." Newtonian-Cartesian probem-solving techniques are not wrong, but modern science has come to realize that all theories are approximations to reality. According to Capra, the question then will be:

> How good an approximation is the Newtonian model as a basis for various sciences, and where are the limits of the Cartesian world view in those fields? In physics the mechanistic paradigm had to be abandoned at the level of the very small (in atomic and subatomic physics) and the level of the very large (in astrophysics and cosmology). In other fields the limitations may be of different kinds; they need not be connected with the dimensions of the phenomena to be described. What we are concerned with is not so much the application of the mechanistic world view on which Newtonian physics is based. Each science will need to find out the limitations of this world view in each context.[25]

A systematic approach to research can be heuristic; many futurists would have us embrace—not dismiss—paradox and contradiction, hunch, imagination, and synthesis. There is a need to look at interrelationships, to look in larger frames of reference. The future is fluid, not frozen; it is dynamic, not static. We need to become better synthesizers to ward off fragmented, haphazard thinking.

Toffler states:

> In all intellectual fields, from the hard science to sociology, psychology, and economics—especially economics—we are likely to see a return to large-scale thinking to general theory, to the putting of the pieces back together again. For it is beginning to dawn on us that our obsessive emphasis on quantified detail without context, on progressively finer and finer measurement of smaller and smaller problems, leaves us knowing more and more about less and less.[26]

Contemporary problems have resisted solution by old methods. What is needed is a new paradigm, a new conceptual framework which transcends the reductionist point of view. A systems view that is holistic and ecological is the conceptual framework that is needed *now*. This view is based on an awareness of the essential interrelatedness and interdependence of all phenomena—psychological, physical, biological, cultural and social.

Education As A Dynamic Connector With Past and Future

Living things exist only in an environmental context. Living organisms must continually give and take with their environment. As humans interact with nature, they change the environment, which in turn brings about changes in human behavior. Life is creative by its very nature, fitting to a world that is in continuous change. The organism grows in this reciprocating relationship with its environment.

There is, today, a new vision of the possibilities of man and his future, provided by the growth of science and technology. In a sense, the earth becomes smaller and smaller as our horizon becomes enlarged in the search for understanding of the earth and the universe. This brings about new goals, which in turn changes future potentials.

Social and ecological problems are increasing and they

place stress on our ability to cope. More than ever, there is a need for healthy people who have the characteristics that Maslow describes in his concept of self-actualizing people:

1. Superior perception of reality
2. Increased acceptance of self, of others and of nature
3. Increased spontaneity
4. Increase in problem solving
5. Greater freshness of appreciation and richness of emotional reaction
6. Increased indentification with the human species
7. More democratic character structure
8. Greatly increased creativeness[27]

The quest for identity, for self-renewal, for the understanding of man's interrelationship with his environment should be central to education. In essence, education should be embracing an holistic view of the reciprocal relationship of man and the rest of nature, it should serve as a dynamic connector between the generations coming on and those who preceded. To live fully human lives—free, strong, and in peace—man must feel his connections with the generations past, present, and future. Being concerned not only about continued life, but also about the quality of life, educators need an ecological perspective which is not now present in many educational institutions.

A System's View

A system's view adopts a frame of reference that is of "fields"—of more or less inclusiveness. "Universe" is the name of the largest field of the known and knowable. Beyond is the still larger field of the unknown and infinite.[28]

Within the universe are concentrically arranged fields: the galaxy, solar system, earth, system of life on earth, system of life to species-man, species-man to individual and individual to his/her consciousness. These are open systems so that each is accessible to the next—going in or out. "...the largest, the infinite, is thus accessible to my consciousness, and my consciousness, in return, is accessible to it."[29] Thus consciousness is interger within the ecosystem, on out to infinity. The key to this concept is that it focuses on larger frames of reference to larger and sequentially larger systems, to the individual's seeing his place in the universe. This system approach is growth in an ever increasing inclusiveness; thus life is an integrating process.

Conceptual Framework of Integrating the Disciplines for Problem Solving

A society or a culture can be either growth-fostering or growth-inhibiting. The sources of growth and of humanness are essentially within each person, but society as a whole can help or hinder the implementation of humanness. The world is in itself interesting, beautiful, and fascinating. Exploring it, manipulating it, contemplating it, enjoying it are all motivated kinds of action (cognitive, motor, and aesthetic needs).[30]

The kind of education that will develop systems thinking in students cannot be experienced entirely within four walls of a classroom. If the young are going to explore, manipulate, play with, contemplate, integrate disciplines and enjoy the world, it is necessary to get them out of the artificial environment of the classroom and into the natural environment.

Interrelatedness of Global Communities

Historically, the world consisted of separate and isolated regional societies. The social structure of the world has become progressively more globalized. Evidence is clear that nations are becoming more interconnected. Yesterday is over and we must adjust to living in a world of interdependent nations.

Educational programs need to be developed in which students develop a conscious awareness of perceiving one's involvement in a global society. Social skills which encourage individuals to reach judgments, make decisions, take action, and be responsible in a global society need to be developed.

Conceptual Shift from Short-Term to Long-Term Considerations

The reductionist point of view has influenced also the way in which we look at time in planning. American institutions have been locked in short term planning. So often, planning is done at the expense of the future to make the quarterly report look good or to make the bottom line of the annual report more attractive. Blame for the national economic decline is placed often on American business managers. Their preoccupation with short-term results and quantitative measurements of performance caused them to neglect the kinds of investments and innovations necessary to increase the nation's capacity to create wealth.

A shift from short-term to long-term planning is necessary to transform education. Education, historically, has been geared primarily to cognitive learning, the acquisition of information. Much of education has been oriented towards training for earning a living. Skills are necessary for living, but not sufficient. Students need to learn about feeling and valuing and they need to learn that long term planning is necessary in order to present realities. The world we now inhabit is too complex, too ambiguous for easy generalizations or simplistic "quick fix quarterly reports." As decisions are made, attention must be given to the long term consequences.

Shift from Narrow either/or Society with Limited Options Into A Multiple Option Society

Toffler makes the point that a new civilization is emerging during our lives. From his point of view we have emerged from the First Wave of Change by the invention of agriculture. The Second Wave was touched off by the industrial revolution. We are now the children of the next transformation, the Third Wave. Many have attempted to describe this change. Some speak of the Electronic Era, Space Age, Information Age, Global Period, or Technetronic Age. Toffler states that the Second Wave produced a mass society, while the Third wave will "demassify" us. The entire social system is moving toward a higher level of diversity and complexity.[31] This point of view helps to explain the collapse of consensus. People lament, "We have lost our national purpose," or "Schools are not fulfilling the needs of society." Moreover, special interests make demands on Bureaucrats and legislators.

The increase of diversity means that, even though our form of government is theoretically founded on majority rule, it may not be possible to form a majority. As educators, we need to look at this issue. The wide range of choices which the generations coming on will confront create multiple options. Work arrangements, new definitions of family, diversity in the arts, and life styles in general are only some of the issues. Traditional values and "old fashioned" concepts to the contrary, the schools of the near future must increase the options and the choices presented to children if we are going to be prepared for the inevitables of the future.

Summary

The world of the future seems destined to be defined by conditions of ecological scarcity, an undeniable conclusion, given a finite ecosystem and ecological laws. The present time is an historic watershed, the passage from "the age of exuberance" into a "post-exuberant age."[32] Patterns of behavior, based on old world-views and values which might have been *adaptive* in frontier times, may be maladaptive in the future.

The most remarkable adaptation of the human species is the ability to learn. Hence, environmental problems can be addressed. If the foregoing analysis is correct, efforts to educate the population about the consequences of population growth and resource consumption are imperative. "The schools alone cannot set it right. But it cannot be set right without the schools"[33]

If man is to survive in freedom and peace, many of the issues addressed in this paper must be placed on the agen-

da of mankind. The development of a new holistic, problem-solving, conceptual framework is essential if we are to deal effectively with the problems at hand. Attention must be directed toward: (1) A new systems view of life, mind, and consciousness; (2) a new conceptual framework of integrating disciplines for problem-solving; (3) a new understanding of interrelatedness of global communities; (4) a shift from short-term to long term considerations; (5) a change in perception from a narrow "either/or" society with limited options into a multiple option society. Educational patterns that move in these directions need to be developed. The use of words such as discover, search, inquire, inspire, invent, structure, synthesize, analyze, self-direct, involve, question, reexamine, reevaluate, reveal, expand, explore and stretch out beyond should be common in our description of educational programs and should become reality in all educational experience. As Erich Fromm has said:

> We are in the very midst of the crisis of modern man. We do not have too much time left. If we do not begin now, it will probably be too late. But there is hope—because there is a real possiblity that man can assert himself, and that he can make the technological society human.[34]

FOOTNOTES

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