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Liberal learning in American higher education.

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LIBERAL LEARNING IN AMERICAN HIGHER EDUCATION

A Dissertation Presented

By

KEVIN F. GRENNAN

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

DOCTOR OF EDUCATION

May 1981

School of Education

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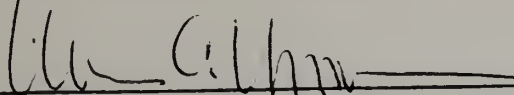
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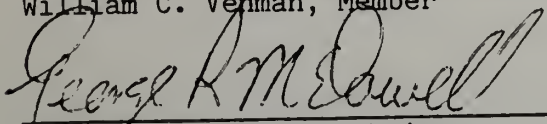
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DEDICATION

To Elaine, Aleel, K.C., and Teig: this dissertation
was done with and for them all.

ACKNOWLEDGMENTS

This dissertation is the result of a great many years of thinking and reading and talking about higher education in America. It is something that has been a part of me for all that time, and will be a part, I'm sure, for some time more as I continue to hone my thoughts and ideas of what could be. In this period here have been many people who contributed something of value to my investigation; many of these did so by their carefully crafted statements, some by their actions -- indeed, some few contributions were provided, unwittingly, by the practices of individuals who knew better, but acted otherwise. And since so much of what I've written about has to do with right actions, eupraxia, even those negative examples have had an effect.

I want to cite those who acted rightly: Bill Krinsky was helpful in the earliest stages, helping set the dialectic; Oswald Tippe and Bill Kornegay provided historical perspectives; George McDowell was an absolute gem on my committee, challenging and supporting and keeping a sense of balance; Meyer Weinberg has provided support and ideas, and I'm grateful for both.

There are two people who deserve special mention: Bill Venman has been with me since the beginning, and well before I thought of writing a dissertation he was working with me on education philosophies and practices; David Schuman is, quite

simply, the single person who helped me put it all together, then take it apart and put it together better.

Finally, without Elaine Grennan there would have been no beginning, no middle, and no end.

ABSTRACT

Liberal Learning in American Higher Education

May 1981

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This study explores the often conflicting assumptions that the public and practitioners make about American higher education. In particular, it proposes that we have allowed much of these assumptions to assume the status of myth. The consequence is an imprecision in higher education: it is seen as both training for jobs and at the same time providing us with a heightened aesthetic and moral sense. This is rarely true.

The review of the literature of the history of higher education reinforces this confusion. Curricular shifts are recorded with very little examination of the consequences they may have on the institution, itself; new missions, goals, and purposes are added with little concern for the overall effect this process of accretion may have. In the last 100 years, disciplines, majors, and other academic responses have occurred to meet the training needs of industry; the atmosphere and goals of the arts, literature, and science are highly professional, as well.

The consequences for higher education include trivialization of courses and majors, isolation of units within the universities, learning that exists only in-order-to acquire narrow skills or credentials, and a continuing rationalization of the connection with the marketplace. There is a lack of critical self-analysis by the institutions.

Proposals for reform have, on occasion, been advanced in recognition of this proliferation of purpose. However, the trend in American higher education seems to be moving ever closer to vocationalism, in spite of proposed reforms. This movement is being effected at the expense of general or liberal education. The consequences of this trend do not seem to be a major concern in most educational circles, or to be fully understood.

The study concludes that an important, even vital part of higher education is being sacrificed to the utilitarian ideal. This reality may force a rethinking of our myth; perhaps, even a reform of our educational ideal.

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Introduction

When we use the term "education," particularly as part of the phrase "higher education," we use it as a portmanteau word and there is as much disagreement as agreement on the contents of that term, both what is and what should be. These interpretations form the "myth" of education: myth in the sense of expressing something deeply felt by the individuals who discuss education, participate in it, and pay for it. Myths are those essentially unexamined but widely held pieces of folk-lore that achieve and maintain a life all their own. To question them is seen as rude and even iconoclastic. Myths are at the foundations of our thinking and acting.

Myths can be "real." Real in the sense that the myth exists, of course, but also in the sense that what we believe can also happen. If part of the myth of higher education is that we become more intelligent, and after going to college one actually is so and acts it, then that is "real." The myth works. And of course, the business about being more intelligent is in fact part of the myth. But only part. Because another part has to do with being more intelligent about very specific things, like biology in order to become a doctor, or accounting in order to become an accountant, and so forth. Sometimes that part of the myth doesn't work. When a myth does not work we are disappointed and frustrated. And then we start tinkering with those institutions

that serve the myth.

We believe that institutions of higher education house teaching, research, and service: all these are for the common weal. Out of these institutions come bright, well-rounded men and women who will be better citizens, better employees in better jobs, better in every way. At the same time, some critics are lashing out at these young men and women and calling them the "new Carthaginians," highly skilled technicians with no appreciation of their culture, or other cultures.

That is a most important criticism. It strikes at the heart of the myth when people complete their higher education yet do not act as educated men and women; we have to be concerned, as well, when individuals act in an educated manner yet have never attended or completed college.

This dissertation is going to examine the current state of higher education in America. In the first chapter, I will define that imprecision and expand on those concerns, and I will also discuss another goal for higher education, the eupractic man or woman.

In the second chapter, in order to provide a clearer understanding of the present condition of higher education, I will review the past. Most histories of education concentrate on the specifics of institutions and their evolutions, curricular changes occurring, as it were, in a kind of ivy-covered vacuum. How often do any of us, as practitioners in the broad field of

education, stop to ask ourselves, "What am I doing here?" What are our real roles, and what should they be? What I intend to accomplish in this history is to underscore the tension that has always been present in higher education -- the tug-of-war between courses of study pursued for vocational or instrumental purposes and those for less instrumental ends.

In Chapter III, I will look more closely at the evolution of American higher education in the twentieth century, and will demonstrate the proliferation of missions and goals of the academy while at the same time the loss of any sense of focus, other than the immediate needs of society.

The chapter will also carefully review three major proposals for revising the curriculum in order to return the undergraduate experience to something more closely aligned with liberal education and less directly linked to the workplace.

The fourth chapter is a detailed examination of one institution in the 1970s, the University of Massachusetts at Amherst. This case study intends to show one institution's trends to vocationalism in higher education, explain the origins of those trends, and suggest some consequences.

The final chapter will summarize the versions of higher education that have developed in America, and will also posit some scenarios for the future.

C H A P T E R I

TENSIONS IN AMERICAN HIGHER EDUCATION

The Liberal Arts versus Vocationalism

In 1974, I attended the Twenty-Ninth National Conference on Higher Education, sponsored by the American Association for Higher Education. During that conference I found the opportunity to engage in rather lengthy and at time heated discussions with a colleague over the issue of curricula. We argued (without any satisfactory resolution) the merits of a "liberal arts" or "general education" approach as opposed to a more "narrow" approach that was avowedly vocational, a degree in business, or engineering. Obviously we were airing biases based on personal experiences. We did not realize that we were anticipating a national debate.

It was, therefore, timely that one of the speakers at the conference was James O'Toole, chairman, HEW Task Force on Work in America. His topic was "Education, Work, and Quality of Life," and it is worth quoting one of his conclusions:

. . . one is inevitably drawn to traditional liberal education as the most relevant form of career education. All we know for certain about the future is that it will be turbulent and filled with unpredictable change. Historically, the people most able to adapt to the vicissitudes of social life have been the liberally educated. The person who has learned how to learn can always pick up a skill that has become essential. For the liberally educated, learning has always been a way of life. The person best able to cope

with change is the one who has the broadest background and is thus the most flexible. (O'Toole, 1974, p. 20)

There was much about that statement that I found pleasing, and so, apparently, did most of the persons in attendance. Before and since that time, O'Toole's argument has been used by a variety of individuals and institutions to defend a "traditional liberal education" against the encroachments of students, other institutions, tax-payers, citizen-activists, and their own bureaucracies. Indeed, not long after, the United States Commissioner on Education, Terrel H. Bell (1975), addressed the question, "Does the small private college have a future?" by answering, "Yes ... if it rolls with the times." He went on to say that if the colleges in question were going to survive they would have to adapt themselves to those economic strains that affect them; more important, they would have to change academically by providing the knowledge students need to succeed in the world of work. A college totally devoted to the liberal arts is "kidding itself. . . . To send young men and women into today's world armed only with Aristotle, Freud, and Hemingway is like sending a lamb into the lion's den. It is to delude them as well as ourselves" (Bell, 1975).

Later that year David A. Trivett (1975), in an article entitled "Jobs and College Graduates," agreed that "'general education' and 'liberal arts' are usually losers when the debate turns to the relationship of education and jobs," but pointed out

that "the 'bad press' liberal arts receive because of difficulties students encounter finding jobs is harmful because potential students and budget watchers are misled into making decisions on the basis of inadequate facts." Trivett cited several studies that indicate the traditional placement surveys take place too soon after graduation, that longitudinal studies show liberal arts majors are "satisfactorily employed," employed in jobs with career potential, making decent salaries, and that one survey demonstrated that "of those graduates who were in business administration, the majority did not major in business but in a liberal arts discipline."

"Aha, chalk up another one for the liberal arts," I thought. At first. Because when I went back to consider what was being said about higher education, there was a basic consideration being left out consistently, and something else being counted that seemed to dominate everything. Briefly put, what was being left out was that education has an intrinsic worth and that, indeed, the unexamined life is not worth living; what was counted was the value of learning how to learn, and the justification of education in terms of gaining particular kinds of employment. In this content, the liberal arts were being compared with those more avowedly vocational degrees, and were being condemned or praised on the same bases and criteria.

An outstanding example of this sort of educational perspective is an article that appeared in the September, 1967

issue of College Management, entitled "Vocational Education for Future Scholars." The focus of the article was the new and unstructured curriculum of Amherst College, and the courses entitled "Problems of Inquiry." Its message was clear: the liberal arts were the vocational education for tomorrow's college faculty.

One might ask where this notion originated that a college education was supposed to supply anything other than skills for jobs? In order to answer that question I must draw as much on my personal experience as on the statements or writings of others. In doing so, I am expressing part of the "myth" of education. For certainly the framers of the Constitution of the Commonwealth of Massachusetts had something other than vocational training in mind when they incorporated the following language in Part 2, Chapter 5, Section 2:

Wisdom and knowledge, as well as virtue, diffused generally among the body of people, being necessary for the preservation of their rights and liberties; and as these depend on spreading the opportunities and advantages of education in the various parts of the country, and among the different orders of the people, it shall be the duty of the legislatures . . . to cherish the interests of literature and the sciences, and all seminaries of them.

This demonstrates their version of the myth: they saw wisdom, knowledge, and virtue as the outcome of education. The use of this wisdom, knowledge and virtue anticipates Jefferson (1816): "If a nation expects to be ignorant and free, in a state of

civilization, it expects what never was and never will be" (p. 4).

Somehow this transcends Commissioner Bell's more utilitarian approach. It is also drawing on Plato's argument in the Republic: in order to fully discuss a just society we must explore the kind of education that will bring that society into existence and sustain it. There is a thread from Plato's understanding that education was basic to conceptualizing and running the state to the understanding of the Massachusetts legislators that it was basic to the preservation of rights and liberties.

I think I can round out this version of the myth of education with a quotation from Daniel G. Aldrich, Jr. (1965), Chancellor of the University of California at Irvine:

If formal higher education is to be meaningful to a man it must have given him somehow, somewhere a sense of values and the courage with which to defend them. Such a sense of values derives from an ability to discriminate not only right and wrong but also between the significant and the trivial, between that which is cheap and shoddy and that which has integrity and beauty. To put the matter another way, the educated man should have a well-developed and refined good taste which he uses as a yardstick in making his moral, social and aesthetic judgments.

Aldrich's statement, of course, runs directly counter to the version of the myth as expressed by O'Toole, Bell, and Trivett. What the latter were expressly not talking about was a "well-developed and refined good taste:" rather, they were either

extolling some instrumental skill they felt the liberal arts could impart, or denying the value of them completely (Bell).

These differing versions of the myth actively work at cross-purposes. The result can be more than dissonance within the myth: it can be the re-focusing of institutional resources on the training aspects of the myth and the ultimate and inevitable neglect of that approach which declares the riddle of Man a more important investigation than the acquisition of certification in the methodology of earning a living.

Listen, for example, to these voices from Cambridge, Massachusetts in 1976: in March, Amanda Aldrich, a Radcliffe College sophomore, "described the student body as intensely job-oriented, careful to avoid risks in education, and seemingly unconcerned with educational breadth" (Botstein, 1976, p. 24).

Six months later, in September, Derek Bok (1976b), President of Harvard University, addressed the freshman class of the College and told them:

What society lacks today is not people who are trained for skilled jobs and professional careers. What society needs are people with a sufficient breadth of knowledge to provide them with judgment, perspective and taste -- people with a sensitivity for the problems of others and a strong sense of ethical principles. These are the subtler goals of a liberal arts education and it would be tragic if you were to disregard them in favor of a short-sighted effort to use these college years to get a head start on your professional training.

Six months and a world separate those two statements.

I can bring some of these issues into clearer focus by examining my own undergraduate experience. When I applied to Harvard College in the 1950's, my reasons were the usual melange: parental expectations, peers, a brother who was already in college, and some vague notions about getting smarter and preparing for a career. College seemed the logical, the only place in which one achieved these nebulous goals.

Once in college I chose a major, tried to make a connection between it and some arbitrary career choice, and muddled my way through the next four years. I was not a very good student: I maintained a "gentleman's 'C'" and led a varied and active social life. The pursuit of the beautiful and true was conducted (if at all) as an extracurricular activity. I no longer thought that I would find it in my courses: they had become requirements for graduation--necessary but often unpleasant. Graduation became the goal.

Robert Paul Wolff (1969) has pointed out that

The "undergraduate" years, either in school or out, should be devoted to the successful completion of a critical stage of intellectual maturation, not to the accumulation of precisely one hundred and twenty points of credit.(p. 150)

If that stage were completed in my case it occurred in spite of, not because of the educational process taking place. Yet, for those individuals actually experiencing the process, Wolff is helpful:

The child as a student masters a number of

linguistic and mathematical skills and absorbs a body of information with very little psychic conflict. But on the threshold of adulthood, he is suddenly faced with a problem much greater than any his schooling has ever posed. He must decide who he is, and hence who he is going to be for the rest of his life. He must choose not only a career, a job, an occupational role, but also a life-style, a set of values which can serve as his ideal self-image, and toward which he can grow through the commitment of his emotional energies. These choices are fateful, dangerous, highly charged, and are felt as such by the young man- or woman-to-be. (p. 16-17)

I do not agree with all that Wolff contends is happening, but it is safe to say that an identity crisis of some magnitude occurs for most young adults during the period one normally attends college. An example was the compulsion I felt to elect a major: I made this choice under the impression that I had to (I did) and that the major was to connect in some explicit or implicit fashion with one's career choice (this notion was never discouraged). In a way, I was lucky, since I was attending one of what Wolff labels the "top colleges" and was among those students

confronted with a mixed program of broad survey courses designed to make him "liberally" or "generally" educated, more specialized courses from among which he could select a sample, and his last year or two, a departmental "major" requiring him to concentrate on a single discipline. In addition, he would have the opportunity to do independent research, usually as a means to a degree with honors. The premises of this sort of undergraduate program were basically two: first, that the typical freshman had not yet had a chance to roam at will in the realm of ideas, acquainting himself with the excitements and potentialities of

intellectual life . . .; and second, that several years should be given over to relatively uncontrolled experimentation before a young man or woman was required to make a decision about a career. (pp. 91-92)

As a consequence, when I decided sometime in my junior year that I did not want to pursue law as a career (I had no idea what I would substitute: it had suddenly occurred to me that I no longer envied or pitied those people who could at the age of eighteen decide to be a doctor and begin the arduous and single-minded pursuit of that grail -- as for me, there would be time enough to decide), I did not feel that I had made a fatal error in my choice of major or that I had completely wasted my college career to that point.

But what I had done up that point was to narrow my focus, to narrow it not because I wanted to master a specified body of knowledge or a form of intellectual discipline before going on to another body or form, but to narrow it because it appeared necessary to do so in order to prepare myself for an occupational role. Even then I knew that that narrowed focus was a diminishment of the educational process and consequently of me. In other words, while I had not "wasted" my college career, that college career had not measured up to its potential because for most of it I thought I was pursuing a credential, not an education.

The interesting but disconcerting fact was that, after completing my baccalaureate degree, society began to treat me as

if I had somehow gotten smarter and had at the same time developed the "refined good taste" Aldrich (1965) refers to. I certainly had taken many courses and learned many things which I never knew before. But I also knew that I was not as smart as most people wanted to believe, and that my developing sense of the aesthetic had been aided more by my extracurricular activities than by my classroom assignments. Looking back, the Harvard College I attended in the 1950s was considerably different from the Harvard Henry Adams (1961) knew in the 1850s but his description of the experience seems apt:

In effect, the school created a type but not a will. Four years of Harvard College, if successful, resulted in an autobiographical blank, a mind on which only a watermark had been stamped. (p. 55)

Apparently, that water mark was sufficient: people assumed that since I had completed a long and expensive rite of passage that I could move to a level in society commensurate with my newly acquired taste and capability. My having graduated from college raised their expectations.

One form of raised expectations is that of the fitting job, or occupational role. Let me try to explain that with a story.

The year before I entered college my older brother informed me that a man named Fletcher (who worked as a purchasing agent for my father) had "wasted his education." My brother meant that Fletcher, who had graduated from Harvard in the twenties, should have secured more prestigious employment. My brother saw that

there should be a correlation between the amount and quality of one's formal education and the job one held in life. He was not expressing a radical view for his age, the times, or the culture, but something vital was left out of that normal and ordinary conclusion. There was no room for any consideration of Fletcher's life: was he a good and decent man, was he happy, did he have a well-developed and refined good taste which he used as a yardstick in making his moral, social, and aesthetic judgements? The more I think about that moment the more clearly I realize that my older brother had fastened on to the real purpose of college in America: what we really want from our advanced education is a "better" job, and we want that even if we haven't read Dewey.

Plato . . . laid down the fundamental principle of a philosophy of education when he asserted that it was the business of education to discover what each person is good for, and to train him to mastery of that mode of excellence, because such development would also secure the fulfillment of social needs in the most harmonious way. His error was not in qualitative principle, but in his limited conception of the scope of vocations socially needed; a limitation of vision which reacted to obscure his perception of the infinite variety of capacities found in different individuals. (Dewey, 1916, p. 309)

In other words, the refined good taste, real or assumed, was lumped together with "mastery of that mode of excellence" (again, real or assumed) -the real value being the utility of the college experience in getting and holding a job. (Certainly Aldrich was talking about something quite different.)

Let me go back and tie some of these thoughts together. Most of what I have been discussing is in the realm of "assumptions," assumptions about the process of going to college. Many of these assumptions have to do with a connection between college and what one does after college, one's career. For example: my choosing a major; the choices Wolff cites; the premises of the "top colleges" again cited by Wolff; the raised expectations that I noted; by brother's perceptions; Dewey's educational philosophy. Behind all of these assumptions is the belief that education is preparation or training for a vocation; less explicit but there nevertheless is the simultaneous belief that the vocations prepared or trained for will be prestigious and rewarding.

During the palmy days of the fifties and the sixties such belief was well-founded. White-collar, well-paying jobs did indeed follow hard on the heels of four years of college. And looking back on my own experience I can see that for many the connection between major and career was not often causal; what was causal was the degree itself. What happens when the cause-and-effect no longer works? What happens when our credo is challenged? What happens when people start writing (and reading) articles called "The Declining Value of College Going"?

For decades the American higher educational system has both provided individuals with training and education promising high earnings and occupational status, and supplied society with skilled specialists and white-collar

workers. In the 1950s and 1960s in particular, the job market for college graduates was exceptionally strong; education was a major means to socioeconomic mobility and national economic growth. . . . With a bull market, there was little incentive to examine the value of college education carefully: whatever it was that was being taught was paying off in good jobs for graduates. The response was simply to expand higher education --. . . (Freeman & Holloman, 1975, p. 24)

The very language is instructive. A college education has a measurable "value" like any commodity; the educational process is one of inputs, throughputs, and outputs; we operate in a world of supply and demand. Higher education, under pressure, describes itself in a way that Hannah Arendt (1958) deplored in her book, The Human Condition:

it is only in the exchange market, where everything can be exchanged for something else, that all things, whether they are products of labor or work, consumer goods or use objects, necessary for the life of the body or the convenience of living or the life of the mind, become "values." This value consists solely in the esteem of the public realm where the things appear as commodities, and it is neither labor, nor work, nor capital, nor profit, nor material, which bestows such value upon an object, but only and exclusively the public realm where it appears to be esteemed, demanded, or neglected. (pp. 163-164)

What Arendt describes here is the absolute neglect of any consideration of higher education as anything other than vocational preparation. What may have been ambiguous in my mind in the fifties, was clarified in a period of stress. The response from both within and without the academy was not to

point out that the assumptions were false or inappropriate, but to engage in a self-examination to discover how the academy had failed to impart marketable skills to its graduates.

Certainly there are some other assumptions about the purpose of a college education. Aldrich's (1965) assumption, for example, does not deal in the "values" of Freeman and Hollomon (1975), and his articulation strikes a responsive chord within me. Even in those unreflective years before and during my undergraduate experience I somehow had the notion that getting educated meant something liberating or broadening. And those two abstractions implied to me that I would comprehend more about myself, about my social and natural environments. And it necessarily meant something more -- that as a result of increased comprehension I would act in manner that would demonstrate my liberation. This acting out would, of course, take place not only in my vocation but in my life. Aldrich means that as well, and it occurs to me that either we were and are dead wrong, or that higher education moved rapidly while we weren't watching. Or that there has always been -- right from the beginning -- a kind of tension or ambiguity within the institution of education and in the public's view of that institution. And that in moments of stress or challenge it is not so much a process of clarification as an actual shifting of goals that takes place. In other words, the academy can and will accomodate essentially conflicting assumptions in periods of calm but (apparently) will

move rapidly and openly into the camp of utility and market values when really pressed.

This tension was addressed by Matthew Arnold in 1867 in his famous essay, "Sweetness and Light."

Plenty of people will try to give the masses, as they call them, an intellectual food prepared and adapted in the way they think proper for the actual condition of the masses. The ordinary popular literature is an example of this way of working on the masses. Plenty of people will try to indoctrinate the masses with the set of ideas and judgements constituting the creed of their own profession or party. Our religious and political organizations give an example of this way of working on the masses. I condemn neither way; but culture works differently. It does not try to teach down to the level of inferior classes; it does not try to win them for this or that sect of its own, with readymade judgments and watchwords. It seeks to do away with classes; to make the best that has been thought and known in the world current everywhere; to make all men live in an atmosphere of sweetness and light, where they may use ideas, as it uses them itself, freely, -- nourished, and not bound by them. (1867/1947, p. 60)

Arnold makes it quite clear that culture (or Aldrich's "refined good taste") is an admirable goal but always in danger of neglect. It is equally clear that what Arnold identifies as culture would fit neatly within most general descriptions of what an educated person should have. But my own experience and the testimony of others demonstrates that that goal is not often met or, worse, is set aside for the more measurable and economically beneficial one of vocational preparation. In the process, the very opportunities for the liberating effects of education are

necessarily being reduced or eliminated.

That is, a process of competition is set up between the instrumental course of higher education and that course I identify as the liberating one. There may be a problem with the latter course, as well, if we assume that a liberal arts degree in the opposite of the professional degree. For when, as at Amherst College (see above) and other prestigious (and not so prestigious) liberal arts colleges, even the liberal arts are preparatory to a specific career, that polarity does not work.

W. Roy Niblett (1974) contributes an historical perspective to this development of specialists and the preoccupation of higher education with preparation for vocations.

The two great wars of this century acted as further encouragement to places of higher education to produce people qualified in scientific and technical ways. ... they became training grounds for the greater and greater numbers of experts and specialists the nations required. Such directed demands have continued, among the causes being the pursuit of affluence by the developed countries and the calculating rationalism dominant in both capitalist and communist countries. ... A channelling of mental energy down narrow avenues can yield dividends -- with trained and clever economists, computer scientists, engineers, surgeons, research chemists, management experts, in great demand these last thirty years. On both sides of the Atlantic, however, the 1950s were years in which idealism in universities, including a concern with general education, was subjugated to what seemed an overriding need for the production of specialists and professionals -- a view which still predominates in spite of the significant efforts to replace or modify it. (p. 119)

Yet in spite of this production of specialists, we still

assume that someone graduating from a college or university is indeed entering the company of educated men and women. Education is anticipated as the product of such schools. And when we use the word education in that way we are talking about the refined good taste which one uses in one's daily rounds, in contrast to training, or to narrow specialization.

Eupraxia

Let me attempt some conclusions. There exists a continuing confusion within the institutions of higher education as to the meaning of "education." This is more than semantics: there may have always been tension between the goals of an education, but according to Freeman and Hollomon and others, that tension is rapidly being resolved.

Even in those institutions that one assumes would champion the liberal arts (which one would normally assume, again, as an antidote to credentialling) there are signs of concern and confusion. For example, Robert L. Belknap and Richard Kuhns (1977), of Columbia, describe it this way:

our universities have lost their old unanimity as to the areas of acceptable ignorance. . . . the curriculum as the sanctuary of traditional bodies of lore and modes of thought has been in part replaced by the curriculum as the exposition ground for the latest literary and social experiments. . . . We have turned our college into a transitional layer between sophisticated education, which is now for kids, and narrow professional training, which distinguishes the practical, working elite. (pp. 26-28)

In the 1970s, Harvard, Columbia, Amherst, and others seemed to attempt a redress of an imbalance between the liberal arts (or general education) and the more frankly vocational disciplines. These institutions are, through their actions, saying that the disparate versions of the myth can co-exist. While this co-existence will be covered in greater detail in a later chapter, it is important to note that the Columbias and Harvards represent about one percent of the four-year colleges and universities in the country. The "mean, mode, and median of American higher education" is a quite different case, as described by Michael Cohen and James C. March (1974):

In these schools the enrollment market dominates budgeting. Sometimes, for some of them, the demand for education has served to blunt the obviousness of the "customer"; but for most of them most of the time, the budgeting problem is one of finding a set of allocations that produces an educational program that attracts enough enrollment to provide the allocations. (pp. 101-102)

It is extremely unlikely that institutional support would be afforded liberal education in those institutions at the expense of more marketable programs. When times are flush, accommodations are easily made for all sorts of programs. But when budget cuts, and programmatic cuts, have to be made, the curriculum is determined on the side of the market analysis.

Even when the cuts are not severe, the perception of the faculty and the administration that justification of degree programs must demonstrate utility produces some interesting

academic hybrids.

At the University of Massachusetts' Amherst campus, attempts at modifying the undergraduate curriculum in the 1970s took the form of the "Educational Liaison Project," which discussed innovations that would provide "minors" for those students who so desired them. Some minors considered included "business skills for arts majors," "business skills for engineers," and similar "cross-cultural" efforts. One could perceive these as (in some cases) reinforcing the idea of college as vocational preparation, or (in others) attempts to boost sagging enrollments in the Arts and Humanities.

There are other, more obvious responses. At the University of Massachusetts, again, a story in the December 1, 1977 issue of the student newspaper contained the following analysis:

The Academic Affairs Council cites increased career options and the need for 71,000 medical technologists by 1985 (Department of Labor Predictions) as the rationale to discontinue the four-year medical technology program currently operating in the division of Public Health in favor of a five-year program within the department of micro-biology. (Massachusetts Daily Collegian, p. 1)

The majority of institutions of higher education in this country are not only going to adapt and adjust existing programs, but will create whole new programs in response to perceived training needs. The process of higher education then is justified in the public mind and in the institutional practice on an instrumental basis. Education is a commodity in these

circumstances, valued for its measurable use to the community or to the individual.

The development of knowledge, skills, and forms of understanding are, in fact, in the greater interest of the community, and in the interest of the individual as well. They can provide certain satisfactions or rewards, they can overcome environmental hardships and mitigate evils. One could cite numerous cases where the development of certain skills have not only been important but essential to the survival of the individual and to the successful development of community. In short, they provide a living: this means food, a home, and the perquisites of position and power.

The problem with this approach to education is that it inevitably mitigates against any attempt for breadth of understanding (one aspect of "being educated") as being insufficiently instrumental, non instrumental, or even anti-instrumental. Like O'Toole's argument about "learning how to learn," to regard my education only as "instrumental" would cause me tremendous frustration: why not package such a skill in a single three-semester-hour course, rather than allow me to infer it from 120 semester hours in a variety of disciplines, many of which I never mastered?

Either the frankly instrumental, or the more subtle approach of O'Toole are manipulative of individuals toward unspecified social ends. Furthermore, they posit that getting a job, and

holding it (or being able to move quickly from job to job) constitutes the good life. And that out of the job-holding will flow profit, goods for consumption, and other benefits. What this approach does not deal with, and where this definition of education is deficient, is the issue of whether knowlege and understanding and wisdom per se constitute the good life.

This is more than a fine point. To move in the direction of extrinsic value, or instrumental justification, is to declare for the universal relativity of everything. One selects a major and pursues an "education" in anticipation of its exchange value in an ever-changing marketplace. This is basic to the thesis of R. P. Dore's (1976) book, The Diploma Disease:

The effect of schooling, the way it alters a man's capacity and will to do things, depends not only on what he learns, or the way he learns it, but also on why he learns it. That is at the basis of the distinction between schooling which is education, and schooling which is only qualification, a mere process of certificaton -- or 'credentialing,' as American sociologists have recently started to call it. (p. 8)

On the other hand, if we focus not on the processes of training individuals in highly skilled tasks so that they may enter the work force with certain, specifiabile advantages, but rather on the concept of an "educated man or woman," we are forced to reconsider the entire higher education enterprise. This concept goes beyond training, the acquisition of narrow and specialized skills, the development of a capacity to reason, or

the articulate justification of beliefs and conduct. One could accomplish all these goals and still not deserve the accolade of "educated man." The educated man transforms all he sees and does, he lives and enjoys a level of life that is thicker and higher than that of someone else who is not educated. In Robert Pirsig's (1975) terms, an educated man has developed a sense of Quality:

Quality is shapeless, formless, indescribable. To see shapes and forms is to intellectualize. Quality is independent of any such shapes and forms. The names, the shapes and forms we give Quality depend only partly on the Quality. They also depend partly on the a priori images we have accumulated in our memory. We constantly seek to find, in the Quality event, analogues to our previous experiences. If we didn't we'd be unable to act... .

In a sense, . . . it's the student's choice of Quality that defines him. (pp. 243-244)

Thus, a sense of Quality, something that is unique to each person and which defines him. But it's more than just that. A truly educated man lives his wisdom, demonstrates his understanding, acts his knowledge. An educated man is, must be, eupractic. He will be, by definition, inclined to act rightly, or he will not be acting as an educated man. If he does not do so, his education will have become the pile of "inert ideas" that Whitehead (1929) deplored.

This eupraxia is not instrumental; the educated man does not act in certain ways in order to ...; if he does, he is, in fact, applying a skill. On the contrary, an educated man acts

rightly because that is an intrinsic feature of being educated. The truly educated man can only reveal that quality in his actions, in his intercourse with other humans.

In acting and speaking, men show who they are, reveal actively their unique personal identities and thus make their appearance in the human world, while their physical identities appear without any activity of their own in the unique shape of the body and sound of the voice. This disclosure of "who" in contradistinction to "what" somebody is -- his qualities, gifts, talents, and shortcomings, which he may display or hide -- is implicit in everything somebody says and does. (Arendt, 1958, p. 179)

Therefore, in order to have truly educated people, the "process" must be one of educing from us those inherent standards rather than laying on a veneer.

You have to have some feeling for the quality of the work. You have to have a sense of what's good. That is what carries you forward. This sense isn't just something you're born with, although you are born with it. It's also something you can develop. It's not just "intuition," not just unexplainable "skill" or "talent." It's the direct result of contact with reality. Quality, which dualistic reason has in the past tended to conceal. (Pirsig, 1975, p. 278)

Such a process should go on throughout one's life. Therefore, it seems evident that it may be detrimental to the process and the objective to confine education to those institutions currently designated as colleges and universities.

What we have is not just two versions of the myth of education, but two quite antithetical beliefs. It is more than a case of instrumental versus non-instrumental education. If we

consider the impact of a relative view of everything, we see that such a view is going to violently reject that philosophy that insists on standards and universals. In an institution that measures success in the values of the marketplace, in the credo that "what works is right" and where man and utility to man is the measure of all things, lip-service is all that can be expected for philosophies of education that propose there can be no measurement of "outcomes" other than the lives, themselves, in their richness and complexity, of the students.

William Butler Yeats (1927) considered this in his poem, "Among School Children."

O chestnut tree, great-rooted blossomer,
 Are you the leaf, the blossom or the bole?
 O body swayed to music, O brightening glance,
 How can we know the dancer from the dance? (ll. 61-64)

My dance is me. It is my opportunity to reveal myself. How I do that will, in all likelihood, reveal more to you, the public, than to myself. The dance and the dancer will be

like the daimon in Greek religion which accompanies each man throughout his life, always looking over his shoulder from behind and thus visible only to those he encounters. (Arendt, 1955, pp. 179-180)

And as the public observes, measures, and judges it should be doing so in the full realization that it is seeing me as "who" I am, rather than "what" I do for a living. I will then be known as either an educated man or not.

David Schuman (1978) has put this a little differently:

I am more and more convinced that one way to understand and make judgements about an individual's actions is to begin with that person's aesthetic sense of the world. Of the people I know best, either by interviewing or simply knowing, no one lacks this aesthetic sense. It is, as I am using it, a pre-conscious sense of the rightfittingness of the world. (p. 6)

That "rightfittingness" with which we are all endowed is the basic stuff for an education. The truly educational work of our lives, one that should be but rarely is enhanced by those institutions that proclaim education, is the discovering, nurturing, and refining of those aesthetic senses in order that we may not only articulate them (in the sense of describing them) but act them out in our lives. Education, then, is the process of educating the aesthetic sense or senses; as such, it never ends until life ends. We cannot tell the dancer from the dance; only in the living of a life are we able to make meaning of it, take its measure; only after the completion of one's earthly rounds can we discover the educated person.

CHAPTER II

MAJOR THEMES IN HIGHER EDUCATION

No other technique for the conduct of life attaches the individual so firmly to reality as laying emphasis on work; for his work at least gives him a secure place in a portion of reality, in the human community. (Freud, 1961, p. 27)

The Medieval View

A conventional historical review begins by examining the 12th and 13th century monastery and cathedral schools. Following Constantine's Edict of Milan (313) Christianity moved from the role of target of officially sanctioned persecution to the religion of the Roman state. By the fifth century a majority of Romans were Christian, and "Christianity and civilization were thus made coterminous; only the rustic, the paganus, was not a member of the Church" (Hay, 1965).

As Christianity became more widespread, it became less accessible: success as a religion for the masses created a need for a specialized priestly calling, and an elaborate hierarchy --

a church which was fundamentally Roman: Roman in its attitude to the theoretically omnipotent emperor, in its organization by cities, in its adoption of Latin as a vehicle of prayer and praise, in its practical identification with the limits of Roman power. Even the monastic movement, which was in a sense a reaction from the compromises involved in the adoption of Christianity as the official creed of the mass of

Roman citizens, reveals an authoritarianism, a respect for law, an itch for system, which bears witness to the strength possessed by these characteristically Roman attitudes in the sixth century and later. (Hay, 1965, p. 11)

Through the efforts of that highly structured society we have records of the pre-medieval period, and a body of knowledge around which were formed the first, tentative groupings of masters and students that became the universities.

Literacy was virtually restricted to the clergy. They wrote and spoke Latin, a small pocket of experts surrounded by a vernacular-speaking majority.

The day-to-day acts of administration and government (apart from those in the Church itself) were . . . normally conducted in the vernaculars, but they were recorded almost always in the Latin of the clerks who wrote them down in the charters (carta, cartula = a piece of parchment) confirming legal actions such as alienations of lands or public alliances between princes, and in the chronicles composed by the monastic historians. Even the ephemeral vernacular literature of relaxation was more often than not written down by a priest so that we perforce regard the whole period through clerical spectacles. (Hay, 1965, p. 54)

Whatever sciences and scholarship existed in the Middle Ages, then, were the almost exclusive province of the Churches specialists; this "control" could extend to the secular literature as well. With Latin as the language of the Church, "grammar" was part of the clergy's basic equipment (Kristeller, 1972). "Rhetoric" or prose style, and "dialectic" or logic, equally derived from the antiquity of the Roman schools, formed

the trivium, which was the normal fare of the monastery school where novices were trained, and of the bishops' schools, centered at the cathedrals, where candidates for ordination received instruction. The trivium, when combined with the more advanced subjects of the quadrivium (music, astronomy, geometry, arithmetic), formed the curriculum of the medieval schools. These, then, were the "liberal arts."

They were "liberal" in that they were "worthy of a free man" (The Shorter Oxford English Dictionary, 1968); they were, technically, "arts," in the sense of being in "the nature of instruments for more advanced studies, or for the work of life" (The Shorter Oxford English Dictionary, 1968). The illustrative quotation used by the Oxford English Dictionary for the yoking of the two words, "He being a Master in all the seven liberall Arts, is not so ignorant in grammar" (1568), is from William Fulke (1538-1589), so we may assume that medieval scholars did not conceive of these branches of learning in quite the same way we do when such a term is used.

In fact, Nathan Schachner (1962) in The Mediaeval Universities points out that:

Practically all the knowledge of the age (11th century) was based on the work of five unoriginal and for the most part inaccurate compilers of the fifth and sixth centuries. In those centuries of gloom and defeat there was no thought of pursuing novel investigations; only desperate attempts to salvage what each author thought valuable out of the funds of learning yet available. (p. 13)

He cites Boethius (ca. 475 -524), Isidorus (d. 636), and Martianus Capella (ca. 424) for their contributions, the last

famous chiefly for introducing later times to the ancient division of the Seven Liberal Arts, into whose sanctified compartments the Middle Ages tried to force all learning. (Schachner, 1962, pp. 13-14)

Another author, commenting on the scholarly heritage available to the Middle Ages, writes:

literature . . . was desperately ill-served by the handful of savants and the few academies, the pedestrian poets and rhetorical writers of the third and later centuries. It was at this stage, indeed, that scholarship became a mere knowledge of grammar, literary ability consisted in the composition of pastiches, and the classical writers were usually read in epitomes. (Hay, 1965, p. 8)

In addition to the monastery and cathedral schools, there were "parish" schools. In England, the first Church statement on this matter is provided by the Council of Cloveshoe, 747; the objectives -- and this pertained for all Europe -- were repeated for the next several centuries:

About 994, an English synod prescribed "that priests shall keep schools in the villages and teach small boys without fee: priests ought always to keep schools of schoolmasters in their houses, and if any of the faithful is willing to give his little ones to be educated he ought to receive them willingly and teach them kindly." (Coulton, 1955, p. 386)

Very few parishes realized this objective. There were also "palace" schools: the first and most notable was at Charlemagne's Court, and was led by Alcuin.

The Cathedral School of Notre Dame, Paris, however, is generally acknowledged as the institution most responsible for the development of what we now call universities. For it was there that Abelard studied in 1099, and perfected the method of Scholasticism. In the process he joined in the debate between Nominalism and Realism, the reigning intellectual and theological controversy of the day. His skill and cleverness won him a significant following among what were turning out to be professional students. The great accomplishment of Abelard was his method:

In him, Logic, the epitome of the syllogism, as exemplified in such of the Logical Works of Aristotle as were then known, came to complete fruition. He set Reason upon a throne in realms where Authority had hitherto been the only guide. Everything, he insisted, must prove amenable to the active processes of the mind, to the rigorous following of major premise, minor premise, and conclusion; even the sacrosanct articles of theology. Nothing was immune from his method; he must understand in order to believe. (Schachner, 1962, pp. 32-33)

Once Abelard had "mastered" the curriculum of the Cathedral School of Notre Dame he was given a licence to teach by the Chancellor, William of Champeaux (the chancellor was the head teacher of the school, appointed by the bishop), and therefore became a "master of arts." Abelard, called the "peripatetic of Palais" (Schachner, 1962), taught at several sites, but ultimately (and painfully) felt the control of the ecclesiastical hierarchy. During the century of his eminence, masters formed

guilds to, in effect, close their ranks, control the teaching and the content, and the process of conferring of degrees. At the same time they provided themselves a measure of independence from the local bishop:

the masters followed the example of all the trades of their day, and formed a guild, a trade union. Banded together they had numbers, strength; numerous and strong, they could protect their pupils from harm. They could resist oppression from whatever source; and like any other society of the kind, they could select their members. So it was in Paris. In Bologna the masters were chiefly natives, who required no such protection. There it was the students . . . who banded together into a "universitas" or union." (Schachner, 1962, p. 44)

Later, such refinements as the ius ubique docendi, the right to teach anywhere, were developed, primarily because of the enormous and genuinely international prestige of the great schools, the studia generalia, places where students were received from all parts of Europe. It was requisite for such a studium generale to possess at least one of the higher Faculties of Medicine, Law or Theology, in addition to the basic Arts Faculty; to have a charter authorized by a Pope, King or Emperor; and to regularly examine students and award degrees.

It is interesting that with the twin successes of "system," the New Logic of Abelard, and the guilds of the masters, a kind of decline set in:

By the time the Universities emerge, toward the end of the century, Chartres, the school of letters. was declining, Orleans was fast becoming a law school, and the fresh liberal culture of

the twelfth century was already submerged in a formalized professional curriculum that was to hold its own right up to the late Renaissance. It sounds paradoxical, but it is true, that the Universities were never to have that broad attitude toward learning they possessed before their formal inception. (Schachner, 1962 pp. 37-38)

The "decline" did not affect the numbers of scholars who attended. These numbers were drawn primarily, if not exclusively, from the nobility and what we should call the upper middle class of the economic strata (Coulton, 1955). Not only did the composition of the student body reflect the burden of the costs of such schooling, it demonstrated some real class distinctions. In a world where there were churchmen for prayer, soldiers for fighting, and artisans and peasants for labor, there was considerable concern to restrict movement or trespass from one division to another. In 1391, the English House of Commons petitioned the king that no bondman be suffered to send his sons to school, "in order to advance them by clergy" (Coulton, 1955). Once enrolled in the universities, the young scholar could pursue studies leading to a lucrative profession, or pursue another extreme, the rather debauched life that found fertile ground in the university towns. It is certain, however, that relatively few pursued their education through to the conferring of the degree: Coulton (1955) states that "only a small minority ever proceeded even to the half-degree of Bachelor, let alone to Master" (p. 409).

One attempt to summarize this section would be to call the university "a distinctly medieval institution" (Kerr, 1963). It was during this period that the dominant features of university life were developed; a name, a central and stable location, faculty with relative autonomy and control over examinations, students, teaching methods, and an administrative structure that divides the teachers into "faculties." Paris and theology, Bologna and law, Salerno and medicine, Montpellier, Toulouse and Prague; the development of Oxford and Cambridge from the Paris model, but placing particular emphasis on the residential college instead of the separate faculties as the primary unit. In the idealized version of history, the university became the center for the professions, the location of the great disputes in theology and philosophy, the home for the classics. A more critical view is provided by Schachner (1962):

The utilitarian spirit became the curse of the Universities. In the early days of Abelard the spirit of scholarship was comparatively disinterested; men and boys travelled over half Europe, and willingly subjected themselves to untold hardships, to drink at the mainsprings of intellectual life; but that eagerness for knowledge per se died down as the formal Universities rose to power and prominence.

Learning, education, became a matter of achieving a degree, of obtaining a social cachet, of opening up paths to riches and fame and easy preferment in Church and State. . . . the Arts, which should have been the backbone of the University, became a narrowed field, relegated to mere boys.

The true reason for the University's existence

was then found in the higher Faculties, the professional schools. Of these by far the most popular was the Civil Law Faculty. There was good reason for this. The Law Graduate had an unlimited field before him. Private practice was exceedingly lucrative, and all the higher positions in municipality and State, in Parlements and Councils, were open to him. Even in the Church the knowledge of Civil Law was highly advantageous. (pp. 372-373)

We should also note that "scholarism" (scholasticism) was still very much in evidence in the seventeenth century; one reason for the narrowing of the Arts course was the prominence of Logic. The humanists of the Renaissance were constantly asserting the importance of the studia humanitatis, the rediscovered Latin and Greek literature for example, against the claims of the other, more utilitarian subjects. This was the intent of the so-called defenses of poetry, where poetry represents all humanist learning, and of their repeated attacks on scholasticism (Kristeller, 1972).

We may judge the impact of the humanists on the curriculum by the assessment of Milton, for whom, "at Cambridge, the endless intricacies of scholastic logic left him 'half dead with boredom'" (Carey, 1969). Milton, more fortunate than most, I imagine, was able to achieve his revenge in Paradise Lost: there he depicted the devils in Pandemonium, having lost the power of intuitive reasoning which differentiates angels from men, engaged

In thoughts more elevate, and reasoned high
Of providence, foreknowledge, will and fate,
Fixed fate, free will, foreknowledge absolute,
And found no end, in wandering mazes lost. (II, p.

558-561)

The Lessons of Socrates

Yet, before the seventeenth Century Milton, before the great universities of the Middle Ages, the Cathedral schools, and the monasteries, there was Plato. In Part I of the Republic, Socrates, in dialogues with Cephalus, Polemarchus and Thrasymachus, seeks a definition of a just society:

We began by looking for a definition of justice; but before we had found one, I dropped that question and hurried on to ask whether or not it involved superior character and intelligence; and then, as soon as another idea cropped up, that injustice pays better. I could not refrain from pursuing that.

So now the whole conversation has left me completely in the dark; for so long as I do not know what justice is, I am hardly likely to know whether or not it is a virtue, or whether it makes a man happy or unhappy. (pp. 39-40)

In the dark or not, Plato has established some principles. One of these is that a just ruler, like a physician, or a ship's captain, is practicing an art for which training and direction can be provided. While looking for those who can best be trained for this art, he develops a theory of society emerging from shared needs, and based on areas of expertise, the "innate differences," the "native aptitude for their calling" will be discovered in the "guardians" of the state as well as in the shoemakers. Each man would have ". . . one trade, for which he was naturally fitted; he would do good work if he confined

himself to that all his life, never letting the right moment slip by."

The selection of the guardians of the Republic will reflect an attempt to "find out who are the best guardians of this inward conviction that they must always do what they believe best for commonwealth." This process will begin in early childhood and will involve observation, the setting of tasks, and subjecting candidates to ordeals of toil and pain. In terms of Socrates' "noble lie" those fit to rule as Guardians would have gold in their composition, the Auxiliaries, silver, and farmers, craftsmen, merchants, and others, iron and brass. Roles in life would be assigned on the basis of the "mixture of metals in the souls of the children," and would not necessarily be hereditary. With gold in the composition of their souls, Guardians would not have the needs of the lower classes, would not be allowed material gold or silver, or any private property beyond the barest necessities. This would prevent Guardians from falling into the trap of luxuriousness.

As for their schooling, it would commence with physical training, poetry and music. The education in poetry and music being

the counterpart of bodily training. It educated our Guardians by the influence of habit, imparting no real knowledge, but only a kind of measure and harmony by means of melody and rhythm, and forming the character in similar ways through the content of the literature, fabulous or true. It taught nothing useful for so high a

purpose as you now have in view. (p. 237)

Then, an intensive course of physical and military training, calculating and number theory, geometry, solid geometry, astronomy, harmonics, and dialectic. This last is the process described in the allegory of the Cave, when one emerged, then looked

at the living creatures outside the Cave, then at the stars, and lastly at the Sun himself, he arrived at the highest object in the visible world. So here, the summit of the intelligible world is reached in philosophic discussion by one who aspires, through the discourse of reason unaided by any of the senses, to make his way in every case to the essential reality and persevere until he has grasped by pure intelligence the very nature of Goodness itself. This journey is what we call Dialectic. (p. 252)

It is important to remember that, having reached this point, the individual left the "academy" to involve himself in his society. To allow this to not happen would be to pervert the system as Plato had developed it:

It is for us, then, as founders of a commonwealth, to bring compulsion to the noblest natures. They must be made to climb the ascent to the vision of Goodness, which we called the highest object of knowledge; and, when they have looked upon it long enough, they must not be allowed, as they now are, to remain on the heights, refusing to come down again to the prisoners or to take any part in their labours and rewards, however much or little these may be worth. (p. 233)

It is a kind of intellectual's noblesse oblige (albeit forced, on occasion). But clearly, Plato intends that the educational process for the most gifted in the Republic would result in those

persons involving their lives in the system and perpetuating the values inherent in that society.

The process of education that he describes is not, strictly, a means to being educated, if we think of "means" as a value-neutral route to an end. There is more here than a cause and effect relationship that might characterize the taking of certain drugs and the consequent heightened sense of consciousness. For Plato, there is a "logical link between the content to which the learner is introduced in the learning situation and that which is constitutive of his performance when he has learnt" (Peters, 1973, p. 241).

For Socrates, and for Plato, if there was order in the body, there was health; similarly in the soul, and in the body politic. In the Gorgias, Socrates convinces Callicles that the self-controlled soul has sense and discipline. And the self-controlled man "will do what is right in regard both to gods and to men." This fitting, or just conduct is, of course, eupraxia, and Socrates takes it a step further. For not only in the Republic, but in the Gorgias as well, Socrates describes the necessity of involvement in the life of the community.

To me, at least, this seems to be the end and aim which a man must keep in mind throughout his life. He must turn all his own efforts and those of his country to bring it about that justice and self-control shall effect a happy life. (Plato, 1979, p. 83)

This goes far beyond mere know-how. The utilitarian case

for knowledge was made by Polus, in the Gorgias, and Socrates pointed out how rhetoric may be technically perfect in its application but absolutely wrong if used not in the pursuit of truth. There must be a concern for something higher than utility, or skill, or the truths of empirical science.

There are some noteworthy challenges to that philosophy. For example, in 1589 Christopher Marlowe's Faustus used his university education at Wittenberg to rise from "base stock," and

So soon he profits in divinity,
The fruitful plot of scholarism grac'd,
That shortly he was grac'd with doctor's name,
Excelling all whose sweet delight disputes
In heavenly matters of theology;
Till swoln with cunning, of a self-conceit,
His waxen wings did mount above his reach,
And melting Heavens conspir'd his overthrow;
For, falling to a devilish exercise,
And gluttred more with learning's golden gifts,
He surfeits upon cursed necromancy. (I. i. 15-25)

A comparison of Plato's Guardian and Marlowe's Faustus reveals a dramatic difference: education, for Plato, is the pursuit of Truth, and should create a public commitment and responsibility; for Faustus, it provided an occasion to pervert his studies for purely personal gain. Marlowe's audience would have immediately recognized Faustus' error; of course, they may have sympathized with his cause.

We could temper Schachner's view of the utilitarian tendencies of the universities by pointing out that in Marlowe's time, and later, in Milton's, the Arts course at Oxford and Cambridge was preeminent (law, for example, was more profitably

and practically acquired through study and residence at the Inns, or through apprenticeship). Given the social and economic background of the undergraduates, and their subsequent careers (someone like Spenser comes immediately to mind), Plato's ideal was at least acknowledged. I should hasten to point out that carried to extremes this could be identified as another kind of "utility;" I should also point out that in practice it was not so systematic or "intended" as Plato would have it. But it did set a pattern of noblesse oblige.

In England, this pattern persisted into the nineteenth century and reflected that society's attitude toward class as well as education. Ronald Dore (1976) has noted that

England, at the end of the eighteenth century, had many schools . . . but it was far from having a school system . . .

Those schools were not intended as channels of social mobility (it was even less common than in Chaucer's day for orphans to become 'poor clerks at Oxford' and eventually princes of the church). They were there to prepare children for a place in society which their parentage had determined with more or less certainty. Gentlemen students went to Oxford to learn to be gentlemen -- so that 'their reason, fancy and carriage be improved by lighter institutions and exercises, that they might become rational and graceful speakers, and be of an acceptable behaviour in their counties' (Seth Ward -- a seventeenth-century author admittedly -- . . .). (p. 16)

Higher Learning in the New Found Land

After God had carried us safe to New England, and we had builded our houses, provided necessaries for our livelihood, rear'd convenient places for Gods worship, and settled the Civill Government: One of the next things we longed for, and looked after was to advance Learning and perpetuate it to Posterity; dreading to leave an illiterate Ministry to the Churches, when our present Ministers shall lie in the dust. (New England's First Fruits, 1643)

The Cambridge connection. When the higher learning arrived in the new found land, it was in the form of Harvard College located in New Towne (later called Cambridge). The change in the town's name was not without significance: the majority of the original trustees of the College had graduated from England's Cambridge. The English curriculum--the Liberal Arts, the Philosophies (mental, moral and metaphysical), and the Classics (Greek and Latin literature) -- was reproduced, and with the obvious absence of a Higher Faculty, America had a college, not a university.

We should note that -- to address some historical concerns -- the initiative for the founding came not from students (as at the University of Bologna), nor from a faculty (as at the University of Paris), but from the government which controlled both civil and religious society. And while the stated aim was to "advance Learning" -- quickly qualified by the application of that learning by a literate Ministry -- the residents of the Massachusetts Bay Colony saw the educative process as vital to

the effective running of the government and the perpetuating of their values to posterity. Furthermore, Morison (1960) points out that it would be a mistake to "lay too much emphasis" on the concern about the "illiterate Ministry." The General Court of Massachusetts had appropriated, in October 1636, £400 "towards a schoale or colledge," and by 1650 Harvard had profited from its first benefactor (John Harvard, who left his library of about four hundred volumes and half his estate valued at less than £800), and was under the leadership of its second president (Henry Dunster). It also had its first formal Charter that declared Harvard's purpose

to be 'The advancement of all good literature, artes and Sciences,' 'the advancement and education of youth in all manner of good literature Artes and Sciences,' and 'all other necessary provisions that may conduce to the education of the English and Indian youth of this Country in knowledge and godliness.' (Morison, 1960, pp. 31-32)

There is no mention in the Charter of training ministers, and as early as 1647 President Dunster was seeking to expand the traditional curriculum, and

to obtain some of the 'other necessary provisions.' He asked for means to purchase suitable books, 'especially in law, physicke, philosophy, and mathematics' for the use of the scholars, 'whose various inclinations to all professions might thereby be encouraged and furthered.' (Morison, 1960, p. 32)

Despite the attempts at expansion, and encouragement of interest in the professions (it is not clear whether Dunster was

anticipating or responding to such interests), Harvard was clearly following the English model of higher education:

The bachelor's course was intended to be, and was, a liberal education for the times, having no practical or professional value, equally suitable for a future divine, physician, or ruler. President Oakes addressed one of his graduating classes as 'gentlemen, educated like gentlemen' . . .

Two ends and objects of their education were constantly held up to students in the puritan century: the attainment of a greater knowledge of God, through knowledge of his word and works; and . . . eupraxia . . . variously translated (as) 'good conduct,' 'right action,' and 'true welfare.' . . . One of the theses frequently debated at commencement was 'Eupraxia is the object and goal of the Arts.' (Morison, 1960, pp. 43-44)

If we consider this, and the substantial financial support provided Harvard (and, later, other institutions) by the civil government, it is clear that there was an expectation that college graduates would return to society endowed with an appreciation for its history, traditions, values, and goals and therefore better prepared to serve in that society. The Platonic ideal on which I speculated earlier is, again, in evidence.

Changes in the new world. Almost a century after Dunster, John Winthrop was appointed to the Hollis Professorship in Mathematics and Natural Philosophy at Harvard in 1738, allowing science to make significant inroads at that institution (Rudolf, 1962). Another attempt to move seriously in new academic directions in the new world was made at the College of Philadelphia. Here,

William Smith addressed the issue of the "American condition" and its needs: that is, that "peace and economic abundance would require of Americans a special effort in 'forming a succession of sober, virtuous, industrious citizens and checking the course of growing luxury'" (Rudolf, 1962, p. 32). With the support of that most practical American, Benjamin Franklin, Provost Smith established, in 1756:

a three year course of study which put as much as one third of the time into science and practical studeis. He was not permitted to establish a parallel "mechanic arts" college as a companion to the traditional classical college, but in the classical college he emphasized English, English literature, and other tool subjects that would be useful to a far wider range of men than had sought and found utility in the old curriculum. Provost Smith's program of studies was the first systematic course in America not deriving from the medieval tradition nor intending to serve a religious purpose. (Rudolf, 1962, p. 32)

By 1799, in papers called forth by the American Philosophical Society's competition for the best plan of an American system of Education, the movement toward utility, practicality, and even of anti-intellectualism, was apparent.

The plans spoke much of science, of preparation for democratic citizenship, of escaping from the past. Rush (Benjamin Rush, a Philadelphia physician) suggested setting up special schools "for teaching the art of forgetting." He distrusted the ancient languages. "While Greek and Latin are the only avenues to science, education will always be confined to a few people," he argued, remarking that "it is only by rendering knowledge universal, that a Republican form of government can be preserved in our country." He warned that the ancient languages could stand in the way of the development of the

country as well as in the way of its preservation. Said Rush "To spend four or five years in learning two dead languages, is to turn our backs upon a gold mine, in order to amuse ourselves catching butterflies." (Rudolf, 1962, p. 43)

The pursuit of butterflies did not seem particularly American to one of our most distinguished critics from abroad, Alexis de Tocqueville. After his journey through the United States in 1831 he wrote at length, with some warmth and considerable insight about his pragmatic American friends. For Tocqueville, Americans accept

tradition only as a means of information, and existing facts only as a lesson used in doing otherwise and doing better; to seek the reason of things for oneself, and in oneself alone; to tend to results without being bound to means, and to aim at the substance through the form. (Vol.II, pp. 1-2)

In Tocqueville's perception, it is natural and normal for Americans to actively question "traditions," and (to turn to our concern) to be impatient if not hostile with curricula that do not address the immediate, or do not seem practical and useful. Americans as observed by Tocqueville were (are) an empirical and pragmatic people. As he develops his analysis, Benjamin Rush's contrast of gold mines and butterflies is resonating in the background:

in most of the operations of the mind, each American appeals to the individual exercise of his own understanding alone.

America is therefore one of the countries of the world where philosophy is least studied, and

where the precepts of Descartes are best applied.
(Vol. II, p. 2)

Franklin and the self-made man. Benjamin Franklin had, apparently, only a few years of elementary schooling, yet he tells us in his Autobiography that in 1727 he "had formed most of my ingenious acquaintance into a club for mutual improvement which we called the Junto" (Franklin, 1958, p. 54). "Morals, politics, or natural philosophy" were the subjects for discussion, and Franklin with characteristic modesty proclaimed the Junto "the best school of philosophy, and politics that then existed in the province." At the same time, he is quick to point out, his fellow disputants were not lax in "exerting themselves in recommending business to us" (p. 55). Out of the Junto came the plans and original subscriptions and even the books for "the mother of all the North American subscription libraries, now so numerous" (p. 64). As Franklin describes it, the venture was a great success:

The institution soon manifested its utility, was imitated by other towns and in other provinces; the libraries were augmented by donations; reading became fashionable; and our people, having not public amusements to divert their attention from study, became better acquainted with books, and in a few years were observed by strangers to be better instructed and more intelligent than people of the same rank generally are in other countries. (p. 72)

And for Franklin, himself:

This library afforded me the means of improvement by constant study, of which I set apart an hour or two each day, and thus repaired in some degree

the loss of the learned education by father once intended for me. (p. 73)

What Franklin seems to be living out, here, is a rather American dynamic between the absolute drive for the useful and the human need for "knowledge" (Tocqueville, 1974, Vol II, pp. 65,66). Such a tension would not be easily resolved in a country that provided an equality of condition (if only for a brief moment in its history), and the opportunity to earn one's rank. Given such conditions, and a limited number of institutions in which to attempt a resolution, a curriculum that had stayed constant at Cambridge since the twelfth century would not be satisfactory. And by the close of the eighteenth century in America, as we have seen, the social climate was significantly different from that of the Colonial period. Hofstadter (1961) has observed

It was to serve the traditional and aristocratic needs of this upper crust that the colonial colleges, with their conservative adherence to the classical curriculum, were designed, while the middle classes beneath them, whose base was small shopkeeping and special crafts, were satisfied to send their children to good private academies with curricula based less upon the classics and more upon a program of practical studies. (p. 149)

The vision of Jefferson. In 1779, Thomas Jefferson, in his capacity as Governor of the State of Virginia, and as a member of the board of visitors of the College of William and Mary, proposed to the Virginia Legislature the abolition of the professorships of divinity and oriental languages, in order to "free men from superstition, not inoculate them with it" (Rudolf,

1962, p. 41). He also proposed a series of new professorships, including anatomy, chemistry, law and police (public administration), medicine, modern languages, and natural history, among others. The legislature did not enact his programs, but Jefferson's interest in higher education was never diminished.

In 1814, in a letter to Peter Carr, Jefferson picks up several of the threads we have already identified and weaves a syncretistic whole of them in his comprehensive proposal for a system of higher education in Virginia. First, he stresses the logic and, indeed, the necessity of developing an educational system that is locally appropriate. Jefferson based this on his personal study of the organization of institutions of higher education in other countries, after which he concluded that no two were alike:

Yet, I have no doubt that these several arrangements have been the subject of mature reflection, by wise and learned men, who, contemplating local circumstances, have adapted them to the condition of the section of society for which they have been framed The example they have set, then, is authority for us to select from their different institutions the materials which are good for us, and, with them, to erect a structure, whose arrangement shall correspond with our own social condition, and shall admit of enlargement in proportion to the encouragement it may merit and receive. (Crane, 1963, p. 38)

Jefferson conceived that while all require education, the amount required was determined by class or "destiny." "The mass of our citizens may be divided into two classes -- the laboring and the

learned" (Crane, 1963, p. 39). Education, therefore, becomes the passport to a white-collar job: "The learned class may still be subdivided into two sections; 1) Those who are destined for learned professions, as a means of livelihood; and 2) The wealthy, who, possessing independent fortunes, may aspire to share in conducting the affairs of the nation, or to live with usefulness and respect in the private ranks of life" (Crane, 1963, pp. 39-40). While all classes would complete the elementary schools (the first grade of education), Jefferson's university would provide both sections of the learned class with instruction in the general schools (the second grade), in "all the branches . . . of useful science" that is, Language, Mathematics, and Philosophy. His definitions of these branches are unique, and comprehensive. For example, under the branch of Language, he includes languages and history, grammar, poetry, composition, criticism, rhetoric and oratory.

At the successful completion of the above course of study, one could pursue training in the professional schools, the third grade of Jefferson's system. There were three main departments:

1st Department, the fine arts, to wit: Civil Architecture, Gardening, Painting, Sculpture, and the theory of Music; the

2d Department, Architecture, Military and Naval; Projectiles, Rural Economy (comprehending Agriculture, Horticulture and Veterinary,) Technical Philosophy, the practice of Medicine, Materia Medica, Pharmacy and Surgery. In the

3d Department, Theology and Ecclesiastical

History; Law, Municipal and Foreign. (Crane, 1963, pp. 41-42)

In this way, Jefferson ensured the advanced training of lawyers, ecclesiastics, physicians, military men, "agricultors," and, in the school of fine arts, gentlemen, architects, pleasure gardeners, painters and musicians. Perhaps most important was Jefferson's "school of technical philosophy."

The school of technical philosophy will differ essentially in its functions from the other professional schools. The others are instituted to ramify and dilate the particular sciences taught in the schools of the second grade on a general scale only. The technical school is to abridge those which were taught there too much in extenso for the limited wants of the artificer or practical man. These artificers must be grouped together, according to the particular branch of science in which they need elementary and practical instruction; and a special lecture or lectures should be prepared for each group -- and these lectures should be given in the evening, so as not to interrupt the labors of the day. (Crane, 1963, p. 42)

All of society would have access to his university; all of the productive forces in society, that is. It is interesting to note that Jefferson began his proposal with the statement that "the laboring (class) will need the first grade of education to qualify them for their pursuits and duties; the learned will need it as a foundation for further acquirements" (Crane, 1963, p. 39). As we have seen, his second and third stages of education merely further the amount of general or specialized training provided segments of society. It is, then, in the best interests of the government to provide a variety of educational

opportunities to its workforces, and those opportunities should be designed to reflect the production needs of the nation.

In the America that was observed and described by de Tocqueville, Jefferson conceived a uniquely American institution. In his proposal for higher education in Virginia, he still anticipates that those who benefit from education will, in turn, benefit society; what is missing, at this point in our educational history, is the explicit sense of societal responsibility that was present earlier. Jefferson saw that "it is highly interesting to our country, and it is the duty of its functionaries, to provide that every citizen in it should receive an education proportioned to the condition and pursuits of his life" (Crane, 1963, p. 39).

While Jefferson never saw his grand plan implemented, we can readily see that the current American educational system is very like his projection. It is interesting that he could state so clearly the connection between higher education and work, and, in effect, suggest the resolution of the tension we saw in Franklin.

A third example is helpful, and necessary to provide some balance. Jefferson and Franklin were outside the educational establishment, and their proposals would properly be considered with suspicion, even resentment. There were many critics and innovators, however, who came from within the establishment.

Conflict within the colleges. A year after Jefferson's letter to Carr, George Ticknor and Edward Everett became the first

Americans to attend a German university for the purpose of doing advanced scholarly work. At Goettingen, Ticknor participated in the rich scholarly traditions that were becoming the envy of academics on both sides of the Atlantic, particularly the concepts of Lernfreiheit and Lehrfreiheit (Rudolf, 1963). Further, Ticknor was able to do the kind of advanced work that was not available in American institutions, which still lacked any higher faculties.

After three years of study Ticknor returned to Harvard and took the position of Smith Professor of French, Spanish and Belles-lettres, and, in 1825, his Remarks on Changes Lately Proposed or Adopted in Harvard University, was published.

In this interesting document, Ticknor made some rather sweeping recommendations for change in American higher education. At the same time, he paid tribute to the very institution of education and commented on its place in American society:

The age in which we live has been appropriately called the age of improvement; and certainly, among the demands made by its peculiar spirit, none has been more constant, more extensive, or more earnest, than the demand, in this country, for an improved state of education. . . . For the generation, on whom now rest the cares of life among us, feel very sensibly, how much more lightly their burthen (sic) could be borne, if they had more of that knowledge, which is, indeed power everywhere, but nowhere so truly and entirely, as in the midst of free institutions; so that there is, at this moment, hardly a father in our country, who does not count among his chief anxieties, and most earnest hopes, the desire to given his children a better education, than he has been able to obtain for himself.

(Crane, 1963, p. 77)

In the first place, Ticknor states that a college such as Harvard, with its resources and numerous instructors, ". . . should open its doors to all; for, if its resources be properly and efficiently applied, it has means of instruction for all" (Crane, 1963, p. 79). Because of those abundant resources, Ticknor feels that many of the emerging public and private institutions, agricultural schools, law schools, or other specialized institutions are unnecessary. In other words, Harvard could meet these societal needs more rapidly and in better fashion than the newer colleges and institutions.

The great increase of manufacturing establishments, which all require men of peculiar skill and knowledge to manage them; the improvement in all the arts, which supposes a corresponding improvement in the education of those who are devoted to them; and the practical intelligence and general character of the whole country, which demands, in its best sense, a liberal education for many persons in all classes of the community; -- all these have long since made requisitions on our best places for public education, which have not yet been fully answered at any of them, but which the general uneasiness will not suffer to remain unanswered much longer. (Crane, 1963, p. 80)

Ticknor concludes with a "sort of cynosure. . .; and that is, the principle of thorough TEACHING" (Crane 1963, p. 80). It is clear that Ticknor is asking for the facilities as well as the opportunities for rigorous, advanced work in the academic disciplines. "Who, in this country, by means here offered him, has been enabled to make himself a good Greek scholar?" (Crane,

1963, p. 81). He warns that this must happen at Cambridge and at the larger colleges, and happen

speedily; for new institutions are springing up, which, in the flexibility of their youth, will easily take the forms that are required of them, while the older establishments, if they suffer themselves to grow harder and harder in their ancient habits and systems, will find, when the period for more important alterations is come and free Universities are demanded and called forth, that, instead of being able to place themselves at the head of the coming changes and directing their course, they will only be the first victims of the spirit of improvement. (Crane, 1963, p. 82)

If we grant Ticknor the privilege of several hidden agendas, his criticisms are interesting. In a way, they are classic in that they demonstrate how the inside critic tends to want to reform education (and probably any other institution). While Jefferson was able to look over the broad expanse of education here and abroad and formulate, in effect, a far-sighted and really different program for education, Ticknor wants to change by a process of accretion. Proposals for change in American higher education were not received lightly by Jefferson's or Ticknor's contemporaries. Both Jefferson and Ticknor, in their own ways, were trying to move American higher education in new directions, hopefully directions that would be appropriate to the needs of their society. Their recommendations are important, and characteristic of the informed criticism of the colleges of the period.

The response from the establishment is best captured in the

"Yale Report" of 1828. This product of the Yale faculty under President Jeremiah Day was an uncompromising defense of the status quo; that is, the concept of a residential college that concentrated on instilling discipline and piety in its graduates.

Day was sensitive to the suggestion "that our colleges must be new-modelled; that they are not adapted to the spirit and wants of the age; that they will soon be deserted, unless they are better accomodated to the business character of the nation" (Crane, 1963, p. 84). He rejected this notion and, in the process, articulated the establishment's position: that view from within the institutions of higher education demonstrates a subtle but significant shift from the intended effects of the "liberal arts" of the colonial period as seen by Morison, while still retaining much of that curriculum:

What then is the appropriate object of a college?
. . . if we have not greatly misapprehended the design of the patrons and guardians of this college, its object is to LAY THE FOUNDATION OF A SUPERIOR EDUCATION: and this is to be done, at a period of life when a substitute must be provided for Parental superintendence. . . .

The two great points to be gained in intellectual culture, are the discipline and the furniture; expanding its powers, and storing it with knowledge. The former of these is, perhaps, the more important of the two. (Crane, 1963, p. 85)

Day goes on to explicitly reject any notion that a collegiate education prepares one for a specific occupation. One's education is begun, but not completed in the college; rather, one has "a thorough foundation in the principles of science,

preparatory to the study of the practical arts" (Crane, 1963, p. 91).

What was happening was something more profound than a debate over the inclusion of a "modern" language in the curriculum; what was breaking out was something akin to academic warfare over the basic concepts of the higher learning in America. At this point, Yale's Discipline and Piety (having overcome the eupraxia of an earlier, colonial Harvard) were fighting off Jeffersonian Utility; Ticknor has begun the mobilization for Research and soon it too would begin its advance; and in the later nineteenth century, Liberal Culture would be revitalized and join the fray.

I want to acknowledge, immediately, the problems built in to the use of such categories. For example, their fallibility is readily apparent when we consider the "utility" present in "discipline and piety," and so on. Further, there never was a chartered "discipline and piety school," with lists of members. But they are handles by which to grasp the educational nettle, a nettle that is constantly changing. And Laurence R. Veysey (1965) has argued that, for a brief time at least, these categories provided specific conceptions of "the university," which was a "primordial, scarcely thought-out vision" in America before 1865.

The Nineteenth Century

In order to understand the higher education in America

during the nineteenth century I must discuss those categories identified by Veysey. After considering them, separately, we may be able to better consider the syntheses of the present century.

Discipline and Piety. To begin with, this approach to education had not only subtly shifted the eupraxia of the colonial college out of center focus, it was the dominant mode in higher education and, as such, was firmly entrenched and just as firmly resisting change. In that sense, it had a stifling effect not unlike that of scholasticism in the medieval period and later. This narrowing of the college was challenged by some professional educators, as well as influential dabblers like Jefferson.

For example, Amherst in 1827 established a "parallel" course of study, emphasizing English literature, modern languages, and the sciences as substitutes for the ancient languages. Union College offered an alternate scientific course after 1828, and the University of Vermont announced a rearrangement of course offerings to permit electives and departmental specialization. Vermont, however, refused to grant the bachelor's degree until the student completed the full, classical course (unlike Amherst and Union).

These experiments were received with apathy and, with the exception of Union's scientific course, were abandoned after brief trial. The "partial course," a mere caricature of Jefferson's and Ticknor's ideal of an open university, continued to be offered at many institutions but it was never popular and fitted poorly into the rigid framework of the college system. (Crane, 1963,

pp. 16, 17)

It would seem that the Yale faculty had carried the day, with the influential 1828 Report,

a vindication of the residential college and of the prescribed classical and mathematical course, tied to a forthright statement of the moral and pedagogical objectives they were intended to achieve. The traditional curriculum was upheld as ideally suited to discipline the mental "faculties," such as reason, imagination, and memory, and as an indispensable prerequisite to all advanced education. Parental supervision of students in a monastic college was imperative, since most undergraduates were impressionable adolescents. (Crane, 1963, p. 17))

An interesting criticism of the nineteenth century classical curriculum, however, is provided by one who survived it, Henry Adams. Writing of his undergraduate days at Harvard (1854-1858), Adams gives the perspective the apologists for the "traditional" curriculum and process lacked:

Harvard College, as far as it educated at all, was a mild and liberal school, which sent young men into the world with all they needed to make respectable citizens, and something of what they wanted to make useful ones. Leaders of men it never tried to make. Its ideals were altogether different. The Unitarian clergy had given to the College a character of moderation, balance, judgement, restraint, what the French called mesure; . . . In effect, the school created a type but not a will. Four years of Harvard College, if successful, resulted in an autobiographical blank, a mind on which only a water-mark had been stamped. (Adams, 1961, pp. 54-55)

Adams was more specific when he wrote of his return to the College as a professor, and, "during some dreary hours of

faculty-meetings," looked up his undergraduate record in the class-lists, finding himself graded precisely in the middle.

In the one branch he most needed -- mathematics -- barring the first few scholars, failure was so nearly universal that no attempt at grading could have had value, and whether he stood fortieth or ninetieth must have been an accident or the personal favor of the professor. Here his education failed lametably. At best he could never have been a mathematician; at worst he would never have cared to be one; but he needed to read mathematics, like any other universal language, and he never reached the alphabet.

Beyond two or three Greek plays, the student got nothing from the ancient languages. Beyond some incoherent theories of free-trade and protection, he got little from Political Economy. He could not afterwards remember to have heard the name of Karl Marx mentioned, or the title of "Capital." He was equally ignorant of Auguste Comte. These were the two writers of his time who most influenced its thought. The bit of practical teaching he afterwards reviewed with most curiosity was the course in Chemistry, which taught him a number of theories that befogged his mind for a lifetime. The only teaching that appealed to his imagination was a course of lectures by Louis Aggasiz on the Glacial Period and Palaeontology, which had more influence on his curiosity than the rest of the college instruction altogether. The entire work of the four years could have been easily put into the work of any four months in after life. (p. 60)

Despite Adams' perceptions, and undoubtedly the similar perceptions of his classmates, and in spite of the criticisms of such influential persons as Francis Wayland, President of Brown, the traditional forms of educational thought and practices were very much with us throughout the nineteenth century. Veysey (1965) notes:

By the end of the Civil War the traditional philosophy of higher education, whose watchword was the much repeated phrase "mental discipline," had already been under long and gathering attack. . . . Yet in 1879 G. Stanley Hall noted that, of the more than three hundred colleges then existent in the United States, all but perhaps a score were still in the hands of men who believed in mental discipline. . . . great numbers of the smaller institutions adhered to something like the orthodox outlook even into the nineties. (p. 21)

It should be repeated that the "furnishings" of the mind were less important than the "disciplining" of it. Given the nineteenth century view of the individual and his soul, it was understandable that educators conceived of the curriculum and the teaching process as the material and the process by which the parts of the soul, or the "faculties" (e.g., will, emotion, intellect) could best be developed. In 1868, in his inaugural address as president of Princeton, James McCosh articulated this position:

I do hold it to be the highest end of a University to educate; that is, draw out and improve the faculties which God has given. Our Creator, no doubt, means all things in our world to be perfect in the end; but he has not made them perfect; he has left room for growth and progress; and it is a task laid on his intelligent creatures to be fellow-workers with him in finishing that work which he has left incomplete. (cited in Veysey, 1965, p.23)

At the same time, particularly in the denominational colleges that stressed orthodox views of man and God, care had to be taken not to stimulate the intellect excessively. The problem was reminiscent of that at Cambridge in Milton's day: then it

was essential to study Latin, and this could only be done by reading such pagan authors as Ovid with their dangerously exciting, even licentious subjects. It is difficult to imagine an education in the sense we now use the term. Most of the arguments between the traditionalists and the reformers deal with the necessity of ancient languages in the curriculum. Greek, in particular, became the symbol of the whole classical curriculum:

A wide variety of arguments was used to defend the ancient languages. Naturally their role in disciplining the mental faculties received primary attention. But grammar was also defended as an intrinsically important item of knowledge. It was even argued that words as such comprehended the meaning of human life. Still, neither as discipline nor as knowledge did the classics offer indisputable advantages over the threatening modern tongues. In order to counter the thrusts of the modernists, the inherent value of ancient history and literature, as revealed in the study of language, had to be asserted. (Veysey, 1965, p. 37)

It is fair to state that the methods of instruction did not help. The "recitation" was the process commonly employed, and this alone would discourage the appreciation of literature, or the encouragement of liberal culture. This is the "daily figuring" cited by Henry Adams in his Education; it is not unusual that Adams had been moved only by the lectures of Agassiz in his four years at Harvard.

While the traditionalists were holding off several factions of critics, one of the most vocal groups was decrying the lack of relevance of the disciplinary regime to the later work life of

the student. In 1828, the Yale Report had dealt with this issue in what was to prove a classic manner:

but why, it may be asked, should a student waste his time upon studies which have no immediate connection with his future profession? Will chemistry enable him to plead at the bar, or conic senctions qualify him for preaching, or astronomy aid him in the practice of physic? Why should not his attention be confined to the subject which is to occupy the labors of his life? In answer to this, it may be observed, that there is no science which does not contribute its aid to professional skill. "Every thing throws light upon every thing." The great object of a collegiate education, preparatory to the study of a profession, is to give that expansion and balance of the mental powers, those liberal and comprehensive views, and those fine proportions of character, which are not to be found in him whose ideas are always confined to one particūlar channel. (Crane, 1963, p. 89-90)

It turned out that the institutions could remain aloof from the concerns of the market place just so long, and that, inevitably (it seemed), they would have to make some accomodations. It is interesting to contrast Day's statement in 1828, with a later president of Yale, Noah Porter. One goal of the collegiate experience, and one that would result from the classical curriculum, argued Porter, "was to increase the student's active power in 'a counting or sales-room,' and hence enable him to outstrip 'in business capacity' his non-collegiate rival. The 'educated recluse' was considered . . . 'a disparagement to a college education,' and a 'morbid result.'" (Veysey, 1965, p. 39)

And while the traditionalists had been defending the

classical way, and in effect, disparaging those who demanded a more frankly vocational model, they were blithely ignoring the rather long tradition of preparation for the ministry associated with collegiate education in America. To further confuse matters, James McCosh of Princeton would use the vocational needs of the clergy as a defense of required Greek.

Discipline and piety, as a force in higher education, was fairly moribund by the turn of the twentieth century. It represented a resistance to change that could not survive in a nation committed, as Tocqueville noted, to tradition only as a means to information. When that information ceased to be relevant, the tradition was discarded.

Background for Change

While the traditionalists were defending the presence of Greek in the curriculum of higher education, the country was experiencing profound change. The nineteenth century began with a population that could be classified as 85 percent "rural," and gathered along the eastern seaboard. Until 1780, there had been only nine institutions in the country that could be labeled colleges. By 1799, sixteen more institutions had been added. In 1830, if we count only the survivors, forty institutions of higher education were serving Americans. Thirty-one years later, the eve of the Civil War, 182 permanent colleges had been founded in this country. In fact, 516 colleges were established in

sixteen states of the Republic before the Civil War. Of those, only 104 survived (Hofstadter, 1955a).

An educator of the day, Philip Lindsley, identified the problem. Colleges, he observed:

rise up like mushrooms on our luxuriant soil. They are duly lauded and puffed for a day; and then they sink to be heard of no more. . . . Our people, at first, oppose all distinctions whatever as odious and aristocratical; and then, presently, seek with avidity such as remain accessible. At first they denounce colleges; and then choose to have a college in every district or county, or for every sect and party -- and to boast of a college education, and to sport with high sounding literary titles -- as if these imparted sense or wisdom or knowledge. (Hofstadter, 1955a, p. 212)

Clearly denominational interests and local pride were two driving forces in the development of most new institutions. And in the vast majority of these discipline and piety would be the only fare. Given the sectarian composition of the governing boards of so many of the new (and the old) institutions, it is easy to understand a reluctance to yield to pressures for change.

Hofstadter (1955a) identifies another issue that affected the development of higher education:

the rising spirit of political partisanship and the social hostilities that raged in the United States from about 1820 to the Civil War. The development of the democratic spirit in the years before and during the Jackson administration had complex results. It was attended by a vogue of humanitarianism and reform as well as an assertive mood of equalitarianism. One of its great contributions to American life was to make available to broader masses of people a free public education at the grammar-school level. In

the field of collegiate education its consequences were far less favorable. One of the dominant popular motives was the passion for equalizing opportunity, which manifested itself . . . in economic life by the attempt to destroy all kinds of monopolies and privileges. (p. 245)

The temper of the people included a widespread disdain for experts, for excellence, or authority. The effect on education was to deny the institutions of higher education the privilege of being the sole avenue to the professions. Informal training of doctors, lawyers, and ministers was encouraged through apprenticeships, or proprietary schools not connected to universities, or hospitals. If the well-to-do persisted in conventional methods they were subject to slurs about their aristocratic tendencies.

Utility. The proponents of the new curricula in higher education used a variety of terms to describe their approach. "Utility," or "utilitarian," were popular, as was "practical," and "real life." And many proclaimed their goal to be "service." All of these were ambiguous, but they clearly shared a common bond with the goals of Franklin and Jefferson.

In 1802, the United States Military Academy at West Point was founded, the first technical institute in the United States. Norwich Academy was founded in Vermont in 1819, and in 1824 the Rensselaer Polytechnic Institute was established, "to qualify teachers for instructing the sons and daughters of farmers and mechanics . . . in the application of experimental chemistry,

philosophy, and natural history to agriculture, domestic economy, the arts, and manufactures" (Eddy, 1956, p. 10). The patron of the Institute, Stephen VanRensselaer, anticipated the rationale of the land-grant college, while bridging the chasm between the anti-intellectualism and the democratic, egalitarian mood of the age. Van Rensselaer desired "The diffusion of a very useful kind of knowledge, with its application to the business of living" (Rudolph, 1962 p. 230).

In 1846, Yale established two professorships, one in agricultural chemistry and animal and vegetable physiology, the second in "practical chemistry." Three years later, the Sheffield School was formed, with a "scientific" curriculum to parallel the traditional Yale "arts" degree. In 1847, Abbott Lawrence bequeathed a sum of money to Harvard to form the Lawrence Scientific School. In both instances, these were separate, parallel schools, and neither could award the traditional Bachelor of Arts degree; rather, a Bachelor of Science degree was proposed and approved.

There were sporadic attempts during this period to develop specialized agricultural schools. The Gardner Lyceum was established in Gardner, Maine in 1823, becoming the first devoted exclusively to agriculture. It failed in ten years. It was followed by a variety of societies and schemes that came and went, ignoring the fact that, in the traditional sense, no "discipline" of agriculture existed. People's College was

conceived in 1850 in upstate New York, opening its doors in 1860 only to close them, forever, in 1861.

A more successful effort was made in Michigan: that state's constitution in 1850 provided for the "establishment of an agricultural school." Within five years a Bill had been passed creating the first "State Agricultural College" in the nation, a separate but not equal counterpart to the existing state university.

Pennsylvania's Farmer's High School was set up in 1854, and that too became an Agricultural College (in 1862). Massachusetts had had a plan for a state agricultural college since 1825, but it wasn't until 1856 that the Legislature created a Board of Trustees (headed by Marshall Wilder). The institution didn't emerge until after the Morrill Land Grant Act (1862). And Maryland had established an agricultural college in 1856, opening in 1859. So it was on the eve of the Land Grant Act that Michigan, Pennsylvania and Maryland formed a triad of agricultural colleges, and three percent of the approximately four hundred colleges and universities in American had departments of "science and agriculture," or something analogous.

The land-grant proposal. Beginning in 1850, Jonathan Baldwin Turner delivered a series of speeches outlining a master plan for a state industrial institution for Illinois. This was to be supported, in part, by grants of federal land which would be

managed or sold by the trustees. The Illinois legislature, in 1853, sent a revised version of this plan to Congress proposing an endowment of \$500,000 worth of federal lands be given to each state to establish and maintain industrial universities "for the more liberal and practical education of the industrial classes" (Eddy, 1956, p. 25). This proposal incorporated a "common man's educational Bill of Rights" (Eddy, 1956 p. 26), emphasizing students (the working man), curricular concerns (practical pursuits and professions), extension (institutes and lyceums), experimentation and research.

Eddy (1956) stresses in his history, Colleges for Our Land and Time, that Turner had turned away from using existing institutions to absorb his proposed, new functions:

At the heart of the Turner plan lay a strong dissatisfaction with the educational institutions of the first half of the nineteenth century. Turner is quoted as saying that the old colleges "have hauled a canoe alongside their huge professional steamship and invited the farmers and mechanics to jump on board and sail with them; but the difficulty is, they will not embark. (p. 25)

Turner could not imagine a combination of the new with the old.

He dismissed it in scathing terms:

No wonder such educators have ever deemed the liberal culture of the industrial classes an impossibility; for they have never tried, nor even conceived of any other way of educating them, except that by which they are rendered totally unfit for their several callings in after life. How absurd would it seem to set a clergyman to plowing and studying the depredations of blights, insects, the growing of

crops, etc., in order to give him habits of thought and mental discipline for the pulpit; yet this is not half as ridiculous, in reality, as the reverse absurdity of attempting to educate the man of work in unknown tongues, abstract problems and theories, and metaphysical figments and quibbles. (Eddy, 1956, p. 25)

Turner demonstrated a class-consciousness, coupled with a seeming sense of the fitness of traditional, inherited roles -- or at least the opportunity for education in those roles -- as well as a pure, vocational view of higher education. In its own way, it is as anti-intellectual a position as that of the proponents of discipline and piety.

In any event, Congress was not moved by the plan or the rhetoric.

On February 28, 1859, a Congressman from Vermont, Justin Smith Morrill, introduced the following resolution in the House:

That the Committee on Agriculture be . . . requested to inquire into the expediency of establishing . . . one or more national agricultural schools upon the basis of the U.S. Naval and Military schools, in order that one scholar from each congressional district and two from each state at large, may receive a scientific and practical education at public expense. (Eddy, 1956, p. 30)

This resolution was promptly defeated, but the following year Morrill came back with a reformed version, this being the first Land-Grant College bill, "An act donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts" (Eddy, 1956, pp. 30-31). President Buchanan vetoed that bill in 1859.

On December 16, 1861, a new bill was presented in the House of Representatives. The significant changes in the second Land-Grant proposal were: (1) the omission of the territories; (2) the increase of the land grant for each member of Congress from 20,000 to 30,000 acres; (3) the exclusion of benefits to States while in the act of rebellion; and (4) the requirement to teach military tactics. The last two changes obviously reflected the condition of Civil War at that time. The wording on the measure stipulated that

each State. . . take and claim the benefits of this act, to the endowment, support, and maintenance of at least one college where the leading object shall be without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life. (Eddy, 1956, p. 33)

Lincoln signed the bill on July 2, 1862.

Alan Nevins (1962) has declared that "the most important idea in the genesis of the land grant colleges and state universities was that of democracy," and that "the central idea behind the land-grant movement was that liberty and equality could not survive unless all men had full opportunity to pursue all occupations at the highest practicable level" (pp. 16-17). Certainly the America of the mid-nineteenth century was one of increasing mobility and transition, of rapid industrialization,

of railroads and homesteading, and challenge to any and all tradition: The Scientific American began publishing in 1845, Herbert Spencer's Principles of Psychology was printed in 1855, and Darwin's Origin of the Species came out the year that Buchanan vetoed the first Land Grant Bill.

Morrill urged support for his proposal in the most eloquent fashion:

Pass this measure and we shall have done -- something to enable the farmer to raise two blades of grass instead of one; something for every owner of land; something for all who desire to own land; something for cheap scientific education; something for every man who loves intelligence and not ignorance; something to induce the fathers' sons and daughters to settle and cluster around the old homestead; something to remove the last vestige of pauperism from our land; something for peace, good order and better support of Christian Churches and common schools; something to enable sterile railroads to pay dividends, something to enable people to bear the enormous expenditures of the national government, something to check the passion of individuals and the nation for indefinite territorial expansion and ultimate decrepitude; something to prevent the dispersion of our population, and to concentrate it among the best lands of our country -- places hallowed by church spires and mellowed by the influence of time -- where the consumer will be placed at the door of the producer; something to obtain higher prices for all sorts of agricultural products, and something to increase the loveliness of the American landscape. (Florer, 1968, p. 467)

Those are not the encomiums one would apply to discipline and piety, and -- even allowing for rhetorical excesses -they commit the institutions of higher education to a quite new and different set of goals. Of course, one must overlook the

complaint of the president of the University of Illinois, Gregory, who stated in 1869 that "we have no science of agriculture. Botany is a science -- chemistry is a science -- but agriculture is not a science in any sense It is simply a mass of empiricism" (Nevins, 1962, p. 57).

In any event, Iowa was the first state to accept the Act's conditions, then Vermont and Connecticut, all in the first year of its passage. Within the next eight years, 37 states had agreed to establish the teaching of agriculture, mechanical arts and military tactics.

What these early and subsequent land grant institutions proclaimed, and what was subscribed to by increasing numbers of other, non-land grant institutions, was a belief that:

"The throbbing life of to-day demands from our colleges something besides learning and culture. It cares not for pedants steeped in useless lore. It calls for true men, who are earnest, and practical, who know something of the problems of real life and are fitted to grapple with them." Learning, this writer added, must aid "the fitting for real life in something besides discipline and culture of the mind." (Veysey, 1965, p. 62)

This reality frequently involved "democracy," and it was always vocational.

Democracy and vocationalism. The democracy applied to fields of learning Ezra Cornell declared in 1868 that he would found an institution "where any person can find instruction in any study"; Charles W. Eliot, the newly appointed president of

Harvard, declared in 1869, "No object of human inquiry can be out of place in the programme of a real university. It is only necessary that every subject should be taught at the university on a higher plane than elsewhere. . . . It is impossible to be too catholic in this matter" (Veysey, 1965, p. 90). It also applied to the admission of students, to equality of treatment or condition for students who were attending a university at any one time. In its most radical sense, the democratic spirit meant a responsiveness to the non-academic mass of citizens. (Today, we talk about a kind of "accountability" that a tax-supported institution "owes" the citizenry.)

The vocationalism served both individual ambition and national need. As Morrill declared in 1888, looking back at his historic Bill:

By no means was it designed to curtail the usual extent of a collegiate education, but to add thereto such essential and practical sciences as were then almost universally neglected by literary colleges, although indispensable to the advancement of the American people in their industrial and diversified life. (Eddy, 1956, p. 32)

In the rapid change and expansion of the curriculum, new disciplines appeared: Engineering expanded from Civil to include Mechanical in 1870, then Electrical appeared in the 1880's; in agriculture, where Gregory complained of a lack of science in 1869, by 1895 "there were chairs in horticulture, botany, entomology, agricultural chemistry, dairy chemistry, agricultural

physics, bacteriology, mycology, dairy husbandry, animal husbandry, as well as other variations peculiar to individual institutions" (Eddy, 1956, p. 88). The Laramie (Wyoming) Sentinel editorialized in 1866 that the colleges must turn out "a class of students who, when they graduate, shall know how to do something, something the world wants done" (Eddy, 1956, p. 89). With the expansion of the curriculum, the elective system at Harvard and elsewhere, and the growing feeling that there was no hierarchy of disciplines (no "Queen of the Sciences," as in Medieval values), the undergraduate had a new freedom.

Veysey (1965) describes the situation:

In his freedom the student was supposed to become a trained expert in some special field. The elevation of the younger professions, such as engineering, schoolteaching, and academic scholarship itself, comprised one of the prominent themes of American "real life" in the late nineteenth century. Professional schools of widely varying types were founded. The rise of such training had a direct impact in turn upon the undergraduate college. It had been an item of faith among believers in mental discipline (and would remain so among defenders of liberal culture) that a rigid separation should be maintained between courses with professional relevance and those taken for the Bachelor's degree. The elective system now made it possible for young men who intended to become medical doctors to take directly preparatory courses in general science as undergraduates. . . . the issues raised by the direct intrusion of vocational training into the college curriculum were never clearly settled. (p. 67-68)

This sense of vocationalism was not confined to the land

grant or state universities. Andrew White at Cornell had promoted as technical a field as pharmacy in 1884; Charles W. Eliot at Harvard argued just as vigorously for the creation of a business school. "There is no danger in any part of the university," he said, "that too much attention will be paid to the sciences ordinarily supposed to have useful applications. The problem is to get enough attention paid to them" (Veysey, 1965, p. 90).

Finally, the concept of Utility had a much more direct application. That is, it was more than just vocationalism, it came to be explicitly involved in public service. Schools of political science or public service came into being at Columbia, Michigan and Wisconsin in the 1880s and 1890s. By this time, the spirit of Progressivism was gestating, and higher education would soon be called upon to solve a wide range of social, business and labor problems. What became known as the "Wisconsin Idea," was first proclaimed by Charles Kendall Adams in a baccalaureate address at the University of Wisconsin in 1896: "The university is not a party separate from the State. It is a part of the State -- as much a part of the State as the Capitol itself -- as much as the brain and the hand are part of the body" (Veysey, 1956, p. 104).

The rhetoric sounds appealing, but it is not without its problems. With Adams, and others, the service to the state is fitting and proper, a return for that state's generosity in

funding. In the event of a conflict between the institution and the state, in, say, a question of academic freedom, or in the appointment of a controversial faculty member, or the offering of a course or degree, who resolves?

Further, "social efficiency" increasingly began to crop up in the speeches of college presidents. The first incident seems to have been an address by Charles W. Eliot to the National Education Association in 1888, entitled "Can School Programs be Shortened and Enriched?" Certainly the very term smacks of technology. However, the concerns we might feel today about these issues were not evident at the conclusion of the nineteenth century.

In 1908 Eliot wrote: "At bottom, most of the American institutions of the higher education are filled with the modern democratic spirit of serviceableness. Teachers and students alike are profoundly moved by the desire to serve the democratic community. . . . All the colleges boast of the serviceable men they have trained, and regard the serviceable patriot as their ideal product. This is a thoroughly democratic conception of their function." (Veysey, 1956, p. 119)

Research. The serviceableness sought by Eliot tied in, at various times, with the goals of Research. For example, Veysey (1956) notes

the Progressive Era brought with it the expectation of prominently displayed altruistic motives in all lines of endeavor. As a result, first-rate scientists began to produce numerous statements linking their work to practical social benefit. (p. 124)

The German example. But we must go back to George Ticknor's Remarks (1825), and his lamentation, "Who, in this country, by means here offered him, has been enabled to make himself a good Greek Scholar?" The model for Research was in Germany, where there was little if any consideration given to the utility or application of its fruits. Lehrfreiheit, as it crossed the Atlantic, became part of an American campaign for academic freedom. This culminated in the establishment, in 1876, of the Johns Hopkins University at Baltimore.

Getting to that point was a slow process, but German higher education was revered at virtually every juncture. For example, in 1825, the same year of Ticknor's Remarks, Philip Lindsley at the University of Tennessee called attention to the "seminars" of Goettingen and Berlin: Lindsley's objective was to demonstrate the role of the German philological seminar as a supplier of classical professors and teachers to Europe.

We have our Theological Seminaries . . . -- our Medical and our Law schools -- which receive the graduates of our colleges, and fit them for their respective professions. And whenever the profession of teaching shall be duly honoured and appreciated, it is not doubted but that it will receive similar attention, and be favoured with equal advantages. (Storr, 1953, p. 24)

Both Ticknor and Lindsley were addressing the plight of the professoriate in America, as well as the lack of facilities for advanced study.

Harvard. In 1831, Harvard hired a German classicist named

Charles Beck to teach Latin. Beck had received a doctorate at Tubingen, and, once arrived in Cambridge, he began to plan a philological seminary for Harvard, designed in part to train teachers. In his formal recommendation, made to the Harvard Corporation on June 23, 1831, Beck said:

We should carefully distinguish between that degree of information which may be sufficient for an individual whose object is to develop & cultivate the powers of his mind, & that comprehensive knowledge necessary for instructing, embracing the whole branch in which instruction is to be given; these two kinds of knowledge differ materially in their object, extent & the manner of their acquisition. . . . A classical seminary . . . should be formed by degrees but still the final object should be fixed & well understood. Such a Seminary should give 1) a complete instruction in classical philology, comprising a thorough acquaintance with the language, literature & history, in the widest sense of the word of the Greeks & Romans, 2) a complete course in history & 3) in mathematics. This wd (sic) constitute a philosophical school as I shall call it, corresponding to the philosophical faculty of European universities, & in common with the theological, law & medical schools complete the structure of our university. (Storr, 1953, pp. 25-26)

The Corporation accepted his recommendation for study, a committee was established to prepare guidelines for such a venture, and a report was submitted to President Josiah Quincy, and Francis C. Gray of the Fellows, in October. The seminary did eventually open with six resident graduates enrolling, but soon withered and was forgotten, lacking financial assistance for needy students, and sufficient reputation to attract the affluent

in preference to study abroad.

In the following decade, the gift of \$50,000 by Abbott Lawrence for the support of scientific education at Harvard allowed newly inaugurated President Edward Everett to speculate that with the scientific school, plus the schools of medicine, theology, and law, his institution might be considered to form, "upon the bases of the ancient and venerable collegiate foundation, an institution closely resembling the universities of Europe, especially those of Germany" (Story, 1953, p. 53). At the same time, he proposed that an "earned" Master of Arts degree be established, one that

shall be conferred by anticiaption on every graduate of this University or any other respectable collegiate institution, who shall have resided for a year and a half in Cambridge, and pursued his studies as a member of either of the Professional Colleges or of the Scientific School. (Storr, 1953, p. 52)

The Board of Overseers rejected the proposal in 1848.

Yale. Meanwhile, in New Haven, Yale was still operating under the philosophy of the precedence of mental discipline over knowledge. In 1846, "the Corporation received an outline of a school of science, the chief author of which was Benjamin Silliman, Professor of Chemistry, Pharmacy, Mineralogy, and Geology. . . . the scheme was broadened to provide advanced insruction in nonscientific subjects" (Storr, 1953, p. 54). A year later, a Department of Philosophy and the Arts was recommended, and appeared in the catalogue for 1847-48. By 1856,

the potential of this department so excited James D. Dana, Professor of Natural History, that he was moved to exclaim:

Only a little wider expansion of the scheme, . . . and it will cover the highest branches of literary as well as scientific education, adapted to carry forward the graduate of the College, through a full university system of classical or other studies. . . . Not till this is accomplished, will the department of philosophy and the arts projected, become a realized fact. Not till then, can we hope to prevent our youth from seeking in the atmosphere of Germany the knowledge for which they yearn. (Storr, 1953, p. 57)

Within four years, Yale approved the Ph.D. "for high attainment in mathematics, philology, or such other branches as might be taught in the Department of Philosophy and the Arts" (Storr, 1953, p. 57) In 1861, Yale awarded the first Ph.D. from an American university.

Johns Hopkins. The Johns Hopkins University was incorporated in 1867, but it took seven more years for Hopkins's will to be probated. Between 1874 and 1876, when the University opened, the trustees attempted to come to an agreement on what a great American university ought to be. Daniel Coit Gilman, the first Johns Hopkins President, had been on the Yale faculty in the 1860s, and had helped reorganize the Sheffield Scientific School there. After meeting with the trustees, Gilman announced plans for a research- oriented graduate school. In 1875 he wrote:

I incline more & more to the belief that what is wanted in Baltimore is not a scientific school, nor a classical college, nor both combined; but a faculty of medicine, and a faculty of philosophy.

. . . : that the usual college machinery of classes, commencements etc may be dispensed with: that each head of a great department, with his associates in that department, -- say of mathematics, or of Language or of Chemistry or of History, etc. shall be as far as possible free from the interference of other heads of departments, & shall determine what scholars he will receive & how he will teach them; that advanced special students be first provided for; that degrees be given when scholars are ready to be graduated, in one year or in ten years after their admission. (Veysey, 1965, p. 160)

Under Gilman, Johns Hopkins became a symbol of an entirely new force in American higher education; faculty-centered, not student-oriented, "Gilman insisted that the faculty be given only students who were sufficiently well prepared to provide the faculty with challenging and rewarding stimulation" (Rudolph, 1962, p. 271).

Johns Hopkins was unabashed in its commitment to research, no matter how remote its "utility" might seem to be. In 1885 Gilman would tell a skeptical audience:

If you persist . . . in taking the utilitarian view and ask me what is the good of Mr. Glaisher's determination of the least factors of the missing three out of the first nine million numbers . . ., I shall be forced to say I do not know; if you press me harder I shall be obliged to express my convictions that nobody knows; but I know, and you know, and everybody may know, who will take the pains to inquire, that the progress of mathematics underlies and sustains all progress in exact knowledge. (Rudolph, 1962, p. 273)

Finally, Gilman and Johns Hopkins were instrumental in developing societal respect for the profession of university faculty,

through salaries, facilities, and support. It was his publicly stated thesis that the material progress of America and the world rested on the fundamental research being conducted in the laboratories of universities. These, said Gilman, "were the creation not of industrial fabrics, not of mercantile operations, not even of private enterprise, but of universities and the motive which inspired their founders and directors was not the acquisition of wealth, but the ascertainment of fundamental law" (Rudolph, 1962, p. 273-4).

Other changes in American higher education were emerging as well. An emphasis on research naturally and inevitably resulted in an increasing specialization of knowledge. At the same time, there was a willingness of the new American universities to shelter these specialized departments of knowledge. And in many cases, the specializations represented vocational aspirations, signifying a sharing, if not a marrying, with the utilitarians.

Liberal Culture. There was a fourth educational perspective, one that emerged in the late nineteenth century and was particularly unfriendly toward the narrow and the practical. We've called this "liberal culture." Somehow, the acquisition of liberal culture provided one with aesthetic, moral, and social standards that were both necessary for the good of humanity, and threatened by the mindless pursuit of technology. And somehow, despite a "liberal" tendency to advocate and support democracy, there was

an undercurrent of disdain for the masses. Numbers, the mark of democracy, dilute standards, the mark of culture.

Perhaps the best statement of this position is provided by Matthew Arnold, who became something of a favorite in certain ranks of higher education during this period. Veysey (1965) explains this:

Most American men of letters were ardent Anglophiles, and an Englishman, Matthew Arnold, was often allowed to speak rather automatically for the concept of culture. . . . Although English higher education then remained largely in a state of torpor and ossification and thus seemed an impossible model to emulate in America, the close intellectual tie with England -- stretching in memory all the way back to the first importation of "liberal education" from Cambridge to Harvard in colonial times -- still indefinably commanded pre-eminent respect. (p. 196)

During a tour of the United States in 1883, Arnold delivered a lecture that has become a classic statement of the role of letters in the modern world, "Literature and Science."

The question is raised whether, to meet the needs of our modern life, the predominance ought not now to pass from letters to science; and naturally the question is nowhere raised with more energy than here in the United States. The design of abasing what is called "mere literary instruction and education," and of exalting what is called "sound, extensive, and practical scientific knowledge," is, in this intensely modern world of the United States, even more perhaps than in Europe, a very popular design, and makes great and rapid progress. (Arnold, 1968, pp. 1139-1140)

Arnold goes on to argue that, no matter how interesting the knowledge of things is, the reality of natural knowledge, as he

calls it, will not overwhelm our "invincible desire to relate this proposition to the sense in us for conduct, and to the sense in us for beauty. But this the men of science will not do for us, and will hardly even profess to do. . . . it will be knowledge only which they give us; knoweldge not put for us into relation with our sense for conduct, our sense for beauty." (Arnold, 1968 p. 1139-1140).

As the twentieth century emerged, Harvard, which had played such an important role in each of the rival conceptions of the higher learning, elected Abbott Lawrence Lowell as successor to President Eliot. When Eliot was named president in 1869, a new era in American higher education was anticipated. Now, forty years later, the choice of Lowell clearly stated that Harvard, at least, was trying to capture the cause of liberal culture and to move away from Eliot's utilitarian determination. Two quite different spokesman deserve to be quoted in the context of Lowell's assumption of the presidency of Harvard, and the fact that, "in the fall of 1909, Lowell revealed that he thought of himself, Wilson (Princeton), and Hadley of Yale as standing alone in university circles in their effort to preserve undergraduate emphasis on the liberal arts" (Veysey, 1965, p. 250). The first is Kenyon Butterfield, then president of Massachusetts Agricultural College in 1904 and destined to serve as president of two more Land Grant Colleges:

(each Land Grant College) should develop as

rapidly as possible a definite tripartite organization that will reveal the college in its three-fold function -- as an organ of research as an educator of students, and as a distributor of information to those who cannot come to the college. These are really coordinate functions and should be so recognized. The colleges should unify them into one comprehensive scheme. The principle of such unity is perfectly clear: We have in research, the quest for truth; in the education of students, the incarnation of truth; and in extension work, the democratization of truth. (Eddy, 1956, p. 116)

The second is Henry Adams, and the quote is from his quite remarkable chapter, "The Dynamo and the Virgin," in The Education of Henry Adams. In that chapter, Adams visits the Paris Exposition of 1900 and, with his friend Langley, tours the exhibits:

At Langley's behest, the Exhibition dropped its superfluous rags and stripped itself to the skin, for Langley knew what to study, and why, and how: . . . Adams had looked at most of the accumulations of art in the storehouses called Art Museums; . . . Langley, with the ease of a great master of experiment, threw out of the field every exhibit that did not reveal a new application of force, and naturally threw out, to begin with, almost the whole art exhibit. He led his pupil directly to the forces. . . . Then he showed his scholar the great hall of dynamos . . . and thus it happened that, . . . (Adams) found himself lying in the Gallery of Machines at the Great Exposition of 1900, his historical neck broken by the sudden irruption of forces totally new. (Adams, 1961, pp. 379-380)

One cannot help but wonder what Arnold would say to Adams to ease his entry into the twentieth century; or what Adams would counsel Lowell with, as he assumed his presidency. The juxtaposition of these declarations, Lowell's, Butterfields', and

Adams' is rich with irony, and prophetic, as well, in that the seventy-odd years following do not seem to have provided a nice resolution for the dramatically divergent viewpoints.

Synthesis

It is a commentary not just on Harvard but also on the modern American university that Eliot and Lowell could look in opposite directions and the same institution could follow them both and glory in it. Universities have a unique capacity for riding off in all directions and still staying in the same place, as Harvard has so decisively demonstrated. (Kerr, 1963, p. 17)

What I have identified as confusion within the university, as to its purpose, its focus within society, can be seen, I hope, to be an on-going situation. It is not something that is unique to this decade, or even this century. We can clearly see syntheses today of the major movements we have identified in the past of American higher education. To use Harvard as an example, one could state with fairness that Lowell's counterrevolution to Eliot's leadership in the fields of Utility was successful; however, Harvard did not disband its professional schools or raze its research laboratories.

By all accounts, institutions of higher education have always been involved in training, the preparation for various professions such as medicine, law, theology. It also turns out that much of what was transmitted became regarded as something of a recapitulation of society's culture. But the heightened

tensions between the study of culture, per se, or the pursuit of "new knowledge," or the fine distinctions between an education and various kinds of training, are recent phenomena. As higher education became more self-conscious, and as the users of higher education became more critical of the institutions and their offerings while at the same time increasing their numbers at a phenomenal rate, the demands from within and without the institutions to declare their missions, their allegiances have also increased.

Those critics who stipulate distinctions between education and training are responding for the most part to the ingestion by the institutions of a remarkable and diverse number of new disciplines. The critics are demanding that the institutions make a commitment to, at the least, a prioritizing of these disciplines: to put it another way, does Hotel, Restaurant and Travel Administration weigh the same, on the academic scales, as Philosophy?

Another part of the critics' response has to do with the assumption of new roles by the University. "New," in that the justification for curricular changes or the reallocation of resources is tied so closely and explicitly to the training needs of the society at large.

When Theodore Hsi-En Chen surveyed liberal higher education in the United States during the 1930s, he found the picture "indeed a confusing and puzzling one" (Chen, 1940). He was able,

however, to identify six different patterns of curricula which seemed to be emerging from contemporary attempts to reorganize the liberal arts. These included: (1) independent study programs (including tutorials and honors systems); (2) comprehensive examinations; (3) organization of the curriculum along "divisional" lines, and development of interdepartmental courses; (4) a revitalized "classical" curriculum as practiced by St. John's College, for example; (5) the so-called "broad-fields curriculum," with subject matter reorganized to, for example, address identified "life problems"; and finally (6) the experimental colleges such as Black Mountain, Bennington, Bard, or Sarah Lawrence, where the curriculum "translates into actual practice the principle that education is essentially an individual affair and must be based on the active interests and abilities of the individual learner" (Chen, 1940, p. 138). The raisons d'etre for the new curricula included student passivity, fragmentary credits and disconnected courses, narrow specialization, and reaction against a system of free electives and a multiplicity of courses.

Chen suggested that his inquiry demonstrated some trends in American higher education. I won't include them all here (there are twelve) (Chen, 1940, pp. 139-140), but I would like to quote four that are important to our understanding of higher education today:

The colleges are slowly moving away from the

lock-step system of credits, points, courses, and lectures.

Comprehensive examinations mark a shift of emphasis from the accumulation of credits and the passing of separate courses to organized knowledge within a whole field.

Rigid departmentalization is avoided; the divisional organization of departments and the development of interdepartmental courses are among the efforts made to help the students see the interrelationships between subjects and between fields of study.

Liberal education is being redefined in terms of the appreciation of contemporary culture and intelligent adjustment to the problems of modern life. (p. 138)

For Chen these trends demonstrated a movement toward a more holistic education, both in terms of content and process, and an education that would have more "relevance." But that has been, as we now recognize, an expressed concern of educational philosophers and critics for centuries. The dilemma is under-scored when the quest for relevance becomes something more akin to specialization as adaptation to the job market.

For example, thirty years after Chen concluded his survey and analysis, two other educational appraisers provided an update. Paul Dressel and Frances DeLisle (1969) noted:

In expanding the curriculum and providing intensive preparation for a wide variety of vocations, neither the university nor the liberal arts college abandoned concern for liberal education. Yet vocationalism and specialization generated conflicts which have not yet been resolved. (p. 4)

Dressel and DeLisle agree with most observers of the pattern of

American higher education that there was a strong attempt to provide a "counterbalance" to utility, or specialization, or vocationalism, and that this resurgence of interest is marked during the thirties (the period surveyed by Chen). After World War II, the Harvard Report on general education was issued, and this provided significant, additional impetus. However, in the Dressel and DeLisle analysis, the issue had not been satisfactorily resolved. They note that most programs were experimental and easily attacked as superficial. Why this is so is something not discussed by Dressel and DeLisle. The conclusion of the authors, as we may have anticipated, is inconclusive:

The appropriate place of liberal and general education in relation to specialization has been, and remains today, one of the sharpest issues. Few disagree that both components are of great value. All acknowledge that the problem lies in finding a balance, properly articulated, between the two emphases. (p.4)

The balance, obviously, rests upon some sort of agreement of the relative "value" of each approach. I have implied, a little bit earlier in this section, that the demonstration of rapid institutional response to the training needs of society may mean that the scales have already been weighed. Dressel and DeLisle, from their particular historical and philosophical perspective, provide support, although that was not their intent, for my thesis:

The primary factors affecting and precipitating

change tend to be of essentially the same character throughout the history of higher education in America. Only the more compelling contemporary tempo has altered significantly. The rapid growth of knowledge, the social and economic pressures of the total society with its technological needs for manpower, and the demands of students continue to call for educational experiences relevant to contemporary times. (p. 7)

It is implicit in their observation that education reflects needs, pressures and demands; a statement about the purpose or purposes of higher education is missing, other than this passive compliance with the current trends or fashions in the economy. This is revealing, and while it may not have been what the authors intended, it will be helpful as we press our critique of the present state of American higher education.

C H A P T E R I I I

THE PURPOSES OF HIGHER EDUCATION IN THE UNITED STATES

It may be that the problem is one without a general solution. Indeed, if we accept what evidence we have, it would appear to be almost impossibly difficult to be a good man without first being a good doctor, lawyer, scholar, or tradesman, not to mention a good husband or wife and father or mother.

(Morison, 1967, xvi)

For some workers, their jobs can never be made satisfying, but only bearable at best. Other workers may be in relatively satisfying jobs, but after many years on the same job, they may wish to change their careers. Still others, ill-prepared by their education, may want to enlarge their choices through additional education and training. . . . we note that high school vocational education has been unsatisfactory in this country, and that for the concept of career education to advance, it might be worthwhile to view schools as a workplace, as much in need of job redesign as other workplaces, and to understand that the proper precursor to satisfying work is a satisfying education.

Special Task Force to the
Secretary of Health, Education,
and Welfare 1973, p. xviii.)

The Accumulation of Purpose

What we need to do, at this point, is to look very carefully at what some of the leading spokespersons for American higher education have to say about its present state. It is important to note that most if not all of these individuals tend to address the state of higher education from a "purposes and goals," position, with the content following. For example, the authors of the Carnegie Commission Report, The Purposes and the Performance of Higher Education in the United States (1973b), point out:

Purposes have grown quantitatively and changed substantially qualitatively in the course of American history but have not been decisively reordered since the period around 1870. At that time higher education -- reflecting new purposes -- greatly expanded its functions to include research and service to society, and opened its doors potentially to the mass entry of students. (p. vii.)

They go on to define

purposes as being the intentions of higher education, as constituting the general design of higher education, as comprising the end objects it pursues. We define functions as the specific acts performed in the course of fulfilling the purposes. (p. vii.)

It is traditional (at least since Kenyon Butterfield, President of Massachusetts Agricultural College, 1904), to declare that American higher education has three "purposes": teaching, research, and service (Eddy, 1956). And we have seen how the American institution of higher education actually developed those

purposes through a process of accumulation. How that is interpreted is what concerns us here.

The authors of the Carnegie Commission Report see that process of accumulation beginning with Harvard's curriculum concerns of the Bible, European and classical culture, Greek and Latin, and mathematics.

A broad general education was combined with a deep concern for the moral and religious development of youth . . . Thus an original purpose of American higher education was personal development through acculturation to the classics and to moral principles. (Carnegie, 1973b, p. 59)

Personal development has continued, although in different forms. Newer subjects (science, social science) have been added, as have the precepts of American society, and our version of democracy. In loco parentis has largely disappeared, and this began in the period between the Civil War and World War I while the German university was the premier model for American institutions. The "student personnel movement" emerged in the twentieth century with the integration of the campus and the classroom, a tremendous rise in extracurricular activities, and the ascendancy of athletics, student government and other areas. One could state that currently the campus serves for many students as a moment for self discovery "-- an interlude between family influence and adult commitment to an occupation and to a way of life" (Carnegie, 1973b, p. 60).

A second theme was economic; education was seen early in

this country as an investment (Benjamin Franklin called it the "best investment"). The blending of the streams of Research and Utility late in the nineteenth century insured the continuing importance of this theme.

This economic purpose increased its momentum during and after World War II, with the emphasis upon research and development, and upon preparing highly trained "manpower." (Carnegie, 1973b, p. 61)

The Report stipulates a third theme, the political role. This has three phases: mass education to promote effective participation in a democracy; training of leaders; and assuring "some equality of opportunity so that deprivations in one generation need not necessarily be passed on to members of succeeding generations" (p. 61). Another political purpose has recently emerged, according to the Report. This is the critical or evaluative function played by faculty of institutions of higher education. This role is played in and out of the classroom and is a "source of self-renewal" for society, complementing other sources such as the press or certain labor unions.

The fourth theme is service to the surrounding society, which received national endorsement with the land-grant movement. This has gone far beyond service to agriculture, and encompasses relationships with industry and the professions, the federal government, state and local governments, and can even be seen in the inter-relationship between the campus and its resources and

the surrounding communities: examples of this include the cultural and entertainment opportunities provided by the college or university, open lectures, radio and tv stations, and athletics.

The Carnegie Report describes this as "the historical process of proliferating purposes" (p. 63). And it adds another:

Pure scholarship has come along more as a companion of these four historical purposes than as a consciously chosen purpose by American society. We believe, however, that it should now be set forth formally as a central purpose . . . (p. 64)

Beneath these purposes lie basic philosophical positions that the Report deals with briefly. These may be summarized as:

1. Searching for Values: this is based on the premise that there are eternal truths in the universe or ultimate values which have been discovered or can be discovered.
2. Pursuing New Knowledge: here, truth is always being pursued, discovered, tested and applied anew. In an expanding and changing universe we can analyze current experience and devise experiments to keep us abreast of expanding and changing truth. The search is eternal in a world in which all is flux.
3. Supporting a Designated Social Structure: education should provide a blueprint of the desired future society for us all. Political and social goals are, in this view, more important than the library, the chapel, or

the laboratory. "The good society is not to be found so much in the natural laws of the universe or in man's individual sense of values or in constantly new knowledge and higher skill, but in the determined will of men of convictions about the best social structure."
(p. 85)

There are tremendous problems in trying to encapsulate anything so complex as an educational philosophy in a few paragraphs, and the authors of the Report are aware of that.

It should be quickly noted that there are great tensions within each of these three points of view, as well as among them, and that each is really an axis of thought with terminal points quite far apart. (p. 86)

But what they intend is to provide an overview and, having done that, to move to some sort of synthesis as they make their recommendations for the future. While such syntheses demonstrate the mainstream, perhaps conservative focus of the Carnegie Commission, they do not serve us well as perceptive interpretations of the state of American higher education:

Earlier we set forth our convictions about the five main purposes of higher education for the present and for the period ahead. These convictions were based on our views of the changes now going on in society and on campus. We also drew on each of the three philosophical views we have set forth. Our emphasis, for example, on the importance of "academic socialization" and on general education draws on values; our stress on "advancing human capability" draws on the the approach of evolutionary knowledge; and our concern for effective "evaluation of society" through

individual study and comment draws on the philosophical concept of helping to shape a better future. Our main approach, however, has been that of the evolution of knowledge and how it can be advanced most successfully, of the application of free and trained thought and research to the great problems of the current age. (pp. 91-92)

In other words, the Carnegie Commission supports the position that the institutions of higher education are there in order to deal with these social issues. Their success, then, must be measured by how well they meet the challenge of these issues; this is an instrumental justification of those institutions. We shall want to return to this.

The Carnegie Commission is not the only example of this approach, of course. It is interesting to consider how some of these other speakers express the instrumental view without the carefully coded phrasing of the commission. For instance, Algo D. Henderson (1970), also talks about a combination of individual and social needs:

The function of higher education in a democracy rests on certain premises concerning the fulfillment of individual and societal needs. A basic premise is that each individual, regardless of his race, color, creed, or social class, should have the opportunity to develop to the full extent of his potentialities, to learn how to live as fully as possible. ... A second premise is that every person should have the opportunity to prepare himself to the best of his ability to make a living. In a democracy each individual has a free choice of vocation, be it as home manager, factory worker, electrician, doctor, or scientist. Democracy is characterized by the absence of an idle or privileged class, and therefore, everyone, ideally, derives his

income from his work. (p. 4)

Without commenting on Henderson's view of democracy, or reality, his vision of higher education is certainly linked to the training provided to individuals, who subsequently leave the college or university to get jobs commensurate with their training, and thus improve society. In other words, we pursue an education in order to get good jobs, and (ideally) we get good jobs in order to improve our society. In Henderson's (1970) words:

Now, because man has sufficient intellectual tools to plan for the good society, the goals of education should be to discover and cultivate our human resources and to apply these resources to the further advance of civilization. The implications of this change in philosophy are far reaching for the new theory involves the concept of social investment in education. (p. 5)

This "change in philosophy" is leading us inexorably to a consideration of higher education as a vocational preparation, nothing more. The underlying belief is that we cannot be happy if we do not have the "good job." The "good life" follows the "good job."

The Multiversity

Even if we accept these interesting explanations of the evolution of the "multiversity," the problem remains: what is to be taught and studied and done in the university will be

determined by the "why" of it. If that answer is to insure that graduates will obtain satisfying and rewarding jobs, then the pluralism will inevitably disappear.

Kerr (1972), in his "Postscript -- 1972", in the re-issue of The Uses of the University compares his "multiversity" to William James' "multiverse." James was contrasting "pluralism" with "monism," the latter being concerned with a single "absolute." The pluralistic approach, by contrast, sees everything in an indeterminate state, or "flux." James (1971) talks about "that distributed and strung-along and flowing sort of reality which we finite beings swim in. That is the sort of reality given us, and that is the sort with which logic is so incommensurable" (p. 223). Kerr (1972) takes this

as a good description of the multiversity with its strung-along type of unity, with its lack of devotion to any single faith and its lack of concentration on any single function, with a condition of cohesion at best or coexistence at next best or contiguity at least (under internal pressures in recent years, some campuses have moved from a state of cohesion to mere contiguity of the constituent elements). (pp. 138-139)

Kerr is using James to refute rather than to endorse in any critical or substantive manner. James' pluralistic universe is useful to reject the "absolutist" position of a single-purpose, or rigidly hierarchical institution, and to allow Kerr to posit his flowing, multi-functioned, multi-purposed university. Within that multiversity, Kerr saw first three, later four great areas of related adjustments: growth, shifting academic emphases,

involvement in the life of society, and response to the new federal involvement. All of these areas are brought together in an overall vision of higher education as an investment: "knowledge is exploding along with the population. There is also an explosion in the need for certain skills. The university is responding to all these explosions" (pp. 110-111).

We have a situation being described by Kerr where people attend our institutions of higher learning in order to get good jobs; disciplines emerge to provide training for those people in our institutions; these institutions are increasingly more closely involved in our nation's daily life with the result being a "knowledge industry" where the university is located at the center of the knowledge production process, and business and government are the consumers; and federal funding is provided for research and programs that have been identified pragmatically, in response to political goals or the urgings of very powerful lobbies. Given this, Kerr's multiversity will not likely or long tolerate an approach to or philosophy of education that does not contribute to those areas of adjustment. In that most probable of events, the multiversity is certainly not James' multiverse; we have merely substituted one form of absolutism for another. Where in the past there were monistic universities committed to one principle, Kerr is describing one committed to no single principle, but depending for its survival, its social evaluation on its ability to produce skilled labor.

If what we care most about be the synoptic treatment of phenomena, the vision of the far and the gathering of the scattered like, we must follow the conceptual method. But if, as metaphysicians, we are more curious about the inner nature of reality or about what really makes it go, we must turn our backs upon our winged concepts altogether, and bury ourselves in the thickness of those passing moments over the surface of which they fly, and on particular points of which they occasionally rest and perch. (James, 1971, p. 24)

Let us be metaphysicians about the present state of higher education: let us go back, as William James would have urged, to bury ourselves in some of the historical thickness that Clark Kerr has flown over.

The sons of . . . opulent citizens are become merchants, lawyers, or physicians. . . . The last trace of hereditary ranks is destroyed, -- the law of partition has reduced all to one level.

I do not mean that there is any deficiency of wealthy individuals in the United States; I know of no country, indeed, where the level of money has taken stronger hold on the affections of men, and where a profounder contempt is expressed for the theory of the permanent equality of property. (Tocqueville, 1961, Vol 1, p. 43)

Tocqueville was struck by the break up of traditional strata and the rapid movement of wealth. But the traditional professions dominated society and men of moderate means retained positions of power. Henry Adams (1961) describes the situation:

Down to 1850, and even later, New England society was still directed by the professions. Lawyers, physicians, professors, merchants were classes, and acted not as individuals, but as though they were clergymen and each profession were a church. In politics the system required competent

expression; it was the old Ciceronian idea of government by the best that produced the long line of New England statesmen. (p. 32)

But after the Civil War the situation changed dramatically. America was building up and out: big cities were rapidly developed, industrialization flourished, railroads were constructed to support the growth, the corporation emerged as the norm for private enterprise. The effect was to transform American society and to rapidly alter the distribution of power and prestige. Tocqueville had noted "heroism in their manner of trading," and an "ardour with which the Anglo-Americans prosecute commercial enterprise." These traits, and an atmosphere which encouraged their fullest expression would allow Warren G. Harding to declare in 1920 that "this is essentially a business country," and Calvin Coolidge to follow in 1923 with the statement that "the business of America is business" (Hofstadter, 1962). Before and since the business of our lives has been business, and this has had a significant effect on how we consider higher education and how the institution of higher education has developed in this country, particularly in this century.

For example, Thorstein Veblen identified a trend in 1916 that he found profoundly disturbing. Through the process of lay appointments to the governing boards of American institutions of higher education a pattern began to emerge: fewer clergy (traditional members of such boards) were found, and the impact was that "the discretionary control in matters of university

policy now rests finally in the businessmen" (Veblen, 1948, p. 508). For Veblen, the reason for this perceived pattern is perfectly clear:

The preference appears to be almost wholly impulsive, and a matter of habitual bias. It is due for the greater part to the high esteem currently accorded to men of wealth at large, and especially to wealthy men who have succeeded in business, quite apart from any special capacity shown by such success for the guardianship of any institution of higher learning. Business success is by common consent, and quite uncritically, taken to be conclusive evidence of wisdom even in matters that have no relation to business affairs. (p. 513)

It strikes me that the high esteem identified by Veblen is a common and pervasive occurrence, from the founding of Harvard to the present day. What is of more interest, and what Veblen glosses over, is that the choice of "hero" has changed -- the clergy is out, the successful entrepreneur is in. If we substituted "religion" for "business" we would have the situation that prevailed one hundred years earlier. Veblen saw these newly constituted lay boards, through the emerging class of academic executives (or "captains of erudition"), exercising

a pecuniary discretion in the case mainly in the way of deciding what the body of academic men that constitutes the university may or may not do with the means in hand; that is to say, their pecuniary surveillance comes in the main to an interference with the academic work. (pp. 509-510)

Now surely there were similar problems when the faculty of Harvard wanted to introduce natural science to the curriculum in

the seventeenth century. This is not a new or unusual phenomenon. What is of more use, in this analysis, is that not only do we have new heroes in powerful positions but we have captains of erudition bringing new techniques to the running of our institutions, and at the same time involving those institutions in a wide array of new projects and areas.

In other words, as higher education entered the twentieth century there occurred a conjunction of growth and development in business and education. Between 1890 and 1925 enrollments in institutions of higher education grew 4.7 times the rate of growth of the general population. In this era of Progressivism there was a

middle-class sense of obligation, a readiness to bring American society to some new sense of its problems and its promises. The simultaneous spread of the Progressive spirit and of the university idea would of course tend to reinforce the service element of both. Both movements would in a sense argue for stability in society, for an equality of opportunity now challenged by labor unionism and socialism from below and by vast concentrations of wealth and power from above; both would serve the idea of inevitable material and moral progress and see the future that would not only be bigger but also better. (Rudolph, 1962, p. 357)

What we have is growth, directions for service to society, and leadership that is predisposed to involve the institutions with those elements of society that are going to sustain that growth and contribute to "progress." In this period the University of Chicago developed degree programs for careers in

public service, and the University of Wisconsin set up an alliance with the state whereby ". . . officers of the university formed and administered legislation for the regulation of corporations, staffed many of the new regulatory commissions, and directed their researchers toward the solution of state problems" (Rudolph, 1962, p. 362). By 1915, the president of Yale would feel comfortable stating that

one test of a legitimate liberal arts subject was that a public motive rather than a private . . . motive must constitute the dominant note in its appeal. (Rudolph, 1962, p. 365)

In the same year, a professor at Columbia, Charles Homer Haskins, explained the rationale of the social sciences which were growing so rapidly:

They are . . . practical, . . . not in the narrower sense as leading to a livelihood, but in the larger sense of preparing for life. (Rudolph, 1962, p. 365)

The Corporate Connection

In other words, across a broad spectrum of higher education was the perception that there should be some fairly direct linkages between the educational process and society. Further, to deal just with the instances cited, Chicago and Wisconsin (and there were many others), there was a growing awareness within and without the institutions of a need for "experts," something Americans had, since the days of Jackson, mistrusted and rejected.

David F. Noble (1977) brings many of these threads together in his case histories of corporate engineering. With the rapid growth of the relatively new industries of electrical and chemical engineering in the period we are concerned with, there was a sudden and desperate shortage of trained professionals. The initial response by the industries was traditional:

"With the growth of the technical industries," Frank Jewett recalled in 1924, "the engineering side of the business was the first to wake up to the necessity of taking college, university and technical school trained men into the business. The engineers were the first ones to organize college recruiting on a consistent bases, . . . to create . . . smooth working machinery for making contacts and getting in touch with the right type of men." (p. 170)

But the process could not end with the recruitment and hiring. It turned out that there was a tremendous gap between the education of the newly minted engineer and the needs of industry.

The college setting demanded that the engineering schools adopt an academically respectable approach to engineering, with an emphasis upon scientific theory rather than industrial practice. As a consequence, the schools remained relatively independent of industry and produced graduates who might be temperamentally ill-suited for disciplined industrial work and poorly trained in the practical application of their theories. (Noble, 1977, p. 184)

At first, the only practical solution to this problem was the establishment of corporation schools. While electrical, railroad, gas, and machine industries had, for the last decade or so of the nineteenth century, run schools concentrating on

commercial sales, office, and apprentice training,

AT&T (and Western Electric), GE, and Westinghouse . . . gave attention to another area important to science-based industry -- graduate education for college-trained engineers. The corporation graduate-training programs were designed to meet the needs of industry: to guarantee the technical proficiency of college-trained employees, to ensure their proper habituation to corporate life, and to prepare them for managerial responsibility. (Noble, 1977, p. 171)

Given the state of engineering education then offered in the colleges and universities this was a practical solution: not only was there a paucity of equipment in the institutions, but the industries -- not the schools -- were at the forefront of theoretical knowledge in the field.

In 1913 the National Association of Corporation Schools (NACS) was created to coordinate the wide variety and large number of such training programs (ten years later, with its activities significantly expanded, it would become the American Management Association). The electrical industry dominated NACS from the beginning. While the NACS was conceived as a clearinghouse for corporation school education, it rapidly went far beyond that modest objective. At its First Annual Convention it formulated three "Functions of the Organization:" "to develop the efficiency of the individual employee;" "to increase efficiency in industry;" "to influence courses of established educational institutions more favorably toward industry" (Noble, 1977, p. 181).

Noble points out that

the third function of the NACS, to "influence" the established educational institutions favorably toward industry, was essentially geared to put the corporation schools out of business by rendering the established educational institutions outside the corporations capable of, and disposed toward, providing the services for which the corporation schools had been created. Galloway (chairman of the organizing meeting) put forth this purpose at the first organizational meeting: "It is time that our educational system was brought into some correlation with the business world." . . . The NACS thus undertook to act as the agency for industry-education cooperation. . . . to integrate the vocational, public, and higher educational institutions within the industrial system. This work was greatly facilitated by the steady flow of high-ranking personnel back and forth between the industries and the schools, with the NACS serving as the primary medium for such interaction. (p. 182)

NACS members included Hopkins, Wickenden, Steinmetz, Aydelotte, Scott, and Schneider: these gentlemen went on to become the presidents of Dartmouth, Case Institute, the Schenectady Board of Education, Swarthmore, Northwestern, and the University of Cincinnati, respectively. The "bridging of the gap" cited earlier would now occur in the educational institutions.

Weblen's concerns, it seems, were well founded. The relationship between the institutions and vocations was not restricted to large engineering schools: in 1921 the president of Antioch College wrote:

The small college, like the small factory, must select an output that the larger institutions either have neglected or cannot deal with efficiently, and should fortify its position by

selection of its materials in a manner which the wholesale methods of its large competitors have made impracticable. (Noble, 1977, p. 201)

This was the Antioch Plan, designed to train students "primarily for proprietorship and management, not for subordinate employment" (Noble, 1977, p. 200).

This brief examination demonstrates how, rapidly and pervasively, higher education moved into the camp of Utility. It was clearly in the grip of individuals who believed in the efficacy of education. The combination of Progressivism and the mood of involvement, the genuine demand for specialists and hitherto unknown expertise, and the American penchant for respecting and rewarding business success produced institutions committed to service whether in the public or private sector, and willing to adjust curricula, or to re-allocate resources in order to efficiently meet the needs of the marketplace.

It is important to recognize that there were significant pressures from another side, as well. Up to this point I have addressed the "post-graduate" end of the educational process. But what was happening in those institutions that were educating the students who were going to attend the colleges and universities? In 1893 the National Education Association set up a "Committee of Ten" to make recommendations about the nation's high school curriculum and to, hopefully, make some sense out of the chaos between the secondary school system and the colleges and universities. The Committee recommended to the secondary

schools four alternative courses:

a classical course, a Latin-scientific course, a modern languages course, and an English course. ... all demanded, as a minimum, four years of English, four years of a foreign language, three years of history, three years of mathematics, and three years of science. ...

The curricula ... show that they thought of the secondary school as an agency for academic training. But they did not make the mistake of thinking that these schools were simply college-preparatory institutions. ... The main function of high schools, said the committee, was "to prepare for the duties of life, not for college..." (Hofstadter, 1962, pp. 330-331)

Certainly, the Committee did not see it necessary to provide specific courses or training that would directly apply to the "duties of life." Yet, by 1911, a new committee of the N.E.A., the "Committee of Nine," had recommended a profound change. The task of the high school was now seen as laying "the foundations of good citizenship and (helping) in the wise choice of a vocation" (Hofstadter, 1962, p. 333). The Committee went on to charge that because of the traditional curricula the public high schools were

responsible for leading tens of thousands of boys and girls away from the pursuits for which they are adapted and in which they are needed, to other pursuits for which they are not adapted and in which they are not needed. By means of exclusively bookish curricula false ideals of culture are developed. A chasm is created between the producers of material wealth and the distributors and consumers thereof. (Hofstadter, 1962, p. 334)

This rather astounding statement turns the whole concept of

education right on its head. But the Committee was not through; where in 1893 there had been four alternative courses, all academic, in 1911 there is a significantly up-dated set of alternatives:

The basis of differentiation should be, in the broad sense of the term, vocational, thus justifying the names commonly given, such as agricultural, business, clerical, industrial, fine-arts, and house-hold-arts curriculums. Provision should be made also for those having distinctively academic interests and needs. (Hofstadter, 1962, p. 336) (emphasis mine)

Certainly higher education found itself caught in a rather determined pinch: the nakedly vocational high schools and the specifically vocational needs of industry. And, above all, boards and administrations populated by captains of industry and captains of erudition.

Once the academy had made its alliance with business and industry, it was inevitable that the degrees awarded by higher education would constitute certificates of entry. Not only did they allow the bearer to get in, they could also work to keep the nonbearer out. The former was the needed "expert," the latter, being non-expert, took his chances. Increasingly, as we have seen, society required the expert. Max Weber, in his classic examination of bureacracy, Wirtschaft und Gesellschaft, points out the necessity for narrowly trained experts in the legal-rational organizations that result from mass democracy or that occur in big, capitalist enterprises:

Office holding is a "vocation." This is shown, first, in the requirement of a firmly prescribed course of training, which demands the entire capacity for work for a long period of time, and in the generally prescribed and special examinations which are prerequisites of employment. (Gerth and Mills, 1946, p. 199)

(Weber had toured the United States in the fall of 1904; he died in 1920, and his work on bureaucracy was published posthumously.)

Of particular interest to our discussion are Weber's observations on the "rationalization" of education and training in a bureaucracy. For one thing, the "firmly prescribed course of training" replaces the advantages of heredity that dominated in the past. For another, it restricts the available supply of qualified applicants for desirable positions and, in effect, allows the certificate holders to monopolize these jobs. What is most germane, however, is Weber's conclusion of the effect of a bureaucratized society on the "end" of education. He expresses this in terms of a struggle between the "cultivated man" and the "specialist." The former has been

the basis of social esteem in such various systems as the feudal, theocratic, and patrimonial structures of dominion.... The term "cultivated man" is used here in a completely value-neutral sense; it is understood to mean solely that the goal of education consists in the quality of a man's bearing in life which was considered "cultivated," rather than in a specialized training for expertness. The "cultivated" personality formed the educational ideal, which was stamped by the structure of domination and by the social condition for membership in the ruling stratum. ... The qualification of the ruling stratum as such rested upon the possession of "more" cultural

quality . . . rather than upon "more" expert knowledge. . . .

Behind all the present discussions of the foundations of the educational system, the struggle of the "specialist type of man" against the older type of "cultivated man" is hidden at some decisive point. This fight is determined by the irresistibly expanding bureaucratization of all public and private relations of authority and by the ever-increasing importance of expert and specialized knowledge. This fight intrudes into all intimate cultural questions. (Gerth and Mills, 1946, p. 199)

It is difficult to add anything to that analysis. Given the specific needs of industry and the general needs of an increasingly bureaucratized society (remember that the Universities of Chicago and Wisconsin were training specialists in public administration at the turn of the century), the end was in sight for any curriculum that proclaimed the "cultivated man" as its ideal.

The realities of American economic and social life provide ample and eloquent support for those institutions concerned with providing students with the kinds of training that will result in jobs upon graduation rather than education in the less useful liberal arts. This is not a local, recent or short-lived phenomenon: Jacques Ellul (1964) provides a useful viewpoint:

The Napoleonic conception that the Lycees must furnish administrators for the state and managers for the economy, in conformity with social needs and tendencies, has become world-wide in its extent. According to this conception, education no longer has a humanist end or any value in itself; it has only one goal, to create technicians. . . .

Education, even in France, is becoming oriented toward the specialized end of producing technicians; and, as a consequence, toward the creation of individuals useful only as members of a technical group, on the basis of the current criteria of utility - individuals who conform to the structure and the needs of the technical group. (p. 349)

The Liberal Arts

Back to the multiversity. We must return to Clark Kerr's (1972) defense of the multiversity, and his postscript, in which he compared the modern university to William James' pluralistic universe:

This may be taken also as a good description of the multiversity with its strung-along type of unity, with its lack of devotion to any single faith and its lack of concentration on any single function, with a condition of cohesion at best or coexistence at next best or contiguity at least (under internal pressures in recent years, some campuses have moved from a state of cohesion to one of coexistence, or from coexistence to mere contiguity of the constituent elements). The multiversity can be compared, as James compared the multiverse, to a "federal republic" as against a "kingdom," a federal republic where attention should be paid to "each form" by itself, rather than only to "all forms" together. (p. 139)

He is asking for universities to be "a generating force for new ideas, and for critical commentary on the status quo" (p. 139). In contrast to the monistic universities, the multiversity "is based more on conflict and on interaction" (p. 140). Kerr's use of James is interesting because he is citing a self-confessed "radical empiricist" to support an institution that is presently

grounded in rationalism, in the scientific method, and in logic. That grounding explains the way the institutions -- through their faculty, through their administrations, through their boards, and through their relationships with the various publics -- explain themselves, perform their functions, measure their performances. Yet, James (1971) would tell us that we face a "residual dilemma:"

Can we, on the one hand, give up the logic of identity? -can we, on the other, believe human experience to be fundamentally irrational? ... For my own part, I have found myself compelled to give up the logic, fairly, squarely, and irrevocably. It has an imperishable use in human life, but that use is not to make us theoretically acquainted with the essential nature of reality -- ... (p. 227)

I, frankly, seriously doubt that the "multiversity" envisioned by Kerr has much of a chance to ever become, and certainly would never square with James' intention for that multiplicity of experience, for the flowing along, strung-along reality of his multiverse, so long as the multiversity is peopled with individuals steeped in and committed to the scientific method. That "intellectualism" was attacked by James for "its ancient platonizing role of claiming to be the most authentic, intimate, and exhaustive definer of the nature of reality" (p. 225).

Both theoretically and practically this power of framing abstract concepts is one of the sublimest of our human prerogatives. We come back into the concrete from our journey into these abstractions, with an increase both of vision and power. It is no wonder that earlier thinkers, forgetting that concepts are only man-made

extracts from the temporal flux, should have ended by treating them as a superior type of being, bright, changeless, true, divine, and utterly opposed in nature to the turbid, restless lower world. The latter then appears as but their corruption and falsification. (pp. 225-226)

Some misuses of the power to conceptualize that James cites include the establishment of hierarchies, the denial of properties to concrete objects because logically the definition of that object does not contain those properties, and, finally, the disconnection of concepts -that is, "once you have conceived things as 'independent,' you must proceed to deny the possibility of any connection whatever among them, because the notion of connection is not contained in the definition of independence" (pp. 225-226).

This, of course, is what we see when we look at institutions of higher education: independent areas of thought, further subdivided into disciplines, with little or no intercourse occurring across disciplinary lines. In many cases this is the result of language barriers; in most, because the practitioners see no need, no purpose, no utility. We are like so many incredibly specialized gardeners, tending miniature plots within a larger field, not recognizing or even caring what is blooming beside us, and raising species so specialized that hybridization is virtually impossible should an errant breeze or inquisitive insect dare to visit or dally too long at the honeyed cups of vastly different flowers.

The Disconnected curriculum. In fact, if we look at the "liberal arts" in American colleges and universities we find a real problem flourishing. Most efforts to even define a liberal education degenerate into specifying encounters or experiences in content areas that are called the "liberal arts." There seems little agreement on just what experiences should be required, even among liberal arts faculties. The humanities, for example, fill the requirement for "liberal arts" at some institutions; science and mathematics may or may not be "liberal" depending on the institution and the whim of the faculty. And, where does a major in fine arts fit? Does studio art or dance or theatre performance have the theory and intellectual challenge appropriate to a baccalaureate degree? To complicate matters, the primary interest of most faculty is the major in their respective disciplines (Dressel, 1979).

Since the fractionalizing of the classical education into an increasing number of disciplines, the liberal arts experience has been defined by courses or credit hours selected from that increasing variety of disciplines. Attempts to create interdisciplinary or "area" studies have met with limited success largely because faculty members highly trained in specific disciplines are not interested in broad, interdisciplinary courses, or feel uncomfortable teaching them, or actually resent the time lost in their basic disciplines.

In other words, the system does not encourage such efforts

or adopt them into the mainstream.

One problem seems to lie in the sense of a "liberal arts" degree as a series of experiences, rather than conceiving of a "liberal education" that focuses on the outcome, the educated person. As a consequence we have the dilemma of people graduating with a degree who are not "educated," as well as some individuals who clearly are educated, but who have never matriculated in a liberal arts institution. The liberal education then is mere knowledge of particular modes and writers or formal study of traditional disciplines; it rarely goes beyond the narrow straits of the "major" -- traditionally defined -- to encompass modes of inquiry and values:

Modes of inquiry include concepts and principles, techniques for selecting and collecting evidence, and ways of validating truth. Values are extensively interwoven with liberal education and are interrelated into modes of inquiry. (Dressel, 1979, p. 317)

In the overwhelming majority of institutions of higher education, the concentration is on content to the detriment of discovering, in any sort of systematic manner, the mastery of a mode of inquiry. And instruction in courses does not deal with values. Ironically, several professional schools have sought to compensate for this state of affairs by offering courses with titles like "Ethics for Engineers." Dressel (1979) goes further:

Even in humanities courses a careful examination usually indicates that values are embedded in content selections which are discussed largely in terms of the facts and scholarly opinions rather

than in terms of implications for any insights into personal and social values. (p. 317)

One need only examine the rationale behind distribution requirements, or general education courses: inevitably, these are seen as providing an introduction to various disciplines or combination of disciplines, not to provide familiarity or knowledge of patterns of thought or the logical connections between thought and actions. This was demonstrated in a recent university report:

Before students at UMA (University of Massachusetts, Amherst) move toward specialization in any area or career, they are expected to have learned the fundamentals of a broad range of disciplines in the physical and natural sciences, social sciences, humanities and fine arts. (Commission on Missions and Goals, 1976, p. 5)

Again, considering the college experience over a four-year period the very format of courses, credit-loads, semester, vacations, internships, and so on tends to reinforce the bewildering sense of discrete units, areas of concentration, major requirements, the separateness of the university's components. Even within a major, the faculty, by virtue of their intense specialization, support a view of disciplines within discipline. There seems to be no correlative. And if faculty find it difficult to synthesize other areas with their own, or their areas with the contemporary world, how can students be expected to do so? In sum, each discipline is presented as a core for someone's life.

The college experience, viewed this way, is wrong. Indeed it should be like James' multiverse. More, it should be but a part of that multiverse, flowing into yet other forms of educational experiences. This argues, merely, for an holistic approach to one's formal curriculum as well as to one's education throughout life. For it would be foolishness, given the approach I have been positing, to assume that a liberal education begins and ends in the undergraduate degree process.

It is equally foolhardy to propose a specific curriculum. By focusing on the outcome apologists for the liberal arts have to make their point -- a liberal education is a liberating experience. And the results, short and long term, benefit the individual qua individual, not as an employee. One critic, Riley (1979), puts it this way:

Developing skills for lifelong learning, for synthesizing the specialized knowledge of the various disciplines, and for making informed value judgments are the principal goals of liberal education. (p. 443)

Professionalism. We should acknowledge that the problem goes deeper than a misconstruction of the liberal arts as content vs. outcome. Leon Botstein (1976), identified this:

The major reason for curricular dissatisfaction at Amherst was uneasiness with a growing atmosphere of professionalism among a faculty absorbed in their discrete disciplines, and a pre-professionalism among students competing for academic records that would guarantee entry into graduate or professional school at the expense of intellectual risk-taking. (p. 25)

This, of course, should not surprise us. Back in the 1960s, studies not only pointed out the rush to professionalism among undergraduates, but predicted curricular consequences. In the introduction to The Professions in America, Kenneth S. Lynn (1967) stated:

In 1962 . . . 83 percent of the graduating class at Harvard College planned to do graduate work of some sort; 74 per cent of Yale's class of '62 had similar plans, as did well over 60 per cent of the seniors at Princeton, Dartmouth, Cornell, Columbia and Pennsylvania. More than 80 per cent of the students at Negro colleges are profession-oriented. (p. ix)

Lynn was concerned about our national ignorance of the professions, how their ranks could be swelled, and our lack of consciousness of the crisis threatening the "whole course of our national development" (p. x). The fact is, there were then (and, I suspect, now) not enough professionals to go around. And, Lynn felt, we were contributing to that crisis by treating the training of more doctors, more lawyers, and more engineers the same way we would attempt to produce more automobile mechanics or welders. That is, we tended to ignore the difference in intellectual rigor between professional and vocational training, and assumed it was merely a question of more funds and facilities.

What effect does this support for the professions have on the liberal arts or on a liberal education? William J. McGlothlin (1964) cited studies by Earl J. McGrath of Teachers

College demonstrating that

the curriculum of the college of arts and sciences has been deeply affected by increased emphasis on preparation for the various professions, particularly the newer ones. Colleges of arts and sciences themselves now offer some fifty professional and pre-professional curricula. In 1900 they offered only six. About two-thirds of the bachelors and first degrees given in the United States are awarded in professional fields. There is obvious danger that the college of arts and sciences will become more and more of a professional school. Its offerings in the basic arts and sciences may be so compressed that they become superficial and cursory rather than penetrating and stimulating to further studies. (p. 39)

Measuring the liberal arts. Lest we assume that all this homage to the salutary effects of a liberal education is misplaced, a study by Winter, Stewart, and McClelland (1978) provides some qualified support.

Four hundred and fourteen students, evenly divided among men and women, were drawn from the first-year and last-year classes of three colleges. The colleges represented three different kinds of higher education:

1. A traditional four-year liberal arts education at a private, well-endowed and prestigious eastern U.S. institution. The curriculum, according to the authors, emphasizes broad, interdisciplinary survey courses in the sciences, humanities, and social sciences, and individualized scholarship at all stages of the four years.
2. A four-year undergraduate program "for training teachers and other professionals," at a state-funded institution. Students are drawn from a large metropolitan area and pass moderately competitive admission standards.

3. A two-year public community college with career programs in such fields as data processing, electronics, nursing, secretarial skills, and business administration. The institution accepts about seven of every ten applicants and draws mostly suburban students to its urban location.

The tests were controlled statistically for intelligence and social class and, by comparing first-year and last-year student responses at each school, the researchers hoped to determine the degree and nature of the changes wrought by the educational process. Finally, by evaluating the three schools together, they hoped to discover if the liberal arts school had a demonstrable, unique impact on its students.

Winter, et al. concluded that those students who participated in the liberal arts education far outdistanced their counterparts at the other two institutions when it came to marshalling, organizing, and operating on facts. They were better able to analyze arguments, criticize positions on controversial issues and support their own stance with reasoned argument. And, when required, were able to craft a limited, qualified endorsement of a position they had opposed.

In the Thematic Apperception Test, a "projective" test that clinicians have used for over 40 years to assess personality, the liberal arts college produced students who scored highest in "self-definition," acting effectively and constructively, often in ways that went beyond ascribed roles. The liberal arts students also: (1) saw authority in complex, versus simplistic terms; (2) viewed other persons as unique individuals, rather than people who could be manipulated to satisfy the students' desires; (3) integrated both joy and sorrow into their moods; (4) were able to work without falling victim to passivity, self-doubt, or anxiety about failure.

Furthermore, the liberal arts college seemed to have fostered a unique pattern of motivation in its students -- a strong concern for power and a weak concern for affiliation, and

high self-control. One of the researchers, McClelland, calls this the leadership or "imperial" motive pattern. This pattern, according to McClelland, is usually found in people considered to be effective leaders --

Managers who have a talent for creating in their subordinates such qualities as high morale, a sense of responsibility, organizational clarity, and "team spirit." (p. 47)

There are obvious problems with the data. Such a limited sampling cannot be definitive. And the authors are quick to point out that these effects are not necessarily caused by the college's course requirements.

It may be that the worth of an education at any school is determined more by faculty quality, library facilities, the size of the endowment, or even by the self-fulfilling anticipation and beliefs of faculty and students. (p. 106)

However, there were changes. In each institution there were significant increases in scores from first-year to last-year students. And the greatest changes and highest scores were those of the last-year students of the liberal arts college. The authors conclude:

(the) changes unique to, or enhanced by, attendance at our liberal arts college do establish at least a prima facie case for education in the liberal arts. (p. 106)

What cannot be overlooked, however, and what must be stressed is that while the study may have measured skills in analysis, self-definition, and motivation, it did not deal with the "informed value judgments" we seem to expect from the

liberally educated, and it did not measure, indeed it could not have measured the "right conduct" that should be the hallmark of every educated person. The warnings of Socrates in the Gorgias are the true measure here, and they were not dealt with.

Along that line, Derek C. Bok (1976a) has asked the question, "Can Ethics Be Taught?" and has pointed out that

if other sources of ethical values have declined in influence (church, government, family), educators have a responsibility to contribute in any way they can to the moral development of their students. (p. 26)

He suggests problem oriented courses to help students "sharpen and refine their moral perception" (p. 38). But the university must do more than offer courses,

it will have to demonstrate its own commitment to principled behavior . . . (through) investment policies, its employment practices . . . (p. 28)

The questions that immediately leap to mind, in no particular order, are

- (1) Haven't we been told, all along, that ethical values follow from a liberal education?
- (2) Why should educators - assumedly "educated" individuals, themselves -- have to be reminded of their responsibility to contribute to anyone's moral development?
- (3) And why should institutions of higher learning have to be chided to demonstrate an alleged commitment to principled behavior?

and of those individuals who provide directions for institutions of higher education. Perhaps then we can better understand the "failures" of liberal education.

Wellborn (1975) has cited some obvious trends that have contributed to a decline in American education: the cost of schooling is rising, budgets are falling, and so are enrollments. He also talked about student attitudes:

Doubts about the usefulness of a college degree, especially in terms of getting a good job, have caused a fall-off in the percentage of high school graduates going to college -- from a peak of 55 percent in 1968 to about 47 percent today. (p. 56)

It seems clear that the students Wellborn talked to have a "utility" motive for going to college. Their baccalaureate should get them a job, preferably a good job, and if it does not then college will have been a waste of time and money. In fact, a lower percentage of students are attending college, Wellborn says, because the colleges are failing that requirement.

What about the educators?

To attract students and to create a better public image, a number of educators recommend two things: a return to required courses in traditional liberal arts, with less concentration on electives; and a broadening out into new markets and curricula, with particular stress on a lifetime of learning. (p. 59)

This response is interesting and ambiguous. Are the traditional liberal arts being reinstated to attract the students, or to create a better public image, or to reduce the

budget (since the concomitant is to reduce the electives)? And what are the "new markets and curricula?" Since the students want jobs at the end of college I assume that the markets and curricula will be a significant part of an attempt to meet that need. The changes, whatever they may be, will be made in order to "attract students and . . . create a better public image."

Schutz (1967), in defining the meaning of acts, stated that there are two kinds of motives that must be understood: "in-order-to motives," and "genuine because-motives." He begins by describing how we understand our experiences:

The specific meaning of a lived experience, and therefore, the particular mode of the act of attention to it (i.e., the reflective glance back at our lived experiences is the "act," which raises the content of consciousness. from prephenomenal to phenomenal status), consists in the ordering of this lived experience within the total context of experience that is present-at-hand. . . . The intended meaning of a lived experience is nothing more or less than a self-interpretation of a lived experience from the point of view of a new lived experience. (p. 78)

That is, we understand all that we have experienced from the point of view of the present. Any lived experience that is to be "classified" is put into a context of our total experience; Schutz calls this the "synthesis of recognition" (p. 83).

If we push further, to discover why people act as they do -- in this case to understand better "why students attend institutions of higher education" -- Schutz defines a particular means of investigation, and focus on the motives.

For Schutz, "every action is carried out according to a project and is oriented to an act phantasied in the future perfect tense as already executed" (p. 87).

To cite a homely case, suppose I wanted a cup of good coffee (Schuman, 1979). To do this I have to leave my desk, a process involving all sorts of muscular tensions and relaxations: I must go into the kitchen, over to the stove, the sink, the refrigerator, and so on. As I am making all these preparations if someone were to ask me about the "meaning" of my activity I should answer that I am going to drink a cup of coffee. The "motive" of all these acts is the "project" of drinking that cup of coffee. All the acts other than the drinking of the coffee are intermediate aims oriented to the final one. Since I have fancied, in the future perfect tense, the drinking of that coffee, the intermediate acts exist within a meaning-context.

Interpreting the actor's "motive" as his expectations, we can say that the motivational context is by definition the meaning-context within which a particular action stands in virtue of its status as the project of an act for a given actor. In other words, the act thus projected in the future perfect tense and in terms of which the action receives its orientation is the "in-order-to motive" for the actor. (Schutz, 1967, p. 88)

All I have to do is to project a picture of myself drinking that coffee as "something I will have done in a few minutes" -- in short, project it in the future perfect tense -- and then proceed to boil water, grind beans, and so on.

We talked about assigning meaning to our experiences, earlier, and I pointed out that Schutz had established meaning of lived experiences within the total context of experiences present-at-hand. We can do the same thing in the project I have described even though the actions which will serve as means have not yet been established. We accomplish this by referring back to past acts analogous to the projected one. The past acts are reproduced in the consciousness of the person formulating a new project.

In order to project an act, I must know how acts of the same kind have been carried out in the past. The more cases there are of such acts and the better their rational principles understood, the more 'are they "taken for granted." (Schutz, 1967, p. 90)

If we take this analysis and apply it to education we come up with some very interesting results. A student who attends college "in-order-to" get a job (or "in-order-to" get a good job), is going to be participating in the educational process in ways that many educators do not want to consider. For example, if

. . . liberally educated people are recognized as such by the way in which they think and act and by the values upon which their thinking and actions are based . . . (Dressel, 1979, p. 322)

we must assume that unless the ways and values Paul Dressel is describing are criteria for employment college students will not waste their time acquiring them. Or, if they do, they will not do so in a planned or conscious fashion. That student we have

referred to (and, apparently, he or she is the one Wellborn was writing about) may indeed take required liberal arts courses -- but they will be just that, requirements, and they will be taken as intermediate acts leading to and oriented by the project: a good job. Those liberal arts courses receive their meaning, as Schutz has pointed out, because so many other, similar acts have been carried out in the past. Other students took them and went on to graduate and get jobs. Therefore, this particular student will take the same or similar courses; the whole process taken for granted unless some special circumstance forces the student or the institution to take account of what is being done.

Interestingly, Schutz' "genuine because-motive" differs from the "in-order-to" motive in that

the in-order-to motive explains the act in terms of the project, while the genuine because-motive explains the project in terms of the actors past experiences. (p. 91)

That is, with the in-order-to relation, a project is the motivating factor-- what is to come, what will have have been done is the reason for the intermediate actions. In the genuine because relation, a prior experience of the individual, something I have already lived through, motivates the project. Schutz explains this relation as "thinking in the pluperfect tense." In point of fact, all those possibilities that exist when a choice is to be made, and all those variables which we appear to have considered before making a decision can, in the selective

backward-looking glance, be seen as genuine because-motives.

They are only interpretations performed by the backward-looking glance when it is directed upon those conscious experiences which precede (in the pluperfect tense) the actual project. And since every interpretation in the pluperfect tense is determined by the Here and Now from which it is made, the choice of which past experiences are to be regarded as the genuine because-motive of the project depends on the core of light which the ego lets fall on its experiences preceding the project. (p. 95)

Only when the project is complete can we say that I drank the coffee because I wanted to taste the hot brew of peruvian, antigua and mocha java beans. Until then, I drink in-order-to. The "because-ness" is the factor, here, not the "genuine." It is only a "genuine because," not necessarily a genuine motive.

In other words, we may be able to understand and provide a useful critique of the project (i.e., the pursuit of a degree) because of its in-order-to nature. But why that particular project was selected is not only going beyond the scope of this argument, it is so personal and varied that the motives are sui generis.

The point has been made, however, that the institutions of higher education are training men and women in-order-to produce professionals of various sorts. And that those men and women are attending colleges and universities in-order-to get jobs, good jobs. They are, as well, acquiring specific skills, capable of being measured.

In Schutz' terms, the "interest" of the student and of the

institution is "first from the point of view of an already formulated problem." (p. 96)

The already existing project (e.g., to get credentialled) is the motivating factor; it motivates the action (e.g., the course of studies) and is the reason why it is performed. (p. 92)

And further,

the goal pictured in the project is detachable from the "meaning" of the component action, which can be treated as something quite distinct. (p. 94)

In other words, the various course and degree requirements do not necessarily have any "meaning" in the sense of producing the pictured goal. They can be -- and obviously are -- just "requirements." The emphasis placed on general education by those of us who are apologists for the liberal arts, or for core requirements, for example, is not necessarily well-placed.

We should keep this in mind as we turn to consider three proposals for the reform of higher education.

Reform

The times call for the establishment of a new college or for an evangelistic movement in some old ones which shall have for its object the conversion of individuals and finally of the teaching profession to a true conception of general education. Unless some such demonstration or some such evangelistic movement can take place, we shall remain in our confusion; we shall have neither general education nor universities; and we shall continue to disappoint the hopes of our people. (Hutchins, 1936, p. 87)

Hutchins' higher learning. When Robert Maynard Hutchins (1936) wrote The Higher Learning in America, it was

during the Great Depression, when Russia was a backward nation, when colonialism was in flower, and when people in the advanced industrial countries still believed that technology could menace neither their livelihood nor their lives. (p. ix)

In 1936, Hutchins, then president of the University of Chicago, surveyed colleges and universities in America and found confusion -- a confusion that began in the high school and continued through graduate school. In the college of liberal arts, for example, he saw a hybrid -- partly high school, partly university, partly general and partly special.

In order to clarify the higher learning, Hutchin's book examines the causes of its confusion: the love of money, a confused notion of democracy, and an erroneous notion of progress that leads to anti-intellectualism. The money that must meet the income requirements of the institution comes from students, donors, and legislatures. And the sources from which money comes tend to dictate the ends to which the money will be directed. In other words, financial constraints determine educational policy, rather than the institutions establishing an educational policy and then trying to finance it.

Undoubtedly the love of money and that sensitivity to public demands that it creates has a good deal to do with the service-station conception of a university. (p. 6)

The service-station conception driven by love of money produces

extension programs, attractive programs to house, feed, and amuse the young (i.e., freshmen and sophomores), large numbers of students, and the American system of educational measurement, that is, a measurement of intellectual progress determined by attendance, class hours, and ability to repeat information on examinations given by the teachers who told it to them.

The confused notion of democracy reinforces the service-station concept by telling us that education should be responsive to public opinion. It leads to the view that everybody is entitled to the same kind and amount of education. It produces confusion about control, not just among the public and the legislatures, but among alumni and trustees as well. Educational problems (e.g., the content of courses, the content of the curriculum, or the qualifications of the faculty) as opposed to determining the amount of money to be spent on education, or the intelligent management of the institution, are beyond the competence of these groups. "The attempt to take these (educational) matters into their own hands can only confound confusion." (p. 24).

The erroneous nature of progress includes the assumption that everything is getting better, indeed, must be getting better with each succeeding age. To the explosion of information and technology Hutchins says we add an evolutionary twist: we must adapt to our new, increasingly complex environment. This is anti-intellectual:

The idea that his education should consist of the cultivation of his intellect is, of course, ridiculous. What it must consist of is surveys, more or less detailed, of the modern industrial, technological, financial, political, and social situation so that he can fit into it with a minimum of discomfort to himself and to his fellow men. (p. 27)

In spite of his critique of the state of higher education, Hutchins is convinced that the health of our nation can only be improved through education. And it will require some strong and purposeful institutions to demonstrate what the true higher learning is:

As education it is the single-minded pursuit of the intellectual virtues. As scholarship it is the single-minded devotion to the advancement of knowledge. (p. 32)

Having described the external conditions that affect the institutions of higher learning, Hutchins turns to the internal dilemmas: the conflict between two kinds of education, the pursuit of truth for its own sake, and the preparation of men and women for their life work. In virtually every department professional training is a major concern: on the other hand, he notes that pursuing truth for its own sake is occasionally practiced in a professional school.

Hutchins points out that the very atmosphere of departments of arts, literature, and science is highly professional. Students do graduate work in organic chemistry or English because industry is hiring Ph.D.s or because advanced degrees are required to secure positions in secondary schools.

The pursuit of knowledge for its own sake is being rapidly obscured in universities and may soon be extinguished. Every group in the community that is well enough organized to have an audible voice wants the university to spare it the necessity of training its own recruits The effect . . . on the universities will be that soon everybody . . . will be there for the purpose of being trained for something. (p. 37)

Vocationalizing the universities is bad for the universities, bad for the professions, and bad for the students. The content of courses, for example, is determined by vocational pressures, confined to those subjects which experience, tradition, or examining and licensing boards have sanctified, And there is the temptation to trivialize; first, by justifying anything on the ground that it may be helpful to the student in his chosen profession; later, by justifying any course of study merely because it will lead to employment in a trade. Further, the more frankly professional schools isolate themselves from other departments, schools, and colleges on the campus, developing their own faculty for, e.g., 'Law and Economics,' 'Ethics for Lawyers,': "History of Jurisprudence," and so on. This is not to say that professional schools do not belong in the university; rather, turning professional schools into vocational schools degrades both universities and professions. Hutchins' contention, furthermore,

is that the tricks of the trade cannot be learned in a university, and that if they can be they should not be. . . . because they get out of date and new tricks take their place, because the teachers get out of date . . . and because tricks

can be learned only in the actual situation in which they can be employed. (p. 47)

Students who have spent their university careers in specific vocational preparation and then don't go into these vocations have wasted their university careers. And even if these students do go into those vocations, their university period has, by necessity, been narrow and focused:

The vocational atmosphere is ruinous to attempts to lead the student to understand the subject. By hypothesis he is learning to practice the profession. You must, therefore, make clear to him at every step that the questions you are discussing have a direct bearing on his future experiences and on his success in meeting them. (38)

Hutchins, of course, has a solution to share with us. It begins with "general education," education for everybody, whether he or she goes to the university or not. It is not "useful," it is not designed to help the individual make money, but it will cultivate the "intellectual virtues." Hutchins outlines

the kind (of education) that everybody should have, . . . that we should find out how to give . . . to those whom we do not know how to teach at present.

That is, not only those who can learn from books, but those who cannot; Hutchins states, we should continue research to find out how

to give a general education to the hand-minded and the functionally illiterate. (p. 61)

Hutchins' proposal focuses on content, not method. It is a four-year unit of study for everybody who can learn from books,

beginning at about the junior year in high school, ending at about the end of the sophomore year in college. In other words, from about age 16 to about age 20. Further, the conclusion of these studies may mark the end of formal instruction for the large majority of the students.

His curriculum will be composed

principally of the permanent studies. We propose the permanent studies because these studies draw out the elements of our common human nature, because they connect man with man, because they connect us with the best that man has thought, because they are basic to any further study and to any understanding of the world. (p. 77)

Hutchins defines the permanent studies to include the classics. "A classic is a book that is contemporary in every age" (p. 78). He cites The Republic of Plato, the Physics of Aristotle, Newton's Principia, Cicero, Milton, Galileo, and Adam Smith. The originals, not excerpts out of context, or second-hand versions of textbooks.

He goes on: grammar, or the rules of reading; rhetoric and logic, the rules of writing, speaking, and reasoning; mathematics. In the last case, mathematics is taught not because of its obvious practical value, but for the "correctness in thinking that may be more directly and impressively taught through mathematics than in any other way" (p. 84). From this course of study Hutchins frames for his student body

the elements of our common human nature, . . . they will have learned what has been done in the past, and what the greatest men have thought.

They will have learned how to think themselves.
If we wish to lay a basis for advanced study,
that basis is provided. (p. 85)

Having identified those external and internal forces that have mis-shaped the higher learning, and having provided general education as the first step in any plan to properly re-shape the university, Hutchins turns to "discover what, given general education, the higher learning should be" (p. 89).

He begins by caustically describing its present state, a chaotic one with no principle of unity. An "encyclopedia of truths" with neither students nor faculty knowing what is the relation of one departmental or disciplinary truth to another. Hutchins reminds us that the medieval university had theology as its principle of unity; acknowledging the impracticality of imposing theology on today's university, with its context that denies faith or belief in revelation, he suggests that, like the Greeks, we should adopt metaphysics as

the ordering and proportioning discipline. It is in the light of metaphysics that the social sciences, dealing with man and man, and the physical sciences dealing with man and nature take shape and illuminate one another. (p. 97)

Metaphysics will be the key to Hutchins' unified university. Metaphysics provides in his scheme a higher meaning, preventing, for example, the degeneration of morals into mores, the devaluation of the truths of ethics into common-sense practices for getting along in this world. Without metaphysics there is no meaning, all data is equivalent and the faculty gather it

indiscriminately. But with metaphysics in place, the science of first principles, Hutchins then turns to the social sciences and the natural sciences. Taken together, the three categories form the proper subject matter of the higher learning. He details the subject matter within the categories (ethics, politics, economics, for example) and demonstrates both the practical applications (law, medicine, engineering), and how they all loop back to the study of metaphysics. The historical and empirical material of the "disciplines" that have emerged from the social and natural sciences would cease to be the primary focus and concern of one's study but would be subordinated to an understanding of the principles.

Hutchins rather breathlessly races through a reorganization of the university after establishing his broad curriculum. Research institutes, and technical institutes will be attached to the university but in both cases would have no voice in the formulation of university policy. The university is an appropriate location; the university can benefit from the information collected, and it can provide a refuge for researchers to work in a detached, objective, and impartial manner. It is perhaps the only institution capable of conducting or financing research; it can provide the training for future researchers, and those learned professions that cannot be trusted to communicate their practices to the young will have their ranks replenished from the graduates of the university-based technical

institutes.

As for departments, they will disappear: members of existing departments who are exclusively concerned either with data collecting or vocational training will be transferred to research or technical institutes. Only those who are working on fundamental problems in the fields of the three faculties will remain as professors in the university. (p. 111)

Professional schools, per se, would also disappear. Students aspiring to medicine, law, or engineering would study in the three faculties of metaphysics, social science, and natural science. A future doctor, having finished his general education, would study metaphysics and the philosophy of nature, the physical and biological sciences, and some social sciences.

The necessary experience that he must have before he could be trusted with a patient should be secured in an institute attached to the university and to a hospital. (p. 113)

Lawyers, teachers, and others would have parallel programs, concluding in a technical institute.

Those professional schools which have no intellectual content in their own right would disappear altogether, except as their activities might be thought worthy of preservation in research or technical institutes. (Hutchins, 1936, p. 112)

In this fashion, Hutchins proposes to remove the distinction between professional and non-professional disciplines, allowing the university, through the three faculties, to concentrate on teaching and the pursuit of truth. Graduates from the university will have completed a general education, as well, and since they

will all have studied under all the faculties, will have a unified and broad education. Specialization, vocational pursuits, and professional undertaking come after in the separate technical and research institutes.

In the process of re-ordering the academic universe Hutchins has returned to the middle ages: in place of the trivium and quadrivium he has "general education." The higher faculties of Theology, Canon and Civil Law, and Medicine have been replaced with metaphysics, social sciences, and natural sciences. And to correct the abuses to which the medieval universities fell victim, he has placed all directly professional training outside the university proper, in institutes.

Yet, during his tenure as president of the University of Chicago, he continued to preside over graduation ceremonies in which he handed out diplomas to journalism and library science majors. His idealized program of study insists on the unifying principle of metaphysics and the higher meaning it provides to life. Yet, during his tenure as president, black students in the university's medical school could not intern at the university hospital. (Weinberg, 1980) It is kind to say that in the former instance he was unable to effect the kind of change he describes in his book; in the latter instance it may well be that such moral issues were not contemplated when he urged the pure, perhaps morally-neutral pursuit of truth.

This is not just an interesting historical anecdote, for it

relates directly to the thesis of this paper, that the truly educated person demonstrates, acts out his education. Indeed, it is a form of existentialism that states, in effect, that mere study of one's humanity -- mere exposure to or knowledge of the humanities -- does not constitute the essence of the individual; rather, how one transforms that "essence" into one's existence is the test, how one draws that essence into the activity of a life. We expect more of an educated person, and we should do so. That is part of what Bok (1976a) meant when he stated that the university "will have to demonstrate its own commitment to principled behavior" (p. 29). And that is why Hutchins has failed in translating his stated ideals into institutional actions.

As a treatise, however, the Higher Learning in America captures the contradiction inherent in a single institution's attempt to both educate and train. He has clearly recognized and identified the tensions created by the introduction of vocational preparation, and the eventual and inevitable domination of the institution by vocationalism. His remedy is simple -- remove the offending limbs, return to the medieval studia generale and higher faculties, and -- in deference to contemporary societal needs -- establish institutes on the periphery. Through this last device, Hutchins maintains the purity of the university per se, and provides for the vocational training he has criticized so effectively.

The "in-order-to" motive described by Schutz is worked out in Hutchins' proposal: everybody is able to participate in a general education without regard for their ultimate occupation. Those who have completed a general education and wish to enter one of the learned professions go on to the higher faculties in the university. Here, patterns of study are established by the faculty with a career goal in mind for the student. The student enters the course of study in-order-to, ultimately, complete the practical training of the third phase, the institute, and enter practice as a doctor, lawyer, or teacher.

Wolff's ideal. When Robert Paul Wolff (1969) wrote The Ideal of the University he was working out some general reflections on the nature of a university while making some particular observations about universities and the education they provided in the United States. Having experienced the student protests at Columbia in the sixties he decided

to develop a program of practical reform of present-day institutions of higher education in America, and only incidentally to sketch the ground plan for a utopian university in the ideal society . . . (p. xii)

In his "Introduction," Wolff admits that, confronted with the muchpublicized student uprising on the campus of Columbia University during the Spring of 1968, he was initially confused by the conflicting demands of the situation -- his sympathy for the students' protest was counterbalanced by his identification

with the authority represented by the faculty. He sought to sort out this confusion by rethinking his concepts of what a university is, and ought to be. Therefore, while the crisis that forced his articulation was different from that of Hutchins, it was as real, and the product as individual and informative.

He begins by sketching four models of a university. These are abstract models, rather than actual cases, that will allow Wolff to make connections between the ideals and their organizations, to show how conflicting ideals have been married to produce awkward and contradictory institutions, and, finally, to consider which of the ideals should dominate American higher education.

The four ideals posit the university as

- (a) a sanctuary of scholarship,
- (b) a training camp for the professions,
- (c) a social service station, and
- (d) an assembly line for establishment man.

As a sanctuary of scholarship, the university is both a cloister for the Gelehrten, as well as a place where the student can be initiated into a dialogue with and about the great cultural tradition. The object of this scholarship will be the Humanities; the spirit of the theoretical or experimental sciences does not flourish here.

Though the tradition may contain pregnant, emotionally powerful commentaries upon life and men's affairs, the scholar's concern is with the

textual world, not with the world about which the text speaks. At its best, scholarship develops a refined sensibility and a wise appreciation of the complexities and ironies of the ways of God and man; at its worst, scholarship hardens into a stultifying pedantry which lacks the art and creative genius of those who wrote the great texts. (p.5)

We must remember that Wolff is describing an ideal, an intentionally exaggerated institution. He acknowledges, willingly, that he can't claim with any certainty that one is inevitably spiritually crippled by a lack of familiarity with the "great tradition." On the other hand, he much prefers the company of men and women who are "cultivated," and capable of

that special sort of irony which comes from the awareness that one's most precious thoughts have been anticipated. (p. 8)

Wolff doesn't expand on this, and it is rather faint praise, but he has certainly alluded to a special sense of connection one achieves, through reading the classics, with a common core of intuitions and concepts, to use Kant's terms, in the expressed thoughts of humanity. And that can be a humbling, humanizing, and provocative experience. That, of course, is the very point Wolff stops short of -- the acts that must flow from that recognition.

The sanctuary concept is a very traditional one; a more recent conception is that of the training camp for the professions. In Chapter Two and in the first section of this chapter, and in the critique of Hutchins' book, we have seen the

joining of the institutions of higher education with professional training. Brickman (1970), in his review of Wolff's book, saw it this way:

With colleges and universities on the front pages . . . it is hardly surprising that academicians and others have begun to examine and re-examine the nature, organization, aims and program of American higher education. . . . Specifically, Wolff's theme is the weakening and eventual destruction of "the unity of the academic community" by the conflict between graduate (including professional) and undergraduate instruction. (p. 180)

Wolff points out that we can and have rationalized the recent phenomenon of transforming so many occupational roles into professions by considering the increasingly technical requirements of those roles and the consequent specialization of tasks and bureaucratizing of skills and knowledge. He goes on, however, to state that

it is surely obvious that a number of the most recently established "professions" are merely ordinary jobs putting on airs. But there is no argument save historical accident for the practice of locating these professions institutionally in universities. The advantage to the new profession is obvious. (p. 11)

Wolff eschews the route of criticizing whatever is new merely because it is so, and therefore vulgar; the fundamental question must be asked, "whether a university is an appropriate place for professional schools at all?"

As Hutchins before him, he quickly establishes the divisive and destructive characteristics of professional programs when

inserted in an academic community: a divided loyalty -- Wolff (1969) uses the Columbia crisis as an example -- wherein faculty and students, alike, are torn between their commitments to a profession and their responsibilities as members of an academic community; the effect of competition (to be accepted at the most prestigious graduate or professional schools) on undergraduate education, particularly grading; the curious dilemma of providing certification in the academic profession -- minting new Ph.D.'s to meet the market demand with little regard for the available pool of truly brilliant students, professing that a dissertation is "an original contribution to knowledge," while counseling doctoral candidates in such a way as to lower both sights and standards. Wolff targets, in this last instance, one of the more familiar tensions in higher education:

Two distinct activities guided by two entirely separate sets of standards, namely, the training and certification of college teachers on the one hand, and the initiation of promising acolytes into intellectual creativity on the other. (p. 27)

Wolff's third ideal is that of the social service station, based on the model articulated by Clark Kerr. Wolff's critique of this ideal is purposeful and pungent. A multiversity cannot have the unity of place, purpose, and political organization found in older, classical universities -- there are too many professional schools, research institutes, training programs, hospitals, extension or field sites, and so on. Further, there

are too many "interpenetrations" between multiversity and government (local, state, and federal), and multiversity and private industry, to pretend that policy is not dramatically affected or determined by these non university agencies. The result of the funded projects or directed research is not "profitability in the economic sense but profitability in the social sense." (p. 31)

It is not a new venture for the university: these institutions, as we have seen, have always devoted themselves to purposes directly or indirectly defined by the societies outside their ivy-covered walls. But Wolff strikes hardest at Kerr's (and others')

complete failure to draw a sharp distinction between the concepts of effective or market demand and human or social need. (p. 36)

The latter is the absence of something, material or social, that could contribute to human welfare; the former is merely a consumer driven force, an expression of willingness to buy.

Wolff's position is that Kerr, and many others, have developed a

covert ideological rationalization for whatever human or social desires happen to be backed by enough money or power to translate them into effective demands. (p. 39)

He readily identifies human needs that cannot get themselves expressed as market demands (e.g., well-designed, well-constructed, low-cost housing; equal education for all;

adequate health care; pollution control), and the disparity between these and the demands to which the university readily accedes is obvious. In this market-place vision of the university the institution accepts those goals and values that are backed by ready and sufficient cash. The most serious indictment of this view of the university is that, in hiring out to the high bidders, the institution has compromised its ability to critically examine and define goals and values. It becomes an instrument of the government, or of the corporation, and as such can no longer effectively function as an independent center of intellectual, educational activity. In Wolff's terms, this ideal raises a significant question:

is there a greater social need for full-scale integration of the resources and activities of the universities into existing domestic and foreign programs, or for a sustained critique of those programs from an independent position of authority and influences? (p. 42)

Wolff's belief is that critique, not cooperation, is necessary, and he rejects this ideal of the multiversity.

The fourth and last ideal of the university is as an assembly line for Establishment Man. This vision of the university is an anti-model, and as such proposes no ideal but rather an attack on American higher education. The starting point is a feeling, a subjective position held by many of the brightest, most enthusiastic students who are dissatisfied with the education they are receiving in the universities. Having

passed through the elaborate screens and filters that stand guard at the entrances to the top schools they find an experience that does not measure up to their expectations -- the testing and grading that rules over genuine education, the lack of "relevance," the excessive specialization or professionalization, the lack of connection between courses, and disciplines. Further, says Wolff, they are profoundly disappointed in the behavior of the institution: contracts for war-related research; ROTC; training programs for industry, and so on. The students see themselves as the raw material in a process that is producing Establishment Man. The customers are corporations, government agencies, and universities, and these in turn perpetuate the production by their destructive, anti-social activities and growth. The concealed goal of America's colleges and universities is to provoke creative thinking and action, which will lead (hopefully) in profitable paths, while obscuring the evils and injustices of the very system Establishment Man is being encouraged to enter.

The system really begins in the elementary grades, with competitive processes and indoctrination about the "good life" that obtains from success. The winners, the successful, have wealth, honor, leisure, the challenging and interesting jobs. The indoctrination, the critique argues, is so successful that we accept the wrongs of the system as "necessary," and besides we want those rewards.

The university's role is particularly pernicious. It co-opts the critics -- it hires the radicals, puts their books on the required reading list, awards tenure, and then claims that it is value-neutral.

In doing all this the university, of course, is a perfect mirror of society. This is accomplished by the financing mechanism: federal and state governments, foundations, and industry all have a vested interest in the status quo. As long as they are underwriting the higher education of America the programs of the universities will reflect their values.

Wolff sympathizes with much of this critique but identifies several errors: first, it is clear that, in spite of the pressures to conform, to bend to the pressures of grades and admission to graduate school, our campuses continue to be forums for free, open, and significant debate -- a certain sign of the liberating effect of university life; second, and again in spite of the obvious linkages between the institutions and American society, the universities continue, in Wolff's view, to be the only viable centers of protest and informed opposition to the dominant values and policies of our society. He cites the opposition to the war in Vietnam as a case in point.

Wolff concludes:

Those of us who can still sustain a concern for the partial amelioration of social evils must rely upon the actual institutions which offer us the most assistance. In America today, the university clearly heads that list. (p. 57)

Having sketched these four models and their institutional arrangements, Wolff turns to the issue of grading, a social evil, as he labels it, that

is the product of a social virtue, namely, the effective implementation of the principle of equality of opportunity. (p. 68)

He spends considerable time on grading but his conclusion is, essentially, that there are three quite separate functions in education of criticism, evaluation, and ranking. The first is at the heart of education, the second is external to it (but quite essential to the professions), and the last serves neither an educational, nor a professional but an economic function -- by ranking we can fairly allocate scarce resources -- a shortage of first rate colleges or graduate schools requires a rank-ordering of applicants.

Wolff also deals with "Practical Proposals for Utopian Reform." His proposals are "practical" in that they are not revolutionary, but they are "utopian" in their rootedness in the ideal university Wolff would like to see evolve.

There are four stages in this reform:

The transition from secondary school to college; the undergraduate experience; the sorting out of college graduates into professional or graduate programs; and the two, three, four, or more years devoted to professional training and certification. (p. 139)

If we reconsider Schutz' analysis of motive, his definition of the in-order-to motive, and the discussion that centered on that

significant point, it is apparent that Wolff must, in order to reform American higher education, properly deal with a lengthy and consistent pattern of preparation and pre-requisites, a coherent plan of deferring gratification (and education) in the present for the promised rewards of the future. Thus, most of the high school curriculum is bent toward admissions requirements at the better colleges; the undergraduate curriculum is focused on the prerequisites of graduate school; once in graduate school, one's education is past (!), and specialized training takes over. In reality, we are subjected to specialized training all along, in-order-to achieve the highest forms of certification in the most specialized and prestigious professions.

Wolff does, in fact, address this lock-step pattern. He proposes eliminating the connection between the stages: admission to college will be based on random selection by computer from among pools of applicants who have achieved a minimum standard in order to be considered. The "best" schools will form consortia, as will the second-rate ones, and common minimum standards established, with common pools of applicants. Thus, the outstanding high school senior in the nation will have exactly the same "chance" for admission to Harvard as the senior who barely squeaked into the established "admit" category.

Once admitted,

college itself ought to be totally divorced from pre-professional training. Students should be offered rigorous, challenging science courses,

but no "pre-med" program . . . There should be no undergraduate "majors" covertly designed to lock students into a doctoral track. The purpose of the undergraduate years should be intellectual exploration. (p. 145)

By shortening the undergraduate program from four to three years, a student who desires to go on to graduate work may use the fourth year to take the requisite math or science courses for, say, engineering or medical school, without compromising the exploratory and independent nature of his or her undergraduate study. Other students may opt for some sort of professional or vocational training directly out of high school, thus by-passing the college stage. Wolff suggests various internships as appropriate. It seems implicit, as well, that the nature of the professional schools will change to accommodate this sort of student.

The central point is that the "undergraduate" years, either in school or out, should be devoted to the successful completion of a critical stage of intellectual maturation, not to the accumulation of precisely one hundred and twenty points of credit. (p. 150)

This proposal for the undergraduate stage also means the elimination of the bachelor's degree. After all, it will no longer have a function. It will not aid in the sorting of students for the next stage in the higher education process -- Wolff proposes competitive, nationwide examinations for graduate and professional school admissions. The college career, ungraded and unstandardized, will have no influence. The

three-year program allows a fourth year for concentrated preparation and specialized course work. Further, the elimination of the baccalaureate degree may lead to a lessening of class consciousness. Wolff points out that

the B.A. stamps a man as a candidate in good standing for the middle class. It is the great social divider that distinguishes the working class from the middle class. (p. 151)

Eliminate this and you erase the mark that separates those who went to work straight out of high school from those who spent several further years in study. The only degrees (and there would be plenty) would be professional degrees attesting to occupation competence.

In the last stage, the professional and graduate schools, Wolff advances two reforms: First, to sever the institutional connections between professional schools and universities; and Second, to abolish the Ph.D., replacing it with a three year professional degree certifying competence to teach at the college or graduate level.

For reasons detailed in the university ideal as a training camp for the professions -- divided loyalties, the certifying function -- Wolff, as Hutchins, proposes a separation of the professional and undergraduate functions. How this separation should be effected, he acknowledges, is an enormously complicated task. At least, he suggests, we should adopt as a working principle that new or emerging professional programs

ought to be separate, and that our goal should be separation of the established schools when possible.

The Ph.D., discussed in the same ideal, is currently a victim of the contradiction inherent in the attempt to combine professional training and certification with the initiation of scholars into the activities of intellectual creation.

Time, energy, and enthusiasm are squandered on pseudotasks which accomplish nothing and fool no one. (p. 153)

Again, the solution is to not only recognize, but to acknowledge the obvious. Since the Ph.D. has become a certificate of (alleged) competence in the professional role of college teacher, or competence in other areas, and only rarely does it honestly signify the successful completion of an original contribution of scholarship to a body of knowledge, Wolff suggests we concentrate on the former and reserve the latter for those happy occasions where interest, time, money, and resources meet. By abolishing the Ph.D. and replacing it with a three year professional degree we would enable both students and faculty to concentrate, as law and medical students, and faculty do, on the preparation for a professional career, college teaching.

Wolff's proposals, in his own words, fall short of the ideal. He acknowledges the unavoidable fact of certification in America.

But by making high school performance irrelevant to college admission, by making college performance irrelevant to graduate admission, and

by removing professional training from the undergraduate curriculum, we can transform competition and certification from a way of life into a limited activity directly related to the student's self-interest. (p. 155)

Wolff's analysis of the state of higher education, like Hutchins', provides strong support for my thesis. While Wolff stops far short of an historical analysis (it is not necessary to his critique), he clearly identifies the perversion of the process of higher education by the connection of the institutions, faculties, disciplines, and majors to the job market. Like Hutchins, he sees a dramatic separation of the undergraduate career as a solution. Hutchins opted for the classical university form, retaining the "learned professions," but Wolff goes further -- all professional training should stand apart. He foregoes a specific curriculum (Hutchins proposed the "great books") for a three year undergraduate program of intellectual exploration. Finally, Wolff clearly sees the connectedness of all the institutions of education and how that has warped our opportunities for the sort of education I have been exploring.

Yet, the whole issue of values, and of publicly demonstrating them is side-stepped. In his chapter on governance Wolff proposes "All Power to the Faculty and Students." He assumes that the faculty and students will act in a fashion that is as or more responsible to the "values" of the Ideal University. But what he's talking about is power, who has it,

and the process of using it. The ends for which it is used are not addressed. We cannot assume, given the state of education that we have discovered, that it will be used nobly.

Belknap and Kuhns' innovation. Both Hutchins and Wolff proposed significant and fundamental changes in the structure and content of higher education. Robert L. Belknap and Richard Kuhns (1977) provide an analysis of the current attempt by Columbia to address the very concerns expressed by Wolff and Hutchins. Tradition and Innovation: General Education and the Reintegration of the University, reiterates the now-familiar themes of criticism:

"American universities have changed aimlessly in response to a series of crises since World War II."

"The current financial crisis has fragmented the universities and restricted the choices open to them."

"Universities and schools have lost their common sense of what kind of ignorance is unacceptable."

"Our educational system isolates training from education and gives training place of honor."

"We also isolate the disciplines from one another."

"This educational disintegration works together with other social and intellectual trends to produce a widespread mindlessness." (p. vii)

Belknap and Kuhns detail the corrective efforts of a major American institution through a general education program. It is important to remember that this is a contemporary solution, or attempt at a solution, and is not a proposal for reform. Their

introduction sounds grand and full of promise. They intend to show that many professionals in America and others in responsible positions have very little real education. They intend, as well, to offer a version of general education as an antidote to both the failure to educate, and the lack of attention and will that contributed to that failure.

We define general education as -- education. Its opposite, in this context, is training. We train doctors, lawyers, historians, or physicists, but we educate human beings. We can even train animals, but we educate only human beings.

. . . this book argues that education without training is impossible, but that but that training without education is disastrous. (p. 3)

The actual means of accomplishing this objective are disappointing. In fact, there is no fundamental change in the undergraduate life of Columbia. There has been at Columbia, since 1894 under Dean John Van Amringe, an active commitment to the job of "making men." This phrase did not concern the development of specialist-scholars or professional men, but, as Lionel Trilling phrased it:

it aimed to teach them to look before and after, and in general to use their minds in ways which are appropriate to civil existence. In all his annual reports Van Amringe asserted his belief that this aim was forwarded by liberal undergraduate education, and he resisted all efforts to curtail its scope. (cited in Belknap and Kunhs, 1977, p. 46)

In 1919 a course called Contemporary Civilization was designed to provide Columbia freshman with the cultural and

intellectual background to intelligently participate in the political and ideological debates surrounding World War I. All undergraduates had to take the course which met four times a week as a discussion group dealing with a fixed reading list. The three guiding questions for the discussions were:

"How have men made a living?"

"How have they lived together?"

"How have they interpreted the world they lived in?" (p. 48)

In the 1930s another general course, Humanities, was added. In the upper classes, there was the junior-senior Colloquium, a two-year sequence of seminars led by humanities faculty, and populated by a small number of students carefully screened and selected.

After World War II there was a general expansion of Contemporary Civilization and Humanities into a two-year sequence of general education. The science departments, although efforts were made, never produced a common course.

After the sophomore year, except for the junior-senior Colloquium, general education at Columbia existed only at the post-doctoral level, in the University seminars. In 1975 there were more than sixty such seminars dealing with topics like "Content and Methods of the Social Sciences," "Genetics and the Evolution of Man," and "Drugs and Society." The seminars are voluntary groups of Columbia faculty and off-campus specialists from academic and non-academic institutions, alike. The intent

here is to continue one's "education" at the point where even training has ended.

My criticism of Columbia's program is not that it continues, but that it is, essentially, a marginal program that has to constantly struggle to remain in existence even though it truly affects, on the junior and senior levels for example, a very small number of undergraduates.

The realities of higher education in general, and providing a general education program in particular, are clear: Peter Gay, then a history professor at Yale, describes it this way:

with the early 1960s things began to change. We became more professional, which is to say, more self-centered. The senior faculty dropped away; most of the junior faculty wished that it, too, could drop away. Word got around that promotion, let alone tenure, depended on performance in departmental courses, and above all in publication, both of them impeded by concentration on general education. Generalists became rare; they were, by and large, potential failures or real suckers. Prestige attached, not to getting into general education, but to getting out of it. (cited in Belknap and Kuhns, 1977, p. 62)

Belknap and Kuhns recognize the problem. The Humanities and Contemporary Civilization courses have no staff of their own but still "must go begging among chairmen of departments every year" (p. 62). And the administration exploits general education by staffing it with graduate students.

The authors claim a remedy, though. In the Fall of 1973 a series of seminars was initiated to discuss the nature, goals,

and techniques of general education. In the next year the Thursday Seminars, as they were called, explored examples of particular courses and programs which had proved or might prove effective in general education. The next two years were devoted to: the professions and professionalism, and the teaching of science to both scientists and nonscientists; and liberalism and liberal education.

In order to advance general education in the graduate schools Columbia established seminars whose staff and students come from the professional schools and the arts and sciences faculties, particularly the humanities. And there are other efforts by Columbia, as well, e.g., interdisciplinary institutes.

The sum of all of this effort, however, is that Belknap and Kuhns, and the faculty and administration

are anxious not to threaten the existing disciplines and we realize, as we have already said, that any outside activity costs professors and students time and energy which their chief disciplines desperately need. We see general education as a complement to traditional scholarly disciplines. (p. 88)

Because of that it is peripheral to the real business of Columbia which is the preparation of students for graduate school, or other vocations. It is clear, from all that we have seen to this point, that graduate schools, by increasing entrance requirements (in order to winnow the expanding numbers of applicants) have dramatically altered the course of undergraduate study. At one time, admission to graduate study in English Literature required

no more than a B.A. from a reputable institution. Now, specific courses, or a B.A. in English Literature is required for entrance. Colleges seeking to get their students into good graduate departments have to comply or they will no longer get good students.

The colleges, then, increase their emphasis on the "major", and force a focus in the disciplines. This is done at the necessary expense of general education. In the process, the overall education, not to mention the courses in the major, becomes less liberal.

Finally, we must recognize that this effort, outlined by Belknap and Kuhns, modest though it is, is confined to a kind of an institution (Columbia) that represents less than one percent of American higher education. And that provides no encouragement or comfort at all. We can be thankful that the authors appreciate the problem (v. their impressive opening remarks), but we should be critical of their conclusions.

The Pursuit of the Pigskin

In one of my favorite malaprop stories, a colleague told me of a piece of advice he received from an old family friend, as he was about to embark on his college career:

"You've gotta get that pigskin, Billy," he was told. "You'll never get a good job, you'll never get paid what you're worth, without that pigskin."

While the connection between jobs and higher education is a source of concern for some critics, and has been shown to have a definite and pejorative effect on liberal learning, very little has been done to attack the notion that the connection is necessary. In fact, apologists for the liberal arts often try to justify their curriculum preference on the grounds of utility.

An interesting question, however, has to do with that perceived utility. In providing skilled technicians, has American higher education really become more closely aligned with the needs of the American economy?

Roger L. Geiger(1980) suggests that there are three basic configurations in the proposed relationship between an instrumental education and the intended occupation (p. 23):

1. If an instrumental education makes a worker sufficiently more productive in his job to cover the wage premium paid for that education, then it would obviously be economically justified.
2. If an instrumental graduate merely displaces another graduate by receiving priority in the labor queue for a training opportunity, then the situation is equivalent to a zero-sum game.
3. If an instrumental graduate displaces someone with less education without becoming more effective in the workplace, then the result is the inflation of the credential associated with that position.

Geiger goes on to state that "Credential inflation necessarily involves social costs, even though individuals with credentials may prove to be beneficiaries" (p. 23). The traditional professions are not imbued with self-doubt. They have a base of theoretical knowlege that is taught effectivly in the classroom (although we know that the teaching only recently moved into the classroom, for some). Where there is an amorphous, or nontechnical, or recently emerging profession, the nexus between theory and application, however, becomes tenuous or suspect. This can be overcome with time, but generally, the desire for formalized, "professional" training precedes the existence of the body of knowlege. Geiger cites the teaching of business courses in higher education as an example.

Business schools have made some progress in developing a theoretical and recondite curriculum by incorporating organizational analysis, quantitative techniques, game theory, and the case method; however, the real significance of most business education continues to be as a normative control. Moreover, for most nontechnical professional programs the relationship between course work and real work remains uncertain. (p. 53)

That the requirements for the degree are not releveant to the actual requirements of the profession does not deter students from enrolling. What they know, and what the faculty in those disciplines constantly reinforce, in the quest for those enrollments, in the justification of the discipline, is that those majors receive priority in the labor queue. Or, for those

who continue their education, direct rewards in the form of promotion or salary increments for completing advanced degrees or courses -- in the right fields.

The consequences are predictable: in order to compete more effectively for students, colleges and universities must shape their curricula to meet instrumental ends. Their success will be determined by enrollments, which in turn will be shaped by the hiring end of the labor queue. The more narrowly trained will move to the front of the line.

But, which line? What happens when high technology fades, and a new industry emerges, demanding trained workers? Can institutions of higher education afford to chase employment cycles?

And what about education?

For more than three hundred years, higher education in America has grown at a rate that, generally, exceeded the growth rate of the overall population (Carnegie Commission on Higher education, 1971). Table 1, Undergraduate degree-credit enrollment, 1870-2000, shows actual and projected enrollments collected and developed by the Carnegie Commission staff:

TABLE 1
 UNDERGRADUATE DEGREE - CREDIT ENROLLMENT
 1870 - 2000 (N = thousands)

YEAR	N	Percentage change
1870	52	
1880	116	122
1890	154	33
1900	232	50
1910	346	49
1929	582	68
1930	1,053	81
1940	1,388	32
1950	2,422*	74
1960	3,227	33
1970	6,840	112
1980	10,080	48
1990	9,660	-4
2000	12,700	31

*Includes 898,000 veterans of World War II.

The figures used by the Commission were actual to 1970, and projected, 1980 to 200. The average rate of change for each decade is 56 percent. One could conclude that higher education constitutes a growth segment of the United States economy. Certainly, that rate of growth is going to slow as the pool of young adults diminishes.

An important underpinning of that growth has been the confidence of the American public that education represents a means to a better life through a "good" job, prestige, and buying power. In the period 1970-1976, for example, the percentage

changes in enrollments were 4.3, 3.0, 4.3, 6.5, 9.4 and -0.7 respectively (Magarell, 1980). This growth was in spite of a declining birth rate and declining numbers of live births for the years 1962-1967, when those incoming students would have been born, as seen in Table 2:

TABLE 2
BIRTH RATE AND LIVE BIRTHS (IN THOUSANDS)
UNITED STATES, 1962 -1967

YEAR	BIRTH RATE*	LIVE BIRTHS
1962	22.4	4,167
1963	21.7	4,098
1964	21.0	4,027
1965	19.4	3,760
1966	18.4	3,606
1967	17.8	3,521

*Live births per 1,000 population.

(Carnegie Commission on Higher Education, 1971)

The 1976 enrollment decline was the first since 1951, which (see Table 1) was the first year after an enrollment of over 2.4 million, including 898,000 veterans. In 1977, enrollments rose 2.6 percent, dropped again by 0.2 percent in 1978, increased 2.8 percent in 1979, and showed an overall increase of 3.8 percent in the fall of 1980 (Magarell, 1980). According to the National Center for Education Statistics the estimated total enrollment in institutions of higher education for fall, 1980, was 12,087,200.

While their estimates of actual enrollments differed significantly from those projected in 1971 by the Carnegie Commission (13,500,000), and while Magarell's survey of enrollment trends differed from the 3.2 percent increase shown by the National Center, the overall picture of the decade of the 1970s shows enrollments rising while the pool of 18 year olds falls. The ten-year average percentage change was 3.5.

In his analysis of the 1980 enrollment data Magarell (1980) reported that the economic recession and a concomitant lack of part-time job opportunities appeared to have encouraged more people to enroll full-time, and the same conditions apparently operated to encourage enrollments overall. The last time that happened was in 1975, when the enrollment change of 9.4 was thought by some to reflect the similar recession conditions of that period (Magarell, 1980).

This confidence in the vocational training provided by higher education is viewed with dismay by some. The Special Task Force to the Secretary of Health, Education, and Welfare (1973) observed:

The very fact that we think about "career education" and talk about the value of schooling in terms of an investment that will yield future earnings indicates not only how important work has become in our thinking, but how other motivating forces have been de-emphasized. Formal education, for example, was once conceived of much more as "preparation for life," whether or not it led to a specific job. (pp. 136-137)

Yet, data such as that in Table 3, Unemployment Rates by

Table 3. Unemployment Rates by Educational Level

	Less than 4 years of high school		4 years of high school		1 to 3 years of college		4 or more years of college	
	1970	1979	1970	1979	1970	1979	1970	1979
MEN								
Age 18 and over	4.8%	8.3%	3.4%	5.5%	3.8%	4.2%	1.2%	1.8%
18 to 24	11.8%	17.6%	7.6%	10.0%	7.0%	8.0%	3.9%	4.0%
25 and over	4.1%	6.2%	2.4%	4.1%	2.7%	3.1%	1.1%	1.7%
25 to 54	4.2%	7.0%	2.4%	4.1%	2.5%	3.3%	1.0%	1.6%
55 and over	3.8%	4.7%	2.3%	3.9%	3.9%	1.9%	1.3%	2.6%
WOMEN								
Age 18 and over	6.8%	10.4%	4.6%	6.0%	4.0%	4.3%	2.0%	3.0%
18 to 24	16.7%	22.2%	7.6%	10.2%	5.8%	5.7%	3.0%	4.0%
25 and over	5.5%	7.8%	3.5%	4.6%	3.0%	3.7%	1.8%	2.8%
25 to 54	6.2%	9.2%	3.8%	4.9%	3.7%	3.0%	2.0%	2.8%
55 and over	3.8%	4.6%	2.1%	3.2%	0.7%	3.4%	1.0%	2.4%

Note: Based on unemployment in March of each of the compared years

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor

Educational Level (Fact File, 1981) reinforce the belief in the nexus between the academy and the workplace.

But, is this belief well founded? We know from the historical review of the development of higher education in Chapter II of the intrusion of Utility, and, from earlier sections of this chapter how higher education was coopted by industry in search for engineering training. In Chapter IV it will be demonstrated how important job placement records are to campus administrators. The employer, therefore, is an important factor in the development of higher education, because the employer's use of educational requirements to control the hiring queue has consequences in enrollments, majors, faculty hiring and tenure decisions, and, ultimately, the very nature of the institution of higher education.

There are critics of this relationship who say that the explosion of highly credentialled graduates has outstripped the number of jobs actually requiring such credentials. I've already cited the Special Task Force to the Secretary of Health, Education, and Welfare (1973). One of their conclusions bears repeating: "The market value of education has driven out its other values. One consequence of this has been to require, needlessly, ever-higher credentials for the same work" (p. 134).

Ivar Berg (1971) came to the same conclusion:

these data imply that we may be able to absorb more highly educated people by redefining the requirements for employment, if not the job

itself, and thus, in the fashion of Humpty Dumpty, make the content of work what we say it is. (p. 68)

What Berg found out, in his research and the research of others, is that executives responsible for hiring practices made several unexamined assumptions about college graduates. The "unifying theme" was that having completed a four year college program demonstrated one's self-discipline and stability.

To a man, the respondents assured us that diplomas and degrees were a good thing, that they were used as screening devices by which undesirable employment applicants could be identified, and that the credentials sought were indicators of personal commitment to "good middle-class values," industriousness, and seriousness of purpose, as well as salutary personal habits and styles. (p. 78)

According to Berg, none of the companies had analyzed the educational achievements of its personnel in order to correlate factors like turnover, absenteeism, productivity, grievance patterns, job satisfaction, supervisor's evaluations, or any other performance factors that might justify the continued use of background and educational credentials for hiring purposes.

Because of the lack of critical self-examination by the hiring firms Berg was unimpressed with arguments about rapidly changing job requirements or the "quality" that college graduates provide. Given this, the data in Table 3 seem merely a self-fulfilling prophecy. There appears no genuine or necessary correlation between all that education and employment. In fact, it is clear that a significant and negative result of this

inflation of requirements is to isolate that group of Americans with modest educational requirements. They are placed in the position of having to play catch-up ball, or settling for temporary employment or permanent welfare. Needlessly.

Berg cites research conducted by the Opinion Research Corporation of Princeton, New Jersey, into the attitudes of engineers and scientists. These professional personnel, approximately 620, were employed in the six largest manufacturers of heavy electrical equipment and appliances. The data showed that income in each company was tied to educational level, although more so in some companies than others. The mean income for Ph.D.s was uniformly much higher than the mean income for other educational groupings. The standard deviation of incomes was smaller between M.A.s and Ph.D.s than among individuals with less education, which would indicate that income for the latter group was determined by factors other than education (e.g., performance), while the former educational groups were paid primarily on the basis of their degrees.

men with master's degrees who were designated by management as among 20 percent of their scientists who were "relatively most valuable in terms of present performance and potential" were paid an average salary which was \$1,000 less than that paid to Ph.D.'s, who were reportedly less valuable. Other data show that Ph.D.'s are paid substantially more even when they are younger and less experienced.

Berg's conclusion, then, is that we have set up a situation where a new elite may emerge. In the past, the Liberal Culture

was seen as elitist. Now, it is the Ph.D. in engineering or business. Or, those individuals who have completed two-year or four-year training programs that result in a credential, a credential that provides entry into one of the desired jobs.

In Chapter IV, we will look closely at one institution, the University of Massachusetts at Amherst, to see how it responds to the external pressures of politics, funding, and enrollments, among others, in the shaping of its academic programs.

C H A P T E R I V

PUBLIC HIGHER EDUCATION IN MASSACHUSETTS; AN EXEMPLARY CASE

In other words, ... even if we sacrifice the letter of the old Bachelor of Arts degree, we should strive to preserve its spirit. This spirit is threatened at present in manifold ways -- by the upward push of utilitarianism and kindergarten methods, by the downward push of professionalism and specialization, by the almost irresistible pressure of commercial and industrial influences. If we sacrifice both the letter and the spirit of the degree, we should at least do so deliberately, and not be betrayed through mere carelessness into some educational scheme that does not distinguish sufficiently between man and an electric dynamo.

(Babbitt, 1908, pp. 115-116)

In 1839, the legislature of Massachusetts appropriated money for the state's first publicly supported institutions of higher learning. These were "normal" schools, or institutions for teacher training, located in Framingham, a suburb of Boston, and Westfield, in the western half of the state.

In 1863, under the federal Land-Grant provision, the Massachusetts Agricultural School was incorporated and located in Amherst. It became Massachusetts State College in 1931, and in 1947 it was chartered as the University of Massachusetts.

Between 1839 and 1980, the Commonwealth developed 28 four-year and two-year public colleges, with the overwhelming percentage of initiation and growth in the last twenty years. There are now ten state colleges, including eight that emerged,

like Framingham State and Westfield State, from normal schools, and two that have traditional and narrow career focuses, the Massachusetts Maritime Academy, and the Massachusetts College of Art.

The 15 community colleges were begun in the 1950s; these and Southeastern Massachusetts University and the University of Lowell (both the result of mergers of smaller institutions -- the University of Lowell, for example, is the product of a marriage of Lowell State College and Lowell Institute of Technology) provide a very local perspective on higher education.

It is the University of Massachusetts, however, that best demonstrates the tensions and trends of American higher education among these institutions. By studying the growth and development of this institution, from a delimited and purposeful agricultural college through its attempts to be the multiversity celebrated in the 1970s, to its present state, I will show the trends and consequences I have identified in the preceding chapters.

The University of Massachusetts: 1862 - 1970

The history of the University of Massachusetts is rooted in the agricultural and land-grant movement. Eddy (1956) notes that the first mention of the necessity of studying agriculture in the college curriculum was in a prospectus for King's College (later Columbia University) about 1754. By 1792, the state legislature had granted funds to Columbia for a professorship in agriculture.

In the first half of the nineteenth century, Harvard received a bequest from Benjamin Bussey for

a course of instruction in practical agriculture, in useful and ornamental gardening in botany, and in such other branches of science as may be tried to promote a knowledge of practical agriculture and the various subservient arts thereto. (Eddy, 1956, p. 13)

Nothing came of it.

In 1825, Edward Hitchcock recommended state support for the establishment of a four year Massachusetts Agricultural College. In 1856, the legislature finally acted, creating the "Trustees of the Massachusetts School of Agriculture," and gave it the commission of "holding, maintaining, and conducting an experimental farm and school . . . with all needful buildings, library, apparatus, and appurtenances, for the promotion of agricultural and horticulture art within this Commonwealth" (Eddy, 1956, p. 20). As we have seen, however, the Morrill Act was necessary to bring this institution into being.

The first president of the Massachusetts Agricultural College (M.A.C.), was Henry F. French of Exeter, New Hampshire. He was not an educator, but a lawyer and gentleman farmer. A Dartmouth graduate, he had secured a reputation for his experiments in soil improvement. He had also written several articles for the New England Farmer, and in 1859 he published Farm Drainage. His leadership was short-lived, and in 1865 he

resigned in the midst of squabbles over campus design and building architecture: the first class had not yet arrived. Paul A Chadbourne, professor of chemistry and natural history at Williams College was his successor. It was Chadbourne who provided leadership for the first curriculum of the college.

"The day has gone for robbing the earth, the hills and valleys of the old Bay State, and then deserting her for the West," wrote Chadbourne. "We think the day is coming when she will understand her own interest, now so much neglected. In that college we shall find the sons of many professional men who have learned the blessings of a farmer's life. . . . If agriculture can be brought to that standard where it ought ever to be found . . . it will certainly equal the learned professions as a field of intellectual enjoyment." (Cary, 1962, p. 34)

When the College opened its doors on October 2, 1867, it was focusing on the practical application of the arts and sciences to the business of agriculture. The fifty-six students that comprised the pioneer freshman class spent their mornings in lectures and recitations, and their afternoons in the fields.

For the duration of his four years, the "Aggie" student followed a curriculum which included the fundamentals in the fields of mathematics and civil engineering, chemistry, botany and zoology, English grammar, rhetoric and literature. Some breadth was added to his education by requiring him to study the French and German languages (twenty weeks of study for each), and by giving him introductions to history, government, economics, logic, and philosophy. (Cary, 1962, p. 41)

By the end of the 1893-94 academic year, President Henry Hill Goodell was completing his eighth year in office, was a

member of the Executive Committee of the Association of American Agricultural Colleges and Experiment Stations, and had two agricultural experiment stations under his jurisdiction. Thirty three seniors graduated that year, and senior year electives had been implemented. And in a survey conducted in 1888, 123 of 278 living graduates of the College were active in agricultural pursuits (Rand, 1933, pp. 84-85; 206).

Under the presidency of Kenyon L. Butterfield (1906-1924), the College became a leader in agricultural education in the United States. By 1916, the four-year enrollment was 668, and there were 275 course offerings. There was a winter school and a two-year program. Seventy two instructors taught full time.

Moreover (Butterfield) has established the primacy of agriculture throughout the whole institution. He glories in the fact that M.A.C. is the only college in the United States devoted exclusively to agriculture. He has stamped the trademark of ruralism upon every department, upon every employee, upon every course. His chemistry is "agricultural chemistry;" his economics is "agricultural economics;" his journalism is "rural journalism;" . . . there is even a course in "rural literature." (Rand, 1933, p. 139)

By the time Butterfield left, his replacement, acting President Edward Lewis, could refute those critics who felt the College had strayed from its original purpose. The curriculum contained no Latin, less English, less foreign language, only one faculty member to teach economics and government, "and only one-tenth of a student's total time required in other than agricultural subjects" (Cary, 1962, p. 145). But there were

critics in other corners, and Lewis and his successor, Roscoe Thatcher, had to respond to those who wanted broader admission and curriculum policies. The critics included students, alumni, and industrial centers. What they wanted was a university, or at least a state college that would award the Bachelor of Arts degree.

The name was changed in 1931 to Massachusetts State College, but it took five years of lobbying within and without to effect any changes in the curriculum. By 1935 a faculty committee submitted a report recommending the liberalization of the College's program.. This included combining the divisions of agriculture and horticulture, establishing a division of physical science and mathematics, and another division of biological science, and strengthening the division of humanities and the division of social sciences. While few of these recommendations were ever implemented, a department of engineering was set up in 1936, incorporating the rural engineering that had been developed in 1914, and the civil engineering that had been offered since 1867 by the mathematics department. One can only say that the committee's report, while not received with ardor, was at least prophetic.

Following World War II, there were sufficient conditions in conjunction to favor the establishment of a university. The increase in numbers of potential students -- both in terms of population and of desire for college training -- the emphasis on

education for professional needs, and the support of the State Grange, the Farm Bureau Federation, American Legion, Veterans of Foreign Wars, and various union organizations combined to force passage of a bill on May 6, 1947, creating the University of Massachusetts.

The fifteenth president of the institution, and the man who guided the University through the 1960s, was John W. Lederle. In his inaugural address, he pledged to keep the University's pace at a par with the national growth in higher education:

I have come to feel that what we have here is potentially a giant. I do not mean merely a bricks and mortar giant, but a great public center for excellence in higher education in this region. (Cary, 1962, p. 198)

In 1960 the University was no giant but it had grown considerably from the days of French, Chadbourne, Goodell, and Butterfield. There were 6,500 students, and 580 faculty. The College of Arts and Sciences was surrounded by six other colleges and schools offering vocational curricula. And there was a strong faculty commitment to growth.

In 1962, the Long Range Planning Committee issued its Report. They noted that the enrollment for that year was 7,450: 6,600 undergraduates, and 850 graduate students. Their projections for the fall of 1976 were: total enrollment -- 21,400; undergraduate enrollment -- 17,415 (81%); graduate enrollment -- 3,985 (19%).

They also listed four major objectives for the University:

1. High quality university education at low cost;
2. Establish the University as the graduate training center of public higher education in the Commonwealth; serve as the primary center for research, and as a major center for professional training;
3. Develop public service;
4. Serve as the capstone of publicly supported institutions of higher education in Massachusetts (Long Range Academic Planning Committee, 1962, pp. 10-12).

These are not modest goals, and it is to the credit of the University, its faculty and administrators, that most of them have been met. The real questions, however, have to do with the cost of realizing those objectives. With this rapid progress through the first 110 years of the University's history we can now consider the decade of the 1970s with more care and more understanding.

The University of Massachusetts: 1970 - 1980

The Board of Trustees of the University of Massachusetts, having opened a campus in 1965 in Boston with a liberal arts focus, established a central office with a new president and an extensive staff in 1970. The new president of the University system was Dr. Robert C. Wood, a political scientist and urbanologist, former undersecretary of Housing and Urban Development under Presidents Kennedy and Johnson, and former MIT

professor.

Under Wood, the University continued the rapid growth initiated by Lederle in the late 1960s: a new, main Boston campus was established, on the harbor, the Kennedy family decided to locate the John F. Kennedy Library on the grounds of the harbor campus, a medical school that was established in Worcester in 1962, and opened in 1965 (over the protests of the highly influential private universities in Massachusetts) expanded, and the legislature appropriated budgets to accomodate that growth, even when, as the economy slowed, the governor recommended cuts.

The future university report. At his inauguration as President, Wood announced the appointment of a Committee on the Future University "to advise him and the Trustees on the nature and direction of the future University of Masssachusetts" (Report of the President's Committee on the Future University of Massachusetts, 1971). The committee was asked to examine a university that had quadrupled its enrollments in the 1960s -- total 1970 enrollment at Amherst was 20,732, at Boston, 4,241, and at the fledgling Medical School in Worcester there were 16 students -- and anticipated doubling again in size in the 1970s:

The questions we seek to anwer, briefly, are who will attend, what they will be taught, where they will study, when in their lives they will participate, and how the institution will serve the Commonwealth beyond its students. (p. 51)

The committee acknowledged the public role of the state's

University, as well as the debate that was going on, even then, of the proper role of universities, in general: the committee decided that

universities should be responsive rather disengaged, appliers as well as creators of knowlege, questioners as well as conservers of values. (p. 52)

Their recommendations embraced five key concepts: accessibility, diversity of academic programs, undergraduate teaching as a special priority, service to the public, and productivity in the use of resources.

Much of the language in the report clearly established directions for the University's academic program. For example, while decrying the credentialing role that higher education had assumed, the committee pointed out the responsibility of higher education to provide "upward mobility and job attainment."

the learning process in the seventies must reflect the complexity of society, its technology and its problems. In the public university especially, this means creating a somewhat more professional and more problem-solving orientation to learning, stressing that learning is a process as much as it is a matter of acquiring specific knowledge. (p. 7)

In the process of gathering data for the report, the committee surveyed the faculty at the Amherst campus, and received replies from "nearly half of them, an excellent cross-section of departments and schools, of age, rank, and sex, and of tenured and non-tenured appointees." One of the questions provides an interesting clue to the interests of the faculty:

	Agree or Agree Somewhat	Neutral	Disagree or Not Disagree Somewhat	Ascertain- ed
Undergraduate education at the university should concentrate on the liberal arts. Professional and technical training should be offered at specialized institutions and/or graduate programs. (p. 49)	24%	7%	68%	1%

Given the overwhelming faculty sentiment away from the liberal arts, it is not surprising that the committee recommended de facto confinement of general education to a revised freshman year program:

The academic center of the freshman year is the core curriculum... a quarter to a third of the freshman's course time would be prescribed for him in the form of three basic units, ... the social sciences, the natural sciences, and the humanities and arts. The rest of his time would be spent in pursuing a number of optional offshoots from the basic courses, with the possibility of self-design of some of the offshoots. (pp. 53-54)

Key to this recommendation was the establishment of "a cadre of professors whose mission at UMass will be to excel in teaching," (p. 55) and a strong advising system.

The immediate problem with such a proposal is that the faculty had clearly indicated that they were not interested in the liberal arts, per se, as evidenced by the survey results, above. Further, in the same survey, 42% surveyed thought that funding for research was a "Serious" problem, 34% rated it a "Moderate" problem, and only 21% felt it "minor" (p. 50). In

other words, a program confining general education to the freshman year would probably receive a great deal of lip service from faculty but very few would volunteer to teach in such a program. Conversely, confining general education to the freshman year leads directly to the devotion of three undergraduate years to a single discipline or professional/instrumental degree. The "Minority Report" that was appended called attention to this:

The report emphasized the committee's belief in the principle that the liberal arts are central to a university's functions. But it does not consider adequately the effect on a liberal arts education of its recommended social service and practical curriculum. The adoption of many of the proposals . . . would have the effect of limiting the time and attention a student could give to any learning that was not immediate and practical. (p. 125)

However, the trend toward the immediate and practical was already well underway, as we have noted in earlier chapters.

The classification of institutions of higher education. In 1970, the Carnegie Commission on Higher Education (1973a) developed a classification system of institutions of higher education in America. Through this system they

sought to identify categories of colleges and universities that would be relatively homogeneous with respect to the functions of the institutions as well as with respect to characteristics of students and faculty members. (p. v)

In the system there were five main categories and a number of sub-categories: i.e., under "1. Doctoral-Granting Institutions" were:

Table 4. Enrollment in Institutions of higher education and number of institutions, by type of institution and control, United States, 1970

Type of Institution	Enrollment (thousands)				Number of institutions					
	Public	Private	Total	Per-cent public	Percent of total	Public	Private	Total	Per-cent Public	Percent of Total
TOTAL*	6,350.0	2,150.0	8,500.0	74.2	100.0	1,313	1,514	2,827	46.4	100.0
Doctoral-Granting Institutions	2,012.9	665.0	2,677.9	75.2	31.5	108	65	173	62.4	6.1
Research Universities I	846.0	254.3	1,100.3	76.9	12.9	30	22	52	57.7	1.8
Research Universities II	498.9	112.0	610.9	81.7	7.2	27	13	40	67.5	1.4
Doctoral-Granting Universities I	421.1	220.4	641.5	65.6	7.6	34	19	53	64.2	1.9
Doctoral-Granting Universities II	246.9	78.3	325.2	75.9	3.8	17	11	28	60.7	1.0
Comprehensive Universities and Colleges	1,978.7	522.7	2,501.4	79.1	29.4	308	145	453	68.0	16.0
Comprehensive Univ/Col I	1,666.1	433.2	2,099.3	79.4	24.7	223	98	321	69.5	11.4
Comprehensive Univ/Col II	312.6	89.5	402.1	77.7	4.7	85	47	132	64.4	4.7
Liberal Arts Colleges	38.5	647.4	685.9	5.6	8.1	28	691	719	3.9	25.5
Liberal Arts Colleges I	5.9	180.0	185.9	3.2	2.2	2	144	146	1.4	5.2
Liberal Arts Colleges II	32.6	467.4	500.0	6.5	5.9	26	547	573	4.5	20.3
Two-Year Institutions	2,214.0	133.8	2,347.8	94.3	27.6	805	256	1,061	75.9	37.5
Specialized Institutions	106.5	180.3	286.8	37.1	3.4	64	357	421	15.2	14.9

*Excludes extension enrollment; items may not add to subtotals because of rounding; grand totals of enrollment have been rounded to the nearest 50,000.

SOURCE: Adapted from U.S. Office of Education data by the Carnegie Commission staff.

1.1 Research Universities I

1.2 Research Universities II

1.3 Doctoral-Granting Universities

1.4 Doctoral-Granting Universities II.

The second category, "Comprehensive Universities and Colleges," had two sub-categories: the third, "Liberal Arts Colleges," had two; categories four and five were "Two-Year colleges and Institutes," and "Professional Schools and Other Specialized Institutions," respectively.

Table 4 is reproduced from that report, and provides a comparison of enrollments and the number of institutions in each category.

The University of Massachusetts at Amherst was included in category 1.2 as a Research University II. Its enrollment in 1970 was 20,732. Six years later, paralleling national growth, the enrollments at UM/A had increased to 23,500. Table 5 illustrates how the patterns of enrollments had shifted nationally within the categories of institutions.

Table 5 - Enrollment in institutions of higher education by type of institution, United States, 1976*

	Enrollment (thousands)	Percentage
Research Universities I	1,144.0	16.5
Research Universities II	802.7	11.6
Doctorate-Granting Universities I	804.8	11.6
Doctorate-Granting Universities II	304.6	4.4
Comprehensive Universities and		

Colleges I: Public Comprehensive Universities and	2,055.8	29.6
Colleges I: Private Comprehensive Universities and	571.6	8.2
Colleges II Liberal Arts I	542.1	7.8
Liberal Arts II	153.5	2.2
Specialized Institutions (undergraduate)	377.7	5.4
	182.8	2.6
Total	6,939.6	100.0

*Not including two-year colleges, predominately graduate or nondegree specialized institutions, and institutions of nontraditional study.

SOURCE: Carnegie Council on Policy Studies in Higher Education, A Classification of Institutions of Higher Education, Revised, Berkely, California: 1976.

If we confine our data to categories 1, 2, and 3 a comparison of enrollments in this brief period would look like this: (Table 6.)

In category 1, the largest gain in this period was made by Research Universities II, with Research Universities I retaining the largest share of the enrollments. Doctoral Granting Universities lost enrollments. Overall, category 1 remained virtually constant in terms of its share of enrollments.

Category 2 has become the dominant type of institution in terms of enrollments with significant gains in all sub-categories. The public and private institutions in category 2.1 are separated to show the huge percentage of enrollments in the public sector.

Category 3 is fading in both absolute and relative terms.

Table 6. Comparison of enrollments by type of institution

	<u>1970</u>		<u>1976</u>
1. Doctoral Granting Institutions	2,677.9	(46%)	3,056.1 (45%)
1.1 Research Universities I	1,100.3		1,144.0 + 43.7
1.2 Research Universities II	610.9		802.7 +191.8
1.3 Doctoral Granting Universities I	641.5		804.8 +163.3
1.4 Doctoral Granting Universities II	325.2		304.6 - 20.6
2. Comprehensive Universities and Colleges	2,501.4	(43%)	3,169.5 (47%)
2.1 Comprehensive Univ/Col I (public)	1,666.1		2,055.8 +389.7
2.1 Comprehensive Univ/Col I (private)	433.2		571.6 +138.4
2.2 Comprehensive Univ/Col II (public and private)	402.1		542.1 +140.0
3. Liberal Arts Colleges	685.9	(12%)	531.2 (8%)
3.1 Liberal Arts Colleges I	185.9		153.5 - 32.4
3.2 Liberal Arts Colleges II	500.0		377.7 -122.3
TOTALS	5,865.2		6,756.8 +891.6

Looking at Massachusetts, institutions were categorized and identified as follows (A Classification of Institutions, pp. 9-56):

- 1.1 Research Universities I:
 - Harvard University
 - Massachusetts Institute of Technology
- 1.2 Research Universities II:
 - University of Massachusetts, Amherst
 - Boston University
 - Brandeis University
 - Tufts University
- 1.3 Doctoral-Granting Universities I:
 - Boston College
 - Northeastern University
- 1.4 Doctoral-Granting Universities II:
 - Clark University
- 2.1 Comprehensive Universities and Colleges I
 - Fitchburg State College
 - Framingham State College
 - Lowell State College
 - North Adams State College
 - Salem State College
 - Southeastern Massachusetts University
 - *American International College
 - *Merrimack College
 - *Simmons College
 - *Suffolk University
 - *Western New England College
- 2.2 Comprehensive Universities and Colleges II:
 - Boston State College
 - Bridgewater State College
 - Westfield State College
 - Worcester State College
 - *Emerson College
 - *Springfield College

(* = private institutions)

- 3.1 Liberal Arts Colleges I:
 - Amherst College
 - College of the Holy Cross
 - Emmanuel College
 - Mount Holyoke College
 - Newton College of the Sacred Heart
 - Regis College
 - Smith College

Wellesley College
 Wheaton College
 Williams College
 3.2 Liberal Arts Colleges II:
 University of Massachusetts, Boston
 Anna Maria College for Women
 Assumption College
 Atlantic Union College
 Cardinal Cushing College
 College of our Lady of the Elms
 Curry College
 Eastern Nazarene College
 Gordon College
 Hampshire College
 Hellenic College
 Lesley College
 Mount Alvernia College
 Saint Hyacinth College-Seminary
 Stonehill College

In Massachusetts, then, using the Carnegie classifications, we find two of the nation's 50 leading universities in terms of federal financial support of academic science, and which awarded at least 50 Ph.D.'s in 1960-70 in category 1.1. In category 1.2, one public and three private institutions were in the top 100 which met the above criteria.

Categories 1.3 and 1.4 awarded between 10 and 40 Ph.D's in 1969-70, and category 1.3 received at least \$3 million in federal support in academic years 1969-70 or 1970-71.

Category 2.1, in Massachusetts, includes institutions that offered a "liberal arts program as well as several other programs, such as engineering and business administration. ... all lacked a doctoral program or had an extremely limited doctoral program. All . . . had at least two professional or occupational programs and enrolled at least 2,000 students in

1970" (p. 2). Six of the eleven insitutions are public, and five of these are former teachers colleges that had only recently broadened their programs to include a liberal arts curriculum.

Category 2.2 continues that relationship of public to private: the majority of the institutions are public, with a mission expanded beyond the teacher training or "normal" school, although all retain at least one professional or occupational program.

Liberal Arts colleges I, category 3.1, are those colleges that "scored 5 or above on Astin's selectivity index (see below) or they were included among the 200 leading baccalaureate-granting institutions in terms of numbers of their graduates receiving Ph.D's at 40 leading doctoral-granting institutions from 1920 to 1966 . . ." (p. 3)

The commission acknowledged that the distinction between liberal arts institutions and comprehensive ones was not clear-cut. Some of the former had modest occupational programs, but all had a strong liberal arts tradition.

Category 3.2 included all the liberal arts colleges that did not meet the criteria for 3.1.

Because the distinctions between liberal arts and comprehensive institutions were necessarily partly a matter of judgement, it would be misleading to see the decline between 1970 and 1976 in the liberal arts category as an unmitigated disaster. Further, some of the liberal arts institutions listed in the 1973

Report were marginal, at best, in terms of quality, enrollments, and financial status. The 1976 data reveal, in this case, not only a decline in absolute enrollments and percentage of enrollments, but the disappearance of many of those marginal colleges. For example, in Massachusetts, Cardinal Cushing College has disappeared.

Further, Harvard College, Princeton College, Columbia, and other "liberal arts" bastions are included (with the other colleges and schools of their institutions) under "Research Universities I." This leaves the misleading impression that (in Massachusetts) there are only 10 colleges in the top rank of Liberal Arts Colleges I.

What is indisputable, however, is the gain in the comprehensive institutions and the overall decline of the liberal arts colleges.

This trend is underscored if we examine the shift in baccalarureate degrees for the period in question. In Table 7, developed by Geiger (1980) (based on Digest of Educational Statistics data) we can clearly see a move away from degrees in

('Astin's selectivity index is based on National Merit Scholarship Qualifying Test Scores for all students who took the NMSQT in 1964 classified according to the college of their first choice. From these distributions of scores, it was possible to estimate both the mean and the standard deviation of the scores of students actually entering each college by making certain adjustments in the data. For additional details, see Appendix C of A. W. Astin, Predicting Academic Performance in College (The Free Press, New York, 1971.)')

Table 7. Bachelor's Degrees Awarded by American Colleges and Universities by Subject (N = thousands)

	1964		1968		1972		1976		1977	
	N	%	N	%	N	%	N	%	N	%
Academic disciplines	222.8	48.4	324.9	51.4	419.0	47.2	405.6	43.8	391.1	42.1
Biological sciences	22.8	5.0	31.8	5.0	37.3	4.2	54.3	5.9	54.2	5.8
Letters	37.8	8.7	61.0	9.6	73.3	8.3	51.5	5.6	47.5	5.1
Fine arts	12.0	2.6	11.3	1.8	21.9	2.5	30.7	3.3	30.7	3.3
Foreign language	12.4	2.7	19.3	3.0	18.8	2.1	15.5	1.7	14.3	1.5
Mathematics	18.6	4.1	23.5	3.7	23.7	2.7	16.0	1.7	14.3	1.5
Physical science	17.5	3.8	19.4	3.1	20.7	2.3	21.5	2.3	22.6	2.4
Psychology	13.6	2.9	23.8	3.8	43.1	4.9	49.9	5.4	57.8	5.1
Theology	2.7	0.6	2.3	0.4	2.6	0.3	3.7	0.4	4.1	0.4
Social science	78.3	17.0	123.8	19.6	158.8	17.9	127.3	13.8	118.3	12.7
Other	7.3	1.6	8.7	1.4						
Area studies					2.8	0.3	3.1	0.3	3.0	0.3
Interdisciplinary					16.0	1.8			32.1	3.5
Instrumental	237.7	51.6	307.6	48.6	465.9	52.5	520.1	56.2	537.2	57.9
Agriculture and forestry	6.1	1.3	7.3	1.2	13.5	1.5	19.4	2.1	21.5	2.3
Architecture	0.6	0.1	3.0	0.5	6.4	0.7	9.1	1.0	9.3	1.0
Business	56.1	12.2	79.5	12.6	122.0	13.7	143.4	15.5	153.8	16.6
Computer science					3.4	0.4	5.7	0.6	6.4	0.7
Education	112.5	24.4	134.9	21.3	191.2	21.5	154.8	16.7	145.4	15.6
Engineering	33.4	7.2	37.4	5.9	51.2	5.8	46.3	5.0	49.7	5.4
Applied fine arts	4.0	0.9	6.9	1.1	9.7	1.1	11.4	1.2	11.4	1.2
Health professions	11.6	2.5	17.4	8.8	28.6	3.2	54.0	5.8	57.8	6.2
Home economics	4.9	1.1	7.4	1.2	12.1	1.4	17.4	1.9	17.6	1.9
Journalism/communications	2.2	0.5	4.4	0.7	12.3	1.4	21.3	2.3	23.2	2.5
Library science	0.5		0.8		1.0		0.8		0.8	
Military science	2.7	1.4	2.0	1.3	0.4	0.3	1.2	0.4	1.0	0.5
Other	3.1		5.5		1.5		2.1		2.6	
Public affairs					12.6	1.4	33.2	3.6	36.7	4.0
TOTAL	460.5	100.0	632.3	100.0	887.3	100.0	925.7	100.0	928.3	100.0

SOURCE: National Center for Educational Statistics, Digest of Educational Statistics, 1966, 1970, 1975, 1978.

what Geiger labels "disciplinary" majors and toward those degrees he calls "instrumental."

The growth and direction of public higher education in the Commonwealth of Massachusetts, including the University of Massachusetts at Amherst, was being determined in this critical period.

The missions and goals report. In April, 1976, the Commission on Missions and Goals of the University of Massachusetts, Amherst issued its report, "Public Service Through Academic Excellence." The Commission, in its Foreword, pointed out that the Amherst campus was "the only state institution providing both liberal arts and professional programs from the freshman year to the doctoral level" (p. 2). The Commission had been established to clarify the nature of the service mission of the state's University. In so doing, it demonstrated the increasing murkiness of academic life. That is, the feeling that higher education had always accommodated, and could always accommodate, the broad and broadening spectrum of disciplines, programs, and professional training that they found in their review of the University and other institutions in the state.

Looking at the nearly 25,000 students and 2,500 faculty and professional staff, the Commission saw "a complex division of labor where seemingly conflicting elements become complementary and reinforcing" (p. 4). The undergraduate program was seen as

particularly significant in this complementary world:

All areas of undergraduate education share the common goal of providing a liberal education to equip students for intelligent, mature lives in the community. A graduate of UMA should have a broad sense of the world of knowledge, along with sufficient scholarly skills, intellectual discipline, and self-awareness to pursue a lifetime of continued learning. . . . Before students . . . move towards specialization in any area or career, they are expected to have learned the fundamentals of a broad range of disciplines in the physical and natural sciences, social sciences, humanities and fine arts. Their awareness will have been sharpened by the discipline of scientific method, and by acquaintance with the various forms of ideas and imagination manifest through philosophy, history, the arts, and literature. They will also have been exposed to a range of values important to developing an awareness of their roles as individuals, as career specialists, and as members of society. (p. 5)

The report went on to point out that students are concerned with employment opportunities when they graduate, and that individual departments should be prepared to advise majors on the best methods for integrating their disciplinary work with career options. It sounded as if the future university that had been sketched out in 1971 had been realized. Yet, while the Commission saw UMA as a "flexible, adaptable, and open academic community," (p. 9) at no point did they analyze enrollment trends, either in Amherst, or nationally, nor did they seem concerned with the clear and loud and insistent voices in the trade journals of higher education proclaiming the decaying state of the liberal arts. This was never mentioned in the report. Indeed, in terms

of critical recommendations, the report seemed most concerned with preserving the campus' perceived role as the "flagship" of the University system, and the fiscal autonomy of public higher education. They cited the need, the responsibility of maintaining a major research library; they implied the necessity of expanding the graduate program, of admitting more out-of-state students (there had been a trend of some years standing that the better students tended to come from out-of-state), and reducing the student faculty ratio from 18:1 back to 15:1. Simply put, the report read like a pastiche of opinions made from the security and sanctity of a wide variety of disciplines. Which it was. The sum of those opinions had been shaped into a non-threatening and not very insightful document. It said, "Let us continue to do what we want to do. Someone else can take care of the big picture."

The Puryear report. In his September, 1977 convocation speech to the Amherst campus, Chancellor Randolph W. Bromery addressed the future of public higher education in Massachusetts:

It's often been said that the only thing that's absolutely certain in this world is that there will always be change with time. This is especially true in higher education, and it is even more true this year for the University of Massachusetts. The school year of 1977-78 will be a critical one of transition for this University. (Bromery, 1977, p. 1)

In a little more than a year since the platitudes of the Commission on Missions and Goals report, the Chancellor was

referring to the resignation of the President, Robert C. Wood, who had commissioned the Future of the University Report; he was referring to the process of collective bargaining that was going on for the first time at the University; and he was also referring to the rumblings in the legislature of a total reorganization of public higher education.

The Chancellor urged unity in this period of change:

During this period in our history, with all its ambiguities and opportunities, its uncertainties and its potential, every unit and individual in the University community is going to have to join hands with every other. We are going to have to pull together this year to improve ourselves and our prospects, indeed to safeguard our very existence as an institution of higher learning. (Bromery, 1977, p. 5)

The Chancellor did not directly address the most immediate and divisive issue, however, the "Long-Range Plan" that was being directed by Provost Paul L. Puryear.

Puryear took office in October, 1976, and one of his immediate tasks was to put together a long-range plan for the Amherst campus. Puryear stated, "It was made clear to me that the new Provost would be expected to move in two or three directions" (Puryear, 1981). Puryear had been told by the President's office that a planning process had to be initiated, that previous attempts hadn't been "serious" (the Missions and Goals Report seems to bear that out), and the campus must be made to take a hard look at the future, which was going to be a move away from the arts and sciences and toward the professional

schools.

"The way I saw it," Puryear later said, "the shift was not only to the professional schools, but, in a secondary sense, toward the Humanities, (toward) those departments that were underfunded and student pressures were there."

So, it would not simply be a matter of reallocation from one sector of the campus to the other. A further complication was the changing complexion of the Board of Trustees. Up until 1974, the board had been wholly supportive of President Wood. It agreed with Wood that the University should move into a "planning mode," and map out the next five or ten years of the University. This meant, initially, planning a decade of expansion. The language and tone of both the Future of the University Report (1971) and the Missions and Goals Report (1976) reflect that confidence in growth. But with the election of Governor Michael Dukakis in 1974, and the subsequent appointment of new Trustees, the mood on the Board began to shift, and by 1976, when Puryear arrived in Amherst, the Board was not anti-planning, but anti-Wood, and therefore, anti-expansion. This meant, said Puryear, a "change to the momentum of the planning process."

In mid-December, 1976, Puryear was summoned to the President's office in Boston and told that the timetable had been speeded up. The Board of Trustees wanted long-range plans submitted around the first of February. "We then had to go to a crash mode," said Puryear, "and put together a document under

new constraints." The new Provost used planning documents submitted by the Deans of the various schools and colleges (Arts and Sciences, which included the faculties of Humanities and Fine Arts, Natural Sciences and Mathematics, and Social and Behavioral Sciences; Education; Engineering; Physical Education; Business Administration; Health Sciences; Food and Natural Resources; there was also a Dean (Acting) for the Graduate School) in response to the previous Provost's request. Using those, and his own analysis based on his understanding of trends on campus and nationally, Puryear came up with a proposal that would re-allocate about 45 faculty positions (out of approximately 1,200 full time faculty positions) over a five year period, with the majority going to the professional schools, and a few to the Humanities.

Rationale for change. The first stage of what was characterized as the "Puryear Report" or "Puryear Plan" was published in early 1977. In it, the Provost cited stabilized or declining enrollments, significant shifts in course demand, nontraditional constituencies, and a rise in "variegated demand for research and service from the University" (Puryear, 1977, p. 1). He stressed the fiscal uncertainty that clouded any planning, but offered a panacea:

Long-range planning is a management technique which has only recently come into vogue in academe. While the process is still little understood, extraordinarily favorable conditions now exist for sound and creative planning for the

University's long term future. Projective techniques have now been refined to the point where it is possible to determine the economic and demographic factors that will shape the University for years to come. We can now forsake our faith in unbridled growth and chart our destiny on the basis of futuristic parameters which are largely known. Given our continuing fiscal predicament, the preservation of a University of quality now requires that critical academic decisions be made within a clear analytical framework supported by rational assumptions about the future. (p. 1)

In brief, the University must decide how it will reduce its work force. But, more to the point, the factors that were acknowledged as the shapers of the University were "economic and demographic." According to Puryear (1981), at no time was he able to sit down with the President, or any other top level administrator of the University, and reach an understanding of what sort of university they thought should serve the people of Massachusetts. Clearly, the process was reactive: given certain enrollment trends and projections, given assumptions about levels of funding, then . . . Puryear identified the crucial variables in the decision-making process:

- student demand
- enrollment trends
- faculty-student ratios
- faculty work load distributions
- student FTE's (full time equivalents)
- quality of program
- quality of faculty
- potential for research. (Puryear, 1977, pp. 3-4)

According to Puryear, his plan recognized that there had been changes in the economic structure. The economy had shifted

from goods-producing to service-producing: the 1950s industrial growth had turned around. As a result, the Provost felt he "had to begin putting more resources in the 'high demand' sectors of the University" (Puryear, 1981). In this process the Arts and Sciences could have qualified as "high demand," according to Puryear. For example, the development or expansion of programs in social policy studies by the Sociology Department; public administration in Political Science; and links between traditional liberal arts (e.g., languages) and some professional schools (e.g., business).

The second point Puryear stressed involved the changed state revenue structure. By that he meant the consistently smaller allocations to higher education, the diminishing tendency to give as much state revenue as had been given over the past 20 years. This was not just a case of competing demands, but a reaction by the legislature to the downturn in enrollments.

Puryear cited a third factor: he felt he must provide some flexibility in the institution to handle a crisis that might loom if the University continued to devote as much of the budget to personnel costs. He felt that it was a mistake to make permanent commitments (i.e., tenure) as a hedge against the day that might require a "payback."

The provosts for the three campuses submitted their plans to the President's office as requested. After review at that level, Puryear's plan was accepted, the plan for the Medical School was

accepted, and the plan for the Boston campus was judged inadequate. That meant that the Boston campus got several more months to work on their long-range document. As Puryear said later, the provost for the Boston campus probably did the politically correct thing.

Puryear next released his plan to the Deans to "circulate for discussion and to provide feedback to me" (Puryear, 1981). What he got was a lot of opposition from the faculty, and the particular focus was "on procedures and process" (Puryear, 1981). Much of the resentment seemed to be a feeling that this was another case of the President's office shoving something down the throats of the faculty.

"But," said Puryear, "I felt the faculty had passed the ball to Boston. I dealt with the material that had been sent from the departments to the Deans. The responsibility for planning was vested in the President's office, and that had been delegated to me" (Puryear, 1981).

Applications. Turning to the document itself, we can see how Puryear applied the variables he'd identified. The following are selected programs in the Humanities and Fine Arts as described in the Long-Range Plan:

Asian Studies

A better than average department, its focus is narrow (language and literature) and our ability to develop it into a truly distinguished comprehensive department probably very limited. Moreover, its student-faculty ratios have been

considered below campus averages. Its future in the University, therefore, is very problematic (p. 5).

English and Journalism

This department presents a number of difficulties. The English component is much too large and seriously underutilized. Enrollments have dropped by 23% over the last year and the student-faculty ratio now stands at 9.9/1. This compares with a campus ratio of 17.4/1. At the present ratio, the English Department would support a faculty of about 56 FTE, yet the tenured faculty alone numbers 77.

. . . the Journalism program is thriving. Enrollments have increased by 20% since 1975 and this upward trend is expected to continue . . . However, because of its association with the much larger English component, the program has been seriously understaffed. The reallocative process will rectify this situation (p. 6).

Linguistics

This is a very strong department of national and international reputation. It probably ranks first or second among similar departments around the country. While its student-faculty ratios are low (9.40), its position of national leadership in the discipline warrants the maintenance of this program as one of the outstanding manifestations of quality on the Amherst campus (p. 6).

Philosophy

This is a program of high equality, but the faculty is seriously over tenured (93%). Moreover, there has been a drop in enrollments since 1975 of 24%. With the market glutted for new Ph.D.s in the discipline, some reduction in the scope of the department is in order . . . (p. 7)

These are brief rationalizations for actions the administration thought necessary in order to adjust the campus' expenditures to the money it thought the state would appropriate, while at the same time reallocating positions to those areas where it thought the greatest student interest and need, as expressed by enrollments, would be.

This reallocation was presented "in tentative form" in the first stage document. When the dust cleared, the Provost proposed overall reductions of 28.1, 16, and three FTE faculty in the faculties of the Humanities and Fine Arts, Natural Sciences and Mathematics, and Social and Behavioral Sciences, respectively. He proposed an increase of five faculty in the School of Engineering, 10.8 faculty in the College of Food and Natural Resources, seven in the School of Physical Education, 15 in the School of Business Administration, and 8.6 in the School of Health Sciences. In sum, a reduction of 47.1 FTE faculty for the Arts and Sciences, and a gain of 46.4 FTE faculty for the professional schools. This reallocation was to occur between fiscal year 1977 (the year the document was submitted) and fiscal year 1982. By FY 82 the Provost had projected a total of 1,243 FTE faculty. Therefore, the reallocation was concerned with less than four percent of the total faculty.

Campus reaction. The campus reaction to the document, and to Puryear, was shrill and harsh. Throughout the spring, 1977 semester, there were emotional meetings of the faculty, and Puryear, when asked to appear, did so and defended his document. At a special meeting of the general faculty of the Amherst campus on May 3, Puryear said:

We are at a critical juncture, as is all of higher education. To this point we have been the wards of a benevolent society, with constantly increasing funding, and enrollments keeping pace.

The 1960s were truly the Golden Age of higher education. (Puryear, 1981)

Puryear went on to point out that the Golden Age was now behind us, and that new forces were at work in society. The forces he stressed were:

- 1) Changes in the occupational structure: the problem here is to maintain the strength of the liberal arts while attempting to meet societal demands for more specialized training.
- 2) A decline in the revenue base of the institution; that is, not just a trend of diminishing revenues (appropriations), but a pattern of rising inflation. (Puryear, 1981)

Puryear asserted his commitment, and his assumption that the faculty shared that commitment, to making the critical decisions on the campus, for the good of this campus, and not having those decisions made elsewhere.

He concluded by saying that he was attempting to provide leadership in this crisis. He acknowledged the need for continuous and vigorous dialogue, but said that, "at some point, we must reach closure, and decisions must be made."

What the Provost was saying, in no uncertain terms, was that the campus had to produce a unified response to enrollment pressures in the professional schools. There could no longer be

individual department, school or college plans. Further, he was to say later, "the Deans had lost credibility -- any action had to be the Provost's and the Board of Trustees' -- the Deans had abdicated." Upon reflection, he added that the problem was, "The central office probably moved a year too late" (Puryear, 1981).

At any rate, the reallocations proposed by Puryear follow the trends described in Table 7. The overall view, supplied by the Provost, was intended to counter what he called "departmental imperialism," that was in control on the campus. By that he meant what Robert Arns, Vice President of Academic Affairs, University of Vermont, has cited as a consequence of the division of the institution into schools, colleges, departments, and disciplines. Arns called attention to commitment by faculty to departmental or disciplinary interests, rather than to the programs or functions of the larger institutions. This is reinforced by the rewards for faculty that are controlled by the disciplinary community (Arns, 1978). I may disagree with the reallocations proposed by Puryear, I cannot disagree with his (and Arns') description of the faculty view.

When the Provost concluded his defense of his plan at the May 3 meeting, Professor Robert Paul Wolff, whose Philosophy Department was slated for reductions, alleged that the very collegiality of the university was being assaulted. The university, which resulted from a joining of the professional schools with the liberal arts in the 12th century, said Wolff,

was being torn apart by this plan.

Letters were written to the campus newspaper, more meetings were held, and special sessions of the Board of Trustees were scheduled with representatives of the Faculty Senate articulating the concern of the faculty. One of the Trustees, Paul Parks, told the faculty they had been derelict, that there had been no plan for the campus since 1974, and that he was not going to censure the Provost because he had provided one. But the Board did not press the issue to a conclusion. It was too controversial with faculty dissension, the wrangling between the President (Wood) and the Governor (Dukakis), and between their factions on the Board, and finally, the fact that -- according to Puryear -- there really was not a clear understanding by the Board of what was being planned.

Finally, the Board announced that any long range planning would require more Board "input," thus removing the plan from the fray, at least in this highly divisive form.

That summer, President Wood resigned, and with the Chancellor of the Amherst campus sensing that he might be a candidate for Wood's position the mood of the campus -- faculty, students, administration -- was schizophrenic. By January 1978, Puryear had been removed as Provost. I don't intend to analyze here the reasons given for his dismissal, but it was not a proud chapter for the University. At the very bottom of it there was a virulent dose of racism (Puryear is black) that surprised many on

the campus. If this were a test of educated men and women demonstrating their education through right action, there were wholesale failures.

Despite his demotion, Puryear did not change his mind about the reallocations he felt the University had to make. In an interview with a local newspaper shortly after his removal from the position of Provost he described the changes that had to be made:

First, . . . it's clear that the occupational structure in this nation is changing. It's fairly clear that many so-called professional disciplines are very much in demand. The university must meet this demand not only in the reallocation of fiscal resources but also in the academic complexion of the institution. We have to figure out what new ways of training are appropriate. Second, I had to meet the challenge caused by the changing fiscal base of the University. The era of expanding fiscal resources is over and will not return in the foreseeable future. . . .

The third challenge is the shifting complexion of the student body. The baby boom is over, and the size of the 18- to 22-year old age group is declining. . . . You have to start thinking in terms of . . . older age groups . . . Universities must learn how to provide training for these new students, and that requires a substantial response from the faculty. (Lipman, 1978, p. 9)

The "Puryear Report" never appeared again on the campus after that semester of histrionics and racist acts. But the challenges to the shape of the University did not go away. The same month that Puryear was relieved of his position (and a year after Puryear released his report), the acting president of the

University, Franklin Patterson, addressed the Board of Trustees. While couched in polite academic language, Patterson was asking the Board to clarify

What it sees now as the proper role and mission of this University as a whole in the period ahead.

In the 1960s the University went through massive growth and diversification. By the end of the seventies, growth has come to an end, or so it appears, many new constraints have developed, and a complicated period lies ahead in the eighties. It is a time when the Board of Trustees should look again at the major purposes of the institution and the institution's best configuration. (Patterson, 1978)

This "best configuration" is the same as Puryear's "academic complexion." In other words, the faculty may not have appreciated the Provost's message, or his delivery of it, but the issues remained. This is the practical side of the ideal of the university.

Reorganizing Public Higher Education

Higher education and high technology. On April 15, 1980, the day Massachusetts' state taxes were due, a piece of legislation was filed to create a quasi-public agency called Bay State Skills Corporation (Mohl, 1980). The Secretary of Economic Affairs, George S. Kariotis, cited statistics compiled by the state Board of Higher Education that showed roughly 41 percent of the jobs projected in Massachusetts' high technology industries through 1982 would go unfilled, despite increases in the numbers of high

school graduates going into the science and technology fields.

Kariotis warned that if those jobs continued to go unfilled the industry would move or expand elsewhere. "A large number of jobs have already left our Commonwealth," he said (Mohl, 1980). Bay State Skills, Corp. was intended to head off that possibility by coordinating start-up grants to educational institutions moving into training programs to meet the job-need areas. Specific programs proposed included:

- Technical career grants to students enrolling in engineering, computer science and mathematics;
- Tax credits for industry and private investors who provide money, equipment, or facilities to educational institutions for such training programs;
- start-up grants for off-campus video instruction, summer programs, technician training, and retraining programs (Mohl, 1980).

This led to the development of a "social contract" between the governor's administration and an informal collection of the so-called "high technology" industries, the Massachusetts High Technology Council, predominantly computer hardware and software corporations. The contract was for these industries to create 65,000 to 120,000 "quality" jobs within five years; the state was to create a favorable tax structure, and to promote linkages between higher education and the training needs of industry.

Three months later, the legislation to create the Skills

Agency died, along with a lot of other bills, as the General court rushed to adjournment in early July.

A spokesman for Secretary Kariotis said that "the administration of Governor Edward J. King hopes to accomplish many of the goals without benefit of the bill until a duplicate of it is taken up by next year's legislature." Paul Schutz, the Secretary's aide, "noted that the reorganization of the state's higher education system with a centralized administration vested in a board of regents . . . could set up a framework for launching more high technology training programs at public colleges" (Brunelle, 1980).

That reorganization of the public higher education system brought an end to the decade of the 1970s, and may have signalled the total control of the higher learning by the forces of vocationalism.

Proposals for reorganizing. Proposals for the reorganization of public higher education in Massachusetts had been virtually annual items since 1976, but none every came to fruition because of the inability of the various factions to reach an agreement. An example of one of the proposals, however, may be instructive: this one, prepared by faculty from the various universities, state, and community colleges for Senate President Kevin Harrington, and released March 23, 1976, proposed a three-tier system:

1. The University Centers: instruction in the liberal arts, teacher education, the sciences (theoretical and applied), engineering, fine, applied and performing arts, and primary jurisdiction over training for the professions requiring post-baccalaureate degrees; the University Centers may award doctor's degrees, and would be the primary agencies for research;
2. The State Colleges: four year programs in liberal arts and sciences; teacher education; fine, applied and performing arts; Master's degrees; joint doctor's degrees in collaboration with University Centers; research encouraged;
3. The Community Colleges: associate degrees in vocational-technical fields, or liberal arts; other certificate programs. (Faculty Committee on Reorganization, 1976)

In addition, while there would be a state University System Board of Trustees, local autonomy would prevail in matters of faculty status, academic matters, and fiscal matters. The state board would submit an annual budget based on the recommendations of the various campuses. Implementation and development of specific programs would be the responsibility of the local Boards of each institution.

Legislating change. In the spring of 1980, there was growing impatience in both the legislature and the governor's administration with the pace of the third such group to work on reorganization, the Special Legislative Commission on the

Reorganization of Higher Education. Governor Edward J. King, at one point, "told members of the Special Commission . . . that if they didn't move more quickly, the legislature would reorganize without them" (Scully, 1980). Then, in the process of putting together the budget for fiscal year 1981 in the final days of the legislative year, the Chairman of the House Ways and Means Committee, John J. Finnegan, added a Reorganization Plan that would merge the state and community colleges over two years (Rosenberg, 1980). This was accepted on the House floor, but the Senate Ways and Means, next to receive the budget package, stated that it was "unacceptable" to deal with reorganization in that way. However, the Senate budget had no response. The next phase of legislative process called for a conference committee of House and Senate members to bring the two budgets into line.

On the day the conference committee met, two members of the Special Commission submitted two pieces of legislation dealing with reorganization, a majority and a minority report. Senator Atkins, chair of the Senate Ways and Means Committee, recognized the disarray and "differences of opinion on higher education," and formally requested the House "recede" on their reorganization plan to allow full legislative action on the plans submitted that morning by the Special Commission.

But by now, the fate of higher education was caught up in Massachusetts politics: Rep. Finnegan of the House Ways and Means said there was no time to read those plans (it was now 11

p.m.), "it looks like 95% of the loaf, and the way I negotiate, that's a good deal." Chairman Finnegan, Speaker of the House McGee, and Governor King all wanted reorganization before adjournment, and eventually Senator Boverini, who chaired the Special Commission, joined them. The result was a compromise hammered out in the early morning hours between the minority report of the Special Commission and the "outside section" that had been added to the House budget.

Until reorganization, there had been six governing boards for public higher education: the University of Massachusetts, the University of Lowell, Southeastern Massachusetts University, a board for the 10 state colleges, a board for the 15 community colleges, and a Board of Higher Education. Under reorganization, the Board of Higher Education is eliminated, and smaller, nine-member local boards for each of the 28 institutions report to a Board of Regents.

In the past, each separate institution developed its own budget and forwarded it to the appropriate board. In turn, those budgets were reviewed by the Board of Higher Education, which had no authority to cut or increase, only to recommend, before being submitted to the legislature for a vote. Now, local budgets are to be funneled to the Board of Regents, which will request and receive a lump sum in the form of a single line item in the state budget. The Board of Regents, then, will determine how those dollars are to be allocated among institutions.

The intentions of the legislature in the shaping of reorganization are quite clear in the language of the amendments to Chapter 15 of the General Laws. In Section 1 of Chapter 15A, "Board of Regents of Higher Education," they state:

This comprehensive system will enable the citizens of Massachusetts to continue to choose among and have access to a broad spectrum of educational programs and services at all levels of instruction while incorporating a capability to respond to changing economic and social needs of the Commonwealth.

In Section 5, the Board of Regents was empowered to

define and authorize new functions or new programs; or consolidate, discontinue or transfer existing functions, educational activities and programs: and may, after a public hearing and submission of a written report to the clerks of the house of representatives and the senate, by a two-thirds vote of the full membership of the board, consolidate, discontinue, or transfer divisions, schools, stations, colleges, branches or institutions as it deems advisable; . . .

Reaction. Reactions among educators in Massachusetts were mixed. The president of Southeastern Massachusetts University, Donald E. Walker, said, "There is some feeling that reorganization was being pushed for the wrong reasons, that it would be an easy fix for the fiscal problems of public higher education in Massachusetts." Walker identified the real problems as coming from "underfunding, and no tidy arrangement or rearrangement of the pieces and players is going to redress that problem." Walker also felt that proponents of reorganization had not been able to

identify what was "duplicative and inefficient" about the old system of governance (Scully, 1980).

Almost unnoticed in the reorganization was the elimination of the cabinet level office of secretary of education. The incumbent, Charles Johnson, had argued against reorganization in a detailed memorandum to the governor, before passage of the budget. Johnson attempted to convince Governor King that the proposed legislation would not accomplish any real financial savings, and had very little to justify it on educational grounds. Finally, he wrote, the reorganization would "cut the governor off from education" (Scully, 1980).

At the University of Massachusetts, many felt that the resignation of Robert C. Wood, and the lengthy interim period while a search for a new president was being conducted, created a sense of drift and vacuum that contributed to the legislative haste to reorganize. The new president, David C. Knapp, was brought in in 1979, and was not a unanimous pick by the Board of Trustees. Because of his highly academic, private university background (he was a provost at Cornell before taking the UMass position), some observers felt he would be chewed up in the highly political arena of public education in Massachusetts. Apparently they were right. Within a year, he had been reorganized into a minor and perhaps temporary job. The budget for his office in the first fiscal year of the reorganization legislation was cut from \$900,000 (fiscal year 1980) to \$500,000

(in fiscal year 1979, it had been \$1.1 million.)

Knapp reacted to the reorganization by stating

I believe, as many do, that the plan has serious defects. Many aspects are ambiguous, especially the division of authority between the board of regents and the institutional boards . . . How, and whether, distinctions can and will be made between the functions and operations of a research university and those of other kinds of institutions remain open questions. I believe that changes can and must be made in the legislation if the public's interest in quality education is to be maintained. (The Alumnus, 1980)

One who tried to see the positive side of reorganization was Senator John Olver, whose district includes the Amherst campus (Rosenberg, 1980). Olver was on the Senate Ways and Means Committee, and the House-Senate conference committee that negotiated the final reorganization legislation. In this precarious role, he had the choice of staying on the conference committee and going along with the final budget (which included the reorganization amendment), thus insuring a position of power on Ways and Means, or opposing the reorganization amendment and, therefore, the budget, thus losing his seat on Ways and Means because he defied the majority. Olver opted for the "long" view, stuck with the budget, retained his seat, and hoped that in the future he would be able to play an influential role in providing healthy budgets for the University through the higher education appropriation. Olver stated, later, that with good appointments to the Regents, the University and all of public higher education

should see more money, and that quality programs could result. The key would be the appointments to the Board.

The Board of Regents. Section 2 of the reorganization legislation provided for 15 members of the Board of Regents, appointed by the governor, and an office of the Board, consisting of a chancellor and staff appointed by the Board.

The first appointment to the new board was made July 2, 1980 by Governor Edward King. James R. Martin, chairman of the Massachusetts Mutual Life Insurance company, immediately promised to bring a businesslike approach to the coordination of the public universities and colleges.

"I look upon this as an attempt to solve a problem that is a management problem more than an education problem," he said. "My experience as an educator is limited. But managing large enterprises -- that's my baby" (Briere, 1980). In his first interview as chairman of the board, Martin allowed that he wanted the Regents to take a close look at eliminating superfluous programs in the system. "The educational community is guilty of the same things the business community is. Too often we do things well that we ought not to be doing at all," he said (Briere, 1980).

As further appointments were made, it was very clear that both Governor King and chairman Martin were going to insure that businesslike approach through the experience of the members. In

a July 29 article, The Morning Union (Springfield, Massachusetts), noted that the appointments of An Wang, president of Wang Laboratories, and David Beaubien, vice president of EG & G, Inc., both "executives of Massachusetts-based high-technology companies that have expanded rapidly in recent years, indicates the governor's concern that the state recognize what he considers the need for greater cooperation between the industry and the public colleges and universities."

In late August, the governor swore the full board to their terms. The members were Martin, Wang, Beaubien, George W. Hazzard (president emeritus of Worcester Polytechnic Institute, and a member of the Special Legislative Commission on the Reorganization of Higher Education), Dr. Charles A. Sanders (general director of Massachusetts General Hospital), Elizabeth B. Rawlins (associate dean at Simmons College), Arnold S. Friedman (editor of the Springfield Morning Union, and former member of the Special Commission), Rev. Francis J. Nicholson (professor at Boston College law school), Foster Furcolo (former Democratic governor of Massachusetts), Sister Janet Eisner, S. N. D. (president of Emmanuel College), David S. Paresky (president of Crimson Travel Service, Cambridge), George H. Ellison (founder of a Boston insurance firm), Robert Cushman (chairman of the board of the Norton Company, one of the major industries of Worcester), Normal Zalkind (coordinator of Fall River's Economic Development Office), and Ray Stata (president

and chairman of the board of Analog Devices, Inc., and founder and first president of the Massachusetts High Technology Council). It is clear that these appointments are consistent with the major thrust of the governor's administration: to marry the manpower needs of Massachusetts industry with the training potential of public higher education.

The first official act of the Board, in September 1980, was to appoint a chief administrator to guide the Regents through the transition period (the complete phasing out of the old boards and complete takeover by the Regents was scheduled for March 1, 1981). Paul Guzzi, a former school teacher, a former secretary of state, an unsuccessful candidate for the Democratic nomination for a U.S. Senate seat, and, most recently, chief secretary to Governor Edward J. King, was named to the job. Guzzi had helped the Governor draft his position on reorganization and had worked with the legislature on the final bill that created the superboard. Not many were surprised when Guzzi announced, in early February, 1981, that as soon as the yet-to-be-named chancellor assumed the position as top administrator of public higher education, he (Guzzi) would become vice president of education and government relations for Wang Laboratories.

Final comments. Some final comments on this particular superboard may be appropriate. Despite the language of the legislation, the Joint Committee on Education is certainly not going to give

complete authority to the Regents, at least not in the first year. On February 25, 1981, members of that Committee questioned the accountability of the Regents, since they were appointees of the governor. And the House Ways and Means Committee decided the same day to submit a bill that would effectively delay implementation of the new Board of Regents system until the position of Chancellor was filled. The House Committee was particularly upset because the Regents came to them with a lump sum budget (as was provided in the legislation), instead of one that clearly stipulated funds for each campus, and identified the distribution of funds among campus segments. By March 2, the chairman of the new board told Rep. John J. Finnegan, chairman of the Ways and Means Committee, that the Regents would "allocate funds exactly as they come to us from the General Court," instead of shifting them from one institution to another as they deemed fit. This was seen sufficiently conciliatory to keep the Committee's bill of delay from moving onto the floor of the House.

Another point of contention is the avowed linking of the institutions with high technology. Senator Gerard D'Amico (1981), of the Joint Committee on Education, sees that as "one of the battles between the legislature and the Board of Regents. They have their constituency and we have ours. And ours is a much broader constituency. How that battle is played out will be interesting. Just two weeks earlier, the Boston Globe

reported a Federal Reserve Bank study of the New England economy by economists Lynn E. Browne and John S. Heckman, and quoted Browne as stating that "closer working arrangements between the high technology industry and New England colleges and universities are essential for both if they are to solve their problems" (Anson, 1981).

Finally, it must not be forgotten that this reorganization was jammed through the legislature at the last minute, with no public hearings, without the benefit of full debate in either the House or Senate, and in such a way that no amendments were allowed. It was made part of the state's budget, so to vote against reorganization meant voting against the entire appropriation package for fiscal year 1981. State Rep. James Collins (D-Amherst) said, "The administration of public higher education in Massachusetts deserves better than being put together like a jigsaw puzzle behind closed doors in the middle of the night" (The Alumnus, 1980). It is inevitable that a series of amendments will be filed to clarify or curtail the various authorities and duties of the Regents, local trustees, and Chancellor. It is just as inevitable that the politicization of public higher education in Massachusetts has been raised to new levels.

The Shift to Instrumental Degrees

Despite its image as a front line educator,

Massachusetts is 48th in the nation in the amount it spends on public higher education. The reorganization promises no added spending for the 120,000 full time students and 5,000 faculty spread among its 28 institutions. (Cohen, 1980, p. 38)

What are the likely effects of reorganization to be on public higher education, and particularly on the University of Massachusetts? The same year the Future of the University Report was released (1971), the U.S. Department of Health, Education and Welfare released its Report on Higher Education. This is best known as the Newman Report, after Frank Newman, the chairman of the commission that wrote it. One of the many phenomena of American higher education they examined and criticized was the multicampus system.

These evolved, the commission agreed, in part because of the desire to effectively allocate resources and to achieve an economy of scale. It was an attempt to accommodate and control growth. That is, to eliminate the duplication of effort, program, and people that often results when organizations and institutions respond to sudden surges in demand. There's no denying that a single law school or medical school can be more efficient than two small law schools or medical schools. And, as the commission pointed out, centralized purchasing of many supplies and services can save funds. (In 1980, Henry Koffler, Chancellor of the University of Massachusetts' Amherst campus pointed out, "Our efforts in this direction have already saved

the Commonwealth thousands of dollars through our development of a statewide purchasing consortium" (The Alumnus, 1980.)

But, the Report went on, a centralized system tends to get carried away with its systematic, rational pursuit of coordination and planning. It "is often pursued in areas where its benefits are illusory." What, after all, are the strengths of systematization? The Report pointed out that

rather than innovation, the skill of the large system lies in more of the same. Entrepreneurs rarely thrive in a climate of detailed budget review, pressures for equal treatment, statewide interest groups, flagship campus dominance, or concern for political expediency.

Today, there is still considerable flexibility within higher education. We still expect that college means a different experience for different students. But steadily, the flexibility, differentiation, and individual responsiveness are slipping away. Only a determined effort can reverse this trend. (p. 27)

Clearly, the experience in Massachusetts indicates that such determined efforts have not been made. Furthermore, the impact of interest groups, particularly the high technology industry, is currently being felt most strongly. One can only wonder about future claimants on the direction of the higher learning.

If we go back to Table 7, there are two conclusions we must now make: the first is the obvious one -- the unmistakable shift in undergraduate degrees toward those that are frankly instrumental. Indeed, Table 8, Bachelor's degrees awarded by subject, 1979, shows that the shift is continuing. The second

Table 8. Bachelor's Degrees Awarded by Subject, 1979.

<u>Subject</u>	<u>N</u>	<u>%</u>
Academic Disciplines	375,878	40.4
Biological Sciences	49,576	5.3
Letters	42,368	4.5
Fine and Applied Arts	51,012	4.4
Foreign Languages	12,034	1.3
Mathematics	11,901	1.3
Physical Sciences	23,363	2.5
Psychology	43,012	4.6
Social Sciences	109,362	11.7
Theology	6,074	0.6
Area Studies	2,602	0.3
Interdisciplinary	34,574	3.7
Instrumental	555,428	59.6
Agriculture, Natural Resources	23,247	2.5
Architecture, Environmental Design	9,297	1.0
Business	175,420	18.8
Communications	26,470	2.8
Computer and Information Sciences	8,769	0.9
Education	127,853	13.7
Engineering	62,800	6.7
Health Professions	62,723	6.7
Home Economics	18,457	2.0
Law	678	--
Library Science	558	--
Military Sciences	347	--
Public Affairs and Services	38,799	4.2
TOTALS	931,296	100.0

*Adapted from "Fact File," The Chronicle of Higher Education, November 17, 1980.

SOURCE: National Center for Educational Statistics.

one is not so obvious. The degrees that are being left behind, the "disciplinary" ones, in Geiger's terms, themselves have become instrumental. As we noted in Chapter III, those disciplines that fall under the rubric of the Liberal Arts, are not concerned with the Liberal Arts, per se, but with meeting the imperatives of the disciplines, per se. Where the undergraduate concerns of the School of Engineering are to prepare the budding engineer according to the profession's requirements, the concerns of the Department of English are just as narrow: preparation of the undergraduate for admission into a good graduate Department of English, and from there into the professoriate. If we doubt this, we need only go back to the rationale for reallocation of faculty at the University Of Massachusetts in the "Long-Range Plan," or the conclusions of Wolff, or Belknap and Kuhns.

But, as erstwhile instrumental majors, the disciplines have forsaken their participation in the general education ideal while placing themselves in an extremely vulnerable position in the academy:

The notion that an educated person ought to be acquainted with certain particular subjects was obviously done in by the enormous expansion and specialization of disciplinary knowledge together with the organizational imperatives of disciplinary departments. Its disappearance, however, has left the disciplines naked in the marketplace. ...(The) prevalence of the notion that all subjects are inherently equal with respect to a bachelor's degree has brought all disciplines and instrumental subjects into competition for student enrollments. (Geiger, 1980, p. 23)

That departmental imperialism also makes it difficult if not impossible to discuss regenerating general education. At the University of Massachusetts the Faculty Senate Rules Committee recently sponsored a series of forums on general education and curriculum review for the Amherst campus. A summary of the discussions (Forman, 1980) indicates a number of areas where problems were identified as well as some considerable confusion about what "general education" is.

Some of the problem areas were as follows:

1. Distrust or lack of integration between the College of Arts and Sciences and the professional schools in curricular and enrollment areas;
2. Criticism of the present core requirement structure as inadequate for the integration of materials understood as necessary for general education;
3. Survey courses that are more oriented to faculty interests or disciplinary organization than to liberal arts needs of students.

Much of the discussion seemed to equate general education with "basic skills education," when the question of "What is meant by general education?" was raised. The responses to this question, and the forms or models of general education that were proposed, tended to set general education to the front end of one's undergraduate experience. That is, general education is something one does in the freshman and sophomore years, getting

ready for the real meat of higher education, the major.

In January 1981, the campus sponsored a "Microcollege," to deal with the recreating of General Education, and this general response from the faculty was reiterated, time and again. Weinberg (1981) pointed out two analogies to keep in mind when general education, or any other program is proposed:

1. General Education as ghetto;
2. General Education as separate-but-equal;

I have added a third: General Education as special program.

In the first, we isolate the general education experience as something the student must escape from; that is, after the orienting, sensitizing, and remediating have been accomplished, the substantive work can be done in specialized courses. Implicit in this is the lesser worth of the general education component, and both students and faculty recognize this.

In the second instance, we prevent the bridging of general courses and specialized course work and contribute to fractionalizing the academic experience even further. This becomes more evident when a separate faculty is provided to teach in the General Education Department. We wind up with two faculties, two orientations, and competition that will prove unhealthy.

In the third, we essentially isolate the general education experience on the fringes of the academy, label it openly or

covertly as "experimental" and not essential, and implicitly encourage students to see it as something to dabble in, if they're serious students, to dally in, if they're not.

In all three instances (I'm sure there are other variations on the theme), the real power of the campus is located in the departments, and the schools and colleges that are tied to national and international associations, that garner awards, that are funded for research, that have enrollments, and can claim placement of their majors.

In other words, to be serious about general education, the institution must institutionalize it. That doesn't seem likely. Even so, faculty at the University of Massachusetts, in overwhelming numbers, don't consider general education a priority. And legislators, public officials, and Regents are intensely interested in seeing more utility in higher education.

C H A P T E R V

SUMMARY AND CONCLUSIONS

Although the value of a college education is not solely measurable in terms of its usefulness in the marketplace, the dominant interest, constantly reinforced in America, is in its marketability. Indeed, the decline in the market value of higher education may endanger the American commitment to education, precisely because its non-market aspects have been ignored or grossly undervalued.

Special Task Force to
the Secretary of
Health, Education, and
Welfare, 1973.

A fundamental characteristic of modern life is not the existence of social problems but the effort to seek the aid of scientific inquiry in solving them. Basic to scientific inquiry is a habit of seeking the factual core of a subject. Indeed, modern industrial culture disciplines us to what Veblen long ago called the matter-of-fact mode of thought. We tend to take things as they are, without such aids as superstition and the supernatural. Nature and society tend to be seen as matters of fact rather than as parts of a sacred order.

Meyer Weinberg, 1977

Paradise Lost

Our present-day confusion about our schools and the role of an education does not occur, I believe, because we have resolved this tension. It occurs because we have lost the tension. We have allowed the utilitarian view of school to displace the larger educational perspective. In losing it, we have lost touch with our past, with the fructifying energy that the older tension, fully embraced, could inspire. We have lost the will to keep a civil ideal and a utilitarian entity in balance, and thus we have ensured the success of neither one nor the other. (Giamatti, 1981)

The expectations we have, as a public, of our institutions of higher education create a critical tension. We want good jobs to come to college graduates, we want those graduates to be well and properly trained to assume those good jobs, and we also expect those graduates to act -- to behave -- and to think in a manner that has something to do with elevated aesthetic and moral standards. To act and think in a fashion appropriate to liberated and free men and women.

The tension is lost when, due to constraints of time, money, or the shifting needs of our economy, the institutions emphasize the training at the expense of the aesthetic and moral development. Higher education then becomes a credentialling process, fitting graduates to job slots, and allowing the education of students to assume a lesser position in the hierarchy, or to vanish altogether.

How did this dilemma come about? Has it always been present in the debate over the aims and ends of education? Can it be resolved -- either within our present institutions or in alternative ones? To answer this, the development of our higher education establishment has been reviewed, going back to Plato, through the medieval period, our colonial institutions and those of the eighteenth and nineteenth centuries, and down to the present. My conclusions are that institutions of higher education have always been involved in career preparation. However, as the possibilities for "careers" have expanded, as societies have moved from agrarian or feudal -- where careers are limited to theology, medicine, canon or civil law, or warfare -- to one in which being a chef is seen as a professional calling, so has the provision of career training within higher education expanded. This has resulted in an incredible specialization within these institutions, mirroring the specialization without. American higher education's purposes have grown and changed in the past three hundred years, higher education in the United States has consistently demonstrated a trend to the practical, to gauging its success by how well it -- through its placement of graduates and other quantitative measures -- responds and deals with economic or social or political problems. It presently seems to require an instrumental justification for its existence. Indeed, that is about the only thing binding all the elements that comprise today's university together; Kerr's "multiversity"

is strung along in a unity of utility.

Proposals for reform of this condition of higher education consistently state that things have gone too far in the direction of utility. They recommend that the institutions diminish the emphasis on career preparation, and reinstate or reinforce the liberal arts or a liberal education. Invariably, however, they opt for some sort of accommodation. In actual practice there is precious little reform, and what exists is frequently done on an experimental or optional basis. Discussion and debate over the place or the role of general education, or liberal education, or core requirements or distribution requirements leaves a participant in confusion and with a feeling of hopelessness. There is little consensus about its purpose or meaning, and in many instances the different interpretations tend to cancel each other out. What is consistent, however, is the tendency toward accommodation: fitting in the liberal or liberating pieces between the larger and openly or tacitly acknowledged important parts of the schooling process. Today, higher education consists of a major, electives, and some sort of "common core." In the hurly-burly of public higher education, particularly, there is an acceleration toward expanded and improved linkages between the academy and the marketplace. Even the belief that our very liberty depends on the free pursuit of occupations is controlled by the availability of training and educational opportunities that are geared to specific, dominant job categories. The

employer, the industry, the marketplace is controlling the curriculum.

The whole idea of a critical nexus between the amount of formal schooling and jobs is questionable. What we truly have is a combination of processes: credentialling and credential inflation. In many cases there seems no true connection between the content of one's higher education and the actual requirements of the job.

The costs of this practice to higher education and to society are many, great, and ignored. We continue to expand majors, contract disciplines, and to expect an educated, sophisticated, and employable graduate to emerge from four years of exposure to the system.

The consequences for higher education, under these circumstances, are disturbing. By fostering and forging new and more alliances with the employing sectors of society, the academy must align the curriculum ever more closely with those sectors' training needs. This process, obviously, will further erode the concept of a university, creating additional "academic" fields in its wake. One need not fantasize as like this:

Diesel Engine Technology.
 Instructor/Chairperson. Anticipated full-time
 teaching position Fall 1981. Emphasis on
 development, organization and implementation of
 program on mobile and stationary diesel engines.
 Requirements: Five year's experience or BS in
 area and two years' trade experience. New Mexico
 State Vocational Teacher Certification or
 eligibility for entrance into teacher training

program. Additional teacher education, work experience and multicultural experience preferred. Salary commensurate with education/experience. Proposed start date, June 1, 1981. Closes May 4, 1981 or until filled. Placement folder, resume, and copies of transcripts to Personnel, UNM- Gallup, Gallup, New Mexico 87301. Affirmative Action, Equal Opportunity Employer. (The Chronicle of Higher Education, 1981)

This position at the University of New Mexico at Gallup, demonstrates my point and captures the essence of much of the development of American higher education.

A real or imagined training need is identified, and ultimately the university is involved in meeting that need. But the process rapidly goes beyond mere training. The next step is credentialling. And, as Berg (1971) demonstrated, even when the need for training is suspect, the credentialling is critical.

There are further steps involved: pressures are brought to bear on the university to deliver the credentials or face the consequences of having denied individuals or groups or classes the opportunity for employment, for promotion, for tenure, and so on. Institutions are brought into competition: come up with a sufficiently attractive, sufficiently flexible, cheap, etc., program or lose enrollments, contracts, grants, research money.

The profession of education illustrates this nicely. While there are several who question whether there is, indeed, a discipline of "education," the teaching profession and our school system rely on the degree structure -- B.A., M.Ed., C.A.G.S., and

Ed.D. -to control certification, hiring, promotion, and tenuring of teachers and school administrators. Ironically, both the faculty in the teacher-training institutions and those who graduate from those institutions frequently question the worth of the courses. But they all recognize the value of the degree. In such situations, the "selling of higher education" becomes more than a possibility: administrators, pressed for enrollments or tuition, negotiate degree programs for individuals, or even school systems with more attention focussed on income than quality. It doesn't matter whether an individual needs the credential for personal advancement, or whether a superintendent is buying a credentialling package so he can upgrade a cohort of faculty into the administrative ranks. It doesn't matter if the aura of the degree provides a halo that allows the person to be more effective even though he or she really has no more aptitude than before. What does matter is that we have diminished the university.

It follows that, given this relationship between higher education and the employer, the student-cum-employee is, ultimately, a commodity used by that employer to develop a product or deliver a service. The vocational training program, de facto, devotes its energies to the development of a "product-deliverer," or a "service-deliverer." There is little, if any room for the growth and development of a whole person.

At the same time, the whole process of credential and

requirement inflation acts to screen out individuals who may have the aptitude or ability, who may, in fact, be better performers in the jobs, but who were unable or unwilling to participate in the credentialling program. Again, Berg (1971):

Educational credentials have become the new property in America. Our nation, which has attempted to make the transmission of real and personal property difficult, has contrived to replace it with an inheritable set of values concerning degrees and diplomas which will most certainly reinforce the formidable class barriers that remain . . . (The) use of educational credentials as a screening device effectively consigns large numbers of people, especially young people, to a social limbo defined by low-skill, no-opportunity jobs in the "peripheral labor market." (pp. 185, 186)

Perversely, even those who benefit from the vocational training and credentialling are trapped. In Chapters III and IV references and illustrations of the narrowing of higher education were provided. The connections between industry needs and the reorganization of public higher education in Massachusetts may, ultimately, detail this. The forces that have joined are economic, political, and education. But who will benefit?

"The State Aims at Closing a Jobs Gap" (Boston Globe, 1980), describes the dilemma of the so-called high-technology industries in Massachusetts. In February, 1979, the Massachusetts High-Technology Council negotiated a "social contract" with Massachusetts' governor, Edward King. In return for creating by 1982 approximately 60,000 "high-tech" jobs and 90,000 support jobs with an annual payroll of \$2 billion and additional tax

revenue of \$300 million, the governor agreed to hold the line on taxes.

With the tax agreement behind them, the high-tech companies began complaining about their manpower problem. A variety of studies were cited to show that while the educational system has become more responsive to high-tech needs, a dwindling supply of students is widening the gap between job needs and job training in Massachusetts.

George Kariotis, Governor King's Secretary for Economic Affairs, is quoted as saying "The educators have made some progress, . . . but their output is still minimal compared to what we need" (Boston Globe, 1980). The article goes on:

Education officials generally agree that changes need to be made, but where, how and by whom are sticky points. And their calls for more money are being greeted by raised eyebrows.

Impatient King administration officials have difficulty comprehending why the educational system cannot be run more like a business, moving from unprofitable product lines (education and history majors are the two most often mentioned) into profitable high-tech lines.

We are back to measuring education by the profit that can be derived from it. Instead of being viewed as an important part of the individual's preparation for a whole life as a responsible, participating, informed member of Massachusetts' society, the governor and his staff and some extremely willing "educators" are rushing to develop programs that will prepare students for carefully defined roles as members in a very

delineated group of employees.

An important yet rarely discussed aspect of this sort of training approach is what skills do the job holders have when the high technology market diminishes? And what sort of an education do they have to provide insight and perspective as they engage in the work of life? Finally, can an institution theoretically devoted to the free and unfettered pursuit of Truth afford to risk participation in such practices?

This movement toward resolution was not abrupt, it occurred gradually and as the result of an extremely complex array of pressures. One of the most critical of those pressures, however, has been a loss of our common sense of the place of a liberal education.

In the Greek polis, the public realm of the city-state, the free man pursued excellence in the tradition of Homeric heroes. In The Iliad, Glaukos says his father ". . . sent me to Troy, and urged upon me repeated injunctions, to be always among the bravest, and hold my head above others . . ." Arendt (1958) argues that Homer, as "the educator of Hellas," was both setting and stating the standard of behavior for the free citizen.

The public realm, in other words, was reserved for individuality; it was the only place where men could show who they really and inexchangeably were. It was for the sake of this chance, and out of love for a body politic that made it possible to them all, that each was more or less willing to share in the burden of jurisdiction, defense, and administration of public affairs.
(p. 41)

The education of that involved citizen was a liberal education, one appropriate for a free and independent, autonomous individual. It was not specialized: the specialized tasks of that period were carried out by slaves. The specialized tasks were those of the private realm of the household. Arendt and others (e.g., McClintock, 1979) see the economic activity of that period as household, or domestic activity, and not something worthy of the concern of the public realm. That world view has been replaced by one that sees work, the production of things, and the specialization of roles and functions in order to enhance that production as the proper pursuit and definition of mankind. We are measured, our arete is determined, by the function we fill in our specialized society. "We are what we do."

This systematic rationalization of functions was noted by Weber (1946), Ellul (1964), and Veblen (1961), as well. It affects our habits of thought, and the way we go about our training and our education. But a liberal education is not specialized. If we use the ideal of the polis, a liberal education endows and enhances the free individual engaged in a common enterprise, the common weal. Conversely, the specialized man or woman is limited by the training and job he or she holds and is valued for that only.

Our individual potential and our possibilities for involvement in the life of our society, alike, have been diminished, or lost.

Paradise Regained

A liberal education is values. It is not the mere teaching of rhetoric; it is not enough to argue with sincerity or passion, one must have a moral foundation and purpose for the argument. I believe that, ultimately, we can share a common understanding of what is right and just, and that it is the process of education that can lead to the discovery of those truths. But we cannot pursue the truth in a value-neutral fashion. And we cannot pursue it merely by acquiring technique. We can pursue it by developing and arguing a position on specific issues, and through that dialectic, discovering the better position and so, throughout our lives, urging ourselves and our societies to the right and just actions. I may never know the truth, but I can and should pursue it. In this sense, the teaching and study of literature is not, properly, scansion or the memorization of genres, or dates, it is the careful and appreciative reading of descriptions of human interaction: of human with environment; of human with self. And the interest that is generated is predicated on human values.

If we ignore values, and it is interesting that most critics of higher education do, we find ourselves in awkward and compromised situations. For example, the very institutions responsible for providing a liberal education often go to extreme lengths to argue that they are "value-neutral." By value-neutral

the university intends a form of academic freedom. The university administration will insure the right of those within the academy to teach and speak out; it will protect its members from outside critics while at the same time guaranteeing free debate within its walls.

In point of fact, universities cannot be value-neutral. They demonstrate values, or the lack of them by what they do and do not do. Their investment policies, hiring and tenure policies, and decisions to expand or contract departments and schools, all demonstrate values. There can be no neutrality if there is social interaction. By claiming this neutrality, however, the university seeks to remove controversial practices from the arena of debate.

Again, using the value-neutral stance, all disciplines, classical or newly-minted, appear to acquire the same value or standing in the university. In turn, this develops into the multiversity that Kerr celebrates and Wolff deplures. We recognize that this is not value-neutral, of course, it is rather a statement of values that is unable to publicly establish a hierarchy of disciplines (although privately the criticisms are smug, even vicious), and that willingly develops new, even inappropriate relationships with outside agencies if the price is right.

The product of this latter approach is, unfortunately, a technician. Whether the technician is a surgeon, the principal

of an urban school, or an architect, without values he or she acts in a mindless fashion that seems a disease of modern society. If the school principal, while technically, even legally correct, participates in the providing of an inferior education to minority children, then she is guilty of a moral wrong. If the surgeon's advice in an abortion case would differ if the woman were black (or white), then he, too, is guilty. If the architect designs an aesthetically and functionally sound building that is to be used for purposes of torture or death, a gas chamber for example, then he or she is guilty. This is a kind of thoughtlessness -- not stupidity. And when, in a burst of technical perfection, we do our jobs without any consideration for the moral consequences, we have diminished our human potential and, potentially, contributed to the diminishment of us all.

One does not need to be "educated" in order to act rightly, to be eupractic. But the educated man or woman understands and articulates his or her conduct as Melville understood Billy Budd's. Budd, on the other hand, acted admirably yet stood mute. We read Melville and attempt to understand his creation. We recognize and comprehend the values Budd demonstrates, and we appreciate the dilemma of Captain Vere, and we despise Mr. Claggett. And at the end we understand. We understand the conflict between forces of darkness and light, we understand Vere's retreat into the rules, we understand Budd's pitiful final cry, "God bless Captain Vere!" And, understanding that, we

better understand our own existences. We transcend mere essence, mere doing, mere being because we have expanded the context of our lives.

The burden of an education is great. If we are to be true to our increased comprehension of our human condition we must exist in an exalted and honorable and humane fashion. We will assign values, not in an arbitrary or "situational" manner but consistent with those evolved values of the human race. We will have a hierarchy of values -- all values are not equal, but have an ordering principle.

As we follow that principle, subscribe to those values, and, through the living of our lives, daily demonstrate our courage in our commitments, we define ourselves. An increasing number of men and women are completing courses of study, are being awarded an expanding number of variety of academic degrees. Whether or not we are contributing to the education of these individuals defies mere quantification. We are tested with each act, it can only be discovered in the "Who" of the person, not in the "What."

What may we conclude from this critique, what can higher education in America anticipate? I see no reason for the tyranny of numbers to be mitigated in the near future, nor will the "unmitigated quest of knowledge, of this matter-of-fact kind" (Veblen, 1961) likely cease. Further, the effect of a rational and scientific view of the world, and the consequent

bureaucratization and specialization in institutions will continue to be felt in the organization and justification of higher education. Arendt (1958), Veblen (1961, 1948), and Freeman (1980) have all demonstrated how this world-view controls the form of our organizations, and how these, in turn, mold our activities and even our processes of thought.

While this is inimical to the liberating and liberal education that I have been proposing, I would hesitate to state that such an education is now impossible. In fact, even though the changes that I have delineated have truly been incremental, taking generations to move the university ever closer to its present state, so much seems to happen so rapidly in the society of twentieth century America that I hesitate to make any projections.

The very sluggishness and torpor that is inherent in the university may very well inhibit the next phase of the training phenomenon. As industries continue to expand and diversify, and as jobs become increasingly specialized, the demands for training will increase and become ever more specific. At some point, therefore, unless institutions of higher education discard even more of their vital components and traditions (e.g., permanent departments and faculties), in order to accommodate the new "disciplines," they will be unable to accrete these functions. Or, they will continue to add on and yet not do their job well, disappointing industry and driving their best customers away.

These customers, in turn, would logically seek out new vendors, or create the service , themselves.

Warsh (1981) has described that last scenario, and points out that those companies that have established their own training centers figure they do a better job at far less cost. Not only do they not have to support permanent faculty (with all the attendant overhead costs) but they can be extremely directed in their teaching, dealing only with the issues that affect their particular product line.

There are some signs, as well, within higher education of an uneasiness with the role of training and the loss of the liberal arts. I have cited the renewed interest at the University of Massachusetts; Scully (1977) noted the national trend toward a re-appraisal of the undergraduate curriculum. I have criticized some of the more prominent proposals for reform. What I point out here is that the interest in general education is still alive: the issue continues to be how to effect significant change. A combination of external influences (e.g., a move by industry to provide its own training) and internal pressures may produce renewed institutionalization of a liberal education.

An example may be emerging in the School of Education at the University of Massachusetts. The recently drafted "Mission Statement," (Grennan and Seldin, 1981) of that school's Long Range Planning Document proposes a commitment to something beyond narrow professionalization:

Our choice is to develop and extend collaboratives with the humanities to ensure that the primary education of children and the secondary, on-going education of adults develops an understanding of the relationship between ideas and human conduct; an educational collaborative dedicated to human, informed standards in the technological society.

Whether those collaboratives are ever erected remains to be seen. There is a recognition, however, of both the problem of too narrow training and the reality that a liberating education does not begin nor does it end with an undergraduate program. The choices we make, and the manner in which we make them reveal our values: those may be refined and expanded as we grow toward maturity, but the effects of our family, our pre-school and elementary school periods, and the myriad other influences on our lives play a role as well.

The issue, for me, is whether or not higher education is going to completely abdicate its role in the development of involved and informed human beings in favor of developing technicians and job holders. This issue is critical because the questions facing us require more than matter-of-fact knowledge or scientific know-how. As citizens of this world, we should properly demand to be involved in these questions and in the formulation of the answers. Arendt (1958) phrased it this way:

This future man, whom the scientists tell us they will produce in no more than a hundred years, seems to be possessed by a rebellion against human existence as it has been given, a free gift from nowhere (secularly speaking), which he wishes to exchange, as it were, for something he

has made himself. There is no reason to doubt our abilities to accomplish such an exchange, just as there is no reason to doubt our present ability to destroy all organic life on earth. The question is only whether we wish to use our new scientific and technical knowledge in this direction, and this question cannot be decided by scientific means; it is a political question of the first order and therefore can hardly be left to the decision of professional scientists or professional politicians.

I remain convinced that a liberally educated person can best grapple with those issues. I remain convinced that we should all grapple with those issues. And I remain convinced that higher education must continue, must renew its critical role in the process.

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