Two Cultures in Education

by

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SENIOR HONORS THESIS

Submitted In Partial Fulfillment of Requirements
for the College Scholars Program
North Central College

Approved: ___________________________ Date 3/25/95

First Reader -- Thesis Supervisor

Approved: ___________________________ Date 5/18/95

Second Reader -- CSP Faculty Member

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Preface

Over the years, the debate over the process, structure and implementation of our society's education system has covered a wide spectrum of ideas and philosophies. I come to this debate with the background and acknowledged training of the sciences, both natural and technical, as well as a keen interest in the development of myself with a more broadly referenced intellectual exposure or understanding. I have enjoyed courses which have introduced me to Vico, Machiavelli, Malcolm X and Bloom (to name a few). These individuals represent a wide range of personalities, disciplines and ideas but all have one common characteristic...they all have something to say, and for whatever reason, people over the years have either listened or debated the reasons they chose not to listen.

During my technical training I have noticed a trend that disturbs me. Too often the focus is exclusively on the ever-changing methods and opportunities of what our technology and knowledge can do that it is not already, keeping our eyes on the future. In doing so, we are missing what people have to say today. I have found that studying areas such as communications, philosophy and social thought tends to open our minds as well as our ears to the voices that wish to be heard. In the past, these voices have enabled us to develop as a culture, or in fact develop a culture. What happens when ten years down the road, we
have no knowledge of which voices to turn to because we have not taken the time to pick them out? Perhaps one of these voices is even our own. The point being, a true education, one that benefits oneself as well as one's society must encompass a background in these social and cultural histories as well as the technical and scientific training necessary in today's society. I am not wishing to come across simply as an advocate for the liberal arts approach to education, for I think that even this "open-minded" realm has at times lost its intended focus. Rather, I am choosing to advocate the methods and approaches liberal arts philosophies are intended to promote. Which is to say, I am advocating education over merely training and skill development, but please..............allow me to explain...........

Two Cultures in Education

Literature, Science, History, Math, Stories, Computers, Poems, Business Contracts. The evolution of education, society and technology. Individual entities--undeniably intertwined. When one talks about culture, society, and the advancement thereof, one may wish to start speaking in the past tense. At this point in its development, society has come to what Joseph Conrad referred to in his tale The Heart of Darkness as "the edge." The reason for this comparison has nothing to do with
what the edge separates, but the questions that are raised by that separation. The edge represents a point of decision-making. Do we continue to go forward? Do we stop and reevaluate? Do we immediately turn away from the conflict that comes with decisions and remain content with where we are and what we have?

In recent years technology has begun to move away from science and forge its own path. The reason for this is that the advancement of science itself would never be able to move at the speed kept by the advancement of technology. The fact that the speed of advancement is remaining unchecked is another reason for moving technology away from science. Should technology spiral itself right out of reach of those who create it (i.e. Big Brother), science will not wish at that time to be associated with the consequences. Here begins the debate over the pluses and minuses of advancing technology and how these advances are to be passed on to those entering the higher levels of our education system.

The advancements in technology have been hailed and praised by many as signs of our ever increasing levels of knowledge and skill. SKILL. That word has come to be almost synonymous with education. Is the development of a skill in and of itself an education? Some would have you believe so. On the other hand, there are those that believe that to have an education means that one is schooled in a number of different disciplines. They believe that part of what is instilled is the instinct and desire to continue learning and seeking out new knowledge for as long as
one is able to. With this approach in mind, questions are being asked about the current process our society goes through to educate itself.

Since the end of the "Flower Power" years, when many were concerned with living for the moment and expressing individuality, we as a society have become future-oriented, self-concerned individuals more concerned with how we measure up to our fellow citizens than with how our present society as a whole measures up to the societies of the past. One of the theories about education today reflects the concern about the individual to society relationship. According to Hirsch, author of Cultural Literacy: What every American needs to know, all members of society, and particularly those who are seeking an education, should desire to become culturally literate. To be culturally literate is to possess the basic information needed to thrive in the modern world. This literacy includes information in all subjects and categories, from sports to the sciences (Hirsch xiii). Some may think that this is an innovative and strikingly new approach to education. However, if one sees the approach from this perspective, as being something unusual i.e., a break from the norm, it must make us wonder...what is the norm? If the "new" approach makes so much sense, why do we choose to continue splintering ourselves into specialized directions? The reason is that a verbal agreement is far from being a commitment to change. The tension between our new perceptions and the established standards is the heartbeat of
academic disciplines, and modern universities are organized to keep that tension high (Scientific Revolution V). Part of the reason we are so reluctant to let go of the current way of doing things, is our increasing lust for information. This increase has been furthered by the ease with which we can obtain this information. The accessibility of information has grown by leaps and bounds as our world is drawn closer together by phones, fax machines and the Internet. Year by year we command more of this information and learn to organize and analyze it in ever more elaborate and sophisticated ways. Specialization is the serious price paid for such gains (Scientific Rev. V). With this specialization or fragmentation, O.B. Hardison, author of Disappearing Through the Skylight: culture and technology in the twentieth century, wondered, "Is the idea of what it is to be human disappearing along with so many other ideas, through the modern skylight (Hardison 5)"

The cultural trend of other-orientation has not been lost on those who design and mold our education system. Instead of focusing on educating to improve ourselves today, we are striving to train ourselves for tomorrow. It is because of this focus on the education of the future, that we are losing the education philosophies of the past. What few seem to realize, however, is that it is those very same philosophies that have gotten us to where we are now.

The great thinkers and educators of the past were, in many ways, closer to understanding what it means to be educated. They
realized that knowledge rests its roots in a number of disciplines and that one discipline almost always compliments the others. "Nature, history, language, and art are parts of a wonderfully intricate mobile: touch one and the rest tremble and change position in sympathy (Hardison xiv)."

Giambattista Vico was a strong believer in the close-knit ties of different academic disciplines. In the book, *On the Study Methods of our Time*, Vico stated, "...I think, young men should be taught the totality of sciences and arts, and their intellectual powers should be developed to the full..." (Vico 19). He went on to say:

Were this done, young students, I think, would become exact in science, clever in practical matters, fluent in eloquence, imaginative in understanding poetry or painting, and strong in memorizing what they have learned in their legal studies. They would not feel the impulse to step rashly into discussions while they are still in [the] process of learning; nor would they, with pedestrian slavishness, refuse to accept any viewpoint unless it has been sanctioned by a teacher. In this sphere, the Ancients seem to me to be superior to us. (Vico 19)

The following are some more modern examples of the ways in which different disciplines that are normally not associated with each other actually do cross paths. The first disciplines to be highlighted are art and technology. O.B. Hardison cites the work of Picasso as an example of commentary on the increasingly technical direction of society. He says that the artwork shows the fall of individuality through the disappearing human image (Hardison 2). As time went on, Picasso's images became more and
more distorted, less like a slate-smooth mirror and more like a broken window pane. Today, we have computer art -- artificial reality -- and it is becoming an increasingly irrelevant task to try to make the distinction between real and artificial (Hardison 4). Rather than question this irrelevance, our society seems to accept it and embrace advancements which are of an artificial nature. Picasso saw this and commented on it through his works of art.

Another area that reflects the crossing of disciplines is architecture. Long seen as a reflection of society and studied as readily as Shakespeare and Scientific Theory, architecture has also become less individualistic and unique. Today one can crisscross the country and see similar bridge structures and buildings. Due to its close alliance with technology, architecture objectifies the forms of modern culture with great clarity. From bridges to hamburger joints, the effect of change has been the disappearance of regional identities and the emergence of a global consciousness. The conclusion: universalizing is increasing and individuality is decreasing (Hardison 2). This decrease in individuality can be linked to the trend in education to stress skill training rather than the exploration of the bounds of intellectual subjects. Hirsch feels that, ". . . literacy is far more than a skill. . . . it requires large amounts of specific information" (Hirsch 2). While the benefits of scientific and technical training to our society may be essential and obvious, the benefits our society can derive
from its individuals receiving an education in various disciplines are just as essential, but perhaps not so immediately obvious.

The Two Cultures

For the purposes of this paper, I have chosen to focus on the theory that our society is splitting into two distinct and specialized groups. In his book Two Cultures, C.P. Snow discussed these two cultures at length, highlighting the elements that make them distinct and pointing out the ways in which they are undeniably bound together. Snow's theories and his discussions of them have provided groundwork for the theories and discussions of others. Hardison also speaks of our modern culture as being fragmented. He believes that the growth of knowledge produces branchings and subbranchings of specialties. As these branchings multiply, they seem to isolate people in procedures and languages that are unrecognizable to people in other specialties (Hardison xiii).

Snow's theory developed in the following manner. "I was moving among two groups - comparable in intelligence, identical in race, not grossly different in social origin, earning about the same incomes, who had almost ceased to communicate at all, who in intellectual, moral and psychological climate had so little in common that instead of going from Burlington House or South Kensington to Chelsea, one might have crossed an ocean"
Snow believes that the intellectual life of western society is increasingly being split into two polar groups, the literary intellectuals and the scientists (physical scientists). Between these two groups existed a "gulf of mutual incomprehension," hostility and dislike (particularly among the young) and, what may be the biggest stumbling block of all, a lack of understanding. Snow is not very optimistic when it comes to closing the gap between the two groups. He feels that they have a distorted image of each other, and that the altitudes the two groups resided on are so different that even on the level of emotion, they can't find much common ground (Snow 4).

Snow gives a rather detailed profile of both of these cultural groups. First, he portrays the scientific culture as being one that spends a great deal of time reading and writing books but uses them more as tools than anything else. He also says that the scientific culture is lacking in art of any kind, except perhaps for music (which has long been recognized as having a mathematical base and math is included in this culture). What is obviously missing with this culture, is any sort of connection to or reliance upon literature and all those subjects usually associated with it (i.e. sociology, morality, psychology). Snow feels that it is not that they are not interested in the psychological, moral, or social life, and in fact he makes specific points to support this. Some elements of the scientific culture are tied to the social climate more than most of us, through medicine, environmental work, etc. As for
morality, scientists are, "...the soundest group of intellectuals we have; there is a moral component right in the grain of science itself, and almost all scientists form their own judgments of the moral life" (Snow 13). The area in which they lack some strength (some would say any strength) is the psychological. In this though, Snow does not think they are any more lacking than most of us; however, they seem to come to this area rather late. Snow feels that it is not that they lack the interest, it is more that the whole literature of the traditional culture doesn't seem to them relevant to those interests. "They are of course dead wrong" (Snow 13). As a result, their imaginative understanding is less than it could be and in this way they are self-impoverished.

Snow also provides a profile of the individuals belonging to this group. He said they tend to be shallowly optimistic and that their work contains a great deal of argument, usually much more rigorous, and almost always at a higher conceptual level, than a literary person's argument (Snow 12). With a reflection on the modern society, scientists know "...that with an indifferent degree they'll get a comfortable job." Those with a vocation in English and History are lucky to earn 60% as much (Snow 17). Perhaps this encourages the complacency of those in these fields when it comes to delving further into literary study.

The pattern of looking ahead at what a given area of study will provide for an individual in the future (in terms of
monetary pay, job placement and subsequently job security) has been further entrenched by the development of "technology" as we know it today. We associate such things as computers, advances in particle acceleration, and medical breakthroughs as being the benefits of developing technology. Snow referred to technology as being the branch of human experience that people can learn with predictable results (Snow 44). Over the course of time, technology has introduced a countless number of useful materials and objects into our society and into our world. Things like televisions, home computers, life support machines, calculators and microwaves have all come to be an expected part of our daily lives. They are all so commonplace we hardly even notice their existence or think about their function anymore. As Hardison put it however, their relative invisibility has very little relation to their influence on the shape of consciousness (Hardison 14). This is a danger. Once we cease to be aware of this influence, we will begin to lose control of this influence (some would say this has already begun to happen).

Man himself, eternally chained down to a little fragment of the whole, only forms a kind of fragment; having nothing in his ears but the monotonous sound of the perpetually revolving wheel, he never develops the harmony of his being; and instead of imprinting the seal of humanity on his being, he ends up being nothing more than the living impress of the craft to which he devotes himself, of the science that he cultivates. This very partial and paltry relation, linking the isolated members to the whole, does not depend on forms that are given spontaneously; for how could a complicated machine, which shuns the light, confide itself to the free will of man? Friedrich Schiller (Marx 169)
Discussions take place every day in coffee houses, focus groups, over e-mail lines and electronic bulletin boards, as well as in governing bodies over how and when to regulate and rein in the ever progressing nature of technology. Hardison states that science is committed to the universal, the question is, are we?

The scientific culture would argue that agricultural and industrial-scientific revolutions are the only qualitative changes in social living that men and women have ever known (Snow 23). Perhaps it was that the literary intellectuals were unable to accept the industrial revolution, and the traditional culture did not notice or perhaps did not like what it saw. The traditional culture became wealthy and trained its young men for administration for the purpose of perpetuating the culture itself, they were not equipped to understand the revolution or take part in it. Had the literary culture stepped in, they may have been able to use their abilities and perspective to help the traditional culture adjust more appropriately. As it was, the academics and artists had little to do with the industrial revolution because the revolution relied upon the handymen (such as Henry Ford) rather than on educated talent (Snow 23). The enormous amounts of money made during this period came from those putting forth the physical effort and skill, not the mental effort. All of the thought and management ideas would have amounted to nothing without the skills of the handymen. Thus begins the separation of the two cultures.

Now we can step up to the next revolution, the center of
which is the computer. We can discuss the idea that it is only by accident that computers have been primarily and widely used to crunch numbers. Due to the three techniques employed by computers (repetition, transformation, and randomness) the capabilities of computers in art have been virtually overlooked by everyone outside of the artistic and literary community. There is some value in the creativeness that can be associated with computers but at this time, only a handful of people seem to be realizing this. George Lucas and Steven Spielberg understand this, and with their efforts to explain how they make their "movie magic" they are trying to help the general public understand and appreciate this aspect of computers. The public still seems to think of these techniques as a part of reality different than the one they deal with every day. The trick lies in making them see that this "other" reality could be opened up into areas beyond that of the silver screen. The use of computers by such mega corporations as Walt Disney and George Lucas' Industrial Light and Magic for animation and synthesized music have helped to create a term that is becoming common place today for describing this "other" reality -- artificial reality. If we stop to think about it, this term should make our heads spin. Where does what is artificial stop and where does reality begin, or vice versa? As J. Bronowski, author of Science and Human Values, reflected, "We live in a world which is penetrated through and through by science, and which is both whole and real. We cannot turn it into a game simply by taking sides. And this
make-believe game might cost us what we value most: the human content of our lives" (Bronowski 5). Here again our society has got to be careful that technology does not overrun the intrinsic value of what art means to us. "... that isn't the way that science could be any good to art. It has got to be assimilated along with, and as part and parcel of, the whole of our mental experience, and used as naturally as the rest" (Snow 16).

As previously mentioned, our society is becoming increasingly focused on the technical skills and abilities often associated with the pure sciences. A large problem, and one that Snow mentions in his book, is the growing separation between pure and applied science. Snow says this is, "...one of the deepest problems in scientific history" (Snow 68). The catch in this equation however, is that in order to make use of and understand applied science, there has to be an understanding of the people and the society it is being applied to. The stake of a technical culture, like the one we are developing into, is a major one and it is wagered (particularly by those in education) that the existence of this culture is altogether possible. Thomas Carlyle had this to say, "... Mechanical genius... has diffused itself into quite other provinces. Not the external and physical alone is now managed by machinery, but the internal and spiritual also" (Marx 171). Bets are placed on the computer (Ellul 11). "This system has its locus in society. It controls almost all social orientations and structures, but it does not incorporate everything. That is, society remains outside the system..."
(Ellul 16). In order for society to remain outside the system and keep whatever little objectivity it has left, it must continue to notice not only the big things, but the little changes as well (Ellul 13). Not only must society notice the little nuances and changes, but it must also make every effort to keep them as a major focus when it comes to making decisions that affect the future direction of society. Science must not let go of the hand of the poet.

Poets fall into the second group that was profiled by Snow: the literary culture. The question asked by Ellul is, "Is technical growth crushing spontaneity, imagination, values, the irrational element - in other words, all that makes us human?" (Ellul 16). It has been a long standing fear of our society that our future has us destined to become nothing more than droids, plugged into technology as if it were a necessary life force. What we can not allow ourselves to forget, and what the literary culture strives to promote, is that society is not just made up of technical pieces, but also ideologies, survivals of the past, myths...manners and customs are on the fringe of technique (Ellul 16).

The literary culture believes the traditional culture is the whole of "culture". They do not believe that natural order even exists. The exploration of the natural order was of no interest to them, either in its value or its consequences (Snow 14). None of this is to say that Snow himself discounted natural order however,
Curiosity about the natural world, the use of symbolic systems of thought, are two of the most precious and the most specifically human of all human qualities. The traditional methods of mental development left them to be starved. So, in reverse, does scientific education starve our verbal faculties - the language of symbols is given splendid play, the language of words is not. On both sides we underestimate the spread of a human being's gifts. (Snow 63)

Some might argue that we also underestimate what it means to be human. The literary culture has a definite focus on language, and how we use language to express our "humanness." Hardison commented that while culture changes quickly, language changes slowly (Hardison 153). That is to say, while technology is changing at the speed of light, the language guiding technology is falling behind. An example of the importance of language in a cross-cultural situation occurs when members of one culture extend their help to members of a different culture. As Snow mentioned in his book, when training individuals to help other countries, "...they need to be trained not only in scientific but in human terms as well." The instructors need to be willing and able to adapt to a new language and all new forms of communication. In order for this type of flexibility to be experienced, they must themselves be instructed in the art of language and the culture of literacy. If they are not literate in their own culture, how can they function in another?

One segment of the literary culture that spends its time devoted to language is the one that contains the poets. Hardison expresses concern that the poets of our society are going to become overrun by the technical direction we are headed in. "The
poet, who is supposed to represent reality in language, responds to the exhaustion of language with bafflement and frustration. The simplest response is silence. If language cannot represent the word, why write? To be silent, however, is to give up, a form of despair" (Hardison 153). How many modern day poets are hailed like the ones of old? One could safely answer very few. Once the poets are silenced, the logical-technical culture will have a stronger foothold in controlling the destiny of our society.

The scientists of old were trained not only in science, but poetry as well. Their training is what enabled science to develop into what it is today. Matthew Arnold stated that poetry was needed to maintain our humanness, the very same humanness which feeds our curiosity and propels us forward in scientific discoveries:

More and more mankind will discover that we have to turn to poetry to interpret life for us, to console us, to sustain us. Without poetry, our science will appear incomplete; and most of what now passes with us for religion and philosophy will be replaced by poetry. Science, I say, will be incomplete without it. (Anthology 1330)

In the words of Ellul, "...A society cannot cut its roots without falling apart" (Ellul 17).

The Road to the Division

Now that we have established a background for both the literary and the scientific cultures, we can begin to discuss the
results of the division these two cultures have created in terms of the impact on our society. For many decades, the current and future conflicts between people, society and the technical system have been documented and chronicled by numerous authors. Social and human utopia has been portrayed in all manners of perspective, ranging from the optimistic in Brave New World, to the pessimistic in 1984. On the popular level, variations of social utopia have been portrayed for years in various films and science fiction creations (Ellul 17). Whether good or bad, optimistic or pessimistic, utopia of any kind is a response to current ideas, hopes and fears and moves through transitions as society does.

Ellul defines transition as the movement into the unknown. This period can be frightening, confusing, exciting, challenging and is characterized by being dynamic. In this sense, it means that it is associated with life and not death. These very conditions are what undoubtedly provide the rushes of adrenaline that propel our society further into the developing technology. In a sense, this is a situation where men create the machines which in turn end up shaping their creators and the reality they react to (Hardison 144). The idea of artificial reality was touched on briefly earlier, and here again the question of what is "reality" arises. Are these machines that we have so carefully crafted and created to enhance every aspect of our lives representative of the "real" world, or are they in fact only the surface (Hardison 144)? While science has played a
major role in answering questions and providing us with
ground-breaking ideas, it has also shown the insubstantiality of
the world. In this, it has undermined an article of faith
(Hardison 144). When one has a background in only one narrow
segment of a subject or area, the ability to recover from the
setbacks presented by science will be greatly reduced. In this
case, communication may prove to be a very useful key. As Hirsch
put it, "The complex undertakings of modern life depend on the
cooperations of many people with different specialties in
different places. Where communications fail, so do the
undertakings."

Here begins the argument in favor of a broad education and
training background. There have been numerous contributions on
the behalf of many authors, educators and overall thinkers
concerning the direction our educational methods and system
should take. Hirsch raises the question concerning technical
skill vs. communicative skill stating that, "Narrow vocational
training in one state of technology will not enable a person to
read manuals that explain new developments in the same
technology" (Hirsch 11). His belief is that general knowledge
helps us deal with new ideas, events and challenges. He sees the
technical trend as a threat to our very social fabric:

The more specialized and technical our
civilization becomes, the harder it is for
nonspecialists to participate in the decisions
that deeply affect their lives. If we do not
achieve a literate society, the technicians,
with their arcane specialties, will not be able
to communicate with us nor we with them. That
would contradict the basic principles of democracy
and must not be allowed to happen. (Hirsch 31)

Hirsch feels that the kids today are not mentally prepared to continue the society because they simply do not understand the society well enough to value it (Hirsch 7). His ideas concerning cultural literacy are explained in detail in his book, but simply put he feels that the kids need to be schooled in every segment of the intellectual ideas that serve to shape the society they will inherit. This schooling would in effect lead to the literacy Hirsch is speaking of. There is a direct relationship between the rise in technology and the rise in the need of cultural literacy. "Advancing technology, with its constant need for fast and complex communications, has made 'literacy' even more essential to commerce and domestic life" (Hirsch 3).

Hirsch is not the only author to express concern. Snow also discussed the downfalls of the current education system. "Persons educated with the greatest intensity we know can no longer communicate with each other on the plane of their major intellectual concern" (Snow 60). He even goes so far as to say that this is leading us to interpret the past incorrectly and to misjudge the present. By doing this, he feels that we are denying our hopes of the future. He stated that in his opinion, "There is only one way out of all this: it is, of course, by rethinking our education. In this country, for the two reasons I have given, this is more difficult than in any other" (Snow 18). The two reasons he speaks of highlight his very pessimistic view of our ability to make this change. He feels that we have sunk
too deeply into our specialization and, in his words, it is "... outside the will of man to alter it." This specialization has been further helped and prolonged by tests of intellectual measure such as the SAT, ACT, CPA. He also believes that we are too embedded culturally and socially to actually make such a change.

The basic goal of education in a society or human community is acculturation. This is a transmission to children of the specific information shared by the adults of the group (Hirsch XVI). This is a general overview that can be applied in nearly every approach to education. It is so general, in fact, that it handcuffs itself to established methods and ideas. Hirsch feels that, "Schools can break the cycle of poverty and literacy if they break fundamentally with some of the theories and practices that education professors and school administrators have followed over the past fifty years" (Hirsch XIII).

The educational rut that our society appears to be in can be attributed to a number of sources. One source that is agreed upon by more than one author is our culture itself. Snow believes that our culture has instilled in us a false sense of timing and pleads urgently to our society when he implores, "Isn't it time we began? The danger is, we have been brought up to think as though we had all the time in the world. We have very little time" (Snow 51). Perhaps it is time that has forced us to develop an education system that closely resembles a cafeteria style of operation. We churn students through on a
closely scripted path, emptying into their minds certain ideas, facts and lessons at preestablished times in their development. Unfortunately, this cafeteria style education leads to the steady diminishment of commonly shared information. This proves to be a very effective recipe for cultural fragmentation (Snow 21). C.P. Snow attributes the current state of our education system to our culture's stubbornness when it comes to the unwillingness to change the curriculum (Snow 61). Hardison cautions that this trend may cause all that we know to slowly begin to disappear into the patterns that we use to guide ourselves. Part of inheritance is the ability to break previously adhered to patterns. We have gone through this phase before and perhaps we are at that point again. "In its fearless exploration of inner and outer worlds, modern culture has evidently reached a turning point - a kind of phase transition from one set of values to another. Crossing the barrier that separates the phases is another kind of disappearance" (Hardison 5). The barrier in this case, is a "horizon of invisibility" which cuts across modern culture almost unseen. For our aging culture, the crossing of this barrier may be like rising from the dead, like being a child again and learning a new and unintelligible language. The question is, are our youth strong enough and enlightened enough to carry our culture forward on this journey?

The Mending of the Division
There are more than a few scholars and authors who have 
mentioned the power of the university to alter and shape society. 
In her book *Reconnection: Dualism and Holism in Literary Society*, 
Betty Jean Craige referred to this power:

> The combination of the elective system and academic specialization affected not only the disciplines themselves and the relationship between disciplines but also the relationship of the university to society. In the next hundred years the university would become more than a place for the preservation and advancement of knowledge; by affiliating itself with government and industry in military and technological research, it would become a force for social change. (Craige 60)

The close ties between the university and society also made it inevitable that the force of social change would come back around to the university. Today the argument is that democracy has in effect "evened" out the education system. As our society has gone through the many phases of its industrial revolution and those in the lower classes saw their opportunity to elevate their social standing, the following trend began to emerge:

> ... generally those who had gone to the expensive prep schools continued to choose the classical education, in which they studied literature, over the scientific education, whereas those who viewed higher education as a means to improve their social standing studied other, more "useful" subjects, such as science. (Craige 61)

Many of today's major universities are supported in a public manner and have almost succeeded in making the prep school "classics" obsolete in favor of technical training, again equating education with skill. The efforts have been to reduce the importance of classes that are not immediately useful.
Education is not for education's sake any longer, but rather for the sake of those who make the promise of an education possible.

Through the advocation of a "skilled education" the universities have actually moved closer to what their name implies, and farther away from what our forefathers intended them to be. Thorstein Veblen had this to say:

The greater number of these state schools are not, or are not yet, universities except in name. These establishments have been founded, commonly with a professed utilitarian purpose, and have started out with professional training as their chief avowed aim. The purpose made most of in their establishment has commonly been to train young men for proficiency in some gainful occupation. (Craige 63)

The preferred term for these institutions among academics today is multiversity, referring to the hope that these institutions serve to give their students enhanced background in a number of disciplines, as opposed to specialized training in just one.

The movement for the reevaluation of our higher education system is not new to this decade. Ten years ago, Craige was commenting on the need for an overhaul at the multiversity level:

In the 1980's higher education has become a subject of intense scrutiny; and at the same time that the multiversity is attracting more monies from industry and the government than ever before, more and more thinkers are criticizing the practices of early specialization and vocational training and are calling for a reevaluation of the liberal arts. (Craige 64)

Today we have reached a point where recognition that a division exists is no longer enough, we must begin to take action now before any possibility of mending the division is lost.
One solution to integrating the literary arts back into mainstream education is to make humanities classes a required element for any four year degree. This would be in keeping with the liberal arts focus already present in some institutions. As these very institutions would attest to, however, there are problems that are inherent with this format as well. There is discussion that the liberal arts institutions cover many things on a surface level and nothing in an in-depth manner. As such, students are not prepared with the SKILLS necessary for today's society. (My response would be that liberal arts education prepares students for tomorrow's society.) An argument has also been made that forcing students away from where their aptitude lies is an unfair educational method. (My response would be, is this not what education is all about? Not only the furthering of skills already possessed, but the acquiring of and appreciation for skills not inherently possessed.)

Since wide sweeping changes in the curriculum of most institutions is unlikely, more creative methods of integrating the two cultures must be sought. This is precisely what two professors from different sides of the Atlantic Ocean have sought to do. Mark C. Taylor and Esa Saarinen developed a trans-Atlantic course that was thought through benefits of modern technology. The background of these professors turned authors (their collaborative book entitled Imagologies) lies in the area of philosophy. Saarinen is well known in Finland for his popular writings and his media interventions. He appears regularly on
television and radio as well as giving public lectures. Taylor is currently a Humanities Professor and has written extensively on a wide range of topics.

The course they established centered on the influence and responsiveness from society concerning images. Images have replaced the written word as a quick and effective means of communication. In the words of the authors, "Writing must become images in order to be effective" (Imagologies 1-7). They wanted to examine the broad-ranging implications of telecommunications technology. The material in the course would cover philosophical considerations of modern technology and branch out to areas where technology is to have a major impact: media, writing, television, urban life, religion, economics, politics, war etc.. They would in a sense, be reflecting on the very course they would be teaching. The significance of this intrigued both men immensely. Their book covers the communication between the two men during the process of establishing the course and after they achieved their goal. It contains memos and messages sent between them as well as thought and quips pertaining to the subject at hand. It is a time-line and an editorial all in one.

The significance of this course to the discussion at hand is clear. Instead of forcing philosophy onto the academic schedule in its well-worn form (Plato etc.), they have introduced their students to philosophy costumed in today's hot topics. The result is the same, the students are learning to think, to
question and to wonder. Perhaps this training is even more relevant given the energy students tend to have. Why not let them mull over problems and questions that those who are twenty years entrenched in technology are no longer able to even see? This is not to say that the classics should be ignored, but this course may open the door of curiosity that would encourage the students to seek out Plato on their own, or at least be more receptive to him when he is presented in another course.

These professors see the exploration of this interdisciplinary area as a necessity at this point in our society's development, "In our era, we must philosophize with images rather than concepts" (Imagologies 1-15). They do not, however, expect that the questions this course would raise will be welcomed with open arms by those comfortable with the way things currently are.

I suspect academics realize that the changes already under way call into question the very foundation upon which the university is built - print culture and everything that goes with it. To make matters worse, the general public is largely unaware of what is at stake in recent technological developments. (Imagologies 1-7)

This lack of understanding could be seen as the beginning of the downfall of society's control over itself and what it creates. Instead of allowing technology to shape itself, "We must begin to think critically and creatively about this technology and start to shape our electronic environment in socially productive ways" (Imagologies 1-7). These professors were attempting to use technology to help them reshape philosophy and turn it into a
more digestible form for the students they were teaching to today. They felt that philosophy had failed to keep up with the changing times:

In spite of enormous intellectual effort to gain insight into the use of language by some of the most brilliant thinkers of all time, in spite of an enormous literary effort to create new discourses by some of the most creative conceptual giants of all time, philosophy remains strangely crippled and impotent. Far from creating a single product that sells successfully in this era of communication, triviledged philosophy remains unmarketable. (Imagologies 2-8)

The professors do not believe that the material is at fault for the failure to communicate the importance of the literary works and thoughts. The material from the past is not about to change, so the methods used to teach the material must:

Education is communication. In contemporary society, however, education remains tied to the advancement of trivilege. The problem is not, as many suppose, the ignorance of so-called basics and unfamiliarity with the tradition. The difficulty is that the educational system is built upon structures for the production of knowledge that no longer operate effectively. The global classroom explodes the foundations of educational institutions by restructuring the space and transforming the time of teaching and learning. The master teacher is no longer a "man of letters" but becomes a purveyor of images who steals the show. (Imagologies 3-1)

In a sense, what these two are saying, is that to get through to the MTV generation, a teacher has to come at them through an MTV-like medium.

The professors shared their thoughts on the current structure of the university/multiversity system by using references to Marx and Kant and the afore mentioned "cafeteria-
style" education students get today:

Marx was right, the point is to change the world. And the part of today's world that most needs changing is the university. Kant insists that the modern university is an industrial machine whose structure mirrors the assembly line, which supports the educational apparatus. The division of knowledge into disciplines and departments is a division of labor that is supposed to increase expertise and efficiency. (Imagologies 3-3)

The professors hope for the future lies in the merging of the two cultures and an education that opens up the student minds using the tools the students are already familiar with, "When depth gives way to surface, understanding becomes inter-standing. To comprehend is no longer to grasp what lies beneath but to glimpse what lies between" (Imagologies 4-1).

Education

The odd thing about the topic of our educational curriculum, is that we as a society must be willing to accept full responsibility for its current state at the same time we accept responsibility for its future state. To claim that what worked for us should work just fine for our children is to sentence our children to a situation where they are ill-prepared to deal with the intellectual questions and roadblocks they will encounter during their journey. Education is a dynamic entity, one that must be fully understood before it can be applied. To equate skill with an education is to miss out on seventy five percent of what education truly has to offer us. It is difficult to say exactly which direction to take from where we are now and the
solution is by no means going to be anything but complex, but to shrug our shoulders in contentment rather than devise a solution is completely unacceptable. We should follow the examples set by individuals such as Taylor and Saarinen and begin to look for new paths through the world we call education.

I'd like my students to learn how to learn, to be involved in the process of teaching themselves. And to make commitments—not to be in love with the position, but to be in love with the search, so that if they find themselves not able to hold a position, if it turns out to be untenable, then they should have enough courage to say 'You know what I said last week? I know longer believe that'.

Maya Angelou
Works Cited


