GRE Writing Issue Task –

Issue 1 - The best idea arise from a passionate interest in commonplace things.

Passion is clearly necessary for a truly great idea to take hold among a people—passion either on the part of the original thinker, the audience, or ideally both. The claim that the most lucrative subject matter for inspiring great ideas is “commonplace things” may seem initially to be counterintuitive. After all, aren’t great ideas usually marked by their extraordinary character? While this is true, their extraordinary character is as often as not directly derived from their insight into things that had theretofore gone unquestioned. While great ideas certainly can arise through seemingly pure innovation... say, for example, Big Bang cosmology, which developed nearly all of its own scientific and philosophical precepts through its own process of formation, it is nevertheless equally true that such groundbreaking thought was, and is, still largely a reevaluation of previous assumptions to a radical degree... after all, the question of the ultimate nature of the universe, and man’s place in it, has been central to human thought since the dawn of time. Commonplace things are, additionally, necessary as material for the generation of “the best ideas” since certainly the success among an audience must be considered in evaluating the significance and quality of an idea.

The advent of Big Bang cosmology, which occured in rudimentary form almost immediately upon Edwin Hubble’s first observations at the Hooker telescope in California during the early 20th century, was the most significant advance in mankind’s understanding of the universe in over 400 years. The seemingly simple fact that everything in the universe, on the very large scale, is moving away from everything else in fact betrays nearly all of our scientific knowledge of the origins and mechanics of the universe. This slight, one might even say commonplace, distortion of tint on a handful of photographic plates carried with it the greatest challenge to Man’s general, often religiously reinforced, conception of the nature of the world to an extent not seen since the days of Galileo. Not even Charles Darwin’s theory, though it created more of a stir than Big Bang cosmology, had such shattering implications for our conceptions of the nature of our reality. Yet it is not significant because it introduced the question of the nature of what lies beyond Man’s grasp. A tremendous number of megalithic ruins, including the Pyramids both of Mexico and Egypt, Stonehenge, and others, indicate that this question has been foremost on humankind’s collective mind since time immemorial. Big Bang cosmology is so incredibly significant in this line of reasoning exactly because of the degree to which it changed the direction of this generally held, constantly pondered, and very ancient train of thought.

Additionally, there is a diachronic significance to the advent of Big Bang cosmology, which is that, disregarding limitations such as the quality of optical devices available and the state of theoretical math, it could have happened at any point in time. That is to say, all evidence points to roughly the same raw intellectual capacity for homo sapiens throughout our history, our progress has merely depended upon the degree of it that a person happens to inherit, a pace that has been increasing rapidly since the industrial revolution. Yet this discovery had to happen at a certain point in time or another—it cannot have been happening constantly or have never happened yet still be present—and this point in time does have its own significance. That significance is precisely the fact that the aforementioned advent must have occurred at precisely the point in time at which it truly could have occured—that is to say, it marks the point in our history when we had progressed sufficiently to begin examining, with remarkable substantiated acuity, the workings of the universe across distances that would take millions of human lifetimes to reach or to traverse. The point for the success of this advent must necessarily have been, additionally, the point at which the audience concerned was capable and prepared to accept such a radical line of reasoning. Both factors, a radical, passionate interpretation of the commonplace and the preparedness to accept such an interpretation, are necessary for the formulation of a truly great idea. If the passion is absent from an inquiry by the thinker or by the bulk of an audience, the idea will die out if it comes to fruition at all. If the material is not sufficiently commonplace to be considered by an informed audience of sufficient size, the same two hazards exist. Given these two factors, the idea must still be found palatable and interesting by the audience if it is to hope to gain a foothold and eventually establish itself in a significant fashion.

1. As people rely more and more on technology to solve problems, the ability of humans to think for themselves will surely deteriorate.

The statement linking technology negatively with free thinking plays on recent human experience over the past century. Surely there has been no time in history where the lived lives of people have changed more dramatically. A quick reflection on a typical day reveals how technology has revolutionized the world. Most people commute to work in an automobile that runs on an internal combustion engine. During the workday, chances are high that the employee will interact with a computer that processes information on silicon bridges that are .09 microns wide. Upon leaving home, family members will be reached through wireless networks that utilize satellites orbiting the earth. Each of these common occurrences could have been inconceivable at the turn of the 19th century.

The statement attempts to bridge these dramatic changes to a reduction in the ability for humans to think for themselves. The assumption is that an increased reliance on technology negates the need for people to think creatively to solve previous quandaries. Looking back at the introduction, one could argue that without a car, computer, or mobile phone, the hypothetical worker would need to find alternate methods of transport, information processing and communication. Technology short circuits this thinking by making the problems obsolete.

However, this reliance on technology does not necessarily preclude the creativity that marks the human species. The prior examples reveal that technology allows for convenience. The car, computer and phone all release additional time for people to live more efficiently. This efficiency does not preclude the need for humans to think for themselves. In fact, technology frees humanity to not only tackle new problems, but may itself create new issues that did not exist without technology. For example, the proliferation of automobiles has introduced a need for fuel conservation on a global scale. With increasing energy demands from emerging markets, global warming becomes a concern inconceivable to the horse-and-buggy generation. Likewise dependence on oil has created nation-states that are not dependent on taxation, allowing ruling parties to oppress minority groups such as women. Solutions to these complex problems require the unfettered imaginations of maverick scientists and politicians.

In contrast to the statement, we can even see how technology frees the human imagination. Consider how the digital revolution and the advent of the internet has allowed for an unprecedented exchange of ideas. WebMD, a popular internet portal for medical information, permits patients to self research symptoms for a more informed doctor visit. This exercise opens pathways of thinking that were previously closed off to the medical layman. With increased interdisciplinary interactions, inspiration can arrive from the most surprising corners. Jeffrey Sachs, one of the architects of the UN Millenium Development Goals, based his ideas on emergency care triage techniques. The unlikely marriage of economics and medicine has healed tense, hyperinflation environments from South America to Eastern Europe.

This last example provides the most hope in how technology actually provides hope to the future of humanity. By increasing our reliance on technology, impossible goals can now be achieved. Consider how the late 20th century witnessed the complete elimination of smallpox. This disease had ravaged the human race since prehistorical days, and yet with the technology of vaccines, free thinking humans dared to imagine a world free of smallpox. Using technology, battle plans were drawn out, and smallpox was systematically targeted and eradicated.

Technology will always mark the human experience, from the discovery of fire to the implementation of nanotechnology. Given the history of the human race, there will be no limit to the number of problems, both new and old, for us to tackle. There is no need to retreat to a Luddite attitude to new things, but rather embrace a hopeful posture to the possibilities that technology provides for new avenues of human imagination.

1. “The best way for a society to prepare its young people for leadership in government, industry, or other fields is by instilling in them a sense of cooperation, not competition.”

Whenever people argue that history is a worthless subject or that there is nothing to be gained by just “memorizing a bunch of stupid names and dates,” I simply hold my tongue and smile to myself. What I’m thinking is that, as cliche as it sounds, you do learn a great deal from history (and woe to those who fail to learn those lessons). It is remarkable to think of the number of circumstances and situations in which even the most rudimentary knowledge of history will turn out to be invaluable. Take, for example, the issue at hand here. Is it better for society to instill in future leaders a sense of competition or cooperation? Those who have not examined leaders throughout time and across a number of fields might not have the ability to provide a thorough and convincing answer to this question, in spite of the fact that it is crucial to the future functioning of our society. Looking closely at the question of leadership and how it has worked in the past, I would have to agree that the best way to prepare young people for leadership roles is to instill in them a sense of cooperation.

Let us look first at those leaders who have defined themselves based on their competitiveness. Although at first glance it may appear that a leader must have a competitive edge in order to gain and then maintain a leadership position, I will make two points on this subject. First, the desire to compete is an inherent part of human nature; that is, it is not something that needs to be “instilled” in young people. Is there anyone who does not compete in some way or another every single day? You try to do better than others in your school work or at the office, or you just try to do better than yourself in some way, to push yourself. When societies instill competitiveness in their leaders, it only leads to trouble. The most blatant example in this case is Adolf Hitler, who took competition to the very extreme, trying to prove that his race and his country were superior to all. We do not, however, need to look that far to find less extreme examples (i.e., Hitler is not the extreme example that disproves the rule). The recent economic meltdown was caused in no large part by the leaders of American banks and financial institutions who were obsessed with competing for the almighty dollar. Tiger Woods, the ultimate competitor in recent golfing history and in many ways a leader who brought the sport of golf to an entirely new level, destroyed his personal life (and perhaps his career ˉˉ still yet to be determined) by his overreaching sense that he could accomplish anything, whether winning majors or sleeping with as many women as possible. His history of competitiveness is well documented; his father pushed him from a very early age to be the ultimate competitor. It served him well in some respects, but it also proved to be detrimental and ultimately quite destructive.

Leaders who value cooperation, on the other hand, have historically been less prone to these overreaching, destructive tendencies. A good case in point would be Abraham Lincoln. Now, I am sure at this point you are thinking that Lincoln, who served as President during the Civil War and who refused to compromise with the South or allow secession, could not possibly be my model of cooperation! Think, however, of the way Lincoln structured his Cabinet. He did not want a group of “yes men” who would agree with every word he said, but instead he picked people who were more likely to disagree with his ideas. And he respected their input, which allowed him to keep the government together in the North during a very tumultuous period (to say the least). My point in choosing the Lincoln example is that competitiveness and conflict may play better to the masses and be more likely to be recorded in the history books, but it was his cooperative nature that allowed him to govern effectively. Imagine if the CEO of a large company were never able to compromise and insisted that every single thing be done in exactly her way. Very quickly she would lose the very people that a company needs in order to survive, people with new ideas, people ready to make great advances. Without the ability to work constructively with those who have conflicting ideas, a leader will never be able to strike deals, reach consensus, or keep an enterprise on track. Even if you are the biggest fish in the pond, it is difficult to force your will on others forever; eventually a bigger fish comes along (or the smaller fish team up against you!).

In the end, it seems most critical for society to instill in young people a sense of cooperation. In part this is true because we seem to come by our competitive side more naturally, but cooperation is more often something we struggle to learn (just think of kids on the playground). And although competitive victory is more showy, more often than not the real details of leadership come down to the ability to work with other people, to compromise and cooperate. Getting to be President of the United States or the managing director of a corporation might require you to win some battles, but once you are there you will need diplomacy and people-skills. Those can be difficult to learn, but if you do not have them, you are likely to be a short-lived leader.

1. If a goal is worthy, then any means taken to attain it are justifiable.

The statement contends that if a goal is worthy enough then any means taken to attain it are justifiable. The issue stated is very subjective in nature as the phrase "any means taken" can be interpreted in many ways. Also, it depends on the goal that one is trying to achieve, categorizing it in two broad areas: Personal and Societal.

If a goal relates to the society as a whole, or if it is going to benefit an entire nation, then any means taken to achieve it are justifiable. For example, Narendra Modi, prime minister of India, had a vision of developing Gujarat, a state in India. This vision, and if turns out to be successful can be considered as worthy for an entire state of people. Hence, measures taken like blocking roads for metro construction, traffic became a big problem. But this problem wasn't bigger than the goal, therefore it is justifiable. Along with this, other means that included collecting extra taxes from taxpayers for the upliftment and well-being of indigents, living in villages far away from city area, was done to achieve a goal of mollifying the electricity cut-off and water shortage problems that were faced by them.

Conversely, if a goal can be categorised as personal, then there can be several factors to be considered before coming to a conclusion whether any means taken to chieve the same are justifiable or not. Considering a primary school student having a goal of achieveing good marks in a particular examination, the first and easiest solution that comes to his/her mind is copying. This goal can be achieved in several other ways like studying hard, or say understanding the core concepts by attaining extra classes. Hence, the means taken by that primary level kid is not justifiable.

Additionally, a personal level goal like achieving a target in business, which would at first seem plausible, but if achieved, can be beneficial to many, and thus can be considered as worthy enough that any steps taken to attain it are justifiable. For example, if sales of a certain product needs to be increased, then various measures taken can include, increased price of that product or increased level of awareness for that product through advertisment, which are very basic but if it includes something like removing the unworthy staff of the company and replacing it with the better ones, that could cause problem to a few, but it is justifibale as long as the goal is concerned.

To recapitulate, if a goal is worthy enough, any means taken to attain it are justifiable, unless ans until it doesn't cause harm to a potential level. Along with it, several factors should be considered before coming to a direct conclusion.

1. "We can usually learn much more from people whose views we share than from people whose views contradict our own."; disagreement can cause stress and inhibit learning."

Do we learn more from people whose ideas we share in common than from those whose ideas contradict ours? The speaker claims so, for the reason that disagreement can cause stress and inhibit learning. I concede that undue discord can impede learning. Otherwise, in my view we learn far more from discourse and debate with those whose ideas we oppose than from people whose ideas are in accord with our own. Admittedly, under some circumstances disagreement with others can be counterproductive to learning. For supporting examples one need look no further than a television set. On today's typical television or radio talk show, disagreement usually manifests itself in meaningless rhetorical bouts and shouting matches, during which opponents vie to have their own message heard, but have little interest either in finding common ground with or in acknowledging the merits of the opponent's viewpoint. Understandably, neither the combatants nor the viewers learn anything meaningful. In fact, these battles only serve to reinforce the predispositions and biases of all concerned. The end result is that learning is that learning is impeded.

Disagreement can also inhibit learning when two opponents disagree on fundamental assumptions needed for meaningful discourse and debate. For example, a student of paleontology learns little about the evolution of an animal species under current study by debating with an individual whose religious belief system precludes the possibility of evolution to begin with. And, economics and finance students learn little about the dynamics of a laissez-faire system by debating with a socialist whose view is that a centrv2ized power should control all economic activity. Aside from the foregoing two provisos, however, I fundamentally disagree with the speaker's claim. Assuming common ground between two rational and reasonable opponents willing to debate on intellectual merits, both opponents stand to gain much from that debate. Indeed it is primarily through such debate that human knowledge advances, whether at the personal, community, or global level. At the personal level, by listening to their parents' rationale for their seemingly oppressive rules and policies teenagers can learn how certain behaviors naturally carry certain undesirable consequences. At the same time, by listening to their teenagers concerns about autonomy and about peer pressures parents can learn the valuable lesson that effective parenting and control are two different things. At the community level, through dispassionate dialogue an environmental activist can come to understand the legitimate economic concerns of those whose jobs depend on the continued profitable operation of a factory. Conversely, the latter might stand to learn much about the potential public health price to be paid by ensuring job growth and a low unemployment rate. Finally, at the global level, two nations with opposing or economic interests can reach mutually beneficial agreements by striving to understand the other's legitimate concerns for its national security, its political sovereignty, the stability of its economy and currency, and so forth. In sum, unless two opponents in a debate are each willing to play on the same field and by the same rules, I concede that disagreement can impede learning. Otherwise, reasoned discourse and debate between people with opposing viewpoints is the very foundation upon which human knowledge advances. Accordingly, on balance the speaker is fundamentally correct.

1. "No field of study can advance significantly unless outsiders bring their knowledge and experience to that field of study."

I strongly agree with the assertion that significant advances in knowledge require expertise from various fields. The world around us presents a seamless web of physical and anthropogenic forces, which interact in ways that can be understood only in the context of a variety of disciplines. Two examples that aptly illustrate this point involve the fields of cultural anthropology and astronomy. Consider how a cultural anthropologist's knowledge about an ancient civilization is enhanced not only by the expertise of the archeologist--who unearths the evidence—but ultimately by the expertise of biochemists, geologists, linguists, and even astronomers. By analyzing the hair, nails, blood and bones of mummified bodies, biochemists and forensic scientists can determine the life expectancy, general well-being, and common causes of death of the population. These experts can also ensure the proper preservation of evidence found at the archeological site. A geologist can help identify the source and age of the materials used for tools, weapons, and structures--thereby enabling the anthropologist to extrapolate about the civilization's economy, trades and work habits, life styles, extent of travel and mobility, and so forth. Linguists are needed to interpret hieroglyphics and extrapolate from found fragments of writings. And an astronomer can help explain the layout of an ancient city as well as the design, structure and position of monuments, tombs, and temples--since ancients often looked to the stars for guidance in building cities and structures.

An even more striking example of how expertise in diverse fields is needed to advance knowledge involves the area of astronomy and space exploration. Significant advancements in our knowledge of the solar system and the universe require increasingly keen tools for observation and measurement. Telescope technology and the measurement of celestial, distances, masses, volumes, and so forth, are the domain of astrophysicists. These advances also require increasingly sophisticated means of exploration. Manned and unmanned exploratory probes are designed by mechanical, electrical, and computer engineers. And to build and enable these technologies requires the acumen and savvy of business leaders, managers, and politicians. Even diplomats might play a role--insofar as major space projects require intemafional cooperative efforts among the world's scientists and governments. And ultimately it is our philosophers whose expertise helps provide meaning to what we learn about our universe. In sum, no area ofinteUectual inquiry operates in a vacuum. Because the sciences are In extricable related, to advance our knowledge in any one area we must understand the interplay among them all. Moreover, it is our non-scientists who make possible the science and who bring meaning to what we learn from it.

1. "A nation should require all its students to study the same national curriculum until they enter college rather than allow schools in different parts of the nation to determine which academic courses to offer."

The speaker would prefer a national curriculum for all children up until college instead of allowing schools in different regions the freedom to decide on their own curricula. I agree Insofar as some common core curriculum would serve useful purposes for any nation. At the same time, however, individual states and communities should have some freedom to augment any such curriculum as they see fit; otherwise, a nation's educational system might defeat its own purposes in the long tenn.

A national core curriculum would be beneficial to a nation in a number of respects. First of all, by providing all children with fundamental skills and knowledge, a common core curriculum would help ensure that our children grow up to become reasonably informed, productive members of society. In addition, a common core curriculum would provide a predictable foundation upon which college administrators and faculty could more easily build curricula and select course materials for freshmen that are neither below nor above their level of educational experience. Finally, a core curriculum would ensure that all school-children are taught core values upon which any democratic society depends to thrive, and even survive--values such as tolerance of others with different viewpoints, and respect for others.

However, a common curriculum that is also an exdusive one would pose certain problems, which might outweigh the benefits, noted above. First of all, on what basis would certain course work be included or excluded, and who would be the final decision- maker? In all likelihood these decisions would be in the hands of federal legislators and regulators, who are likely to have their own quirky notions of what should and should not be taught to children--notions that may or may not reflect those of most communities, schools, or parents. Besides, government officials are notoriously susceptible to influence-peddling by lobbyists who do not have the best interests of society's children in mind. Secondly, an official, federally sanctioned curriculum would facilitate the dissemination of propaganda and other dogma which because of its biased and one-sided nature undermines the very purpose of true education: to enlighten. I can easily foresee the banning of certain text books, programs, and websites which provide information and perspectives that the government might wish to suppress--as some sort of threat to its authority and power. Although this scenario might seem far-fetched, these sorts of concerns are being raised already at the state level.

Thirdly, the inflexible nature of a uniform national curriculum would preclude the inclusion of programs, courses, and materials that are primarily of regional or local significance. For example, California requires children at certain grade levels to learn about the history of particular ethnic groups who make up the state's diverse population. A national curriculum might not allow for this feature, and California's youngsters would be worse off as a result of their ignorance about the traditions, values, and cultural contributions of all the people whose citizenship they share.

Finally, it seems to me that imposing a uniform national curriculum would serve to undermine the authority of parents over their own children, to even a greater extent than uniform state laws currently do. Admittedly, laws requiring parents to ensure that their children receive an education that meets certain minimum standards are well-justified, for the reasons mentioned earlier. However, when such standards are imposed by the state rather than at the community level parents are left with far less power to participate meaningfully in the decision-making process. This problem would only be exacerbated were these decisions left exclusively to federal regulators. In the final analysis, homogenization of elementary and secondary education would amount to a double-edged sword. While it would serve as an insurance policy against a future populated with illiterates and ignoramuses, at the same time it might serve to obliterate cultural diversity and tradition. The optimal federal approach, in my view, is a balanced one that imposes a basic curriculum yet leaves the rest up to each state--or better yet, to each community.

8)"The video camera provides such an accurate and convincing record of contemporary life that it has become a more important form of documentation than written records."

According to the speaker, the video recording is a more important means of document hag contemporary life than a written record because video recordings are more accurate and convincing. Although I agree that a video provides a more objective and accurate record of an event's spatial aspects, there is far more to document ha life than what we see and hear. Thus the speaker overstates the comparative significance of video as a documentary tool.

For the purpose of documenting temporal, spatial events and experiences, I agree that a video record is usually more accurate and more convincing than a written record. It is impossible for anyone, no matter how keen an observer and skilled a journalist, to recount has complete and objective detail such events as the winning touchdown at the Super Bowl, a Ballanchine ballet, the Tournament of Roses Parade, or the scene at the intersection of Florence and Normandy streets during the 1992 Los Angeles riots. Yet these are important events in contemporary life the sort of events we might put ha a time capsule for the purpose of capturing our life and times at the turn of this millennium.

The growing documentary role of video is not limited to seminal events like those described above. Video surveillance cameras are objective witnesses with perfect memories. Thus they can play a vital evidentiary role in legal proceedings--such as those involving robbery, drug trafficking, police misconduct, motor vehicle violations, and even malpractice in a hospital operating room. Indeed, whenever moving images are central to an event the video camera is superior to the written word. A written description of a hurricane, tornado, or volcanic eruption cannot convey its immediate power and awesome nature like a video record. A diary entry cannot "replay" that wedding reception, dance recital, or surprise birthday party as accurately or objectively as a video record. And a real estate brochure cannot inform about the lighting, spaciousness, or general ambiance of a featured property nearly as effectively as a video.

Nonetheless, for certain other purposes written records are advantageous to and more appropriate than video records. For example, certain legal matters are best left to written documentation: video is of no practical use ha documenting the terms of a complex contractual agreement, an incorporation, or the establishment of a trust. And video is of little use when it comes to documenting a person's subjective state of mind, impressions, or reflections of an event or experience. Indeed, to the extent that personal interpretation adds dimension and richness to the record, written documentation is actually more important than video.

Finally, a video record is of no use in documenting statistical or other quantitative information. Returning to the riot example mentioned earlier, imagine relying on a video to document the financial loss to store owners, the number of police and firefighters involved, and so forth. Complete and accurate video documentation of such information would require video cameras at every street corner and in every aisle of every store.

In sum, the speaker's claim overstates the importance of video records, at least to some extent. When it comes to capturing, storing, and recalling temporal, spatial events, video records are inherently more objective, accurate, and complete. However, what we view through a camera lens provides only one dimension of our life and times; written documentation will always be needed to quantify, demystify, and provide meaning to the world around us.

1. "It is often necessary, even desirable, for political leaders to withhold information from the public."

I agree with the speaker that it is sometimes necessary, and even desirable, for political leaders to withhold information from the public. A contrary view would reveal a naiveted about the inherent nature of public politics, and about the sorts of compromises on the part of well-intentioned political leaders necessary in order to further the public's ultimate interests.

Nevertheless, we must not allow our political leaders undue freedom to with-hold information, otherwise, we risk sanctioning demagoguery and undermining the philosophical underpinnings of any democratic society.

One reason for my fundamental agreement with the speaker is that in order to gain the opportunity for effective public leadership, a would-be leader must first gain and maintain political power. In the game of politics, complete forthrightness is a sign of vulnerability and naivete, neither of which earn a politician respect among his or her opponents, and which those opponents will use to every advantage to defeat the politician. In my observation some measure of pandering to the electorate is necessary to gain and maintain political leadership.

For example, were all politicians to fully disclose every personal foibles, character flaw, and detail concerning personal life, few honest politicians would ever by elected. While this view might seem cynical, personal scandals have in fact proven the undoing of many a political career; thus I think this view is realistic.

Another reason why I essentially agree with the speaker is that fully disclosing to the public certain types of information would threaten public safety and perhaps even national security. For example, if the President were to disclose the government's strategies for thwarting specific plans of an international terrorist or a drug trafficker, those strategies would surely fail and the public's health and safety would be compromised as a result. Withholding information might also be necessary to avoid public panic. While such cases are rare, they do occur occasionally. For example, during the first few hours of the new millennium the U.S.

Pentagon's missile defense system experienced a Y2K- related malfunction. This fact was withheld from the public until later in the day, once the problem had been solved; and legitimately so, since immediate disclosure would have served no useful purpose and might even have resulted in mass hysteria.

Having recognized that withholding information from the public is often necessary to serve the interests of that public, legitimate political leadership nevertheless requires forthrightness with the citizenry as to the leader's motives and agenda. History informs us that would-be leaders who lack such forthrightness are the same ones who seize and maintain power either by brute force or by demagoguery--that is, by deceiving and manipulating the citizenry. Paragons such as Genghis Khan and Hitler, respectively, come immediately to mind. Any Democratic society should of course abhor demagoguery, which operates against the Democratic principle of government by the people. Consider also less egregious examples, Such as President Nixon's withholding of information about his active role in the Watergate cover-up. His behavior demonstrated a concern for self- interest above the broader interests of the democratic system that granted his political authority in the first place.

In sum, the game of politics calls for a certain amount of disingenuousness and lack of forthrightness that we might otherwise characterize as dishonesty. And such behavior is a Necessary means to the final objective of effective political leadership. Nevertheless, in any democracy a leader who relies chiefly on deception and secrecy to preserve that leadership, to

Advance a private agenda, or to conceal selfish motives, betrays the democracy-and ends up forfeiting the political game.

1. "Governments must ensure that their major cities receive the financial support they need in order to thrive, because it is primarily in cities that a nation's cultural traditions are preserved and generated."

The speaker's claim is actually threefold: (1) ensuring the survival of large cities and, in turn, that of cultural traditions, is a proper function of government; (2) government support is needed for our large dries and cultural traditions to survive and thrive; and (3) cultural traditions are preserved and generated primarily in our large cities. I strongly disagree with all three claims.

First of all, subsidizing cultural traditions is not a proper role of government. Admittedly, certain objectives, such as public health and safety, are so essential to the survival of large dries and of nations that government has a duty to ensure that they are met. However, these objectives should not extend tenuously to preserving cultural traditions. Moreover, government cannot possibly play an evenhanded role as cultural patron. Inadequate resources call for restrictions, priorities, and choices. It is unconscionable to relegate normative decisions as to which cities or cultural traditions are more deserving, valuable, or needy to a few legislators, whose notions about culture might be misguided or unrepresentative of those of the general populace. Also, legislators are all too likely to make choices in favor of the cultural agendas of their home towns and states, or of lobbyists with the most money and influence.

Secondly, subsidizing cultural traditions is not a necessary role of government. A lack of private funding might justify an exception. However, culture--by which I chiefly mean the fine arts--has always depended primarily on the patronage of private individuals and businesses, and not on the government. The Medicis, a powerful banking family of Renaissance Italy supported artists Michelangelo and Raphael. During the 20th Century the primary source of cultural support were private foundations established by industrial magnates Carnegie, Mellon, Rockefeller and Getty. And tomorrow cultural support will come from our new technology and media moguls----including the likes of Ted Turner and Bill Gates. In short, philanthropy is alive and well today, and so government need not intervene to ensure that our cultural traditions are preserved and promoted.

Finally, and perhaps most importantly, the speaker unfairly suggests that large cities serve as the primary breeding ground and sanctuaries for a nation's cultural traditions. Today a nation's distinct cultural traditions--its folk art, crafts, traditional songs, customs and ceremonies--burgeon instead in small towns and rural regions. Admittedly, our cities do serve as our centers for "high art"; big cities are where we deposit, display, and boast the world's preeminent art, architecture, and music. But big-city culture has little to do any- more with one nation's distinct cultural traditions. After all, modern cities are essentially multicultural stew pots; accordingly, by assisting large cities a government is actually helping to create a global culture as well to subsidize the traditions of other nations' cultures.

In the final analysis, government cannot philosophically justify assisting large cities for the purpose of either promoting or preserving the nation's cultural traditions; nor is government assistance necessary toward these ends. Moreover, assisting large cities would have little bearing on our distinct cultural traditions, which abide elsewhere.

1. "All nations should help support the development of a global university designed to engage students in the process of solving the world's most persistent social problems."

I agree that it would serve the interests of all nations to establish a global university for the purpose of solving the world's most persistent social problems. Nevertheless, such a university poses certain risks which all participating nations must be careful to minimize--or risk defeating the university's purpose. One compelling argument in favor of a global university has to do with the fact that its faculty and students would bring diverse cultural and educational perspectives to the problems they seek to solve. It seems to me that nations can only benefit from a global university where students learn ways in which other nations address certain soda] problems-successfully or not.

It might be tempting to think that an overly diversified academic community would impede communication among students and faculty. However, in my view any such concerns are unwarranted, especially considering the growing awareness of other peoples and cultures which the mass media, and especially the Internet, have created. Moreover, many basic principles used to solve enduring social problems know no national boundaries; thus a useful insight or discovery can come from a researcher or student from any nation.

Another compelling argument for a global university involves the increasingly global nature of certain problems. Consider, for instance, the depletion of atmospheric ozone, which has waned the Earth to the point that it threatens the very survival of the human species. Also, we are now learning that dear-cutting the world's rainforests can set into motion a chain of animal extinction that threatens the delicate balance upon which all animals—including humans--depend. Also consider that a financial crisis---or a political crisis or natural disaster in one country can spell trouble for foreign companies, many of which are now multinational in that they rely on the labor forces, equipment, and raw materials of other nations. Environmental, economic, and political problems such as these all carry grave social consequences--increased crime, unemployment, insurrection, hunger, and so forth. Solving these problems requires global cooperation--which a global university can facilitate.

Notwithstanding the foregoing reasons why a global university would help solve many of our most pressing social problems, the establishment of such a university poses certain problems of its own which must be addressed in order that the university can achieve its objectives. First, participant nations would need to overcome a myriad of administrative and political impediments. All nations would need to agree on which problems demand the university's attention and resources, which areas of academic research are worthwhile, as well as agreeing on policies and procedures for making, enforcing, and amending these decisions. Query whether a functional global university is politically feasible, given that sovereign nations naturally wish to advance their own agendas.

A second problem inherent in establishing a global university involves the risk that certain intellectual and research avenues would become officially sanctioned while others of equal or greater potential value would be discouraged, or perhaps even proscribed. A telling example of the inherent danger of setting and enforcing official research priorities involves the Soviet government's attempts during the 1920s to not only control the direction and the goals of its scientists' research but also to distort the outcome of that research---ostensibly for the greatest good of the greatest number of people. Not surprisingly, during this time period no significant scientific advances occurred under the auspices of the Soviet government. The Soviet lesson provides an important caveat to administrators of a global university: Significant progress in solving pressing social problems requires an open mind to all sound ideas, approaches, and theories---krespective of the ideologies of their proponents.

A final problem with a global university is that the world's preeminent intellectual talent might be drawn to the sorts of problems to which the university is charged with solving, while parochial social problem go unsolved. While this is not reason enough not to establish a global university, it nevertheless is a concern that university administrators and participant nations must be aware of in allocating resources and intellectual talent.

To sum up, given the increasingly global nature or the world's social problems, and the

Escalating costs of addressing these problems, a global university makes good sense. And, since all nations would have a common interest in seeing this endeavor succeed, my intuition is that participating nations would be able to overcome whatever procedural and political obstacles that might stand in the way of success. As long as each nation is careful not to neglect its own unique social problems, and as long as the university's administrators are careful to remain open-minded about the legitimacy and potential value of various avenues of intellectual inquiry and research, a global university might go a long way toward solving many of the world's pressing social problems.

1. "Many of the world's lesser-known languages are being lost as fewer and fewer people speak them. The governments of countries in which these languages are spoken should act to prevent such languages from becoming extinct."

The speaker asserts that governments of countries where lesser-known languages are spoken should intervene to prevent these languages from becoming extinct. I agree in so far a country's indigenous and distinct languages should not be abandoned and forgot ten altogether. At some point, however, I think cultural identity should yield to the more practical considerations of day-to-day life in a global society.

On the one hand, the indigenous language of any geographical region is part-and-parcel of the cultural heritage of the region's natives. In my observation we humans have a basic psychological need for individual identity, which we define by way of our membership in distinct cultural groups. A culture defines itself in various ways--by its unique traditions, rituals, mores, attitudes and beliefs, but especially language. Therefore, when a people's language becomes extinct the result is a diminished sense of pride, dignity, and self- worth.

One need look no further than continental Europe to observe how people cling tenaciously to their distinct languages, despite the fact that there is no practical need for them anymore.

And on the other side of the Atlantic Ocean, the French Canadians stubbornly insist on French as their official language, for the sole purpose of preserving their distinct cultural heritage. Even where no distinct language exists, people will invent one to gain a sense of cultural identity, as the emergence of the distinct Ebonic can’t among today's African Americans aptly illustrates. In short, people resist language assimilation because of a basic human need to be part of a distinct cultural group.

Another important reason to prevent the extinction of a language is to preserve the distinct ideas that only that particular language can convey. Certain Native American and Oriental languages, for instance, contain words symbolizing spiritual and other abstract concepts that only these cultures embrace. Thus, in some cases to lose a language would be to abandon cherished beliefs and ideas that can be conveyed only through language.

On the other hand, in today's high-tech world of satellite communications, global mobility, and especially the Internet, language barriers serve primarily to impede cross-cultural communication, which in turn impedes international commerce and trade. Moreover, language barriers naturally breed misunderstanding, a certain distrust and, as a result, discord and even war among nations. Moreover, in my view the extinction of all but a few major languages is inexorable--as supported by the fact that the Internet has adopted English as its official language. Thus by intervening to preserve a dying language a government might be deploying its resources to fight a losing battle, rather than to combat more pressing social problems--such as hunger, homelessness, disease and ignorance--that plague nearly every society today.

In sum, preserving indigenous languages is, admittedly, a worthy goal; maintaining its own distinct language affords a people a sense of pride, dignity and self-worth. Moreover, by preserving languages we honor a people's heritage, enhance our understanding of history, and preserve certain ideas that only some languages properly convey. Nevertheless, the economic and political drawbacks of language barriers outweigh the benefits of preserving a dying language. In the final analysis, government should devote its time and resources elsewhere, and leave it to the people themselves to take whatever steps are needed to preserve their own distinct languages.

1. "Although many people think that the luxuries and conveniences of contemporary life are entirely harmless, they in fact, prevent people from developing into truly strong and independent individuals."

Do modern luxuries serve to undermine our true strength and independence as individuals? The speaker believes so, and I tend to agree. Consider the automobile, for example. Most people consider the automobile a necessity rather than a luxury; yet it is for this very reason that the automobile so aptly supports the speaker's point. To the extent that we depend on cars as crutches, they prevent us from becoming truly independent and strong in character as individuals.

Consider first the effect of the automobile on our independence as individuals. In some respects the automobile serves to enhance such independence. For example, cars make it possible for people in isolated and depressed areas without public transportation to become more independent by pursing gainful employment outside their communities. And teenagers discover that owning a car, or even borrowing one on occasion, affords them a needed sense of independence from their parents.

However, cars have diminished our independence in a number of more significant respects. We've grown dependent on our cars for commuting to work. We rely on them like crutches for short trips to the corner store, and for carting our children to and from school. Moreover, the car has become a means not only to our assorted physical destinations but also to the attainment of our socioeconomic goals, insofar as the automobile has become a symbol of status. In fact, in my observation many, if not most, working professionals willingly undermine their financial security for the sake of being seen driving this year's new SUV or luxury sedan. In short, we've become slaves to the automobile.

Consider next the overall impact of the automobile on our strength as individuals, by which I mean strength of character, or mettle. I would be hard-pressed to list one way in which the automobile enhances one's strength of character. Driving a powerful SUV might afford a person a feeling and appearance of strength, or machismo. But this feeling has nothing to do with a person's true character.

In contrast, there is a certain strength of character that comes with eschewing modern

Conveniences such as cars, and with the knowledge that one is contributing to a cleaner and quieter environment, a safer neighborhood, and arguably a more genteel society. Also, alternative modes of transportation such as bicycling and walking are forms of exercise which require and promote the virtue of self-discipline. Finally, in my observation people who have forsaken the automobile spend more time at home, where they are more inclined to prepare and even grow their own food, and to spend more time with their families. The former enhances one's independence; the latter enhances the integrity of one's values and the strength of one's family.

To sum up, the automobile helps illustrate that when a luxury becomes a necessity it can sap our independence and strength as individuals. Perhaps our society is better off, on balance, with such "luxuries"; after all, the automobile industry has created countless jobs, raised our standard of living, and made the world more interesting. However, by becoming slaves to the automobile we trade off a certain independence and inner strength.

1. "Most cultures encourage individuals to sacrifice a large part of their own personalities in order to be like other people. Thus, most people are afraid to think or behave differently because they do not want to be excluded."

The speaker claims that most cultures encourage conformity at the expense of individuality and as a result most people conform for fear of being excluded. While I find the second prong of this dual claim well supported overall by empirical evidence, I take exception with the first prong; aside from the cultures created by certain oppressive political regimes, no culture need "encourage" its members to conform to prevailing ways of thought and behavior; in fact, all the evidence shows that cultures attempt to do just the opposite.

As a threshold matter, it is necessary to distinguish between conformity that an oppressive ruling state imposes on its own culture and conformity in a free democratic society. In the former case, people are not only encouraged but actually coerced into suppressing individual personality; and indeed these people are afraid to think and behave differently--but not for fear of being excluded but rather for fear of punishment and persecution by the state. The modern Communist and Fascist regimes are fitting examples. With respect to free democratic societies, it might be tempting to dismiss the speaker's dual claim out of hand. After all, true democratic states are predicated on individual freedoms---of choice, speech, expression, religion, and so forth. Ostensibly, these freedoms serve to promote individuality, even non-conformity, in our personas, our lifestyles, and our opinions and attitudes.

Yet, one look at any democratic society reveals a high degree of conformity among its members. Every society has its own bundle of values, customs, and mores which most of its members share. Admittedly, within any culture springs up various subcultures which try todistinguish themselves by their own distinct values, customs, and mores. In the U.S., for instance, African-Americans have developed a distinct dialect, known as Ebonics, and a distinct body language and attitude which affords them a strong sub-cultural identity of their own. Yet, the undeniable fact is that humans, given the actual freedom to either conform or not conform, choose to think and behave in ways similar to most people in their social group---however we define that group.

Nor is there much empirical evidence of any cultural agenda, either overt or covert, to encourage conformity in thought and behavior among the members of any culture. To the contrary, the predominant message in most cultures is that people should cultivate their individuality. Consider, for example, the enduring and nearly ubiquitous icon of the ragged individualist, who charts his or her own course, bucks the trend, and achieves notoriety through individual creativity, imagination, invention, or entrepreneurship. Even our systems of higher education seem to encourage individualism by promoting and cultivating critical and independent thought among its students.

Yet, all the support for forging one's one unique persona, career, lifestyle, opinions, and even belief system, turns out to be hype. In the final analysis, most people choose to conform. And understandably so; after all, it is human nature to distrust, and even shun, others who are too different from us. Thus to embrace rugged individualism is to risk becoming an outcast, the natural consequence of which is to lLmit one's socioeconomic and career opportunities. This prospect suffices to quell our yearning to be different; thus the speaker is correct that most of us resign ourselves to conformity for fear of being left behind by our peers. Admittedly, few cultures are without rugged individualists----the exceptional artists, inventors, explorers, social reformers, and entrepreneurs who embrace their autonomy of thought and behavior, then test their limits. And paradoxically, it is the achievements of these notable non-conformists that are responsible for most cultural evolution and progress. Yet such notables are few and far between in what is otherwise a world of insecure, even fearful, cultural conformists.

To sum up, the speaker is correct that most people choose to conform rather than behave and think in ways that run contrary to their culture's norms, and that fear of being exuded lies at the heart of this choice. Yet, no culture need encourage conformity; most humans recognize that there is safety of numbers, and as a result freely choose conformity over the risks, and potential rewards, of non-conformity.

1. "There are two types of laws: just and unjust. Every individual in a society has a responsibility to obey just laws and, even more importantly, to disobey and resist unjust laws."

According to this statement, each person has a duty to not only obey just laws but also disobey unjust ones. In my view this statement is too extreme, in two respects. First, it wrongly categorizes any law as either just or unjust; and secondly, it recommends an ineffective and potentially harmful means of legal reform.

First, whether a law is just or unjust is rarely a straightforward issue. The fairness of any law

Depends on one's personal value system. This is especially true when it comes to personal

Freedoms. Consider, for example, the controversial issue of abortion. Individuals with particular religious beliefs tend to view laws allowing mothers an abortion choice as unjust, while individuals with other value systems might view such laws as just.

The fairness of a law also depends on one's personal interest, or stake, in the legal issue at

hand. After all, in a democratic society the chief function of laws is to strike a balance among competing interests. Consider, for example, a law that regulates the toxic effluents a certain factory can emit into a nearby river. Such laws are designed chiefly to protect public health. But complying with the regulation might be costly for the company; the factory might be forced to lay off employees or shut down altogether, or increase the price of its products to compensate for the cost of compliance. At stake are the respective interests of the company's owners, employees, and customers, as well as the opposing interests of the region's residents whose health and safety are impacted. In short, the fairness of the law is subjective, depending largely on how one's personal interests are affected by it.

The second fundamental problem with the statement is that disobeying unjust laws often has the opposite affect of what was intended or hoped for. Most anyone would argue, for instance, that our federal system of income taxation is unfair in one respect or another. Yet the end result of widespread disobedience, in this case tax evasion, is to perpetuate the system. Free-riders only compel the government to maintain tax rates at high levels in order to ensure adequate revenue for the various programs in its budget.

Yet another fundamental problem with the statement is that by justifying a violation of one

Sort of law we find ourselves on a slippery slope toward sanctioning all types of illegal behavior, including egregious criminal conduct. Returning to the abortion example mentioned above, a person strongly opposed to the freedom-of-choice position might maintain that the illegal blocking of access to an abortion clinic amounts to justifiable disobedience. However, it is a precariously short leap from this sort of civil disobedience to physical confrontations with clinic workers, then to the infliction of property damage, then to the bombing of the clinic and potential murder.

In sum, because the inherent function of our laws is to balance competing interests,

Reasonable people with different priorities will always disagree about the fairness of specific laws. Accordingly, radical action such as resistance or disobedience is rarely justified merely by one's subjective viewpoint or personal interests. And in any event, disobedience is never justifiable when the legal rights or safety of innocent people are jeopardized as a result.

1. "Anyone can make things bigger and more complex. What requires real effort and courage is to move in the opposite direction---in other words, to make things as simple as possible."

Whether making things simple requires greater effort and courage than making them bigger and more complex depends on the sort of effort and courage. Indisputably, the many complex technological marvels that are part-and-parcel of our Lives today are the result of the extraordinary cumulative efforts of our engineers, entrepreneurs, and others. And, such achievements always call for the courage to risk failing in a large way. Yet, humans seem naturally driven to make things bigger and more complex; thus refraining from doing so, or reversing this natural process, takes considerable effort and courage of a different sort, as discussed below.

The statement brings immediately to mind the ever-growing and increasingly complex digital world. Today's high-tech firms seem compelled to boldly go to whatever effort is required to devise increasingly complex products, for the ostensible purpose of staying ahead of their competitors. Yet, the sort of effort and courage to which the statement refers is a different one--bred of vision, imagination, and a willingness to forego near term profits for the prospect of making lasting contributions. Surely, a number of entrepreneurs and engineers today are mustering that courage, and are making the effort to create far simpler, yet more elegant, technologies and applications, which will truly make our lives simpler in sharp contrast to what computer technology has delivered to us so far.

Lending even more credence to the statement is the so-called "big government" phenomenon. Human societies have a natural tendency to create unwieldy bureaucracies, a fitting example of which is the U.S. tax-law system. The Intemal Revenue Code and its accompanying Treasury Regulations have grown so voluminous and complex that many certified accountants and tax attorneys admit that they cannot begin to understand it all. Admittedly, this system has grown only through considerable effort on the part of all three branches of the federal government, not to mention the efforts of many special interest groups. Yet, therein lies the statement's credibility. It requires great effort and courage on the part of a legislator to risk alienating special interest groups, thereby risking reelection prospects, by standing on principle for a simpler tax system that is less costly to administer and better serves the interests of most taxpayers.

Adding further credibility to the statement is the tendency of most people to complicate their personal lives--a tendency that seems especially strong in today's age of technology and consumerism. The greater our mobility, the greater our number of destinations each day; the more time-saving gadgets we use, the more activities we try to pack into our day; and with readier access to information we try to assimilate more of it each day. I am hard-pressed to

think of one person who has ever exclaimed to me how much effort and courage it has taken to complicate his or her life in these respects. In contrast, a certain self-restraint and courage of conviction are both required to eschew modern conveniences, to simplify one'sdaily schedule, and to establish and adhere to a simple plan for the use of one's time and money.

In sum, whether we are building computer networks, government agencies, or personal lifestyles, great effort and courage are required to make things simple, or to keep them that way. Moreover, because humans na~traUy tend to make things big and complex, it arguably requires more effort and courage to move in the opposite direction. In the final analysis, making things simple---or keeping them that way--takes a brand of effort born of reflection and restraint rather than sheer exertion, and a courage character and conviction rather than unbridled ambition.

1. "Most people would agree that buildings represent a valuable record of any society's past, but controversy arises when old buildings stand on ground that modern planners feel could be better used for modern purposes. In such situations, modern development should be given precedence over the preservation of historic buildings so that contemporary needs can be served."

The speaker asserts that wherever a practical, utilitarian need for new buildings arises this need should take precedence over our conflicting interest in preserving historic buildings as a record of our past. In my view, however, which interest should take precedence should be determined on a case-by-case basis--and should account not only

for practical and historic considerations but also aesthetic ones.

In determining whether to raze an older building, planners should of course consider the community's current and anticipated utilitarian needs. For example, if an additional hospital is needed to adequately serve the health-care needs of a fast-growing community, this compelling interest might very well outweigh any interest in preserving a historic building that sits on the proposed site. Or if additional parking is needed to ensure the economic survival of a city's downtown district, this interest might take precedence over the historic value of an old structure that stands in the way of a parking structure. On the other hand, if the need is mainly for more office space, in some cases an architecturally appropriate add-on or annex to an older building might serve just as well as razing the old building to make way for a new one. Of course, an expensive retrofit might not be worthwhile if no amount of retrofitting would meet the need.

Competing with a community's utilitarian needs is an interest preserving the historical record. Again, the weight of this interest should be determined on a case-by-case basis. Perhaps an older building uniquely represents a bygone era, or once played a central role in the city's history as a municipal structure. Or perhaps the building once served as the home of a founding family or other significant historical figure, or as the location of an important historical event. Any of these scenarios might justify saving the building at the expense of the practical needs of the community. On the other hand, if several older buildings represent the same historical era just as effectively, or if the building's history is an unremarkable one, then the historic value of the building might pale in comparison to the value of a new structure that meets a compelling practical need.

Also competing with a community's utilitarian needs is the aesthetic and architectural value of the building itself--apart from historical events with which it might be associated. A building might be one of only a few that represents a certain architectural style. Or it might be especially beautiful, perhaps as a result of the craftsmanship and materials employed in its construction--which might be cost-prohibitive to replicate today. Even retrofitting the building to accommodate current needs might undermine its aesthetic as well as historic value, by altering its appearance and architectural integrity. Of course it is difficult to quantify aesthetic value and weigh it against utilitarian considerations. Yet planners should strive to account for aesthetic value nonetheless.

In sum, whether to raze an older building in order to construct a new one should never be determined indiscriminately. Instead, planners should make such decisions on a case-by-case basis, weighing the community's practical needs against the building's historic and aesthetic value.

1. "Students should memorize facts only after they have studied the ideas, trends, and concepts that help explain those facts. Students who have learned only facts have learned very little."

The speaker makes a threshold claim that students who learn only facts learn very little, then condudes that students should always learn about concepts, ideas, and trends before they memorize facts. While I wholeheartedly agree with the threshold claim, the condusion unfairly generalizes about the learning process. In fact, following the speaker's advice would actually impede the learning of concepts and ideas, as well as impeding the development of insightful and useful new ones.

Turning first to the speaker's threshold daim, I strongly agree that ifwe learn only facts we learn very little. Consider the task of memorizing the periodic table of dements, which any student can memorize without any knowledge of chemistry, or that the table relates to chemistry. Rote memorization of the table amounts to a bit of mental exercise-an opportunity to practice memorization techniques and perhaps learn some new ones. Otherwise, the student has learned very little about chemical dements, or about anything for that matter.

As for the speaker's ultimate claim, I concede that postponing the memorization of facts until after one leams ideas and concepts holds certain advantages. With a conceptual framework already in place a student is better able to understand the meaning of a fact, and to appreciate its significance. As a result, the student is more likely to memorize the fact to begin with, and less likely to forget it as time passes. Moreover, in my observation students whose first goal is to memorize facts tend to stop there--for whatever reason. It seems that by focusing on facts first students risk equating the learning process with the assimilation of trivia; in turn, students risk learning nothing of much use in solving real world problems.

Conceding that students must learn ideas and concepts, as well as facts relating to them, in order to learning anything meaningful, I nevertheless disagree that the former should always precede the latter--for three reasons. In the first place, I see know reason why memorizing a fact cannot precede learning about its meaning and significance--as long as the student does not stop at rote memorization. Consider once again our hypothetical chemistry student. The speaker might advise this student to first learn about the historical trends leading to the discovery of the elements, or to learn about the concepts of altering chemical compounds to achieve certain reactions--before studying the periodic table. Having no familiarity with the basic vocabulary of chemistry, which includes the information in the periodic table, this student would come away from the first two lessons bewildered and confused in other words, having

learned little.

In the second place, the speaker misunderstands the process by which we learn ideas and concepts, and by which we develop new ones. Consider, for example, how economics students learn about the relationship between supply and demand, and the resulting concept of market equilibrium, and of surplus and shortage. Learning about the dynamics of supply and demand involves (1) entertaining a theory, and perhaps even formulating a new one, (2) testing hypothetical scenarios against the theory, and (3) examining real-world facts for the purpose of confirming, refuting, modifying, or qualifying the theory. But which step should come first? The speaker would have us follow steps 1 through 3 in that order. Yet, theories, concepts, and ideas rarely materialize out of thin air; they generally emerge from empirical observations--i.e., facts. Thus the speaker's notion about how we should learn concepts and

ideas gets the learning process backwards.

In the third place, strict adherence to the speaker's advice would surely lead to ill-conceived ideas, concepts, and theories. Why? An idea or concept conjured up without the benefit of data amounts to little more than the conjurer's hopes and desires. Accordingly, conjurers will tend to seek out facts that support their prejudices and opinions, and overlook or avoid facts that refute them. One telling example involves theories about the center of the universe. Understandably, we ego-driven humans would prefer that the universe revolve around us. Early theories presumed so for this reason, and facts that ran contrary to this ego-driven theory were ignored, while observers of these facts were scorned and even vilified. In short, students who strictly follow the speaker's prescription are unlikely to contribute significantly to the advancement of knowledge.

To sum up, in a vacuum facts are meaningless, and only by filling that vacuum with ideas

and concepts can students learn, by gaining useful perspectives and insights about facts. Yet, since facts are the very stuff from which ideas, concepts, and trends spring, without some facts students cannot learn much of anything. In the final analysis, then, students should learn facts right along with concepts, ideas, and trends.

1. "Unfortunately, the media tend to highlight what is sensational at the moment. Society would be better served if the media reported or focused more fully on events and trends that will ultimately have the most long-term significance."

The speaker asserts that rather than merely highlighting certain sensational events the media should provide complete coverage of more important events. While the speaker's assertion has merit from a normative standpoint, in the final analysis I find this assertion indefensible.

Upon first impression the speaker's claim seems quite compelling, for two reasons. First, without the benefit of a complete, unfiltered, and balanced account of current events, it is impossible to develop an informed and intelligent opinion about important social and political issues and, in turn, to contribute meaningfully to our democratic society, which relies on broad participation in an ongoing debate about such issues to steer a proper course. The end result

of our being a largely uninformed people is that we relegate the most important decisions to a handful of legislators, jurists, and executives who may or may not know what is best for us.

Second, by focusing on the "sensational"--by which I take the speaker to mean comparatively shocking, entertaining, and titillating events which easily catch one's attention-the media appeal to our emotions and baser instincts, rather than to our intellect and reason. Any observant person could list many examples aptly illustrating the trend in this direction--from trashy talk shows and local news broadcasts to The National Enquixer and People Magazine. This trend dearly serves to undermine a society's collective sensibilities and renders a society's members more vulnerable to demagoguery; thus we should all abhor and resist the trend.

However, for several reasons I find the media's current trend toward highlights and the sensational to be justifiable. First, the world is becoming an increasingly eventful place; thus with each passing year it becomes a more onerous task for the media to attempt full news coverage. Second, we are becoming an increasingly busy society. The average U.S. worker spends nearly 60 hours per week at work now; and in most families both spouses work. Compare this startlingly busy pace to the pace a generation ago, when one bread-winner worked just over 40 hours per week. We have far less time today for news, so highlights must suffice. Third, the media does in fact provide full coverage of important events; anyone can find such coverage beyond their newspaper's front page, on daily PBS news programs, and on the Internet. I would wholeheartedly agree with the speaker if the sensational highlights were all the media were willing or permitted to provide; this scenario would be tantamount to thought control on a mass scale and would serve to undermine our free society. However, I am aware of no evidence of any trend in this direction. To the contrary, in my observation the media are informing us more fully than ever before; we just need to seek out that information.

On balance, then, the speaker's claim is not defensible. In the final analysis the media serves its proper function by merely providing what we in a free society demand. Thus any argument about how the media should or should not behave--regardless of its merits from a normative standpoint begs the question.

1. "Public figures such as actors, politicians, and athletes should expect people to be interested in their private lives. When they seek a public role, they should expect that they will lose at least some of their privacy."

This statement is fundamentally correct; public figures should indeed expect to lose their privacy. After all, we are a society of voyeurs wishing to transform our mundane lives; and one way to do so is to live vicariously through the experiences of others whose lives appear more interesting than our own. Moreover, the media recognize this societal foible and exploit it at every opportunity. Nevertheless, a more accurate statement would draw a distinction between political figures and other public figures; the former have even less reason than the latter to expect to be left alone, for the reason that their duty as public servants legitimizes public scrutiny of their private lives.

The chief reason why I generally agree with the statement is that, for better or worse,

intense media attention to the lives of public figures raises a presumption in the collective mind of the viewing or reading public that our public figures' lives are far more interesting than our own. This presumption is understandable. After all, I think most people would agree that given the opportunity for even fleeting fame they would embrace it without hesitation. Peering into the private lives of those who have achieved our dreams allows us to live vicariously through those lives.

Another reason why I generally agree with the statement has to do with the forces that

motivate the media. For the most part, the media consist of large corporations whose chief objective is to maximize shareholder profits. In pursuit of that objective the media are simply giving the public what they demand a voyeuristic look into the private lives of public figures. One need look no further than a newsstand, local-television news broadcast, or talk show to find ample evidence that this is so. For better or worse, we love to peer at people on public pedestals, and we love to watch them fall off. The media know this all too well, and exploit our obsession at every opportunity.

Nevertheless, the statement should be qualified in that a political figure has less reason to expect privacy than other public figures. Why? The private affairs of public servants become our business when those affairs adversely affect our servants' ability to serve us effectively, or when our servants betray our trust. For example, several years ago the chancellor of a university located in my city was expelled from office for misusing university funds to renovate his posh personal residence. The scandal became front-page news in the campus newspaper, and prompted a useful system-wide reform. Also consider the Clinton sex scandal, which sparked a debate about the powers and duties of legal prosecutors vis4-vis the chief executive.

Also, the court rulings about executive privilege and immunity, and even the impeachment proceedings, all of which resulted from the scandal, might serve as useful legal precedents for the future.

Admittedly, intense public scrutiny of the personal lives of public figures can carry harmful consequences, for the public figure as well as the society. For instance, the Clinton scandal resulted in enormous financial costs to taxpayers, and it harmed many individuals caught up in the legal process. And for more that a year the scandal served chiefly to distract us from our

most pressing national and global problems. Yet, until as a society we come to appreciate the potentially harmful effects of our preoccupation with the lives of public figures, they can expect to remain the cynosures of our attention.

1. "The primary goal of technological advancement should be to increase people's efficiency so that everyone has more leisure time."

The speaker contends that technology's primary goal should be to increase our efficiency for the purpose of affording us more leisure time. I concede that technology has enhanced our efficiency as we go about our everyday lives. Productivity software helps us plan and coordinate projects; intranets, the Internet, and satellite technology make us more efficient messengers; and technology even helps us prepare our food and access entertainment more efficiently. Beyond this concession, however, I find the speaker's contention indefensible from both an empirical and a normative standpoint.

The chief reason for my disagreement lies in the empirical proof: with technological advancement comes diminished leisure time. In 1960 the average U.S. family included only one breadwinner, who worked just over 40 hours per week. Since then the average work week has increased steadily to nearly 60 hours today; and in most families there are now two breadwinners. What explains this decline in leisure despite increasing efficiency that new technologies have brought about? I contend that technology itself is the culprit behind the decline. We use the additional free time that technology affords us not for leisure but rather for work. As computer technology enables greater and greater office productivity it also raises our employers' expectations--or demands--for production. Further technological advances breed still greater efficiency and, in turn, expectations. Our spiraling work load is only exacerbated by the competitive business environment in which nearly all of us work today. Moreover, every technological advance demands our time and attention in order to learn how to use the new technology. Time devoted to keeping pace with technology depletes time for leisure activities.

I disagree with the speaker for another reason as well: the suggestion that technology's chief goal should be to facilitate leisure is simply wrongheaded. There are far more vital concerns that technology can and should address. Advances in bio-technology can help cure and prevent diseases; advances in medical technology can allow for safer, less invasire diagnosis and treatment; advances in genetics can help prevent birth defects; advances in engineering and chemistry can improve the structural integrity of our buildings, roads, bridges and vehicles; information technology enables education while communication technology facilitates global participation in the democratic process. In short, health, safety, education, and freedom--and not leisure--are the proper final objectives of technology. Admittedly, advances in these areas sometimes involve improved efficiency; yet efficiency is merely a means to these more important ends.

In sum, I find indefensible the speaker's suggestion that technology's value lies chiefly in the efficiency and resulting leisure time it can afford us. The suggestion runs contrary to the overwhelming evidence that technology diminishes leisure time, and it wrongly places leisure ahead of goals such as health, safety, education, and freedom as technology's ultimate aims.

1. "Money spent on research is almost always a good investment, even when the results of that research are controversial."

I agree with the speaker's broad assertion that money spent on research is generally money well invested. However, the speaker unnecessarily extends this broad assertion to embrace research whose results are "controversial," while ignoring certain compelling reasons why some types of research might be unjustifiable. My points of contention with the speaker involves the fundamental objectives and nature of research, as discussed below.

I concede that the speaker is on the correct philosophical side of this issue. After all, research is the exploration of the unknown for true answers to our questions, and for lasting solutions to our enduring problems. Research is also the chief means by which we humans attempt to satisfy our insatiable appetite for knowledge, and our craving to understand ourselves and the world around us. Yet, in the very notion of research also lies my first point of contention with the speaker, who illogically presumes that we can know the results of research before we invest in it. To the contrary, if research is to be of any value it must explore uncharted and unpredictable territory. In fact, query whether research whose benefits are immediate and predictable can break any new ground, or whether it can be considered "research" at all.

While we must invest in research irrespective of whether the results might be controversial, at the same time we should be circumspect about research whose objectives are too vague and whose potential benefits are too speculative. After all, expensive research always carries significant opportunity costs--in terms of how the money might be spent toward addressing society's more immediate problems that do not require research. One apt illustration of this point involves the so-called "Star Wars" defense initiative, championed by the Reagan administration during the 1980s. In retrospect, this initiative was ill-conceived and largely a waste of taxpayer dollars; and few would dispute that the exorbitant amount of money devoted to the initiative could have gone a long way toward addressing pressing social problems of the day--by establishing after-school programs for delinquent latchkey kids, by enhancing AIDS awareness and education, and so forth. As it turns out, at the end of the Star Wars debacle we were left with rampant gang violence, an AIDS epidemic, and an unprecedented federal budget deficit.

The speaker's assertion is troubling in two other r~sp,ects as well. First, no amount of

research can completely solve the enduring pr~l~rm of war, poverty, and violence, for the reason that they stem from certain aspects of human nature--such as aggression and greed. Although human genome research might eventually enable us to engineer away those undesirable aspects of our nature, in the meantime it is up to our economists, diplomats, social reformers, and jurists--not our research laboratories--to mitigate these problems. Secondly, for every new research breakthrough that helps reduce human suffering is another that serves primarily to add to that suffering. For example, while some might argue that physics researchers who harnessed the power of the atom have provided us with an alternative source of energy and invaluable "peace-keepers," this argument flies in the face of the hundreds of thousands of innocent people murdered and maimed by atomic blasts, and by nuclear meltdowns. And, in fulfilling the promise of "better living through chemistry" research has given us chemical weapons for human slaughter. In short, so-called "advances" that scientific research has brought about often amount to net losses for humanity.

In sum, the speaker's assertion that we should invest in research whose results are

"controversial" begs the question, because we cannot know whether research will turn out controversial until we've invested in it. As for the speaker's broader assertion, I agree that money spent on research is generally a sound investment because it is an investment in the advancement of human knowledge and in human imagination and spirit. Nevertheless, when we do research purely for its own sake without aim or clear purpose--we risk squandering resources which could have been applied to relieve the immediate suffering of our dispirited, disadvantaged, and disenfranchised members of society. In the final analysis, given finite economic resources we are forced to strike a balance in how we allocate those resources among competing societal objectives.

1. "Creating an appealing image has become more important in contemporary society than is the reality or truth behind that image."

Has creating an image become more important in our society than the reality or truth behind the image? I agree that image has become a more central concern, at least where short-term business or political success is at stake. Nevertheless, I think that in the longer term image ultimately yields to substance and fact.

The important role of image is particularly evident in the business world. Consider, for example, today's automobile industry. American cars are becoming essentially identical to competing Japanese cars in nearly every mechanical and structural respect, as well as in price. Thus to compete effectively auto companies must now differentiate their products largely through image advertising, by conjuring up certain illusory benefits--such as machismo, status,

sensibility, or fun. The increasing focus on image is also evident in the book-publishing business. Publishers are relying more and more on the power of their brands rather than the content of their books. Today mass-market books are supplanted within a year with products that are essential the same---except with fresh faces, rifles, and other promotional angles. I find quite telling the fact that today more and more book publishers are being acquired by large media companies. And the increasing importance of image is especially evident in the music industry, where originality, artistic interpretation, and technical proficiency have yielded almost entirely to sex appeal.

The growing significance of image is also evident in the political realm, particularly when it comes to presidential politics. Admittedly, by its very nature politicking has always emphasized rhetoric and appearances above substance and fact. Yet since the invention of the camera presidential politicians have become increasingly concerned about their image. For example, Teddy Roosevelt was very careful never to be photographed wearing a tennis outfit, for fear that such photographs would serve to undermine his rough-rider image that won him his only term in office. With the advent of television, image became even more central in presidential politics. After all, it was television that elected J.F.K. over Nixon. And our only two-term presidents in the television age were elected based largely on their image. Query whether Presidents Lincoln, Taft, or even F.D.R. would be elected today if pitted against the handsome leading man Reagan, or the suave and poliricaUy correct Clinton. After all, Lincoln was homely, Taft was obese, and F.D.R. was crippled.

In the long term, however, the significance of image wanes considerably. The image of the Marlboro man ultimately gave way to the truth about the health hazards of cigarette smoking. Popular musical acts with nothing truly innovative to offer musically eventually disappear from the music scene. And anyone who frequents yard sales knows that today's best-selling books often become tomorrow's pulp. Even in politics, I think history has a knack for peeling away image to focus on real accomplishments. I think history will remember Teddy Roosevelt, for example, primarily for building the Panama Canal and for establishing our National Park System--and not for his rough-and-ready wardrobe.

In the final analysis, it seems that in every endeavor where success depends to some degree on persuasion, marketing, or salesmanship, image has indeed become the central concern of those who seek to persuade. And as our lives become busier, our attention spans briefer, and our choices among products and services greater, I expect this trend to continue unabated--for better or worse.

1. "Most of the people we consider heroic today were, in fact, very ordinary people who

happened to be in the right place at the right time."

I agree with the statement insofar as our heroes tend to be ordinary people like us. However, I strongly disagree with the further assertion that people become heroes simply by being "in the right place at the right time." If we look around at the sorts of people we choose as our heroes, we real/ze that heroism has far less to do with circumstance than with how a hero responds to it.

I concede that heroes are generally ordinary people. In my observation we choose as our heroes people with whom we strongly identify--people who are very much like us. In fact many of us call a parent, grandparent, or older sibling our hero. Why? My intuition is that the more a person shares in common with us----m terms of experience, heritage, disposition, motives, and even physical attributes-----~e more accessible that person's heroic traits are to us, and the stronger their attraction as a role model. And few would dispute that we share more in common with immediately family than with anyone else.

However, the statement's further suggestion that people become heroes merely as a result of circumstances not of their own choosing is simply wrongheaded. Admittedly, circumstance often serves as a catalyst for heroism. After all, without wars there would be no war heroes. Yet this does not mean that we should lionize every member of the armed forces. I find quite telling the oft-used idiom "heroic effort," which suggests that mere coincidence has little to do with heroism. If one examines the sorts of people we select as our heroes, it becomes evident that heroism requires great effort, and that the very nub of heroism lies in the response, not in the circumstance.

Consider the ordinary person who overcomes a personal obstacle through extraordinary effort, fortitude, or faith---thereby inspiring others toward similar accomplishments. Sports heroes often fall into this category. For example, Lance Armstrong, a Tour de France cycling champion, became a national hero not merely because he won the race but because he overcame a life-threatening illness, against all odds, to do so. Of course, widespread notoriety is not a requisite for heroic status. Countless individuals with physical and mental disabilities become heroes in their community and among their acquaintances by treating their obstacles as personal challenges--thereby setting inspirational examples. Consider the blind law student who inspires others to overcome the same challenge; or the amputee distance runner who serves as a role model for other physically challenged people in her community. To assert that individuals such as these become our heroes merely by accident, as the statement seems to suggest, is to completely misunderstand the very stuff of which heroes are made.

Another sort of hero is the ordinary person who attains heroic stature by demonstrating extraordinary courage of conviction--against external oppressive forces. Many such heroes are champions of social causes, rising to heroic stature by way of the courage of their convictions; and, it is because we share those convictions--because we recognize these champions as being very much like us----~at they become our heroes. Such heroes as India's Mahatma Gandhi, America's Martin Luther King, South Africa's Nelson Mandela, and Poland's Lech Lawesa come immediately to mind. None of these heroes was born into royalty or other privilege; they all came from fairly common, or ordinary, places and experiences. Or consider again our military heroes, whose courage and patriotism in battie the statement would serve to completely discredit as merely accidental outcomes of certain soldiers being "m the right place at the right time." I think the preposterousness of such a suggestion is clear enough.

In sum, the statement correctly suggests that heroes are ordinary people like us, and that opportunity, or circumstance, is part of what breeds heroes. However, the statement overlooks that serendipity alone does not a hero make. Heroism requires that "heroic effort," or better yet a "heroic response," to one's circumstances in life.

1. "The greatness of individuals can be decided only by those who live after them, not by their contemporaries."

Can a person's greatness be recognized only in retrospect, by those who live after the

person, as the speaker maintains? In my view the speaker unfairly generalizes. In some areas, especially the arts, greatness is often recognizable in its nascent stages. However, in other areas, particularly the physical sciences, greatness must be tested over time before it can be confirmed. In still other areas, such as business, the incubation period for greatness varies from case to case.

We do not require a rear-view mirror to recognize artistic greatness--whether in music, visual arts, or literature. The reason for this is simple: art can be judged at face value. There's nothing to be later proved or disproved, affirmed or discredited, or even improved upon or refined by further knowledge or newer technology. History is replete with examples of artistic greatness immediately recognized, then later confirmed. Through his patronage, the Pope recognized Michelangelo's artistic greatness, while the monarchs of Europe immediately recognized Mozart's greatness by granting him their most generous commissions. Mark Twain became a best-selling author and household name even during his lifetime. And the leaders of the modernist school of architecture marveled even as Frank Lloyd Wright was elevating their notions about architecture to new aesthetic heights.

By contrast, in the sciences it is difficult to identify greatness without the benefit of historical perspective. Any scientific theory might be disproved tomorrow, thereby demoting the theorist's contribution to the status of historical footnote. Or the theory might withstand centuries of rigorous scientific scrutiny. In any event, a theory may or may not serve as a springboard for later advances in theoretical science. A current example involves the ultimate significance of two opposing theories of physics: wave theory and quantum theory. Some theorists now claim that a new so-called "string" theory reconciles the two opposing theories--at least mathematically. Yet "strings" have yet to be confirmed empirically. Only time will tell whether string theory indeed provides the unifying laws that all matter in the universe obeys. In short, the significance of contributions made by theoretical scientists cannot be judged by their contemporaries--only by scientists who follow them.

In the realm of business, in some cases great achievement is recognizable immediately,

while in other cases it is not. Consider on the one hand Henry Ford's assembly-line approach to manufacturing affordable cars for the masses. Even Ford could not have predicted the impact his innovations would have on the American economy and on the modern world. On the other hand, by any measure, Microsoft's Bill Gates has made an even greater contribution than Ford; after all, Gates is largely responsible for lifting American technology out of the doldrums during the 1970s to restore America to the status of economic powerhouse and technological leader of the world. And this contribution is readily recognizable now--as it is happening. Of course, the DOS and Windows operating systems, and even Gates' monopoly, might eventually become historical relics. Yet his greatness is already secured.

In sum, the speaker overlooks many great individuals, particularly in the arts and in business, whose achievements were broadly recognized as great even during their own time. Nevertheless, other great achievements, especially scientific ones, cannot be confirmed as such without the benefit of historical perspective.

1. "In the age of television, reading books is not as important as it once was. People can learn as much by watching television as they can by reading books."

The speaker contends that people learn just as much from watching television as by reading books, and therefore that reading books is not as important for learning as it once was. I strongly disagree. I concede that in a few respects television, including video, can be a more efficient and effective means of learning. In most respects, however, these newer media serve as poor substitutes for books when it comes to learning.

Admittedly, television holds certain advantages over books for imparting certain types of knowledge. For the purpose of documenting and conveying temporal, spatial events and experiences, film and video generally provide a more accurate and convincing record than a book or other written account. For example, it is impossible for anyone, no matter how keen an observer and skilled a journalist, to recount in complete and objective detail such events as a Ballanchine ballet, or the scene at the intersection of Florence and Normandy streets during the 1992 Los Angeles riots. Besides, since the world is becoming an increasingly eventful place, with each passing day it becomes a more onerous task for journalists, authors, and book publishers to recount these events, and disseminate them in printed form. Producers of televised broadcasts and videos have an inherent advantage in this respect. Thus the speaker's claim has some merit when it comes to arts education and to learning about modern and current events.

However, the speaker overlooks several respects m which books are inherently superior to television as a medium for learning. Watching television or a video is no indication that any significant learning is taking place; the comparatively passive nature of these media can render them ineffectual in the learning process. Also, books are far more portable than television sets. Moreover, books do not break, and they do not depend on electricity, batteries, or access to airwaves or cable connections---aU of which may or may not be available in a given place. Finally, the effort required to read actively imparts a certain discipline which serves any person well throughout a lifetime of learning.

The speaker also ignores the decided tendency on the part of owners and managers of television media to ffiter information in order to appeal to the widest viewing audience, and thereby maximize profit. And casting the widest possible net seems to involve focusing on the sensational---that is, an appeal to our emotions and baser instincts rather than our intellect and reasonableness. The end result is that viewers do not receive complete, unfiltered, and balanced information, and therefore cannot rely on television to develop informed and intelligent opinions about important social and political issues.

Another compelling argument against the speaker's claim has to do with how well books and television serve their respective archival functions. Books readily enable readers to review and cross-reference material, while televised broadcasts do not. Even the selective review of videotape is far more trouble than it is worth, especially if a printed resource is also available. Moreover, the speaker's claim carries the implication that all printed works, fiction and non-fiction alike, not transferred to a medium capable of being televised, are less significance as a result. This implication serves to discredit the invaluable contributions of all the philosophers, scientists, poets, and others of the past, upon whose immense shoulders society stands today.

A final argument that books are made no less useful by television has to do with the experience of perusing the stacks in a library, or even a bookstore. Switching television channels, or even scanning a video library, simply cannot duplicate this experience. Why not? Browsing among books allows for serendipity--unexpectedly coming across an interesting and informative book while searching for something else, or for nothing in particular. Moreover, browsing through a library or bookstore is a pleasurable sensory experience for many people--an experience that the speaker would have us forego forever.

In sum, television and video can be more efficient than books as a means of staying abreast of current affairs, and for education in the arts that involve moving imagery. However, books facilitate learning in certain ways that television does not and cannot. In the final analysis, the optimal approach is to use both media side by side--television to keep us informed and to provide moving imagery, along with books to provide perspective and insight on that information and imagery.

1. "Scholars and researchers should not be concerned with whether their work makes a contribution to the larger society. It is more important that they pursue their individual interests, however unusual or idiosyncratic those interests may seem."

Should academic scholars and researchers be free to pursue whatever avenues of inquiry and research that interest them, no matter how unusual or idiosyncratic, as the speaker asserts? Or should they strive instead to focus on those areas that are most likely to benefit society? l strongly agree with the speaker, for three reasons.

First of all, who is to decide which areas of academic inquiry are worthwhile? Scholars

cannot be left to decide. Given a choice they will pursue their own idiosyncratic areas of

interest, and it is highly unlikely that all scholars could reach a fully informed consensus as to what research areas would be most worthwhile. Nor can these decisions be left to regulators and legislators, who would bring to bear their own quirky notions about what would be worthwhile, and whose susceptibility to influence renders them untrustworthy in any event.

Secondly, by human nature we are motivated to pursue those activities in which we excel. To compel scholars to focus only on certain areas would be to force many to waste their true talents. For example, imagine relegating today's preeminent astrophysicist Stephen Hawking to research the effectiveness of affirmative-action legislation in reducing workplace discrimination. Admittedly, this example borders on hyperbole. Yet the aggregate effect of realistic cases would be to waste the intellectual talents of our world's scholars and researchers. Moreover, lacking genuine interest or motivation, a scholar would be unlikely to contribute meaningfully to his or her "assigned" field of study.

Thirdly, it is "idiosyncratic" and "unusual" avenues of inquiry that lead to the greatest

contributions to society. Avenues of intellectual and scientific inquiry that break no new ground amount to wasted time, talent, and other resources. History is laden with unusual claims by scholars and researchers that turned out stunningly significant--that the sun lies at the center of our universe, that time and space are relative concepts, that matter consists of discrete particles, that humans evolved from other life forms, to name a few. One current area of unusual research is terraforming---creating biological life and a habitable atmosphere where none existed before. This unusual research area does not immediately address society's pressing social problems. Yet in the longer term it might be necessary to colonize other planets in order to ensure the survival of the human race; and after all, what could be a more significant contribution to society than preventing its extinction?

Those who would oppose the speaker's assertion might point out that public universities

should not allow their faculty to indulge their personal intellectual fantasies at taxpayer

expense. Yet as long as our universities maintain strict procedures for peer review, pure

quackery cannot persist for very long. Other detractors might argue that in certain academic areas, particularly the arts and humanities, research and intellectually inquiry amount to little more than a personal quest for happiness or pleasure. This specious argument overlooks the societal benefits afforded by appreciating and cultivating the arts. And, earnest study in the humanities affords us wisdom to know what is best for society, and helps us understand and approach societal problems more critically, creatively, and effectively. Thus despite the lack of a tangible nexus between certain areas of intellectual inquiry and societal benefit, the nexus is there nonetheless.

In sum, I agree that we should allow academic scholars nearly unfettered freedom of

intellectual inquiry and research within reasonable limits as determined by peer review.

Engaging one's individual talents in one's particular area of fascination is most likely to yield advances, discoveries, and innovations that serve to make the world a better and more interesting place in which to live.

1. "Such nonmainstream areas of inquiry as astrology, fortune-telling, and psychic and paranormal pursuits play a vital role in society by satisfying human needs that are not addressed by mainstream science."

This statement actually consists of two claims: (1) that non-mainstream areas of inquiry are vital in satisfying human needs, and (2) that these areas are therefore vital to society. I concede that astrology, fortune-telling, and psychic and paranormal pursuits respond to certain basic human needs. However, in my view the potential harm they can inflict on their participants and on society far outweighs their psychological benefits.

Admittedly, these non-mainstream areas of inquiry address certain human needs, which

mainstream science and other areas of intellectual inquiry inherently cannot. One such need involves our common experience as humans that we freely make our own choices and decisions in life and therefore carry some responsibility for their consequences. Faced with infinite choices, we experience uncertainty, insecurity, and confusion; and we feel remorse, regret, and guilt when in retrospect our choices turn out be poor ones. Understandably, to prevent these bad feelings many people try to shift the burden of making difficult choices and decisions to some nebulous authority outside themselves--by relying on the stars or on a tack of tarot cards for guidance.

Two other such needs have to do with our awareness that we are mortal. This awareness brings a certain measure of pain that most people try to relieve by searching for evidence of an afterlife. Absent empirical proof that life extends beyond the grave, many people attempt to contact or otherwise connect with the so-called "other side" through paranormal and psychic pursuits. Another natural response to the prospect of being separated from our loved ones by death is to search for a deeper connection with others here on Earth and elsewhere, in the present as well as the past. This response manifests itself in people's enduring fascination with the paranormal search for extraterrestrial life, with so- called "past life" regression and "channeling," and the like.

While the sorts of pursuits which the speaker lists might be "vital" insofar as they help some people feel better about themselves and about their choices and circumstances, query whether these pursuits are otherwise useful to any individual or society. In the first place, because these pursuits are not rooted in reason, they are favorite pastimes of charlatans and others who seek to prey on dupes driven by the aforementioned psychological needs. And the dupes have no recourse. After all, it is impossible to assess the credibility of a tarot card that tells us how to proceed in life simply because we cannot know where the paths not taken would have led. Similarly, we cannot evaluate claims about the afterlife because these claims inherently defy empirical proof--or disproof.

In the second place, without any sure way to evaluate the legitimacy of these avenues of inquiry, participants become vulnerable to self-deception, false hopes, fantastic ideas, and even delusions. In turn, so-called "insights" gained from these pursuits can too easily serve as convenient excuses for irrational and unreasonable actions that harm others. On a personal level, stubborn adherence to irrational beliefs in the face of reason and empirical evidence can lead to self-righteous arrogance, intolerance, anti-social behavior, and even hatred. Moreover, on a societal level these traits have led all too often to holy wars, and to such other atrocities as genocide and mass persecution.

In sum, I concede that the non-mainstream pursuits that the speaker lists are legitimate insofar as they afford many people psychological solace in life. However, when such pursuits serve as substitutes for reason and logic, and for honest intellectual inquiry, participants begin to distrust intellect as an impediment to enlightenment. In doing so, they risk making ill-conceived choices for themselves and unfair judgments about others--a risk that in my view outweighs the psychological rewards of those pursuits.

1. "To be an effective leader, a public official must maintain the highest ethical and moral

standards."

Whether successful leadership requires that a leader follow high ethical and moral

standards is a complex issue--one that is fraught with the problems of defining ethics, morality, and successful leadership in the first place. In addressing the issue it is helpful to consider in turn three distinct forms of leadership: business, political, and social-spiritual.

In the business realm, successful leadership is generally defined as that which achieves the goal of profit maximization for a firm's shareholders or other owners. Moreover, the prevailing view in Western corporate culture is that by maximizing profits a business leader fulfills his or her highest moral or ethical obligation. Many disagree, however, that these two obligations are the same. Some detractors claim, for example, that business leaders have a duty to do no intentional harm to their customers or to the society in which they operate--for example, by providing safe products and by implementing pollution control measures. Other detractors go further--to impose on business leaders an affirmative obligation to protect consumers, preserve the natural environment, promote education, and otherwise take steps to help alleviate society's problems.

Whether our most successful business leaders are the ones who embrace these additional obligations depends, of course, on one's own definition of business success. In my observation, as business leaders become subject to closer scrutiny by the media and by social activists, business leaders will maximize profits in the long term only by taking reasonable steps to minimize the social and environmental harm their businesses cause. This observation also accords with my personal view of a business leader's ethical and moral obligation.

In the political realm the issue is no less complex. Definitions of successful political

leadership and of ethical or moral leadership are tied up in the means a leader uses to wield his or her power and to obtain that power in the first place. One useful approach is to draw a distinction between personal morality and public morality. In my observation personal morality is unrelated to effective political leadership. Modern politics is replete with examples of what most people would consider personal ethical failings: the marital indiscretions of President Kennedy, for instance. Yet few would disagree that these personal moral choices adversely affected his ability to lead.

In contrast, public morality and successful leadership are more closely connected. Consider the many leaders, such as Stalin and Hitler, whom most people would agree were egregious violators of public morality. Ultimately such leaders forfeit their leadership as a result of the immoral means by which they obtained or wielded their power. Or consider less egregious examples such as President Nixon, whose contempt for the very legal system that afforded him his leadership led to his forfeiture of it. It seems that in the short term unethical public behavior might serve a political leader's interest in preserving his or her power; yet in the long term such behavior invariably results in that leader's down- fall that is, in failure.

One must also consider a third type of leadership: social-spiritual. Consider notable figures such as Gandhi and Martin Luther King, whom few would disagree were eminently successful in leading others to practice the high ethical and moral standards which they advocated. However, I would be hard-pressed to name one successful social or spiritual leader whose leadership was predicated on the advocacy of patently unethical or immoral behavior. The reason for this is simple: high standards for one's own public morality are prerequisites for successful social-spiritual leadership.

In sum, history informs us that effective political and social-spiritual leadership requires

adherence to high standards of public morality. However, when it comes to business

leadership the relationship is less clear; successful business leaders must strike a balance between achieving profit maximization and fulfilling their broader obligation to the society, which comes with the burden of such leadership.

1. "While some leaders in government, sports, industry, and other areas attribute their success to a well-developed sense of competition, a society can better prepare its young people for leadership by instilling in them a sense of cooperation."

Which is a better way to prepare young people for leadership: developing in them a spirit of competitiveness or one of cooperation? The speaker favors the latter approach, even though some leaders attribute their success to their keenly developed competitive spirit. I tend to agree with the speaker, for reasons having to do with our increasingly global society, and with the true keys to effective leadership.

The chief reason why we should stress cooperation in nurturing young people today is that, as tomorrow's leaders, they will face pressing societal problems that simply cannot be solved apart from cooperative international efforts. For example, all nations will need to cooperate in an effort to disarm themselves of weapons of mass destruction; to reduce harmful emissions which destroy ozone and warm the Earth to dangerous levels; to reduce consumption of the Earth's finite natural resources; and to cure and prevent diseases before they become global epidemics. Otherwise, we all risk self-destruction. In short, global peace, economic stability, and survival of the species provide powerful reasons for developing educational paradigms that stress cooperation over competition.

A second compelling reason for instilling in young people a sense of cooperation over competition is that effective leadership depends less on the latter than the former. A leader should show that he or she values the input of subordinates--for example, by involving them in decisions about matters in which they have a direct stake. Otherwise, subordinates might grow to resent their leader, and become unwilling to devote themselves wholeheartedly to the leader's mission. In extreme cases they might even sabotage that mission, or even take their useful ideas to competitors. And after all, without other people worth leading a person cannot be a leader let alone an effective one.

A third reason why instilling a sense of cooperation is to be preferred over instilling a sense of competition is that the latter serves to narrow a leader's focus on thwarting the efforts of competitors. With such tunnel vision it is difficult to develop other, more creative means of attaining organizational objectives. Moreover, such means often involve synergistic solutions that call for alliances, partnerships, and other cooperative efforts with would-be competitors.

Those who would oppose the speaker might point out that a thriving economy depends on freely competitive business environment, which ensures that consumers obtain high-quality goods and services at low prices. Thus key leadership positions, especially in business, inherently call for a certain tenacity and competitive spirit. And, a competitive spirit seems especially critical in today's hyper-competitive technology-driven economy, where any leader f~iling to keep pace with ever-changing business and technological paradigms soon fails by the wayside. However, a leader's effectiveness as a competitor is not necessarily inconsistent with his or her ability to cooperate with subordinates or with competitors, as noted above.

In sum, ifwe were to take the speaker's advice too far we would risk becoming a world without leaders, who are bred of a competitive spirit. We would also risk the key benefits of a free-market economy. Nevertheless, on balance I agree that it is more important to instill in young people a sense of cooperation than one of competition. The speaker's preference properly reflects the growing role of cooperative alliances and efforts in solving the world's most pressing problems. After all, in a world in which our very survival as a species depends on cooperation, the spirit of even healthy competition, no matter how healthy, is of little value to any of us.

1. "Society does not place enough emphasis on the intellect---that is, on reasoning and other cognitive skills."

The speaker asserts that society should place more emphasis on intellect and cognition. While the speaker might overlook the benefits of nurturing certain emotions and feelings, on balance I agree that it is by way of our heads rather than our hearts that we can best ensure the well-being of our society.

I concede that undue emphasis on cultivating the intellect at the expense of healthy emotions can harm an individual psychologically. Undue suppression of legitimate and healthy desires and emotions can result in depression, dysfunction, and even physical illness. In fact, the intellect can mask such problems, thereby exacerbating them. To the extent they occur on a mass scale these problems become societal ones--lowering our economic productivity, burdening our health-care and social-welfare systems, and so forth. I also concede that by encouraging and cultivating certain positive emotions and feelings--such as compassion and empathy--society dearly stands to benefit.

In many other respects, however, emphasizing emotions and de-emphasizing intellect can carry negative, even dangerous, consequences for any society. Our collective sense of fairness, equity, and justice can easily give way to base instincts like hate, greed, and lust for power and domination. Thus, on balance any society is better off quelling or at least tempering these sorts of instincts, by nurturing reason, judgment, tolerance, fairness, and understanding--all of which are products of the intellect.

The empirical evidence supporting this position is overwhelming; yet one need look no further than a television set. Most of us have been witness to the current trend in trashy talk shows, which eschew anything approaching intellectual discourse in favor of pan &ring to our baser urges and instincts like jealousy, lust and hate. Episodes often devolve into anti-social, sometimes violent, behavior on the part of participants and observers alike. And any ostensible "lessons learned" from such shows hardly justify the antisocial outbursts that the producers and audiences of these shows hope for.

The dangers of a de-emphasis on intellect are all too evident in contemporary America.The incidence of hate crimes is increasing at a starting rate; gang warfare is at an all-time high; the level of distrust between African Americans and white America seems to be growing. Moreover, taken to an extreme and on a mass scale, appeal to the emotions rather than the intellect has resulted in humanity's most horrific atrocities, like the Jewish holocaust, as well as in nearly every holy war ever waged throughout history. Indeed, suppressing reason is how demagogues and despots gain and hold their power over their citizen-victims. In contrast, reason and better judgment are effective deterrents to despotism, demagoguery, and especially to war.

Those opposed to the speaker's position might argue that stressing cognition and intellect at the expense of emotion and feeling would have a chilling effect on artistic creativity, which would work a harm to the society. However, even in the arts students must learn theories and techniques, which they then apply to their craft whether it be music performance, dance, or acting. And creative writing requires the cognitive ability to understand how language is used and how to best communicate ideas. Besides, creative ability is itsdf partly a function of intellect; that is, creative expression is a marriage between cognitive ability and the expression of feelings and emotions.

In sum, emotions and feelings can serve as important catalysts for compassion and for creativity. Yet behaviors that are most harmful to any society are also born of emotions and instincts, which the intellect can serve to override. The inescapable conclusion, then, is that the speaker is fundamentally correct.

1. "The study of history places too much emphasis on individuals. The most significant events and trends in history were made possible not by the famous few, but by groups of people whose identities have long been forgotten."

The speaker claims that significant historical events and trends are made possible by groups of people rather than individuals, and that the study of history should emphasize the former instead of the latter. I tend to disagree with both aspects of this claim. To begin with, learning about key historical figures inspires us to achieve great things ourselves--far more so than learning about the contributions of groups of people. Moreover, history informs us that it is almost always a key individual who provide the necessary impetus for what otherwise might be a group effort, as discussed below.

Admittedly, at times distinct groups of people have played a more pivotal role than key individuals in important historical developments. For example, history and art appreciation don courses that study the Middle Ages tend to focus on the artistic achievements of particular artists such as Fra Angelico, a Benedictine monk of that period. However, Western civilization owes its very existence not to a few famous painters but rather to a group of Benedictine nuns of that period. Just prior to and during the decline of the Roman Empire, many women fled to join Benedictine monasteries, bringing with them substantial dowries which they used to acquire artifacts, art works, and manuscripts. As a result, their monasteries became centers for the preservation of Western culture and knowledge which would otherwise have been lost forever with the fall of the Roman Empire.

However, equally influential was Johannes Gutenberg, whose invention of the printing press several centuries later rendered Western knowledge and culture accessible to every class of people throughout the known world. Admittedly, Gutenberg was not single handedly responsible for the outcomes of his invention. Without the support of paper manufacturers, publishers, and distributors, and without a sufficient demand for printed books, Gutenberg would never have become one of"the famous few." However, I think any historian would agree that studying the groups of people who rode the wave of Gutenberg's invention is secondary in understanding history to learning about the root historical cause of that wave. Generally speaking, then, undue attention to the efforts and contributions of various groups tends to obscure the cause-and-effect relationships with which the study of history is chiefly concerned.

Gutenberg is just one example of an historical pattern in which it is individuals who have been ultimately responsible for the most significant developments in human history. Profound scientific inventions and discoveries of the past are nearly all attributable not to forgettable groups of people but to certain key individuals--for example, Copernicus, Newton, Edison, Einstein, Curie, and of course Gutenberg. Moreover, when it comes to seminal sociopolitical events, the speaker's claim finds even less support from the historical record. Admittedly,

sweeping social changes and political reforms require the participation of large groups of people. However, I would be hard-pressed to identify any watershed sociopolitical event attributable to a leaderless group. History informs us that groups rally only when incited and inspired by key individuals.

The speaker might claim that important long-term sociological trends are often instigated not by key individuals but rather by the masses. I concede that gradual shifts in demography, in cultural traditions and mores, and in societal attitudes and values can carry just as significant an historical impact as the words and deeds of "the famous few." Yet, it seems that key individuals almost invariably provide the initial spark for those trends. For instance, prevailing attitudes about sexual morality stem from the ideas of key religious leaders; and a culture's prevailing values concerning human life are often rooted in the policies and prejudices of political leaders. The speaker might also point out that history's greatest architectural and engineering feats--such as the Taj Mahal and the Great W~--- came about only thm~h the efforts of large groups of workers. A~, however, it was the famous few--monarchs in these cases whose whims and egos were the driving force behind these accomplishments.

To sum up, with few historical exceptions, history is shaped by key individuals, not by nameless, faceless groups. It is the famous few that provide visions of the future, visions which groups then bring to fruition. Perhaps the speaker's claim will have more merit at the close of the next millennium since politics and science are being conducted increasingly by consortiums and committees. Yet, today it behooves us to continue drawing inspiration from "the famous few," and to continue understanding history chiefly in terms of their influence.

1. "Imaginative works such as novels, plays, films, fairy tales, and legends present a more accurate and meaningful picture of human experience than do factual accounts. Because the creators of fiction shape and focus reality rather than report on it literally, their creations have a more lasting significance."

Do imaginative works hold more lasting significance than factual accounts, for the reasons the speaker cites? To some extent the speaker overstates fiction's comparative significance. On balance, however, I tend to agree with the speaker. By recounting various dimensions of the human experience, a fictional work can add meaning to and appreciation of the times in which the work is set. Even where a fictional work amounts to pure fantasy, with no historical context, it can still hold more lasting significance than a factual account. Examples from literature and film serve to illustrate these points.

I concede that most fictional works rely on historical settings for plot, thematic, and character development. By informing us about underlying political, economic, and social conditions,

factual accounts provide a frame of reference needed to understand and appreciate imaginative works. Fact is the basis for fiction, and fiction is no substitute for fact. I would also concede that factual accounts are more "accurate" than fictional ones--insofar as they are more objective. But this does not mean that factual accounts provide a "more meaningful picture of the human experience." To the contrary, only imaginative works can bring an historical period alive by way of creative tools such as imagery and point of view. And, only imaginative works can provide meaning to historical events--through the use of devices such as symbolism and metaphor.

Several examples from literature serve to illustrate this point. Twain's novels afford us a sense of how 19th-Century Missouri would have appeared through the eyes of 10-year old boys. Melville's "Billy Budd" gives the reader certain insights into what travel on the high seas might have been like in earlier centuries, through the eyes of a crewman. And the epic poems "Beowulf" and "Sir Gawain and the Green Knight" provide glimpses of the relationships between warriors and their kings in medieval times. Bare facts about these historical eras are easily forgettable, whereas creative stories and portrayals such as the ones mentioned above can be quite memorable indeed. In other words, what truly lasts are our impressions of what life must have been like in certain places, at certain times, and under certain conditions. Only imaginative works can provide such lasting impressions.

Examples of important films underscore the point that creative accounts of the human experience hold more lasting significance than bare factual accounts. Consider four of our most memorable and influential films: Citizen Kane, Schindkr5 LaSt, The Wizard of O~ and Star Wars. Did Welles' fictional portrayal of publisher William Randolph Hearst or Spielberg's fictional portrayal of a Jewish sympathizer during the holocaust provide a more "meaningful picture of human experience" than a history textbook? Did these accounts help give "shape and focus" to reality more so than newsreels alone could? If so, will these works hold more "lasting significance" than bare factual accounts of the same persons and events? I think anyone who has seen these films would answer all three questions affirmatively. Or consider The Wizard of O~ and Star Wars. Both films, and the novels from which they were adapted, are pure fantasy. Yet both teem with symbolism and metaphor relating to life's journey, the human spirit, and our hopes, dreams and ambitions--in short, the human experience. Therein lies the reason for their lasting significance.

In sum, without prior factual accounts fictional works set in historical periods lose much of their meaning. Yet only through the exercise of artistic license can we convey human experience in all its dimensions, and thereby fully understand and appreciate life in other times and places. And it is human experience, and not bare facts and figures, that endures in our minds and souls.

1. "In order to improve the quality of instruction at the college and university level, all faculty should be required to spend time working outside the academic world in professions relevant to the courses they teach."

Whether college faculty should also work outside academia, in professional work related to their academic fields, depends primarily on the specific academic area. With respect to fields in which outside work is appropriate, I strongly agree with the statement; students and faculty all stand to gain in a variety of respects when a professor complements academic duties with real-world experience.

As a threshold matter, the statement requires qualification in two respects. First, in certain academic areas there is no profession to speak of outside academia. This is especially true in the humanities; after all, what work outside academia is there for professors of literature or philosophy? Secondly, the statement fails to consider that in certain other academic areas a professor's academic duties typically involve practical work of the sort that occurs outside academia. This is especially true in the fine and performing arts, where faculty actively engage in the craft by demonstrating techniques and styles for their students.

Aside from these two qualifications, I strongly agree that it is worthwhile for college faculty to work outside academia in professional positions related to their field. There are three dear benefits of doing so. First, in my experience as a student, faculty who are actively engaged in their fields come to class with fresh insights and a contagious excitement about the subject at hand. Moreover, they bring to their students practical, real-world examples of the principles and theories discussed in textbooks, thereby sparking interest, and even motivating some students to pursue the field as a career.

Secondly, by keeping abreast with the changing demands of work as a professional,

professors can help students who are serious about pursuing a career in that field to make more informed career decisions. The professor with field experience is better able to impart useful, up-to-date information about what work in the field entails, and even about the current job market. After all, college career-planning staff are neither equipped nor sufficiently experienced to provide such specific advice to students.

A third benefit has to do with faculty research and publication in their areas of specialty.

Experience in the field can help a professor ferret out cutting-edge and controversial

issues--which might be appropriate subjects for research and publication. Moreover, practical experience can boost a professor's credibility as an expert in the field. For example, each year a certain sociology professor at my college combined teaching with undercover work investigating various cults. Not only did the students benefit from the many interesting stories this professor had to tell about his experiences, the professor's publications about cults catapulted him to international prominence as an expert on the subject, and justifiably so. In sum, aside from certain academic areas in which outside work is either unavailable or unnecessary, students and faculty alike stand everything to gain when faculty enrich their careers by interspersing field work with academic work.

1. "In any academic area or professional field, it is just as important to recognize the limits of our knowledge and understanding as it is to acquire new facts and information."

Does recognizing the limits of our knowledge and understanding serve us equally well as acquiring new facts and information, as the speaker asserts? While our everyday experience might lend credence to this assertion, further reflection reveals its fundamental inconsistence with our Western view of how we acquire knowledge. Nevertheless, a careful and thoughtful definition of knowledge can serve to reconcile the two.

On the one hand, the speaker's assertion accords with the everyday experience of working professionals. For example, the sort of"book'I knowledge that medical, law, and business students acquire, no matter how extensive, is of little use unless these students also learn to accept the uncertainties and risks inherent in professional practice and in the business world. Any successful doctor, lawyer, or entrepreneur would undoubtedly agree that new precedents and challenges in their fields compel them to acknowledge the limitations of their knowledge, and that learning to accommodate these limitations is just as important in their professional success as knowledge itself.

Moreover, the additional knowledge we gain by collecting more information often diminishes-sometimes to the point where marginal gains turn to marginal losses. Consider, for instance, the collection of financial-investment information. No amount of knowledge can eliminate the uncertainty and risk inherent in financial investing. Also, information overload can result in confusion, which in turn can diminish one's ability to assimilate information and apply it usefully. Thus, by recognizing the limits of their knowledge, and by accounting for those limits when making decisions, investment advisors can more effectively serve their clients.

On the other hand, the speaker's assertion seems self-contradictory, for how can we know the limits of our knowledge until we've thoroughly tested those limits through exhaustive empirical observation--that is, by acquiring facts and information. For example, it would be tempting to concede that we can never understand the basic forces that govern all matter in the universe. Yet due to increasingly precise and extensive fact-finding efforts of scientists, we might now be within striking distance of understanding the key laws by which all physical matter behaves. Put another way, the speaker's assertion flies in the face of the scientific method, whose fundamental tenet is that we humans can truly know only that which we observe. Thus Francis Bacon, who first formulated the method, might assert that the speaker is fundamentally incorrect.

How can we reconcile our experience in everyday endeavors with the basic assumption underlying the scientific method? Perhaps the answer lies in a distinction between two types of knowledge--one which amounts to a mere collection of observations (i.e., facts and information), the other which is deeper and includes a realization of principles and truths underlying those observations. At this deeper level "knowledge" equals "under-standing": how we interpret, make sense of, and find meaning in the information we collect by way of observation.

In the final analysis, evaluating the speaker's assertion requires that we define "knowledge,'' which in turn requires that we address complex epistemological issues best left to philosophers and theologians. Yet perhaps this is the speaker's point: that we can never truly know either ourselves or the world, and that by recognizing this limitation we set ourselves free to accomplish what no amount of mere information could ever permit.

1. "The concept of 'individual responsibility' is a necessary fiction. Although societies must hold individuals accountable for their own actions, people's behavior is largely determined by forces not of their own making."

I fundamentally agree with the speaker's first contention, for unless we embrace the concept of "individual responsibility" our notions of moral accountability and human equality, both crucial to the survival of any democratic society, will whither. However, I strongly disagree with the second contention--that our individual actions are determined largely by external forces. Although this claim is not entirely without support, it runs contrary to common sense and everyday human experience.

The primary reason that individual responsibility is a necessary fiction is that a society where individuals are not held accountable for their actions and choices is a lawless one, devoid of any order whatsoever. Admittedly, under some circumstances a society of laws should carve out exceptions to the rule of individual responsibility--for example, for the hopeless psychotic who has no control over his or her thoughts or actions. Yet to extend forgiveness much further would be to endanger the social order upon which any civil and democratic society depends.

A correlative argument for individual responsibility involves the fact that lawless, or anarchist, states give way to despotic rule by strong individuals who seize power. History informs us that monarchs and dictators often justify their authority by claiming that they are preordained to assume it--and that as a result they are not morally responsible for their oppressive actions. Thus, any person abhorring despotism must embrace the concept of individual responsibility.

As for the speaker's second claim, it flies in the face of our everyday experiences in making choices and decisions. Although people often claim that life's circumstances have "forced" them to take certain actions, we all have an infinite number of choices; it's just that many of our choices are unappealing, even self-defeating. Thus, the complete absence of free WIU would seem to be possible only in the case of severe psychosis, coma, or death.

Admittedly, the speaker's second contention finds support from "strict determinist" philosophers, who maintain that every event, including human actions and choices, is physically necessary, given the laws of nature. Recent advances in molecular biology and genetics lend some credence to this position, by suggesting that these determining physical forces include our own individual genetic makeup. But, the notion of scientific determinism opens the door for genetic engineering, which might threaten equality in socioeconomic opportunity, and even precipitate the development of a "master race." Besides, since neither free will nor determinism has been proven to be the correct position, the former is to be preferred by any humanist and in any democratic society.

In sum, without the notion of individual responsibility a civilized, democratic society would soon devolve into an anarchist state, vulnerable to despotic rule. Yet, this notion is more than a mere fiction. The idea that our actions spring primarily from our free will accords with common sense and everyday experience. I concede that science might eventually vindicate the speaker and show that our actions are largely determined by forces beyond our conscious control. Until that time, however, I'll trust my intuition that we humans should be, and in fact are, responsible for our own choices and actions.

1. "Universities should require every student to take a variety of courses outside the student's field of study because acquiring knowledge of various academic disciplines is the best way to become truly educated."

I fundamentally agree with the proposition that students must take courses outside their major field of study to become "truly educated." A contrary position would reflect a too narrow

view of higher education and its proper objectives. Nevertheless, I would caution that extending the proposition too far might risk undermining those objectives.

The primary reason why I agree with the proposition is that "me" education amounts to far more than gaining the knowledge and ability to excel in one's major course of study and in one's professional career. True education also facilitates an understanding of one- self, and tolerance and respect for the viewpoints of others. Courses in psychology, sociology, and anthropology all serve these ends. "True" education also provides insight and perspective regarding one's place in society and in the physical and metaphysical worlds. Courses in political science, philosophy, theology, and even sciences such as astronomy and physics can help a student gain this insight and perspective. Finally, no student can be truly educated without having gained an aesthetic appreciation of the world around us--through course work in literature, the fine arts, and the performing arts.

Becoming truly educated also requires sufficient mastery of one academic area to permit a student to contribute meaningfully to society later in life. Yet, mastery of any specific area requires some knowledge about a variety of others. For example, a political-science student can fully understand that field only by understanding the various psychological, sociological, and historical forces that shape political ideology. An anthropologist cannot excel without understanding the social and political events that shape cultures, and without some knowledge of chemistry and geology for performing field work. Even computer engineering is intrinsically tied to other fields, even non-technical ones such as business, communications, and media. Nevertheless, the call for a broad educational experience as the path to becoming truly educated comes with one important caveat. A student who merely dabbles in a hodgepodge of academic offerings, without special emphasis on any one, becomes a dilettante lacking enough knowledge or experience in any single area to come away with anything valuable to offer. Thus in the pursuit of true education students must be careful not to overextend themselves----or risk defeating an important objective of education.

In the final analysis, to become truly educated one must strike a proper balance in one' educational pursuits. Certainly, students should strive to excel in the specific requirements of their major course of study. However, they should complement those efforts by pursuing course work in a variety of other areas as well. By earnestly pursuing a broad education one gains the capacity not only to succeed in a career, but also to find purpose and meaning in that career as well as to understand and appreciate the world and its peoples. To gain these capacities is to become "truly educated."

1. "People work more productively in teams than individually. Teamwork requires cooperation, which motivates people much more than individual competition does."

The speaker asserts that because teamwork requires cooperative effort, people are more motivated and therefore more productive working in teams than working individually as competitors. My view is that this assertion is true only in some cases. If one examines the business world, for example, it becomes clear that which approach is more effective in motivating people and in achieving productivity depends on the specific job.

In some jobs productivity dearly depends on the ability of coworkers to cooperate as members of a team. For businesses involved in the production of products through complex processes, all departments and divisions must work in lock-step fashion toward product roll-out. Cooperative interaction is even essential in jobs performed in relative isolation and in jobs in which technical knowledge or ability, not the ability to work with others, would seem to be most important. For example, scientists, researchers, and even computer programmers must collaborate to establish common goals, coordinate efforts, and meet time lines. Moreover,

the kinds of people attracted to these jobs in the first place are likely to be motivated by a sense of common purpose rather than by individual ambition.

In other types of jobs individual competition, tenacity, and ambition are the keys to

productivity. For example, a commissioned salesperson's compensation, and sometimes tenure and potential for promotion as well, is based on comparative sales performance of coworkers. Working as competitors a firm's individual salespeople maximize productivity-in terms of profit--both for themselves and for their finn. Key leadership positions also call, above all, for a certain tenacity and competitive spirit. A finn's founding entrepreneur must maintain this spirit in order for the firm to survive, let alone to maximize productivity. Moreover, in my observation the kinds of people inclined toward entrepreneurship and sales in the first place are those who are competitive by nature, not those who are motivated primarily by a sense of common purpose.

On balance, however, my view is that cooperation is more crucial for an organization's long-term productivity than individual competition. Even in jobs where individual competitiveness is part-and-parcel of the job, the importance of cooperation should not be underestimated. Competition among sales people can quickly grow into jealousy, back stabbing, and unethical behavior all of which are counterproductive. And even the most successful entrepreneurs would no doubt admit that without the cooperative efforts of their subordinates, partners, and colleagues, their personal visions would never become reality.

In sum, individual competitiveness and ambition are essential motivating forces for certain types of jobs, while in other jobs it is a common sense of mission that motivates workers to achieve maximum productivity. In the final analysis, however, the overall productivity of almost every organization depends ultimately on the ability of its members to cooperate as a team.

1. "Colleges and universities should offer more courses on popular music, film, advertising, and television because contemporary culture has much greater relevance for students than do arts and literature of the past."

The speaker asserts that the curriculum of colleges and universities should emphasize popular culture--music, media, literature, and so forth rather than literature and art of the past, for the reason that the former is more relevant to students. I strongly disagree. Although courses in popular culture do play a legitimate role in higher education, formal study of the present culture at the expense of studying past cultures can undermine the function of higher education, and ultimately provide a disservice to students and to society.

Admittedly, course work in popular culture is legitimate and valuable for three reasons. First, popular culture is a mirror of society's impulses and values. Thus, any serious student of the social sciences, as well as students of media and communications, should take seriously the literature and art of the present. Secondly, in every age and culture some worthwhile art and literature emerges from the mediocrity. Few would disagree, for example, that the great modem-jazz pioneers such as Charlie Parker and Thelonius Monk, and more recently Lennon

and McCarmey, and Stevie Wonder, have made just as lasting a contribution to music as some of the great classical musicians of previous centuries. Thirdly, knowledge of popular films music, and art enables a person to find common ground to relate to other people. This leads to better communication between different subcultures.

Nevertheless, emphasizing the study of popular culture at the expense of studying classical art and literature can carry harmful consequences for students, as well as for society. Without the benefit of historical perspective gamed through the earnest study of the art and literature of the past, it is impossible to fully understand, appreciate, and critique literature and art of the present. Moreover, by approaching popular culture without any yardstick for quality it is impossible to distinguish mediocre art from worthwhile art. Only by studying the classics can

an individual develop fair standards for judging popular works. Besides, emphasis on the formal study of popular culture is unnecessary. Education in popular culture is readily available outside the classroom---on the Internet, through educational television programming, and through the sorts of everyday conversations and cross-talk that occur at water coolers and in the coffee houses of any college campus.

In sum, while the study of popular literature and art can be worthwhile, it has to be

undertaken in conjunction with an even greater effort to learn about the literature and art of the past. In the absence of the latter, our universities will produce a society of people with no cultural perspective, and without any standards for determining what merits our attention and nurtures society.

1. "A person's own habits and attitudes often limit that person's freedom more than do restrictions imposed by others."

I strongly agree with the contention that we often limit our own freedom through our habits and attitudes. By limiting our own freedom, we often serve our own interests. And as we learn this lesson, we cultivate certain attitudes and habits--particularly in our relationships with others--by which we apply that lesson, and which continue throughout life.

To appreciate that from an early age we ingrain in ourselves habits that serve to constrain our freedom, one need look no further than the neighborhood playground. Even without adult supervision, a group of youngsters at play invariably establish mutually agreed-upon rules of conduct--whether or not a sport or game is involved. Children learn that without any rules for behavior the playground bully usually prevails. Thus our habit of making choices that constrain our own freedom stems from our desire to protect our own interests, and it begins at an early age.

This habit of making choices that constrain our own freedom continues into our adult lives. As we mature, most of us develop the attitude that monogamous relationships are preferable to polygamous ones--thus our habit of entering into exclusive pair-bonding relationships. During our teens we agree to "go steady," then as adults we voluntarily enter into marriage contracts. As we enter the working world, we carry these attitudes and habits with us. We eagerly engage in exclusive employment relationships---with the attitude that the security of

steady income is preferable to the "freedom" of not knowing where our next paycheck will come from. Even people who prefer self-employment to job security quickly develop the attitude that the only way to preserve their autonomy is to constrain themselves in terms of their agreements with clients and customers, and especially in terms of how they use their me.

Those who disagree that we tend to restrict our own freedom through our habits and attitudes involving personal and employment relationships might cite the often-heard complaint about life's circumstances leaving one with "no choice." One complaining person might feel trapped in a job or a marriage, by their boss or partner. Another complainant might blame his or her spendthrift habits on enticing advertisements, the pressure to appear successful, and so forth. However, people in situations such as these are not actually at the mercy of others. Instead, they have a significant degree of personal freedom, but simply choose one alternative

over others that might be less appealing or even self-defeating. For example, almost every person who blames someone else for being trapped in a job is simply choosing to retain a certain measure of financial security. The choice to forego this security is always available, although it might carry unpleasant consequences.

That through our attitudes we serve to constrain our own freedom is evident on a societal level as well. Just as children at a playground quickly develop the habit of imposing rules and regulations on themselves, as a society we do the same. After all, in a democracy our system of laws is an invention of the people. For example, we insist on being bound by restrictions for operadng motor vehides, for buying and selling both real and personal property, and for making public statements about other people. Without these restrictions, we would live in continual fear for our physical safety, the security of our property, and our personal reputation and dignity. Thus most of the rules and regulations we claim are imposed on us we have

ultimately imposed on ourselves, as a society, in order to protect ourselves.

In the final analysis, in contenting that our habits and attitudes "often" serve to restrict our freedom more than restraints that others place on us do, the statement does not even go far enough. Despite our occasional sense that others are restricting our choices, on both an individual and a societal level we are ultimately the ones who, through our attitudes and habits, limit our own freedom.

1. "In any realm of life---whether academic, social, business, or political---the only way to succeed is to take a practical, rather than an idealistic, point of view. Pragmatic behavior guarantees survival, whereas idealistic views tend to be superceded by simpler, more immediate options."

I agree with the speaker insofar as that a practical, pragmatic approach toward our endeavor can help us survive in the short tenn. However, idealism is just as crucial if not more so—for long-term success in any endeavor, whether it be in academics, business, or political and social reform.

When it comes to academics, students who we would consider pragmatic tend not to pursue an education for its own sake. Instead, they tend to cut whatever corners are needed to optimize their grade average and survive the current academic term. But, is this approach the only way to succeed academically? Certainly not. Students who eamesdy pursue intellectual paths that truly interest them are more likely to come away with a meaningful and lasting education. In fact, a sense of mission about one's area of fascination is strong motivation to participate actively in class and to study earnesdy, both of which contribute to better grades in that area. Thus, although the idealist-student might sacrifice a high overall grade average, the depth of knowledge, academic discipline, and sense of purpose the student gains will serve that student well later in life.

In considering the business world it might be more tempting to agree with the speaker; after all, isn't business fundamentally about pragmatism--that is, "getting the job done" and paying attention to the "bottom line"? Emphatically, no. Admittedly, the everyday machinations of business are very much about meeting mundane short-term goals: deadlines for production, sales quotas, profit margins, and so forth. Yet underpinning these activities is the vision of the company's chief executive--a vision which might extend far beyond mere profit maximization to the ways in which the frrm can make a lasting and meaningful contribution to the community, to the broader economy, and to the society as a whole. Without a dream or vision--that is, without strong idealist leadership--a firm can easily be cast about in the sea of commerce without dear direction, threatening not only the fLrm's bottom line but also its very survival.

Finally, when it comes to the political arena, again at fzrst blush it might appear that pragmatism is the best, if not the only, way to succeed. Most politicians seem driven by their interest in being elected and reelected--that is, in surviving--rather than by any sense of mission, or even obligation to their constituency or country. Diplomatic and legal maneuverings and negotiations often appear intended to meet the practical needs of the parties involved--minimizing costs, preserving options, and so forth. But, it is idealists-not pragmatists--who sway the masses, incite revolutions, and make political ideology reality. Consider idealists such as America's founders, Mahatma Gandhi, or Martin Luther IGng. Had these idealists concerned themselves with short-term survival and immediate needs rather than with their notions of an ideal society, the United States and India might still be British colonies, and African-Americans might still be relegated to the backs of buses.

In short, the statement fails to recognize that idealism--keeping one's eye on an ultimate prize--is the surest path to long-term success in any endeavor. Meeting one's immediate needs, while arguably necessary for short-term survival, accomplishes lite without a sense of mission, a vision, or a dream for the long term.

1. "The study of history has value only to the extent that it is relevant to our daily lives."

The speaker alleges that studying history is valuable only insofar as it is relevant to our daily lives. I find this allegation to be specious. It wrongly suggests that history is not otherwise instructive and that its relevance to our everyday lives is limited. To the contrary, studying history provides inspiration, innumerable lessons for living, and useful value-clarification and perspective---all of which help us decide how to live our lives.

To begin with, learning about great human achievements of the past provides inspiration. For example, a student inspired by the courage and tenacity of history's great explorers might decide as a result to pursue a career in archeology, oceanography, or astronomy. This decision can, in turn, profoundly affect that student's everyday life--in school and beyond. Even for students not inclined to pursue these sorts of careers, studying historical examples of courage in the face of adversity can provide motivation to face their own personal fears in life. In short,

learning about grand accomplishments of the past can help us get through the everyday business of living, whatever that business might be, by emboldening us and lifting our spirits.

In addition, mistakes of the past can teach us as a society how to avoid repeating those mistakes. For example, history can teach us the inappropriateness of addressing certain social issues, particularly moral ones, on a societal level. Attempts to legislate morality invariably fail, as aptly illustrated by the Prohibition experiment in the U.S. during the 1930s. Hopefully, as a society we can apply this lesson by adopting a more enlightened legislative approach toward such issues as free speech, criminalization of drug use, criminal justice, and equal rights under

the law.

Studying human history can also help us understand and appreciate the mores, values, and ideals of past cultures. A heightened awareness of cultural evolution, in turn, helps us formulate informed and reflective values and ideals for ourselves. Based on these values and ideals, students can determine their authentic life path as well as how they should allot their time and interact with others on a day-to-day basis.

Finally, it might be tempting to imply from the speaker's allegation that studying history has little relevance even for the mundane chores that occupy so much of our time each day, and therefore is of little value. However, from history we learn not to take everyday activities and things for granted. By understanding the history of money and banking we can transform an otherwise routine trip to the bank into an enlightened experience, or a visit to the grocery store into an homage to the many inventors, scientists, engineers, and entrepreneurs of the past who have made such convenience possible today. And, we can fully appreciate our freedom to go about our daily lives largely as we choose only by understanding our political heritage. In short, appreciating history can serve to elevate our everyday chores to richer, more interesting, and more enjoyable experiences. In sum, the speaker fails to recognize that in all our activities and decisions--from our grandest to our most rote--history can inspire, inform, guide, and nurture. In the final analysis, to study history is to gain the capacity to be more human--and I would be hard- pressed to imagine a worthier end.

1. "It is primarily through formal education that a culture tries to perpetuate the ideas it favors and discredit the ideas it fears."

The speaker asserts that a culture perpetuates the ideas it favors while discrediting those It fears primarily through formal education. I agree that grade-school, and even high-school education involves cultural indoctrination. Otherwise, I think the speaker misunderstands the role of higher education, and overlooks other means by which a culture achieves these ends.

I agree with the speaker with respect to formal grade-school and even high-school education--which to some extent amount to indoctrination with the values, ideas, and principles of mainstream society. In my observation, young students are not taught to question authority, to take issue with what they are taught, or to think critically for themselves. Yet, this indoctrination is actually desirable to an extent. Sole emphasis on rote learning of facts and figures is entirely appropriate for grade-school children, who have not yet gained the intellectual capacity and real-world experience to move up to higher, more complex levels of thinking. Nevertheless, the degree to which our grade schools and high schools emphasize indoctrination should not be overstated. After all, cultural mores, values, and biases have little to do with education in the natural sciences, mathe matics, and specific language skills such as reading and writing.

Although the speaker's assertion has some merit when it comes to the education of young people, I find it erroneous when it comes to higher education. The mission of our colleges and universities is to afford students cultural perspective and a capacity for understanding opposing viewpoints, and to encourage and nurture the skills of critical analysis and skepticism--not to indoctrinate students with certain ideas while quashing others. Admittedly, colleges and universities are bureaucracies and therefore not immune to political influence over what is taught and what is not. Thus to some extent a college's curriculum is vulnerable to wealthy and otherwise influential benefactors, trustees, and government agencies who by advancing the prevailing cultural agenda serve to diminish a college's effectiveness in carrying out its true mission. Yet, my intuition is that that such influences are minor ones, especially in public university systems.

The speaker's assertion is also problematic in that it ignores two significant other means by which our culture perpetuates ideas it favors and discredits ideas it fears. One such means is our system of laws, by which legislators and jurists formulate and then impose so-called "public policy." Legislation and judicial decisions carry the weight of law and the threat of punishment for those who deviate from that law. As a result, they are highly effective means of forcing on us official notions of what is good for society and for quashing ideas that are deemed threatening to the social fabric, and to the safety and security of the government and the governed. A second such means is the mainstream media. By mirroring the culture's prevailing ideas and values, broadcast and print media serve to perpetuate them. It is important to distinguish here between mainstream media-such as broadcast television—and alternative media such as documentary films and non-commercial websites, whose typical aims are to call into question the status quo, expose the hypocrisy and unfair bias behind mainstream ideas, and bring to light ideas that the powers-that-be most fear. Yet, the influence of alternative media pales in comparison to that of mainstream media.

In sum, the speaker's assertion is not without merit when it comes to the role of grade schools and high schools. However, the speaker over-generalizes about what students are taught--especially at colleges and universities. Moreover, the speaker's assertion ignores other effective ways in which mainstream culture perpetuates its agenda.

1. "In many countries it is now possible to turn on the television and view government at work. Watching these proceedings can help people understand the issues that affect their lives. The more kinds of government proceedings---trials, debates, meetings, etc.---that are televised, the more society will benefit."

I strongly agree that the more government proceedings--debates, meeting, and so forth---that are televised, the more society will benefit overall. Nevertheless, undue emphasis on this means of informing a constituency has the potential for harm--which any society must take care not to allow.

Access to government proceedings via television carries several significant benefits. The main benefit lies in two useful archival functions of videotaped proceedings. First, videotapes are valuable supplements to conventional means of record keeping. Although written transcripts and audio tapes might provide an accurate record of what is said, only video tapes can convey the body language and other visual clues that help us understand what people say, whether they are being disingenuous, sarcastic, or sincere. Secondly, videotape archives provide a useful catalogue for documentary journalists.

Televised proceedings also provide three other useful functions. First, for shut-ins and people who live in remote regions, it might be impracticable, or even impossible, to view government proceedings in person. Secondly, with satellite television systems it is possible to witness the governments of other cities, states, and even nations at work. This sort of exposure provides the viewer a valuable sense of perspective, an appreciation for other forms of government, and so forth. Thirdly, in high schools and universities, television proceedings can be useful curriculum supplements for students of government, public policy, law, and even public speaking.

Nevertheless, televising more and more government proceedings carries certain risks that should not be ignored. Watching televised government proceedings is inherently a rather passive experience. The viewer cannot voice his or her opinions, objections, or otherwise contribute to what is being viewed. Watching televised proceedings as a substitute for active participation in the political process can, on a mass scale, undermine the democratic process by way of its chilling effect on participation. Undue emphasis on tele government poses the risk that government proceedings will become mere displays, or shows, for the public, intended as public relations ploys and so-called "photo opportunities,'' while the true business of government is moved behind closed doors.

In sum, readier access to the day-day business of a government can only serve to inform and educate. Although undue reliance on televised proceedings for information can quell active involvement and serve as a censor for people being televised, I think these are risks worth taking in the interest of disclosure.

1. "The purpose of many advertisements is to make consumers want to buy a product so that they will 'be like' the person in the ad. This practice is effective because it not only sells products but also helps people feel better about themselves."

The speaker asserts that the many ads which make consumers want to "be like" the person portrayed in the ad are effective not only in selling products but also in helping consumers feel better about themselves. This assertion actually consists of two claims: that this advertising

technique is used effectively in selling many products, and that consumers who succumb to technique actually feel better about themselves as a result. While I agree with the first claim, I strongly disagree with the second one.

Turning first to the statement's threshold claim, do many ads actually use this technique to sell products in the first place? Consider ads like the wildly popular Budweiser commercial featuring talking frogs. There's nothing in that ad to emulate; its purpose is merely to call attention to itself. Notwithstanding this type of ad, in my observation the majority of ads provide some sort of model that most consumers in the target market would want to emulate, or "be like." While some ads actually portray people who are the opposite of what the viewer would

want to "be like," these ads invariably convey the explicit message that to avoid being like the person in the ad the consumer must buy the advertised product. As for whether the many, many ads portraying models are effective in selling products, I am not privy to the sort of statistical information required to answer this question with complete certainty. However, my intuition is that this technique does help sell products; otherwise, advertisers would not use it so persistently.

Turning next to the statement's ultimate claim that these ads are effective because they help people who buy the advertised products feel better about themselves, I find this claim to be specious. Consumers lured by the hope of "being like" the person in an ad might experience some initial measure of satisfaction in the form of an ego boost. We have all experienced a certain optimism immediately after acquiring something we've wanted a good feeling that we're one step closer to becoming who we want to be. However, in my experience this sense of optimism is ephemeral, invariably giving way to disappointment that the purchase did not

live up to its implicit promise.

One informative example of this false hope involves the dizzying array of diet aids, skin creams, and fitness machines available today. The people in ads for these products are youthful, fit, and attractive what we all want to "be like." And the ads are effective in selling these products; today's health-and-beauty market feeds a multi-billion dollar industry. But the end result for the consumer is an unhealthy preoccupation with physical appearance and youth, which often leads to low self-esteem, eating disorders, injuries from over-exercise, and so forth. And these problems are sure signs of consumers who feel worse, not better, about themselves as a result of having relied on the false hope that they will "be like" the model in the ad.

Another informative example involves products that pander to our desire for socioeco-nomic status. Ads for luxury cars and upscale dothing typically portray people with lucrative careers living in exclusive neighborhoods. Yet, I would wager that no person whose life-style actually resembles these portrayals could honestly claim that purchasing certain consumer products contributed one iota to his or her socioeconomic success. The end result for the consumer is envy of others that can afford even more expensive possessions, and ultimately low self-esteem based on feelings of socioeconomic inadequacy.

In sum, while ads portraying people we want to "be like" are undoubtedly effective in selling products, they are equally ineffective in helping consumers feel better about themselves. In fact, the result is a sense of false hope, leading ultimately to disappointment and a sense of failure and inadequacy--in other words, feeling worse about ourselves.

1. "When we concern ourselves with the study of history, we become storytellers. Because we can never know the past directly but must construct it by interpreting evidence, exploring history is more of a creative enterprise than it is an objective pursuit. All historians are storytellers."

Are all historians essentially storytellers, for the reasons that the speaker cites? In asserting that we can never know the past directly, the speaker implies that we truly "know" only what we experience first-hand. Granting this premise, I agree that it is the proper and necessary role of historians to "construct" history by interpreting evidence. Nevertheless, the speaker's characterization of this role as "storytelling" carries certain unfair implications, which should be addressed.

One reason why I agree with the speaker's fundamental claim lies in the distinction between the role of historian and the roles of archivist and journalist. By "archivist" I refer generally to any person whose task is to document and preserve evidence of past events. And by "journalist" I mean any person whose task is to record, by writing, film, or some other media, factual events as they occur--for the purpose of creating evidence of those events. It is not the proper function of either the journalist or the archivist to tell a story. Rather, it is their function to provide evidence to the historian, who then pieces together the evidence to construct history, as the speaker suggests. In other words, unless we grant to the historian a license to "construct" history by interpreting evidence, we relegate the historian to the role of mere archivist or journalist.

Another reason why I agree with the speaker's characterization of the historian's proper function is that our understanding of history is richer and fuller as a result. By granting the historian license to interpret evidence--to "construct" history--we allow for differing viewpoints among historians. Based on the same essential evidence, two historians might disagree about such things as the contributing causes of a certain event, the extent of influence or impact of one event on subsequent events, the reasons and motives for the words and actions of important persons in history, and so forth. The inexorable result of disagreement, debate, and

divergent interpretations among historians is a fuller and more incisive understanding of history.

However, we should be careful not to confuse this license to interpret history, which is needed for any historian to contribute meaningfully to our understanding of it, with artistic license. The latter should be reserved for dramatists, novelists, and poets. It is one thing to attempt to explain historical evidence; it is quite another to invent evidence for the sake of creating a more interesting story or to bolster one's own point of view. A recently released biography of Ronald Reagan demonstrates that the line which historians should not cross is a fine one indeed. Reagan's biographer invented a fictional character who provided commentary as a witness to key episodes during Reagan's life. Many critics charge that the biographer overstepped his bounds as historian; the biographer claims, however, that the accounts in the biography were otherwise entirely factual, and that the fictional narrator was merely a literary device to aid the reader in understanding and appredating the historical Reagan.

In sum, I strongly agree that the historian's proper function is to assemble evidence into plausible constructs of history, and that an element of interpretation and even creativity is properly involved in doing so. And if the speaker wishes to call these constructs "storytelling," that's fine. This does not mean, however, that historians can or should abandon scholarship for the sake of an interesting story.

1. "Some educational systems emphasize the development of students' capacity for reasoning and logical thinking, but students would benefit more from an education that also taught them to explore their own emotions."

The speaker asserts that educational systems should place less emphasis on reason and logical thinking and more emphasis on the exploration of emotions. While I concede that in certain fields students are well served by nurturing their emotions and feelings, in most academic disciplines it is by cultivating intellect rather than emotions that students master their discipline and, in turn, gain a capacity to contribute to the well-being of society.

I agree with the speaker insofar as undue emphasis on reason and logical thinking can have a chilling effect on the arts. After all, artistic ideas and inspiration spring not from logic but from emotions and feelings such as joy, sadness, hope, and love. And, the true measure of artistic accomplishment lies not in technical proficiency but rather in a work's impact on the emotions and spirit. Nevertheless, even in the arts, students must learn theories and techniques, which they then apply to their craft. And, creative writing requires the cognitive ability to understand how language is used and how to communicate ideas. Besides, creative ability is itself partly a function of intellect; that is, creative expression is a marriage of one's cognitive abilities and the expression of one's feelings and emotions.

Aside from its utility in the arts, however, the exploration of emotions has little place in educational systems. The physical sciences and mathematics are purely products of reason and logic. Even in the so-called "soft" sciences, emotion should play no part. Consider, for example, the study of history, political science, or public policy, each of 'which is largely the study of how the concepts of fairness, equity, and justice work themselves out. It is tempting to think that students can best understand and learn to apply these concepts by tapping feelings such as compassion, empathy, sympathy, and indignation. Yet fairness, equity, and justice

have little to do with feelings, and everything to do with reason. After all, emotions are subjective things. On the other hand, reason is objective and therefore facilitates communication, consensus, and peaceful compromise.

Indeed, on a systemic scale undue emphasis on the exploration of our emotions can have deleterious societal consequences. Emotions invite irrationality in thought and action, the dangers of which are all too evident in contemporary America. For example, when it comes to the war on drugs, free speech and religion, abortion issues, and sexual choices, public policy today seems to simply mirror the voters' fears and prejudices. Yet common sense dictates that social ills are best solved by identifying cause-and-effect relation-ships---in other words,

through critical thinking. The proliferation of shouting-match talk shows fueled by irrationality and emotion gone amuck is further evidence that our culture lends too much credence to our emotions and not enough to our minds. A culture that sanctions irrationality and unfettered venting of emotion is vulnerable to decline Indeed, exploiting emotions while suppressing reason is how demagogues gain and hold power, and how humanity's most horrific atrocities have come to pass. In contrast, reason and better judgment are effective deterrents to incivility, despotism, and war.

In sum, emotions can serve as important catalysts for academic accomplishment in the arts. Otherwise, however, students, and ultimately society, are better off by learning to temper their emotions while nurturing judgment, tolerance, fairness, and understanding--all of which are products of reason and critical thinking.

1. "It is primarily through our identification with social groups that we define ourselves."

I strongly agree that we define ourselves primarily through our identification with social groups, as the speaker asserts. Admittedly, at certain stages of life people often appear to define themselves in other terms. Yet, in my view, during these stages the fundamental need to define one's self through association with social groups is merely masked or suspended.

Any developmental psychologist would agree that socialization with other children plays a critical role in any child's understanding and psychological development of self. At the day-care center or in the kindergarten class young children quickly learn that they want to play with the same toys at the same time or in the same way as some other children. They come to understand generally what they share in common with certain of their peers---m terms of appearance, behavior, likes and dislikes--and what they do not share in common with other peers or with older students and adults. In other words, these children begin to recognize that

their identity inextricably involves their kinship with certain peers and alienation from other people.

As children progress to the social world of the playground and other after-school venues, their earlier recognition that they relate more closely to some people than to others evolves into a desire to form well-defined social groups, and to set these groups apart from others. Girls begin to congregate apart from boys; clubs and cliques are quickly formed--often with exclusive rituals, codes, and rules to further distinguish the group's members from other children. This apparent need to be a part of an exclusive group continues through high school, where students identify themselves in their yearbooks by the clubs to which they belonged. Even in college, students eagerly join clubs, fraternities, and sororities to establish their identity

as members of social groups. In my observation children are not taught by adults to behave in these ways; thus this desire to identify oneself with an exclusive social group seems to spring from some innate psychological need to define one's self through one's personal associations.

However, as young adults take on the responsibilities of partnering, parenting, and working, they appear to define themselves less by their social affiliations and more by their marital status, parental status, and occupation. The last of these criteria seems particularly important for many adults today. When two adults meet for the first time, beyond initial pleasantries the initial question almost invariably is "What do you do for a living?" Yet in my opinion this shift in focus from one's belonging to a social group to one's occupation is not a shift in how we prefer to define ourselves. Rather, it is born of economic necessity--we don't have the leisure time or financial independence to concern ourselves with purely social activities. I find quite telling the fact that when older people retire from the world of work an interest in identifying with social groups--whether they be bridge clubs, investment clubs, or country clubs--seems to reemerge. In short, humans seem possessed by an enduring need to be part of a distinct social group—a need that continues throughout life's journey.

In sum, I agree that people gain and maintain their sense of self primarily through their belonging to distinct social groups. Admittedly, there will always be loners who prefer not to belong, for whatever reasons; yet loners are the exception. Also, while many working adults might temporarily define themselves in terms of their work for practicality's sake, at bottom we humans are nothing if not social animals.

1. "Humanity has made little real progress over the past century or so. Technological innovations have taken place, but the overall condition of humanity is no better. War, violence, and poverty are still with us. Technology cannot change the condition of humanity."

Have technological innovations of the last century failed to bring about true progress for humanity, as the statement contends? Although I agree that technology cannot ultimately prevent us from harming one another, the statement fails to account for the significant positive impact that the modem-industrial and computer revolutions have had on the quality of life at least in the developed world.

I agree with the statement insofar as there is no technological solution to the enduring problems of war, poverty, and violence, for the reason that they stem from certain aspects of human nature--such as aggression and greed. Although future advances in biochemistry might enable us to "engineer away" those undesirable aspects, in the meantime it is up to our economists, diplomats, social reformers, and jurists--not our scientists and engineers—to mitigate these problems.

Admittedly, many technological developments during the last century have helped reduce human suffering. Consider, for instance, technology that enables computers to map Earth's geographical features from outer space. This technology allows us to locate lands that can be cultivated for feeding malnourished people in third-world countries. And, few would disagree that humanity is the beneficiary of the myriad of 20th-Century innovations in medicine and medical technology--from prostheses and organ transplants to vaccines and lasers.

Yet, for every technological innovation helping to reduce human suffering is another that has served primarily to add to it. For example, while some might argue that nuclear weapons serve as invaluable "peace-keepers," this argument flies in the face of the hundreds of thousands of innocent people murdered and maimed by atomic blasts. More recently, the increasing use of chemical weapons for human slaughter points out that so called "advances" in biochemistry

can amount to net losses for humanity.

Notwithstanding technology's limitations in preventing war, poverty, and violence,

20th-Century technological innovation has enhanced the overall standard of living and comfort level of developed nations. The advent of steel production and assembly-line manufacturing created countless jobs, stimulated economic growth, and supplied a plethora of innovative conveniences. More recently, computers have helped free up our time by performing repetitive tasks; have aided in the design of safer and more attractive bridges, buildings, and vehicles; and have made possible universal access to information.

Of course, such progress has not come without costs. One harmful byproduct of industrial progress is environmental pollution, and its threat to public health. Another is the alienation of assembly-line workers from their work. And, the Internet breeds information overload and steals our time and attention away from family, community, and coworkers. Nevertheless, on balance both the modern-industrial and computer revolutions have improved our standard of living and comfort level; and both constitute progress by any measure.

In , enduring problems such as war, poverty, and violence ultimately spring from human nature, which no technological innovation short of genetic engineering can alter. Thus the statement is correct in this respect. However, if we define "progress" more narrowly--in terms of economic standard of living and comfort level--recent technological innovations have indeed brought about clear progress for humanity.

1. "It is through the use of logic and of precise, careful measurement that we become aware of our progress. Without such tools, we have no reference points to indicate how far we have advanced or retreated."

Do we need careful measurements and logic to determine whether and to what extent we are progressing or regressing? I agree that in certain endeavors quantitative measurements and logical analysis of data are essential for this purpose. However, in other realms objective data provides little guidance for determining progress. My view applies to individuals as well as society as a whole.

As for monitoring individual progress, the extent to which careful measurement and logical analysis of data are required depends on the specific endeavor. In the area of personal finance, objective measurements are critical. We might feel that we are advancing financially when we buy a new car or a better home, or when our salary increases. Yet these signs of personal economic success can be deceptive. Cars depreciate quickly in value, and residential real estate must appreciate steadily to offset ownership expenses. Even a pay raise is no sure sign of personal financial progress; if the raise fails to keep pace with the cost of living then the real salary is actually in decline.

In the area of one's physical well-being, however, quantitative measurement might be useful yet insufficient. Quantitative data such as blood pressure, cholesterol level, and body weight are useful objective indicators of physical health. Yet quantitative measurement and logic can only take us so far when it comes to physical well-being. Levels of physical discomfort and pain, the most reliable indicators of physical well-being, cannot be quantified. And of course our emotional and psychological well-being, which can have a profound impact on our physical

health, defy objective measurement altogether.

On a societal level, as on a personal level, the extent to which careful measurement and logic are needed to determine progress depends on the endeavor. In macro-economics, as in personal finance, objective measurements are critical. For example, a municipality, state, or nation might sense that things are improving economically when its rate of unemployment declines. Yet if new jobs are in poor-paying positions involving unskilled labor, this apparent advance might actually be a retreat. And, a boom in retail sales might amount to regress if the goods sold are manufactured by foreign firms, who benefit from the boom at the expense of

domestic business expansion. Technological progress also requires carefu measurement. Advances is computer technology can only be determined by such factors as processing and transfer speeds, numbers of in staUations and users, amounts of data accessed, and so forth. And, advances in biotechnology are determined by statistical measurements of the effectiveness of new drugs and other treatments, and by demographic statistics regarding the incidence of the ailments that the technology seeks to ameliorate.

In contrast, socio-political progress is less susceptible to objective measurement. For instance, progress in social welfare might be measured by the number of homeless people, incidence of domestic violence, or juvenile crime rate. Yet would an increase in the number of single mothers on welfare indicate that our society is becoming more compassionate and effective in helping its victims, or would it indicate regress by showing that our private sector and education systems are failing? Moreover, when it comes to our legal system and to politics, progress has little to do with numbers, or even logic. For example, to what extent, if any, would

more lenient gun ownership laws indicate progress, considering the competing interests of individual freedom and public safety? Do anti-abortion laws indicate a sociological advance or retreat? Or, when a political party gains greater control of a legislature by sweeping a particular election, is this progress or regress?

In sum, although the statement has merit, it unfairly generalizes. In areas such as finance, economics, and computing technology, all of which involve nothing but quantifiable data, nothing but careful measurement and logic suffice to determine the extent of progress. In other areas, such as health care and social welfare, determining progress requires both objective measurement and subjective judgment. Finally, progress in politics and law is an entirely subjective matter--depending on each individual's values, priorities, and interests.

1. "With the growth of global networks in such areas as economics and communication, there is no doubt that every aspect of society---including education, politics, the arts, and the sciences---will benefit greatly from international influences."

I agree that the globalization of economic and communication networks will heighten international influences in all four of the areas listed. However, while those influences will no doubt benefit education and the sciences, the nature of those influences on the arts and on politics will probably be a mixed one beneficial in some respects yet detrimental in others.

The dearest and most immediate beneficiaries of international influences are students. When students learn more about other cultures, systems of government, religions, and so forth, they advance their knowledge and grow in their understanding of humanity--which is, after all, the final objective of education. Emerging distance-learning technologies, made practicable now by the Internet, will no doubt carry an especially profound international influence on education. Distance learning will permit a class of students located all over the world to video-conference simultaneously with a teacher and with one other, thereby enlivening and enriching educational experiences.

The sciences dearly benefit from international influences as well. After all, principles of physics, chemistry, and mathematics know no political boundaries; thus a useful insight or discovery can come from a researcher or theorist anywhere in the world. Accordingly, any technology that enhances global communication can only serve to advance scientific knowledge. For example, astronomers can now transmit observational data to other scientists throughout the world the instant they receive that data, so that the entire global community of astronomers can begin interpreting that data together in a global brain-storming session. The

sciences also benefit from multi-national economic cooperation. Consider, for instance, the multi-national program to establish a human colony on the Moon. This ambitious project is possible only because participating nations are pooling their economic resources as well as scientific talents.

With respect to the arts, however, the speaker's claim is far less convincing. It might seem that if artists broaden their cultural exposure and real-world experience their art works would become richer and more diverse. However, the logical consequence of increasing international influence on the arts is a homogenous global culture in which art becomes increasingly the same. The end result is not only a chilling effect on artistic creativity, but also a loss of cultural identity, which seems to be an important sociological and psychological need.

The impact of global networking on political relations might turn out to be a mixed one as well. Consider, for instance, the current unification of Europe's various monetary systems. Since Europe's countries are become economically interdependent, it would seem that it would be in their best interests to cooperate politically with one another. However, discord over monetary policy might result in member countries withdrawing from the Community, and in a political schism or other falling out. Consider also the burgeoning global communications network. On the one hand, it would seem that instant face-to-face communication between

diplomats and world leaders would help avert and quell political and military crises. By the same token, however, global networking renders any nation's security system more vulnerable. This point is aptly illustrated by a recent incident involving a high-ranking Pentagon official who stored top-secret fries on his home computer, which was connected to the Internet without any firewall precautions. Incidents such as this one might prompt the world's governments to become more protective of their sovereignty, more insular, and even-paranoid.

In sum, growing international influences that result naturally from global communications and economic networks can only serve to facilitate education and to advance scientific knowledge. However, although the same influences no doubt will have an impact on the arts and on international politics, the speaker's claim that those influences will be beneficial is dubious, or at least premature, given that global networking is still in its nascent stages.

1. "When research priorities are being set for science, education, or any other area, the most important question to consider is: How many people's lives will be improved if the results are successful?"

Should researchers focus on areas that are likely to result in the greatest benefit to the most people, as the speaker suggests? I agree insofar as areas of research certain to result in immediate and significant benefits for society should continue to be a priority. Yet, strictly followed, the speaker's recommendation would have a harmful chilling effect on research and new knowledge. This is particularly true in the physical sciences, as discussed below.

Admittedly, scientific research whose societal benefits are immediate, predictable, and profound should continue to be a high priority. For example, biotechnology research is proven to help cure and prevent diseases; advances in medical technology allow for safer, less invasive diagnosis and treatment; advances in genetics help prevent birth defects; advances in engineering and chemistry improve the structural integrity of our buildings, roads, bridges, and vehicles; information technology enables education; and communication technology facilitates

global peace and participation in the democratic process. To demote any of these research areas to a lower priority would be patently foolhardy, considering their proven benefits to so many people. However, this is not to say that research whose benefits are less immediate or clear should be given lower priority. For three reasons, all avenues of scientific research should be afforded equal priority.

First of all, if we strictly follow the speaker's suggestion, who would decide which areas of research are more worthwhile than others? Researchers cannot be left to decide. Given a choice, they will pursue their own special areas of interest, and it is highly unlikely that all researchers could reach a fully informed consensus as to what areas are most likely to help the most people. Nor can these decisions be left to regulators and legislators, who would bring to bear their own quirky notions about what is worthwhile, and whose susceptibility to influence-peddlers renders them untrustworthy in any event.

A telling example of the inherent danger of setting "official" research priorities involves the Soviet government's attempts during the 1920s to not only control the direction and the goals of its scientists' research but also to distort the outcome of that research--ostensibly for the greatest good of the greatest number of people. During the 1920s the Soviet government quashed certain areas of scientific inquiry, destroyed entire research facilities and libraries, and caused the sudden disappearance of many scientists who were viewed as threats the state's authority. Not surprisingly, during this time period no significant scientific advances occurred under the auspices of the Soviet government.

Secondly, to compel all researchers to focus only on certain areas would be to force many to waste their true talents. For example, imagine relegating today's preeminent astrophysicist Stephen Hawking to research the effectiveness of behavioral modification techniques in the reform of violent criminals. Admittedly, this example borders on hyperbole. Yet the aggregate effect of realistic cases would be to waste the intellectual talents of our world's researchers. Moreover, lacking genuine interest or motivation a researcher would be unlikely to contribute

meaningfully to his or her "assigned" field.

Thirdly, it is difficult to predict which research avenues will ultimately lead to the greatest contributions to society. Research areas whose benefits are certain often break little new ground, and in the long term so-called "cutting-edge" research whose potential benefits are unknown often prove most useful to society. One current example involves terraforrning---creating biological life and a habitable atmosphere where none existed before. This unusual research area does not immediately address society's pressing social problems. Yet in the longer term it might be necessary to colonize other planets in order to ensure the survival of the human race; and after all, what could be a more significant contribution to society than preventing its extinction?

In sum, when it comes to setting priorities for research, at least in the sciences, the speaker goes too far by implying that research whose benefits are unknown are not worth pursuing. After all, any research worth doing delves into the unknown. In the final analysis, the only objective of research should be to discover truths, whatever they might be-- not to implement social policy.

1. "So much is new and complex today that looking back for an understanding of the past provides little guidance for living in the present."

The speaker claims that since so much in today's world is new and complex the past

provides little guidance for living in the present. I agree with this assertion insofar as history offers few foolproof panaceas for living today. However, I disagree with the speaker's claim that today's world is so unique that the past is irrelevant. One good example that supports my dual position is the way society has dealt with its pressing social problems over time.

Admittedly, history has helped us learn the appropriateness of addressing certain social issues, particularly moral ones, on a societal level. Attempts to legislate morality invariably fail, as illustrated by Prohibition in the 1930s and, more recently, failed federal legislation to regulate access to adult material via the Internet. We are slowly learning this lesson, as the recent trend toward legalization of marijuana for medicinal purposes and the recognition of equal rights for same-sex partners both demonstrate.

However, the only firm lesson from history about social ills is that they are here to stay. Crime and violence, for example, have troubled almost every society. All manner of reform, prevention, and punishment have been tried. Today, the trend appears to be away from reform toward a "tough-on-crime" approach. Is this because history makes clear that punishment is the most effective means of eliminating crime? No; rather, the trend merely reflects our current mores, attitudes, and political climate.

Another example involves how we deal with the mentally-iii segment of the population.

History reveals that neither quarantine, treatment, nor accommodation solves the problem, only that each approach comes with its own trade-offs. Also undermining the assertion that history helps us to solve social problems is the fact that, despite the civil-fights efforts of Martin Luther King and his progenies, the cultural gap today between African-Americans and white Americans seems to be widening. It seems that racial prejudice is a timeless phenomenon.

To sum up, in terms of how to live together as a society I agree that studying the past is of some value; for example, it helps us appreciate the futility of legislating morality. However, history's primary sociological lesson seems to be that today's social problems are as old as society itself, and that there are no panaceas or prescriptions for solving these problems---only alternate ways of coping with them.

1. "At various times in the geological past, many species have become extinct as a result of natural, rather than human, processes. Thus, there is no justification for society to make extraordinary efforts, especially at a great cost in money and jobs, to save endangered species."

What are the limits of our duty to save endangered species from extinction? The statement raises a variety of issues about morality, conscience, self-preservation, and economics. On balance, however, I fundamentally agree with the notion that humans need not make "extraordinary" efforts--at the expense of money and jobs--to ensure the preservation of any endangered species.

As I see it, there are three fundamental arguments for imposing on ourselves at least some responsibility to preserve endangered species. The first has to do culpability. According to this argument, to the extent that endangerment is the result of anthropogenic events such as dear-cutting of forests or polluting of lakes and streams, we humans have a duty to take affirmative measures to protect the species whose survival we've placed in jeopardy.

The second argument has to do with capability. This argument disregards the extent to which we humans might have contributed to the endangerment of a species. Instead, the argument goes, if we are aware of the danger, know what steps are needed to prevent extinction, and can take those steps, then we are morally obligated to help prevent extinction. This argument would place a very high affirmative duty on humans to protect endangered species.

The third argument is an appeal to self-preservation. The animal kingdom is an intricate matrix of interdependent relationships, in which each species depends on many others for its survival. Severing certain relationships, such as that between a predator and its natural prey, can set into motion a series of extinctions that ultimately might endanger our own survival as a species. While this claim might sound far-fetched to some, environmental experts assure us

that in the long run it is very real possibility.

On the other hand are two compelling arguments against placing a duty on humans to protect endangered species. The first is essentially the Darwinian argument that extinction results from the inexorable process of so-called “natural selection” in which stronger species survive while weaker ones do not. Moreover, we humans are not exempt from the process. Accordingly, if we see fit to eradicate other species in order to facilitate our survival, then so be it. We are only behaving as animal must, Darwin would no doubt assert.

The second argument, and the one that I find most compelling, is an appeal to logic over emotion. It is a scientific fact that thousands of animal species become extinct every year. Many such extinctions are due to natural forces, while others are due to anthropogenic factors. In any event, it is far beyond our ability to save them all. By what standard, then, should we decide which species are worth saving and which ones are not? In my observation, we tend to favor animals with human-like physical characteristics and behaviors. This preference is understandable; after all, dolphins are far more endearing than bugs. But there is no logical justification for such a standard. Accordingly, what makes more sense is to decide based on our own economic self-interest. In other words, the more money and jobs it would cost to save a certain species, the lower priority we should place on doing do.

In sum, the issue of endangered-species protection is a complex one, requiring subjective judgments about moral duty and the comparative value of various life forms. Thus, there are no easy or certain answers. Yet it is for this very reason I agree that economic self-interest should take precedence over vague notions about moral duty when it comes to saving endangered species. In the final analysis, at a point when it becomes critical for our own survival as a species to save certain others, then we humans will do so if we are fit – in accordance with Darwin’s observed process of natural selection.

1. "Facts are stubborn things. They cannot be altered by our wishes, our inclinations, or the dictates of our passions."

Can we alter facts according to our wishes or inclinations? If by "facts" the speaker means such phenomena as political, economic, social, or legal status quo, then I concede that we can alter facts. The reason for this is that such systems are abstract constructs of our inclinations, wishes, and passions to begin with. Otherwise, I strongly agree with the speaker that we cannot alter facts. When it comes to certain aspect of our personal lives, and to historical events and scientific truths, no measure of desire or even passion can change external reality.

On an individual level, we all engage in futile attempts to alter facts--by pretending that certain things are not the way they are because they are inconsistent with our wishes or personal interests. Psychologists refer to this psychological defensive mechanism, which seems to be part of human nature, as "denial." Consider curious pastimes such as mind-reading, psychic healing, rituals that purportedly impart immortality, and other such endeavors, which seems to transcend all cultures and periods of human history. Understandably, we would all like to have the ability to alter the physical world, including ourselves, as we see fit, or even to live forever by means of the sheer force of our will. Yet, not one iota of scientific evidence lends support to the claim that any human being has ever had any such ability.

Nor can we alter facts by virtue of our inclinations or passions when it comes to history. Admittedly, no person can truly know any particular past that the person did not experience firsthand. In this sense history is a construct, created for us by reporters, archivists, and historians. Historical facts are therefore susceptible to interpretation, characterization, and of course errors in commission and omission. This is not to say, however, that historical facts can be altered by our inventing versions that suit our inclinations or wishes. In short, an historical event is not rendered any less factual by either our ignorance or characterization of it.

Similarly, when it comes to science our wishes and desires ultimately yield to the

stubbornness of facts--by which I mean empirical scientific evidence and the laws and principles of the physical world. Admittedly, in many cases it is difficult to distinguish between scientific "fact" and mere "theory." History is replete with examples of what were considered at one time to be facts, but later disproved as incorrect theories. Yet it is telling that many such obsolete theories were based on the subjective inclinations, desires, and wishes of theorists and of the societies in which the theorists lived. For example, the notions of an Earth-centered tmiverse and of linear time and space were both influenced by religious notions--that is, by

human wishes and passions. As our factual knowledge increased such theories ultimately give way.

In sum, I agree that facts are indeed "stubborn things." Understandably, all humans are guilty of ignoring, overlooking, and misunderstanding facts--at least to some extent. After all, human passion, desire, and individual bias and perspective are powerful influences when it comes to what we believe to be true and factual. Moreover, the statement carries deep epistemological implications regarding the nature of knowledge and truth, which I cannot begin to adequately address here. Nevertheless, on a less abstract level the speaker is correct that neither inclination, desire, nor passion, no matter how fervent, can alter that which is past or beyond our physical control.

1. "How children are socialized today determines the destiny of society. Unfortunately, we have not yet learned how to raise children who can help bring about a better society."

I find the speaker's dual claim to be specious on both counts. The claim that society's destiny hinges on how children are socialized, while appealing in some respects, is an over-statement at best. And the claim that we have not yet learned how to raise children who can better society is poorly supported by empirical evidence.

Consider first the speaker's assertion that society's destiny depends on how children are socialized. I concede that unless a child is allowed sufficient opportunities for healthy interaction with peers, that child is likely to grow into an ineffectual, perhaps even an anti-sodal, adult. To witness healthy socialization in action, one need look no further than the school playground, where children learn to negotiate, cooperate, and assert themselves in a respectful manner, and where they learn about the harmful results of bullying and other anti-social behavior. These lessons help children grow up to be good citizens and effective leaders, as well as tolerant and respectful members of society.

However, socialization is only one factor influencing the extent to which an individual will ultimately contribute to a better society. And in my observation it is not the most important one. Consider certain prominent leaders who have contributed profoundly to a better society. Mahatma Gandhi's contributions sprang primarily from the courage of his inner convictions, in spite of his proper socialization among genteel Indian society and, as a law student, among British society. Martin Luther King's contribution was primarily the result of his strong religious upbringing, which had more to do with parental influence than with socialization. An even more remarkable modern example was Theodore Roosevelt, whose social and physical development were both stunted by life-threatening physical infirmities during his childhood. In spite of his isolation, odd manner and aloofness throughout his early life, Roosevelt ascended to a social-activist presidency by means of his will to overcome physical infLrmities, his voracious appetite for knowledge, and his raw intellect.

Consider next the speaker's claim that we have not yet learned how to raise children who can better society. If we define a "better" society as one characterized by greater tolerance of differing viewpoints and people who are different from ourselves, greater respect for individual rights, and greater cooperation across cultural and national boundaries, then the children of the most recent half-century are creating a better society. The most recent quarter-century has seen an increasing sensitivity in our society toward ensuring public health by policing the food and drug industries and by protecting our natural environment. We're becoming more sensitive to, and respectful of, the rights of women, various ethnic and racial groups, homosexuals, and mentally- and physically-challenged individuals. The re-emergence of political third parties with decidedly libertarian ideals demonstrates an increasing concern for individual freedoms. And there is ample evidence of increasing international cooperation. The former Soviet Union and the U.S. have worked coUaboratively in space research and exploration since the 1970s; peace-keeping missions are now largely multi-national efforts; and nations are now tackling public health problems coUaboratively through joint research programs. In short, the speaker's second claim flies in the face of the empirical evidence, as I see it.

In sum, when it comes to whether a child grows up to contribute to a better society, the key determinant is not socialization but rather some other factor--such as a seminal childhood event, parental influence, raw intelligence, or personal conviction. And, while reasonable people with differing political and social viewpoints might disagree about what makes for a "better" society, in my observation our society is steadily evolving into a more civilized, respectful, and tolerant one. In the final analysis, then, I fundamentally disagree with both aspects of the speaker's dual claim.

1. "The arts (painting, music, literature, etc.) reveal the otherwise hidden ideas and impulses of a society."

The speaker asserts that the arts reveal society's hidden ideas and impulses. While this assertion has merit, I think it unfairly generalizes about art. Consider two particular art forms: architecture and painting. In more important architecture one consistently sees a refection of society's ideas and urges. However, in more important paintings of the most recent century one sees instead the artists' personal and idiosyncratic visions of an aesthetic ideal.

Turning first to public architecture, one sees in ancient and Renaissance forms an

Impulse to transcend the human condition. Clearly, the most important architecture of these periods was built to honor deities and to propel humans into the afterlife. Consider, for example, the ancient pyramids and the great cathedrals of Europe, which rise upward toward the stars and heavens. During the Medieval period the most important architectural form was the castle, which reflected an overriding concern for military security and brute strength during a time of

comparative anarchy. During the 20th Century it was first the steel-forged art deco forms and then the sky-scraping office building that dominated public architecture. These forms reflect modern, more mundane concerns for industrial and technological progress.

Turning next to important paintings and painters, it seems to me that the art of previous centuries reflected the attitudes and ideas of the prevailing culture to a far greater extent than today's art. The cynosures of the Medieval and Renaissance artists, for instance, were certain Christian themes--the Trinity, virgin birth of Christ, the Resurrection, and so forth with which the society at large was also preoccupied. Later, during the 18th and 19th Centuries, an emerging genteel class saw itself reflected in the bourgeois themes of impressionists such as Renoir and

Monet.

But in the most recent century the picture has been much different. Consider three of the 20th Century's most influential painters: Picasso, Dali and Pollock. Picasso's style underwent a series of radical changes throughout his career. Was the reason for Picasso's diverse "periods" a quick series of radical changes in society's ideas and impulses, or perhaps a reflection of society's hidden impulse for constant change? Or did Picasso's varied styles merely reflect the complex psychological profile of one eccentric artist? Dali is known for his surrealistic images; but do these images reveal some kind of existential angst on a societal level, or just the odd aesthetic vision of one man? Pollock's penchant was for dripping paint on

the floor in order to create abstract images that would have the sort of visceral impact he was after. In fact, Pollock turned to this technique only after he tried but failed as a conventional painter, using brush and easel. So are Pollock's striking abstract murals a reflection of some mid-20th Century societal impulse, or merely the result of one struggling artist stumbling onto something he was good at? In all three cases, it seems that the art reflected the artist but not the society.

In sum, in the art of painting one can observe a shift from styles and themes reflecting broad societal impulses to a more recent concern for expressing personal impulses and creative urges. In contrast, the more public art form of architecture has always mirrored society's ideas and impulses, and probably always will--because architecture is so much more public than the art of painting.

1. "The absence of choice is a circumstance that is very, very rare."

I strongly agree with the contention that absence of choice is a rare circumstance, primarily because this contention accords with common sense and our everyday experience as human beings. Besides, the reverse claim that we do not have free choice--serves to undermine the notions of moral accountability and human equality, which are critical to the survival of any democratic society.

Our collective life experience is that we make choices and decisions every day----on a continual basis. Common sense dictates that humans have free will, and therefore the true absence of choice is very rare. The only possible exceptions would involve extreme and rare circumstances such as solitary imprisonment or a severe mental or physical deficiency--any of which might potentially strip a person of his or her ability to make conscious choices. Yet even under these circumstances, a person still retains choices about voluntary bodily functions and movement. Thus the complete absence of choice would seem to be possible only in a comatose state or in death.

People often claim that life's circumstances leave them with "no choice." One might feel trapped in a job or a marriage. Under financial duress a person might claim that he or she has "no choice" but to declare bankruptcy, take a demeaning job, or even lie or steal to obtain money. The fundamental problem with these sorts of claims is that the claimants are only considering those choices that are not viable or attractive. That is, people in situations such as these have an infinite number of choices; it's just that many of the choices are unappealing, even self-defeating. For example, almost every person who claims to be trapped in a job is simply choosing to retain a certain measure of financial security. The choice to forego this security is always available, although it might carry unpleasant consequences.

Besides, the contention that we are almost invariably free to choose is far more appealing from a socio-political standpoint than the opposite claim. A complete lack of choice implies that every person's fate is determined, and that we all lack free will. According to the philosophical school of "strict determinism," every event, induding human actions and choices, that occurs is physically necessary given the laws of nature and events that preceded that event or choice. In other words, the "choices" that seem part of the essence of our being are actually beyond our control. Recent advances in molecular biology and genetics lend some credence to the determinists' position that as physical beings our actions are determined by physical forces beyond our control. New research suggests that these physical forces include our own individual genetic makeup.

However, the logical result of strict determinism and of the new "scientific determinism" is that we are not morally accountable for our actions and choices, even those that harm other individuals or society. Moreover, throughout history monarchs and dictators have embraced determinism, at least ostensibly, to bolster their claim that certain individuals are preordained to assume positions of authority or to rise to the top levels of the socioeconomic infrastructure.

Finally, the notion of scientific determinism opens the door for genetic engineering, which poses a potential threat to equality in socioeconomic opportunity, and could lead to the development of a so-caUed "master race." Admittedly, these disturbing implications neither prove nor disprove the determinists' claims. Nevertheless, assuming that neither free will nor determinism has been proven to be the correct position, the former is to be preferred by any humanist and in any democratic society.

In sum, despite the fact that we all experience occasional feelings of being trapped and having no choice, the statement is fundamentally correct. I would concede that science might eventually disprove the very notion of free will. However, until that time I'll trust my strong intuition that free will is an essential part of our being as humans and, accordingly, that humans are responsible for their own choices and actions.

1. "Only through mistakes can there be discovery or progress."

The speaker contends that discovery and progress are made only through mistakes. I strongly agree with this contention, for two reasons. First, it accords with our personal experiences. Secondly, history informs us that on a societal level trial-and-error provides the very foundation for discovery and true progress, in all realms of human endeavor.

To begin with, the contention accords with our everyday experience as humans from early childhood through adulthood. As infants we learn how to walk by falling down again and again. As adolescents we discover our social niche, and develop self-confidence and assertiveness, only by way of the sorts of awkward social encounters that are part-and-parcel of adolescence. Through failed relationships not only do we discover who we are and are not compatible with, we also discover ourselves in the process. And, most of us find the career path that suits us only through trying jobs that don’t.

This same principle also applies on a societal level. Consider, for example, how we progress in our scientific knowledge. Our scientific method is essentially a call for progress through trial-and-error. Any new theory must be tested by empirical observation, and must withstand rigorous scientific scrutiny. Moreover, the history of theoretical science is essentially a history of trial-and-error. One modern example involves two contrary theories of physics: wave theory and quantum theory. During the last quarter-century scientists have been struggling to disprove one or the other--or to reconcile them. As it turns out, a new so-called "string" theory shows that the quantum and wave theories are mistakes in the sense that each one is inadequate to explain the behavior of all matter; yet both so-called "mistakes" were necessary for physics to advance, or progress, to this newer theory.

The value of trial-and-error is not limited to the sciences. In government and politics, progress usually comes about through dissension and challenge--that is, when people point out the mistakes of those in power. In fact, without our challenging the mistaken notions of established institutions, political oppression and tyranny would go unchecked. Similarly, in the fields of civil and criminal law, jurists and legislators who uphold and defend legal precedent must face continual opposition from those who question the fairness and relevance of current laws. This ongoing challenge is critical to the vitality and relevance of our system of laws.

In sum, the speaker correctly asserts that it is through mistakes that discovery and true progress are made. Indeed, our personal growth as individuals, as well as advances in science, government, and law, depends on making mistakes.

1. "What society has thought to be its greatest social, political, and individual achievements have often resulted in the greatest discontent."

I strongly agree that great achievements often lead to great discontent. In fact, I would assert more specifically that great individual achievements can cause discontent for the individual achiever or for the society impacted by the achievement, or both. Never the- less, it is important to acknowledge that whether a great achievement causes great dis- content can depend on one's personal perspective, as well as the perspective of time.

With respect to individual achievements, great achievers are by nature ambitious people and therefore tend to be dissatisfied and discontent with their accomplishments—no matter how great. Great athletes are compelled to try to better their record-breaking per- formances; great artists and musicians typically daim that their greatest work will be their next one--a sign of personal discontent. And many child prot6g6s, especially those who achieve some measure of fame early in life, later suffer psychological discontent for having "peaked" so early. Perhaps the paradigmatic modern example of a great achiever's discontent was Einstein, whose theoretical breakthroughs in physics only raised new theoretical conundrums which Einstein himself recognized and spent the last twenty years of his life struggling unsuccessfully to solve.

Individual achievements can often result in discontent on a societal level. The great

achievement of the individual scientists responsible for the success of the Manhattan Project resulted in worldwide anxiety over the threat of nuclear annihilation--a form of discontent with which the world's denizens will forever be forced to cope. Even individual achievements that at first glance would appear to have benefited society turn out to be causes of great discontent. Consider the invention of the automobile, along with the innovations in manufacturing processes and materials that made mass production possible. As a result we have become a

society enslaved to our cars, relying on them as crutches not only for transportation but also for affording us a false sense of socioeconomic status. Moreover, the development of assembly-line manufacturing has served to alienate workers from their work, which many psychologists agree causes a great deal of personal discontent.

Turning from individual achievements to societal, induding political, achievements, the extent to which great achievements have caused great discontent often depends on one's perspective. Consider, for example, America's spirit of Manifest Destiny during the 19th Century, or British Imperialism over the span of several centuries. From the perspective of an Imperialist, conquering other lands and peoples might be viewed as an unqualified success. However, from the viewpoint of the indigenous peoples who suffer at the hands of Imperialists, these so-called "achievements" are the source of widespread oppression and misery, and in

turn discontent, to which any observant Native American or South African native could attest.

The extent to which great socio-political achievements have caused great discontent also depends on the perspective of time. For example, F.D.R.'s New Deal was and still is considered by many to be one of the greatest social achievements of the 20th Century. However, we are just now beginning to realize that the social-security system that was an integral part of F.D.R.'s social program will soon result in great discontent among those workers currently paying into the system but unlikely to see any benefits after they retire.

To sum up, I agree that great achievements, both individual and socio-political, often result in great discontent. Moreover, great individual achievements can result in discontent for both the individual achiever and the society impacted by the achievement. Nevertheless, in measuring the extent of discontent, we must account for varying personal and political perspectives as well as different time perspectives.

1. "Contemporary art (painting, music, literature, etc.) is absent from the lives of most people,

since it is primarily created only for the enjoyment of other artists. Art should instead be

created purely for popular understanding and appreciation."

This statement asserts that art, not the art critic, provides something of lasting value to society. I strongly agree with the statement. Although the critic can help us understand and appreciate art, more often than not, critique is either counterproductive to achieving the objective of art or altogether irrelevant to that objective.

To support the statement the speaker might point out the three ostensible functions of the art

critic. First, critics can help us understand and interpret art; a critic who is familiar with a particular artist and his or her works might have certain insights about those works that the layperson would not. Secondly, a critic's evaluation of an art work serves as a filter, which helps us determine which art is worth our time and attention. For example, a new novel by a best-selling author might nevertheless be an uninspired effort, and if the critic can call our attention to this fact we gain time to seek out more worthwhile literature to read. Thirdly, a critic can provide feedback for artists; and constructive criticism, if taken to heart, can result in better

work.

However, reflecting on these three functions makes clear that the art critic actually offers very little to society. The first function is better accomplished by docents and teachers, who are more able to enhance a layperson's appreciation an understanding of art by providing an

objective, educated interpretation of it. Besides, true appreciation of art occurs at the moment we encounter art; it is the emotional, even visceral impact that art has on our senses, spirits, and souls that is the real value of art. A critic can actually provide a disservice by distracting us from that experience.

The critic's second function that of evaluator who filters out bad art from the worthwhile is that we must be very wary of. History supports this caution. In the role of judge, critics have failed us repeatedly. Consider, for example, Voltaire's rejection of Shakespeare as barbaric because he did not conform to neo-classical principles of unity. Or, consider the complete dismissal of Beethoven's music by the esteemed critics of his 6me. The art critic's judgment is limited by the narrow confines of old and established parameters for evaluation. Moreover, critical judgment is often misguided by the ego; thus its value is questionable in any event.

I turn finally to the critic's third function: to provide useful feedback to artists. The value of this function is especially suspect. Any artist, or anyone who has studied art, would agree that true art is the product of the artist's authentic passion, a manifestation of the artist's unique creative impulse, and a creation of the artist's spirit. If art were shaped by the concern for integrating feedback from ali criticism, it would become a viable craft, but at the same time would cease to be art.

In sum, none of the ostensible functions of the critic are of much value at all, let alone of lasting value, to society. On the other hand, the artist, through works of art, provides an invaluable and unique mirror of the culture of the time during which the work was produced a mirror for the artist's contemporaries and for future generations to gaze into for insight and appreciation of history. The art critic in a subordinate role, more often than not, does a disservice to society by obscuring this mirror.

1. "Most people recognize the benefits of individuality, but the fact is that personal economic success requires conformity."

Personal economic success might be due either to one's investment strategy or to one's work or career. With respect to the former, non-conformists with enough risk tolerance and patience invariably achieve more success than conformists. With respect to the latter, while non-conformists are more likely to succeed in newer industries where markets and technology are in constant flux, conformists are more likely to succeed in traditional service industries ensconced in systems and regulations.

Regarding the sort of economic success that results from investing one's wealth, the principles of investing dictate that those who seek risky investments in areas that are out of favor with the majority of investors ultimately reap higher returns than those who follow the crowd. It is conformists who invest, along with most other investors, in areas that are currently the most profitable, and popular. However, popular investments tend to be overpriced, and in the long run their values will come down to reasonable levels. As a result, given enough time conformists tend to reap lower rewards from their investments than nonconformists do.

Turning to the sort of economic success that one achieves by way of one's work, neither conformists nor non-conformists necessarily achieve greater success than the other group. In consumer-driven industries, where innovation, product differentiation and creativity are crucial to lasting success, non-conformists who take unique approaches tend to recognize emerging trends and to rise above their peers. For example, Ted Tumer's departure from the traditional format of the other television networks, and the responsiveness of Amazon's Jeff Bezos to burgeoning Internet commerce, propelled these two non-conformists into leadership positions

in their industries. Particularly in technology industries, where there are no conventional practices or ways of thinking to begin with, people who cling to last year's paradigm, or to the status quo in general, are soon left behind by coworkers and competing firms.

However, in traditional service industries--such as fnance, accounting, insurance, legal services, and health care--personal economic success comes not to non-conformists but rather to those who can work most effectively within the constraints of established practices, policies and regulations. Of course, a clever idea for structuring a deal, or a creative legal maneuver, might play a role in winning smaller battles along the way. But such tac-tics are those of conformists who are playing by the same ground rules as their peers; winners are just

better at the game.

In conclusion, non-conformists with sufficient risk tolerance and patience are invariably the most successful investors in the long run. When it comes to careers, however, while non-conformists tend to be more successful in technology- and consumer-driven industries, traditionalists are the winners in system-driven industries pervaded by policy, regulation, and bureaucracy.

1. "The well-being of a society is enhanced when many of its people question authority."

The speaker asserts that when many people question authority society is better off. While I contend that certain forms of disobedience can be harmful to any society, I agree with the speaker otherwise. In fact, I would go further by contending that society's well-being depend on challenges to authority, and that when it comes to political and legal authority, these challenges must come from many people.

Admittedly, when many people question authority some societal harm might result, even if a social cause is worthy. Mass resistance to authority can escalate to violent protest and rioting, during which innocent people are hurt and their property damaged and destroyed. The fallout from the 1992 Los Angeles riots aptly illustrates this point. The "authority" which the rioters sought to challenge was that of the legal justice system which acquitted police officers in the beating of Rodney King. The means of challenging that authority amounted to flagrant disregard for criminal law on a mass scale--by way of looting, arson, and even deadly assault.

This violent challenge to authority resulted in a financially crippled community and, more broadly, a turning back of the clock with respect to racial tensions across America.

While violence is rarely justifiable as a means of questioning authority, peaceful challenges to political and legal authority, by many people, are not only justifiable but actually necessary when it comes to enhancing and even preserving society's well-being. In particular, progress in human rights depends on popular dissension. It is not enough for a charismatic visionary like Gandhi or King to call for change in the name of justice and humanity; they must have the support of many people in order to effect change. Similarly, in a democracy citizens must respect timeless legal doctrines and principles, yet at the same time question the fairness and relevance of current laws. Otherwise, our laws would not evolve to reflect changing societal

values. It is not enough for a handful of legislators to challenge the legal status quo; ultimately it is up to the electorate at large to call for change when change is needed for the well-being of society.

Questioning authority is also essential for advances in the sciences. Passive acceptance of prevailing principles quells innovation, invention, and discovery, all of which clearly benefit any society. In fact, the very notion of scientific progress is predicated on rigorous scientific inquiry--in other words, questioning of authority. History is replete with scientific discoveries that posed challenges to political, religious, and scientific authority. For example, the theories of a sun-centered solar system, of humankind's evolution from other life forms, and of the reactivity of time and space, clearly flew in the face of "authoritative" scientific as well as

religious doctrine of their time. Moreover, when it comes to science a successful challenge to authority need not come from a large number of people. The key contributions of a few individuals---like Copernicus, Kepler, Newton, Darwin, Einstein, and Hawking---often suffice.

Similarly, in the arts, people must challenge established styles and forms rather than imitate them; otherwise, no geminal new art would ever emerge, and society would be worse off. And again, it is not necessary that a large number of people pose such challenges; a few key individuals can have a profound impact. For instance, modern ballet owes much of what is new and exciting to George Ballanchine, who by way of his improvisational techniques posed a successful challenge to established traditions. And modern architecture arguably owes its

existence to the founders of Germany's Bauhaus School of Architecture, which challenged certain "authoritative" notions about the proper objective, and resulting design, of public buildings.

To sum in general I agree that when many people question authority the well-being of society is enhanced. Indeed, advances in government and law depend on challenges to the status quo by many people. Nevertheless, to ensure a net benefit rather than harm, the means of such challenges must be peaceful ones.

1. "It is the artist, not the critic,\* who gives society something of lasting value." \*a person who evaluates works of art, such as novels, films, music, paintings, etc.

This statement asserts that art, not the art critic, provides something of lasting value to society. I strongly agree with the statement. Although the critic can help us understand and appreciate art, more often than not, critique is either counterproductive to achieving the objective of art or altogether irrelevant to that objective.

To support the statement the speaker might point out the three ostensible functions of the art critic. First, critics can help us understand and interpret art; a critic who is familiar with a particular artist and his or her works might have certain insights about those works that the layperson would not. Secondly, a critic's evaluation of an art work serves as a filter, which helps us determine which art is worth our time and attention. For example, a new novel by a best-selling author might nevertheless be an uninspired effort, and if the critic can call our attention to this fact we gain time to seek out more worthwhile literature to read. Thirdly, a critic can provide feedback for artists; and constructive criticism, if taken to heart, can result in better work.

However, reflecting on these three functions makes clear that the art critic actually offers very little to society. The first function is better accomplished by docents and teachers, who are more able to enhance a layperson's appreciation and understanding of art by providing an objective, educated interpretation of it. Besides, true appreciation of art occurs at the moment we encounter art; it is the emotional, even visceral impact that art has on our senses, spirits, and souls that is the real value of art. A critic can actually provide a disservice by distracting us

from that experience.

The critic's second function that of evaluator who filters out bad art from the worthwhile is one that we must be very wary of. History supports this caution. In the role of judge, critics have failed us repeatedly. Consider, for example, Voltaire's rejection of Shakespeare as barbaric because he did not conform to neo-classical principles of unity. Or, consider the complete dismissal of Beethoven's music by the esteemed critics of his 6me. The art critic's judgment is limited by the narrow confines of old and established parameters for evaluation. Moreover, critical judgment is often misguided by the ego; thus its value is questionable in any event.

I turn finally to the critic's third function: to provide useful feedback to artists. The value of this function is especially suspect. Any artist, or anyone who has studied art, would agree that true art is the product of the artist's authentic passion, a manifestation of the artist's unique creative impulse, and a creation of the artist's spirit. If art were shaped by the concern for integrating feedback from ali criticism, it would become a viable craft, but at the same time would cease to be art.

In sum, none of the ostensible functions of the critic are of much value at all, let alone of lasting value, to society. On the other hand, the artist, through works of art, provides an invaluable and unique mirror of the culture of the time during which the work was produced a mirror for the artist's contemporaries and for future generations to gaze into for insight and appreciation of history. The art critic in a subordinate role, more often than not, does a disservice to society by obscuring this mirror.

1. "People who are the most deeply committed to an idea or policy are the most critical of it."

The speaker claims that people who are the most fmnly committed to an idea or policy are the same people who are most critical of that idea or policy. While I find this claim paradoxical on its face, the paradox is explainable, and the explanation is well supported empirically. Nevertheless, the claim is an unfair generalization in that it fails to account for other empirical evidence serving to discredit it.

A threshold problem with the speaker's claim is that its internal logic is questionable. At first impression it would seem that firm commitment to an idea or policy necessarily requires the utmost confidence in it, and yet one cannot have a great deal of confidence in an idea or policy if one recognizes its flaws, drawbacks, or other problems. Thus commitment and criticism would seem to be mutually exclusive. But are they? One possible explanation for the paradox is that individuals most fmnly committed to an idea or policy are often the same people who

are most knowledgeable on the subject, and therefore are in the best position to understand and appreciate the problems with the idea or policy.

Lending credence to this explanation for the paradoxical nature of the speaker's claim are the many historical cases of uneasy marriages between commitment to and criticism of the same idea or policy. For example, Edward Teller, the so-called "father of the atom bomb," was firmly committed to America's policy of gaining military superiority over the Japanese and the Germans; yet at the same time he attempted fervently to dissuade the U.S. military from employing his technology for destruction, while becoming the most visible advocate for various peaceful and productive applications of atomic energy. Another example is George Washington, who was quoted as saying that all the world's denizens "should abhor war wherever they may find it." Yet this was the same military general who played a key role in the Revolutionary War between Britain and the States. A third example was Einstein, who while committed to the mathematical soundness of his theories about relativity could not reconcile them with the equally compelling quantum theory which emerged later in Einstein's life. In fact, Einstein spent the last twenty years of his life criticizing his own theories and struggling to determine how to reconcile them with newer theories.

In the face of historical examples supporting the speaker's claim are innumerable influential individuals who were zealously committed to certain ideas and policies but who were not critical of them, at least not outwardly. Could anyone honestly claim, for instance, that Elizabeth Stanton and Susan B. Anthony, who in the late 19th Century paved the way for the women's rights movement by way of their fervent advocacy, were at the same time highly critical or suspicious of the notion that women deserve equal rights under the law? Also, would it not be absurd to claim that Mahatma Gandhi and Martin Luther King, history's two leading

advocates of civil disobedience as a means to social reform, had serious doubts about the ideals to which they were so demonstrably committed? Finally, consider the two ideologues and revolutionaries Lenin and Mussolini. Is it even plausible that their demonstrated commitment to their own Communist and Fascist policies, respectively, belied some deep personal suspicion about the merits of these policies? To my knowledge no private writing of any of these historical figures lends any support to the claim that these leaders were particularly critical of their own ideas or policies.

To sum up, while at first glance a deep commitment to and incisive criticism of the same idea or policy would seem mutually exclusive, it appears they are not. Thus the speaker's claim has some merit. Nevertheless, for every historical case supporting the speaker's claim are many others serving to refute it. In the final analysis, then, the correctness of the speaker's assertion must be determined on a case-by-case basis.

1. "Tradition and modernization are incompatible. One must choose between them."

Must we choose between tradition and modernization, as the speaker contends.; I agree that in certain cases the two are mutually exclusive. For the most part, however, modernization does not reject tradition; in fact, in many cases the former can and does embrace the latter.

In the first place, oftentimes so-caUed "modernization" is actually an extension or new iteration of tradition, or a variation on it. This is especially true in language and in law. The modern English language, in spite of its many words that are unique to modern Western culture, is derived from, and builds upon, a variety of linguistic traditions--and ultimately from the ancient Greek and Latin languages. Were we to insist on rejecting traditional in favor of purely modern language, we would have essentially nothing to say. Perhaps an even more striking marriage of modernization and tradition is our system of laws in the U.S., which is deeply rooted in English common-law principles of equity and justice. Our system requires that new, so-called "modern" laws be consistent with, and in fact build upon, those principles.

In other areas modernization departs from tradition in some respects, while embracing it in others. In the visual arts, for example, "modern" designs, forms, and elements are based on certain timeless aesthetic ideals--such as symmetry, balance, and harmony. Modern art that violates these principles might hold ephemeral appeal due to its novelty and brashness, but its appeal lacks staying power. An even better example from the arts is modern rock-and-roll music, which upon first listening might seem to bear no resemblance to classical music traditions. Yet, both genres rely on the same twelve-note scale, the same notions of what

harmonies are pleasing to the ear, the same forms, the same rhythmic meters, and even many of the same melodies.

I concede that, in certain instances, tradition must yield entirely to the utilitarian needs of modern life. This is true especially when it comes to architectural traditions and the value of historic and archeological artifacts. A building of great historic value might be located in the only place available to a hospital desperately needing additional parking area. An old school that is a prime example of a certain architectural style might be so structurally unsafe that the only practicable way to remedy the problem would be to raze the building to make way for a modern, structurally sound one. And when it comes to bridges whose structural integrity is

paramount to public safety, modernization often requires no less than replacement of the bridge altogether. However, in other such cases architecturally appropriate retrofits can solve structural problems without sacrificing history and tradition, and alternative locations for new buildings and bridges can be found in order to preserve tradition associated with our historic structures. Thus, even in architecture, tradition and modernization are not necessarily mutually exclusive options.

To sum up, in no area of human endeavor need modernization supplant, reject, or otherwise exclude tradition. In fact, in our modern structures, architecture and other art, and especially languages and law, tradition is embraced, not shunned.

1. "Because of television and worldwide computer connections, people can now become familiar with a great many places that they have never visited. As a result, tourism will soon become obsolete."

The speaker asserts that television and computer connectivity will soon render tourism obsolete. I agree that these technologies might eventually serve to reduce travel for certain purposes other than tourism. However, I strongly disagree that tourism will become obsolete, or that it will even decline, as a result.

As for the claim that television will render tourism obsolete, we already have sufficient empirical evidence that this will simply not happen. For nearly a half-century we have been peering through our television sets at other countries and cultures; yet tourism is as popular today as ever. In fact, tourism has been increasing sharply during the last decade, which has seen the advent of television channels catering exclusively to our interest in other cultures and countries. The more reasonable conclusion is that television has actually served to spark our interest in visiting other places.

It is somewhat more tempting to accept the speaker's further claim that computer

connectivity will render tourism obsolete. However, the speaker unfairly assumes that the purpose of tourism is simply to obtain information about other people and places. Were this the case, I would entirely agree that the current information explosion spells the demise of tourism. But, tourism is not primarily about gathering information. Instead, it is about sensory experience--seeing and heating firsthand, even touching and smelling. Could anyone honestly claim that seeing a picture or even an enhanced 3-D movie of the Swiss Alps serves as a suitable substitute for riding a touting motorcycle along narrow roads traversing those mountains? Surely not. The physical world is laden with a host of such delights that we humans are compelled to experience firsthand as tourists.

Moreover, in my view tourism will continue to thrive for the same reason that people still go out for dinner or to the movies: we all need to "get away" from our familiar routines and surroundings from time to 6me. Will computer connectivity alter this basic need? Certainly not. In short, tourism is a manifestation of a basic human need for variety and for exploration. This basic need is why humans have come to inhabit every corner of the Earth, and will just as surely inhabit other planets of the solar system.

In fact, computer connectivity might actually provide a boon for tourism. The costs of travel and accommodations are likely to decrease due to Internet price competition. Even more significantly, to the extent that the Internet enhances communication among the world's denizens, our level of comfort and trust when it comes to dealing with people from other cultures will only increase. As a result, many people who previously would not have felt safe or secure traveling to strange lands will soon venture abroad with a new sense of confidence.

Admittedly, travel for purposes other than tourism might eventually decline, as the business world becomes increasingly dependent on the Internet. Products that can be reduced to digital "bits and bites" can now be shipped anywhere in the world without any human travel. And the volume of business-related trips will surely decline in the future, as teleconferencing becomes more readily available. To the extent that business travelers "play tourist" during business trips, tourism will decline as a result. Yet it would be absurd to claim that these phenomena alone will

render tourism obsolete.

In sum, while business travel might decline as a result of global connectivity, tourism is likely to increase as a result. Global connectivity, especially the Internet, can only pique our curiosity about other peoples, cultures, and places. Tourism helps satisfy that curiosity, as well as satisfying a fundamental human need to experience new things first-hand and to explore the world.

1. "High-speed electronic communications media, such as electronic mail and television, tend to prevent meaningful and thoughtful communication."

Do high-speed means of communication, particularly television and computers, tend to prevent meaningful and thoughtful communication, as the speaker suggests? Although ample empirical evidence suggests so with respect to television, the answer is far less dear when it comes to communication via computers.

Few would argue that since its inception broadcast television has greatly enhanced

communication to the masses. The circulation of even the most widely read newspapers pales compared to the number of viewers of popular television news programs. Yet traditional television is a one-way communications medium, affording viewers no opportunity to engage those so-called "talking heads" in dialogue or respond. Of course, there is nothing inherent about television that prevents us from meaningful and thoughtful communication with each

other. In fact, in television's early days it was a fairly common occurrence for a family to gather around the television together for their favorite show, then afterwards discuss among themselves what they had seen and heard. Yet over time television has proven itself to serve primarily as a baby-sitter for busy parents, and as an means of escape for those who wish to avoid communicating with the people around them. Moreover, in the pursuit of profit, network executives have determined over time that the most effective uses of the medium are for

fast-paced entertainment and advertising--whose messages are neither thoughtful nor meaningful.

Do computers offer greater promise for thoughtful and reflective communication than television? Emphatically, yes. After all, media such as email and the Web are interactive by design. And the opportunity for two-way communication enhances the chances of meaningful and thoughtful communication. Yet their potential begs the question: Do these media in fact serve those ends? It is tempting to hasten that the answer is "yes" with respect to email; after are, we've all heard stories about how email has facilitated reunions of families and old friends, and new long-distance friendships and romances. Moreover, it would seem that two-way

written communication requires far more thought and reflection than verbal conversation. Nevertheless, email is often used to avoid face-to-face encounters, and in practice is used as a means of distributing quick memos. Thus on balance it appears that email serves as an impediment, not an aide, to thoughtful and reflective communication. With respect to Web-based communication, the myriad of educational sites, interactive and otherwise, is strong evidence that the Web tends to enhance, rather than prevent, meaningful communication. Distance learning courses made possible by the Web lend further credence to this assertion. Nonetheless, by all accounts it appears that the Web will ultimately devolve into

a mass medium for entertainment and for e-commerce, just like traditional television. Meaningful personal interactivity is already yielding to advertising, requests for product information, buy-seU orders, and titillating adult-oriented content.

Thus, on balance these high-speed electronic media do indeed tend to prevent rather than facilitate meaningful and thoughtful communication. In the final analysis, any mass medium carries the potential for uplifting us, enlightening us, and helping us to communicate with and understand one another. However, by all accounts, television has not fulfilled that potential; and whether the Web will serve us any better is ultimately up to us as a society.

1. "No amount of information can eliminate prejudice because prejudice is rooted in emotion, not reason."

The speaker actually raises two distinct issues here: (1) whether information can eliminate, or at least help reduce, prejudice; and (2) if not, whether this is because prejudice is rooted in emotion rather than reason. Despite the evidence to the contrary, I fundamentally agree with the speaker's essential claim that prejudice is here to stay because it is firmly rooted in emotion rather than reason.

Regarding the first issue, it would appear at first glance that prejudice is declining as a result of our becoming a more enlightened, or better informed, society. During the past quarter-decade, more so than any other period in human history, various voices of reason have been informing us that racial, sexual, and other forms of prejudice are unfounded in reason, morally wrong, and harmful to any society. During the 1960s and 1970s such information came from civil-rights and feminist activists; more recently the primary source of this information has been mainstream media, which now affirmatively touts the rights of various racial groups, women, and homosexuals. Moreover, increasing mobility and cultural

awareness surely serve to inform people the world over that we are all essentially alike.

It would seem that, as a result of this flood of information, we would be making clear progress toward eliminating prejudice. However, much of this so-called progress is forced upon us legislatively--in the form of anti-discrimination laws in the areas of employment, housing, and education, which now protect all significant minority groups. Without these laws, would we voluntarily refrain from the discriminatory behavior and other forms of prejudice that the laws prevent? Perhaps not.

Moreover, signs of prejudice are all around us today. Extreme factions still rally around bigoted demagogues; the number of "hate crimes" is increasing alarmingly; and the cultural gap between white Americans and African-Americans seems to be widening as the level of mutual distrust heightens. Besides, what appears to be respect for one another's differences may in fact be an increasing global homogeneity--that is, we are becoming more and more alike. In short, on a societal level an apparent decline of prejudice is actually legislated morality and increasing homogeneity. Accordingly, I find the speaker's threshold assertion--that no

amount of information can eliminate prejudice-- compelling indeed.

The second issue that the statement raises is whether prejudice is learned or instinctive. If it were learned, then it would seem that by obtaining certain information, or by purging one's mind of certain dis-information, one could learn to not be prejudiced. Despite popular notions that this is possible, I have my doubts because these are age-old theories but we see little evidence that prejudice is on the wane. Thus it seems that the root of prejudice lies more in an instinctive, almost primal, sense of fear than in the sort of distrust that is learned and can

therefore be "unlearned." Accordingly, I also find the speaker's second assertion—that prejudice is rooted in emotion---compelling as well.

In sum, despite a deluge of information debunking our false notions about people who are different than us, as a society it appears we have not reversed our inclination toward prejudice. Therefore, I find convincing the speaker's claim that prejudice is rooted in the sort of emotion that reason cannot override.

1. "The only responsibility of corporate executives, provided they stay within the law, is to make as much money as possible for their companies."

Should the only responsibility of a business executive be to maximize business profits, within the bounds of the law? In several respects this position has considerable merit; yet it ignore certain compelling arguments for imposing on businesses additional obligations to the society in which they operate.

On the one hand are two convincing arguments that profit maximization within the bounds of the law should be a business executive's sole responsibility. First, imposing on businesses additional duties to the society in which they operate can, paradoxically, harm that society. Compliance with higher ethical standards than the law requires--m such areas as environmental impact and workplace conditions--adds to business expenses and lower immediate profits. In turn, lower profits can prevent the socially conscious business from creating more jobs, and from keeping its prices low and the quality of its products and services high. Thus if businesses go further than their legal duties in serving their communities the end result might be a net disservice to those communities.

Secondly, by affirming that profit maximization within legal bounds is the most ethical behavior possible for business, we encourage private enterprise, and more individuals enter the marketplace in the quest of profits. The inevitable result of increased competition is lower prices and better products, both of which serve the interests of consumers. Moreover, since maximizing profits enhances the wealth of a company's stakeholders, broad participation in private enterprise raises the wealth of a nation, expands its economy, and raises its overall standard of living and quality of life.

On the other hand are three compelling arguments for holding business executives to certain responsibilities m addition to profit maximization and to compliance with the letter of the law. First, a growing percentage of businesses are related to technology, and haws often lag behind advances in technology. As a result, new technology-based products and services might pose potential harm to consumers even though they conform to current laws. For example, Internet commerce is still largely unregulated because our lawmakers are slow to react to the paradigm shift from brick-and-mortar commerce to e-commerce. As a result, unethical marketing practices, privacy invasion, and violations of intellectual-property rights are going unchecked for lack of regulations that would clearly prohibit them.

Secondly, since a nation's laws do not extend beyond its borders, compliance with those laws does not prevent a business from doing harm elsewhere. Consider, for example, the trend among U.S. businesses in exploiting workers in countries where labor laws are virtuaUy non-existent in order to avoid the costs of complying with U.S. labor laws.

Thirdly, a philosophical argument can be made that every business enters into an implied social contract with the community that permits it to do business, and that this social contract, although not legally enforceable, places a moral duty on the business to refrain from acting in ways that will harm that community.

In sum, I agree with the statement insofar as in seeking to maximize profits a business serves not only itself but also its employees, customers, and the overall economy. Yet today's rapidly changing business environment and increasing globalization call for certain affirmative obligations beyond the pursuit of profit and mere compliance with enforceable rules and regulations. Moreover, in the final analysis any business is indebted to the society in which it operates for its very existence, and thus has a moral duty, regardless of any legal obligations, to pay that debt.

1. "Students should bring a certain skepticism to whatever they study. They should question what they are taught instead of accepting it passively."

The speaker contends that students should be skeptical in their studies, and should not accept passively whatever they are taught. In my view, although undue skepticism might be counterproductive for a young child's education, I strongly agree with the speaker otherwise. Ifwe were all to accept on blind faith all that we are taught, our society would never progress or evolve.

Skepticism is perhaps most important in the physical sciences. Passive acceptance or prevailing principles quells innovation, invention, and discovery. In fact, the very notion of scientific progress is predicated on rigorous scientific inquiry--in other words, skepticism. And history is replete with examples of students of science who challenged what they had been taught, thereby paving the way for scientific progress. For example, in challenging the notion that the Earth was in a fixed position at the center of the universe, Copernicus paved the way for the corroborating observations of Galileo a century later, and ultimately for Newton's principles of gravity upon which all modern science is based. The staggering cumulative impact of Copernicus' rejection of what he had been taught is proof enough of the value of skepticism.

The value of skepticism is not limited to the physical sciences, of course. In the fields of sociology and political science, students must think critically about the assumptions underlying the status quo; otherwise, oppression, tyranny and prejudice go unchecked. Similarly, while students of the law must learn to appreciate timeless legal doctrines and principles, they must continually question the fairness and relevance of current laws. Otherwise, our laws would not evolve to reflect changing societal values and to address new legal issues arising from our ever-evolving technologies.

Even in the arts, students must challenge established styles and forms rather than learn to imitate them; otherwise, no genuinely new art would ever emerge. Bee-bop musicians such as Charlie Parker demonstrated through their wildly innovative harmonies and melodies their skepticism about established rules for harmony and melody. In the area of dance BaUanchine showed by way of his improvisational techniques his skepticism about established rules for choreography. And Germany's Bauhaus School of Architecture, to which modern architecture owes its existence, was rooted in skepticism about the proper objective, and resulting design, of public buildings.

Admittedly, undue skepticism might be counterproductive in educating young children. I am not an expert in developmental psychology; yet observation and common sense informs me that youngsters must first develop a foundation of experiential knowledge before they can begin to think critically about what they are learning. Even so, in my view no student, no matter how young, should be discouraged from asking "Why?" and "Why not?"

To sum up, skepticism is the very stuff that progress is made of, whether it be in science, sociology, politics, the law, or the arts. Therefore, skepticism should be encouraged at all but the most basic levels of education.

1. "Both parents and communities must be involved in the local schools. Education is too important to leave solely to a group of professional educators."

Should parents and communities participate in local education because education is too important to leave to professional educators, as the speaker asserts? It might be tempting to agree with the speaker, based on a parent's legal authority over, familiarity with, and interest in his or her own children. However, a far more compelling argument can be made that, except for major decisions such as choice of school, a child's education is best left to professional educators.

Communities of parents concerned about their children's education rely on three arguments for active parental and community participation in that process. The first argument, and the one expressed most often and vociferously, is that parents hold the ultimately legal authority to make key decisions about what and how their own children learn including choice of curriculum and text books, pace and schedule for learning, and the extent to which their child should learn alongside other children. The second argument is that only a parent can truly know the unique needs of a child including what educational choices are best suited for the child. The third argument is that parents are more motivated--by pride and ego--than any other

person to take whatever measures are needed to ensure their children receive the best possible education.

Careful examination of these three arguments, however, reveals that they are specious at best. As for the first one, were we to allow parents the right to make all major decisions regarding the education of their children, many children would go with little or no education. In a perfect world parents would always make their children's education one of their highest priorities. Yet, in fact many parents do not. As for the second argument, parents are not necessarily best equipped to know what is best for their child when it comes to education.

Although most parents might think they are sufficiently expert by virtue of having gone through formal education themselves, parents lack the specialized training to appreciate what pedagogical methods are most effective, what constitutes a balanced education, how developmental psychology affects a child's capacity for learning at different levels and at different stages of childhood. Professional educators, by virtue of their specialized training in these areas, are far better able to ensure that a child receives a balanced, properly paced education.

There are two additional compelling arguments against the speaker's contention. First, parents are too subjective to always know what is truly best for their children. For example, many parents try to overcome their own shortcomings and failed self-expectations vicariously through their children's accomplishments. Most of us have known parents who push their child to excel in certain areas--to the emotional and psychological detriment of the child. Secondly, if too many parties become involved in making decisions about day-to-day instruction, the end result might be infighting, legal battles, boycotts, and other protests, all of which impede the educational process; and the ultimate victims are the children themselves. Finally, in many

jurisdictions parents now have the option of schooling their children at home, as long as certain state requirements are met. In my observation, home schooling allows parents who prefer it great control over a child's education, while allowing the professional educators to discharge their responsibilities as effectively as possible--unfettered by gadfly parents who constantly interfere and intervene.

In sum, while parents might seem better able and better motivated to make key decisions about their child's education, in many cases they are not. With the possible exceptions of responsible home-schoolers, a child's intellectual, social, and psychological development is at risk when communities of parents dominate the decision-making process involving education.

1. "There is no such thing as purely objective observation. All observation is subjective; it is always guided by the observer's expectations or desires."

The speaker claims that all observation is subjective--colored by desire and expectation. While it would be tempting to concede that we all see things differently, careful scrutiny of the speaker's claim reveals that it confuses observation with interpretation. In fact, in the end the speaker's claim relies entirely on the further claim that there is no such thing as truth and that

we cannot truly know anything. While this notion might appeal to certain existentialists and epistemologists, it runs against the grain of all scientific discovery and knowledge gained over the last 500 years.

It would be tempting to afford the speaker's daim greater merit than it deserves. After all, our everyday experience as humans informs us that we often disagree about what we observe around us. We've all uttered and heard uttered many times the phase "That's not the way I see it!" Indeed, everyday observations--for example, about whether a football player was out of bounds, or about which car involved in an accident ran the red light--vary depending not only on one's spatial perspective but also on one's expectations or desires. If I'm rooting for one football team, or if the player is well-known for his ability to make great plays while barely

staying in bounds, my desires or expectations might influence what I think I observe. Or if I am driving one of the cars in the accident, or if one car is a souped-up sports car, then my desires or expectations will in all likelihood color my perception of the accident's events.

However, these sorts of subjective "observations" are actually subjective "interpretations'' of what we observe. Visitors to an art museum might disagree about the beauty of a particular work, or even about which color predominates in that work. In a court trial several jurors might view the same videotape evidence many times, yet some jurors might "observe" an incident of police brutality, will others "observe" the appropriate use of force to restrain a dangerous individual. Thus when it comes to making judgments about what we observe and about

remembering what we observe, each person's individual perspective, values, and even emotions help form these judgments and recollections. It is crucial to distinguish between interpretations such as these and observation, which is nothing more than a sensory experience. Given the same spatial perspective and sensory acuity and awareness, it seems to me that our observations would all be essentially in accord--that is, observation can be objective.

Lending credence to my position is Francis Bacon's scientific method, according to which we can know only that which we observe, and thus all truth must be based on empirical observation. This profoundly important principle serves to expose and strip away all subjective interpretation of observation, thereby revealing objective scientific truths. For example, up until Bacon's time the Earth was "observed" to lie at the center of the Universe, in accordance with the prevailing religious notion that man (humankind) was the center of God's creation. Applying Bacon's scientific method Galileo exposed the biased nature of this claim. Similarly, before Einstein time and space were assumed to be linear, in accordance with our

"observation." Einstein's mathematical formulas suggested otherwise, and his theories have been proven empirically to be true. Thus it was our subjective interpretation of time and space that led to our misguided notions about them. Einstein, like history's other most influential scientists, simply refused to accept conventional interpretations of what we all observe.

In sum, the speaker confuses observation with interpretation and recollection. It is how we make sense of what we observe, not observation itself, that is colored by our perspective, expectations, and desires. The gifted individuals who can set aside their subjectivity and delve deeper into empirical evidence, employing Bacon's scientific method, are the ones who reveal that observation not only can be objective but must be objective if we are to embrace the more fundamental notion that knowledge and truth exist.

1. "The human mind will always be superior to machines because machines are only tools of human minds."

This statement actually consists of a series of three related claims: (1) machines are tools of human minds; (2) human minds will always be superior to machines; and (3) it is because machines are human tools that human minds will always be superior to machines. While I concede the fn:st claim, whether I agree with the other two claims depends partly on how one defines "superiority," and partly on how willing one is to humble oneself to the unknown future scenarios.

The statement is clearly accurate insofar as machines are tools of human minds. After all, would any machine even exist unless a human being invented it? Of course not. Moreover, I would be hard-pressed to think of any machine that cannot be described as a tool. Even machines designed to entertain or amuse us--for example, toy robots, cars and video games, and novelty items--are in fact tools, which their inventors and promoters use for engaging in commerce and the business of entertainment and amusement. And, the claim that a machine

can be an end in itself, without purpose or utilitarian function for humans whatsoever, is dubious at best, since I cannot conjure up even a single example of any such machine. Thus when we develop any sort of machine we always have some sort of end in mind a purpose for that machine.

As for the statement's second claim, in certain respects machines are superior. We have devised machines that perform number-crunching and other rote cerebral tasks with greater accuracy and speed than human minds ever could. In fact, it is because we can devise machines that are superior in these respects that we devise them--as our tools--to begin with.

However, if one defines superiority not in terms of competence in per-forming rote tasks but rather in other ways, human minds are superior. Machines have no capacity for independent thought, for making judgments based on normative considerations, or for developing emotional responses to intellectual problems.

Up until now, the notion of human-made machines that develop the ability to think on their own, and to develop so-called "emotional intelligence," has been pure fiction. Besides, even in fiction we humans ultimately prevail over such machines--as in the cases of Frankenstein's monster and Hal, the computer in 2001: A Space Odyssey. Yet it seems presumptuous to assert with confidence that humans will always maintain their superior status over their machines. Recent advances in biotechnology, particularly in the area of human genome research, suggest that within the 21st Century we'll witness machines that can learn to think on their own, to repair and nurture themselves, to experience visceral sensations, and so forth. In other words, machines will soon exhibit the traits to which we humans attribute our own superiority.

In sum, because we devise machines in order that they may serve us, it is fair to

characterize machines as "tools of human minds." And insofar as humans have the unique capacity for independent thought, subjective judgment, and emotional response, it also seems fair to claim superiority over our machines. Besides, should we ever become so clever a species as to devise machines that can truly think for themselves and look out for their own well-being, then query whether these machines of the future would be "machines'' anymore.

1. "The most essential quality of an effective leader is the ability to remain consistently committed to particular principles and objectives. Any leader who is quickly and easily influenced by shifts in popular opinion will accomplish little."

Whether effective leadership requires that a leader consistently follow his or her principles and objectives is a complex issue--one that is tied up in the problem of defining effective leadership in the first place. In addressing the issue it is helpful to consider, in turn, three distinct forms of leadership: business, political, and social-spiritual.

In the business realm, effective leadership is generally defined, at least in our corporate culture, as that which achieves the goal of profit maximization for a firm's shareholders or other owners. Many disagree, however, that profit is the appropriate measure of a business leader's effectiveness. Some detractors claim, for example, that a truly effective business leader must also fulfill additional duties--for example, to do no intentional harm to their customers or to the society in which they operate. Other detractors go further--to impose on business leaders an affirmative obligation to yield to popular will, by protecting consumers, preserving the natural environment, promoting education, and otherwise taking steps to help alleviate society's problems.

Whether our most effective business leaders are the ones who remain consistently committed to maximizing profits or the ones who appease the general populace by contributing to popular social causes depends, of course, on one's own definition of business success. In my observation, as business leaders become subject to closer scrutiny by the media and by social activists, business leaders will maximize profits in the long term only by taking reasonable steps to minimize the social and environmental harm their businesses cause. Thus the two definitions merge, and the statement at issue is ultimately correct.

In the political realm the issue is no less complex. Definitions of effective political leadership are tied up in the means a leader uses to wield his or her power and to obtain that power in the first place. Consider history's most infamous tyrants and despots--such as Genghis Khaan, Stalin, Mao, and Hider. No historian would disagree that these individuals were remarkably effective leaders, and that each one remained consistently committed to his tyrannical objectives and Machiavellian principles. Ironically, it was stubborn commitment to objectives that ultimately defeated all except Khan. Thus in the short term stubborn adherence to one's objectives might serve a political leader's interest in preserving his or her power; yet in the long term such behavior invariably results in that leader's downfall if the principles are not in accord with those of the leader's would-be followers.

Finally, consider social-spiritual leadership. Few would disagree that through their ability to inspire others and lift the human spirit Mahatma Gandhi and Martin Luther King were eminently effective in leading others to effect social change through civil disobedience. It seems to me that this brand of leadership, in order to be effective, inherently requires that the leader remain steadfastly committed to principle. Why? It is commitment to principle that is the basis for this brand of leadership in the first place. For example, had Gandhi advocated civil disobedience yet been persuaded by dose advisors that an occasional violent protest might be effective in gaining India's independence from Britain, no doubt the result would have been immediate forfeiture of that leadership. In short, social-spiritual leaders must not be hypocrites; otherwise, they will lose all credibility and effectiveness.

In sum, strict adherence to principles and objectives is a prerequisite for effective social-spiritual leadership--both in the short and long term. In contrast, political leadership wanes in the long term unless the leader ultimately yields to the will of the followers.

Finally, when it comes to business, leaders must strike a balance between the objective of profit maximization--the traditional measure of effectiveness--and yielding to certain broader obligations that society is now imposing on them.

1. "In this age of intensive media coverage, it is no longer possible for a society to regard any woman or man as a hero. The reputation of anyone who is subjected to media scrutiny will eventually be diminished."

In general, I agree with the assertion that intense media scrutiny nearly always serves to diminish the reputation of society's would-be heroes, for the chief reason that it seems to be the nature of media to look for ways to demean public figures whether heroic or not. Moreover, while in isolated cases our so-called heroes have vindicated themselves and restored their reputations diminished by the media, in my observation these are exceptional cases to the general rule that once slandered, the reputation of any public figure, hero or otherwise, is forever tarnished.

The chief reason why I generally agree with the statement has to do with the forces that motivate the media in the first place. The media generally consist of profit-seeking entities, whose chief objective is to maximize profits for their shareholders or other owners. Moreover, our corporate culture has sanctioned this objective by codifying it as a fiduciary obligation of any corporate executive. For better or worse, in our society media viewers, readers, and listeners find information about the misfortunes and misdeeds of others, especially heroic public figures, far more compelling than information about their virtues and accomplishments.

In short, we love a good scandal. One need look no further than the newsstand, local television news broadcast, or talk show to find ample evidence that this is the case. Thus in order to maximize profits the media are simply giving the public what they demand scrutiny of heroic public figures that serves to diminish their reputation.

A second reason why I fundamentally agree with the statement is that, again for better or worse, intense media scrutiny raises a presumption, at least in the public's collective mind, that their hero is guilty of some sort of character flaw or misdeed. This presumption is understandable. After all, I think any demographic study would show that the vast majority of people relying on mainstream media for their information lack the sort of critical-thinking skills and objectivity to see beyond what the media feeds them, and to render a fair and fully informed judgment about a public figure--heroic or otherwise.

A third reason for my agreement with the statement has to do with the longer-term fallout from intense media scrutiny and the presumption discussed above. Once tarnished as a result of intense media scrutiny, a person's reputation is forever besmirched, regardless of the merits or motives of the scrutinizers. Those who disagree with this seemingly cynical viewpoint might cite cases in which public figures whose reputations had been tarnished were ultimately vindicated. For example, certain celebrities have successfully challenged rag sheets such as

the National Enquirer in the courts, winning large damage awards for libel. Yet in my observation these are exceptional cases; besides, a damage award is no indication that the public has expunged from its collective memory a perception that the fallen hero is guilty of the alleged character flaw or peccadillo.

In sum, the statement is fundamentally correct. As long as the media are motivated by profit, and as long as the public at large demands stories that serve to discredit, diminish, and destroy reputations, the media will continue to harm whichever unfortunate individuals become their cynosures. And the opportunity for vindication is little consolation in a society that seems to thrive, and even feed, on watching heroes being knocked off their pedestals.

1. "Sometimes imagination is a more valuable asset than experience. People who lack experience are free to imagine what is possible and thus can approach a task without constraints of established habits and attitudes."

The speaker asserts that imagination is "sometimes" more valuable than experience

because individuals who lack experience can more freely imagine possibilities for approaching tasks than those entrenched in established habits and attitudes. I fundamentally agree; however, as the speaker implies, it is important not to overstate the comparative value of imagination. Examples from the arts and the sciences aptly illustrate both the speaker's point and my caveat.

One need only observe young children as they go about their daily lives to appreciate the role that pure imagination can play as an aid to accomplishing tasks. Young children, by virtue of their lack of experience, can provide insights and valuable approaches to adult problems.

The speaker's contention also finds ample empirical support in certain forms of artistic accomplishment and scientific invention. History is replete with evidence that our most gifted musical composers are young, relatively inexperienced, individuals. Notables ranging from Mozart to McCartney come immediately to mind. Similarly, the wide-eyed wonder of

inexperience seems to spur scientific innovation. Consider the science fiction writer Jules Veme, who through pure imagination devised highly specific methods and means for transporting humans to outer space. What makes his imaginings so remarkable is that the actual methods and means for space flight, which engineers settled on through the experience of extensive research and trial-and-error, turned out to be essentially the same ones Verne had imagined nearly a century earlier!

Of course, there are many notable exceptions to the rule that imagination unfettered by experience breeds remarkable insights and accomplishments. Duke EUington, perhaps jazz music's most prolific composers, continued to create new compositions until late in life.

Thomas Edition, who registered far more patents with the U.S. patent office than any other person, continued to invent until a very old age. Yet, these are exceptions to the general pattern. Moreover, the later accomplishments of individuals such as these tend to build on earlier ones, and therefore are not as truly inspired as the earlier ones, which sprung from imagination less fettered by life experience.

On the other hand, it is important not to take this assertion about artistic and scientific accomplishment too far. Students of the arts, for instance, must learn theories and techniques, which they then apply to their craft whether music performance, dance, or acting. And, creative writing requires the cognitive ability to understand how language is used and how to communicate ideas. Besides, creative ability is itself partly a function of intellect; that is, creative expression is a marriage of one's cognitive abilities and the expression of one's feelings and emotions. In literature, for example, a rich life experience from which to draw ideas is just as crucial to great achievement as imagination. For example, many critics laud

Mark Twam's autobiography, which he wrote on his death bed, as his most inspired work. And, while the direction and goals of scientific research rely on the imaginations of key individuals, most scientific discoveries and inventions come about not by sudden epiphanies of youthful star-gazers but rather by years and years of trial-and-error in corporate research laboratories.

In sum, imagination can serve as an important catalyst for artistic creativity and scientific invention. Yet, experience can also play a key role; in fact, in literature and in science it can play just as key a role as the sort of imagination that inexperience breeds.

1. "In any given field, the leading voices come from people who are motivated not by conviction but by the desire to present opinions and ideas that differ from those held by the majority."

I agree with the statement insofar as our leading voices tend to come from people whose ideas depart from the status quo. However, I do not agree that what motivates these iconoclasts is a mere desire to be different; in my view they are driven primarily by their personal convictions. Supporting examples abound in all areas of human endeavor—including politics, the arts, and the physical sciences.

When it comes to political power, I would admit that a deep-seated psychological need to be noticed or to be different sometimes lies at the heart of a person's drive to political power and fame. For instance, some astute presidential historians have described Clinton as a man motivated more by a desire to be great than to accomplish great things. And many psychologists attribute Napoleon's and Mussolini's insatiable lust for power to a so-called "short-man complex"--a need to be noticed and admired in spite of one's small physical stature.

Nevertheless, for every leading political voice driven to new ideas by a desire to be noticed or to be different, one can cite many other political leaders clearly driven instead by the courage of their convictions. Iconoclasts Mahatma Gandhi and Martin Luther King, for example, secured prominent places in history by challenging the status quo through civil disobedience. Yet no reasonable person could doubt that it was the conviction of their ideas that drove these two leaders to their respective places.

Turning to the arts, mavericks such as Dali, Picasso and Warhol, who departed from

established rules of composition, ultimately emerge as the leading artists. And our most influential popular musicians are the ones who are flagrantly "different." Consider, for example, jazz pioneers Thelonius Monk and Miles Davis, who broke all the harmonic rules, or folk musician-poet Bob Dylan, who established a new standard for lyricism. Were all these leading voices driven simply by a desire to be different? Perhaps; but my intuition is that creative urges are born not of ego but rather of some intensely personal commitment to an aesthetic ideal.

As for the physical sciences, innovation and progress can only result from challenging conventional theories--that is, the status quo. Newton and Einstein, for example, both refused to blindly accept what were perceived at their time as certain rules of physics. As a result, both men redefined those rules. Yet it would be patently absurd to assert that these two scientists were driven by a mere desire to conjure up "different" theories than those of their contemporaries or predecessors. Surely it was a conviction that their theories were better that drove these geniuses to their places in history.

To sum up, when one examines history's leading voices it does appear that they typically bring to the world something radically different than the status quo. Yet in most cases this sort of iconoclasm is a byproduct of personal conviction, not iconoclasm for its own sake.

1. "It is impossible for an effective political leader to tell the truth all the time. Complete honesty is not a useful virtue for a politician.”

Is complete honesty a useful virtue in politics? The speaker contends that it is not, for the reason that political leaders must sometimes lie to be effective. In order to evaluate this contention it is necessary to examine the nature of politics, and to distinguish between short-term and long-term effectiveness.

On the one hand are three compelling arguments that a political leader must sometimes be less than truthful in order to be effective in that leadership. The first argument lies in the fact that politics is a game played among politicians--and that to succeed in the game one must use the tools that are part-and-parcel of it. Complete forthrightness is a sign of vulnerability and naivete, neither of which will earn a politician respect among his or her opponents, and which those opponents will use to every advantage against the honest politician.

Secondly, it is crucial to distinguish between misrepresentations of fact in other words, lies--and mere political rhetoric. The rhetoric of a successful politician eschews rigorous factual inquiry and indisputable fact while appealing to emotions, ideals, and subjective interpretation and characterizations. Consider, for example, a hypothetical candidate for political office who attacks the incumbent opponent by pointing out only certain portions of that opponent's legislative voting record. The candidate might use a vote against a bill eliminating certain incentives for local businesses as "dear evidence" that the opponent is "anti-business," "bad for the economy," or "out of touch with what voters want." None of these allegations are outright lies; they are simply the rhetorical cant of the effective politician.

Thirdly, politics is a business born not only of idealism but also of pragmatism; after all, in order to be effective a politician must gain and hold onto political power, which means winning elections. In my observation some degree of pandering to the electorate and to those who might lend financial support in reelection efforts is necessary to maintain that position. Modern politics is replete with candidates who refused to pander, thereby mining their own chance to exercise effective leadership.

Although in the short term being less-than-truthful with the public might serve a political leader's interest in preserving power, would-be political leaders who lack requisite integrity ultimately forfeit their leadership. Consider Richard Nixon, whose leadership seemed born not of ideology but of personal ambition, which bred contempt of the very people who sanctioned his leadership in the first place; the ultimate result was his forfeiture of that leadership. In contrast, Ronald Reagan was a highly effective leader largely because he honestly, and deeply, believed in the core principles that he espoused and advocated during his presidency--and his

constituency sensed that genuineness and responded favorably to it. Moreover, certain types of sociopolitical leadership inherently require the utmost integrity and honesty. Consider notable figures such as Gandhi and King, both of whom were eminently effective in leading others to practice the high ethical and moral standards which they themselves advocated. The reason for this is simple: A high standard for one's own personal integrity is a prerequisite for effective moral leadership.

To sum up, I concede that the game of politics calls for a certain measure of posturing and disingenuousness. Yet, at the end of the game, without a countervailing measure of integrity, political game-playing will serve to diminish a political leader's effectiveness perhaps to the point where the politician forfeits the game.

1. "What is called human nature is really a reflection of the human condition: if all people had a reasonable share of territory and resources, such products of 'human nature' as war and crime would become extremely rare."

Are products of human nature such as war and crime actually products of the human condition--specifically, lack of resources and territory? The speaker daims so. I strongly disagree, however. Whether we look at science and history, or simply look around us in our daily lives, we see ample evidence that human aggression is the product of our nature as humans--and not of our circumstances.

First of all, the claim runs contrary to my personal observation about individual

behavior--especially when it comes to males. One need look no further than the local school-ground or kindergarten playroom to see the roots of crime and war. Every school-yard has its bully who delights in tormenting meeker school mates; and in every kindergarten classroom there is at least one miscreant whose habit is to snatch away the favorite toys of classmates--purely for the enjoyment of having seized property from another. And these behaviors are clearly not for want of resources or territory. Thus the only reasonable explanation is that they are products of human nature--not of the human condition.

Secondly, the daim flies in face of what scientists have learned about genetically determined human traits. Many human traits--not just physical ones but psychological ones as well are predetermined at birth. And to a great extent we have inherited our genetic predisposition from our non-human ancestors. One might argue that lower animal species engage in warlike behavior for the main reason that they must do so to protect their territory, their dan, or for food

not because of their nature. Yet, this point begs the question; for we humans have been genetically programmed, through the evolutionary process, to behave in similar ways. In other words, doing so is simply our nature.

Thirdly, the claim makes little sense in the context of human history. Prior to the last few centuries the inhabitable regions of our planet provided ample territory and resources--such as food and cultivable land--to accommodate every human inhabitant. Yet our distant ancestors engaged in war and crime anyway. What else explains this, except that it is part of our inherent nature to engage in aggressive behavior toward other humans? Moreover, if we consider the various experiments with Marx's Communism, it becomes clear that the pure Marxist State in which all territory and resources are shared according to the needs of each individual does not work in practice. Every attempt, whether on the macro- or micro-level, has failed at the hands of a few demagogues or despots, who aggress and oppress like playground bullies.

In sum, the author of this statement misunderstands the roots of such phenomena as war and crime. The statement runs contrary to my personal observations of human behavior, to the scientific notions of genetic predisposition and evolution of species, and to the overwhelming lack of evidence that providing ample resources to people solves these problems.

1. "Critical judgment of work in any given field has little value unless it comes from someone who is an expert in that field."

The speaker's assertion that work in any field can be judged only by experts in that field amounts to an unfair generalization, in my view. I would concur with the speaker when it comes to judging the work of social scientists, although I would strongly disagree when it comes to work in the pure physical sciences, as explained in the following discussion.

With respect to the social sciences, the social world presents a seamless web of not only anthropogenic but also physical forces, which interact in ways that can be understood only in the context of a variety of disciplines. Thus experts from various fields must collectively determine the merit of work in the social sciences. For example, consider the field of cultural anthropology. The merits of researcher's findings and conclusions about an ancient civilization must be scrutinized by biochemists, geologists, linguists, and even astronomers.

Specifically, by analyzing the hair, nails, blood and bones of mummified bodies, biochemists and forensic scientists can pass judgment on the anthropologist's conjectures about the life expectancy, general well-being, and common causes of death of the population. Geologists are needed to identify the source and age of the materials used for tools, weapons, and structures--thereby determining whether the anthropologist extrapolated correctly about the civilization's economy, trades and work habits, life styles, extent of travel and mobility, and so forth. Linguists are needed to interpret hieroglyphics and extrapolate from found fragments of writings. And astronomers are sometimes needed to determine with the anthropologist's explanations for the layout of an ancient city or the design, structure and position of monuments, tombs, and temples is convincing-because ancients often looked to the stars for guidance in building cities and structures.

In contrast, the work of researchers in the purely physical sciences can be judged only by their peers. The reason for this is that scientific theories and observations are either meritorious or not, depending solely on whether they can be proved or disproved by way of the scientific method. For example, consider the complex equations which physicists rely upon to draw conclusions about the nature of matter, time, and space, or the origins and future of the universe. Only other physicists in these specialties can understand, let alone judge, this type of

theoretical work. Similarly, empirical observations in astrophysics and molecular physics require extremely sophisticated equipment and processes, which only experts in these fields have access to and who know how to use reliably.

Those who disagree that only inside experts can judge scientific work might point out that the expertise of economists and pubic-policy makers is required to determine whether the work is worthwhile from a more mundane economic or political viewpoint. Detractors might also point out that ultimately it is our philosophers who are best equipped to judge the ultimate import of ostensibly profound scientific discoveries. Yet these detractors miss the point of what

I take to be the speaker's more narrow claim: that the integrity and quality of

work---disregarding its socioeconomic utility----can be judged only by experts in the work's field.

In sum, in the social sciences no area of inquiry operates in a vacuum. Because fields such as anthropology, sociology, and history are so closely intertwined and even dependent on the physical sciences, experts from various fields must collectively determine the integrity and quality of work in these fields. However, in the purely physical sciences the quality and integrity of work can be adequately judged only by inside experts, who are the only ones equipped with sufficient technical knowledge to pass judgment.

1. "Those who treat politics and morality as though they were separate realms fail to understand either the one or the other."

Should politics and morality be treated as though they are mutually exclusive? I strongly agree with the speaker that any person claiming so fails to understand either the one or the other. An overly narrow definition of morality might require complete forthrightness and candidness in dealings with others. However, the morality of public politics embraces far broader concerns involving the welfare of society, and recognizes compromise as a necessary, and legitimate, means of addressing those concerns.

It is wrong-headed to equate moral behavior in politics with the simple notions of honesty and putting the other fellow's needs ahead of one's own----or other ways which we typically measure the morality of an individual's private behavior. Public politics is a game played among professional politicians--and to succeed in the game one must use the tools that are part-and-parcel of it. Complete forthrightness is a sign of vulnerability and naivet~, neither of which will earn a politician respect among his or her opponents, and which opponents will use to every advantage against the honest politician. Moreover, the rhetoric of a successful politician eschews rigorous factually inquiry and indisputable fact while appealing to emotions, ideals, and subjective interpretation and characterizations. For example, the politician who claims his opponent is "anti-business," "bad for the economy," or "out of touch with what voters want" is not necessarily behaving immorally. We must understand that this sort of rhetoric is part-and-parcel of public politics, and thus kept in perspective does not harm the society—as long as it does not escalate to outright lying.

Those who disagree with the statement also fail to understand that in order to gain the opportunity for moral leadership politicians must engage in certain compromises along the way. Politics is a business born not only of idealism but also of pragmatism insofar as in order to be effective a politician must gain and hold onto political power. In my observation, some degree of pandering to the electorate and to those who might lend financial support for reelection

efforts is necessary to maintain that position. Modern politics is replete with candidates who refused to pander, thereby mining their own chance to exercise effective leadership.

Finally, those who claim that effective politicians need not concern themselves with morality fail to appreciate that successful political leadership, ifit is to endure, ultimately requires a certain measure of public morality--that is, serving the society with its best interests as the leader's overriding concern. Consider the many leaders, such as Stalin and Hitler, whom most people would agree were egregious violators of public morality. Ultimately such leaders forfeit their leadership as a result of the immoral means by which they obtain or wield their power. Or

consider less egregious examples such as President Nixon, whose contempt for the very legal system that afforded him his leadership led to his forfeiture of that leadership. It seems to me that in the short term amoral or immoral public behavior might serve a political leader's interest in preserving power; yet in the long term such behavior invariably results in that leader's downfall.

In sum, I fundamentally agree with the statement. It recognizes that the "game" of politics calls for a certain amount of disingenuousness that we might associate with dubious private morality. And it recognizes that such behavior is a necessary means to the final objective of moral political leadership. Besides, at the end of the political game any politician failing to exercise moral leadership ultimately forfeits the game.

1. "Great advances in knowledge necessarily involve the rejection of authority."

The speaker claims that great advances in knowledge necessarily involve rejection of authority. To the extent that political authority impedes such advances, I agree with this claim. Otherwise, in my view most advances in knowledge actually embrace certain forms of authority, rather than rejecting authority out of hand.

One striking example of how political authority can impede the advancement of knowledge involves what we know about the age and evolution of planet Earth. In earlier centuries the official Church of England called for a literal interpretation of the Bible, according to which the Earth's age is determined to be about 6,000 years. IfWestern thinkers had continued to yield to the ostensible authority of the Church, the fields of structural and historical geology would never have advanced beyond the blind acceptance of this contention as fact.

A more modern example of how yielding to political authority can impede the advancement of knowledge involves the Soviet Refusenik movement of the 1920s. During this time period the Soviet government attempted not only to control the direction and the goals of its scientists' research but also to distort the outcome of that research. During the 1920s the Soviet government quashed certain areas of scientific inquiry, destroyed entire research facilities and libraries, and caused the sudden disappearance of many scientists who were engaged in research that the state viewed as a potential threat to its power and authority. Not surprisingly,

during this time period no significant advances in scientific knowledge occurred under the auspices of the Soviet government.

However, given a political climate that facilitates free thought and honest intellectual inquiry, great advances in knowledge can be made by actually embracing certain forms of "authority."

A good example involves modern computer technology. Only by building on, or embracing, certain well-established laws of physics were engineers able to develop silicon-based semi-conductor technology. Although new biotechnology research suggests that organic, biochemical processors will replace artificial semi-conductors as the computers of the future, it would be inappropriate to characterize this leap in knowledge as a rejection of authority.

In sum, to the extent that political authority imposes artificial constraints on knowledge, I agree that advances in knowledge might require rejection of authority. Otherwise, in my observation advances in knowledge more typically embrace and build on authoritative scientific principles and laws, and do not require the rejection of any type of authority.

1. "The surest indicator of a great nation is not the achievements of its rulers, artists, or scientists, but the general welfare of all its people."

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1. "International relations can never be completely harmonious because many cultures do not share the same values."

Does a nation's greatness lie in the general welfare of its people rather than in the

achievements of its artists, rulers, and scientists, as the speaker claims? I find this claim problematic in two respects. First, it fails to define "general welfare." Second, it assumes that the sorts of achievements that the speaker cites have little to do with a nation's general welfare--when in fact they have everything to do with it.

At first blush the speaker's claim might appear to have considerable merit. After all, the overriding imperative for any democratic state is to enhance the general welfare of its citizenry. Yet the speaker fails to provide a clear litmus test for measuring that welfare. When we speak of "promoting the general welfare," the following aims come to mind: public health and safety, security against military invasions, individual autonomy and freedom, cultural richness, and overall comfort--that is, a high standard of living. Curiously, it is our scientists, artists, and political leaders-----or so-called "rulers" who by way of their achievements bring these aims

into fruition. Thus, in order to determine what makes a nation great it is necessary to examine the different sorts of individual achievements that ostensibly promote these aims.

Few would disagree that many scientific achievements serve to enhance a nation's general welfare. Advances in the health sciences have enhanced our physical well-being, comfort, and life span. Advances in technology have enabled us to travel to more places, communicate with more people from different walks of life, and learn about the world from our desktops.

Advances in physics and engineering make our abodes and other buildings safer, and enable us to travel to more places, and to travel to more distant places, with greater safety and speed. Artistic achievement is also needed to make a nation a better place for humans overall. Art provides inspiration, lifts the human spirit, and incites our creativity and imagination, all of which spur us on to greater accomplishments and help us appreciate our own humanity. Yet

the achievements of scientists and artists, while integral, do not suffice to ensure the welfare of a nation's citizens. In order to survive, let alone be great, a nation must be able to defend its borders and to live peaceably with other nations. Thus the military and diplomatic accomplishments of a nation's leaders provide an integral contribution to the general welfare of any nation's populace.

Notwithstanding the evidence that, in the aggregate, individual achievements of the sorts listed above are what promote a nation's general welfare, we should be careful not to hastily assume that a nation is necessarily great merely by virtue of the achievements of individual citizens. Once having secured the safety and security of its citizens, political rulers must not exploit or oppress those citizens. Also, the populace must embrace and learn to appreciate artistic accomplishment, and to use rather than misuse or abuse scientific knowledge. Of particular concern are the many ways in which scientific achievements have served to diminish our quality of life, thereby impeding the general welfare. It is through scientific "achievements"

that chemicals in our food, water, and air increase the incidence and variety of cancers; that our very existence as a species is jeopardized by the threat of nuclear warfare; and that greenhouse gases which deplete our ozone layer and heat the Earth's atmosphere threaten civilization itself.

In sum, in asserting that general welfare--and neither the scientific, artistic, nor political achievements of individuals--provides the yardstick for measuring a nation's greatness, the speaker misses the point that general welfare is the end product of individual achievements. Besides, achievements of artists, scientists, and political leaders rarely inure only to one particular nation. Rather, these achievements benefit people the world over.

Accordingly, by way of these achievements the world, not just one nation, grows in its greatness.

1. "People who pursue their own intellectual interests for purely personal reasons are more likely to benefit the rest of the world than are people who try to act for the public good."

I strongly agree with the speaker's threshold claim that international relations can never be completely harmonious. To assert otherwise would be Pollyannaish and would fly in the face of human history--which is largely a story of power struggles, war, and general discord between nations and cultures. However, the speaker's rationale, although appealing and not without merit, is inadequate to explain why total accord among all nations is impossible.

Supporting the speaker's claim is the fact that each culture has its own distinct ethos-- consisting of its core values, principles, and spirit which defines and distinguishes the culture. And I agree that the failure of one culture to understand the unique ethos of another is what often lies at the root of discord between nations and cultures. An apt current-day illustration of this point involves a certain American Indian tribe in Washington State, and its traditional custom of whale hunting. Environmentalists denounce the practice as unnecessary

endangerment of a species. However, underlying this custom is a centuries-old spiritual belief that ceremonial whale-hunting is sacrificial ritual honoring Nature, and an even more fundamental Native American ethos, characterized by a far greater respect for animals and for Nature than the ethos of white Americans.

The sort of unfair judgment exemplified by certain white Americans' denunciation of Native American customs and practices is what sociologists term "ethnocentricity"-- reference to one's own cultural ethos as a standard for judging the values and actions of other people. History informs us all too well that ethnocentricity leads inexorably to disharmony. Virtually all wars are rooted in religious ethnocentricity. Political ethnocentricity results in imperialism--assimilation of any and all peoples with complete disregard or respect for ethos.

Understandable resistance to British imperialism during the 19th Century resulted in the oppression and demise of many indigenous peoples of Africa and Indonesia. And ethnocentricity on a societal level can lead to mass persecution, as demonstrated by the legions of citizens and soldiers brainwashed by the Nazis into believing that the Jewish race posed some sort of threat to German society and to the Arian race.

Thus the speaker's contention that harmonious international relations are impossible because of conflicting cultural values finds ample support from history. Yet, as compelling as this argument might be, it nevertheless suffers from two notable deficiencies. First, in spite of their differences the world's mainstream cultures all share certain fundamental tenets--particularly about the dignity of human life and that they all agree upon these tenets, at least tacitly. And people should judge other cultures against such universal standards. Otherwise, the end result is that we find ourselves acquiescing in or even sanctioning war and

other such atrocities. Since all cultures share a universal ethos the speaker's rationale seems inadequate. Discord occurs not only as a result of an ethos clash but also upon violation of the universal ethos.

A second problem with the speaker's rationale is that it overlooks the fact that we can find considerable discord within almost every culture. On a microcosmic scale we all observe so-caUed infighting among members of the same church congregations, political factions, and so forth. On a larger scale infighting is all too evident--from overt gang warfare and civil war to covert corporate espionage and political back-stabbing. Thus even if all cultures were to share the same ethos the promise of complete harmony would still be an illusory one. In short, contentiousness seems to be part of human nature.

To sum up, I agree with the speaker that complete harmony among nations is unrealistic, but not just because of conflicting cultural values; it runs contrary to human nature. Yet, the outlook for international relations is not necessarily so grim. An enlightened understanding of the ethos of other cultures, and of our own cultural bias, can foster a universal ethos of respect for human dignity and life. The end result would be to stem, or at least minimize, discord among nations and cultures.

1. "Originality does not mean thinking something that was never thought before; it means putting old ideas together in new ways."

Are people who make the greatest contributions to society those who pursue their personal intellectual interests, as the speaker asserts? Or are they the ones who focus instead on areas that are most likely to benefit society? I strongly agree with the speaker, for three reasons.

First of all, by human nature we are motivated to pursue activities in which we excel. To compel people to focus their intellectual interests only on certain areas would be to force many to waste their true talents. For example, imagine relegating today's preeminent astrophysicist Stephen Hawking to researching the effectiveness of affirmative-action legislation in reducing workplace discrimination. Admittedly, this example borders on hyperbole. Yet the aggregate effect of realistic cases would be to waste the intellectual talents of our world's scholars and

researchers.

Secondly, it is unusual avenues of personal interest that most often lead to the greatest contributions to society. Intellectual and scientific inquiry that breaks no new ground amount to wasted time, talent, and other resources. History is laden with quirky claims of scholars and researchers that turned out stunningly significant--that the sun lies at the center of our universe, that time and space are relative concepts, that matter consists of discrete particles, that humans evolved from other life forms, to name a few. One current area of unusual research is

terraforrning---creating biological life and a habitable atmosphere where none existed before. This unusual research area does not immediately address society's pressing social problems. Yet in the longer term it might be necessary to colonize other planets in order to ensure the survival of the human race; and after all, what could be a more significant contribution to society than preventing its extinction?

Thirdly, to adopt a view that runs contrary to the speaker's position would be to sanction certain intellectual pursuits while proscribing others which smacks of thought control and political oppression. It is dangerous to afford ultimate decision-making power about what intellectual pursuits are worthwhile to a handful of regulators, legislators, or elitists, since they bring to bear their own quirky notions about what is worthwhile, and since they are notoriously susceptible to influence-peddling which renders them untrustworthy in any event. Besides, history informs us well of the danger inherent in setting official research priorities. A telling

modern example involves the Soviet government's attempts during the 1920s to not only control the direction and the goals of its scientists' research but also to distort the outcome of that research----ostensibly for the greatest good of the greatest number of people. During the 1920s the Soviet government quashed certain areas of scientific inquiry, destroyed entire research facilities and libraries, and caused the sudden disappearance of many scientists who were viewed as threats to the state's authority. Not surprisingly, during this time period no

significant scientific advances occurred under the auspices of the Soviet government.

Those who would oppose the speaker's assertion might argue that intellectual inquiry in certain areas, particularly the arts and humanities, amounts to little more than a personal quest for happiness or pleasure, and therefore is of little benefit to anyone but the inquirer. This specious argument overlooks the palpable benefits of cultivating the arts. It also ignores the fact that earnest study in the humanities affords us wisdom to know what is best for society, and helps us understand and approach societal problems more critically, creatively, and effectively. Thus, despite the lack of a tangible nexus between certain areas of intellectual inquiry and societal benefit, the nexus is there nonetheless.

In sum, I agree that society is best served when people are allowed unfettered freedom of intellectual inquiry and research, and use that freedom to pursue their own personal interests. Engaging one's individual talents in one's particular area of fascination is most likely to yield advances, discoveries, and a heightened aesthetic appreciation that serve to make the world a better and more interesting place in which to live.

1. "Laws should not be stationary and fixed. Instead, they should be flexible enough to take account of various circumstances, times, and places."

Does "originality" mean putting together old ideas in new ways, as the speaker contends, rather than conjuring up truly new ideas? Although I agree that in various realms of human endeavor, such as linguistics, law, and even the arts, so-called "new" or "original" ideas rarely are. However, when it comes to the physical sciences originality more often entails chartering completely new intellectual territory.

The notion that so-called "originality" is actually variation or synthesis of existing ideas finds its greatest support in linguistics and in law. Regarding the former, in spite of the many words in the modern English language that are unique to Western culture, modern English is derived from, and builds upon, a variety of linguistic traditions--and ultimately from the ancient Greek and Latin languages. Were we to insist on rejecting tradition in favor of purely modern language we would have essentially nothing to say. The same holds true for all other modern

languages. As for law, consider the legal system in the United States, which is deeply rooted in traditional English common-law principles of equity and justice. The system in the U.S. requires that new, so-called "modern" laws be consistent with and indeed build upon—those traditional principles.

Even in the arts--where one might think that true originality must surely reside--so-called "new" ideas almost always embrace, apply, or synthesize what came earlier. For example, most "modern" visual designs, forms, and elements are based on certain well-established aesthetic ideals--such as symmetry, balance, and harmony. Admittedly, modern art works often eschew these principles in favor of true originality. Yet, in my view the appeal of such works lies primarily in their novelty and brashness. Once the ephemeral novelty or shock dissipates, these works quickly lose their appeal because they violate fn:rnly established artistic ideals. An

even better example from the arts is modern rock-and-roll music, which upon first listening might seem to bear no resemblance to dassical music traditions. Yet, both genres rely on the same 12-note scale, the same notions of what harmonies are pleasing to the ear, the same forms, the same rhythmic meters, and even many of the same melodies.

When it comes to the natural sciences, however, some new ideas are truly original while others put established ideas together in new ways. One striking example of truly original scientific advances involves what we know about the age and evolution of the Earth. In e~rlier centuries the official Church of England called for a literal interpretation of the Bible, according to which the Earth's age is determined to be about 6,000 years. If Western thinkers had simply put these established ideas together in new ways the fields of structural and historical geology might never have advanced further. A more recent example involves Einstein's theory of

relativity. Einstein theorized, and scientists have since proven empirically, that the pace of time and possibly the direction of time as well, is relative to the observer's motion through space. This truth ran so contrary to our subjective, linear experience, and to previous notions about time and space, that I think Einstein's theory can properly be characterized as truly original.

However, in other instances great advances in science are made by putting together current theories or other ideas in new ways. For example, only by building on certain well-established laws of physics were engineers able to develop silicon-based semiconductor technology. And, only by struggling to reconcile the quantum and relativity theories have physicists now posited a new so-called "string" theory, which puts together the two preexisting theories in a completely new way.

To sum up, for the most part originality does not reject existing ideas but rather embraces, or synthesizes what came before. In fact, in our modern languages, our new laws, and even our new art, existing ideas are reflected, not shunned. But, when it comes to science, whether the speaker's claim is true must be determined on a case-by-case basis, with each new theory or innovation.

1. "It is always an individual who is the impetus for innovation; the details may be worked out by a team, but true innovation results from the enterprise and unique perception of an individual."

Some measure of consistency and stability in the law is critical for any society to function. Otherwise, I strongly agree with the speaker's assertion that laws should be flexible enough to adapt to different circumstances, times and places. The law of marital property apdy illustrates this point.

On the one hand, a certain measure of consistency, stability, and predictability in our laws is required in order for us to understand our legal obligations and rights as we go about our day-to-day business as a society. For example, in order for private industry to thrive, businesses must be afforded the security of knowing their legal rights and obligations visi-vis employees, federal regulatory agencies, and tax authorities--as well as their contractual rights and duties vis-~t-vis customers and suppliers. Undue uncertainty in any one of these areas would surely have a chilling effect on business. Moreover, some measure of consistency in the legal environment from place to place promotes business expansion as well as interstate and international commerce, all of which are worthwhile endeavors in an increasingly mobile society.

On the other hand, rigid laws can result in unfairness if applied inflexibly in all places at all times. The framers of the U.S. Constitution recognized the need both for a flexible legal system and for flexible laws--by affording each state legal jurisdiction over all but interstate matters. The framers understood that social and economic problems, as well as standards of equity and fairness, can legitimately change over time and vary from region to region----even from town to town. And our nation's founders would be pleased to see their flexible system that promotes equity and fairness as it operates today.

Consider, for example, marital property rights, which vary considerably from state to state, and which have evolved considerably over time as inflexible, and unfair, systems have given way to more flexible, fairer ones. In earlier times husbands owned all property acquired during

marriage as well as property brought into the marriage by either spouse. Understandably, this rigid and unfair system ultimately gave way to separate-property systems, which acknowledged property rights of both spouses. More recently certain progressive states have adopted even more flexible, and fairer, "community property" systems, under which each spouse owns half of all property acquired during the marriage, while each spouse retains a separate-property interest in his or her other property. Yet even these more egalitarian

community-property systems can operate unfairly whenever spouses contribute unequally; accordingly, some community-property states are now modifying their systems for even greater flexibility and fairness.

Thus, the evolution of state marital-property laws aptly illustrates the virtue of a legal system that allows laws to evolve to keep pace with changing mores, attitudes, and our collective sense of equity. This same example also underscores the point that inflexible laws tend to operate unfairly, and properly give way to more flexible ones--as our nation's founders intended.

1. "The function of science is to reassure; the purpose of art is to upset. Therein lies the value of each."

The speaker claims that individual enterprise, energy, and commitment, and not team-work, provide the impetus for innovation in every case. In my view, although the claim is not without merit, especially when it comes to business innovation, it overlooks the synergistic relationship between individual effort and teamwork, particularly with respect to scientific innovations.

With respect to business innovation, I agree that it is the vision and commitment of key individuals--such as a firm's founder or chief executive--from which businesses burgeon and innovative products, services, and marketing and management strategies emerge. One notable example involves the Apple Computer &bade following the departure of its founding visionary Steve Jobs. It wasn't until Jobs reassumed the helm, once again injecting his unique perception, insight, and infectious fervor, that the ailing Apple was able to resume its innovative ways, thereby regaining its former stature in the computer industry. Admittedly, the

chief executives of our most successful corporations would no doubt concede that without the cooperative efforts of their subordinates, their personal visions would never become reality. Yet, these efforts are merely the carrying out of the visionary's marching orders.

Nevertheless, the speaker would have us accept a too-narrow and distorted view of how innovation comes about, particularly in today's world. Teamwork and individual enterprise are not necessarily inconsistent, as the speaker would have us believe. Admittedly, if exercised in a self-serving manner--for example, through pilfering or back stabbing--individual enterprise and energy can serve to thwart a business organization's efforts to innovate. However, if directed toward the firm's goals these traits can motivate other team members, thereby facilitating innovation. In other words, teamwork and individual enterprise can operate synergistically to bring about innovation.

We must be especially careful not to understate the role of teamwork in scientific innovation, especially today. Important scientific innovations of the previous millennium might very well have been products of the epiphanies and obsessions of individual geniuses. When we think of the process of inventing something great we naturally conjure up a vision of the lone inventor hidden away in a laboratory for months on end, in dogged pursuit of a breakthrough. And this image is not entirely without empirical support. For example, Thomas Edison's early innovations--including the light bulb, the television, and the phonograph--came about in

relative isolation, and solely through his individual persistence and commitment.

However, in today's world, sdentific innovation requires both considerable capital and extensive teams of researchers. Admittedly, in all likelihood we will continue to encounter the exceptional case---~ke Hewlett and Packard, or Jobs and Wozniak, whose innovations sprang from two-man operations. But for the most part, scientific breakthroughs today typically occur only after years of trial-and-error by large research teams. Even Thomas Edison relied more and more on a team of researchers to develop new innovadons as his career progressed. Thus the statement flies in the face of how most modern scientific innovations actually come

about today.

To sum up, I agree that, when it comes to the world of business, true innovation is possible only through the imagination of the individual visionary, and his or her commitment to see the vision through to its fruition. However, when it comes to scientific innovation, yesterday's enterprising individuals have yielded to today's cooperative research teams--a trend that will no doubt continue as scientific research becomes an increasingly expensive and complex undertaking.

1. "The study of an academic discipline alters the way we perceive the world. After studying the discipline, we see the same world as before, but with different eyes."

The speaker maintains that the function of art is to "upset" while the function of science is to "reassure," and that it is in these functions that the value of each lies. In my view, the speaker unfairly generalizes about the function and value of art, while completely missing the point about the function and value of science.

Consider first the intent and effect of art. In many cases artists set about to reassure, not to upset. Consider the frescos of Fra Angelico and others monks and nuns of the late medieval period, who sought primarily through their representations of the Madonna and Child to reassure and be reassured about the messages of Christian redemption and salvation. Or consider the paintings of impressionist and realist painters of the late 19th Century. Despite the

sharp contrast in the techniques employed by these two schools, in both genres we find soothing, genteel, pastoral themes and images---certainly nothing to upset the viewer.

In other cases, artists set about to upset. For example, the painters and sculptors of the Renaissance period, like the artists who preceded them, approached their art as a form of worship. Yet Renaissance art focuses on other Christian images and themes--especially those involving the crucifxiion and apocalyptic notions of judgment and damnation--which are clearly "upsetting" and disconcerting, and clearly not reassuring. Or consider the works of two important 20th-Century artists; few would argue that the surrealistic images by Salvador Dali or the jarring, splashy murals by abstract painter Jackson Pollock serve to "upset," or at the very least disquiet, the viewer on a visceral level.

When it comes to the function and value of science, in my view the speaker's assertion is simply wrongheaded. The final objective of science, in my view, is to discover truths about our world, our universe, and ourselves. Sometimes these discoveries serve to reassure, and other times they serve to upset. For example, many would consider reassuring the various laws and principles of physics which provide unifying explanations for what we observe in the physical world. These principles provide a reassuring sense of order, even simplicity, to an otherwise

mysterious and perplexing world.

On the other hand, many scientific discoveries have dearly "upset" conventional notions about the physical world and the universe. The notions of a sun-centered universe, that humans evolved from lower primate forms, and that time is relative to space and motion, are all disquieting notions to anyone whose belief system depends on contrary assumptions. And more recently, researchers have discovered that many behavioral traits are functions of individual neurological brain structure, determined at birth. This notion has "upset" many professionals in fields such as behavioral psychology, criminology, mental health, and law, whose work is predicated on the notion that undesirable human behavior can be changed--through various means of reform and behavior modification.

In sum, the speaker over-generalizes when it comes to the function and value of art and science both of which serve in some cases to reassure and in other cases to upset. In any event, the speaker misstates the true function and value of science, which is to discover truths, whether reassuring or upsetting.

1. "Many problems of modern society cannot be solved by laws and the legal system because moral behavior cannot be legislated."

I strongly agree that by studying any particular academic discipline we alter the way we perceive the world. As intellectual neophytes we tend to polarize what we see as either right or wrong, or as either good or bad. We also tend to interpret what we see by way of our emotions. Once educated, we gain the capacity to see a broader spectrum of opinion and perspective, and to see our own culture and even ourselves as a tapestry-like product of history.

Through the earnest pursuit of knowledge--particularly in history and literature--we reveal to ourselves the flaws and foibles of other humans whose lives we study and read about. History teaches us, for example, that demagogues whom society places on pedestals often fall under the weight of their own prejudices, jealousies, and other character flaws. And, any serious student of Shakespeare comes away from reading King Lear and Hamlet with a heightened awareness of the tragically flawed ironic hero, and of the arbitrariness by which we distinguish our heroes from our villains.

Through education we begin to see flaws not only in people but also in ideologies that we had previously embraced on pure faith. A student of government and public policy learns that many of the so-called "solutions" which our legislatures and jurists hand down to us from atop their pedestals are actually Band-Aid comprises designed to appease opponents and pander to the electorate. A philosophy student learns to recognize logical fallacies of popular ideas and the rhetoric of our political parties, religious denominations, and social extremists. And, a law student learns that our system of laws is not a monolithic set of truths but rather an ever-changing reflection of whatever the society's current mores, values, and attitudes happen to be.

While education helps us see the flawed nature of our previously cherished ideas,

paradoxically it also helps us see ideas we previously rejected out of hand in a different light--as having some merit after all. Through education in public policy and law, once-oppressive rules, regulations, and restrictions appear reasonable constraints on freedom in light of legitimate competing interests. Through the objective study of different religious institutions, customs, and faiths, a student learns to see the merits of different belief systems, and to see the cultural and philosophical traditions in which they are rooted.

Education also helps us see our own culture through different eyes. As cultural neophytes we participate unwittingly in our culture's own customs, rituals, and ceremonies--because we see them as somehow sacrosanct. A student of sociology or cultural anthropology comes to see those same customs, rituals, and ceremonies as tools which serve our psychological need to belong to a distinct social group, and to reinforce that sense of belonging by honoring the group's traditions. And, by reading the literary works of writers from bygone eras, a literature student comes to see his or her own culture as a potential treasure trove of fodder for the creative literary mind. For example, by studying Twain's works a student learns that Twain saw 19th-Century life along the Mississippi not as a mundane existence but as a framework for the quintessential adventure story, and that we can similarly transform the way we see our own culture.

Finally, education in the arts alters forever the way we perceive the aesthetic world around us. Prior to education we respond instinctively, emotionally, and viscerally to the forms, colors, and sounds of art. Post education we respond intellectually. We seek to appreciate what art reveals about our culture and about humanity. We also seek to understand the aesthetic principles upon which true art is founded. For instance, an earnest art student learns to see not just pigments and shapes but also historical influences and aesthetic principles. An informed listener of popular music hears not just the same pleasing sounds and pulsating rhythms as their naive counterparts, but also the rhythmic meters, harmonic structure, and compositional

forms used by the great classical composers of previous centuries, and which provided the foundation of modern music.

To sum up, through education we no longer see our heroes, leaders, and idols through the same credulous eyes, nor do we see other humans and their ideas through the black-and-white lens of our own point of view. In the final analysis, through education we come not only to perceive the world differently but also to understand the subjective, and therefor changeable, nature of our own perceptions.

1. "The way students and scholars interpret the materials they work with in their academic fields is more a matter of personality than of training. Different interpretations come about when people with different personalities look at exactly the same objects, facts, data, or events and see different things."

The speaker asserts that many laws are ineffective in solving society's problems because moral behavior cannot be legislated. I agree with this assertion insofar as it relates to constraints on certain personal freedoms. However, when it comes to the conduct of businesses, I think that moral behavior not only can but must be legislated for the purpose of alleviating societal problems.

Morality laws that impinge upon freedom of choice about our personal lives--to control what we do with and to ourselves--simply do not work in a democratic society. People always find ways to circumvent such laws, which ultimately give way to more lenient laws that acknowledge personal freedom of choice. The failed Prohibition experiment of the 1930s is perhaps the paradigmatic example of this. And we are slowly learning history's lesson, as aptly demonstrated by the recognition of equal rights for same-sex partners, and current trends

toward legalization of physician-assisted suicide and the medicinal use of marijuana. In short, history informs us that legislating morality merely for morality's sake simply does not work.

Morality laws impinging on personal freedoms are not made any more useful or effective by purporting to serve the greater good of society, because on balance their costs far outweigh their benefits. For instance, those who defend the cfiminalization of drug use cite a variety of harms that result from widespread addiction: increased incidence of domestic violence, increased burden on our health-care and social-welfare systems, and diminished productivity of addicts. However, these defenders overlook the fact that outlawing addictive substances

does not prevent, or even deter, people from obtaining and using them. It only compels users to resort to theft and even violent means of procuring drugs, adding to the economic costs of enforcement, prosecution, and punishment. In short, the costs of proscription outweigh the benefits.

In sharp contrast to personal behavior, the behavior of businesses can and must be

controlled through legislation. Left unfettered, businesses tend to act on behalf of their own financial interest, not on behalf of the society at large. And when excessive business profits accrue at the expense of public health and safety, in my view business has behaved immorally.

Examples of large-scale immoral behavior on the part of businesses abound. For example, although technology makes possible the complete elimination of polluting emissions from automobiles, auto manufacturers are unwilling to voluntarily make the short-term sacrifices necessary to accomplish this goal. Tobacco companies have long known about the health hazards of smoking cigarettes; yet they weigh the costs of defending law suits against the profit from cigarette sales, and continue to cater to nicotine addicts. And when given the chance, many manufacturers will exploit underage or underprivileged workers to reduce labor costs, thereby enhancing profits. In short, only government holds the regulatory and enforcement power to impose the standards needed to ensure moral business behavior.

In sum, whether legislating morality is effective or even appropriate depends on whether the behavior at issue involves personal freedom or public duty. Legislating personal moral behavior is neither practicable nor proper in a democratic society. On the other hand, legislating business morality is necessary to ensure public health and safety.

1. "We live under the illusion that we know what we want, when actually we merely want what we are supposed to want."

I strongly disagree that personality is the key to how a student or scholar interprets the material with which he or she works. Whether those materials be facts, events, data, observations, in my view the key factor in their interpretation is a person's training and educational background.

Assuming that by personality the speaker embraces such personal attributes as individual temperament, disposition and general mood, and outlook, it seems to me that personality has little bearing on how students and scholars interpret the materials with which they work. Admittedly, whether an individual tends to be an optimist or a pessimist might have some beating on interpretation. For instance, an archeology student with a generally sanguine outlook toward life might respond to a lengthy yet unsuccessful search for certain artifacts as discovery and progress--insofar as certain possibilities have been eliminated, bringing us closer to affirmative discoveries. In contrast, an archeology student with a generally pessimistic outlook might condude that the same effort was in vain and that nothing has been learned or otherwise gained. Yet it strikes me that these reactions are emotional ones that have nothing to do with intellectual interpretation.

In sharp contrast, one's educational background and training can serve as a strong influence on how one interprets historical events involving human affairs, statistical data, and especially art. With respect to human affairs, consider the centuries-old imperialist policies of Great Britain. A student of political science might interpret British imperialism as a manifestation of that nation's desire for political power and domination over others. A student of economics might see it as a strategy to gain control over economic resources and distribution channels for goods. A sociology or anthropology student might see it as an assimilation of culture. And, a student of theology or religion might interpret the same phenomenon as an attempt, well intentioned or otherwise, to proselytize and to impose certain beliefs, rituals, and customs on others.

Educational training and background also affects how students and scholars interpret seemingly objective statistical data. It is crucial here to distinguish between numbers themselves, which are not subject to varying interpretations, from what the numbers signify--that is, what conclusions, prescriptions, or lessons we might come away with. Consider, for example, a hypothetical increase in the rate of juvenile crime in a particular city. Although the percent change itself might be subject to only one reasonable meaning, what the change signifies is open to various interpretations. A sociologist might interpret this data as an indication of deteriorating family unit or community. A student of public policy or government might see this statistic as an indication that current legislation fails to implement public policy as effectively as it could. And a student of law or criminal justice might interpret the same statistic as a sign of overburdened courts or juvenile detention facilities.

Finally, when it comes to how students and scholars interpret art, training and educational background play an especially significant role. After all, while facts and figures are to some extent objective, the meaning Of art is an inherently subjective, and highly personal, matter. A business student might interpret a series of art works as attempts by the artist to produce viable products for sale in the marketplace. However, a theology student might eschew such a cold and cynical interpretation, seeing instead an expression of praise, a celebration of life, a plea for grace, or a struggle to come to terms with mortality. Even art students and scholars can interpret the same art differently, depending on their training. A student of art history might see a particular work as the product of certain artistic influences, while a student of art theory, composition, and technique might view the same work as an attempt to combine color for visual impact, or as an experiment with certain brush-stroke techniques.

To sum up, I concede that as students and scholars our working "materials"--facts, data, objects, and events--are open to subjective interpretation in terms of what they teach us. However, what our materials teach us is a function of what we've already learned, and has little if anything to do with our personal basket of emotions and moods called "personality."

1. "As we acquire more knowledge, things do not become more comprehensible, but more complex and more mysterious."

Does knowledge render things more comprehensible, or more complex and mysterious? In my view the acquisition of knowledge brings about all three at the same time. This paradoxical result is aptly explained and illustrated by a number of advances in our scientific knowledge.

Consider, for example, the sonar system on which blind bats rely to navigate and especially to seek prey. Researchers have learned that this system is startlingly sophisticated. By emitting audible sounds, then processing the returning echoes, a bat can determine in a nanosecond not only how far away its moving prey is but also the prey's speed, direction, size and even specie! This knowledge acquired helps explain, of course, how bats navigate and survive. Yet at the same time this knowledge points out the incredible complexity of the auditory and brain functions of certain animals, even of mere humans, and create a certain mystery and wonder about how such systems ever evolved organically.

Or consider our knowledge of the universe. Advances in telescope and space-exploration technology seem to corroborate the theory of a continually expanding universe that began at the very beginning of time with a "big bang." On one level this knowledge, assuming it qualifies as such, helps us comprehend our place in the universe and our ultimate destiny. Yet on the other hand it adds yet another chapter to the mystery about what existed before time and the universe.

Or consider the area of atomic physics. The naked human eye perceives very little, of course, of the complexity of matter. To our distant ancestors the physical world appeared simple--seemingly comprehensible by means of sight and touch. Then by way of scientific knowledge we learned that all matter is comprised of atoms, which are further comprised of protons, neutrons, and electrons. Then we discovered an even more basic unit of matter called the quark. And now a new so-called "string" theory posits the existence of an even more fundamental, and universal, unit of matter. On the one hand, these discoveries have rendered things more comprehensible, by explaining and reconciling empirical observations of how

matter behaves. The string theory also reconciles the discrepancy between the quantum and wave theories of physics. On the other hand, each discovery has in turn revealed that matter is more complex than previously thought. In fact, the string theory, which is theoretically sound, calls for seven more dimensions---in addition to the three we already know about! I'm hard-pressed to imagine anything more complex or mysterious.

In sum, the statement overlooks a paradox about knowledge acquired, at least when it comes to understanding the physical world. When through knowledge a thing becomes more comprehensible and explainable we realize at the same time that it is more complex and mysterious than previously thought.

1. "It is a grave mistake to theorize before one has data."

Is it a "grave mistake" to theorize without data, as the speaker contends? I agree insofar as to theorize before collecting sufficient data is to risk tainting the process of collecting and interpreting further data. However, in a sense the speaker begs the question, by overlooking the fact that every theory requires some data to begin with. Moreover, the claim unfairly ignores equally grave consequences of waiting to theorize until we obtain too much data.

In one important respect I agree with the speaker's contention. A theory conjured up without the benefit of data amounts to little more that the theorist's hopes and desires-- what he or she wants to be true and not be true. Accordingly, this theorist will tend to seek out evidence that supports the theory, and overlook or avoid evidence that refutes it. One telling historical example involves theories about the center of the Universe. Understandably, we ego-driven humans would prefer that the universe revolve around us. Early theories presumed so for this reason, and subsequent observations that ran contrary to this ego-driven theory were ignored,

while the observers were scorned and even vilified.

By theorizing before collecting data the theorist also runs that risk of interpreting that data in a manner which makes it appear to lend more credence to the theory than it actually does. Consider the theory that the Earth is flat. Any person with a clear view of the horizon must agree in all honesty that the evidence does not support the theory. Yet prior to Newtonian physics the notion of a spherical Earth was so unsettling to people that they interpreted the arc-shaped horizon as evidence of a convex, yet nevertheless "flattish," Earth.

Despite the merits of the speaker's claim, I find it problematic in two crucial respects. First, common sense informs me that it is impossible to theorize in the first place without at least some data. How can theorizing without data be dangerous, as the speaker con tends, if it is not even possible? While a theory based purely on fantasy might ultimately be born out by empirical observation, it is equally possible that it won't. Thus without prior data a theory is not worth our time or attention. Secondly, the speaker's claim overlooks the inverse problem: the

danger of continuing to acquire data without venturing a theory based on that data. To postpone theorizing until all the data is in might be to postpone it forever. The danger lies in the reasons we theorize and test our theories: to solve society's problems and to make the world a better place to live. Unless we act timely based on our data we render ourselves impotent. For example, governments tend to respond to urgent social problems by establishing agencies to collect data and think-tanks to theorize about causes and solutions. These agencies and think-tanks serve no purpose unless they admit that they will never have all the data and that

no theory is foolproof, and unless timely action is taken based on the best theory currency available--before the problem overwhelms us.

To sum up, I agree with the speaker insofar as a theory based on no data is not a theory but mere whimsy and fancy, and insofar as by theorizing first we tend to distort the extent to which data collected thereafter supports our own theory. Nevertheless, we put ourselves in equal peril by mistaking data for knowledge and progress, which require us not only to theorize but also to act upon our theories with some useful end in mind.

1. "Scandals---whether in politics, academia, or other areas---can be useful. They focus our attention on problems in ways that no speaker or reformer ever could."

Are scandals useful in calling our attention to important problems, as this statement suggests? I agree that in many cases scandals can serve to reveal larger problems that a community or society should address. On the other hand, scandals can sometimes distract us from more important societal issues.

On the one hand, scandals can sometimes serve to call our attention to pervasive social or political problems that we would otherwise neglect. Perhaps the paradigmatic modern example is the Watergate scandal. Early in that scandal it would have been tempting to dismiss it as involving one isolated incidence of underhanded campaign tactics. But, in retrospect the scandal forever increased the level of scrutiny and accountability to which our public officials are held, thereby working a significant and lasting benefit to our society. More recently, the

Clinton-Gore fundraising scandal sparked a renewed call for campaign-finance reform. In fact the scandal might result in the passage of a congressional bill outlawing private campaign contributions altogether, thereby rendering presidential candidates far less susceptible to undue influence of special-interest groups. Our society would be the dear beneficiary of such reform. Surely, no public speaker or reformer could have called our nation's collective attention to the problem of presidential misconduct unless these two scandals had surfaced.

On the other hand, scandals can sometimes serve chiefly to distract us from more pressing community or societal problems. At the community level, for example, several years ago the chancellor of a university located in my city was expelled from office for misusing university funds to renovate his posh personal residence. Every new development during the scandal became front-page news in the campus newspaper. But did this scandal serve any useful purpose? No. The scandal did not reveal any pervasive problem with university accounting practices. It did not result in any sort of useful system-wide reform. Rather, it was merely one incidence of petty misappropriation. Moreover, the scandal distracted the university community

from far more important issues, such as affu'mative action and campus safety which were relegated to the second page of the campus news paper during the scandal.

Even on a societal level, scandals can serve chiefly to distract us from more

Important matters. For example, time will tell whether the Clinton sex scandal will benefit our political, social, or legal system. Admittedly, the scandal did call our attention to certain issues of federal law. It sparked a debate about the powers and duties of legal prosecutors, under the Independent Counsel Act, vis-i-vis the chief executive while in and out of office. And the various court rulings about executive privilege and immunity WIU serve useful legal precedents for the furore. Even the impeachment proceedings xxhll no doubt provide useful procedural precedent at

effects of the scandal in terms of the financial expense to taxpayers and the various harms to the many individuals caught up in the legal process---outweigh these benefits. More importantly, for more that a year the scandal served chiefly to distract us from our most pressing national and global problems, such as the Kosovo crisis, our social-security crisis, and health-care reform, to name just a few.

In sum, I agree that scandals often serve to flag important socio-political problems more effectively than any speaker or reformer can. However, whether a scandal works more benefit than harm to a community or society must be addressed on a case-by-case basis.

1. "Practicality is now our great idol, which all powers and talents must serve. Anything that is not obviously practical has little value in today's world."

In today's world is practicality our idol---one which all powers and talents must serve. While this claim has considerable merit with respect to most areas of human endeavor—including education, art, and politics--I take exception with the claim when it comes to the direction of scientific research today.

Practicality seems clearly to be the litmus test for education today. Grade-schoolers are learning computer skills right along with reading and writing. Our middle and high schools are increasingly cutting arts education, which ostensibly has less practical value than other course work. And, more and more college students are majoring in technical fields for the purpose of securing lucrative jobs immediately upon graduation. Admittedly, many college students still advance to graduate-level study; yet the most popular such degree today is the MBA; after all, business administration is fundamentally about practicality and pragmatism that is, "getting

the job done" and paying attention to the "bottom line."

Practicality also dictates what sort of art is produced today. Most new architecture today is driven by functionality, safety, and cost; very few architectural masterpieces find their way past the blueprint stage anymore. The content of today's feature films and music is driven entirely by demographic considerations--that is, by pandering to the interests of 18-35 year old, who account for most ticket and CD sales. And, the publishing industry today is driven by immediate concern to deliver viable products to the marketplace. The glut of how-to books in our bookstores today is evidence that publishers are pandering to our practicality as well. It isn't that artists no longer create works of high artistic value and integrity. Independent record labels, filmmakers, and publishing houses abound today. It's just that the independents do not thrive, and they constitute a minuscule segment of the market. In the main, today's real-estate developers, entertainment moguls, and publishing executives are concerned with practicality and profit, and not with artistic value and integrity.

Practicality is also the overriding concern in contemporary politics. Most politicians seem driven today by their interest in being elected and reelected that is, in short-term survival rather than by any sense of mission, or even obligation to their constituency or country. Diplomatic and legal maneuverings and negotiations often appear intended to meet the practical needs of the parties involved minimizing costs, preserving options, and so forth. Those who would defend the speaker might claim that it is idealists--not pragmatists who sway the masses, incite revolutions, and make political ideology reality. Consider idealists such as the America's founders, or Mahatma Gandhi, or Martin Luther King. Had these idealists concerned themselves with short-term survival and immediate needs rather than with their notions of an ideal society, the United States and India might still be British colonies, and African-Americans might still be relegated to the backs of buses. Although I concede this point, the plain fact is that such idealists are far fewer in number today.

On the other hand, the claim amounts to an overstatement when it comes to today's scientific endeavors. In medicine the most common procedures today are cosmetic; these procedures strike me as highly impractical, given the health risks and expense involved. Admittedly, today's digital revolution serves a host of practical concerns, such as communicating and accessing information more quickly and efficiently. Much of chemical research is also aimed at practicality--at providing convenience and enhancing our immediate comfort. Yet, in many other respects scientific research is not driven toward immediate practicality but rather toward broad, long-term objectives: public health, quality of life, and environmental protection.

In sum, practicality may be our idol today when it comes to education, the arts, and politics; but with respect to science I find the claim to be an unfair generalization. Finally, query whether the claim begs the question. After all, practicality amounts to far more than meeting immediate needs; it also embraces long-term planning and prevention aimed at ensuring our future quality of life, and our very survival as a species.

1. "It is easy to welcome innovation and accept new ideas. What most people find difficult, however, is accepting the way these new ideas are put into practice."

The speaker maintains that it is easy to accept innovation and new ideas, yet difficult to accept how they are put to use. In my view the speaker has it backwards when it comes to socio-political ideas, at least in our democratic society. Nevertheless, I tend to agree with the speaker insofar as scientific innovation is concerned.

In the areas of politics and law, new ideas are not often easily accepted. More often than not, the status quo affords people a measure of security and predictability in terms of what they can expect from their government and what rights and duties they have under the law. The civil-fights movement of the 1960s aptly illustrates this point. The personal freedoms and rights championed by leading civil-rights leaders of that era threatened the status quo, which tolerated discrimination based on race and gender, thereby sanctioning prejudice of all kinds. The resulting civil unrest, especially the protests and riots that characterized the late 1960s,

was dear evidence that new ideas were not welcome. And today those who advocate gay and lesbian rights are encountering substantial resistance as well, this time primarily from certain religious quarters.

Yet once society grows to accept these new ideas, it seems that it has an easier time accepting how they are put into practice. The explanation for this lies in the fact that our system of laws is based on legal precedent. New ideas must past muster among the government's legislative, judicial, and executive branches, and ultimately the voters, before these ideas can be codified, implemented and enforced. Once they've passed the test of our democratic and legal systems, they are more readily welcomed by the citizenry at large.

In contrast, consider innovations in the natural sciences. It seems that we universally embrace any new technology in the name of progress. Of course there are always in formed dissenters with legitimate concerns. For example, many scientists strongly opposed the Manhattan Project, by which nuclear warfare was made possible. Innovations involving alternative energy sources meet with resistance from those who rely on and profit from fossil fuels. Some sociologists and psychologists claim that advances in Internet technology WIU

alienate society's members from one another. And opponents of genetic engineering predict certain deleterious social and political consequences.

Yet the reasons why these dissenters oppose certain innovations have to do with their potential applications and uses, not with the renovations themselves. Edward Teller, the father of the atom bomb, foresaw the benefits of atomic energy, yet understood the grave consequences of applying the technology instead for destruction. Innovations involving alternative energy sources meet with resistance from many businesses because of their potential application in ways that will threaten the financial interests of these businesses. And those who would impede advances in Internet technology fear that consumers and businesses will use the technology for crass commercialism, exploitation, and white-collar crime, rather

than for the sorts of educational and communication purposes for which it was originally designed. Finally, opponents of genetic engineering fear that, rather than using it to cure birth defects and prevent disease, the technology will be used instead by the wealthy elite to breed superior offspring, thereby causing society's socioeconomic gap to widen even further, even resulting in the creation of a master race.

In sum, when it comes to new social and political ideas, the power and security afforded by the status quo impedes initial acceptance, yet by the same token ensures that the ideas will be applied in ways that will be welcome by our society. On the other hand, it seems that scientific innovation is readily embraced yet meets stronger resistance when it comes to applying the innovation.

1. "Success, whether academic or professional, involves an ability to survive in a new environment and--, eventually, --to change it."

Do academic and professional success both involve surviving in a new environment and eventually changing it, as the speaker claims? Regarding academic success, in my view the speaker overstates the significance of environment. Regarding professional success the speaker's threshold claim that adaptation is necessary has considerable merit; however, the extent to which professional success also entails shaping the environment in which the professional operates depends on the type of profession under consideration.

Turning fzrst to academic success, I concede that as students advance from grade school to high school, then to college, they must accustom themselves not just to new curricula but also to new environments--mompfised of campuses, classmates, teachers, and teaching methods. The last item among this list is proving particularly significant in separating successful students from less successful ones. As computers and the Internet are becoming increasing important tools for learning academic skills and for research, they are in effect transforming our learning

environment--at every educational level. Students who fail to adapt to this change will fred themselves falling behind the pace of their peers.

Otherwise, the speaker's prescription for academic success makes little sense. Aside from the environmental variables listed above, academia is a relatively staid environment over time. The key ingredients of academic success have always been, and will always be, a student's innate abilities and the effort the student exerts in applying those abilities to increasingly advanced course work. Besides, to assert that academic success involves changing one's environment is tantamount to requiring that students alter their school's teaching methods or physical surroundings in order to be successful students--an assertion that nonsensically

equates academic study with educational reform.

Turning next to professional success, consider the two traditional professions of law and medicine. A practicing lawyer must stay abreast of new developments and changes in the law, and a physician must adapt to new and improved medical devices, and keep pace with new and better ways to treat and prevent diseases. Otherwise, those professionals risk losing their competency, and even their professional licenses. However, this is not to say that success in

either profession also requires that the practitioner help shape the legal, medical, technological, or ethical environment within which these professions operate. To the contrary, undue time and energy devoted to advancing the profession can diminish a practitioner's effectiveness as such. In other words, legal and medical reform is best left to former practitioners, and to legislators, jurists, scientists, and academicians. Thus the speaker's claim unfairly overrates the ability to change one's professional environment as a key ingredient of professional success.

In contrast, when it comes to certain other professions, such as business and scientific research, the speaker's claim is far more compelling. Our most successful business leaders are not those who merely maximize shareholder profits, but rather those who envision a lasting contribution to the business environment and to society, and realize that vision. The industrial barons and information-age visionaries of the late 19th and 20th Centuries, respectively, did not merely adapt to the winds of business and technological change imposed upon them. They

altered the direction of those winds, and to some extent were the fans that blew those winds. Similarly, ultimate success in scientific research lies not in reacting to new environments but in shaping future ones--by preventing disease, inventing products that transform the ways in which we live and work, and so forth. Perhaps the most apt example is the field of space exploration, which has nothing to do with adapting to new environments, and everything to do with discovering them and making them available to us in the first place.

To sum up, the speaker's daim has merit insofar as any individual must adapt to new environments to progress in life and to survive in a dynamic, ever-changing world. However, the speaker's sweeping definition of success overlooks certain crucial distinctions between academics and the professions, and between some professions and others.