

WHERE ARE WE GOING FROM HERE?

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Since I have been old enough to read and understand, I have been particularly interested in those writings which explore the future. I have never gone so far as tea leaves or Ouija boards, but I do enjoy a review of information which has some plausibility and rational support for the ideas presented.

The earliest of these publications which I remember reading was Huxley's Brave New World, published in 1933, though I didn't read it then. Another which received wide acclaim and is considered a classic by some was Orwell's Nineteen Eighty Four, published in 1949. In 1970, Toffler released Future Shock and it also is considered by some to be a classic.

To review briefly, Huxley portrayed a choice of two future life styles for Savage, the central character. This look into the future had a strong emphasis on genetic engineering. Embryos were conditioned prior to birthing and then readily accepted their lot for life. Interestingly, Huxley never mentioned nuclear fission and its impact on world societies.

Orwell wrote more of a governmental circumstance with a description of life styles under a totalitarian rule. Big Brother was the ultimate authority with a form of loyalty akin to worship. Three social classes were evident: members of the party, the working class, and the proles who were considered by all to be unimportant. Orwell's book was obviously influenced by his contact with political events of the times in which he wrote.

The Toffler treatise seems to approach the future through a more scientific eye, possibly that of a behavioral psychologist, and pictured the future as a shocking experience resulting from the rapid change of living conditions and the inability of humans to adjust. The result is a population of neurotics and psychotics.

By contrasting these three pieces, we see a basic trend in writing about the future. Huxley's writing appears to be fiction and fantasy, with little or no relationship to the times. Orwell, though, begins to lend a measure of credibility to his to his novel and predictions by relating to the political circumstances of the recent past. Toffler evaluated the future by drawing heavily from current events and human behavior studies. The basic trend we identify is the prediction based first on guess, second by evaluating the past, and third by looking at the present.

The remaining choice for predicting the future is an evaluation of the future itself, and hence the topic of this paper, "Where Are We Going From Here?"

Well, where are we going? It is believed by some futurists that we can best predict the future by evaluating the near future. The near future can be identified by trends. What are some of these trends in American society and how are we able to identify them? Let's take a look at a few:

- 1) Industrial America is dead. We are in the shift phase from an industrial age to the information age.
- 2) We are shifting from an era of forced technology to one of high/tech/high touch.

- 3) Our economy is no longer national. Rather, we are a part of a complex global economy.
- 4) Consideration of the long term results, rather than the immediacy of short term response is becoming prevalent.
- 5) From centralization to decentralization.
- 6) From institutional help to self-help.
- 7) From representative democracy to participatory democracy.
- 8) From hierarchal communication to networking.
- 9) From North to South.
- 10) From and either/or decision process to one of multiple choice.

. and the list goes on.

A technique used to identify these trends was first introduced as a valid and reliable evaluation tool in the early '40s by Paul Lazarsfeld and Harold Lasswell. Called content analysis, the procedure involves extracting, from current publications, factual events. Analysis of these events reveals trends. The first practical application of content analysis was against Germany in World War II. The timeliness of the study lacked a bit because newspapers across Germany were not immediately available. However, subsequent reviews of the analysis and the trends were extremely accurate. The local paper told us of shortages, of attitudes, and their losses in military actions.

Allow me to summarize the technique of content analysis for you. Essentially the practice includes a consistent review of published information from a broad

spectrum of sources over a continuous time period. The presence or absence of certain subject matter suggests the emphasis that subject has received at that time. By following particular subjects through a period, trends can be established concerning it.

An organization, The Naisbitt Group, a professional consulting firm, in America, uses this process to identify trends for the future and includes in its customer files many of the world's multi-national corporations.

The Naisbitt Group's application of content analysis to the American society is enhanced by two significant facts: 1) the American free press and 2) the computer.

The free press avoids the influence of controlled information and the computer allows large samples to be evaluated with rapid collation and summarization. Space given to news in the American press is a function of less important issues being deleted in favor of more critical matters. The pressure of getting the paper out on time does not allow much planning of what is to be reported. Therefore, the news is more of what is really happening. The technique is also more valid since the news maker and the news reporter are not aware of their contribution to the information whole. The procedure tends to eliminate the influence of bias with an extremely large disconnected sample and through the evaluation of pure news in lieu of editorial efforts.

In the identification of events and any consistency or correlation between events, there is a necessity to differentiate between a trend and a fad. Researchers

suggest that fads begin at the top and move downward in a society network, while genuine trends appear to originate at the bottom and work upward. In our reference to top and bottom, the top is the leadership of a particular society while the bottom is a reference to the grass roots citizenry.

In a review of trends of the past thirty years, another interesting trend is observed. The majority of "happenings" have originated in a few areas or population centers. If asked, "Where?", one might guess that California is a trend setting area. And, yes, you might also guess that Florida is such a pacemaker; but, would you expect Washington State, Colorado, and Connecticut to be that influential? They are.

It is suggested by some that many of today's civic and political leaders are, in fact, not leaders, rather they happen to be in the path of a trend and caught on for the ride.

Now let us look more closely at some of the trends.

From An Industrial To An Information Society

We hear more and more today about the information society in which we live. Reagan has just placed emphasis on computer training. Tennessee's governor has begun to talk about computers in every school room. Our own gubernatorial candidates will soon be singing the same tune. This talk by leadership is a fad. The real trend toward an information society began in the 1950's, an era which seemed to be at the height of the industrial revolution.

Some think it began with the launch of Sputnik and the space age. At another glance, however, one could see that the real shift began with the development at Bell Laboratories of the transistor - the real beginning of the solid state era. Sputnik and the subsequent logarithmic development of communication satellites was made possible by solid state electronics, thus instantaneous global communications began.

The increased technology of the late '70s and early '80s has only accelerated the pace of the trend toward the information society, or as we may say, the obsolescence of the industrial age.

It is taking a while for the lumbering labor oriented industrial society to die; but, there are those who predict its sure death. The only retardant is the resistance of organized labor, and, more so than they, corporate leadership itself. Why? Because they want to preserve tradition? No, mainly because they are unable to respond to the trend.

Why is the trend working? Robert Noyce, one of the developers of the integrated circuit and, subsequently, the microprocessor, offers a simple explanation. In the industrial age, a "good idea" was not enough. To produce goods, one must have the idea, the machinery, the workers; but more significantly, large quantities of capital. A good example is right here in our own state. Nathan Stubblefield of Murray really developed the radio receiver; however, little chance did he have for recognition or development of the idea because he did not have the needed Eastern capital.

By contrast, the primary resource in the information society is the information. The growth of information is exponential. The organization of that information into accessible data bases is woefully wanting. The current emphasis on home computers and data links is just beginning; thereby making the information data bases a very attractive resource. This is one area in which Toffler in Future Shock was correct. Many humans will not be able to adjust as the events of life whirl by. It will be necessary for our whole vocabulary to change. We will no longer be able to "railroad" an idea through or put our shoulder to the wheel or keep our noses to the grindstone. Those people who are unable to adjust may well be the proles Orwell described. The real dilemma of this trend is that there is no longer a need for thousands of steel or auto workers or other machine operators in the information society.

From Forced Technology to High Tech/High Touch

The development of technology has three phases. First, the pure science of development which follows a free form process without significant influence or consequence on surrounding activities. The second phase is the application of that technology to existing needs or practically a process of making one's task easier. Thirdly, the most devastating phase to the laboring human, the application of the technology to improve the task thus eliminating the need for the worker.

The microprocessor is a perfect example. Initially a harmless and, in fact, exciting development in the field of solid state electronics. Secondly, such an asset as direct dialing, chronographic watches, and so on. The

third step, however, is more traumatic. Robotics is the present demonstration of the use of microprocessors to remove the need for human laborers. Today some 17,000 robots exist in the automobile industry. By 1990, it is estimated that the number may be near 90,000, virtually eliminating the need for the human hand in automotive manufacturing. From our first trend, laden with despair, there is a certain glow of hope for human life in the second. From a situation of forced technology where people were mastered by the machines or devices they earned their livings operating to one involving technology with feeling or as coined by The Naisbitt Group a society of "high tech/high touch".

The trend toward a balance in high tech/high touch is refreshing. American ingenuity has recognized the need for equal or greater portion of high touch for each addition of high tech. There is strong evidence that the success of professional sports from the spectators' perspective is not the result of avid fans, rather it is a population seeking a human centered event. A handwritten note from an executive to a co-worker is more appreciated than the cold typewritten memorandum.

The trend of high tech/high touch balance is being seen at every level of the community - the home, the school, and in the work place. In the home, considerable emphasis is paid to decorating schemes, colors, and styles of furniture. The whole "back to the basics" efforts in furnishings and life styles, the nostalgia trips, possibly country music, and surely the urban cowboy philosophy are motivated by the desire of the human animal for human interaction. Each of these contributes to the warmth of human relations and that is why they are popular. You should notice the television

commercials from beer to bubble gum in which the product receives very little mention. The emphasis is placed on the relationships between individuals.

In the schools, the move to reinstate moral and spiritual values may be seen as an indirect effort to add high touch. In the work place, the development of quality circles as in some European countries or problem solving committees reflect a move by the employer to add high touch.

This mix of high tech/high touch should direct us to some key observations.

1) The presence of technology is a tremendous tool; however, the presence of a good tool without a good mind to direct its focus is valueless. Thousands of jobs about the country are going begging for want of high tech/high touch skills.

From A National Economy To A Global Economy

In 1960, the United States had 25% of the world's manufacturing market. Of that 95% of the world's automobiles, steel, and consumer electronics. In 1980, the percentage had changed to 17% of manufactured goods, including only 79% of the autos, 86% of steel, and less than 50% of electronics.

Considering this and other related facts, the obvious trend for the United States is from a position of superiority in economics to just one of the stronger countries.

It is not difficult for us to find great numbers of persons who will add to the list of excuses for the decline. These include imports, regulations, labor unions, and the like. It is no doubt that this list contributed to the rate of decline but in no way at all the direction of the trend. Our excuses are akin to the

athlete who blames the loss on the referee without examining his own performance, or, more specifically, the performance of the opposition.

Some predict that it will be a tragic mistake for America to attempt to rebuild its industrial supremacy, saying that, in fact, it cannot be done. The protectionist acts of tariffs and trade quotas or more recently talk about laws requiring American made parts in imported cars are futile efforts to maintain the status quo and they will not be successful. Names, such as South Korea, Hong Kong, Taiwan, Phillipines, and Mexico lead the world in the growth of industrial production, while American productivity continues to diminish. In America, it requires 33 hours to produce an automobile from start to finish. In Japan, an automobile of equal or better quality is produced in just 11 hours.

Many states and local communities are reading the trends and capitalizing on them by directly dealing with foreign markets for the export of their goods and, more significantly, their information resources.

The real key to our success or failure in the global economy will be our ability to adapt or bend. We must undergo a major structural adjustment, both economically and governmentally.

For example, rather than unemployment benefits for a person waiting to get an old job that will likely never again exist, the government should be retraining workers for available jobs. National job banks, training and relocation programs, could replace the bureaucracy of existing subsidy programs. As an example, a steel worker whose job was replaced by imported steel is receiving a subsidy of

near \$12,000 per year on the assumption that his job will be reopened when the economy is turned around. The trend is clear. The job will not be reopened and the \$12,000 has only helped him survive for the duration, not to readjust.

We have lost sight of the real problems through averaging. Costs of living, inflation, unemployment data are meaningless because they are averages. One failure and one complete success gives an average of 50%. This, of course, is misleading because the failure's¹ subsistence will be totally dependent on the one success, if not taught to succeed.

The economic conditions of the country are another example of the misleading effects of averaging. In many parts of the country, the economy is in boom time, while others are at the heights of a depression greater than ever imagined in the '30s. Many economists continue to predict gloom mainly because they look only at our industrial past and present and do not realize that survival is dependent on the acknowledgement of the world economy and the shift from the industrial to the information age.

Our restructuring toward a global economy has other values as well. It is highly likely that we will not bomb each other from the face of the earth, if we are intertwined and interdependent economically. In fact, we could well see peace as a result of trade, the application of high tech and its partner, high touch on world social problems.

From Short Term to Long Term

From the famous Dogs of Pavlov through the Development of the Concept of Behaviorism in American Psychology Circles by John Watson in 1913 to Operant Conditioning explained by B. F. Skinner in the late '30s. The science of behavior

being altered by stimuli has been broadly applied in professional and industrial circles in America. These professionals while developing an understanding of the science and parallelly developing educational and treatment techniques cautioned about the pitfalls of these techniques of behavior management. It appears that business and industry leaders ignored those warnings and for several years have concentrated their efforts on immediate reward for good behavior.

In economic circles, the only indicator was the next quarterly dividend or the bottom line even at the expense of longer term growth of the corporation. Executive salaries in major corporations have been based exclusively on short term growth of the corporation with little consideration given to long term. The average length of stay of a corporate executive averages under five years. This also has contributed to the short sightedness of executive corporate planning. It seems to be a very simple cause, but American business managers are the primary reason for our national economic decline. For those of us with more rural upbringing, what has happened in the American manufacturing and industrial scene is related to the farmer boy who plows a row of corn by watching the plants passing between his feet rather than looking down the row.

All is not doom, however. The trend is clear that major American financial leaders are beginning the shift from emphasis on the short term to longer term concerns. Business publications are challenging boards of directors to reinvest in research, to take short term risks that will enhance long term circumstances. To completely convert to a long term emphasis, it will be necessary to approach our management principles from another perspective. The Naisbitt Group suggests

that the application of "the law of situation", a term coined in 1904 by Mary Parker Follett one of the country's first management consultants. She forced business leaders to examine what business they are really in. She caused business leaders to raise their sights and expand their vision. One example cited concerned the window shade manufacturing company, who she convinced to perceive themselves as being in the light control business.

The inability to make this adjustment is a basic reason for the stagnation of the railroad industry. Railroad executives enamored by their shiny locomotives and miles of steel rail perceived only too late that they were really in the transportation business.

This rethinking of what business you are in has caused such companies as the Singer Company, renowned for the sewing machine, to now be listed heavily in the hand tool business, military communications, the Breckinridge Job Corp Center, for example, and even aerospace.

Within the last 6 months, advertising by Sears seldom mentions the soft goods business, rather they discuss financial counselling, real estate, insurance, and with only a trailer of attention paid to washing machines and refrigerators.

The banking community is in for a drastic change. Also as a result of instantaneous communication, the ability of banks to shift money and operate on depositors money for short periods of time has been eliminated by the electronic transfer of funds. As a result, banks have considerable less room for error. It is suggested that by some futurists, banks will go in and out of business as

frequently as filling stations.

Big labor, as usual, is one of the last to recognize the trend from short to long term and all of their efforts are focused on short term survival activities. Their membership has dropped in half over the last 10 years and if they do not change they too will be gone.

The planning of NASA in the early '60s is a perfect example of the necessity of long term vision, prior to short term activity. The goal, a man on the moon before the end of the decade, was clear what the long term plan was. Every intermediate step was then weighed as a positive act toward that ultimate goal.

In the shift from short term to long term thinking, the specialist may well find himself following a course that is ultimately terminated. It is fairly predictable that the generalist education will once again become important.

From Centralization To Decentralization

The presidency and the congress are useless tapestry.

This may sound like a radical statement and may not be completely accurate; however, a close look at the results of their efforts in the past few years makes the expense of government leadership awfully hard to justify. In the '81-'82 session of Congress, some 15,000 bills were introduced and only 500 passed. Assuming that these were all good, the cost of just enacting that legislation is hard to comprehend.

We have not had a federal budget approved and finalized in a number of years.

The government continues to function on continuing resolutions instead. Apparently postponing dealing with the real issues of leadership. In 1970, 50% of physicians licensed in American were members of the American Medical Association. In 1980, only 1/3. Such mainstays as Life, Look, and the Saturday Evening Post came and went, primarily because their readers found their needs being met in more interest focused periodicals. The advent of low powered television stations and the coming satellite to home television reception will likely eliminate or greatly alter the appearance ^{of} national communication networks, ^{ABC, CBS, NBC} Local interest groups have gotten tired of fooling of the bureaucracy of government and have acted in their own interest. Examples of these range from the Proposition 13 efforts in California to efforts in this state to deal with international drug traffic.

In the field of energy, specifically energy conservation, all of the efforts have come from the bottom up. The Carter administration floundered without developing any meaningful energy policy for the country and subsequently, the Reagan administration completely abolished the exercise.

This shift from centralization to decentralization embodies another trend very closely, that is the shift from representative democracy to participatory democracy.

We are no longer willing to elect public officials, send them off to the halls of government to make decisions on our behalf. We want and, further, we expect those elected officials to be responsive to our individual desires in

the casting of their votes. An arena once controlled exclusively by special interest lobbys is gradually giving way to the individual influence of the local voter.

I predict that we will likely see a result of this participatory democracy in the congress and the presidency's inability to wrestle with Federal spending. If Congress does not act soon, the general populace will whether right or wrong apply Proposition 13 type limitation to government spending. As you know, of course, motions are already in effect to have a constitutional amendment prohibiting deficit spending.

Trends toward employee rights groups, outside directors (non-stock owning) in corporations, consumer representation on boards is evidence of the trend .

The leader of tomorrow will not and cannot be an order giver, rather they must be a facilitator.

From Hierarchy to Networks

This final trend is the operational basis for all others that I have described other than the shift from an industrial society to an information society. The rigid pyramid structure of organizational charts and military lines of communication are being short circuited at an accelerated rate. This all connects to the desire of the persons involved fro a high touch situation, the availability of information and the directness of communication between the source of information and the seeker.

Networking as the process has been labeled, has proven to be a more productive , efficient and mutually beneficial means of information exchange, in contrast to the rigid highly structured chain of command of the heirachy.

Fellow Athenaeum member Bill Rowlette and I can testify to a form of networking which has existed since the 1930's, amateur radio. We ham radio operators had at our disposal a personal instantaneous communications vehicle much earlier than the typical citizen and as a result have developed informal networks around the world communicating to, from or about our specific special interest.

With the development of the computerized data bases and information banks this technique has been expended to the general population and will be even more influential when the home computer can scan the networks for a specific source of information.

The trend for networking has everything going for it: the opportunity for positive human interacting when desired, prompt response. Avid networkers claim they can reach anyone in the world with fewer than 6 transactons.

By contrast I have been seeking a single item of information from a single government agency. To date I have made over 20 phone calls, talking to 15 different persons and still no answer.

Conclusion

All of these trends are quite interesting. It remains of greater interest what we will do with our own interests as we observe these events. It is easy to follow a trend, most difficult to alter it. As with the high tech tools we have described earlier, we do have an opportunity to choose our options.