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## FUTURISM—AN ART AND A SCIENCE

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 The nature of futurism with particular focus on its use in the processes of Issues Management and Strategic Planning.

MR. A. ANTHONY AUTIN, JR.: This panel discussion is being presented by the Society's Futurism Section. The theme of this meeting is Competitive Strategies and, in particular, the use of strategic planning to determine the decision-making principles that govern resource allocation within our organizations and the processes by which such decisions are made. Issues Management can be viewed as a precursor activity to strategic planning that, in many instances, identifies issues or alternatives which are the fuel for the strategic planning process.

If the label Information Age has application, it might be to describe the enormous range of information available to managers in the insurance and pension industries today. Such is the variety, range and volume of this information, such is its volatility, its inconsistency and its lack of apparent structure or direction, that the term Noise Age might be more appropriate.

How can Futurism and Futurists help with the task of making Information out of Noise? Can the techniques used by futurists give structure to the tasks of issues management and strategic planning?

Our two speakers will help us get answers to these questions by describing both the Art and the Science of Futurism, the right brained approach as well as the more left brained approach typically used by actuaries.

Our focus today will be the application of Futurism to Strategic Planning and to its closely allied process, Issues Management. As the earlier speakers in this meeting have pointed out, strategic Planning and Issues Management are becoming more important functions in the life insurance industry because of the significant changes occurring in economics and finance technology, consumer attitudes and competitive practices. Because these functions are focused externally vis-a-vis most management functions, they can benefit from the perspective of futurism and the involvement of futurists.

All of our speakers are active in futurism in addition to being active members of the Society. I am Chairman of the Council for the Futurism Section. Wil Kraegel chaired the Society's Futurism Committee from 1978 to 1980. Additionally, he has been a monitor in the Trend Analysis Program of the ACLI since 1970 and is currently a member of the steering committee for this archetypal environmental monitoring program.

Toy Anderson was the first Chairman of the Society's Futurism Committee and has been a frequent speaker on futurism at Society meetings. He currently serves on the steering committee for the Trend Analysis Program.

Wil and Roy are both members of the World Future Society and the U.S. Association for the Club of Rome. Their broad experience in life insurance and many years of studying the external environment in which our industry works, makes them uniquely qualified to discuss today's subject.

MR. WILFRED A. KRAEGEL: Because some of you may be relatively new to this way of thinking, I think that both Roy and I would like to give some perceptions about futurism to help you put it into a framework that can be useful to you. How Can Futurism Help the Actuary? One way to look at futurism is that it deals with everything, everywhere from this time forward. Now that covers a lot of ground and in a very real sense that is what futurism is about. In that sense, everybody, of course, is a futurist to some degree; but we do want to focus it considerably more than that.

Some actuaries feel that futurism is not worth much attention. There are others including the people on the podium this morning, who feel that futurism is probably the single most important mode of thinking for the actuarial profession as well as other segments of society. I certainly feel that futurism is not only very important, it is also extremely exciting and a very interesting and enjoyable activity. Some of the things we talk about are not necessarily enjoyable, but the whole way of looking at things and being mentally involved with what is going on in the world is a very enjoyable process.

In a very real sense, actuaries have long been futurists, even long before the field of futurism was recognized as such. Actuaries have dealt with a very limited facet of futurism, however, concentrating usually on the extrapolative form of forecasting — an oversimplification, perhaps, but substantially true. But there is more to forecasting than extrapolation, and there is more to futurism than forecasting. These remarks will consider a variety of ways in which futurism can help the actuary with issues management and strategic planning, and will conclude with some thoughts on the art/science question.

#### Forecasting

Let us being with forecasting, because that is a well-understood and widely accepted technique used by the actuary. The actuary was a master of extrapolation long before most people knew what the word meant. But forecasting has changed from an arcane and limited tool to a widely used and sophisticated methodology. The national (even international) recognition of the accelerated pace of change has given forecasting a tremendous boost, both in the extent of use and in the variety of techniques.

Actuaries tend to have one difficulty with forecasting, however. We have had such a strong link with extrapolative methods, that many of us have not recognized the emerging importance of other methods. A useful classification of the forecasting methodology was presented by Joseph Martino\*, which is summarized in Diagram 1:

<sup>\*&</sup>quot;Survey of Forecasting Methods," Joseph P. Martino World Future Society Bulletin, Nov.-Dec. 1976 and Jan.-Feb. 1977.

Exploratory

Normative

### Purely extrapolative

Growth curves
Trend curves

Morphological Relevance trees Mission flow diagrams

# Explanatory

Correlation Precursors Causal Other

Delphi

Computer simulation

# Auxiliary

Cross-impact matrices Scenarios Surprise-free

### Diagram 1 - Forecasting Methods

The first major category is the exploratory. These methods start from the present situation and its preceding history, and attempt to project future developments. All are based to some degree on extrapolation, and in effect they are based on the premise that the future will be an extension of the past. These methods have been extremely useful in the past and will continue to be very useful. Actuaries have tended to use primarily the purely extrapolative; no doubt we could benefit by using the other exploratory methods as well.

As an example, I believe actuaries rarely use precursors, and yet the identification and recognition of certain signals as advance announcements of certain probable events could be very useful. As another example, the population curve, not mentioned by Martino, might be considered as an inverted form of a growth curve, and the relationships between the two might be instructive.

As useful as they may be, however, exploratory methods have at least two vital deficiences — they do not take into account the power of alternative visions of the future and current decisions to achieve them, and they generally ignore potential discontinuities. That is where the normative methods enter the picture. They start with some desired or postulated future situation, and work backwards to derive feasible routes for the

transition from the present to the desired future. Time does not permit going into the details of these methods, but at least you are alerted that they exist. As for discontinuities, the normative methods do not identify them specifically. Once identified, the normative methods can assist in finding ways to achieve them — or avoid them — as the case may be.

### Planning - Etc.

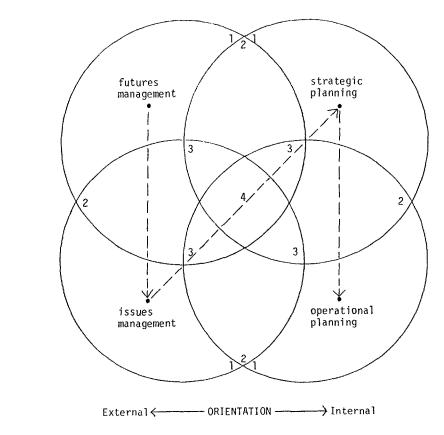
Actuaries have been among the early planners in the field of life insurance and related services. This opportunity came about in the early development of planning perhaps because actuaries were recognized as being more future-oriented and more comprehensively-grounded than the average professional in the field. But planning has changed - indeed, metamorphosed. That type of planning may be called operational.

How has planning metamorphosed since then? First, it must be emphasized that operational planning continues as a vital stage in the metamorphosis cycle. Ultimately, it is necessary to plan how best to accomplish specific objectives (whether or not the narrowly-focused Taylorian approach is used). But beyond that, planning has evolved to embrace at least three additional stages in the metamorphosis cycle - strategic planning, issues management and futures management (organizational futurism). Diagram 2 shows schematically how these four stages interrelate and overlap (note that the small numerals indicate the level of overlap, from one stage by itself through two, three and all four stages overlapping). The interactions are multi-dimensional and multi-directional, so it is not strictly valid to assume a normal sequence of stages, but there may be a tendency to follow the sequence of the dotted line. Bear in mind that this is not more than a rough model of the interconnectedness of several corporate activities. The distinctions are for convenience and understanding, but they are not clear-cut. See diagram 2 on the following page.

Another aspect of these four stages is their direction of orientation. Future management and issues management focus primarily on external events and conditions, and (in an organizational context) how the organization relates to them. Strategic and operational planning, on the other hand, focus primarily on internal goals and objectives, in light of the externals.

Does this mean that futurism and issues management are parts of planning? Well, yes and no. Futures management is indeed a part of the planning process within an organization. But the reverse is true also - in a broader sense, planning within an organization is a limited application of futurism. Similarly, issues management has 2-way relationships with the other terms.

Then how may we distinguish among these four stages? In an oversimplified way, we may identify the basic purposes of each (in the context of the corporation) in the following way (Diagram 3):



Longer Range

TIME

Shorter Range

Diagram 2 - Four interactive stages of the planning process

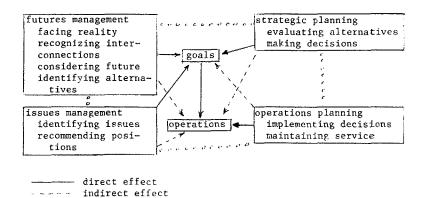


Diagram 3 - Purpose of four stages in planning

o o o o o communication and coordination

Let's take those in order. First, take operational planning for implementing decisions and maintaining service. Operations are the life blood of the organization and won't require much discussion in this panel on futurism. However, operations would not escape the scrutiny of futuristic thinking, because certain routine services being performed very efficiently may no longer be worth doing at all - and may potentially even be harmful. In any event, the time frame is short, usually one year, and interconnections are assumed to be taken care of at higher levels.

Second, take strategic planning. This activity normally is concerned with evaluating alternatives and making decisions. It does have a future orientation, but primarily with an internal focus. The analysis of external forces is present, but limited, except as issues management and futurism are introduced. The time frame is longer than one year, but generally not more than five years.

Third, take issues management. This is a short term version of futures management, usually two to five years. Issues management may relate to today's crisis as "one that got away," but ideally it anticipated crises (identifying issues) and does something about them (recommending positions) while there is still time. The analysis of the issue determines what alternatives are available to take advantage of an opportunity, or to avoid the development of a crisis, or to meet the crisis if unavoidable.

And fourth, futures management (organizational futurism). The time frame is from here to eternity. If a solid issues management effort is in place, then the emphasis may begin at five years. The more distant horizon will depend upon the topic, but will normally be from 10 to 25 years. The degree of conjecture about the future seems to increase with the square of the number of years considered. More specifically, futurism has several distinctive characteristics not normally found in planning:

a. Facing reality - Doesn't planning normally face reality? Surprisingly, no. Of course, planning recognizes many aspects of current reality, but it tends to overlook two types: those factors which

may challenge the status quo, and those which affect the organization's future only indirectly as secondary or tertiary consequences.

- b. Recognizing interconnections Doesn't planning normally recognize interconnections? Again, often not. The familiar may be given due regard, but the new and the subtle usually are not given adequate attention. Such activity is difficult and takes time (equals money). It requires going beyond analysis and moving into synthesis to determine relationships and resulting consequences of alternative actions.
- c. Considering the future Doesn't strategic planning do that? Yes, but generally not beyond three to five years. Futurism is concerned about the near future, of course, but also about the longer. The purpose is not to make tomorrow's decisions today. Rather, it is to make today's decisions do double duty to solve today's problems and to move toward a preferred tomorrow.
- d. Identifying alternatives Strategic planning normally considers alternatives which are derived primarily through internal considerations, while futurism seeks a more comprehensive set. Futurism goes beyond the obvious; it opens the door wider to more innovative, out-of-pattern decisions (but it takes more than opening the door).

Futurism suggests still another dimension which relates to the philosophical basis of the actuarial profession. The core of the profession deals with contingencies which are probabilistic. Events involving the contingencies appear to be occurring at random, even though the resulting patterns may be defined using actuarial concepts. But are those events really random? Or, are there underlying forces which are obscure to us but which really are capable of explanation and demonstration? When I moderated a panel on futurism in 1979 (The RECORD, Bal Harbour), I proposed five principles of futurism, the 4th of which stated that "everything is connected to everything."\* This principle suggests that the randomness model might be replaced by the systems model. What appear to be random, probabilistic events may really be the reverberations of contacts among many complex interactive systems. If so, the power of computers may ultimately help us to model those systems and improve our forecasting capabilities substantially. However, I do realize the limits to that idea since the potential number of such systems may be so large that no computer could possibly deal with the almost infinite number of interactions.

<sup>\*</sup>The other four were: "the future is a choice among alternatives; the future is in today's reality; the future is in today's decisions; change is self-accelerating."

### Other Future-Oriented Activities

Future-oriented activities can take many other forms. The list of such activities which follows in this section will likely strike each of you in different ways. Some items will seem today-oriented, but are included to emphasize the importance of fully understanding today's realities. Some you may find are simplistic and already being done, which demonstrates that much of futurism is far from estoeric. Some you may find far-out and unacceptable; but futurism does not specify what will be, rather what may be.

At any rate, there are some ideas for your consideration. This first list relates primarily to information:

- 1. Join the SOA Futurism Section.
- If you are in a life insurance company, set up an ongoing documentation of the experience of selected other companies - product portfolio, business paid-for, etc.
- Assign one person in each department to review the ACLI legislative and other committee materials and to give an oral report routinely at periodic departmental meetings.
- 4. Summarize the ACL1 TAP (Trend Analysis Program), MPA (Monitoring Attitudes of the Public), and other research reports, and distribute or route them to everyone in the organization.
- 5. Become an institutional member of the World Future Society. Attend local and national meetings.
- 6. Set up a forum or seminar on an issue of current significance, giving representatives of differing viewpoints an opportunity to share views.
- Invite advocates of unpopular positions to speak to management in your organization - and hear them out.

This second list of ideas for future-oriented activities relates primarily to the organizational:

- Set up structures within the organization (if not already there), parttime, for the four stages of planning described earlier: operational and strategic planning, issues and futures management. Involve management (and possibly others) in exercises to provide input and to offer critique.
- Require that each recommendation for a decision include a section giving the broader implications of the decision process described in the panel on Futurism (The RECORD, Bal Harbour, 1979).
  - a. Which external factors were considered in formulating the recommendation (was today's reality recognized adequately)?
  - b. Which alternatives were considered and discarded and why?

- c. What are the direct future consequences of this decision (probable and possible) to this organization (one year, five years, ten years)?
- d. What are the indirect future consequences of this decision (short term, long term)? Are they in the best interests of the profession, industry, social/political/economic milieu - of which this organization is a part?
- e. What actions are suggested to further the overall beneficial results of the decision?
- 3. Set up networks for people, in particular, positions whose decisions affect each other significantly, but who do not usually talk together (e.g., business and industry management, labor, government, academia, volunteer sector, religion, etc.).
- 4. Develop a contribution policy which recognizes the areas that are most important to support for healthy future of both your organization and the world in which it operates (e.g., a matching gifts program).
- Encourage employees at all levels to be active in professional and community affairs, and support them in those activities through time arrangements, minor services, etc.
- Seek interdisciplinary evaluation of organizational opportunities and threats by forming interdepartmental, interprofessional teams for review and report.

You may add many other ideas to that list. The idea is not necessarily to do them all, but to increase the futuristic outlook to a point of balance with considerations of past and present.

#### Special Topics of Current and Potential Significance

To this point my discussion has concentrated on matters of form. Ultimately, matters of substance must be addressed, because they are the stuff of opportunity and threat. The following is a selection of topics which seem particularly relevant in a discussion of futurism. The list is neither complete, nor in priority order, but primarily an illustration:

Nuclear war - War has always been bad for life insurance companies, and for many, but not all, segments of society. So far as we can forecast, a major nuclear war will be bad for virtually all living things, no matter where they live or grow, and for much of the urban human habitat. To say that nuclear war will be bad for life insurance companies is a laughable understatement. I believe it is no exaggeration to say that any human problems existing before nuclear war will be amplified by several orders of magnitude if it occurs (except for the population explosion). Is it a valid concern of the actuarial profession and of the life insurance business? Unquestionably, there is no more devastating phenomenon over which humans have control. Is there anything we can do about it as a profession or an industry? Unquestionably; in whatever contexts we operate, we can be aware of this overriding threat and do everything possible to move away from it rather than toward it.

- Gender-neutral mortality tables We are in the middle of this issue. Could it have been anticipated? Avoided?
- 3. Increased longevity Life expectancy (average human lifetime) continues to increase. Life span (maximum human lifetime) may experience a major breakthrough within 10 or 20 years. What would that do to life insurance? To annuities? What should we do to prepare for this potential challenge?
- 4. Changing male/female roles This trend will continue to affect our profession, our managerial mix, our office staff, our distribution systems, and our markets. How can we recognize the favorable aspects of this apparently irresistible trend and make use of the opportunities they provide?
- 5. Financial services diversification The requirements of the consumer are enlarging to embrace a wider range of financial services. A few life companies have already acquired subsidiaries qualified to offer a variety of services, and vice versa. Banks are striving to sell life insurance. Regulations are changing. What is the probable outcome by, say, 1990? By 2000? Is that regarded as favorable by the life insurance industry?
- 6. Effect of toxics As noted earlier, several factors are moving toward increased longevity. However, the reverse is also a possibility. One such scenario is that the rapid accumulation of toxics in food, air and water is like a time bomb and will cause a decrease in longevity.
- 7. Inflation Will rapid inflation resume its erosion of purchasing power? Can life insurance thrive if it does?
- 8. Computers What effect will the proliferation of computers have on records processing and service capabilities of life companies? On products? On the distribution systems? On the client perceptions of what to do personally and what to have done by others?
- 9. Work roles Will there be enough meaningful work roles in the U.S. and world economies over the next 10 or more years? If not, how will income be distributed? With what impact on life insurance?
- 10. Taxes This is a vital current issue for life companies, but is likely also a continuing concern well into the future.
- 11. Investments Most investments serve to support and stimulate goods and services which are clearly beneficial to humans. But some tend to harm human health and property. Are life companies' investments part of the solution - or part of the problem?
- 12. Other professions What is happening to medical doctors, lawyers and other professional and managerial people? They form an important part of the private life insurance market. The nature of their activities is changing; will this affect their use of our products?
- 13. Natural catastrophes With the increasing numbers and concentrations of people in urban areas, the potential havoc of a natural catastrophe (earthquake, volcano, etc.) is large and growing. What can life

- companies do to modify the potential risk? Reinsurance may be a partial answer. Is further pooling of such risks an appropriate move?
- 14. Family The traditional nuclear family is still alive and well. However, the proportion of such families is diminishing and a wider range of family styles is finding wide acceptance. How does this trend affect our markets?
- 15. Communications Like computers, the range of communications has increased rapidly during the 70's and 80's. Can we handle those changes within existing frameworks? If not, what alternatives are needed?
- 16. Genetics Genetic engineering may change the ways in which human life is initiated, maintained and terminated. The implications for life insurance could be profound.
- 17. Mind-brain-body Our understanding of the physical brain and of the mind process is expanding rapidly, along with their interdependence with other functions of the body. Personal control over health and longevity is increasing.
- 18. Environment, water, land, air, resources, food, energy, etc. One can go on and on. These are vital to the actuary because they relate to the continuing health of the profession, the business, the economy, and the society.

#### Futurism - An Art and a Science

Before discussing the art/science dichotomy, let us ask a more basic question: is futurism a discipline? An academic discipline may be thought of as an integrated body of knowledge, linked by a coherent set of principles, supported by relevant literature and research. Futurism does not yet meet a rigid application of that definition, but it seems to be headed in that direction. Sometimes, however, it seems instead to cut across other disciplines as a unifying dimension of time. And at still other times, futurism highlights the interconnections of other disciplines and blurs their distinctiveness, perhaps even bringing into serious questions whether the concept of discipline is valid in the first place.

If it is a discipline, is futurism an art, a science, or both — or neither? I am not prepared to consider the "neither" option, but futurism really may be "something else." Perhaps we can define a physical science as a discipline dealing with the physical aspects of nature, a social science as one dealing with human thought patterns and activities, and an art as one dealing with human conceptions of love, beauty, truth and justice. It is not difficult to say that futurism is both an art and a science. But more study of this phenomenon is needed.

#### Conclusion

In any event, futurism offers several dimensions of utility for the actuary. Futurism helps the actuary to better understand and to relate interconnections over time, to anticipate alternatives, to choose from among them, and to work toward a preferred future. Futurism fosters creativity and vision, helping to perceive what may be and what we may become.

MR. ROY R. ANDERSON: After reading Peter Drucker's  $\frac{Age}{2000}$ , I became aware of the tremendous problems facing the world. As a result of my activities with the Trend Analysis Program, I came in contact with Hazel Henderson and Willis Harman, who helped me develop the conviction that our civilization is undergoing a historical transformation. We are now at the beginning of a new era.

If we are ending one period and another period is starting, what is the period that is ending? I've already said that Western Industrial Society is ending. John Naisbitt in his book, <u>Megatrends</u>, referred to the Industrial Society that's ending. Western Industrial Society has been a period of about 200-250 years that began somewhere in the second half of the 18th century.

There are other concepts of the period that is now ending. There's a school of economists which believes in the long-wave, sometimes called the Kondratieff Wave after the Russian Nicholai Kondratieff who, back in the 1920's said there seems to be statistically a fifty-year economic cycle. The concept is that a new period of prosperity is ushered in with new technological innovations; they find new ways of producing goods and services. A lot of investment is put into capital equipment and the capital is built up. We have years of great prosperity and increasing affluence.

Ultimately, the system begins to wear out and becomes over-capitalized; unemployment starts; inflation starts; and then people and nations all go into debt -- both to patch up with their present capital structure and also to maintain their lifestyle. Then what you have is the collapse of that whole system. Out of that collapse comes a new wave based on new technology and new thinking. Much of this new technology we can now see -- it's already in place. So, there's the fifty-year wave cycle: we're ending one and we're going to start up another one.

However, I think there's something even more dramatic than the fifty-year Kondratieff Wave. I'll accept the fact that we're ending a fifty-year wave, but I don't think we're going to start a new wave of Western Industrial Society. I'll offer you several other concepts of the kind of period that is ending.

There are those who say we are ending a period of 400 to 500 years that began with the Renaissance and the Reformation -- when Western Europe left the domination of the church, which up until then had determined what was real, what was worthwhile, and how people should conduct their lives. People began to think in the terms of the economic and the political systems. Over the past 400 to 500 years, we've become a political/economic society rather than a religious society.

Perhaps even more basically, we're ending a period that was begun with the concepts of Renee Descartes — when he separated mind from body and told us that all that is real are only those things that can be known with the five sense. Descartes established the scientific perception of reality: the left-brain, masculine, hierarchal system that has dominated Western Society for the past 400 years or so.

There are those who say we are also ending a period of almost 2000 years when the world has been dominated by Western nations that call themselves "Christian." Notice that I say "call themselves "Christian"," because I

don't believe that any of the nations have behaved in a very Christian-like manner during the past 2000 years.

One of the most dramatic concepts is that we are ending a period that began tens of thousands of years ago when man reached his present level of consciousness -- when he developed the capacity of thought. Some believe we are now in the process of rising up to a higher level of consciousness. That's what the consciousness movement is all about.

There's still another period that I think is ending -- and I don't even know when it began. It began at the time when man began to think that he was separate and apart from nature; that nature was something that he could use and abuse and he was somehow outside of it -- and that if he did abuse it, he was not going to have to pay the penalty. I think it may in part be a misconception of Genesis where we are told that we are to subjugate the land and to have dominion over other forms of life. But, I think we're supposed to be custodians of other forms of life and of the earth itself. The theologian, Thomas Berry, suggest that we are leaving that era and we are going to enter an ecological era.

Which of all these periods that I've mentioned is now ending — the fifty years of the Kondratieff Wave or the 200 to 250 years of Western Industrial Society? That's the one you'll mostly hear about from such authors as John Naisbitt and Daniel Bell. Or are we also ending the 400 to 500 years since the Renaissance and the Reformation? Or the period of Renee Descartes? Or the 2000 years when the world has been dominated by Christians? Or that undefined long period in which man has believed he can control nature and bend it to his will? My answer is "all of the above" — which is why I believe this period we are now in is by far the most dramatic in the history of man. I think we are all privileged to be alive at this point of time — there's never been another period like it.

What's the nature of this "new age" that we are entering? We're in the process of entering it — the shoots are already coming up — you have to look for them. The first term that was applied to it was by Daniel Bell in his book, The Coming of the Post-Industrial Society. That doesn't really tell you anything — it just says it's no longer the industrial society. Alvin Toffler's excellent book, The Third Wave, doesn't tell you much either. The first wave was the agrarian wave; the second was the industrial wave; but he really doesn't define the third wave.

Other expressions have been the "technological age," the "services age," the "communication age," the "information age," the electronic age," the "space age," or "the global village." Whatever it proves to be, it will probably have a bit of all of these. As I said, I believe one of the dominant features of the new age will be Thomas Berry's "Ecological Age." We must learn to empathize with other forms of life and to respect our Mother Earth.

There is another way of defining what we're leaving and what we're entering. And that you'll find in a book that's coming out in May by a young man by the name of Paul Hawken. The title of his book is The Next Economy. Paul defines the economy we are leaving as the "mass economy." I'll quote from his book. "The age of the mass economy was marked by expansion, mass production, the degradation of the environment, technological innovation, affluence, our ethic of consumption, high wages, the specialization and division of labor, the declining durability of goods, and the

professionalization of services. The mass economy is being replaced by the informative economy -- an economy based on the changing ratios between mass and information that are contained in goods and services."

In these brief remarks, I can't possibly do justice to Paul Hawkin's book. Let me just define a little bit more what he means by the informative economy. It is characterized by people producing and consuming smaller numbers of goods that contain more "information." Information is design; it's utility; it's craft; it's durability; and it's knowledge all added to mass. It is the quality and the intelligence that makes a product more useful and functional, longer lasting, easier to repair, lighter, stronger, and much less consumptive of energy. I highly recommend Paul's book.

Let me conclude with a few other thoughts I have about what the nature of this new age is going to be -- and the age has actually arrived for some people who are now living it. We will learn to live in harmony with nature, with a respect for other forms of life, and for the earth itself. We will not be so dominated by the hierarchal, pyramidal, vertical institutions, but will have learned to cooperate and communicate with each other through networks. Networking is by far one of the most thrilling and most useful activities that has emerged in this last decade.

We will also have a less competitive and much more cooperative society — a much more humanistic and less materialistic society. Finally, we will no longer be dominated by the scientific perception of reality. We will have gained a higher level of consciousness with a set of values and beliefs that reflects the fact that mind, body, and spirit are one.

Whether all this is "good news" or "bad news" depends on whether you have perceived what we have said as what you want. If your values are in the old system, what I'm saying is that it's not only going to end -- it is ending. One the other hand, if you sense there are better things in life than the material things that you once thought were so valuable, and a better way of working and living with other people, I say to you that's already begun to happen.

The question was asked yesterday what books would I recommend? For a broad view of futurism, I suggest Marilyn Ferguson's book, The Aquarian Conspiracy. Her extensive bibliography is very useful. For a gentle beginning, I recommend, The Tao of Pooh. This little book will give the concepts of Chinese culture, another way of looking at things. The magazine "The Futurist" makes good reading. "Another is Co-evolution Quarterly."

MR. AUTIN: In his remarks this morning John Hammond spoke of an external orientation. He also said that in his view most of the strategic planning done today is really trying to adjust a company's operation to today's environment. I think some of the remarks that were just made by both Wil and Roy suggest that perhaps the adjustments are being made toward yesterday's environment, not even today's environment. And, yet, John Hammond said that the adjustment should be aimed at bringing the company into focus with the environment that will exist at the time that those strategic plans become reality. Futurism, as has been said this morning, is one of the tools which can help in the endeavor. Futurism has many faces. I think you have gotten at least two faces of that this morning.

MR. DAVID S. WILLIAMS: Today we have been describing concepts which are quite far removed from the channels in which our minds normally tend to move. Roy has some very challenging thoughts. What does that imply that we should be doing as actuaries and how do we bring that into our work?

MR. KRAEGEL: The question is, "Is there a way in which we can more directly incorporate some of these concepts into our thinking?". One thing mentioned at the session yesterday afternoon was the concept of the "open mind" and its importance. It is very important in developing an idea about futurism to have an open mind, and all that it implies. Surprisingly, you need to have an open mind to accept some of the kinds of reality which are actually with us today, which we have ignored, or hoped would go away or have not realized they are as imminent as they are. Let us look at this dynamic decision process. The two circles in the middle of this diagram represent a micro level and a macro level decision process. The micro level is what you and your organization do. It is that part of reality over which you have some measure of control. The macro level is that part of the reality which is not subject to our direct control but rather is the sum of all of the micro level decisions that we make for various purposes. Now let's consider those two levels in terms of the four stages of the decision process.

The first step is to recognize a particular issue or situation we are dealing with. We must understand the current reality which is relevant to that situation. That may be very difficult, because so many things have relevance and interconnections. You have to deal with the most significant interconnections and apply them in a given situation. Recognize future alternatives. What kinds of opportunities we do have and how can we relate to them?

Notice that in diagram 4 the arrows in the recognition stage refer both to the micro level and to the macro level. That is a relatively new kind of thinking. Usually, we make our decisions in terms of what they do for us, as individuals or groups. But, what that viewpoint overlooks, is that each individual and group is a part of a larger body, and if we do something which harms the larger body, then we really are harming ourselves as well. If the harm is severe enough, it can destroy the society of which we are a part.

In the decision process itself there are three substeps to weigh those alternative futures. Look at their consequences and weigh their pros and cons to see which of them is the best balance. Then select the specific preferred future. Now we can make the decision to do two things, to meet today's needs and to move toward preferred futures. Here again we must consider the results of the decision and the alternatives in the context of both the micro level and macro level. Then, we must make the decision.

Third is the action stage. We must implement the decisions. Again, that can be done only at the micro level. It is important also to increase recognition by others and to seek societal consensus, usually through the legislative process in our society. Finally, evaluation has to be at both the micro and macro levels in order to see what impact we are having on solving our own problems and on the betterment of society.

The final step is to adjust to improve or adapt. Occasionally, we may go back to square one and start over when our paradigm has changed so completely that it is necessary to get a fresh start. In a real sense that is

happening now in the insurance industry's product thinking and distribution thinking. We are trying to figure out what are the fundamental principles involved and how we should deal with them. As we go back to square one and try to deal with these in the 1980's, it is very important to take that broader view, tying in with what Roy said before that competition is probably not the wave of the future, but that cooperation is.

There are some elements of competition which can be very salutary and motivational given the proper perspective in which they are done. Cooperation is what is really going to make the difference. The insurance industry does have a good record in that area in various ways as evidenced by industry meetings such as this. So that is a dynamic decision process that I would like to suggest for your consideration and your reactions.

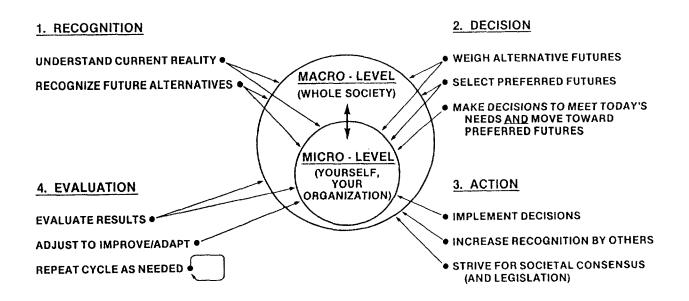
MR. RICHARD A. BURROWS: I will pursue Dave's question a bit more. Being a futurist leaves me with a rather esoteric disciplined group. In a practical business situation, how can you, without making futurists of your CEOs, dramatize the need for futuristic views? There are other instances where you look at the past and say, "Had this been perceived as a matter of anticipating the future at that time, the response would have been better." In a practical planning situation in business, however, how do you get the attention without converting them to futurists?

MR. ANDERSON: It is almost impossible with respect to events that are truly dramatic or discontinuous. CEOs and other officers are not much different than other people. They really don't like to have their systems disturbed. They prefer the good news. There are plenty around who bring news that is in effect a perpetuation of whatever is going on. What the process is, is not so much to get them to change present behavior on the basis of what you foresee, but to prepare them for the event when it comes. It is as if you are going through a fog. You know that something is going to come at you, but you are not sure what it is. The worst thing you can do is plan one single trip or expect one sort of thing. That is what most planners do. They obtain "a most probable scenario" and base all their decisions on that single activity. Others predict alternative futures. They will have three or four possible scenarios of the future.

You can lay out five or six alternative futures. It isn't likely to be any one of them. In the process, however, you may do enough thinking to be able to adapt. By far the most important thing in this process is that you have the company and your CEO prepared for the fact that something is coming out of the fog. Those who are doing nothing but projecting the past into the future are going to be devastated because they are not expecting anything, or they won't believe it. By the time they do believe it, it is too late.

MR. KRAEGEL: I think another way to express that is that it is a matter of enlarging the horizons of the people in your organization. I hope we can enlarge horizons a bit for some of you today; but during your reading, look at the things that you don't normally look at. Enlarge your own horizons, bring these materials into your organization; for example, become an institutional member of the World Future Society. Have as many people as possible be primary recipients of <a href="The Futurist">The Futurist</a>, which has articles that are directly relevant, as well as many indirectly relevant to business. Get their publications into your library. Refer to them. Include some reference to them in some of your papers from time to time or in some of your

# "WHAT" - DYNAMIC DECISION PROCESS



comments at your meetings. Maybe 10% of the time talk about some futuristic concepts that are relevant and important to your organization. These efforts have a cumulative effect, as I have found at Northwestern Mutual Life. So, try to put information in front of your associates as frequently as you can. Sometimes you may even think about the unthinkable. If it is unthinkable because it is so horrible, think about what we might do to avoid it.

Mk. KIRAN DESAI: I have one comment to make. It is more on a personal level in answer to Rich's question. I find that to get the CEO or anybody else to do something that you want him to do is, as Roy says, impossible. The only way to get him to do something is if he wants to do it. So, the first question you have to ask is, "What is in it for him?." Plant a theme constantly in front of your eyes that says, "How can I help him?" and "What is in it for him?." If you ask these two questions to yourself all the time, you will be surprised at how many different solutions open up that you did not think about before when your concern was the project that you wanted to champion. The solution that you come up with may be completely different, but beneficial and more likely to be acted upon. He will then do what you want him to do.

I recently attended a seminar organized by Eastern NLP Institute at Princeton. NLP is a new form of psychology for behavior modification called Neuro-Linquistic Programming. The seminar addressed the point Rich brought up. We are talking about communicating and motivating others. A very important part of effective communication is achieved through establishing rapport with the other person. Understand how he thinks and how he makes decisions, and you can tune into his world, see his viewpoint, get a handle on what motivates him. You can effectively communicate only if you enter his world and then win him over to your cause. If you remember, the speaker this morning said, "picture, if you will," and we pictured it because most of us are visuals. But there are people who are auditory; they don't picture things. They hear things. There are some people who are kinetic. They feel things, just like left brained and right brained. If he is visual, you make him see your viewpoint. If he is auditory, you check if he heard what you said; and if he is kinetic, let him get a handle on your project.

Different people process information differently. Some make decisions by studying a lot of reports (visual). Others like to discuss (auditory), whereas, some simply feel their peers out. Try to analyze how he processes information. Then bring him over to your mode of thinking. But you can't get him to your place until you go to where he is first. So try to get to where he is first and bring him into your field gradually. That is the only way to get somebody to move in your direction. First find out what is in it for him and how you can help him. Do this by going over to him - to his way of thinking, his way of processing information - and then bringing him over gradually to your "desired state." It is a very personal answer to your question and it is in general terms, but it will help you in motivating him to move in your direction.

MR. ANDERSON: I have to say that you have just heard from someone who was brought up and has the wisdom of the East. That truly is the Eastern way and many of the futurists that I have come to know are Easterns, the Chinese, the Indiana, the American Indian and so forth. We of the Western culture must learn some of the approaches to life of the East and they must learn

the scientific approach. There has to be a blend of the two, despite what Kipling said.

I'd like to comment on the functional officers of a company - the ones running the day to day operations. It is very hard to get them to give time and attention to long range strategic planning. They are the ones that run the shop. If it doesn't directly have something to do with functions such as underwriting or actuarial, claims or marketing, they are very difficult to get into strategic planning. You face a better chance with staff people. I would say that if you are going to do real strategic planning, you have to get the group away from the office. You should do it for three days or a week if you can. Some of the companies are wise enough to do it. You have to get them out of this mode of problem solving - the scientific approach that is so typical of our business.

The Futurism Section is still in its formative stages. However, it is getting activities underway to introduce its members to the concepts of futurism and the use of futurism in their on-going work. This panel session is one such activity. Another is the possible presentation of a teaching session on the construction and use of scenarios at the Fall 1983 meeting. Request for assistance from the Section have been received in projects on the role of the actuary in 1990 and the life insurance industry to the year 2000. Such activities and projects would be helpful background for actuaries involved in strategic planning for their companies. And section members desiring to get some exposure to these should contact any of the Council members of the Section.

For Section members, and others seeking to get a foundation in futurism, the place to begin is the bibliography on futurism which can be obtained from the Society office. Further reading opportunities exist in the TAP and MAP reports published by the ACLI and made available to member companies on a regular basis.

MR. MICHAEL COHEN: If we want to look at the future, we should determine trends that have occurred in the past because we are going to be undergoing similar trends in the future. We can see what issues are coming up and how mankind has reacted to them in the past. I agree that cooperation is the way of the future. If, however, you look back at the history of man, man is not cooperative, man is competitive. I see this coming up in the future also. Although, I agree that cooperation is the essence. If you look at sports or you look at business or politics or countries, success has occurred when these groups have been cooperative. Look at the trade market. Success came with cooperative efforts of the Marshal Plan and where we have cooperated with the West and with Japan. Now look at the state of affairs that our world trade is in when we compete aggressively. The same is true of world peace.

One of the programs that I have developed at Penn Mutual is an environmental and future scanning network. We analyze what the environment is and what is going on out there that affects our operations? Then we try to develop trends that will occur in the future; see changes that have happened in the past and try to extrapolate them for the future. One application of this, which is a particular problem that insurance companies are facing now, is the retention of the whole life business. We can juxtapose the research that has been done on what kind of consumer needs there are and break it down into five categories. Different people are categorized into basically

the same needs in a different way. In the talk yesterday, Joe Plumeri from Shearson mentioned them in a similar context, but maybe in a different order. Basically, the needs are protection, asset accumulation, borrowing, service, etc. If we apply this to whole life and look into the future, we can try to figure out what the consumer will need in ten years and how can we move our block of business from where we are now to that point in the future? Our retention activities are centered around those kinds of things.

This is more of a question. A friend of mine told me about a book which he has not been able to find called <u>Creative Problem Solving</u> by Prince. If you know about it, I would like to read it. One of the techniques is that when you sit down or try to solve a problem don't say, "We can't do that, or this won't work or that won't work," but "how do we do it?." "How are we going to solve this problem?." It is amazing what you can do if you have enough confidence in yourself. Say, "Let's try it anyway and see what happens." Another technique is when you solve a problem think of five or ten ideas that cannot work. Think of the farthest fetched answers possible and then even admitting that they might not work, it seems that usually some of those do come true after all.

MR. ANDERSON: Not too many years ago the Japanese sent a task force to our insurance industry in North AMerica. There are different kinds of competition. There are different kinds of cooperation. One of the things that they have done very well is learn from what the other people are doing. This task force that came to North America, included CEOs from the largest companies in Japan. They sifted through our entire operation and extracted things that they thought were worth following up. With the results of their studies, they have started invading our market. The ultimate thing is the way you were talking earlier about another point, trend analysis. It was just another example of the various ways of looking at what you are doing. Competition and cooperation are words that we assign specific deeds. can be viewed not as diametrically opposed to one another, but as broad terms which in themselves can have overlapping areas in which they both have relevance. You can compete and cooperate at the same time. You have to consider the whole frontier of values and try and come up with a strategy that will blend the best of both cooperation and competition.

MR. KRAEGEL: I would like to make a comment that relates to your reference to war and the weapons that we have been accumulating on both sides. Unfortunately, Sam Tucker isn't here. He is a retired actuary, and if he were here he would tell us that we are not spending any time discussing the most important basic issue: whether or not we are going to have a nuclear war. I have never made a comment about it at a Society meeting before but since Sam isn't here, I would like to do so.

I feel that this issue is so fundamental, so vital, so overwhelming that we must pay some attention to it; and yet, we go about blithely in our activities, all around the U.S. and I am sure, in the USSR also. We do not recognize what seems to be so fundamental, that is, that a nuclear war would not solve our problems. Whatever problems we have that resulted in a nuclear war would be aggravated tremendously and bring in a whole set of new problems far more serious than anything that brought about the nuclear war in the first place. So, it is inconceivable to me that we can think of the possibility of a nuclear war as an alternative that should be considered in solving society's problem in the 1980s.

Think of the consequences just very briefly. I know you have some awareness of them but just recall them. The hundreds of millions of people who would almost certainly be immediately killed. The short and long range health effects on almost all who survive, not just the U.S. and USSR. The genetic effects on our children and grandchildren. The number of species of animals, plants and other living things that would be severly affected. The destruction of vast amounts of human property and infrastructure (dare we think of the impact on life insurance claims and assets to pay them?). The whole nature of life on earth, the whole range of cultural attributes that we now share and take for granted would be so fundamentally altered that we cannot even conceive of it.

On the other hand, we have an alternative cultural level that humanity may choose which is far beyond anything that humans in the past have dreamed about. We have this choice. Are we going to reach out for a kind of humanity that was once considered Utopian in our wildest dreams, or are we going in the other direction to some imcomprehensible "square one?" It is such a vital issue, and I do feel that we have something to say about it. We as individuals and as organizations have legislators to whom we can convey these feelings. Perhaps a small part of the trillions spent for "defense" by the U.S. and the USSR could be allocated to seek peaceful resolution of our differences. Alternatives to war have been given virtually no attention by either side. It is very difficult to think about or to talk about these matters, but, I urge you to think about them, and maybe you can talk about them, too.

MR. ANDERSON: I want to second what Wil said. I believe that the people of the world in their wisdom are now doing something about it. They are going to be doing more about it. I believe the leaders of all institutions, the top layer of people will be passing from the scene in the next decade or so. Their perception is of an old world that no longer exists. Their power has been waning with every passing year. Willis Harmon now regards the threat of nuclear war as his major personal issue. That is the one thing that Willis is now devoting his efforts to - finding the ways and means of combining groups networking throughout the world and other cultures on the issue of the nuclear buildup. I can go on also about how insane it is that we think it is an issue of two nations - the U.S. and Russia. At least five other nations have nuclear power, so what does it mean for the U.S. and Russia to come to some balance of terror? It is nonsense. I agree with Wil, we have to start talking more about this issue before some idiot gets his finger near the red button.

MR. EDWARD F. COWMAN: I would like to ask Mr. Anderson a question regarding his comments on the experiments at Princeton and more generally in the field of parapsychology. We Western people are uncomfortable with this. Your remarks indicate that learning more about these areas which we are unfamiliar with would lead us to have a more open mind about other people's viewpoints. Are you thinking of some specific ways? Are there tools available that we have just not learned how to use, that would be helpful to us as futurists? What can help us achieve a blend of cultures?

MR. ANDERSON: It was from Bill Harman at a meeting of TAP about seven years ago that I caught on to paranormal powers of the mind. He had a list of nine paranormal powers of the mind such as; recognition, distant viewing, psychokinesis, psychosurgery. In that same meeting, a woman by the name of Gertrude Shlackter of CCNY told of her experiments for several decades on

precognition. It clicked. Up to that point, I did not believe in paranormal powers, but I had said that if I ever heard overpowering evidence I would begin to accept it. So, with the combination of Bill Harman and Gertrude Schlackter at the same meeting, I said that ESP and all that funny staff must have something to it. I have to find out more about it. I saw Bill Harman a few months later and and said to him that he had a list of nine. I was going to check them off. He said, "Once you understand that any one of them is possible, then you understand that they all are." That got me interested in the nature of the mind. Marilyn Ferguson issues the Brain/Mind Journal once a month that reports on all the developments on the nature of the mind. There are more and more people exploring different powers of the mind, including self-healing. I have reached the point where I believe that we make ourselves sick when we choose to, we heal ourselves when we choose. We die when we choose to. We have accidents when we choose to. That is pretty far from what I thought ten years ago.

In India, they do walk on live coals. Now take your scientist who knows that is impossible and walk him across them. Then watch an Indian do it. I have friends who have levitated. My education says that it is not possible, but I know it is done. I insist that all of that is going to be part of the new age - not only as it relates to the power of the mind, but also as it relates to the spirit. The one religion of those established on earth that I relate most closely to is Taoism. But even more fundamental than Taoism, I believe the finest culture that has trod the earth is that of the American Indian and their perception of the great spirit, and their philosophy of life.

A real Litmus test as to the nature of a futurist is do you or do you not believe in an eternal soul? If you believe that all there is is what is here and now you have one kind of person. If you believe that the soul endures, including that it existed before, then you have an entirely different view of what it is all about. I don't believe that there is going to be a Holocaust. I don't believe that God meant it to be. But, I also believe we have to struggle to make sure it isn't.

I didn't answer your question, but I warned you that I might ramble. Once you catch on to what this is all about, you find a whole different perception of reality. In fact, each of us has his own individual perception of reality and we differ far more than we understand. What's more, we are creating it with our minds all the time.