Images of the Future—Sequence II

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PREFACE

Mind you, one expects challenge in dealing with the future, unless one happens to have an inside track on the supernatural. I do not, and have bruises to prove it! Perhaps in reaction to that, for a long time I tried to reduce future prediction to sheer mechanics and failed there, too, often quite spectacularly. I now believe a lot of what happens is art, as much metaphor as method, intuitive finesse enriching step-wise formula. Somewhere in this mix is a futurism which is useful, practical and do-able for busy mortals. I hope.

What follows is one of three main strategies I've been working with the past fifteen years, called MODELING or IMAGING. The other two strategies are VISIONING and OPPORTUNITY-THREAT ANALYSIS. Material on Visioning is available in many other references. Opportunity-Threat Analysis still needs some refining work. Both of these strategies are therefore omitted for purposes of manageability in this introduction to futuring.

There is a more positive reason for concentrating on Modeling as an approach. Consider the volunteer coordinator or other careerist-in-caring; she/he already needs a vast array of competencies and skills, and anyhow may not be particularly oriented to purely mechanical approaches. For her or him, *modeling is a relatively non-technical, intuition-friendly way of looking at the future. I also find the process motivating enough to grip and hold attention.*

There is furthermore, a sense in which modeling is a natural first phase in conceiving possible futures; the other two methods seem to fit more as filling in detail within the broad framework established by modeling. It is something like deciding the overall design and shape of your house, before you get to details of interior decoration and furnishing.

INTRODUCTION

Definitions

- "Futuring" is an attempt to anticipate what's coming down the road, then respond in ways which maximize potential opportunities and minimize potential dangers.
- "Modeling" or "Imaging" is one of three main strategies for futuring. The process assumes the future comes in many different shapes, including the following:
- A ROAD IN WESTERN KANSAS (Straight-Line Continuation): Things will keep happening in the future at the same rate and in the same way as in the past/present. This is usually wrong except in physical science.
- A ROLLER COASTER (Waveform): Current upward trends will tend to flatten (decelerate) and may even decline. Less certain, but possible, is that current downward trends will also flatten out and may even upswing again, eventually.

Over the past thirty years, *Ivan Scheier* has been a volunteer, a volunteer coordinator, director of a volunteer center, researcher, author, publisher, and—both in North America and overseas—a trainer and consultant in the field of volunteerism. Involvements have included President of the Association of Voluntary Action Scholars, Executive Director of the National Information Center on Volunteerism, and Chairperson of the Alliance for Volunteerism. Scheier is currently Director of the Center for Creative Community and Dreamcatcher-in-Residence at the VOLUNTAS Retreat Center, headquartered in Madrid, New Mexico.

Correction: We apologize to Ivan Scheier for the mistake on page seven of the Spring issue of TJOVA. The quotation of José Ortega should read, "Life is a series of collisions with the future; it is not so much a sum of what we have been, but what we yearn to be."—*Ed*.

- A GREAT RUBBER WALL OF CHINA (Trend Reversal): "The harder it hits, the harder it bounces back." Under certain circumstances, the strength of a trend only increases the likelihood of a counter-trend or reversal.
- A SLOW SPIRAL (Cyclical, but this circle is going somewhere): A trend may eventually return to its point of origin, though usually it does not "come round again" in exactly the same way.
- A PRESSURE COOKER (Quiescent/Eruptive): Sometimes, when it looks like nothing is happening, powerful forces may be incubating unseen, building up to erupt after some time, in visible/impactful ways. As in a volcano.
- CROSSROADS FADING IN THE FOG (A Lattice Work of Choices): The future is visualized as a series of crossroads. The futurist can predict and prepare for the choices we will have more easily than he/she can predict the choices we will make.
- A HOUSE OF MIRRORS (Transformation): The quality as well as the quantity of what we're interested in, changes over time (for example, the nature as well as the number of volunteers, women, elders, etc.).

Summary

The futurist should first select the most appropriate image(s) or model(s) on which to base a future projection, before fleshing it out with details. Otherwise, it will be like trying to travel with the wrong "map" as guide. Thus, steep rates of increase in volunteer recruiting early in a program are unlikely to continue at the same rate in the future. In other words, for this situation, a waveform map is more appropriate than a straight-line one.

There are three main steps in the imaging/modeling process:

- Select a KEY SITUATION whose future prospects deeply concern you as an individual, a program, organization, community, etc.;
- Define an approximate TIME-FRAME over which you want to consider the future for this key situation;
- Choose the MAP/MODEL/PARADIGM which best fits how this key situation is most likely to unfold in the future. This becomes your basic framework for futuring, which subsequent work fills in with more detail.

IMAGES OF THE FUTURE

Futuring attempts to anticipate what's coming down the road, then tries to respond in ways which maximize potential opportunities and minimize threats in times to come.

Easier said than done. One often overlooked complexity is that the future comes in many different shapes. Among these are:

- A ROAD IN WESTERN KANSAS (Straight-Line Projection); or
- A ROLLER COASTER (Waveform); or
- A GREAT RUBBER WALL OF CHINA (Trend Reversal); or
- A SLOW SPIRAL (Modified Cyclical); or
- A PRESSURE COOKER (Quiescent-Eruptive).

Along with or superimposed on any of these five models can be at least two others:

- CROSSROADS IN THE DISTANCE (A Latticework of Choices); and/or
- A HOUSE OF MIRRORS (Transformation).

The point is, if you're working with the wrong Image/Model/Map, you'll get lost. Take, for example, the OPEC oil boycott of the 1970s. An immediate result was that gasoline prices shot up suddenly and dramatically. If you had projected that trend straight-line to the present, (A ROAD IN WESTERN KANSAS), gas would cost about \$5 a thimbleful today and there probably wouldn't be many cars on the road. Instead, the shock led rather quickly to development of new oil fields, more fuel-efficient cars, and higher priority research on alternative fuels. This in turn drove gas prices back down (Trend Reversal: A GREAT RUBBER WALL OF CHINA).

Another example: you develop a successful program for preventing or "curing" vandalism by youth. Your futuring plan therefore provides for continuation and increase in the program. Meanwhile, expressions of youth "acting out" change dramatically from vandalism to drug usage (transformation), and your vandalism program is no longer particularly relevant.

The message is: first get the overall model or "map" of the future as accurately as possible, before adding in details. In other words, the model selected must fit the terrain ahead-in-time. If you're planning a trip to Texas, don't use a map of Rhode Island. But in fact, the situation is more complex in futuring, for here we are attempting to choose the best map for unknown or imperfectly known territory. Moreover, one map may be best for some stages in the futuring journey while other maps fit better on other parts of the trip. Or, two or more maps may apply in different ways to the same part of the trip!! The final section here begins to deal with such complications.

No one said it would be simple; respectable futuring rarely is. We'll nevertheless simplify in what follows, primarily for purposes of familiarization and explanation.

There are three main steps in modeling the future:

- A. Select a "KEY SITUATION" whose future prospects most concern you as an individual, program, organization, community, planet, etc.);
- B. Define an APPROXIMATE, FLEXIBLE TIME-FRAME over which to consider your key situation;
- C. Identify the MAP(s) or MODEL(s) which seems the best fit to the way in which your key situation will unfold in the future timeframe selected.

A. Choosing The Key Situation: Importance and Workability

The key situation should be real and important. That usually means a complexity of conditions and factors, rather than single-issue "purity" or strict quantifiability. Here are some examples of key situations. Your own would, of course, be modified, adapted, and probably expanded for your own best use. (Some possible variations are in parentheses.)

- A consensus demographic prediction could be that the number and proportion of elderly (youth, volunteers, some other group) in the population will increase (decrease) substantially (minimally). Do we agree with the probable accuracy of this demographic prediction, particularly as it applies to our specific locale (program, organization, etc.)? How can we best respond so as to capitalize on opportunities and deter dangers inherent in this demographic trend?
- To what extent will the motivation of volunteers change in the future? (or other kinds of people we'd like to involve, for example, as customers). Will we still want and need their participation in the future? If so, how can we best adapt to any such changes to ensure the continued (expanded) participation/affiliation of these people in the future?
- What does the future of my profession look like? (Profession can be volunteer administration, social work, real estate, law enforcement, community development, etc.) What can and should I do to help ensure the most positive possible development of the profession? What can and should I do to maximize my prospects for advancement and fulfillment in the profession? Alternatively, should I be considering a move to another profession/occupation?
- How will mandated community service impact traditional volunteering in the future? (Variations could include impact of any currently imminent or increasing factor on a more established one, for example, how will the North American Free Trade Agreement affect trade relations between the three nations initially involved and Japan? Europe?)
- Concerning the possibilities for growth in our program (organization, community, etc.): Do we want growth—slow, rapid, or none at all? Is growth of any

kind likely? If so, what are some of the alternative tracks growth might take? Which of these do we prefer? How can we help make our preferred growth track more likely?

• What change(s) does the future hold in the relationship between volunteer programs and their host agencies (or between any two entities of vital concern to us)? How can we best respond to these changes to maximize benefits to our organization (program, city, etc.)?

The foregoing examples are intended to illustrate situations which are real and important. A key situation must also be *workable*. This means you can see well enough ahead to predict developments in the situation, at least generally. Along with that, you must be able to *do* something about what you see.

If your proposed key situation doesn't seem sufficiently workable, there may be some ways you can make it more so. Shortening time-frame (see next section) usually makes prediction easier. It can be hard to predict the next President of the U.S. when the election is three years away; it's usually far easier the week before the election, or the night before. Trends in your profession are more predictable two years ahead than ten years ahead.¹

Moreover, simplifying the situation usually makes it more workable, though at the same time, less meaningful. Thus, predicting whether a first-term incumbent President will run again is more manageable than predicting who the next President will be. The future of only grant funding for your organization is probably more foreseeable than the future of five or six types of funding possibilities with all their interactions (though neither task is exactly easy!). The likelihood of salary increases over the next two years is usually simpler to foresee than the course of your total job reward and recognition package over the next *five* years.

Such simplification also tends to make it easier to *do* something about what you see ahead. But be sure you understand that doing something about a "future factor" doesn't necessarily mean *changing* that factor. It may only mean having options in *responding* to that factor, more or less appropriately. We can't as yet stop hurricanes, but we do have many significant options in preparing and responding to them. A firm verdict of two months to live may still allow a person meaningful choices in *how* that time is lived. None of us can alter a demographic trend to increasing proportions of elderly in the U.S. population. But we have abundant alternatives among which to choose in capitalizing on the opportunities in that trend, and buffering against the potential dangers in it.

Indeed, it's almost impossible—in secular terms, at least—to conceive of a factor that allows no choice in response: lightning on the way to strike you, perhaps, or a fatal heart attack, the microsecond before it hits. Beyond that, the ability to do something about a factor or situation depends on having a reasonable (more than instantaneous) time in which to prepare appropriate responses to it. How long that must be will depend on the complexity of the key situation, among other things. But the lead time should not be so lengthy that one can't see ahead with reasonable accuracy (see discussion in next section).

In summary of this section: Awareness and reasonable care should enable selection of a key situation which is not only real and important, but with which the futurist can work reasonably well.

B. Choosing the Most Appropriate Time-frame

Once you've selected the key situation of most concern to you, the next decision is time-frame—how far ahead in the future you wish to look. The key situation itself tends to influence time-frame. For example, motivation of volunteers in the future generally implies a somewhat longer span than, say, budget planning for growth in your volunteer program.

Generally, I suggest six months to three years as a workable time span. Less than six months (say, next week) may be too easy, and, in any case doesn't usually allow enough time to prepare thoroughly for predicted events, or react to them. Very long-term predictions may be more fun as fantasy than useful as strategy. This is because, as time distance increases, factors and alternatives are harder to see. Even when they can be seen, the number of possible choices (see later model) rapidly increases and can soon get beyond the realm of the ordinary person's ability to work or even comprehend. To be sure, I was once told by someone who lived in an Asian community that Asian people tend to plan successfully in twenty-year time-frames! Perhaps so. I only suggest, enviously, that they may cycle back to adjust predictions more often than once every twenty years.

C. Choosing the Map or Model Which Best Fits Your Key Situation

Any of us could think of models other than the seven given. Nevertheless, I believe these seven are a manageable number which pretty well cover main options in the shape of the future. The futurist is welcome to add his or her own or organize them differently, once familiar with the overall modeling process.

Each of the seven models or maps will be described and analyzed to help you decide which best fits the future of your key situation(s). A final section then begins to explore a more complicated—and realistic—condition in which several models may fit different aspects and/or sequences of the same key situation.

IMAGING

A Road in Western Kansas (Straight-line Projection)

Images

From horizon to horizon, the road goes straight as an arrow. No curves. No dead ends. You can look at the road behind and predict perfectly where the road ahead will go.²

Implications

In this map of the future, the patterns of the past perfectly predict the patterns of the future: no transformations, no surprises, scarcely any variations, and certainly no "mutant emergents" (an ominous phrase concocted by professional futurists). This is a linear constancy model of prediction.

True, without clairvoyance, our understanding of the past and present is the only realistic basis we have for predicting the future. But no one should expect perfect continuation. Seduced by the relative simplicity of straight-line projection, we're prone to underestimate the subtlety of nature. This happens when we go beyond acceptance of some past influence on the future to assume that the past continues with perfect consistency into the future. That usually doesn't happen. As we shall see, current trends accelerate, decelerate, disappear, reverse, transform, etc.

Actualities

As noted, this model is temptingly "easy" and almost automatic in unthinking acceptance. Faced with the uncertainties of prophecy, people can hardly be blamed for savoring a future of apparently solid calculations based on the present, for example, how many or how much of X there is now, multiplied by the current rate of change of X, gives a precise numerical prediction of X in the future.

Example

Today, 15% of the population is over 60 years of age. This segment of the population is increasing at the rate of one percent every two years. Therefore, by the year 2000 we can expect about 20% of the population to be over 60 years of age. We'd better get ready with more volunteer jobs attractive to seniors, and more volunteer programs serving the elderly.³

But a vast number of reasonably plausible things can distort this simplistic extrapolation. The rate of elderly increase in the population might decline if there were dilution of health care and other services, or perhaps a "revolt" of wage earners against "carrying" such heavy tax burdens for the elderly. The rate of elderly suicide might increase even more than it is increasing now. In the other direction, a medical breakthrough might significantly prolong life and accelerate the rate of currently predicted increase. Just as important, the *nature* of elderly people and the conditions under which they live might change so that they more often want parttime paid or stipended positions rather than volunteer work. Thus, any long-range plan for serving the elderly is on hazardous ground insofar as it prescribes "more of the same" for the future—again because the people served will probably *not* be the same.

Another Example

The growth of a volunteer (or other) program. Let's say the number of volunteers in a new program doubled last year, with satisfying results. Does that mean continued doubling each year for the next five years will be equally satisfying? Or even *possible*? Probably not. For reasons I think are too obvious to need listing, this is a case where trend-bending is more realistic than straight-line continuation in our prediction and planning for a key situation (program growth).

Strategy

Mainly, at this point, the do-it-yourself futurist has to decide whether the factors/ situations with which he or she is concerned, fit this linear model or the alternatives explained later on. Keep in mind that we are not suggesting the linear map be completely rejected out of hand. It is, for example, true that a kind of precise "linear projection" from past to future does work sometimes, especially with the laws of classical physics acting on the surface of the earth. Here we would have gravity, entropy and the like; for example, what goes up must come down. An apple loosened from a tree will fall every time and at the same predictable rate. The uncertainties come in forecasting whether or not Isaac Newton will happen to be underneath and what his reaction will be if hit-presumably ranging from unprintable Middle English to "Eureka, I've discovered the _____th law of motion!" In other words, immutable laws lose precision when it comes to human and humane matters. This is why research psychologists yearning for precision laws tend to prefer rats over humans.

My surmise at this point is that the linear model is more likely to apply insofar as:

- Your key situation involves physical or other scientific law (and to a somewhat lesser extent, partly quantifiable disciplines such as economics);
- You wish to predict for shorter timespans (less time for trends to bend); and
- Your key situation is relatively simple.

The problem, of course, is that these kinds of situations tend also to be less meaningful in human and social terms. For more meaningful key situations, I believe, *straight-line extrapolation to the future is the most common mistake practical prophets make.* So let's look carefully at some alternative models.

A ROLLER COASTER (WAVEFORM) Images

- A ROLLER COASTER. As you angle up, gravity slows you down. At the crest, you level out, almost stop. Then you start down, plunging ever faster until you flatten out at the bottom. Repeating now, as you angle up, gravity slows you down . . .; or
- A Surfboarder, when the surf is up.
- VERBALLY; "What goes up, must come down." And even sometimes, "what goes down, can come up."

Implications

On the ROAD IN WESTERN KANSAS, the expectation was for things to keep happening in the future at the same rate and in the same way as in the past (Straight Line Projection). By contrast, the ROLLER COASTER map (Waveform) predicts that upward trends will tend to flatten out and may eventually decline. Less certain, but possible, is that downward trends will tend to level out and in due course, even start to upswing. Generally, this map suggests caution, especially in assuming from a current upward trend, that the "upwardness" will continue in the same way.

Examples

- Suppose that, new and well-managed, your volunteer program has been increasing at the rate of 25% more volunteers each year for its first few years. It is hazardous to assume this rate of increase will continue year after year; more likely the increase will taper off.
- A sharply downward trend in volunteer morale might alert and alarm an agency enough so that "something is done about it" and the trend is halted, maybe even reversed. (It's also possible the trend will continue and destroy the program.)
- Suppose the stock market has been going up for awhile. It's hardly safe to assume the upswing will continue indefinitely.

Diagnosis For "Model Fit" To Your Situation

Upward Trend

Let's consider first the likelihood that *an upward trend will "fatigue"* and flatten out. The things you should look for here are:

- a. Exhaustion of a "supply"
- The rate of women entering the paid job market will tend to level off as we approach the point where most of the women likely to do so, have done so.
- Insofar as you've successfully taught more adults to read, and built the model into the educational system for new adults there will be fewer adults left to teach, and your increase in literacy rate will tend to flatten. Generally, success in a program or service itself ensures that the supply of people needing the service will decline.
- The rate of VCR sales increase, rapid at first, declines insofar as a higher proportion of people who want and can afford VCRs have purchased them. In other words, the "supply" of potential customers is more completely tapped

into (and VCRs are not wearing out too rapidly). I expect anyone planning increased manufacturing capacity based on the current healthy rate of FAX machine sales should keep the same kind of consideration in mind.

b. Fads

Look for a trend that seems to depend mostly on novelty without filling any "real" need. Here we have pet rocks and hula hoops, the latest "hit" song, etc. In such cases, seriously consider the possibility of a fairly early wearing out of the upward trend, and then, probably, a quite rapid decline.

But don't do this automatically. I can think of two possible exceptions to the above "rule." First, if you happen to correctly sense the very beginning of a fad (not easy to do, usually), the trend will likely continue or accelerate for at least a little while. Secondly, certain kinds of apparent fads can have a lot of perseverance (long-term fads?), particularly in food or clothing of the kind ordinary people wear (as distinct from "the latest" Paris or New York styles). Whoever dismissed the early interest in pizza as a mere fad or pantyhose as a passing fancy, dismissed the wrong items. The taste for owning personal computers also looks like much more than a whim. Even hairstyles, for some individuals, exhibit a certain general continuity over many years.

c. Look for fatigue in an upward trend based on someone promising too much and/or too soon. The increasing popularity of a politician who promises too much is eroded by cynicism when the promises don't materialize. Allowing new volunteers to expect more staff support than they are realistically likely to get, may make an early surge in morale turn downward in dismay. Once again, there are exceptions, particularly when there's a strong emotional stake in believing the promises, or when the lack of promised results can be "finessed" or disguised. Thus, for years, Americans have been told that locking up more and more people will reduce crime. It has, if anything, done just the opposite, even though the U.S. now incarcerates more people per capita than any country in the world. Yet, for many people the solution is still—more prisons.

- d. Be wary about increases which seem to depend on response to shortages, particularly shortages prone to panic response. Suppose a shortage of aeronautical engineers. University Administrators expand facilities and faculty to accommodate an increased enrollment of engineers (increasing trend). But since such planning is often "overshot," there is a surfeit of engineers within a few years, and formerly increasing enrollments level off and start to decline. A similar "overshoot" reaction occurred in response to perceived or optimistically predicted shortages of office space, some years ago in several Texas cities.
- e. Related to the preceding is when "too much of a good thing" tends to flatten an upward trend in benefits, as in exercise which is bad not to have at all, good within a moderate range, and bad or dangerous to excess. Similarly, food totally lacking is bad over the long run (malnutrition), good within a rather wide intermediate range, but can be very bad as overeating. A little bit of warmth is good as insurance against freezing; then okay within a wide normal range, but bad or even deadly once it reaches an extreme "heat wave" level.

The same curvilinear relation of benefits to increase in a substance or activity seems to hold very widely, though sometimes less clearly, in regard to money, sex, leisure time, volunteering, etc. Sayings which caution against excess and for "moderation" stem from this "overshoot" phenomenon. The message for the futurist is to watch for this "curvature effect" in any benefit-producing upward trend, *especially when the sense is that because of its history of being beneficial, the phenomenon is increasing or being increased deliberately to excess.*

As elsewhere, however, it is far more difficult to see how this effect would tend to flatten and perhaps reverse a downward trend in our waveform model. Possibly, once overeating led to obesity, the reaction might be to under-eat so that eventually the resulting danger of malnutrition could be ameliorated by beginning to eat something again. But this strikes me as a rather labored explanation.

"Too much of a good thing" might have as a converse "Too little of a bad thing." I can hardly be blamed for not wanting to talk about this— except for a slight temptation to say this much: the kind of challenge ("bad thing") that at a higher intensity could produce a positive response, won't do so until it reaches a certain level (as in environmental insult). But this might fit better in our later section on the "PRESSURE COOKER" model.

f. Definitely exercise caution in projecting the continuation of increases which seem to be based largely on fragile non-continuous resources. The oneyear grant to provide more services to children of the homeless results in dramatic increases in such services. But then the year ends and the funder's expectation that the community will "pick it up" proves to be, as often, a fantasy. So the grant project's benefits erode. Similarly, be careful of an upswing which depends too much on the dedication, charisma or competence of a single individual; he/she might leave sometime during your time-frame.

None of the above denies the possibility that an upward trend in circumstances different from the above will continue as such, and possibly even accelerate. As noted, a new product or service that genuinely fills an important need might well continue upward in popularity. Any *new* trend is likely to increase or accelerate for a while before it begins to decelerate. All power to the practical prophet who identifies and capitalizes on such trends early in their emergence. Among other things, such futurists can get very rich!

The waveform shape is essentially a sequence of an upward trend that flattens and produces a downward trend, which in turn flattens and reverses. So, let us now consider *the DOWNTREND* part of a waveform.

The erroneous preconception that an upward trend will continue upward in the same way has a counterpart assumption that a downtrend will continue down and vanish "off the scale," more or less. If anything, the downtrend assumption is even more reflexive than the uptrend continuation assumption. I tend to see some justification in this. As noted later, downtrends do seem somewhat more irreversible than uptrends, or at least they seem to take longer to flatten and perhaps reverse. In any event, there seems to be a substantial predilection for apprentice futurists to leave uptrends in their future calculations and leave downtrends out. As we have seen, leaving uptrends in could easily be wrong if the uptrend is destined to flatten or reverse. Leaving downtrends out could also be wrong in the same way, that is, if the downtrend is destined to flatten out. But even if a downtrend is likely to keep going down, it shouldn't necessarily be ignored; this is because the disappearance of a phenomenon may be as important as its continuation. For example, a continued decline in government funding for our type of program is something we had better take into account in our futuring, if in fact we have been depending on such funding, or would like to as part of future planning.

That having been said, it is still important to assess the likelihood a downtrend will continue or abate. Here are some cues:

Downtrends Unlikely to Flatten or Reverse Foreseeably

1. A decline which is the downside of a novelty/fad is likely to continue toward virtual or actual disappearance. The popular tune which has been slipping for several weeks in the ratings is unlikely to stage a sudden comeback, (though many years later it might enjoy a sentimental comeback).

2. A downtrend which represents a successfully replaced product or service, is unlikely to be reversed. The decline of the horse and buggy in the U.S. became per-

manent insofar as the automobile was accepted as an affordable and more effective mode of transportation.

Downtrends That Might Come Back, But It Will Usually Take A Long Time

1. Where there might be overconfidence that a problem has been eradicated. Examples: Major efforts increasingly make inroads on a problem such as illiteracy, tuberculosis, etc. until we believe the problem eradicated, and relax our efforts. As a direct or indirect consequence of this inattention, illiteracy, TB, etc., supposedly "conquered," reappear. Or, our workshops with staff on acceptance and support of volunteers have such positive effects we feel the workshop series is no longer needed. So, after a while, new staff coming in and old staff forgetting drive staff resistance up again.

2. The phenomenon of something apparently going away (declining), but then coming back again is expressed somewhat differently in two other models discussed later: the CYCLICAL and the QUIES-CENT-ERUPTIVE. A third model, TREND REVERSAL, might also explain in some cases why a downtrend flattens and reverses to upward. This is particularly so where a decline is caused by a depleting supply of a valued commodity (gasoline, clean air, etc.). In such cases, the pain and inconvenience resulting from the decline may provoke an effective counter-reaction which increases the supply again.

One Conceivable Instance in Which A Downtrend Might Flatten and Reverse Relatively Rapidly

As noted earlier in this section, an upward trend of optimism or confidence produced by someone promising people too much too soon, can soon flatten and reverse to disappointment and cynicism when these promises aren't kept. But, alas for human frailty (or hurrah for invincible faith), the resulting downtrend in confidence might reverse to hope again, when someone new makes fresh promises persuasively.

A GREAT RUBBER WALL OF CHINA (TREND REVERSAL)

Images

- Going down that Road in Western Kansas, you encounter a high wall across the road, stretching from horizon to horizon. You push against the wall and bounce back (it's made of rubber).
- Related image: The harder you throw a ball against a wall, the harder it comes back.
- A great rubber band is fastened around your waist. The further you walk forward, the greater the tension on the rubber band, until finally it stops you and pulls you back.

Implications

The ROLLER COASTER or waveform model illustrated one pitfall in straightline projection to the future: current rates of increase or decrease will accelerate or decelerate. They rarely remain the same. The GREAT RUBBER WALL or Trend Reversal model highlights another exception to linear thinking: that current trends may actually reverse. As in classical physics "To every action there is an equal and opposite reaction," though in this case, we may have only a rough, imperfect proportionality rather than exact equality between the forward "hit" and backward "bounce." The principle is: a factor or trend, especially a powerful one, will not necessarily continue to have strong effects in its present direction. Its power may only increase the likelihood of counterreaction and reversal.

Such reversal may be value-neutral, especially in the physical realm; a ball thrown against the wall is not morally superior to the ball bouncing back. But in psycho-social realms, it does seem that factors identifiable as "bad" or threatening often reverse to "good" consequences, while "good" factors bounce back to "bad" results. The following are examples in each direction.

Examples

Bad or Threatening Factors Reversing to Good or Promising Effects

- Increased difficulty in getting adequate grant funding for a non-profit leads to successful creativity in developing alternative funding sources.
- Environmental abuse leads progressively to alarmed awareness and more effective preservation efforts. (Let us hope it is not too late for that.)
- Almost any danger, illness, disability, setback, loss or challenge can mobilize positive reactions and "bring out the best" in an individual (up to the point where it overwhelms). The historian Arnold Toynbee made this kind of challenge and response a central tenet of his historical analysis. A parallel galvanizing effect can occur in organizations, for example, in response to budget cuts, the loss of a valued leader, the loss of relevance to current clients, etc.
- The 1980s threat of increasing liability for non-profit board members and rescue workers, producing reluctance to volunteer, is being responded to by protective legislation and better insurance.
- Far better that the terrible tragedy of AIDS had never been. But since it is with us still, it might yet lead to a vastly improved understanding of the immune system and how to strengthen it. That could ultimately mean longer and healthier lives for billions of people.
- The plight of the homeless in the U.S. might get visible and pervasive enough to provoke an appropriate, massive, positive response. (Or, negatively, we might just get numb, or just give up.)
- Inoculations or vaccinations give an individual a presumably mild case of a disease ("bad") to stimulate a positive reaction which protects against that disease in the future ("good"). Some people, however, would rather let the immune system do its work, more naturally, without such outside provocation.
- Sometimes, doomsday-type predictions are made more or less deliberately in hopes of galvanizing positive reactions. This can backfire, however, when prediction of a disaster actually helps to create one—which is why it's a crime to holler "fire" in a crowded theater unless you're sure there is.

The exception to virtually any of these bounce-back examples is when the threatening factor is so powerful, or the response so weak, that it breaks through and fulfills its noxious effects. The image here is a rubber band stretched until it breaks or a force so powerful it batters down the rubber wall. Some prominent professional futurists seem to favor such a view—that what's bad today will be worse tomorrow. The alternative view taken here is that what's bad today just possibly might be *better* tomorrow. You don't have to be Pollyanna to believe that.

In the Other Direction: A Good Influence Has a Bad Backlash

- The joy of love and friendship leaves you more vulnerable to loss.
- The same for caring about any cause, program, organization, etc.
- Improving your property, getting a nicer car or other possessions, makes you a more likely target for burglars.
- Becoming more popular and/or of higher status, can make you more vulnerable to unjust criticism which "cuts you down to size." Related to this, fame has its drawbacks.
- Your organization gets a large grant or bequest, fine. But with it comes the danger of going soft and/or getting obsessed with keeping money for its own sake and forgetting who you are and what you're supposed to be doing.
- Growth in a program/organization/ community can seem an unblemished "good" at first. But as a result, there are often "'growing pains" due to overstressed resources, loss of intimacy, accountability, control etc.
- Assume your purpose is greater access to higher-paying jobs for women. Higher salaries in a predominantly women's profession (volunteer administration, etc.) are much deserved and appreciated, but rather soon lead to male competition which probably means fewer job openings overall for women in that profession. (Many, perhaps most people will say that's natural, even desirable in the long run. I'm only suggesting that in the short run the benefit can produce some pain.)

ese Diagnosis and Strategy

The lesson for the futurist is, first of all, to avoid the automatic assumption that what's bad today will be worse tomorrow and what's good today will be even better tomorrow. Instead, think bounceback or reversal as real possibilities. Here are some cues:

- A bad threatening factor might be more subject to reversal insofar as:
 - a. the factor is visibly and widely threatening enough to capture concerned attention on the part of people who can do something about it.
 - b. but not so powerful as to overwhelm any chance of positive response; and
 - c. acts and builds slowly enough so there is time to mobilize resources in response to the threat. (Not lightning on the way to hit you.)
- A good factor might be subject to reversal insofar as:
 - a. its benefits are likely to lull into complacency and dull coping skills;
 - b. the beneficiary is prone to become so obsessed with retaining the rewards that the purpose of the program, etc. is obscured or forgotten;
 - c. related to this, a dependency is created on things that can be taken away or lost, such as grant funding, fame, status, popularity, athletic ability, a powerful patron, etc.;
 - d. the factor itself had a curvature effect—a moderate amount of it is good, but too much of it reverses to bad (for example, heat, moisture, food; see previous discussion).

A SLOW SPIRAL

(MODIFIED CYCLICAL)

THE "FLAVOR," VERBALLY

"There's nothing new under the sun." "The more things change, the more they are the same." "I've been there before."

Images

 A horse on a moving merry-go-round (except that socially significant cycles tend to take longer and usually are less obviously circular).

- A fairly long path in a park, ultimately returning to its starting point.
- A circular bus route which ends up where it began.

In both the last two cases, it might sometimes seem as if the path is going straight ahead or away from its point of origin, rather than towards it. Moreover, the examples are somewhat unrealistic in implying a return to *exactly* the same place as they began. In effect, usually "you can't go home again"; that is, the place you come back to isn't quite the same as the place you left.

Examples of this point:

- A reunion with a friend you haven't seen in years. Things are the same and yet a little different, too.
- The railroad just west of Calgary, Alberta, as it climbs the vast carapace of the Canadian Rockies. The grade is too steep to conquer in a straight line, so the train climbs gradually in slow circles and sometimes almost "meets itself coming back." However, each time around the train is a little bit higher (hence, "a circle going somewhere" or a spiral). But the "higher" part of the image in the train example might imply too much optimism; better to just say "different" each time around, and call this a "modified cyclical" model.

The Importance of Cycles in Futuring

The main benefit for the futurist is to capitalize on the experience of previous cycles as an aid in planning and reacting to present or predicted ones. Examples:

- Once we knew that Halley's Comet comes around again every 76 years, we could be better prepared to observe it, next time it passed by.
- If your program is in healthy financial shape now but has suffered periodic funding crises in the past, it is prudent to do your futuring having learned as much as you can from these past crises, and with full awareness of the possibility they might recur.
- Suppose one sees today's stipended and sometimes socially-pressured community service programs as radically new. The danger is you will miss

important lessons of history. Suppose instead, you are able to see these programs as part of a cycle which, "the previous time around" some fifty years ago, included programs like the Civilian Conservation Corps (CCC) and the Works Progress Administration (WPA). There is then at least the possibility of learning some important things from the previous cycle, even though kinship with present programs is far from perfect. That learning surely includes what to avoid as well as recommended positive steps. (The idea is not to make the same old mistakes; make some creative new ones, instead!)

A second and related benefit in the study of cycles is the possibility of intervening to interrupt and block negative or destructive repeating patterns.⁴ Some suggestions here are:

- It helps to gain awareness of how and why a negative pattern might have been rewarded in the past, why it is no longer rewarding and is in fact punishing today. See earlier reference to organizational amnesia.
- Simple avoidance of mistakes made "the last time around."
- Another possible remedy is information or skills acquisition. Example: study of recurring patterns of vitality or apathy in your board helps explain the reasons for them, and provides hope of breaking the cycle through information, training, or policy changes.
- Finally, targeted application of available, relevant resources might help break a negative cycle. The crucial resource might be money, as in hiring more youth workers in a high-crime neighborhood, or for scholarships for deserving low-income youth. The cycle-breaking resource might involve people as volunteer mentors or companions; equipment for recreational or other purposes; or, most importantly of all, an attitude of trust and belief in people who have never had that. (That isn't usually thought of as a "resource," but it is.)
- Insofar as the negative cycle has the character of an addiction, we may be

able to apply the lessons learned from helping people break such chains.

Examples

Physical: Sunrise, the seasons, the tides are themes repeating but rarely in precisely the same way. This winter, for example, is winter, but not a duplicate of last winter.

Economic: cycles of "prosperity-recession" in relatively recent U.S. history. Deep recession is unmistakable misery, but the character of the misery seems to vary somewhat, each time around.

Social:

- Recurring problems some of us feel we experience in our relationships with other people.
- Cycles of healthy vigor or inactivity your board goes through.
- Cycles in political liberalism-conservatism many believe to exist.

SPOTTING CYCLES—DIAGNOSIS AND IDENTIFICATION

How does the futurist know that her or his key situation may be (at least, partly) cyclical in nature? Here are some clues:

- As noted, cycles are easiest to identify in physical phenomena, though these by themselves are usually of least interest to futurists.
- Be aware of, and deliberately try to counteract, a prevalent bias in Western Industrial Society that things always "move forward" or "move on"; it's all "progress." As one who grew up drenched in this presupposition, I'm uptight about missing the bus, for example, because deep down I'm sure it will never come back. I've missed it forever! For others, who could be excellent trainers of futurists, if you miss the bus, you need only remember that it is probably coming around again sometime; you might even consult a schedule to figure out just when.
- A study of past repeating patterns related to your key situation is a good way of anticipating them in the future. It is no accident that many of the best established cycles have been

identified by historians. But, since grassroots volunteer groups are notorious for organizational amnesia, gaining access to actual, as distinguished from rumored, history, may be a challenge.

- A driven, compulsive, addictive, quality in the organization or individual could signify proneness to recycling the same mistakes. "Well, we've always done it this way" rarely listens to: "Well, you've always had the same lousy results, too" or "Yes, it worked in 1975 (or 1875), but conditions have changed somewhat since then." Hardening of the categories invites recurrence of errors. It is a frequent but not inevitable characteristic of older organizations.
- The Cyclical model resembles the previously discussed Trend Reversal model in that both tend to return towards their point of origin; the Cyclical model just tends to do so by a more rounded route. Because of this kinship, the cues for identifying Trend Reversal, can apply to the Cyclical model, as well.

A PRESSURE COOKER

(QUIESCENT/ERUPTIVE)

Images

- A Pressure Cooker (remember?)
- The "Old Faithful" geyser in Yellowstone Park (every hour on the hour)

Relatively less predictable examples include:

- Volcanoes
- Earthquakes in a fault zone
- Temper tantrums

COMMON CHARACTERISTICS AND SIGNIFICANCE FOR THE FUTURIST

For a relatively long period it looks like nothing is happening. But something is happening under the surface, a buildup of forces or pressures. When this buildup reaches a threshold intensity ("critical mass"), there is a sudden eruption, usually quite dramatic and impactful.

Social-Psychological Examples

 Tensions building up relatively unnoticed between members of a board, a married couple, staff and volunteers, employees and a supervisor, etc. At some critical point they explode.

- Some observers feel that in the thirty years between the Los Angeles riots, there was indeed a steady accumulation of tensions. But relatively few people warned of this and they were largely ignored.
- An individual/group/organization entrusted with important responsibilities is in fact dishonest and/or incompetent. But this fact is not perceived clearly enough by others for a long time because of poor oversight procedures, deliberate cover-up or both. Exposure, when it finally occurs, produces shock, recrimination and even legal action.

But pressure cooker phenomena can also be "good." Examples are:

- We work hard to develop a new competency or product. Very little shows during all the planning, preparation and other groundwork. But suddenly, it all comes together.
- Similarly, an individual or group seems to be going around in circles struggling to achieve their dream. Then one day, the dream comes true!
- You spend time together apparently as acquaintances. After a time, it dawns on you that you have become good friends.

IMPORTANCE AND USE OF THE PRESSURE COOKER MODEL

The futurist should not automatically leave out of her/his calculations any factor or situation where nothing appears to be happening now. Something might be hibernating or incubating beneath the surface, with important consequences for the future.

But how can the futurist sense this sub-surface fermentation when little or nothing is overtly evident? Some cues:

— Have there been eruptions or explosions in the past with this kind of situation? If yes, there is some presumption of similar phenomena in the future. Moreover, the time period between past eruptions is a starting point in estimating when the next one will be.

- Related to this, other things being equal, as there has been a longer time since the last eruption, there is likely to be a shorter time before the next one.
- People may be suppressing or refusing to see unpleasant happenings, symptoms, or signals. Beyond this largely unconscious repression, someone in authority may be putting a deliberate spin on things as a political or other cover-up.
- Look for "the starvation phenomenon." Has some individual, group, or organization been deprived of something(s) vital to them over a long time, as would be the case for food with an intensive dieter, a prison inmate lacking just about every amenity, an unloved child, an individual organization desperately short of money, a race or gender deprived of basic rights, etc. If so, the intensive dieter may at some point be prone to splurge on food; the released prisoner on amenities of all kinds, etc. Generally, extreme prolonged deprivation, suddenly given opportunity, can explode in excessive indulgence.
- Try to improve your sensitivity to what's actually happening inside and underneath the pressure cooker. Researchers are getting better at measuring previously unregistered buildup events between volcanic eruptions and earthquakes. It may prove even more challenging to do this for socialpsychological happenings, but we should try; for example, to understand better what, presently is unseen, underlies successful incubation of dreams.

TRANSITION

The five models described thus far have this in common: They visualize the future as a single line, a road, if you will. The line may bend, go up or down, circle back, reverse, etc., but it is still a single track.

The next two models involve: (l) a branching lattice rather than a line (CROSS-

ROADS FADING IN THE FOG); and (2) transformations in whatever is on the road (A HOUSE OF MIRRORS).

CROSSROADS IN THE DISTANCE (A LATTICE WORK) Philosophy

There *is* such a thing as free will. Because of it, the decisions we make do count; they make a difference in the real world. And even refusal to choose is a choice.

Images

— A fishnet, a lattice, or a maze. The main difference from the conventional image is that the fishnet, lattice or maze widens with distance from the point of origin.

Examples

- Winter and you're driving west (towards Denver? Kansas City?) where you will need to decide between a more scenic northern route to the West Coast with more chance of snow, and a less scenic southern route more protected from winter.
- You're a volunteer coordinator in an organization that is planning to "downsize" (for example, lay people off). You can predict with considerable unhappy likelihood that relatively soon if not already, management will tell you to recruit volunteers to replace laid-off staff. You can at least dimly foresee your possible choices at that crossroads:
 - go along passively with the directive;
 - go along complainingly with the directive;
 - appear to go along, but do your best to subvert the directive;
 - flatly refuse and risk loss of any more choices regarding your present job;
 - think long enough and other possible responses may occur to you.
- Your 10-year-old child is bright and you're in reasonably good financial shape. About eight years in the future you and your child will likely reach a decision point . . . to go or not to go to

college. If it's "go," the decision points become "which college?" and, either concurrently or somewhat later, "what subject-matter focus?" The point is, it may be useful to begin anticipating these decisions at age 10, even though it is usually impossible to finalize them at that time.

- Assuming you are in the paid workforce and will continue in reasonably good physical and financial health to age 60-65 (maybe earlier, maybe later) you can anticipate major decision points involving "retirement"; for example, total or partial retirement? Stay where you are or move? If move, what will you be looking for? (Climate, environment, cost of living, near friends or not, etc.?)
- Consider a volunteer coordinator or anyone else in an altruistically-oriented, challenging, underpaid position. Quite predictably, at some point (if not already), he/she will be offered another job with more pay and less ethical satisfaction.
- At some point in the evolution of a volunteer or other healthy program, you can pretty well foresee encountering a growth/no growth choice-point. It might not be quite that cut-anddried, of course, and more a matter of emphasis and priority.

Purpose and Process

What benefit is there for the futurist in anticipating the choices he/she will have in the future? The main benefit is more time to prepare for making the best possible choice when the crossroads is reached, as distinct from being surprised and "caught off balance."

Playing "choice and consequences" for comparable cases is one way of preparing for an anticipated crossroads. What do your friends, the Smiths, think of Florida, now that they've retired there? How does former volunteer coordinator, Mary Jones, feel about her new job in public relations with a distinctly profit-oriented corporation? The Millers' son, Tim: what are his pros and cons on State College, now that he's been there a year? When the drug education program had a chance for rapid growth two years ago, and took it, what happened to the program?

As you approach a crossroads you're able to gather more information on your specific decision (as distinct from other presumably similar cases). Thus, as you get nearer to Denver, the weather forecast gets more and more relevant in the decision on northern vs. southern route. As your retirement date approaches you'll have more up-to-date information relevant to your choices there; for example, the current state of your health and your finances, what you could sell your house for and what it would cost to get another one, what it's current conditions are and where might you want to move?

How do you decide whether the lattice work model will be helpful in understanding the future of your key situation? No problem; it's *always* applicable. Almost, anyhow. Unless you believe in total predestination (I do not), the lattice model is almost always relevant, and should at least be tried out as a fit to the future. This does not mean it *replaces* other models; rather, it is used in conjunction with them. Thus, a straight line projection to the future might be predicted to branch at some point; the same for any section of a Waveform, Spiral or Reversing Trend.

CAUTIONS IN USING THE CROSSROADS MODEL

Don't try to peer too far ahead; it gets foggy. A main reason is rapid proliferation of choices as you move through the lattice. If you go X-way instead of Y-way at the first crossroads, you then confront choices X1, X21, X3 etc. If you take X3, you're then looking at X3a, X3b, X3c, X3d etc. There's a comparable proliferation on the Y-side, of course. And this is simplifying matters. Clearly, after moving through only a few successive crossroads it would be nearly impossible to forecast reliably where we would be on the lattice.

Another problem with projecting the lattice very far into the future has already been described: solid information relevant to a good choice is more likely to be available only as we get nearer to a crossroads.

Generally, living too much in the future can be dangerous because it neglects *present* dangers. This caution applies to every other model, too. But the lattice seems especially tempting to far-futuring; at least it is to me.

A House of Mirrors (Transformation)

Images

- As you walk through the House of Mirrors, each mirror reflects a changed image of yourself. It's you all right, but taller, rounder, differently proportioned, etc.
- Photos of a child in successive stages of growing up. Though still in some real sense, the same person, there are differences—she/he becomes something more than a larger child.

Implications

While you're counting apples they become oranges. What you're counting changes as you're counting it. In forecasting the future, you must consider not only how the number of elders might change but also alterations in the nature of elderliness itself. An increase in the number of older Americans does not necessarily mean a proportionate need for more shuffleboard courts-unless future elders happen to maintain that interest at today's level. Generally, insofar as tomorrow's elders differ in health, style, outlook or any other important characteristic, "more of the same" will be off the mark in programs involving them as clients, volunteers, citizens, workers, etc.

Another example: Take the forecast that Hispanics will be the largest minority group in the U.S. within 20–25 years. Suppose you go from that to recommending just "more of the same" as a response based only on what Hispanics tend to be like today. You could well miss important changes in this magnificent people in cultural awareness, economic progress, intermarriage with Anglos, the very impact of becoming a larger group, etc. A final example: Look at how the nature of volunteers and the profession of volunteer administration have changed over the past thirty years, and dare, if you can, to suppose they will *not* change any more in the next thirty years! The 1975 forecaster planning a future involving more regularly scheduled ongoing jobs for daytime volunteers, would be way off in 1995.

Examples of such transformations-overtime could easily be multiplied for just about any individual, program, organization, race, gender, culture, age level, occupation. Almost certainly, over longer time spans, there will be changes in quality as well as quantity for anything alive the futurist wants to study. Put otherwise, "trait change" is frequently present along with "rate change."

Also subject to "trait change" are *functions* such as "management" and *characteristics* such as "professionalism." For example, my personal experience as an individual over the past forty years is that the meanings of management and professionalism are proliferating and perhaps also being applied less selectively. Therefore, recommendations for future training, certification, etc. should specify *which* management and *which* professionalism is meant—taking into account the possibility that over longer time frames any particular version might alter in nature.

Along with types of people and types of functions, *systems* can undergo transformations over time. Among other things, the inter-relationships which define the system, the rules of the game, as it were, may change. Therefore, any futuring designed to maintain or improve performance in a system must take account of the fact that the system itself may transmute over time. Examples:

- You learn to type and arrive at your first job to find a new, drastically different keyboard.
- You project future recommendations for an entirely volunteer group, as if it will continue to involve only volunteers and more of them. You could be missing a crucial system change if, in

fact, the group begins to hire paid staff (and the number of volunteers declines as it sometimes does in that circumstance). In any case, the addition of paid staff to the mix could well involve some qualitative changes in within-group relationships.

- A business school in 1970, forecasting future business education needs in 1995, projects mainly "more of the same" based on 1970 workplace interrelationships. This forecast would be prone to neglect a crucial "system change" since then: increased awareness and willingness to confront sexual harassment in the workplace.
- A woman in 1975, planning a vocation in a liberal church, would have been well advised to anticipate changes in church rules which, by 1995, would offer far more choice in responsible church positions for women.
- Pity whomever, in 1939, was forecasting the future of the American Family, based on the prevalent situation at that time: both parents in the home, the man working outside the home, the woman working inside. The assumption of permanence in such characteristics, would have ignored crucial changes in today's predominance of single-parent families and/ or two-parent homes with both parents working outside the home.
- The saying "generals are always prepared to fight the last war" reflects a perception that military planners do their futuring for the next war without taking sufficient account of transformations possible in the way enemies will "interact" in future wars (warfare system changes).

DIAGNOSIS AND EXPECTATIONS

How do we decide when trait change as well as rate change has to be taken into account in our futuring? Transformations often seem so slippery and uncontrolled. Yet there are some cues:

— Significant trait change is less probable over shorter time-frames. The nature of women, volunteers, youth, etc. is, of course, less likely to alter in a year than, say, in twenty years.

- A past history of trait change is a good clue that such change will continue in the future. Anyone knowing the changes in Western women over the past thirty years would be hard pressed to presume that somehow they'll now freeze in place.
- That the direction and nature of change in the past will hold in the future, seems to me a far more chancy proposition, in most cases. I don't think the dramatic increase in oneparent families in the past twenty years is necessarily, for that reason, going to continue into the far future. As a matter of fact, it can hardly do so, because of a ceiling effect in the number of possible one-parent families.
- In the kind of time-frames with which we'll probably work, there is little chance of significant trait change for natural inanimate objects such as rocks, mountains, etc. The probabilities of transformation rise: (1) with manufactured objects such as computers, TV sets, air conditioners, etc.; and (2) with manipulatable entities such as would be involved in genetic engineering. Substantial trait change might be somewhat more likely earlier in the history of manufacturing or manipulation for an object or entity.
- For the animate realm, any generalization is problematic. At first glance it would seem that transformative change would be more likely as one moves "higher" on the phylogenetic scale, for example, from microbes to plants to cats, to people at the socialpsychological level. But what about natural mutations, as in a virus, and again, "deliberate mutations" as in biological or genetic engineering, which could have macro-effects on immunity, disease, etc.

When in doubt it's best to assume there will be at least some trait change as a factor in futuring for anything at the humanpsychological level—what we're typically interested in. On the other hand, we should not lose sight of a persistent commonalty or common essence in what we're studying. Thus, though the nature of elders may change significantly in the future, and probably will, some constant core of "elderliness" will also remain, and needs to be taken into account.

INTEGRATION, COMPLICATION AND REALISM

Seven models have been dealt with separately for purposes of simplification. For purposes of *realism*, we must now start to complicate things a little bit.

First, some of the separately presented models are to some extent different ways of saying much the same thing. Thus, both Trend Reversal and Cyclical models describe a future which eventually returns to its point of origin in the past or present. *Though in somewhat different ways*, I believe, and that justifies keeping them distinct. Similarly, the quiescent phase of the Pressure Cooker might explain or represent a persistent low point on a Roller Coaster waveform.

A second complication is in the application of the models (even when kept distinct). Several models might apply to different aspects of the same key situation. Also, different models might apply to the same aspect at different times.

As one example, consider as a key situation: the future of our entirely volunteer group. For expectable ups and downs in morale and vitality, a waveform might be the best fit to the future. Fundraising prospects might be productively phrased as more of a transformation, from a grant to an earned revenue emphasis. Thirdly, a crossroads might be anticipated in which the growth of the group creates pressure for a choice between raising a bit more money to hire paid secretarial services or to continue relying on part-time volunteers, as now. And so on. Schematically:

Aspects of the Future for Our Entirely Volunteer Group

Morale/Vitality	\mathcal{N}	\mathcal{N}	\mathcal{N}
Fundraising	Gr Gr	Gr ER	ER
Support Services	3		SECRETE AS NOW

A second example—future recruiting prospects for a new agency volunteer program—illustrates how, at different times in the evolution of a key situation different models might apply. Early on, a best fit model for recruiting in a new volunteer program might look like the first part of a Waveform: flat during planning and start-up, then accelerating for a while until the trend "fatigues" and begins to flatten out, thus.



At some point later, perhaps, we might foresee a decision point-to include or not to include mandated service people along with traditional volunteers in our program. Including them might well be predicted to lead to a renewed increase in total numbers in our program, but a partial transformation in the nature of program participants. Deciding to stick only with volunteers might augur a continuing flatness or decline in total program numbers but would preserve the program as only for volunteers (no transformation). Here's a rough diagram of this sequence, where x=traditional volunteers, and xy=traditional volunteers along with mandated service people.



What the diagram doesn't show, of course, are the larger challenges that might go along with larger numbers, in the combined program.

SOME LAST WORDS

At times during the preparation of this manuscript, I was tempted to go into hiding immediately upon publication. Curiosity overcame temptation, however, and I'm therefore going to give both my address and phone number hoping for feedback in the struggle to make this presumably abstruse subject user-friendly and user-useful.

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ENDNOTES

¹Also, taking averages of large numbers usually makes for more accuracy than prediction of individual instances, for example the percentage of heavy smokers likely to get lung cancer before age 60 is easier to foresee than whether or not one individual heavy smoker will get lung cancer before age 60. I'm assuming here that we are more interested in the individual program, person, or situation, etc., so we won't deal with such actuarial prediction here.

²To my few remaining friends in Western Kansas, let me say that a road arrowing to the far horizon can be pretty thrilling.

³Here and throughout, numbers are "for instance," rounded, and for purposes of illustration only.

⁴Is it true, as it now seems to me, that there are more "negative" than "positive" or value-neutral cycles? Or is it just that we have more trouble recognizing them? In either case, it's an area I want to think about much more.