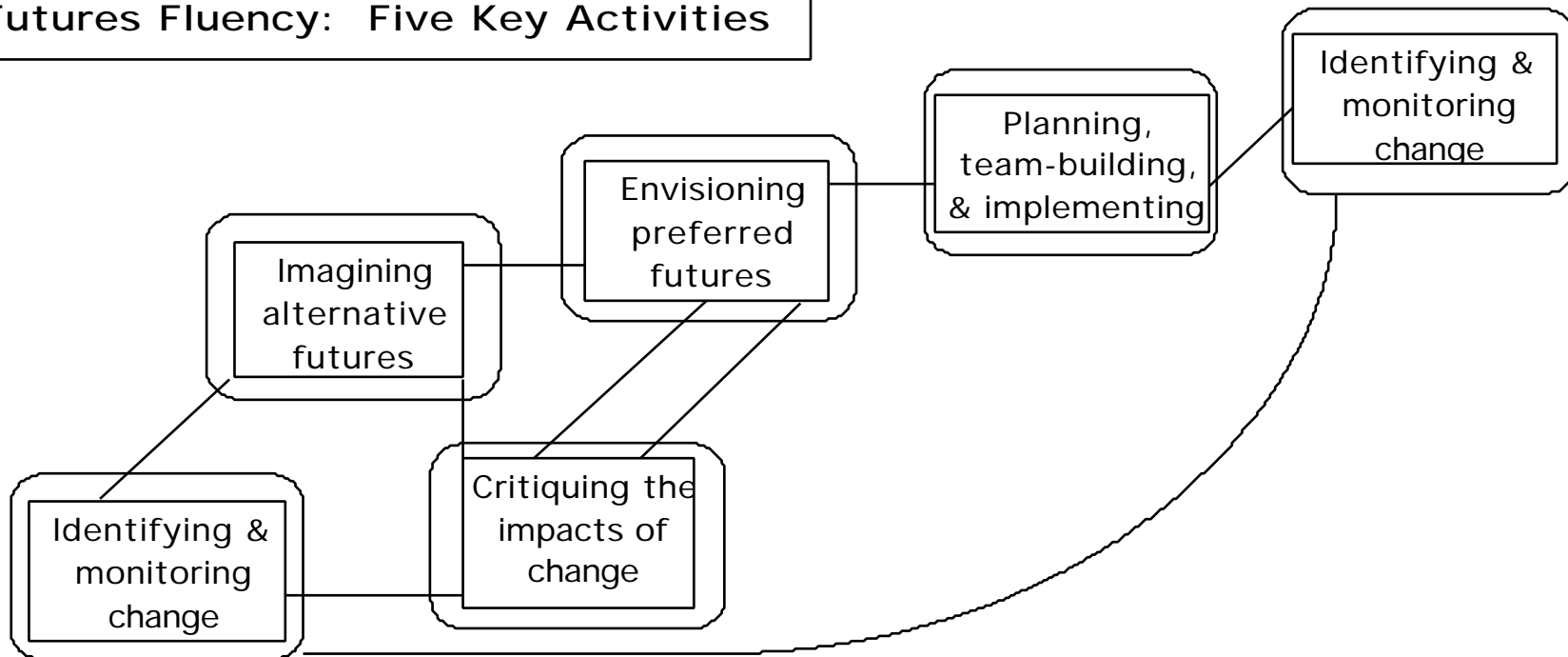


Futures Fluency: Five Key Activities



adapted from Chapter Five of
Futures Fluency: Explorations in Leadership, Vision, and Creativity
DEFINING FUTURES FLUENCY

THINKING, INTUITING, AND IMAGINING THE FUTURE¹

Dealing imaginatively and effectively with the future is critical -- but it is seldom easy. Futurists, decision-makers, and planners have developed a wide range of techniques to deal with the future more effectively. These approaches blend rigor and logic with imagination.

Imagination is by necessity a foundation of futures research: **there are no future facts.**

What information we do have about the future comes from our records of the past, our observations of the present, and our imaginative ability to ask, "what if"? At base, these are the three key components of futures thinking. Looking at the past, we can identify cycles of events: seasons, sunspot activities, El Nino/La Nina events, elections, coronations, couturier's hemline lengths. We can study "wild card" events: watersheds in history that have restructured political, economic, or social systems. What analogous situations exist in the present, or might occur in the next millenium?

Today's sophisticated data-gathering and processing systems allow us to compile observations of our world with astonishing speed and precision. This greatly enhances our ability to spot historical cycles, to identify and monitor trends of change, and to look for trends in the making. As a species, we are immensely adaptive and innovative -- and our innovations open myriad doors of opportunity while at the same time closing doors on past habits and behaviors. Keeping an eye on inventions and technological innovations, value shifts, even fashions and fads allows us to spot emerging issues in the present that might initiate changes in the future.

We have enhanced not only our ability to observe and record the changing patterns of the world around us, but also our ability to analyze those patterns. Economists, market researchers, systems analysts, survey researchers, historians, and futurists, among others, all have techniques to extrapolate what possible outcomes might be for observed patterns of change. Whether quantitatively or qualitatively derived, we refer to these expressions of

possible outcomes as scenarios. A scenario may be as simply expressed as the top line on a graph of economic growth, or as elaborately fleshed out as a science-fiction novel. But at base, it is an attempt to suggest what a possible future might be -- given certain assumptions.

Scenarios of possible futures are one category of answers to the question, "what if"? Scenario-writing, as a discipline, has its own set of rules, chief of which is *internal consistency*. Achieving this requires that imagination be harnessed to logical rigor: the flight of fancy launched by asking "what if?" must follow a plausible path. Scenarios combine our fund of observations about the past and the present, our hypotheses about the laws of nature and society, and our creative imperative to expand our mental horizons.

But another category of answers exists for the question, "what if?" These answers come from our hearts. What if anything were possible? *What would we want for the future?* Creating an image of our preferred future is *visioning*. When a vision is created with conscious understanding of the possibilities with which it must contend, it can prove a powerful tool for strategic planning and personal motivation.

It is also critical for negotiation: everyone makes decisions based on vision, on their idea of a preferred future, even if that vision is never consciously articulated. While we cannot retrieve facts from the future, we can collect information on what the people around us think will happen in the future, and what they want to happen. Those opinions underlie individual and group choices and actions.

This chapter introduces the concept of *futures fluency*: proficiency and delight in creative, critical, and constructive uses of rigorously imaginative speculation. Its five cornerstone activities are **1) looking for, and monitoring, change; 2) critiquing implications; 3) imagining difference; 4) envisioning ideals; and 5) planning achievement**. When practiced as a continuously rising spiral of data-gathering, analysis, synthesis, and imagination, they comprise futures fluency.

Two assumptions bear emphasis:

- 1. The future is uncertain.** There is no single, certain forecast for ourselves, our organizations, communities, or nations, or for the planet as a whole. While

we would like to eliminate this uncertainty, we must work to live with it effectively and creatively. Understanding trends and scenarios gives us a sense of the patterns of opportunities and threats, and enhances our potential effectiveness and creativity.

2. While the future is uncertain and much of it is beyond our control, we can control many aspects of it. We choose our future: we create it by what we do or fail to do. Visions and strategies linked to a clear sense of trends and scenarios make us better able to shape the future we prefer.

ELEMENTS OF FUTURES FLUENCY

The sections which follow give context, examples, and approaches for each of the five elements of futures fluency. Five futures research techniques underpin these five elements. The following paragraphs briefly introduce each technique and its use in the practice of futures fluency.

Emerging issues analysis, also known as environmental scanning, is the search for and detection of changes before they reach public attention. Emerging issues analysis maximizes the opportunity to identify and monitor coming change.

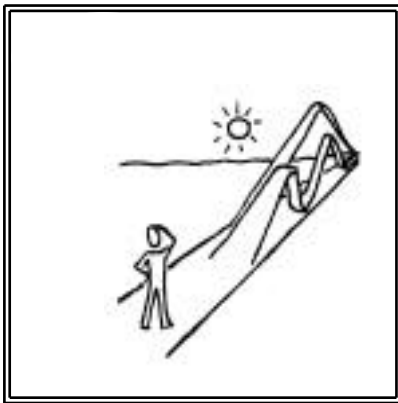
Impact analysis, practiced widely by planners as part of environmental and social impact studies, refers to a family of techniques used to identify and estimate the extent of the effects of change on people and the environment. Impact analysis lets us consider and critique the effects of change.

Incasting, developed primarily by James Dator, is the deductive forecasting of alternative possible futures. Incasting hones our ability to explore different possible future states for changing systems, whether environmental, economic, political, social, or technological. Thus it is a useful first step, or precursor, to the more advanced forecasting tools for building scenarios from available data on change.

Visioning is an imaginative, idealistic and normative process which aids people in explicitly articulating their preferred future. It opens up a creative space free from

constraints and the need to solve problems, in which we can envision achieving our ideals. The approach presented relies greatly on the seminal work of Robert Jungk.²

Backcasting, also known as "Apollo forecasting" or "creating future histories," bridges the gap between the events in a possible future -- usually a preferred future -- and the extended present. It is a critical first step in specifying goals and milestones for use in planning and achieving an articulated vision. The approach presented emerges primarily from previous work by Warren Ziegler.³



Looking for, and Monitoring, Change

Being futures fluent means being actively interested in change. Most people are merely aware of change -- and often disgruntled about it. Futures fluency requires a perspective which celebrates change. Not uncritically; change can erect barricades to opportunities and often destroys much of what we value in our traditions. But it also creates wholly

new opportunities and new networks of social relations. Whether negative or positive, change challenges us to learn, adapt, create, grow, and reconsider and redefine ourselves. Recognizing and reflecting on change and its implications allows us to critique not only external realities but also our own internal landscapes.

The rhythms and paces of reality are many. Braudel began his history of the Mediterranean by looking at the rhythms of events in geological time. Slightly faster paced are climatological cycles like the ice age-and-interval cycle: we are now close to the end of an interval -- "close" being "within a thousand years."

Rhythms in the planet are also linked to rhythms in the solar system. A prime example is the eleven-year sunspot cycle, critical to humanity ever since we domesticated food crops, as it disrupts accustomed weather patterns. The sunspot cycle is even more

critical to the information age, as heightened sunspot activity interferes with broadcast transmissions.

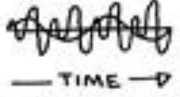
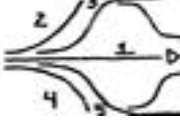
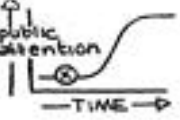
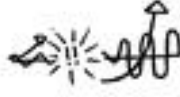
Shifting perspective from massive systems with monumental inertia to smaller, more reactive systems like single separate species, the pace of the rhythms we observe quickens. The shorter cycles and more frenetic rhythms of systems such as plant and animal populations, the economy, women's fashions, and our individual bodies produce a greater amount of observable data in smaller time intervals. This aids analysis, although it does not necessarily improve our ability to forecast events along these cycles with precision.

All of these ongoing rhythms are the baseline data for the first element of futures fluency: *identifying and monitoring change*. In order to notice changes occurring, you must first know how things used to be. Thus the beginning of futures fluency is a wide-ranging interest in historical patterns. Identifying change requires monitoring four forms of change: cycles, trends, emerging issues, and wild card events. Each varies in shape, pace, and magnitude of change. Examples are presented in Table 1.

The American Heritage Dictionary defines a **cycle** as "1. A time interval in which a characteristic, esp. a regularly repeated, event or sequence of events occurs." One of the earliest understandings of the future emerges from seasonal cycles. But data exist now on a wide variety of cycles: astronomic, climatic, political, social, and economic. Cycles have unique signatures in terms of shape (wave pattern), pace at which they complete (periodicity), and magnitude of effects. Perturbations in these characteristics hallmark change occurring in a cycle. If winter in the temperate zone is longer, that is a perturbation in the seasonal cycle which might cause a perturbation in the ice age-and-interval cycle.

El Nino/La Nino events (a cycle often referred to as the "El Nino-Southern Oscillation") occur about twice a decade, and their strongest immediate effects are hemispheric in magnitude: the Pacific Basin and Rim. We have been intensively

Table 1. Identifying and Monitoring Different Types of Change

IDENTIFY/ MONITOR	SHAPE	EXAMPLES	PACE	MAGNITUDE	LOCATION OF DATA (timeline)
cycles		ice ages rise & fall of empires sunspots El Nino/La Nina seasons	geologic centuries decades decades months	global hemispheric astronomical hemispheric continental	from prehistory history present
trends		global warming transport speed % age of women employed	centuries accelerating decades	global expanding varies by site	prehistory history present
emerging issues		60's:environmentalism 70's:personal computer use 80's:virtual reality	accelerating	expanding	present
wildcards		OPEC AIDS Berlin Wall Exxon Valdez Dissolution of USSR	immediate	global global Europe/U.S. U.S. global	future

gathering data on this cycle since the 1960's. In the decades to come new high-technology observation systems will supply real-time oceanographic and atmospheric data to monitor its pattern. In an intensified effort to understand this cycle, researchers are backtracking to interpret ever-earlier anecdotal and historical data. The more we hone our understanding of this cycle, the better we will be at identifying changes to it. These changes could in turn identify other perturbations among the world's systems.

Trends, defined generally as "general inclinations or tendencies," are in analytical usage directions of change in one variable over time. Trend analysis monitors changes in chosen variables from the past into the present, focussing on the cumulative tendency of the change over and above any seasonal cycles or statistical "noise" generated by unique events. In addition, trend extrapolation -- mathematically modelling the continuation of a trend past our last current data point out into the future -- allows us to speculate on the extremes of change possible for the variable in question. Observing trends requires collecting quantifiable data: it must be possible to operationalize a phenomenon before monitoring its trend. Trend analysis is the foundation for baseline information on change.

Trends occur in several basic "families": 1) things stay the same; 2) things increase; 3) things increase and then level out or decrease; 4) things decrease; and 5) things decrease and then level out or increase. Economists develop sophisticated, complex arrangements of algorithms which direct computers to manipulate data such that charts portraying one or another of these results emerge from printers. For the sake of imaging alternative possible futures, magic markers and graph paper work just as well.

Identifying and monitoring trends of change requires us to investigate the current and past states of any phenomenon whose possible futures we wish to consider.

Not forecast; none of the varieties of trend extrapolation can "predict the future." But all of them can augment how well and widely we question patterns of change:

What will be the consequences if a given trend continues? if it plateaus or accelerates? What forces contribute to the trend, and how might those forces change? Can we influence this trend, and if so, how?

Trend analysis links our ability to observe change with our ability to plan it.

In order to plan intended change we must have room to respond to unintended change. The further into the future we look, the greater the uncertainty -- but the greater the possibilities for anticipatory action. Thus spotting nascent forces of change when their effects are yet small is critical. The technique which best enables a 50-year stare into the future is emerging issues analysis.

Emerging issues are nascent trends: trends that very few people have yet recognized as such. With each example of an emerging issue, Table 1 identifies the decade in which the change was emerging, but had not yet attracted widespread public attention. Rachel Carson and Lester Brown sounded an academic alarm regarding the environment in the late fifties. Environmentalism was a watchword on the pages of *Ramparts* and *Mother Jones* in the sixties. But it did not reach the pages of *Time* and *Newsweek*, and America's living rooms, until the second anniversary of Earth Day in April 1989. In contrast, personal computer use and virtual reality took only a decade each to emerge onto newsprint.

Emerging issues analysis assumes first of all that change is rooted in the innovative and the extraordinary. Extraordinary in the statistical sense: outliers produce change -- geniuses, visionaries, and lunatics in science, engineering, the arts, politics, philosophy or religion. And outliers are the first to spot change, to feel the shifts in the frequencies with which society or the environment resonates. The precursors of change may thus be searched out among fringe groups, in esoteric literature, within marginalized populations. The process of reviewing a wide variety of specialized or esoteric sources to sift out the spores of change is also sometimes called *environmental scanning*. The

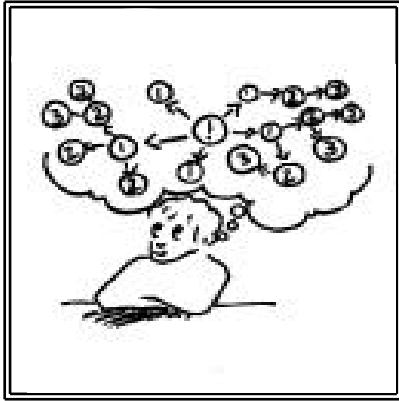
insight which identifies an emerging issue may come either at the prompting of a single item, or as an intuitive recognition of a pattern of events or references spread across many outlier groups.

Wild card events are system breaks: sudden, disjunctive changes whose causes are several interlinked variables which produce no obvious change until a threshold of some kind is met. They are system watersheds, after which disequilibrium reigns until the system reorganizes and establishes a new equilibrium. Technically, futures researchers define a “wild card” as an event with a low probability of occurrence, which if it did occur, would produce high magnitude impacts. The fall of the Berlin Wall is a perfect example of a wild card event; the economies of the two Germanies are still in the throes of reorganizing to establish equilibrium across the newly formed larger system.

Wild card events are very easy to recognize after the fact: their pace, or speed of impact, is usually immediate. Their magnitude usually depends on the reach of the system in which they occur. Forecasting wildcard events is a conjuring trick based on intuition and good imagination: all the data is located within the forecaster's image of a possible future. Computer models of interacting trend lines can suggest possible wildcard events if the results are sufficiently counterintuitive. However, computer models offer output in systemic terms, where wild card events are characterized by specificity: a particular [person, country, geological feature, microbe] does something unexpected. Wild card events are useful in identifying change because they prompt close observation of trends and cycles that might support their occurrence.

Identifying and monitoring change involves collecting and analyzing data related to cycles, trends, emerging issues, and possible wild card events. Does anything exist unchanging? No. Tectonic plates shift; mountains move; stone erodes. Seasonal cycles may change, and with them the global climate: El Nino events could perturb North American winters and accelerate the onset of glaciation. Even cycles may not be

classified as "unchanging change," because they may alter in pace or magnitude: within a futures fluent perspective, wild cards may crop up anywhere.



Critiquing Implications

Finding and keeping an eye on change as it occurs around us is not sufficient for futures fluency. Critical to the task of inventing a better future is evaluating change. What effects cascade from ongoing change? What impacts do those effects have on our day-to-day life? Who has been newly advantaged or disadvantaged by the advent of change?

What trade-offs might we face as a result of change?

In order to critique the implications of change, we must first distinguish between *unintended* and *intended* change. The distinction rests on two concepts: intervention and responsibility. Unintended change is often described as "what happens if people take no action to intervene." But this characterization is both imprecise and incomplete. It is imprecise because people are always in action, and those actions continuously intervene in the fabric of reality. It is incomplete because lack of intention implies lack of planning and lack of responsibility: a more complete description of unintended change is "what happens 1) when people take no action to intervene, or 2) when people act without considering consequences and assuming responsibility." Unintended change is the combination of natural processes with those actions we take without thinking. Intended change is the product of conscious planning which assumes responsibilities for human interventions and their consequences.

Second, we must distinguish between *effects* and *impacts*. "Effects" loosely encompasses all the linked changes that change itself causes: mapping the effects of change in essence looks not just at the result of the cue ball striking the racked balls, but at the subsequent results of the balls in motion as they rebound off the table walls and each other. "Impacts" loosely encompasses how all the players involved feel about the

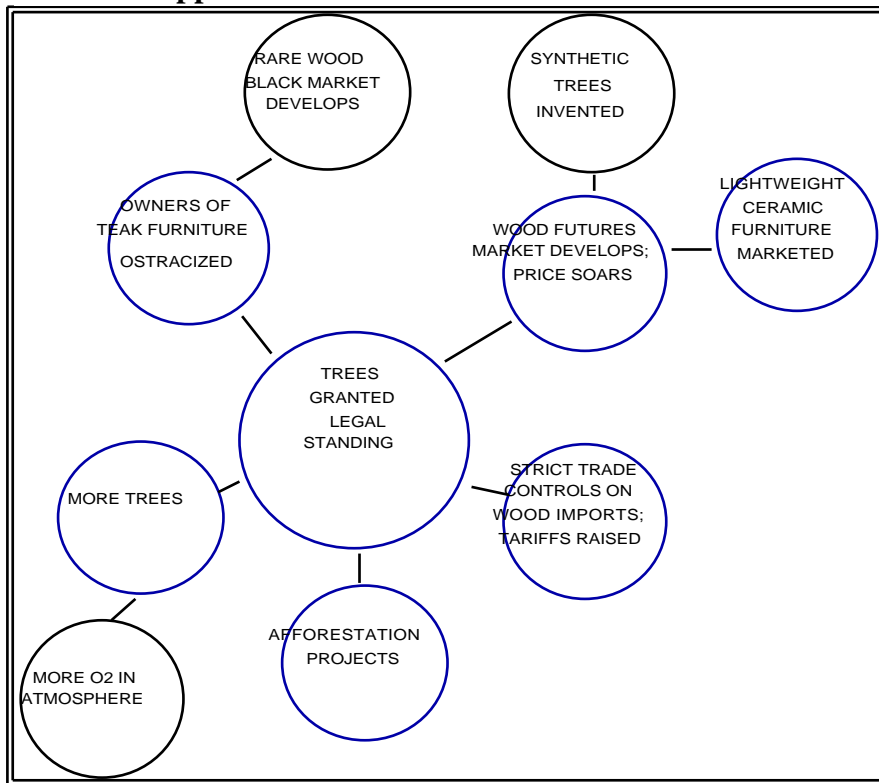
effects of the cue ball striking the racked balls. The "impacts" of change are our evaluations of all the effects of change -- and thus vary from person to person.

As an example of these two distinctions, consider personal transportation. Increases in car ownership in the United States have outstripped increases in population. As a consequence, it takes longer to get to work, longer to find a place to park, and more money to pay for parking; air pollution has increased, car graveyards litter the land, and acres of discarded tires melt in perpetual smolder. These are all primary *effects* of the increase in the number of privately owned cars. Secondary effects include the creation of the fast-food/convenience store/gas station; gasoline credit cards; carphones, carfaxes, and trip computers; and "bedroom communities." To represent tertiary effects, I will offer only one example: the Exxon Valdez disaster.

Car ownership is perceived by most people to enhance personal mobility and independence. Individual automobile ownership in the U.S. is so ingrained into the culture as to be considered a right: life, liberty, and happiness are pursued in a car. They are the *intended* effects of increased opportunities for personal car ownership. The primary, secondary, and tertiary effects offered as examples are *unintended* effects. People's *reactions* to the car graveyards or gridlock are the social *impacts* of those effects.

Exploring and mapping the tiers of **effects** that cascade from change may focus on adding breadth or adding depth. That is, we can attempt to think through the primary, secondary, and tertiary effects of change, extending the series out to the limits of our patience or imagination, or we can attempt to think through how the sets of effects generated by several changes interact with each other. They are both amenable to structured brainstorming. The first is often accomplished via a futures technique called "futures wheels" and the second via a qualitative form of a "cross-impact matrix." Figures 11 and 12, and Table 2, offer examples of these methods.

**FUTURES WHEELS:
free-form approach**



**FUTURES WHEELS:
impacts organize by STEEP category**

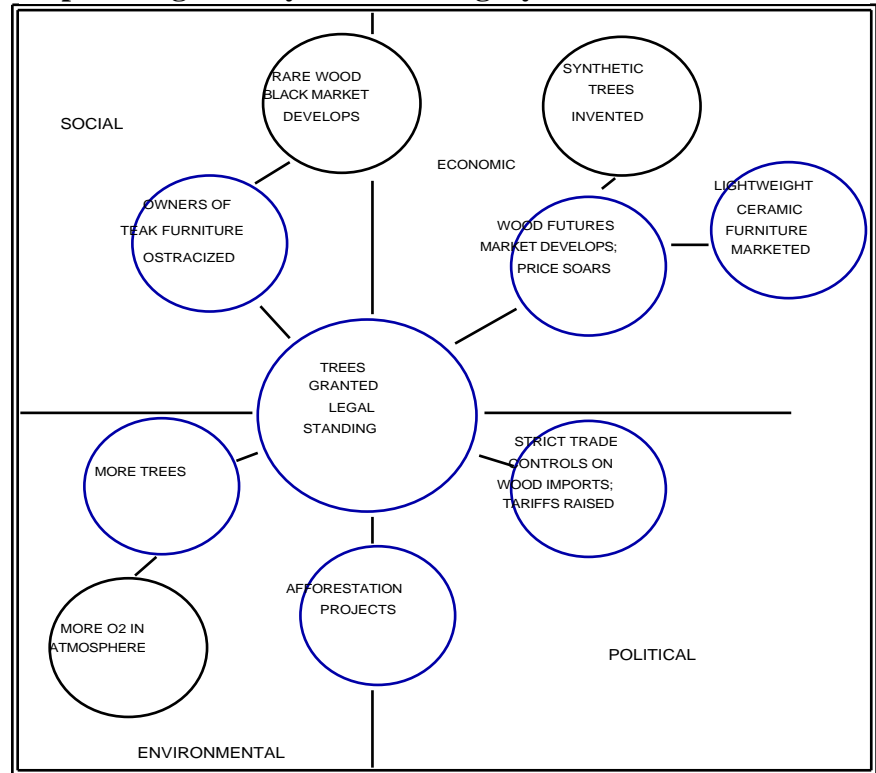


Table 2. Qualitative Cross-Impact Matrix: Combining Trend Impacts

EXAMPLE CROSS - IMPACT MATRIX	TREES HAVE LEGAL STANDING	REMOTE SENSING FOR NATURAL RESOURCE POLICING	INDUSTRIAL CO2 EMISSIONS RISE
TREES HAVE LEGAL STANDING	GREATER PRESERVATION OF FORESTS	MORE INVESTMENT IN FOREST MONITORING SYSTEMS	<u>NET</u> CO2 ADDITIONS TO ATMOSPHERE LOWERED
REMOTE SENSING FOR NATURAL RESOURCE POLICING	EASIER TO MONITOR FOREST RESERVES IN REMOTE AREAS	HEIGHTENED PROTECTION OF SCARCE RESOURCES, ENDANGERED SPECIES	INFRARED & MASS SPECTROSCOPY MONITORING OF INDUSTRIAL EMISSIONS
INDUSTRIAL CO2 EMISSIONS RISE	TREES GROW LARGER, MORE PROLIFERICALLY	POLITICAL CONCERN RE: ENVIRONMENTAL CHANGE FUNDS EXPANDED SPACE SENSING PROGRAM	GREENHOUSE EFFECT ENHANCED; CHANGED WEATHER PATTERNS; SEA LEVEL RISE

Assessing impacts requires participation of the affected communities, which in an ideal world would mean either real or virtual town hall meetings. Public participation more often takes the shape of small focus groups, in-depth interviews of selected respondents, or surveys. In highly politicized situations, referenda convey the public's evaluation of the effects of a possible change.

Lacking the time or resources for these approaches, a single individual can estimate social impacts by analogy, referring to previous research on similar situations.

It is no more possible to map completely the effects and impacts of change than it is to predict the future. Any critique of the implications of change must acknowledge its unknowable complexity. More, our attempts to observe and map the patterns of change distort those patterns: social scientists also endanger Schrodinger's cat.



Imagining Difference

Imagining a world, a reality, a version of ourselves radically different from what we experience now, and now, and now, and now, is the heart of futures fluency. Difference provides vivid details which are words and exclamations in the language of alternative futures; our knowledge and understanding of the

structures and process of reality, and the social construction of reality, are the grammar of that language. Entre's abound for those interested in learning the language of futures: the great works of anthropology; of social change; and of utopian and science fiction. All these open our eyes to alternatives, and teach the skill of consciously skewing our perceptions of reality.

Reading a wide variety of science fiction/fantasy short stories and novels helps jumpstart the ability to play constructively with alternative scenarios of the future. Familiarity with science fiction also helps sharpen one's skill at spotting emerging issues, possible impacts of innovations, and patterns in trends of change. A gifted writer can make an alternative future and its inhabitants live for us. In conversations with those characters we can experience meaningful insights into our construction of the present and our thoughts about the future.

To explore images of possible alternative futures, we may choose among three basic methods which require successively greater investments of imagination on the part of the futures thinker. First, we can search for and document images of alternative futures existing and being created in culture; second, we can take images of the future sketched by someone else and elaborate on them; and third, we can create images of alternative futures from scratch. Table 3 summarizes these methods, suggesting possible uses of each, examples of the kind of images that result, and the basic research approach. For comparative purposes, the table also lists the two discriminatory

activities of estimating probable scenarios and generating preferable scenarios (visioning).

The first paragraph of this chapter asserted that "there are no future facts." That is true, and thus futures research often seems a sadly constrained field to database aficionados. But we **can** gather data regarding the images of the future people hold in the present. A large sub-section of futures research pursues just this end. African villagers,⁴ Columbian housewives,⁵ Italian children,⁶ Jamaican leaders⁷ -- positivist studies surveying and collecting individuals' images of the future abound in the futures field. Another approach collects and analyzes forecasts of alternative futures developed by social change analysts, world process modellers, economists, political and cultural critiques, and the like. Analysts then cluster the scenarios into groups of similar stories, developing "families" of prospective futures.

Such **scenario identification** begins to map the topography of human thinking about the possible futures, and blaze some trails for others to follow. These approaches require logic, meticulous organization, an affinity for detail, and skill in pattern identification. The resulting scenarios provide data for more interpretive work on the role of images of the future in the economy or in politics, or the emergence of images of the future in culture or mass media. Comparisons among scenarios found in different age groups, gender roles, or cultures also yield interesting results. Yet another use for "found images" is incasting.

Incasting takes people on a comparative journey across several possible futures. It requires moderate and equal amounts of logic, imagination, and intuition, and is hampered by the idealistic and the normative. Incasting begins with the choice of four to six candidate scenarios describing *possible* alternative futures. These scenarios are the results either of identifying images of the future extant in a culture, as described above, or of intermixing the logical extensions of impacts and cross-impacts from specific emerging issues, described below.

Table 3. Modes of Imagining Difference

IMAGINING DIFFERENCE	USE (why?)	EXAMPLES (what?)	APPROACH (how?)	DEV'T TIME (how long?)
identify existent scenarios	map cultural topography of futures images; inventory images people are using to make current decisions	Second Coming Second Global Depression Second Balkan War Star Trek	content analysis of media and speech	months
deduce scenario details	forecast alternative futures for specific items, groups, structures, etc.	alternative futures for: the Girl Scouts the health industry books	incasting (deduction from broadly drawn scenarios)	hour
generate possible scenarios	widen our sense of the possible; identify range of threats and opportunities	worldwide sea level rise creates under-, over-sea culture; direct human-computer neural link engenders global cybernetic mind	plausibly combine possible effects of trends and emerging issues	day (given database of trends and emerging issues)
estimate probable scenarios	contingency planning: encourage opportunities, mitigate threats	monitor ocean temperatures, ice shelf calving, coastal inundation; monitor advances in neurophysi-ology, biochemistry, electronics	monitor trends supporting possible scenario; analyze statistical probabilities	months
evaluate/ generate preferable scenarios	motivate people	U.S. Constitution "I had a dream..." Landing a man on the moon MacIntosh, the people's computer	assess trade-offs and values across possible scenarios, or envision ideals	day/hour

From these general descriptions of a future, futures researchers may then logically deduce particulars, specific details: given a future in which nanotechnologies and bioengineering allow corporations to produce infinitely malleable mass-market consumer goods, what would chairs look like? What would 21st century chairs look like across an array of very different futures? How would educational systems differ between a high-technology corporate future and a future characterized by increased spirituality and a focus on environmental stewardship? How would the concept of "tourism" differ across a green future, a corporate future, and a post-environmental disaster, post-global depression future? What familiar social institutions would cease to exist? What social institutions would people invent to suit the new context?

Incasting can also be structured to elicit a useful political critique: incasting possibilities for specific marginalized subpopulations -- women, children, the physically or mentally handicapped, the unemployed. At a more general level, merely identifying who in each scenario will find themselves economically or politically advantaged, and who disadvantaged, critiques the assumptions and structures of those scenarios.

Incasting directs the imagination to add details and enrich an already sketched image of an alternative future. Incasting is a good entre to **scenario construction**, as it is basically scenario construction with training wheels. Scenario construction may be as unstructured as a child's daydreaming, or as formally codified as the algorithms which comprise one of Forrester's global models. As used throughout this work, scenario construction refers to the systematic use of logic and imagination to create a plausible, internally consistent story that describes a possible alternative future, and offers some information as to its genesis.

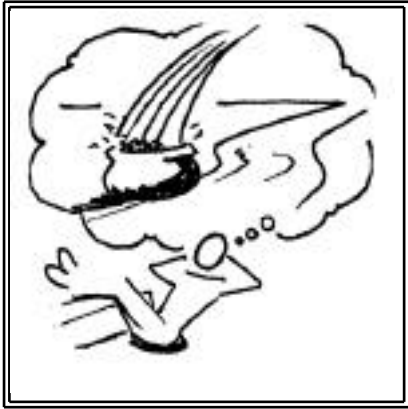
Other essays review the details of the scenario construction process designed for this research. In brief, the basic ingredients are a handful of emerging events, a list of general societal characteristics, and a timeline. The emerging issues are used as engines of difference; the list of societal characteristics evoke a broad impact pattern; and the timeline places the pattern of the effects in relation to the present.

The effects and impacts of the emerging trends are elaborated via futures wheels and cross-impact matrices: imagine writing a narrative in which the contents of the futures wheels above might plausibly be embedded. With this "seed narrative" available, the next step is incasting the future of the rest of reality: will the mundane remain the same, or will the emerging trends change it? In order to heighten the level of detail generated, it helps to have a components checklist. In this scenario of the future, what will be the form and function of government? the economy? the family? personal transport? goods distribution systems? educational and training systems? housing? myths and religions? vices? This components list ensures breadth of imagination.

The resulting impacts, changes, conditions, and characteristics are then positioned a plausible distance away from the present on a timeline. The resulting narrative focusses on describing this alternative future as if it were the narrator's present. The narrator may choose to explain in detail what events brought this future present about, or may simply point to the supporting historical trends and leave the rest to the reader's imagination. This exercise is tantamount to creating a new culture from scratch, and as such challenges even the most accomplished synthesist: it requires wide-ranging familiarity with arts, humanities, and the natural and social sciences.

Once we have imagined difference, and stretched our abilities to limn the possible, we can start estimating the probable and evaluating the preferable. Sorting through widely divergent possibilities helps people identify what attracts them and what repels them in the arenas of change. Estimating probabilities lets them consider how likely they are to end up in a repellant future. Both serve as good warm-ups for visioning. Without this initial adventuring in the fields of the infinitely possible, people are likely to let the mundane constrain their visions.

Envisioning Ideals



The previous chapter on leadership made a strong case for the link between vision and extraordinary human achievement. Reaching our full potential requires goals that challenge us to exceed that potential. Unfortunately, in this most instrumental of ages, daydreaming is unfashionable. The education of the industrial era teaches us to keep our attention on the task at hand; the drive for upward mobility focusses our creativity on immediate problem-solving and practical matters of management. The age of deconstruction awards more points to critiques than to castles in the air.

Given these barriers, little wonder that people are uncomfortable with the verbs "vision," "fantasize," "dream." If not for the cases cited in recent management literature which underscore the utility of vision for motivating exemplary performance, it would be difficult to convince professionals to engage in visioning. Yet it is something humans do naturally, that in fact we must be trained not to do. Reinstating visioning as a powerful creative tool is simply re-balancing our internal environment: giving equal pride of place to intuition and fantasy next to logic and calculation. Visioning requires them all.

Visioning is an exercise in structured idealism. It means wrenching our "common sense"-ibilities away from the practical to indulge in daydreaming and wishlisting. It not only assumes that people can create the future, but also that a sufficiently inspiring vision of a preferred future motivates people to action. Most simply, it is an iterative brainstorming process, relying heavily on imagination, ideals, and intuition.

To begin, we state a handful of general characteristics for a preferred future: peace on earth, environmental stewardship, racial equality. These are too general to be useful building blocks; they must be refined into more precise statements.

Next, we perform an idealistic incasting on the staple components of social reality: in our preferred future, what form will nation-states take? government? what will community social structures be like? how will people be educated? how will work be structured? how will goods be produced, distributed, and consumed? The next step moves further into the realm of fantasy, by asking what the components of an individual's everyday reality look like: describe a typical day in this preferred future -- begin with waking up and getting out of bed, being sure to describe the bed and the bedding.

This exercise has two primary goals: one, to create a richly descriptive image of a preferred future; and two, to get beyond the imaginative constraints of a purely practical, "yes, but..." mindset. Many people find it difficult to let go of the problem-identifying and problem-solving perspectives that work ingrains in all of us. Often the best bridge to the ideal is a string of complaints: most people know what it is about the present they do NOT like. Consequently, the psychologically natural opening exercise for visioning is a problem-listing or "catharsis" stage, in which we list what we absolutely reject for our preferred future.

The statement of positive components can begin with restating the negatives as their opposites: if cultural intolerance is the hallmark of a negative future, the delight in cultural diversity may be a major component for our preferred future. Another way to shift to the positive is to identify our greatest recent successes, either individually or organizationally. This has the added benefit of reinforcing the belief that we can create change.

As Table 4 illustrates, individuals and groups may express their visions in many modes. A vision may be expressed as simply as a sentence: Henry V's, "No King of England unless King of France," or Kennedy's, "Within the next decade, the United States will land a man on the moon." These pocket visions, or **vision icons**, serve as snapshot reminders of the living reality of the long-term goal, keeping priorities clear and motivation high.

Ideally, the **vision scenario** -- the scenario of a preferred future -- offers a rich inventory of the vision's identifying characteristics. We might use Fernand Braudel's approach to history as the exemplar: from daily manners, the niceties of table settings and other quotidian details, to the monumental, geologic differences that make that past scenario real for the participant in the present. Corporations, agencies, and organizations rarely have the luxury of investing the time necessary to elaborate a vision in great detail. Most examples of such extreme elaboration emerge from political utopianists -- although by far the best present-day example, and by far the most exhaustively discussed, augmented, and media-diverse vision of a preferred future is that of "Star Trek." The details of this vision are designed, deliberated, disputed, and delighted in by thousands of people all over the world daily via Internet, not to mention the video series, movies, animated cartoons, cartoon books, novels, short stories, technical manuals, and dictionaries of hypothetical alien languages. Every community should aspire to such richness of detail for its vision.

"Oregon Shines" is Oregon's capsule phrase for its state vision. Oregon's vision serves as the hub about which its state strategic planning process turns. The vision begins by affirming that Oregon cherishes its traditions, human resources, and environmental riches, and pledges to preserve and enhance these state treasures. From there, it elaborates:

Well-located industrial land would be available and competitively priced...Power would be plentiful and affordable. Water would be clean and abundant. The work force would be well-educated and productive. Our communities would boast excellent, affordable housing, efficient services, good schools and minimal congestion. Our buildings, bridges and roads would be well maintained. Our communities, streets and highways would be uncongested. Both east and west of the Cascades, our natural environment would remain unspoiled and accessible, offering year-round outdoor recreation.⁸

Table 4. Vision Components

VISION COMPONENT	USE	EXAMPLES	SOURCE	DEV'T TIME
icon/ logo/ slogan	catalyst/rallying cry	<i>Fukoku Kyohei</i> ¹ <i>Oregon Shines</i> ² <i>To be the standard for public service in America.</i> ³	individual: inspiration	voila
preferred scenario (the vision)	what we want to achieve	Make Western nations acknowledge Japan as an equal. Social and economic development of the State of Oregon. Quality local government.	individual: inspiration; group: facilitated process, delegated drafting	months, year(s)
mission	who we are, why we work, our values	...progressive public policy, superior public service, courteous public contact, ...and sound management (Pinellas Co.)	facilitated process, delegated drafting	weeks
plan	what we will do, when, how, and with whom	White papers, policies, programs; Oregon Shines (state vision/plan);	group process and individual initiative	weeks

1. The rallying cry for the Meiji era: Rich country, strong army! This expressed a vision of Japan's future in which they equalled the West in economic and military strength.
2. Oregon's state vision, which resulted from the Oregon 2020 project, and has resulted in the Oregon Benchmarks commission, as well as numerous participatory community visioning and planning projects.
3. Pinellas County, Florida: This vision statement and vision resulted as part of their efforts to institute total quality management throughout their county government; it has resulted in superb teamwork, performance, worker morale, and taxpayer savings.

By itself, this is admirable, but something of a mom-and-apple-pie vision, akin to envisioning peace on earth. The trick is filling in the details to define what exactly they mean by "a well-educated work force" and "good schools." The vision expands to offer those day-to-day details:

At the Portland International Airport, one would hear visitors and Oregonians conversing in international languages... [This] would result from investments begun in the late 1980s -- ...increased attention to basic skills, problem solving, and foreign languages in our grade schools...Quality would be the hallmark in all phases of Oregon life.⁹

As the details of day-to-day life are added to the vision, they are carefully interwoven: in describing economic development which takes advantage of new industries and innovations and growing cultural diversity, the vision also discusses related vocational programs, retraining for older workers, and a new curriculum emphasis on cross-cultural sensitivity and foreign language training.

For each element of the vision, Oregon has stated a clear and *measurable* goal, with attendant strategies to reach that goal. These measurable goals, the Oregon Benchmarks, serve not only as the specific details of the vision, illuminating what the ideals mean in very concrete terms, but also as landmarks for planning, centering long-range strategies.

In the **mission** statement, the community committed to the vision articulates who they are and explains the source of their commitment to the vision: why is it a worthwhile act of creation for this particular group of people? How does it complement their definition of self? The Pinellas County Government mission statement reads in full:

Pinellas County Government is committed to progressive public policy, superior public service, courteous public contact, judicious exercise of authority and sound management of public resources, to meet the needs and concerns of our citizens today and tomorrow.¹⁰

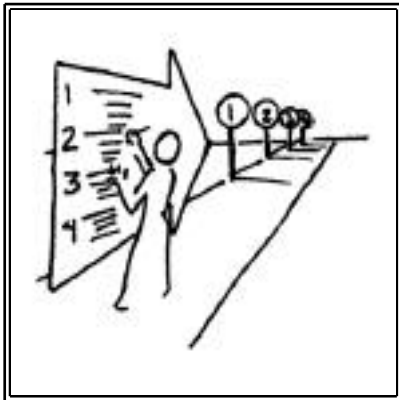
In order to excel within the framework of this self-definition, the Pinellas County Government declares, "We are working to be the standard for public service in America." This single sentence is their vision: it is the organizational best they wish to achieve, given the mission they have defined for themselves.

They elaborate the vision-mission link by articulating three criteria by which to judge strategies to achieve the vision:

To achieve this vision, we place the highest importance on:
The Quality of our Service;
Having our Customers Think Highly of us;
A sense of Commitment and Pride among us.¹¹

Since July, 1991, this mission statement and vision have created an organizational culture within Pinellas County Government that is reflected in the enthusiasm, creativity, and energy of its employees. The Court Administrator of the Sixth Circuit Court was admiring the fine woodworking county construction staff were completing as part of renovating the courthouse. He asked the county employee why the work had not gone to an outside contractor. The employee told him that the county crew had bid against outside contractors, come in with a lower price, shorter time estimate, and higher technical specifications; he finished by adding, "we are, after all, all working to set the standard for public service in America."

With the vision and mission statement articulated, the **plan** then organizes the means the community has chosen to achieve the vision. Ideally, these are means that the community judges possible, productive, and appropriate in ethical or cultural terms. It also acts as the bridge between the practical present and the idealized future of the vision: it describes the timeline of achievements necessary to create the changes that build the vision. Planning achievement completes visioning, structures the revolution, calls the community to action, and reinforces the belief that what people imagine they can create -- so we should teach ourselves to imagine with skill, with care, with critical foresight, and with respect for diversity.



Planning Achievement

Imaging difference and visioning preferred futures are singularly sterile activities unless partnered by commitment to create. In fact, commitment to create is the litmus test of a vision: if it touches the heart enough to inspire action, it is a vision; if not, it is merely an entertainment. Visions can, however, be discouraging things to birth. A truly inspiring, transformational vision can seem dauntingly idealistic and romantic, completely beyond the reach of anyone's grasp. Hence the need to plan achievement: futures fluency must include the skill to facilitate creating the future that the vision depicts.

As Table 5 illustrates, seven linked activities comprise planning achievement. *Backcasting* throws a hypothetical timeline backward from the vision to the present, anchoring future achievement of ideals in our current behavior. *Strategizing* suggests ways of coordinating community activities, resources, and allies to create the conditions and events that will in turn create the vision; *goal-setting* merely operationalizes those events and conditions in order to monitor progress. *Identifying resources* serves to inventory community strengths and allocate those strengths appropriately among the chosen strategies. *Devising tactics* highlights discrete actions required to make strategies successful, and *committing* means pledging to implement a tactic. *Monitoring change* brings futures fluency full circle: in order to determine our rate of progress, spot the need for course corrections, and determine the impacts of our actions on our goals, ourselves, and our world, we observe trends and emerging issues, cycles and wild card events.

Backcasting is arguably the most difficult of these activities, either to do or to explain. It involves creating a future history, a timeline that explains what events needed

Table 5. Activities for Planning Achievement

PLANNING ACHIEVEMENT: ACTIVITIES	USE (why?)	EXAMPLES (what?)	APPROACH (how?)	TIMESPAN (how long, how often?)
BACKCASTING	Anchors the distant ideal in the immediate real; what needs to happen	Development of environmentally friendly, sustainable tourism	"Effect-and-cause" chains; deduce necessary/sufficient precursors	From vision date to present: 10 to 30 years
BRAINSTORM STRATEGIES	Defines how we can make it happen	Encourage B&B's, small inns and eco-tours as strategy	Brainstorm; borrow strategies from analogous goals previously achieved	Rule of thumb: strategies 1/10th the length of the total timeline
SET GOALS	Defines what will serve to indicate progress: landmarks	tourists staying longer at smaller inns, requesting nature guides	Operationalize achievement measures for strategies	At posted increments parallel to strategies
IDENTIFY RESOURCES	Defines who <u>we</u> are, <u>what</u> we need to make it happen	Hawaii: lovely land, fragile resources, need tourism dollars	Inventory and brainstorm; solicit cooperation	Update per strategy
BRAINSTORM TACTICS	Defines which action steps comprise the larger strategies	Heighten room tax on large hotels; decrease at inns	Brainstorm; borrow tactics from analogous proven strategies	Rule of thumb: 1/10th the length of the strategy
COMMIT	Confirms our will to create the vision	Lobbying at capitol; legislative support	Written pledges to act, with action & timeline specified	Day of vision session
MONITOR	Asks: Are we making it happen? Any adjustments necessary? Any +/- impacts from our changes?	Increase in small businesses; decrease in tourist busses; increase in impacts on local trails	Trend analysis; emerging issues analysis; impact assessment	Length of total timeline

to occur for the future under discussion to emerge from the present we currently inhabit. The simplest approach considers the emerging trends implied by the given scenario, imagines possible events related to those trends, and then attempts to impose a plausible chronological order on the events list.

A more rigorous approach asks, what logical precursors are required for each characteristic or artifact of a given scenario? And what logical precursors precede those initial precursors? In short, vision designers/scenario builders construct an "effect-and-cause" chain. Researchers often suggest five-year intervals between the events, the links of the chain, to allow for social inertia. In the cases of scientific achievements or technological artifacts, the links in the chain may be shorter.

Perhaps the best-known example of backcasting was the planning effort which designed the Apollo program -- hence the technique's other label, "Apollo forecasting." This approach allowed scientists and technicians to brainstorm a logical list of what they would need to assemble, adapt, or invent in the way of techniques and technology to place a person on the moon. This example demonstrates the practicality of this futures activity: if the chain of precursor events is brought to within five or so years of the present, people can usually see a direct link to actions they could initiate within a week.

The next four activities are common to both formal and informal planning: devise strategies; set goals; inventory resources in terms of team members and their skills, allies, and material; and design tactics to meet goals. People may either create **strategies** from scratch, or copy and amend strategies from successes elsewhere. For example, say a community has envisioned establishing a neighborhood arts center for all ages. Strategies to accomplish this include soliciting donations of sites, or of funds for construction and activity supplies, or of in-kind contributions of labor and skills. **Goals** might include organizing volunteers to teach within six months; acquiring class materials and supplies within nine months; devising a minimal tuition schedule within nine months; and acquiring a temporary site within a year: first classes offered twelve months from the date of the vision workshop.

Inventorying resources can take many forms. Participants could list their own skills as related to these overall strategies. Salespeople might bend their persuasive power to solicit donations; real estate professionals, contractors, architects, and engineers might look for and review possible sites; neighborhood craftspeople, retired artisans and artists, and dedicated hobbyists might serve as potential staff. In addition, participants would attempt to enlist other community residents in contributing to, as well as implementing, the vision. Finding additional champions heightens the momentum. The greater the personal participation enlisted, the easier it is to find sources of monetary and material support.

Finally, the strategies would be split up into their component **tactics**, or specific tasks around which task teams can be organized. The materials and supplies team could decide to 1) apply for a grant from the National Endowment for the Arts; 2) solicit national corporations for donations of equipment; 3) solicit local corporations for donations of supplies; or 4) start a neighborhood fund drive based on people "buying" a potter's wheel or TV camera which will boldly memorialize their donation with an engraved plaque. These activities bridge the ideal of the vision with the practical of the present; people who are problem-solvers glory in this phase of futures fluency.

Commitment is most commonly and concretely demonstrated every time public television embarks on fund-raising: call the community member, enlist their vocal support, suggest their fiscal support, persuade them to commit to writing a check when they receive the reminder in the mail. An effective vision planning process asks for commitment in the same way. Throughout the visioning process, participants rely on each other for verbal support for the ideas that comprise the vision. Near the end, the group as a whole asks its members for written pledges of commitment. These pledges specify what first steps, what initial tasks, participants are willing to start within the week. Finally, participants set up a mechanism by which the group as a whole can check back with each other after a month to relay individual progress on goals.

Monitoring progress towards the vision involves both observing the direction of change, and assessing the impacts of change -- whether related to the vision actions or not -- such that the vision may be constantly revised and revitalized. In a previous essay I outlined the process by which visions reify, eventually shackling further creativity rather than nurturing it. The lesson of critique in that essay suggests the necessity of a constant review of the vision and activities linked to and legitimated by it. This review includes monitoring change, critiquing impacts and implications, and continuously refreshing the vision. Thus the final component of futures fluency links back to the first in a continuously refreshed cycle of observation, implication, imagination, idealization, and realization.

FUTURES FLUENCY: IMMERSION AS PRAXIS

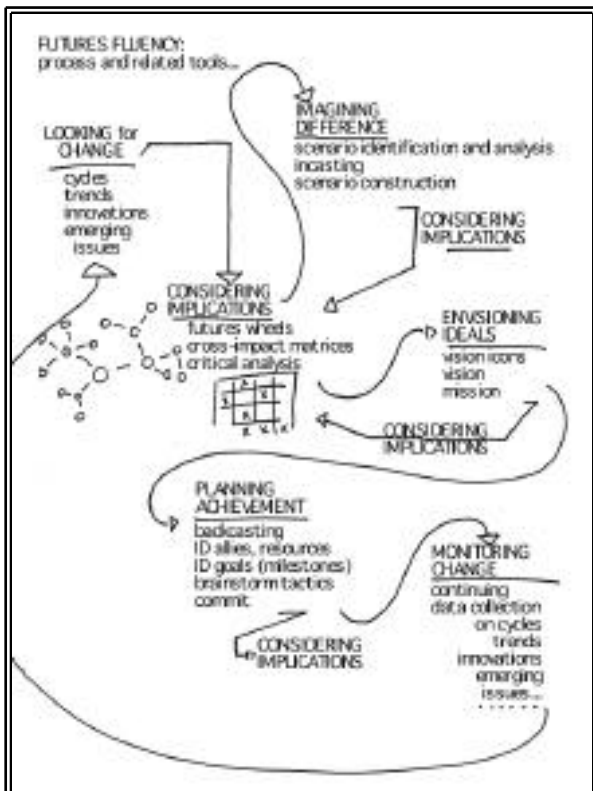
The Widening Gyre

The preceding pages introduced, defined, and offered examples of the five cornerstone activities of futures fluency: **1) looking for, and monitoring, change; 2) critiquing implications; 3) imagining difference; 4) envisioning ideals; and 5) planning achievement.** Many researchers pursue each of these cornerstone activities for themselves alone, as independent fields of study. Yet linked together they create an art at once powerfully critical and powerfully constructive.

Within each phase of activity, the fluent futures thinker maximizes diversity, combining and recombining elements of social science extrapolation, intuition, whimsy, and fantasy. As all the loose elements of observation, analysis, and imagination shift and fall and are viewed within this mental kaleidoscope, the fluent mind looks for and compares the varying trade-offs posed by each new pattern as it slides into place. The figure that follows offers a map of the movement from one activity to the next. It illustrates the iteration of critique between each phase.

We begin by standing in the present, on the foundation of the patterns of the past. We begin by *looking for change*, asking, "what *is* happening?" After identifying

cycles, trends, innovations, and emerging issues, we ask ourselves, "what are the implications of these changes -- and for whom?" In the new conditions and environments created, who wins? who loses? Next, we *imagine difference*. Extending those changes and their effects out to absurd but interesting extremes, we ask, "what *might* happen as a result of these interacting forces of change?" And what are the implications of what's possible for the future? Which possible future offers more in the realms of equity, justice, fairness? Which presents the fewest trade-offs between human productivity and environmental quality? Which offers the greatest opportunity for development of human potential?



All these initial exercises help us understand how changes intertwine to create different scenarios. They thus enhance our ability to envision our ideals very specifically. It is too easy to say, "we want a world at peace, a world in which people live and work in harmony with the environment, where every child has the right to affection, health, and education;" what, after all, would all that look like *in practice*? When you fill an ideal scenario with less than ideal people, who have fears and hatreds and petty irritations, irresponsibilities, and idiosyncrasies, what does it look like on a day-to-day basis?

The richer our vision of a preferred future, the more it will touch our hearts -- the more it will seem real to us. When we ask, "what do we *want* to happen?" we must focus on the minutiae of individual's lives, asking what this structure of our ideals will mean to different real people, how it will change their circumstances, and whom it will benefit, and whom harm.

It would be frustrating forever to build castles in the air, and never on the ground. With our vision richly expressed, we can ask, "how do we *make* things happen?" This leads us to plan and mobilizes us for action. But even at this stage, we must consider the implications of the strategies and tactics designed to realize the vision. When acting to achieve our dreams, we become forces of change ourselves, and so must evaluate the possible effects and impacts of our actions.

Finally, after imagining, dreaming, and planning, we are eager to see results. In order to do so, we must complete our efforts by *monitoring change*, which is merely an update of our initial efforts in looking for change. Thus the last phase of futures fluency links back to the first, creating an infinite cycle of vision renewal.

Yet our actions between round one and round two mean we begin the second iteration slightly advanced from the present. We progressed in time and in experience: with this incremental increase in mastery of the skills involved comes an increase in the scope, in the breadth and depth of our imagination, ability to vision, and ability to plan achievement. Thus our cycle of futures fluency broadens as it rises.

Futures Fluency and Strategic Planning: A Double Helix

In the summer of 1987, as part of the U.S. A.I.D.-sponsored Asia-Pacific Development Planning Institute, I made a presentation on the various perspectives and techniques involved in futures studies. My audience was composed of government planners from a variety of Pacific Island nations, states, and territories. They asked me what the difference was between futures research and planning. The best response I could think of at the time was an analogy to playing cards.

Assume you are with four or five friends in search of amusement, and you have a deck of cards. Futures studies aims to get people to discuss which games they might want to play, and can then try to inform players what the possibilities are in the hands they might be dealt, and how probable it is they will receive any one kind of hand (whether a particular hand is preferable or not depends upon which game a given player has chosen). Once you have the game chosen and the hands dealt, planners advise you

on how best to play the hand. This also involves considering alternative possibilities, probabilities, and preferences, but in a more limited way.

The question is still a struggle. What is futures to planning, or planning to futures? Aren't they the same thing? *Why* aren't they the same thing? Between the first floor of Porteus Hall (Urban and Regional Planning, University of Hawai'i) and the sixth (Futures Studies, Political Science, University of Hawai'i), these questions have been drowned in coffee, cola, and good brown ale, but keep surfacing. Many of the activities defined above as comprising futures fluency either *are* planning, outright, or are practiced also by planners. How do we tell ourselves apart? We know the difference when we see it, certainly -- why is it so difficult to define?

Perhaps because the two fields parallel each other so closely, separated only by a matter of degree, a shift in emphasis, a difference in attitude: planners attempt to minimize difference and divergence, as they result in controversy and cost over-runs; futures researchers attempt to maximize difference and divergence, as they result in critique and creativity. How does that play out in practice?

First let's look at the forms of planning that most clearly resemble futures fluency: comprehensive planning and strategic planning. Comprehensive planning uses a systems approach that manages activities in three dimensions for defined conditions. That is, comprehensive planning assumes that in order to manage the forest, you must manage the watershed, the indigenous species, the soil quality: managing the trees means managing all the interlinked bits of their ecosystem as well. Comprehensive planning has little temporal dimension. It assumes that you wish to maintain conditions as they were at a defined moment in time. It is a snapshot.

Strategic planning, on the other hand, is the movie. Strategic planning takes a probabilistic approach that manages activities through time in the face of uncertainty and change. Just as a good movie includes a series of clear, well-composed stills, good strategic planning includes clear, well-composed comprehensive planning. This

definition of planning parallels futures fluency by encompassing complexity, in the form of multiple systems, and chaos, in the form of uncertainty and change.

To manage the forest strategically, we must account for possible changes that might take place, and actively design preferable changes we want to implement. For example, say we are managing 10,000 acres of old growth forest in the Pacific Northwest, currently classified as state lands. What changes might take place? Some introduced parasite might damage the trees; the state could re-classify it and sell it to a land developer; the state could sell the timber rights; the Nature Conservancy could buy it; some near-by long-dormant volcano could explode and cover huge tracts of it in mud and ash. Which of these changes could we monitor? Which could we mitigate, encourage, or constrain? Who would be our allies in those efforts, and where would we solicit support? Which outcome would we prefer -- or must we design another, one not mentioned? These questions resemble those listed above under "planning achievement." They are the questions asked by leaders faced with uncertainty, rather than the conditions maintained by managers entrusted with a system. Strategic planning, like futures fluency, is linked to leadership.

Strategic planning consists of six basic components: 1) program evaluation; 2) data-gathering; 3) describing several possible scenarios as well as the preferable scenario; 4) mission statement definition; 5) outlining strategies and goals; and 6) implementation. Like futures fluency, these activities are most effective linked together in a continuous process. As plans are realized and programs implemented, they undergo regularly scheduled evaluations, which re-engage the strategic planning process.

Like futures fluency, planning begins by looking around at the presently visible landscape. In the planning scheme outlined above, that includes the organization's internal landscape as well as what's happening outside it. The organization's internal landscape is mapped via the *program evaluation*. This defines the original conditions under which the organization or community was formed, reviews the past problem definition and the mandate that accompanied it, itemizes current activities, and inventories

strengths and weaknesses. It is akin to beginning futures fluency by monitoring progress made towards an old vision. The external landscape is mapped by *gathering data* on the environment within which the organization or community exists. This parallels the "identify/monitor change" activity of futures fluency.

The next four steps in strategic planning map one-to-one onto futures fluency: exploring organizational possibilities via alternative scenarios of the organization's future; defining organizational preferences in a vision statement; affirming organizational purpose via a mission statement; prioritizing vision components as strategies and goals, and identifying resources, allies, strengths and weaknesses; implementing strategies by defining objectives and personal responsibilities of the participants to the vision; and commitment. What is missing is the conscious investment in critical evaluation at each stage.

What characterizes good strategic planning? First, it should be *ongoing*, a permanent organizational activity. Second, it is *information intensive*, with data searches focussed on external conditions and change. Third, good strategic planning *expands the planning timeline*, considering the past, the present, and a range of possible futures for an organization or community. To achieve constructive outcomes, it is *opportunity hungry*, constantly working to identify allies, resources, and emerging activity niches for the community. Strategic planning works best when it melds the efforts of many people: it is *participatory*, involving stakeholders, clients, and allies at each stage. Finally, good strategic planning is *future-focussed*, concentrating every participant's efforts to achieve the group's vision.

What are the requirements for successful strategic planning? If implemented in a hierarchical organization, the leaders must strongly support the process, encouraging risk-taking on the part of their subordinates. In order to encourage suggestions, ideas and creativity from all participants, organizers should design a process that is simple, open, and accessible. Participation is critical, and the process should encourage diverse input, *listen* rather than lecture, and *acknowledge* what it has heard. Successful strategic

planning incorporates mediation and conflict resolution; it must heighten participants' sensitivity to conflict and encourage negotiation to balance competing interests. As part of negotiation and creativity, it must encourage flexible thinking, particularly in the form of new problem definitions, and solutions which identify and adapt emerging possibilities. The final three requirements for successful strategic planning are community consensus on the vision, encouraging a sense of personal responsibility for achieving the vision, and a commitment to continuously review progress and renew the vision.

These characteristics and requirements also fit futures fluency. To return briefly to the card analogy, where the two differ mostly is in the scope of the changes they consider and attempt to influence: planners attempt to monitor and influence the conditions internal to the game; futures researchers attempt to monitor total transformation of the game, the players, and the room itself into something entirely different, and entirely unlikely.

THE BENEFITS OF FUTURES FLUENCY

As a whole, the elements of futures fluency enable people to state their fears and articulate their hopes, to consider a wide range of possible changes and build alternative future scenarios based on those possibilities, to evaluate critically the opportunities and constraints offered by alternative futures, and finally to articulate their vision of a preferred future and develop strategies to achieve it. When combined, these activities enable us to exercise creativity, flexibility, and adaptiveness in the face of the future.

Researchers in creativity define it as, "the formulation of a specific problem in an initially ill-defined problem domain, or as advancing a novel and appropriate solution to an extant problem, or both." The cognitive mechanisms seen as crucial to creativity are: the association of two or more previously dissociated or even incompatible elements in the existing knowledge structure; the forging of random associations; breaking existing perceptual and cognitive sets; mental imaging; and the suspension of judgments. The

activities of futures fluency create conditions in which each of these cognitive mechanisms may function -- and in fact *require* each of these cognitive mechanisms.

Envisioning the human future, the future of the species, the future of value and meaning, the future of communities and governance, the future of laughter, music, dance, art, and games, is the great creative act. It does not require charisma; it does not require attainment of power; it does not require discipline or a serious frame of mind; it requires only reflection. But it is greatly aided by collaboration, and perhaps the best use of the skills and tools of futures fluency leading are participatory processes leading to community vision and enhanced constituent leadership.

NOTES

1. This introductory section was drawn from an earlier work by W. Schultz, with C. Bezold, and B. Monahan, *Reinventing Courts for the 21st Century: Designing a Vision Process* (Williamsburg, Virginia: National Center for State Courts, 1993), 9-10.
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3. Warren Ziegler, *Envisioning the Future: A Mindbook of Exercises for Futures-Inventors* (Denver, Colorado: The Futures-Invention Associates, 1989).
4. United Nations Development Programme, *Reclaiming the Future: A Manual on Futures Studies for African Planners* (London: Tycooly International, 1986) 13-24.
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6. Personal correspondence with Ray Lorenzo of Learning Environments regarding the "Let's Image the Future" Project with children and teens in Italy, April 22, 1991.
7. James A. Mau, *Social Change and Images of the Future: A Study of the Pursuit of Progress in Jamaica* (Cambridge, Massachusetts: Schenkman, 1968).
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9. Ibid.
10. Personal conversations with J. William Lockhart, Courts Administrator, Sixth Judicial Circuit Court, Clearwater Florida, March 2-4, 1992.
11. Ibid.