

The Act of Choosing:  
An  
“Executive” Summary

Russell Rhyne

*There is “a special obligation of the theorist to provide the kind of theory that can be used in the solution of social problems that make a difference”.*

Kurt Lewin

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This summary is drawn, with some adjustments, from the book, “The Act of Choosing, A context Matching Theory and Its Practical Implications”, also by Russell Rhyne. Comments will be welcome.

That book soon will be available on order from major book sellers. It can be ordered now from its print-on-demand publisher at <[www.iUniverse.com](http://www.iUniverse.com)>.

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## The Act of Choosing: An “Executive” Summary

I try here to provide you with the kind of summary with which I would preface a long policy-research report to a client. That person, who might have bought and paid for the study, might choose to read only the summary, calling on his staff to consider the details. Or, (as I'd hope) s/he might use it as an initial sketch, from which to draw the questions to be held in mind while studying, and approving or disapproving, the body of the report.

So, I will try in this summary to build in your mind an initial image of my context matching (CM) theory of choosing and its uses.

### “Executive”?

I turn here to a generous usage of the word, “executive”. Such a person usually pursues (“executes”) a policy or strategy that s/he may or may not have developed in the first place. However, many others are concerned with policy and the making or pursuing of policy decisions. As I see it, policy ordinarily will condition the actions of many people for years into the future, and the person who chooses a policy wears an executive hat, whether s/he may be a householder, voter, leader of an ad hoc group, or corporate or governmental official.

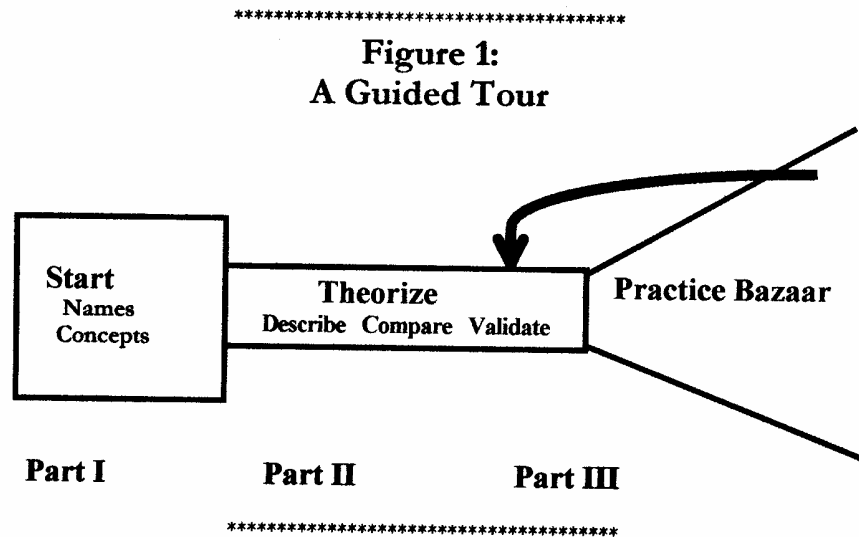
Who, then, are you, to whom this summary and the rest of my book are addressed — the prospective reader whose face I have tried to keep in my mind’s eye while engaging in this discussion with you?

You graduated from high school, probably as one of the leaders of your class. You take seriously the responsibilities that you have shouldered as a voting citizen and, thereby, have chosen to play a part in managing a representative republic. You may be a lower division college student, reading this book on choosing as one route toward an understanding of concepts central to all thinking about human interactions. You may be further along, concerned with, and perhaps conducting research into, theories of thought and action. Or, you may more actively engaged; if so, most of Part III is addressed to you, whether you may make policy, help others do so through staff work or policy research, or just serve as a critical bystander.

I hope that some of you “executives” will choose to build upon and extend (and perhaps demolish?) the work that I have done, and several of the chapters in Part III go into the kind of detail that could serve as departure grounds for such follow-on work. If you are one of the few who help to manage a research conglomerate, and if you “buy” my context matching theory of choosing, you’ll find that you must change your ways, radically.

The body of the book is laid out as a guided tour, as is illustrated in Figure 1, so I’ll organize this summary similarly. Part I gathers the party (of readers) together;

Part II explores context matching theory; and Part III looks into the practical implications of that theory.



## Getting Started (Part I)

### Names

To start with, we need to agree on what to call a few activities familiar to all of us. I feel that the following names pass two tests: a) each is consonant with every day usage, and b) each is operational, in the sense that it implies within itself a way of testing whether a given happening should be so named. And, for reasons to be discussed later, I like to work with names that refer to activities rather than to things; thus, I prefer “choosing” to “choice”. So, please accept these names.

**Happening #1: You arrive at a selection among options through reference to some broader authority or law (a “reason”) that is acceptable, at least to you.**

I believe that most of us would assign the name, *reasoning*, to a process such as that. In its more austere form, Reasoning proceeds along a path keyed to science and formal logic. A good name for this more austere form of reasoning is *solving*.

**Happening #2: You have occasion to select one of several paths when reasoning cannot show which way would be best.**

I feel that *choosing* is the best English-language name for this kind of activity. It is turned to only after reason has been deemed to be inadequate — has flunked the course.

**Happening #3: The situation is much like that of Happening #2, but one selects among options after due deliberation and with a sobering sense of responsibility.**

*Judging* is an appropriate name for this class of happenings. Some may object, saying that judging calls for a reasoned consideration of alternatives. I assert that the reasoning comes before and/or after the actual selection, which is accomplished through choosing. We judge the more sobering issues for which objective determination of the best answer is denied us; for less weighty matters, we turn to ordinary choosing. For those where reasoning can see us through, we look up the right answer or derive it from some respected authority. Yes, judges do refer to authority — the Constitution, precedent, etc. — but there usually is some disagreement upon the bench, proving that the derivation was *not* conclusive.

*Deciding* is different in kind from the happenings or acts just named. It is a *process* within which a prospective selection is finally disposed of. Deciding may be done using pure choosing, pure solving, by any mixture of the two; one sometimes decides by merely guessing.

**This distinction between *choosing/judging* and *deciding* is crucially important.**

**Why Bother?**

On the average, and working from conservative assumptions, there are more than a million occasions per second in which someone makes a decision. Some may be decided through *reasoning*, but they will be relatively few; far more must be handled through *choosing* or a mixture of the two in which choosing “wags the dog”. That alone would justify inquiry into the nature of the act of choosing, but there are other reasons that seem at least as strong.

Choosing is central to the freedom and social openness that we prize — the sort of openness discussed so well by Karl Popper in his, “*The Open society and Its Enemies*”. A society’s openness is indexed by the kind and significance of personal choosing that it invites, and freedom is measured by the extent to which a person may pursue that which s/he chooses to undertake. For the person who does not choose, freedom is just an unexercised potential, and that person’s “freedom muscle” probably will waste away over time. Only the person who chooses inherits the burden and merits the pride of responsibility, and s/he who chooses never to choose is unlikely ever to mature; also, that person will have scant use thereafter for the pronoun “I”.

Moreover, the times to come promise to be even more “interesting” than the ones just passed, and those — you “executives” — who choose on behalf of others will have to learn how to do so more wisely than humans under stress usually have done in the past. Surely, an understanding of what happens during choosing and of the prerequisites to good choosing, should help all of us who serve as executives do our lonely thing better.

Such understanding only could flow only from a sound theory, so the idea that

theory is impractical is dead wrong in this case, as in most others.

## Underlying Associations

It is wise to circle and sniff any really complex topic before pouncing on it. Choosing is lodged deep within all of the socio-psychological disciplines, and those who have lived within one or a few of those bodies of thought may be unfamiliar with the others. So, we should glance at a few of those interconnections, even during a summary inspection such as this.

1) Choosing has very deep *evolutionary roots*. The fossil record indicates that our hominid ancestors had to use choosing as a means of deciding what to do next for about 4,000,000 million years before reasoning could be added to our bag of tricks. Reasoning (answering the question, “Why?” with the answer, “Because”) had to wait upon the evolution of a physical capacity for modern-style speech, which did not occur until sometime after about 150,000 years BC. Such speaking may not have been commonly practiced until a mere 40,000 years ago. So, good choosing is grounded on aptitudes generated by rigorous Darwinian selection during more than 300,000 pre-verbal and pre-rational hominid generations, when bad choosing must often have been fatal. And, some positive feed-back may have reinforced selection-through-survival; those who could talk to each other may have sought each other out as mates.

2) *Assertive, personalized thinking* is especially important for happenings such as choosing, where subtle of mind is crucially important. Also, subjective data must be admitted, foregoing the independent checking favored by scientific purists. However, the social sciences have leaned over backward in regard to strict objectivity. Michael Polanyi has explored this issue in detail in his book, *“Personal Knowledge”*. Very briefly, we (Polanyi and I) hold that the detached, impersonal thinking that social scientists say they favor is suitable only during criticism of ideas or conclusions reached otherwise, and it is rare even then. For more creative endeavors, one’s personality shifts forward, and passionate advocacy is very much in order. Use this as guidance. *If he does not have fire in his belly, don’t pay much attention to his words*. So, I use the pronoun, “I”, often and proudly.

3) P. W. Bridgman fathered the research approach that is known as *operational analysis*, which urges that one focus on happenings rather than things. He also calls out a need for humility among social-systems analysts, dictated by the fact that actual happenings tend to be vastly more complex than any verbal model could be. So, we speech-bound humans should not aspire to full understanding of happenings, especially psycho-social ones; we should instead merely try for enough appreciation of them to operate upon them successfully.

We, who as operational analysts have attended to happenings rather than things, have done so for pragmatic reasons; as Bridgman told us and as we verified in practice, analyses so conducted work better. CM theory tells us that *why* we should have expected this operational approach to work so well. During the millions of years in which hominids came gradually to be able to choose better, it seems likely that the images used for that purpose were of short vignettes — of “bear charging” rather than of an abstraction called “bear”. So, focusing upon activities rather than things holds us

closer to our roots, enhancing the many acts of choosing needed within most studies.

4) Next, there is the matter of *quasi-organic wholes*. Gestalt psychology and the social-field concepts of Kurt Lewin tell us that most social items are embedded in infinitely fine-grained patterns that are organized almost as tightly as actual organisms. The parts of such a field are so interconnected that disturbing one part tends to affect all. The rules of association within the pattern also are vulnerable to change, since they are among the field's parts. Among its countless ramifications, this tells us that dipoles of cause and effect should not be examined until one has attained a *feel* for the overall character of the field within which those dipoles are embedded. This, in turn, gives qualitative appreciation precedence over quantitative analysis.

5) Finally, for this summary, *the culture concept* should occupy a key position in any view of the nature of choosing that emphasizes images of context. Culture is that rich body of rules and uses of artifacts that is both learned and widely shared, and it is the device used by humans to attain social coherence; the social insects do it otherwise, relying upon genetically implanted instincts. Each culture is a field, and so are the images of it that reside in the minds of its communicant, with all of the complexities implied thereby. However, such emphases upon the wholeness and essentiality of each culture seem to have left too many people feeling uneasy, as anthropologists shifted their attention from the cultures of primitive tribes to our own, more complex patterns of life. It is imperative that this drift be reversed. No person, wherever resident, can function as a social human without belonging to a culture, whether s/he may live in the mountains of New Guinea or in some great modern city. All humans are as firmly hooked on culture as any heroin addict is on his "fix".

## A Context Matching Theory of Choosing (Part II)

I contend that choosing not only is not, but *could* not be, a rational process, and that brings me into conflict with feelings held (often implicitly) by mainstream students of decision-making. This opposition of ideas injects a polemical flavor throughout this book. I want to be as clear as possible on this matter, right here at the start.

- The rationalistic Decision Analysis model of choosing does not serve as a description of choosing behavior, as its more thoughtful spokesmen *say*. But, most decision theorist *act* as though it does so serve.
- However, I definitely am not attacking Decision Analysis *as an alternative way of deciding*, nor as an aid to the person who prepares for the act of choosing.

Mine is not the only view of choosing that focuses upon patterns and pattern matching, but each of the others that I have found differs with CM theory in some substantial way. The writings of Kenneth Boulding and Howard Margolis were especially useful to me, as I honed and polished my theory.

### The Central Model of CM Theory

I shall try to persuade you that the following hypothesis provides a usefully

accurate caricature, a verbal model, of the act of choosing.

**Choosing consists of a fleeting matching of gestalt patterns that is intuitive in character and mostly subconscious, in which a person feels which of the options open to selection seems to fit best within his image of the relevant context.**

I was forced by my subject matter to use words in that model that reek of affect and that reflect the emphasis on wholeness that permeates Gestalt psychology and Lewinian field theory. They may grate on the sensibilities of many of you and may be entirely foreign to some. Please try to read them as they are used commonly, in barber shops and beauty salons, and without the tacit meanings that may attach to them in this or that academic discipline. I shall try here just to introduce you to a few of them.

- I view *intuition* as an entirely natural, non-mystical form of mental activity that operates along the interface between conscious and subconscious mentation. It is as though a person buried within us, a genius at forming and processing images but with no sense of logic, nudges us toward one option and way from others by inducing feelings of comfort when patterns fit together.
- *Context* is often used both in reference to an overall setting and to the immediate problem at hand. I use it only in the former sense. For our purposes here, a context is a social field condition, bounded as may be appropriate and infinitely fine grained. As such, no context ever could be fully *described* in words (or other symbols), but we all regularly form mental *images* of the ones that matter to us.
- *An image of a context* is taken to be a mental mirroring of that external complex whole, always biased to some extent by a person's nature and concerns. A context might be all that exists — things and processes and prejudices — in Santa Barbara; one's image of it ordinarily would cover the whole picture very superficially, while elaborating upon life in a neighborhood or erosion along a particular creek.
- *Subconscious*. This is the region of the mind that is not accessible to conscious inspection, the part that is so often compared to the submerged part of an iceberg. It usually is called the "unconscious" by psychologists, but to most of the rest of us that word implies the sort of absence of thinking that may be caused by a drink too many. I object to that implication, since I assume that a vast amount of "work" goes on down there. Freudians see it a kind of cesspool, but they have focused on diseased minds. I see the subconscious mind as the place where we process the many non-rational mental activities that introduce warmth into living, such as love and hate and feelings of ease.

## Validation

It is not at all clear what is needed to validate a theory such as this one, but

several tests come to mind.

- *Empirical check.* Checking to see that a theory's predictions are borne out in practice of course is important, and CM theory stands up well to this test. However, such empirical checks rarely can be made conclusive, because the rigid controls used in physical science laboratories usually cannot be invoked.

- *Descriptive power* also is an important criterion. After all, reasoning consists of answering the question, "Why?" with a "Because", and some theory (explicit or implicit) is needed to bridge between the two. So, describing or explaining is one of any theory's main functions, and doing either well is a partial test of validity. Again, CM theory checks out rather well.

- *Feasibility* is crucially important; it tests whether or not the component activities called for by a theory could in fact be carried out as advertised. We all form and match images of the sort called for in CM theory, as is proven in many ways, such as one's recognition of a friend. In contrast, no one could believe in the instant balancing of probabilities and expected values called for if one is to accept the Decision Analysis models as descriptions of choosing, especially in view of the fact that excellent choosing often is done by persons who cannot even add.

- *Correspondence with "known" facts.* There is general agreement among experts in decision theory and among interested laymen that choosing is: largely intuitive, takes up only one or a few tenths of a second, can be shockingly accurate at some times and wildly aberrant at others, and seems to be done best by persons steeped in the relevant context. Of course, some those supposedly known facts may prove not to be true, but they have withstood the tests of common sense for a long time. CM theory does very well when it is measured against them.

- *Fruitfulness.* A good theory (i.e., one that is really valid) should be practically useful.

That last criterion of validity might be relatively unimportant in a placid era, but it looms large now. Any theory that yields predictions and explanation that prove valid is practical, because any purposing action depends upon such services. The comment by Kurt Lewin that I quoted on my title page goes further; it asserts that a truly "good" theory in these all-too-interesting times must deal effectively with questions that truly matter. The rest of this summary (and most of the chapters in the book being summarized) takes up the very practical implications of CM theory.

## Some Practical Implications

The practical implications of CM theory are addressed in Part III, taking up some two thirds of the book. Sweeping acceptance of CM theory would force basic shifts of attention within most of the human-oriented sciences; it would revolutionize some of their associated "soft" technologies, such as field-testing and analytical policy evaluation. In this summary, I'll only mention a few of its more salient impacts.

## Caging Modern Contexts

When the ambient situation is one that would attract the serious attention of a cave man (as in freeway driving, combat, sports, or interpersonal relations), choosing performs with amazing effectiveness. However, modern policy-relevant contexts often are broader in scope and more evanescent than the ones on which our aptitudes for choosing were honed. Those who choose on behalf of others now need help in “getting their heads around” such field conditions.

- We (and especially those of us — policy analysts — who seek to help authoritative choosers perform better or easier) need better, crisper ways of describing any sort of context. Such tools should permit fine discrimination and ready comparisons among large numbers of contexts. Maps serve this need admirably, but they only can portray a limited proportion of the contexts of concern, and they deal statically with conditions rather than processes. Another suitable tool, the morphological array, permits description of any complex whole, and it is available and ready for use; others surely wait to be invented.

- A morphological array is formed by first selecting six or seven (never eight or more) aspects of an overall social field that deserve special emphasis; these are called primary Sectors. Then, array under each Sector a roster of alternative states or conditions (Factors) within that Sector, seeking to offer filing space for any plausible condition therein. Choosing a Factor from each Sector of that S/F array forms a Configuration, which offers a crisp, nicely discriminatory description of one overall field condition.

- We also can help modern policy choosers by presenting descriptions of context to them in a way that tricks the hominid within each of us into using his magical pattern-matching powers. One such trick adjusts the tempo of presentation to match the speed with which a rabbit might run from bush to bush. This results in the kind of burst of appreciation that one experiences while watching time-lapse photography of a blooming flower. Such tempo adjusted, animated display (TAAD) has been used often, and it always has dramatically enhanced the images essential, according to our theory, to choosing; CM theory tells us why such successes were to be expected. Other such tricks, yet to be discovered, probably have comparable potentials.

- Since a policy ordinarily will “live” only in the future, CM theory demands that all choosings (including assumptions) pertaining to it should be drawn from an image of some future context. So, there is a need for a form of futures projection radically different from technological forecasting, with its attention to parts rather than to wholes. One method of projecting descriptions of future contextual field conditions has been proven through use during the past 30 years; it has been named Field Anomaly Relaxation (FAR). Again, new and better methods may be found, but this one works nicely.

## **Appreciating the Existence of Options**

Perceiving the existence of options always has been a sticking point in policy research. Standard approaches such as focused discussion and appeals to unguided insight will go on being useful, but the same morphological arrays that have proved useful in describing contexts, present or future, can take us much further toward exposing overlooked alternatives.

## **The Hybrid Strategies of Choosing**

Our more sweeping decisions very often are reached through a process that mixes rational determination and intuitive choosing, and there are two kinds of such hybrid strategies that must be recognized and appreciated. In one (which I call “Hybrid A” in the book), the combined effect of such component steps is determined analytically; the Decision Analysis models and procedures exemplify this approach to deciding. In the other (Hybrid B), that final synthesis is accomplished judgmentally.

I contend that the Decision Analysis (DA) models do not and could not describe the act of choosing, although it seems that most decision theorists tacitly accept them as doing so. Those models do, however, offer an alternative to choosing that can be very valuable in several ways. They can serve as actual substitutes, in instances where the preconditions of good choosing cannot be met; they will quicken and refine a potential chooser’s image of the context when used as preparatory exercises; and when the neither the needs of rational determination nor of good choosing are met, the DA models may be the least disadvantageous way of arriving at a decision.

The Hybrid-A category includes approaches much less elegant than that of Decision Analysis. Majority rule arrives at a final decision just by counting, a completely ruled procedure in which (the Florida election of 2000 AD notwithstanding) intuition should not intrude. Many of the problems of military combat or along a modern assembly line must be processed very swiftly; there just is not time for judgmental overview, and a computer-generated answer therefore is accepted as final. And, so it is with many processes in which logistical consideration dominate.

However, Hybrid B is the strategy more often turned to, although the final judgmental synthesis may consist just of a ruling on whether or not to accept a computed answer based on Bayesian probabilities. Unfortunately, lack of a theory such as CM leaves too many of those positioned for judgmental synthesis without the needed appreciations of context. And, ideas of “correctness” built up during decades of over-emphasis on rationalistic views of choosing have led to a pervasive contempt for intuition as a means of arriving at answers; too many executives have come to feel that their decisions are naked if they are not clothed in computer printout.

## **Contextual Discipline and Contingency**

CM theory suggests that when two persons judge a given issue while carrying dissimilar images of context in mind, they might almost as well be considering two different matters of concern. This leads to two especially significant, very practical, over arching conclusions.

- Considerations of operational similarity and contextual discipline, that are taken for granted now in physical engineering, are needed even more in all practical applications of social science — where they have been almost entirely neglected until now.
- A prudent executive should adopt a contingency stance, at least during interesting times such as these

## Contextual Discipline

This argument must start with similitude. Two contexts are *operational similar* when much the same rules of interaction hold true in both.

This has been “old hat” in mechanical engineering for more than a hundred years. By this rule, conditions in a stressed metal are operationally dissimilar below and above that metal’s elastic limit. Correspondingly, two flow patterns are operationally dissimilar above and below the Reynolds Number at which a transition from laminar to turbulent flow occurs. In each case, the equations of state differ radically from one setting — one context — to another.

Such engineers submit to the following rules of *contextual discipline*, departing from them rarely and only for good cause

**Never mix data from operationally dissimilar contexts.**

**Always designate, explicitly, the context or class of contexts from which one’s findings derive.**

CM theory tells us, insistently, that such discipline is even more needed in applied social science than it is in applied physical science, for at least two reasons.

- First, we have almost no analytical models from which we can conclusively derive the consequences of a particular social disturbance or operation. So, we must proceed empirically, using what has happened to predict what may happen next — and that’s exactly where the need for contextual discipline intrudes.
- Second, operational dissimilarities are more common and at least a dramatic in social systems than they are in physical ones.

In regard to that second point, social field theory holds that the rules of interaction within such a field are parts of it, and all the parts of a field tend to be altered somewhat whenever one such part is disturbed. So, we should expect that changing circumstances within a field quite often will cause basic rules of relationships to change; if so, the new condition will be operationally dissimilar to the old one.

Consider, for example, a crowd at a beach. Its members may be nearly as unrelated, one to another, as the sands beneath them, and they therefore do not constitute a social field. However, rage or fear may convert them into a unitary mob — a social field. Now, set off a string of fire crackers among them. They are apt merely to scatter if they were drawn together by fear, but quite another response is to be expected if rage were to have been their unifying impulse. The two field conditions

would therefore be operationally dissimilar, so data, statistical inferences, and hunches based upon one of them should not be applied to the other.

Several cases are dealt with in Part III of the book — all that I have been able to uncover, during 40 years of searching, in which the needed information was kept. In one, an Indonesian exercise in policy evaluation, such discipline was maintained, to very good advantage; in the others, disregarding it led to disaster. But, shockingly, such matters have been almost totally neglected by those of us who try to improve social systems. There is no way now of knowing which plans and studies and practices have been mortally flawed by that neglect.

Correcting this grave error will completely overturn some of the soft, social-systems technologies such as the methods conventionally used in field testing proposed policies; it will impact all the rest. This matter should be of particular concern to those who manage research conglomerates, because one of their institutions' reasons for existence is cross fertilization among the studies that they sponsor. But, if contextual discipline were not submitted to by all such studies, the results of any melding of their results would be as monstrous as any synthesis that might have been achieved by the blind men of the fable if they had fondled not one elephant but several different beasts. Unfortunately, the monstrous unrealities introduced by this error of technique are subtle and difficult to detect; too many tainted results surely have passed as valid.

### **A Contingency Stance**

Adoption of the contingency stance that CM theory calls for also will impact social science practices, less fundamentally perhaps than will the acceptance of contextual discipline, but compellingly none the less. This matter has several faces, but we should first, even in this summary treatment, elaborate somewhat upon the need.

If one accepts CM theory, each policy issue must be judged against a context relevant to it, but for policy matters that context usually lies well out into the future. That indicates a need for a particular sort of futures projection that produces descriptions of overall conditions within an entire, integral social field. However, and this is what makes a contingency stance almost obligatory, when such projections are made, several alternative scenarios prove to be comparably plausible. A prudent executive would not to “bet the farm” on any one of them. Such scenarios cannot be seen as predictions of what the future *will be*. That's beyond our reach, so projecting contextual futures must be a non-prophet venture. What can be achieved, however, is to compose serviceable illustrations of what that future *may turn out to be*. One way of making such projections, Field Anomaly Relaxation (FAR) is described in Chapter 10 of the book.

What evidently should be done is to lay out policies and plans, each prefaced by statements such as, “Boss, we recommend that this policy be kept in force as long as the future evolves more or less along that described by Scenario X, from which all our *en route* assumptions were drawn; the policy's worth is contingent upon the actual unfolding of such a line of development. If the real future veers away, perhaps toward that described by Scenario Y, we think a change of policy would be appropriate.”

The results of the needed kind of projection come out as a sort of “tree”, in which each “branch” runs from the past and through the present out into the future. Descriptions of the condition projected for each time hack along such a scenario line are laid out using the same S/F array and in exactly equal detail, so each branch is to be seen as a present-sized tube, rather than as a limb that dwindles finally to a twig.

Past experience suggests that there rarely will be more than a dozen such branches that are internally coherent and notably different one from another. For relatively unstressed times, the tree of future scenarios will be dense toward the center with sparser coverage out toward the extremes. Under moderately tense conditions, the branches will thin out toward the center. In times of real crisis (such as those in London under German air attack), the center will be empty; all the plausible futures will describe different kinds of victory or defeat.

At the time when this is being written, there are differing views as to the severity of the existing crisis; things aren’t as tough as they were then in London, but they seem (to me) to be unusually pregnant with prospects of triumph and disaster. If I am right, few branches should show up near the center of a futures tree projected now.

A contingency stance should be adopted at least in policy selection, threat analysis, environmental impact assessment, and technological forecasting. Here, I’ll turn only to *contingent technological forecasting*, where the practical implications of a contingency stance are especially evident— and immediately applicable.

Context-free technological forecasting for policy uses has proven to be mortally flawed in three ways.

- It normally has been done without explicit reference to context, and that total disregard of contextual discipline has made its results suspect.
- The fan between its plausible “high” and “low” extremes becomes so wide that, after just a few years out into the future, answers could be selected from within it that would support almost any policy. Worse, the common practice of offering the mean of those extremes as one’s answer promises to be dead wrong.
- The math of standard technological forecasting makes it opaque. Executives, who ultimately are to be held responsible but who normally are not conversant with such technicality, cannot bring judgment to bear upon its conclusions. Also, the assumptions buried within it are hard to identify.

That fan of estimates is not quite as broad as context-free forecasting makes it seem, but the uncertainties reflected by it indeed are real. Adopting a contingency stance and being strict in regard to contextual discipline, make it possible to factor that uncertainty into two parts.

Do it thus.

First, find or project of tree of contextual future scenarios for the social field relevant to your concerns. With those results in hand, pick a scenario out of the dozen or so limbs of that tree (or have one picked for you), and pretend that it is perfectly prescient. Draw all of your assumptions from that selected context and make all *en*

*route* judgments through reference to it, and proceed with the standard technicalities of forecasting. This satisfies the demands of contextual discipline, correcting the first of the flaws noted above.

The results will be contingent upon the unfolding of the real future somewhat along the lines of that chosen scenario, but (based on all of the admittedly scant cases available) the gap between the upper and lower extremes for each contingent forecast will be tiny, which relieves the second of the three flaws. Furthermore, methods of futures projection such as FAR can reach well out into policy relevant-time frames. The FAR method was first used for 30-year projections. Those of us who did that work now feel that the “reach” of that first trial was too ambitious, but projections covering a couple of decades seem OK.

Injecting contingency into tech forecasting also effectively cures the third (and especially telling) flaw that had existed. Luckily, most of the variation among expert estimates — perhaps 9/10 or more — turns out to be keyed to uncertainties as to the relative plausibility of the various projected scenarios, reflecting uncertainty concerning the overall condition within the relevant context. Executives are very well able to judge such matters. Most of the uncertainty thus is brought within reach of judgmental overview; the rest remains opaque, but it accounts for only a small portion of the variance.

Then, do it again for a different one of the projected scenarios — and again, and again.

*See how far we have come.*

Contextual discipline has been honored, through reference at all stages to some one, designated contextual scenario; forecasting has been extended so as to reach decades into the future, as policy-related thinking demands. Also, the ineluctable uncertainties involved in any such peering into the future have been split in two, with the part that covers most of that uncertainty exposed to judgmental inspection and review.

Another result of pursuing contingent technological forecasting is this. We noted that a futures tree projected for times of crisis, should have only a few, relatively implausible branches growing near its center, so when the contingent estimates of this or that parameter — a budget surplus, the level and kind of international trade in bananas, whatever — are toted up, few if any will be found near the center. *That is, the mean between the highest and lowest estimates will be seen to be significantly less likely than either of those extremes.* But that mean is what has been offered to executives by tech forecasters as the most likely parametric value, an offering that probably was terribly misleading for times such as these.

## **TLC for Designated Choosers**

The person tasked to choose for others bears a heavy load, especially in heavily stressed times such as these. Each choosing may ruin the day —perhaps even wreck the life —of some innocent victim, and no chooser can be confident of being right. That combination of responsibility and uncertainty exerts a fearful pressure on the kind of

person whom we want to serve us as our chooser. Too many of them drift away. That leaves behind the ones we wish would quit — those for whom injuring the innocent at least is tolerable —

So, those designated choosers who serve us well deserve more “tender loving care” from us than we ordinarily have given them. They should know from our actions (not just our words) that we appreciate their burden’s weight and honor the intuitive powers that they must use. We should shield them more than we do from life’s more trivial irritations.

However, the power of being able to choose for others will corrupt some and will attract others who already are corrupt. Unfortunately, many such will be well protected and hard to get at. When we can reach them, we should “take care” of them, mercilessly.

## Wrap-Up

Rudyard Kipling said it best: “*Who rides may read*”.

I hope that this hurried “ride” has planted in your mind a sound (if preliminary) version of CM theory. If you choose not to read the book, you at least have come this far; if you do go on, you’ll read it better.

Fare thee — well.