Chapter 2

Futures studies and the human sciences: the case for normative scenarios

James Ogilvy

Simply to be a human being is to be a futurist of sorts. For human freedom is largely a matter of imagining alternative futures and then choosing among them. Conversely, to be a good futurist, I will argue, one must at least aspire to being a good human being. One must care about the welfare of others. One's visions of the future must be informed by more than the science of what is or an imagination of what might be; one's visions of the future must also be informed by a sense of what *ought* to be.

The principal purpose of this chapter is to offer a justification for normative scenarios. But I have other goals as well, goals which are served by the way in which I reach the principal objective. In order to achieve a convincing justification for normative scenarios, we need to rethink the very nature of futures studies in the larger context of disciplined inquiry. If there is such a thing as futurology - a disciplined *logos* or discourse about the future - is it an art or a science or, as many suspect, nothing more than hopes and fears dressed up as science?

Put the question in a very concrete way: if futures research is indeed a legitimate field of disciplined inquiry, then why are there so few courses or departments of futures studies in our major universities? Why is futures research not recognized by academics as one among the many *disciplines?*

Let's face it: those of us who call ourselves futurists are not likely to wear this badge proudly when we arc surrounded by academics. We are thought to be intellectual charlatans, soothsayers in business suits, tea-leaf readers and crystal ball gazers with little more credibility than astrologists. Where is our body of evidence? What is our methodology? How can we possibly claim a place at the academic high table when we have so little in the name of legitimate scholarship that we can offer? Go to the library today to do research on the future and you will not find one book copyrighted in the year 2000.

Faced with the slimness of our academic portfolio, we find ourselves on the defensive. We turn to our computers and our databases; we develop models; we debate methodology as if we were building the foundations for a science. We refine our polling procedures, twiddle our statistical

techniques, and do our very best to make our trend analyses and technology forecasts look as thoroughly engineered as the technologies we are forecasting. In our defensive anxiety about the tenuousness of our academic credentials we arc tempted to become holier than the Pope, more scientific than the scientists. And in such a mood, the last thing we want to hear about is normative scenarios. We want *facts,* not values. We want well-founded theory, not sentimental morality.

There is, consequently, a constant danger of bad faith in the work of most futurists. Eager to escape the charge of subjective bias, of claiming that what we want to happen will in fact happen, we do everything we can to make sure that our scenarios of what will happen have been scourged of every relic of what we ourselves might want to happen. Eager to escape the charge of issuing self-fulfilling prophecies, we do our best to articulate worst case scenarios. I call this bad faith, not because I think we are unsuccessful in scourging our hopes. I call it bad faith just to the extent that we *are* successful. To the extent that we mimic scientists in claiming value-free objectivity in our view of the future, we deny the very thing that makes us good human beings and good futurists. We deny that we *care.* But we must care. If we do not, we are doomed to a dreadful future.

All very well and good, you say. But so far we have only the makings of a windy commencement address. Where's the beef?

TWO STRATEGIES FOR LINKING THE TWO OBJECTIVES

I've mentioned two objectives for this chapter - justifying normative scenarios and rethinking the place of futures studies in the context of other academic disciplines. One possible strategy for linking these two objectives would be to argue, from accepted ideas about what constitutes a science, that futures studies is indeed a science, but that, because we are good, caring people, we will use this science for the betterment of humankind by developing normative scenarios. We might place futures studies on the firm foundations of accepted science and then, on the strength of that foundational maneuver, make the further argument that a good science must be an ethical science. This is precisely *not* the strategy I will follow.

Rather than defensively placing futures studies on the firm foundations of science, I want to pursue an offensive strategy. I want to show how very infirm the so-called foundations of science have become. Rather than dragging futures studies over into the camp of the sciences, I want to show how the so-called human sciences are moving in the direction of futures studies.

In short, *we* don't have to learn how to play *their* game; *they* are learning to play *ours.* The human sciences are moving through a paradigm shift

that makes them much more amenable to the work of the futurist and far less pretentious about their place at the academic high table with the hard sciences. The burden of this chapter - and the reason it is so long - is to *show* this movement among the human sciences. It is not enough simply to *say* that the paradigm shift is here. And there is no brief way to demonstrate in the requisite degree of detail the very real movement taking place in the fields of anthropology, psychology, literary criticism, philosophy and sociology. At risk of running on at some length, I intend to demonstrate that the human sciences are moving toward a widespread recognition of the need for normative scenarios as an essential feature of their own epistemologies.

What a sad irony it would be if, just as these reinforcements from the human sciences arrived to support futures research, futurists themselves had decamped in the direction of the hard sciences! This is why I pursue this second strategy of linking my two objectives, and not the first.

BACKGROUND

Given the range of subjects to be discussed, and the conclusions yet to be reached, it may be more than merely incidentally informative to say a few words about how I came to the views I am expressing. I started my academic career as a philosopher. I taught for twelve years, mostly at Yale. Under the imperative to specialize, I found myself being backed into the corner of becoming a specialist on Hegel - the pre-eminent generalist. But my real ambition was to accomplish today something akin to what Hegel achieved in 1807: a totalized synthesis showing how all the parts of human endeavor relate to one another in the dialectical dance of history.

Then I moved to California, and, at the invitation of Peter Schwartz and Arnold Mitchell, spent seven years working at SRI International (formerly Stanford Research Institute) where it seemed easier to Hegelize than it turned out to be in an academic environment riven with departmental barriers maintained by an imperative to specialization - not a congenial environment in which to Hegelize, which is quite something else from specializing in Hegel. One of the first tasks I undertook at SRI was a collaboration with Peter Schwartz on a monograph entitled *The Emergent Paradigm: Changing Patterns of Thought and Belief.* In that 1979 report we reviewed thirteen different disciplines to limn out the features of a new paradigm. To our surprise that report, which was not easy going for most readers, generated quite a bit of interest. But to our disappointment, it resisted two different attempts to turn it into a book for broader consumption. The present chapter represents a third-generation attempt to publish some of the ideas contained in that 1979 report.

At SRI, I wore two hats: I worked with the futures group using my training as an Hegelian to try to catch the momentum of the present toward the future. My second hat was also continuous with my training in philosophy. I spent three years as director of research for SRI's Values and Lifestyles (VALS) program, a survey-based segmentation system for dividing Americans into different groups distinguished not just by demographic characteristics but by their empirically verified values.

In 1987, Peter Schwartz concluded five years as head of long-range scenario development for corporate planning at Royal Dutch/Shell. We decided to form a company that would carry further some of the methods and techniques of futures research that had been developed at Shell and SRI over the past several decades. Our company is called Global Business Network. GBN is dedicated to gathering and applying the sorts of intelligence necessary for creating alternative scenarios to be used in strategic planning.

Our principal methodology is the generation and use of alternative scenarios that we develop around specific decisions being made by policy makers and strategists. We do not make predictions. Instead we think through several possible sets of consequences that today's decisions might have. By developing alternative scenarios that are explicitly linked to decisions facing managers, we guarantee that the differences that divide our scenarios from one another are differences that will make a difference to the decisions in question. We design our scenarios in such a way as to highlight the most important uncertainties surrounding the outcome of today's decisions.

Sometimes the most important uncertainties are technological: will battery technology move ahead fast enough to permit a light enough electric car? Sometimes the most important uncertainties are economic: will the growth of the economy in general be strong enough to sustain demand in a specific market? More often than many futurists may care to admit the most important uncertainties are social and cultural: the differences between the 1960s and the 1980s are best described in socio-cultural language rather than in technological or economic terms. The new values of the 1960s and 1970s, the anti-authoritarianism that drew strength from the resistance to the Vietnam war, the experiments with consciousness through drugs and mysticism, the rise of feminism, the awakening of awareness of the environment, and the preoccupation with self-realization that ranged from the quest for spiritual enlightenment to the narcissism of what Tom Wolfe called the Me-decade - each of these waves of social change that began in the 1960s is still rippling through the 1990s. But as these waves break on the shore of the next millennium, how will they give shape to the future?

Rather than trying to predict the future of values on the basis of some theory of social change, I believe that the best we can do is develop

alternative scenarios. But these scenarios need not be completely neutral. I will argue that a case can be made for constructing scenarios that range from the Utopian to the negative morality play; from a normative portrait of what ought to be to a negative portrayal of the punishments in store for us if we do not clean up our act. The case for normative scenarios, morality plays and abject utopianism needs to be made these days because the worship of science over the past century or so has led us toward embarrassment over our values.

1 have seen big science, I have plowed the fields of the humanities, and I have experienced their uneasy union in the practice of contract research and corporate consulting. It is just the uneasiness of this union that provokes me to publish this chapter. The union of the sciences and the humanities is uneasy precisely where human beings with values try to be scientific about the values of human beings. This is a situation that is ripe for psychoanalytic examination. There are all sorts of opportunities for self-deception when the analyst and the analysand are one and the same consciousness. The resonances of transference and counter-transference are endless.

We cannot lift ourselves by the bootstraps up and out of the practice of revaluation we are purportedly studying. We are both the experimenter and the experiment; we are both the laboratory technician and the laboratory itself. But it is just this sort of self-referential, foundationless reflection that distinguishes philosophy from other well-founded disciplines. Just this sort of high wire act differentiates philosophy from the ever so much safer piling of fact upon fact - the masonry of historians or the carpentry of botanists or the engineering of physicists. Philosophy has no foundation and no safety net. It is a dance in mid-air which, if the dancer loses his balance, ends in a flailing fall.

In the following pages I hope to tease out some relationships between futures studies and philosophy, but this endeavor should not be confused with an attempt to give a philosophical *foundation* to futures studies. It is precisely the quest for foundations - whether philosophical or scientific - that current philosophy tells us is impossible. Rather than borrowing firm foundations from philosophy, it is just the recognition of foundationlessness in philosophy that I would take as a guide for learning how to do without the pretensions of scientific foundations for futures studies. In coming to terms with the role of values in confronting the future, it is important that we cut ourselves loose from the foundational security of solid facts and scientific theories.

In our work with alternative scenarios, we constantly come up against several inter-related questions having to do with human values. It is clear that one of the most important drivers of energy demand is people's willingness to conserve energy. Will people be willing to drive a 'green' car that is slow off the mark at stop lights? How much air pollution are they willing to breathe? How many homeless will they allow on their doorsteps? How much more *stuff will* materialism consume before a wave of asceticism sets in? Such a wave would be comparable to, but very different from, the counterculture of the 1960s. It would be a reaction against the 1980s, much as the 1960s could be read as a dialectical negation of the 1950s.

But will it happen? Who knows? The point is not to predict and say, yes it will, or, no it won't. The point is to imagine what it might be like as a way of anticipating possible moves for the human spirit. The several questions in the previous paragraph are all questions of values. They do not turn on questions of technological feasibility but on the very human question of what people will want in their lives in ten years' time. What part of a full human life will be most scarce and therefore of the highest value? And how will that skewing of the ecology of value tend to revalue other parts of life? For anticipating fundamental shifts in the economics of *value,* anticipating changes in *values* is essential.

But very difficult. Possibly impossible. Because if anything is a function of human freedom, you would think that the revaluation of human values would be a prime candidate. If our values are like a hard-wired, read-only program, then we are pretty mechanical creatures, hardly free at all. Only if we can write over at will, only if we can reprogram the human biocomputer can we be said to be free.

Precisely this primacy of freedom as definitive of the human means that the prediction of human values is in principle impossible. As Aristotle formulated the paradox over two millennia ago, if you can know the future, then you can't do anything about it; if you can do something about the future, then you cannot know it in advance. You can no more predict human values than you can predict movements in contemporary art. It is the artists that will do something about the future of art, and it is human beings who will revalue their values. If either one is predictable, then she is not an artist, he is not a human being. Both beauty and humanity share an inherent unpredictability.

Likewise in neither humanity nor in art can invention count on the force of novelty alone. New for the sake of new won't do. There must be some sense of continuity, some connection with eternal depths, even as there is a clear articulation of just why some break with tradition is so urgently required. It is always the old battle of the sons with the fathers, this rebellion that is creativity. Does it require a strong father for the struggle to be intense? Is intensity what one most wants out of this struggle? What about clarity of identity, which is, after all, what this struggle is all about? Who will we be ten or twenty years hence? What passions will most motivate us? *What is the future of desire?*

So one objective of this study is to deal with the question: What will our values look like in the year 2005? I say 'deal with' rather than 'answer'

the question because my response is oblique. Rather than trying to forecast the evolution of values over the coming decades, I will tell you, as one among several possible scenarios, what I want and hope our values will become. And I will add to this normative scenario an account showing why such *advocacy is the only epistemologically authentic stance where values are concerned.*

I cannot predict the dominant values in the year 2005, not only because we lack a covering law to serve as the engine of prediction, but also because the very nature of valuation is to transgress all attempts at prediction. It would be nice to imagine that advances in sociology and anthropology would allow us to take some reading from our distant past, our recent past and our present and plot them on some theoretically grounded metric where we could apply some elegant covering law to project a series of readings for the near and distant future - with increasing plus or minus estimates of uncertainty for increasingly distant futures. It would be nice to imagine that futures research could aspire to reducing these plus-or-minus error factors, refining skill in prediction, minimizing risk. But this is not what our discipline is about. It is instead the articulation of risk so that we have some sense of *what is at stake* in our daily decisions.

To summarize the major point of this introductory section, the line of argument I am pursuing - away from a foundation on fact or scientific theory and towards a more creative and willful endeavor - drives futures studies toward becoming a kind of collectively practiced existentialism. The existentialist philosophers - Heidegger, Camus, Sartre - had a great deal to say about the importance of entertaining the various possibilities that open before the anguished individual entertaining his or her future. While I am eager to acknowledge the importance of the existentialists' emphasis on temporality and the future, I want to part company with their preoccupation with the finality of individuality. Camus' stranger is the quintessential solitary misfit. Heidegger's authentic *Dasein* may die alone, but is this any reason to believe that we must live alone? In his *Being and Nothingness* Sartre struggles to cross what can only be regarded as a self-imposed 'reef of solipsism'. All of this philosophical individualism is, I would argue, an artifact of the Cartesian-Kantian tradition in philosophy. Sartre saw as much late in his life but he had to lurch into Marxism to find a congenial medium for a collectivism to balance his early existential individualism. But Marxism is not the only medium for acknowledging the sociality of human existence. In steering futures studies toward becoming a *social existentialism* I hope to be able to avoid both the solipsistic extremes of existentialism as well as the juggernaut determinism of vulgar Marxism.

All these -isms are just ways of talking about that same uneasy union between the sciences and the humanities, the uneasiness I experienced moving from academic philosophy departments into contract consulting at SRI, the uneasiness C. P. Snow addressed in his famous essay on the two cultures; the uneasiness that comes from the fact that science wants to be value-free but the future is very much shaped by values. This uneasiness is captured in the phrase 'the human sciences,' which some regard as an oxymoron. The human sciences seem to straddle the gap between the hard sciences and the humanities. This straddling act is not easy, as the following sections are intended to show.

What I hope to show by the following review of recent developments in the human sciences is this: rather than trying to found their own legitimacy on mimicking the hard sciences with their solid methodologies and confident access to objectivity, the human sciences are accepting their irreducibly semiotic and therefore inevitably ambiguous status. They are acknowledging their foundationlessness and accepting the finality of interpretations in place of facts. They are therefore waking up to the ineluctable *interestedness* of the human sciences, to the absurdity of claiming that sociology or social philosophy can conduct their inquiries in a wholly disinterested manner. To return to the opening paragraph, we must *care.* If we don't, then all is lost. But if we do, then we are hardly disinterested.

Thus do these several strategies and objectives come together: the first, a justification for normative scenarios; the second, the placement of futures studies in the context of the human sciences; the third, coming to terms with the risk of bad faith by ignoring our own values in shaping our visions of the future. These three strategies support one another. Having justified normative scenarios, it is easier to stop ignoring one's own values in the name of objectivity. And the claim to objectivity turns out to be empty in any case, if reports from the other human sciences are to be believed.

We begin with these reports from the human sciences, for there is where the criteria for scientific objectivity are tested. The basic criteria that define the difference between science and mere opinion can be said to make up a paradigm. While futures studies could not sit easily in the context of a positivist scientific paradigm, it can play a central role among the human sciences following a paradigm shift away from the positivist paradigm toward something new, something that lacks a name, something that might clumsily be described as a semiotic/existential paradigm.

The next section has more to say about the concept of a paradigm in general, the nature of paradigm shifts, and the outline of the positivist paradigm. Later sections then take a tour through recent paradigm-bursting developments in anthropology, literary criticism, philosophy, psychology and sociology. The concluding sections take a stab at what a normative scenario might look like. Given such a long running start, through the first six sections, the last three must take a long jump toward a value-driven vision of a better future and not just stumble through some trend analysis of our most plausible tomorrow.

1. THE EMERGENT PARADIGM IN THE HUMAN SCIENCES

During recent decades, a good deal of attention has been given to some fundamental shifts in assumptions about science and scientific method. T. S. Kuhn's *The. Structure of Scientific Revolutions* is usually invoked as the source of talk about paradigm shifts. But earlier sources arguing the perspectival and historical nature of science can be traced back to the philosophies of Kant and Hegel, and later sources are necessary to argue for a contemporary paradigm shift where Kuhn describes only past paradigm shifts.

For our present purposes, the point at issue is not so much the fundamental assumptions underlying any one discipline; rather, the point at issue is the nature of scientific explanation or inquiry in general. What counts as good science?

Scientists and philosophers of science have been working at cross-purposes during this century. While philosophers of science have been trying to codify the methods of scientists in earlier centuries as a way of arriving at a precise method for what counts as good science, physicists, chemists, biologists and many researchers in the human sciences have been merrily forging ahead using methods quite different from those of their predecessors.

Philosophy of science flourished under the banner of logical positivism, a school of thought founded by the Vienna Circle which included the young Ludwig Wittgenstein, Moritz Schlick and Rudolf Carnap. Their insights were anglicized by Bertrand Russell and A. J. Ayer. The essence of this worldview, and its implications for science, can be captured in a few propositions.

1 The world is the totality of empirically measurable atomic elements moving in space and time.
2 Motion in space and time takes place according to universal, deterministic, causal laws that cover all situations.
3 In order to explain complex phenomena like biological growth or human thought, it is necessary and sufficient to reduce those phenomena to their physical, constituent, simple parts and then plug state descriptions of those parts into equations representing well confirmed general laws.
4 One way to confirm general laws is to test their predictive power. Thus, if laws L1, L2, . . ., Lr enable one to predict events of type E from antecedent conditions Cl, C2, . . ., Ck, then those laws are confirmed, and event E can be scientifically explained. In a classic statement by Carl Hempel and Paul Oppenheim:

> It *E* describes a particular event, then the antecedent circumstances described in the sentences Cl, C2,. . ., Ck may be said jointly to 'cause' that event, in the sense that there are certain empirical regularities, expressed by the laws L1, L2, …, Lr, which imply that whenever conditions of the kind indicated by Cl, C2, .. ., Ck occur, an event of the kind in £ will take place.

The import of logical empiricism for futures studies is as follows. If everything under the sun really can be described according to deterministic, predictive, causal laws, then the agenda for futurists is plain: take the past and present as antecedent circumstances Cl, C2, …, Ck, discover general laws L1, L2, . . ., Lr, and set about predicting future events El, E2 *ad infinitum.*

No one, of course, thinks this sort of cranking out of predictions is really possible. But debates over methodology in futures studies hinge on the precise reasons *why* the positivist program is not possible. Is it simply that we have not yet discovered the relevant laws of social change and technological diffusion? Or is it that we have not yet clarified the correspondence rules that would relate complex epiphenomena like thoughts or social change to their atomic, material constituents?

Any number of reasons could be given for the current failure of the positivist program. As long as the reasons given are of the type suggested, then the debate over methodology in futures studies will gravitate toward better measurement techniques, improved polling procedures, or statistical techniques and modeling tools that might uncover lawlike regularities amidst masses of data.

I would like to suggest that such efforts, however useful for particular purposes, are fundamentally misguided as putative answers to current questions about futures methodology. As an alternative to the covering law model of scientific explanation, I would like to suggest a new paradigm of scientific explanation. In short, futurists should borrow a few leaves from their colleagues in some other human sciences.

In the following sections, I want to take a brief tour through some new developments in the human sciences. The purpose of these brief explorations is not to glean new discoveries or general laws that can be exploited by futurists in their efforts to make predictions. To the contrary, the purpose is to see how researchers in several disciplines that may be regarded as more mature than futures studies have already abandoned their pretensions to the kind of predictive science to which some futurists still aspire.

Each of these sections will begin (a) with a discussion of recent paradigm-shattering developments in the field under review, then conclude (b) with a brief discussion of some direct implications for futures studies. Section 6 will then abstract from the human sciences taken as a group a set of features of an emergent paradigm.

2(a) ANTHROPOLOGY: FROM EXPLANATION BY LAW TO A SEMIOTIC DISCIPLINE

Once upon a time, the practice of anthropology was a pursuit of the origins of mankind. Grubbing about among the bones and broken crockery of ancient civilizations, anthropologists sought clues from which to reconstruct the social habits of prehistoric human beings. Among more than a few students of anthropology, this quest after origins was also a quest after *essence:* if we knew more about the advent of civilization, then perhaps we would better understand the deepest mysteries in the contemporary human heart. Perhaps the riddle of human nature, and the endless debate between nature and nurture, could be unlocked if we just knew more about the first humans. Were they noble savages? Were they social beings or loners? Loving or aggressive? Matriarchal or patriarchal? These questions were pursued as if their answers could tell us something important about contemporary society, e.g. the fate of feminism or the plausibility of a political ideology based on the perfectibility of the human heart. From Marx to Margaret Mead, arguments based on anthropology made claims about human nature that were based on anthropology's access to the first terms in the 'language' of human culture. Call it the Adam and Eve school of anthropology.

The achievement of structural anthropology was a breakthrough from a preoccupation with individual terms - first or last - to an articulation of structures and relations. And not just relations among terms, but relations among relations among relations.

Lévi-Strauss asserts that, The kinship system is a language', but denies that the 'meanings' of its terms can be derived from some anthropological analogue to etymology. 'A kinship system does not consist in the objective ties of descent or consanguinity between individuals. It exists only in human consciousness; it is an arbitrary system of representations, not the spontaneous development of a real situation.'

Also like languages, kinship systems reveal structures of relations so abstract as to defy any attempts at foundational analysis seeking an origin in some first term. In studying societies of the Cherkiss and Trobriand types, one finds, 'the relation between maternal uncle and nephew is to the relation between brother and sister as the relation between father and son is to that between husband and wife'. Not originary or natural terms, but relations among relations determine the meanings of the resultant relata.

Structural anthropology, as developed by Claude Lévi-Strauss, made the move from atomic terms to 'molecular' relationships. But Lévi-Strauss tended to think of some relationships as fundamental, even universal. However varied and arbitrary the vocabularies of different myth systems, for example, 'The vocabulary matters less than the structure.' Further:

> If we add that these structures are not only the same for everyone and for all areas to which the function applies, but that they are few in number, we shall understand why the world of symbolism is infinitely varied in content, but always limited in its laws. There are many languages, but very few structural laws which are valid for all languages. A compilation of known tales and myths would fill an imposing number of volumes. But they can be reduced to a small number of simple types if we abstract from among the diversity of characters, a few elementary functions.

Lévi-Strauss moved anthropology away from the atomism of an original, essential human nature that could biologically dictate the structure of human society. But the structures of relations he put in place of elementary atoms came to play a role in anthropological theory that was not so very different from the role of Adam and Eve terms. To reach these unchanging essences - relational though they may be - all we have to do is, 'abstract from among the diversity of characters, a few elementary functions'.

More recently, anthropology has moved beyond the quest for universals of the sort that might be evident in first terms or first relationships. The problem is simply that the quest for universals leads toward insights that tell us less and less about more and more until we learn nothing about everything. It is always possible to say *something* that will be true of everything and everyone. But as the rich variety and distinctnesses of different cultures become evident with ever more research, the question arises: are the samenesses more essential to human nature than the differences? As Clifford Geertz puts the question:

> Is the fact that 'marriage' is universal (if it is) as penetrating a comment on what we are as the facts concerning Himalayan polyandry, or those fantastic Australian marriage rules, or the elaborate bride-price systems of Bantu Africa? … it may be in the cultural particularities of people - in their oddities - that some of the most instructive revelations of what it is to be generically human, are to be found.

Geertz's contributions to anthropology manifest several aspects of a paradigm shift. Not only does he accept the move from primary terms to structures of relationships - 'In short, we need to look for systematic relationships among diverse phenomena, not for substantive identities among similar ones' - but further, he argues that these systematic relationships, once revealed, have a different status from that of the laws of human nature anthropologists once sought. Geertz regards anthropology as, 'not an experimental science in search of law, but an interpretive one in search of meaning'. The difference is immense.

The difference between the quest for law and the quest for meaning has implications that extend far beyond anthropology. The distinction

extends throughout the human sciences to psychology, sociology and history. At stake in this distinction is nothing less than the nature and reality of human freedom.

Geertz calls his concept of culture 'essentially semiotic'. Semiotics is the theory of signs, of how they signify and mean what they mean. In regarding culture as semiotic, Geertz is treating the artifacts of culture like a language. The advantages of this approach are several. For one thing the old debate between subjectivism (culture is in people's heads) and objectivism (culture is patterned behavior) seems simply irrelevant since language is so clearly both. Another advantage lies in the quick end-run around the closely related issue: is culture public or private? 'Culture is public because meaning is.'

The greatest advantage of the semiotic approach to culture, however, is the light it sheds on the role of symbols in constituting the human condition. According to an older view, symbols, sign systems, language and literature come only very late in the human story. First, it was thought, we had to deal with nature. Only later could we afford to dabble in culture. It is mankind, after all, that manufactures symbols.

But symbols manufacture man as well. We *are* our marriages, our wars fought beneath flying banners, our oaths cast in blood and language. We *are* the results of our dedications to our symbols. Human beings are unique among animals for this self-making evolutionary creativity that takes place alongside of strictly biological evolution. 'What this means is that culture, rather than being added on, so to speak, to a finished or virtually finished animal, was ingredient, and centrally ingredient, in the production of that animal himself.' Our physical and cultural evolution is thus a kind of mutual bootstrapping operation in which nature and culture are interwoven into the web of meaning.

One hope of social science, to know the nature of man so well that optimal living arrangements could be computed, is a naive hope if Geertz is right. If cultures are objects for interpretation rather than calculation under laws, then the study of culture is endless. There is no hope of a definitive answer to the nature of human culture. It is always and forever up for grabs, ever subject to new creation through reinterpretation of what has become old.

Geertz tells a story, heard elsewhere in connection with William James. It is an old story that reappears here in the form of an Indian tale told to an Englishman who is asked to believe that the world rests on a platform which rests on the back of an elephant which rests in turn on the back of a turtle. When the English gentleman persists with the question as to what the turtle rests on, he is told, *another turtle.* And after that? 'Ah, Sahib, after that it is turtles all the way down.'

So it now appears for the human sciences, with anthropology among them: *interpretations all the way down.* The fact is that to commit oneself to a semiotic concept of culture and an interpretive approach to the study of it is to commit oneself to a view of ethnographic assertion, as, to borrow W.B. Gallie's by now famous phrase, "essentially contestable".'

Will we discover that collectivism as opposed to individualism is the most natural, and therefore essentially correct ideology for the optimal arrangement of human cultures? No. Nor will we discover that individualism is *the right answer.* To say that these interpretations are essentially contestable is just to say that there is no foundational essence or human culture that is incontestable. On this and other issues, rival interpretations will continue to contest the proper reading of whatever evidence is brought to bear.

Where meaning is concerned, it is not a matter of converging on closer and closer measurements. Where meaning is involved, alternative contexts can determine widely divergent significances for the same physical entity, whether it be a bone or a pun. And what finally stymies the positivist is the fact that the divergent contexts are determined in turn *not* by some secure and single basis, but by other interpretations which are the symbolic products of an unpredictable human creativity. Turtles and interpretations, all the way down.

In his work since *Interpreting Cultures,* from which all the previous quotations are taken, Geertz has become far more explicit about the semiotic, sign-interpreting nature of anthropology, and about the contagious spread of semiotic methods across the whole range of social sciences. Further, he has become more self-conscious about the significance of this movement *as a movement,* as a change of approach (or paradigm shift) reflecting a broadly recognized failure of earlier, more mechanical approaches that tried to mimic the hard sciences.

> Ten years ago, the proposal that cultural phenomena should be treated as significative systems posing expositive questions was a much more alarming one for social scientists - allergic, as they tend to be, to anything literary or inexact - than it is now. In part, it is a result of the growing recognition that the established approach to treating such phenomena, laws-and-causes social physics, was not producing the triumphs of prediction, control, and testability that had for so long been promised in its name.

While the shift of method in anthropology is in part a function of the failure of the older laws-and-causes approach, it is in part also a function of a new blurring of disciplinary boundaries. Once upon a time, the articulation of different academic disciplines - mathematics, English, anthropology, sociology, and so on - was thought to represent much more than arbitrary conveniences erected for purposes of university administrators. The different disciplines were thought to represent the different branches of a naturalistic tree of knowledge. The differences between the disciplines

rested, it seemed, on real differences in the world, like the differences between sheep and goats, or the organic and the inorganic, or the human and historical as opposed to the eternal laws of nature and mathematics.

In recent years, these lines between the disciplines have come to seem increasingly arbitrary, and it is this phenomenon within the working lives of researchers that is the subject of Geertz's opening essay in *Local Knowledge,* 'Blurred Genres: The Refiguration of Social Thought'.

> It is a phenomenon general enough and distinctive enough to suggest that what we are seeing is not just another redrawing of the cultural map - the moving of a few disputed borders, the marking of some more picturesque mountain lakes - but an alteration of the principles of mapping. Something is happening to the way we think about the way we think.

In place of the laws-and-causes approach, three different metaphors now vie with one another in the methods and imaginations of anthropologists. The first is part of the legacy of recent discoveries in the physical sciences: *the game.* Just as Manfred Eigen finds games with rules a fruitful way to organize the play of determination and chance in a whole range of phenomena from genetics and evolution to economics and the arts, so some anthropologists use the game metaphor to describe cultures and the structure of everyday life. Erving Goffman is one of the chief proponents of the game metaphor. His analyses of institutions' social practices are peppered with references to implicit rules, strategies and 'moves', as if all of life were an elaborate board game. But, of course, *we* make up and maintain the rules, rarely consciously, but always conscientiously in our efforts to 'do the right thing' in whatever circumstances present themselves.

The second dominant metaphor, one which Goffman also exploits, is the metaphor of life as a stage, society as theater, history as drama. The dramaturgical metaphor has the merit of being particularly apt for the handling of rituals - weddings, funerals, coronations, and all sorts of pomp and circumstance whose stagings give clues to what matters to a society. Consider, for example, the Super Bowl as the indicator of what counts in American society, not only the nature of the competition, the players and their coaches, but also the details of the staging or frame: the role of television, the ads, the half-time show, and the fact that more than 100 million viewers around the world simultaneously participate in this event, a larger number than those joining in any other ritual with the possible exception of Christmas and New Year's Eve, whose celebrations tend to be more localized and customized in any case. Geertz's own studies tend to the dramaturgical, partly as a result of the fact that one of his targets, Bali culture, is a society where politics is very clearly enacted through theatrical rituals in which to perform a role is to play a part.

The third analogy following *game* and *drama* as model objects for the anthropologists is the *text.* This third analogy is the one that draws Geertz's attention most, and it is the one that most clearly opens up the boundaries between anthropology and literary criticism.

When looking at a culture as if it were an interpretable text, one is hardly limited to looking at literal texts. Geertz is hardly interested in a 'textual anthropology' on the model of a 'textual history' based on the readings of important written documents. The point is to look at all the pieces of a culture - not only its texts, if there are any, but its rituals, its ways of life - as elements in a larger 'text' that the anthropologist interprets much as a literary critic reads a poem or a novel. 'To see social institutions, social customs, social changes as in some sense "readable" is to alter our whole sense of what such interpretation is and shift it toward modes of thought rather more familiar to the translator, the exegete, or the iconographer than to the test giver, the factor analyst, or the pollster.'

In his conclusion to another essay, 'Art as a Cultural System', Geertz further refines his description of the interpretive anthropologist in terms that emphasize the reading of living texts:

> It is not a new cryptography that we need, especially when it consists of replacing one cipher by another less intelligible, but a new diagnostics, a science that can determine the meaning of things for the life that surrounds them. It will have, of course, to be trained on signification, not pathology, and treat with ideas, not with symptoms. But by connecting incised statues, pigmented sago palms, frescoed walls, and chanted verse to jungle clearing, totem rites, commercial inference, or street argument, it can perhaps begin at last to locate in the tenor of their setting the sources of their spell.

Text and context; the event or sign gains meaning through its setting in its social or literary surroundings. And because it is *meanings* that are sought, not measurements, the physical particulars, whether the type font or the details of the headdresses, may not be as important as the patterns of relationships linking particulars and their contexts. These patterns are read as the literary critic reads a text.

2(b) IMPLICATIONS OF NEW ANTHROPOLOGY FOR FUTURES STUDIES

These movements in modern and postmodern anthropology - Lévi-Strauss's structuralist turn, Geertz's interpretive turn - suggest similar moves on the part of futurists. Forget about the laws-and-causes approach toward a predictive science. Focus instead on multiple interpretations of the present. This, after all, is what a set of scenarios amount to: alternative interpretations of the present as the first chapter of several very

different narratives. Today's decisions and events take on different *meanings* depending on the different tomorrows that are their possible consequences. Contemporary anthropology has made this shift from a positivistic emulation of the hard sciences toward a more literary, narrative approach - what Geertz calls *thick description:* a story-telling approach that stresses the narrative relationships among specific details more than general laws or universal principles. Again, this is just what good scenarios accomplish: a narrative synthesis of many details into a story about the future that makes sense of the present. And there are always several such stories for any given present.

As anthropologists and futurists alike make the move from a laws-and-causes positivism toward a more literary interpretive approach, both would do well to turn their attention from the methods of the hard sciences toward the methods - or is it madness - of literary critics. For it is the literary critics who are the experts at reading and interpreting texts.

But how do literary critics read texts these days? In reaching from the physical sciences to literary criticism to find a better model for the anthropologist's (and, by turns, the futurist's) task, Geertz can only find more turtles, for the foundations of literary theory are no firmer today than the foundations of anthropology.

3(a) LITERARY CRITICISM AND THE LEGACY OF EXISTENTIALISM

If it weren't for the fact that Geertz's inquiries steered us in this direction, literary criticism would qualify on its own for inclusion among contemporary disciplines reflecting a paradigm shift. In recent years, a paradigm war has been raging in the upper stories of that vast academic mansion known on lower floors simply as 'The English Department'. Some of the generals in this titanic battle of paradigms are actually from departments of French or Comparative Literature. The labels over the door don't much matter, though careers may be made or lost depending on whether the main heat of the battle moves from one flank to another. The major point of importance, whether your battalion talks French or English, is that the rules of the contest are changing. The reading of texts isn't what it used to be.

Surely there have always been fashionable -isms to complicate the unselfconscious act of reading a good novel. From Russian formalism to the New Criticism (now quite old) professors have earned their keep by telling us how the text was *really* working in ways far removed from our naive following of the yarn. But in recent years, particularly since the late 1970s, the cries from the attic have become particularly intense. From the floors below the esoteric squabbles often sound like the unintelligible babble of people who have read too much European philosophy. But one

ignores these squabbles at one's peril, especially when words drift down with ominous connotations like 'deconstruction'. The literary critics have ganged up in an intellectual wrecking crew.

Deconstructive criticism works like a corrosive against all pretences at systematic explanation. The corrosion process works at both the foundational level and at the upper stories of theoretical abstraction. At the foundational level, deconstructive criticism shows that the simple elements that make up a text are not very simple after all, that each sentence, each phrase, each word is packed with complexities introduced by the several different contexts at play: social, economic, political, psychological, to say nothing of literary and historical contexts. And if the reader should want to take a foothold in any one of those contexts, say, by taking the political context as primary, then the deconstruction operation moves to the upper stories where the status of, say, Marxism as a theory will come under attack. Deconstruction challenges the very idea of seeing the world as neatly displayed beneath the gabled eaves of theoretical hierarchies with their unifying abstractions at the peak of the roof.

Though the project might sound anti-intellectual, the principal workers make up a very literate wrecking crew. If they traveled to work in a panel truck, its sides might bear legends with names like Nietzsche, Heidegger, and the current foreman, Jacques Derrida. The program is derived in part from Heidegger's project, teased out of Nietzsche, for the destruction of the tradition of Western metaphysics. What might such a program involve? And is it really necessary just for the purpose of reading a text, or a culture, or a decade of social change?

Just as Geertz proclaimed in his essay on 'Blurred Genres', the story starts to get very confused when anthropology reaches toward literary criticism for help only to find literary critics reaching toward philosophy. More turtles. 'The penetration of the social sciences by the views of such philosophers as Heidegger, Wittgenstein, Gadamer, or Ricoeur, such critics as Burke, Frye, Jameson, or Fish, and such all-purpose subversives as Foucault, Habermas, Barthes, or Kuhn makes any simple return to a technological conception of those sciences highly improbable.' Kuhn, of course, is the great promoter of the concept of paradigm shifts. But how have some of the others taken part in the destruction of the Western tradition of metaphysics?

Heidegger's contribution was, among other things, to challenge the idea of philosophy as a quest after timeless truths. Existentialism, a mid-twentieth-century intellectual fashion that owes much to Heidegger, proceeds from the destruction of the Aristotelian view that essence precedes existence. An acorn's essence is to become an oak. The essence precedes the eventual existence of the oak tree. But people aren't like that. Their existence precedes their essence. What they actually do, the way they exist, determines their essence, who they really are.

(Existentialism is, socially speaking, an anti-aristocratic, very American philosophy.)

This textbook description of Heidegger's existentialism misses the more radical implications of his writings, however. By hurling humanity into time, Heidegger also hurls human categories, truths, the whole human world into time. Even the inquiry into Being - metaphysics - no longer appears under the guise of a precious glimpse into eternity, but becomes an historically bound activity in which the questioner must ever question his or her own situation, the power of the past, future possibilities, the aim of the questioning itself. Philosophizing *a la* Heidegger is an enterprise fraught with uncertainty and anxiety. Any attempt to escape that anxiety prematurely by hanging the enterprise on the skyhook of some lofty absolute, or by basing it on the firm foundations of objective 'facts', will not bring the inquirer closer to 'the truth', for truth, according to Heidegger, is not to be found by building a stable picture to correspond to a stable reality.

'Being', 'Truth' - each of the super-tools that theoreticians use to construct grand models of reality ultimately faces the corrosive power of deconstruction. Being has been bent by the tradition of Western metaphysics into the distorted image of mere presence, filling space here and now. The Cartesian view of the world through the cross-hatched lens of the Cartesian coordinate system turns time into just another dimension of a space whose every volume is the same as every other. The map for representing reality within the Cartesian coordinate system - graph paper - was supposed to assist in the picturing of reality; instead it became the model of the reality to be pictured. Time is leveled out onto the endless, meaningless moments whose tedium is captured by T. S. Eliot in The Love Song of J. Alfred Prufrock': 'I have measured out my life with coffee spoons.' One square block of Cartesian time is pretty much like another, and Being, reduced to presence in that time, is a dull business. Its model is matter, a bare, characterless substratum in which attributes coalesce to form things with shapes and boundaries.

The austere Cartesian metaphysics of matter and space and a spatialized time has very little in it of what Heidegger recognized in the writings of the Greek philosophers. There he saw a dynamic swarming of process and possibility, and an immersion of man in his environment quite different from the spectral distance assumed by later theoreticians. The separation of form from matter was all of a piece with the separation of observing subject from observed object. Descartes' separation of mind from matter has its roots in both an epistemology that separates knower from known, and in an ontology that separates Being from beings. For Heidegger, and for the pre-Socratic philosophers in which he claimed to find intimations of a livelier reality, these separations were less than tidy.

Being is not settled and measurable for Heidegger. The words we would use to describe Being are bound to reduce it to a mere presence that can be delimited on all sides. How to reveal the truth of Being when the usual tools of truth telling - words - are each matched with an attribute or property? If Being is that in which properties and attributes reside, but is not a property or attribute in itself, then words for properties and attributes will inevitably miss the mark.

Heidegger reflects on language, as does Wittgenstein. For both of these pre-eminent twentieth-century philosophers, the central drama of their philosophical careers consists in a constant struggle against the limitations of the tools of their trade: words. The early Wittgenstein thought through the old picture of language to its end. He hypothesized an ideal language, one for which true propositions would picture the facts. The later Wittgenstein deconstructs each part of that simple correspondence theory of truth: the form of the proposition, the relationship of perfect correspondence, and the givenness of so-called facts. Propositions need linguistic contexts in order to mean anything at all. Correspondence is often ambiguous: what geometric laws would prove the correspondence between 'Old Glory' and 'the Stars and Stripes'? Finally, 'the facts' don't come in the tidy bundles assumed by Wittgenstein's early *Tractatus.* Instead, our presuppositions and expectations always bend our selection of what is to count as 'the facts'.

Like Wittgenstein, Heidegger, too, challenged the simple correspondence theory of truth. Both tried to liberate themselves and their readers from the objectivist illusion that metaphor is a second-best way to represent reality. The very idea of a reality simply present behind our metaphors and linguistic attempts to picture, the very idea of an essence beneath existence, begins to crumble.

This mighty triumvirate of Nietzsche, Heidegger and Wittgenstein confronts the twentieth century with the disturbing news that the whole rationalist enlightenment, with its scientific triumphs and its philosophical systems, may rest on some drastic misunderstandings about the relationships between human inquirers, language, and the reality that inquiry would describe and explain with language and mathematics. These philosophers see their domain not as an inner sanctum of eternal truths to be sought by Promethean scientists and borne back to mortal men in pictures made with words and numbers. Instead, they see philosophy as, in large part, a matter of undoing the damage done by mistaking linguistic pictures for the reality they would represent - including those linguistic pictures that picture the relationships between speakers, language, and whatever is to be represented.

The later Wittgenstein rejects the whole picture theory of truth. The later Heidegger trades in the relatively professorial tone of his earlier tracts for an increasingly rhapsodic prose that evokes more than it pictures

or describes. Poetry becomes the paradigm for a language that remains true to itself only by creating itself ever anew with neologisms and unexpected combinations. For the expected is always false to the unfolding of novelty that is non-Cartesian time.

The critique of static pictures of a static presence that follows from these reflections on being, time and truth has been extended from philosophy into literary criticism, where the mighty triumvirate are read more eagerly than in Anglo-American philosophy departments, where the news was too bad to be taken seriously. Most academic philosophers simply chose finer, harder pencils to draw their pictures with greater, if more specious, precision. Literary critics, less interested in precise truth to begin with, were more open to a frontal attack on aspirations to literal portraiture. After all, modern art had already shown the way to break free of literal representation. Perhaps the truth was to be found in fiction!

The corrosive force of deconstruction came into play against the calmly assumed categories of earlier critics. Categories like 'author', 'reader', 'text', might not be quite as grand as 'Being', but they were grand enough to assume a reified solidity in need of deconstruction.

In what seems at first more a pun than an argument, Edward Said deconstructs the *authority* of the *author*, 'authority is nomadic: it is never in the same place, it is never always at the center .. .' Therefore, an author like Michel Foucault (among those genre blurrers mentioned by Geertz) is necessarily concerned with relationships of 'adjacency, complementarity, and correlation, which are not the same as the linear relationships of succession and integrity', the simplicities of before and after or inside and outside.

Foucault's analysis of intellectual history amounts to a kind of cultural existentialism: the course of a culture is no more driven by some logical essence than is the course of a free individual's life. Instead Foucault sees worldview following upon worldview without any particular rhyme or reason. He calls each successive worldview an *episteme.* He could as well use the word, *paradigm.* Whatever the name, the theme is the same: a preoccupation with the influence of knowers on the known, not the other way around as various materialisms or scientific determinisms would have it.

Earlier philosophers like Kant and Hegel cut through the objectivist illusion to appreciate the role of consciousness in crafting experience. But for Kant the structure of consciousness was fixed: only one paradigm for all conscious beings. And for Hegel the successive order of the forms of consciousness followed a rational dialectic, a process of unfolding that, at least retrospectively, made some kind of essentialist sense. Foucault, however, sees sharp discontinuities between the several forms of consciousness that he finds in the last several centuries of European history. There is no clear foundation, and no clear rules by which successive stories have been added to that foundation.

Under the influence - one might say intoxicated by the genres - of philosophy and intellectual history, literary critics like Said see a similar exile from secure origins in the literary tradition. Said opposes the situation of the contemporary critic to that of a critic like Leo Spitzer, who was among the last of those to draw on an orally received training in a canonical tradition of world literature and languages studied in the original. The 'dynastic tradition' of interpretation could tell you where and how to begin; but the dynastic tradition has ended. So the contemporary critic is set loose in a sea of competing schools where none lays claim to the legitimacy enjoyed by received learning in the old dynasty. The foundations are lost along with essences, origins and simple presences.

Said distinguishes between *origin,* as a kind of passive foundation, and *beginning,* as both more ambiguous and more active, much like the free choice of the existential individual. There is a sense in which we do not know where to begin, but must instead find out what we meant to say by seeing, later down the line, what we have already said. As Roland Barthes describes his process of creation, 'I begin producing by reproducing the person I want to be.' So, for Said, 'Beginnings, therefore, are for me opposed to originalities, or to those ideal Presences whose ideal originality Yeats called "self-born mockers of man's enterprise".' Lacking a clear sense of origin, whether in a dynastic tradition or in a sense of personal essence, we must be enterprising!

3(b) THE IMPORT OF RECENT LITERARY CRITICISM FOR FUTURES STUDIES

What Said and others have done to literary criticism has direct import for the field of futures studies in several respects, one of which is as follows. Once upon a time literary criticism sought to ground the 'correct' reading of a text by tying it to the originary intentions of the author, who was considered as a kind of all-knowing and all-powerful God in relationship to the text. A second phase, the New Criticism, placed more emphasis on the creation, the text. Part of the force of deconstructionism has been to demonstrate that the text is no less ambiguous in its meaning than the intentions of an originary author. Consequently, contemporary criticism now finds itself stressing neither the author, nor the text, but the reader. As the fog of French deconstructionism begins to clear, the healthiest survivor on the literary critical horizon appears to be Reception Theory, a school of criticism that reframes the goal of criticism by emphasizing neither the author nor the text, but the role of the reader.

An instructive parallel to these stages in the history of literary criticism can be found in three analogical stages in the history of futures studies. Once upon a time the study of the future was literally an attempt to uncover God's intentions. With the advent of secular science, teleological

accounts of God's design gave way to scientific attempts to trace causal chains in the manifest text of physical reality. If the plot of the present could not be told by reference to God-given purpose, then the plot of the present could be completed by predictions of the future; e.g. today's struggle could be justified by dialectical materialism's 'scientific proof of what life would be like after the revolution.

But predictability in the social sciences now lies in the dustbin alongside aspirations to unambiguous validity of interpretation via text-based New Criticism. In place of prediction, future studies might borrow a leaf from literary criticism and develop its own analogue to Reception Theory. As I shall argue at greater length in the conclusion to this chapter, scenarios developed at the grassroots by those who will live one future or another may fill the bill as a close analogue to Reception Theory in literary criticism.

Just as a text finds its multiple meanings in the multiple readings of its readers, so the present has a range of possible meanings. These are not to be interpreted solely by reference to the will of a creator God, nor by reference to a single future that could be predicted by a deterministic social science. Instead, the meaning of the present is a function of the future, yet the future that in fact unfolds will be very much a function of human choices based on several different 'readings' of the present. Both the interpretability of the present and the multiplicity of future goals and values introduce uncertainty and human volition into the process of history. Multiple scenarios can reflect both the descriptive and evaluative dimensions of uncertainty. Like Reception Theory in literary criticism, multiple scenarios locate the leverage for describing the future where it belongs: with the human beings who will 'receive' a future they hopefully chose. So we need to know more about human beings - the human factor and its influence on the future.

4(a) THE IMPORT OF PSYCHOLOGY FOR THE EMERGENT PARADIGM

Evidence of an emergent paradigm can be found in other disciplines besides anthropology, philosophy and literary criticism. Contemporary psychology is in ferment. Freud's metapsychology, with its echoes of a nineteenth-century physicalism and reductionism, is regarded as an embarrassment to be set aside by practitioners and clinicians. Developmental psychologists see a dynamic unfolding of personality that is not utterly determined in the first three years of life. Jungian psychologists engage in semiotic interpretations of symbols whose meanings are always overdetermined - too rich in possible meanings to be reduced to one unambiguous interpretation of significance. Finally, the object relations school - Melanie Klein, D.W. Winnicott, Ronald Fairbairn and Harry Guntrip - sees the self as a structure of evolving relationships, not as a substance or thing with clearly defined boundaries. Their theories and their therapies treat the development of personality as a succession of relationships beginning with the primary relationship between parent and infant. Just as structural anthropology turns away from the attempt to build a kinship system out of atomic elements and locates structure in the lattice of kinship relationships, so psychology no longer begins with the assumption of a self-contained, atomic ego, but regards the self as established - successfully or unsuccessfully - through its relationships.

This shift in emphasis from *things* to *relationships* is important. Its significance extends from the abstractions of ontology to concrete decisions about everyday life. In ancient philosophy, especially in the influential writings of Aristotle, to be is to be an individual, and to be an *individual* is to be a *substance.* Relations were regarded as ontologically secondary or derivative, as added by the perceiving mind. If A is to the left of B, that relationship depends in turn on the relationship between A, B, *and an observer.* Substance, on the contrary, was defined as that which is self-sufficient.

This Aristotelian ontology of self-sufficiency was rendered even more explicit by Spinoza, who defined substance as 'that which is completely self-sufficient and needs no other in order to exist'. It doesn't take a card-carrying feminist to identify the *macho* presuppositions underlying the ontological priority of substance so defined. Nor does it take a degree in psychoanalysis to see the import of Spinoza's - and behaviorist psychology's - attempt to reduce human subjectivity to a set of observable behaviors and properties of physical substance. The reduction of subject to substance, and the privileging of self-sufficiency over relatedness, arc part and parcel of a positivistic paradigm that puts facts before values, objects before subjects, and matter before mind. Even as his psychology opened up the symbolic dimensions of subjectivity and mind, Freud's metapsychology - his tacit and sometimes explicit beliefs about what counted as science - constantly dragged him back toward materialistic metaphors for describing the vicissitudes of the unconscious. Especially in his earliest work - *Project for a Scientific Psvchology* - he held out the hope of reducing all psychological explanation to neuro-physiological descriptions of electronic and chemical reactions - reductionism rampant. Like some futurists, he felt that he could never get a fair hearing for psychology unless he turned it into a step-child of the hard sciences.

According to nineteenth- and early twentieth-century criteria for what counts as scientific inquiry, psychology often comes up short. William James and Freud based many of their insights on introspection. But if observer and observed are one and the same person, claims to objectivity are likely to be tainted by the subjectivity of the observer. Where does fantasy leave off and reality begin? Is the child's experience of the primal

scene of parents making love based on fantasy or actual experience? Freud vacillated on this very question. But how could one ever know if one has only verbal reports to go on?

In an effort to live up to the requirements dictated by the physical sciences, behaviorist psychology eschews the evidence of introspection. Only observable behavior counts as evidence, thus leading to the quip that one behaviorist psychologist greeted another with the remark, 'You're fine. How am I?'

The behaviorist rigor with respect to observability leads to suspicions about all 'inner' phenomena - not just how to describe them, but whether they even exist. The constraints of rigorous theory construction forbid hypotheses that cannot be tested by experiments in which predictions are verified or disconfirmed in laboratory conditions involving controls and repeatable observations of carefully isolated independent variables. These constraints drove academic psychologists ever further away from clinical therapy with complicated human beings, and ever closer to laboratory experiments with rats and rabbits, who are plentiful enough to allow statistical significance, and uncomplaining in their submission to repeated experiments. Meanwhile, clinical psychologists seemed to be relegated to the role of latter-day priest-confessors, or scientific charlatans.

In his review of the object-relations school, Harry Guntrip takes up the challenge of the scientific status of clinical psychology, but he does so very differently from the behaviorists. Rather than reducing human experience to an interplay of theoretical entities - instincts, drives, or the 'mechanisms' of repression, displacement, sublimation, etc. - his best defense is a strong offense. He challenges the adequacy of the nineteenth-century scientific paradigm.

After describing a case history 'so utterly individual and unique that no possibility would exist in practice of finding an adequate parallel case to serve as a control', he observes: 'Such a case points out a fact that we must never ignore, that in psychoanalysis science is for the first time challenged to understand and thereby explain the unique individual, and that this must lead to a new development in our concept of what is science.'

The problem of understanding unique phenomena is not unique to psychoanalysis, of course. History has a similar liability in its attempt to become a science: no era, no decade, no war is quite like any other. Nor does history yield easily to testable predictions or readily available control groups. Yet events might be predictable and still add up to a history. The subject of psychoanalysis - a person - is in principle less predictable. 'In fact, the more possible it is to predict consistently exactly what a human being will do, the less a real person he has become, and the more he presents what Winnicott calls "the false self on a conformity basis".'

It is tempting to retreat to the position that psychoanalysis is an art, not a science. A work of art is, like an individual person, unique. But the goal of psychoanalysis is neither entertainment nor edification. Psychoanalysis uses knowledge to achieve a particular purpose - mental and emotional health. Art is supposed to be devoid of external purposes, an end in itself. But in the last analysis the categorization of psychoanalysis as an art or a science is less interesting than the use of psychoanalysis as an example showing the inadequacy of our understanding of what makes any discipline an art or a science. Rather than trying to learn more about psychoanalysis by glibly categorizing it as an art or a science, Guntrip leads us to learn more about science by assuming that psychoanalysis is a science and then revising our idea of science to accommodate psychoanalysis. In dealing with unique individuals, he writes, 'We are dealing with a different order of reality, which cannot be dealt with by orthodox traditional scientific methods.'

Part of the difference between 'orthodox traditional scientific methods' and a new paradigm for science lies in the stress on (local knowledge of) the unique individual rather than the laying on of the universal and repeatable. But part of the difference lies in a closely related phenomenon: the difference between reductionism and holism. Reductionist analysis sees the individual as an assemblage of separable elements, each of which can be characterized by permanent properties. Magnesium is always magnesium, and it retains its atomic structure wherever you find it. Likewise, a carburetor is always a carburetor and can be transferred from one automobile to another of the same make and model. But Alice's paranoia is not just like John's. Despite the use of the same diagnostic label, the treatments appropriate to Alice and John may benefit more from an appreciation of how their paranoias are different rather than the same. Why are they different? Because paranoia is not a precisely repeatable, unchanging element like magnesium, but a syndrome whose nature is determined more by its relational context in a given character than by some list of intrinsic properties. This is the meaning of holism: that the whole determines the part more than the part, through its intrinsic properties, determines the nature of the whole.

Working within the 'orthodox traditional' scientific paradigm, 'Freud did not start with the concept of the whole person. Psychoanalysis became obsessed with distinguishable aspects functioning as parts needing to be fitted together', like so many elements or unchanging, replaceable parts of a machine.

Working within the emergent, holistic paradigm, both existential therapists and those in the object-relations school stress the importance of seeing the whole person before reducing him or her to an assemblage of syndromes, neuroses or elemental instincts.

Their holistic perspective carries over into their view of the relationship between psyche and soma, or mind and body. 'It has been assumed hitherto that mind (that which enabled the scientist to create his science) is a kind of secretion, if anything, of the body. But now we have to think in terms of developing psyche as the vital stimulating factor evolving a body to meet its needs.'

Neither the body nor the so-called primitive instincts can be regarded as fixed elements always exerting the same pressures or constraints. Just as Geertz objects to the idea that culture is a layer of refinement that is added on top of more archaic levels of physical determinants, so the relational and existential perspectives object to the idea that archaic elements lie unchanged beneath newer layers of mental or cultural refinement. 'The equation of "mature" with "up-to-date" and "infantile" with "archaic" is a misleading error perpetuated by the idea of evolutionary layers of the psychosomatic whole. It needs to be replaced by the concept of an evolutionary whole in which every constituent is appropriately different from what it would have been in a different kind of whole.'

4(b) IMPORT OF OBJECT RELATIONS PSYCHOLOGY FOR FUTURES STUDIES

This last sentence could be grafted directly onto a description of the way scenarios should replace predictions. Scenarios are precisely those narrative wholes whose logics cast each part into a significative context different from what it would have been in a different kind of scenario. For example, the rapid diffusion of computing technology may contribute to social decentralization in one scenario or to the spread of invasive Big-Brotherism in another scenario. Ripped out of context and viewed - artificially - as an isolated element, the rapid diffusion of information technology cannot carry its meaning or significance on its own face. Only by embedding that technology in a larger text or context - a set of scenarios - can its several possible meanings be explored.

Neither culture, psyche nor mind is added on top of physical nature or body or technology taken as unchanging elements. From a holistic perspective, in the evolved organism of psyche and society, matter is informed and altered by mind 'all the way down'. There is no fixed foundation beneath holistic turtles, no unchanging elements into which organisms can be analyzed and reduced for purposes of explanation and prediction.

5(a) FROM CRITICAL THEORY TO EXISTENTIAL SOCIOLOGY

To the extent that sociology uses the cultural and intellectual artifacts of a society - a culturally bound set of categories - to understand that very

society, it is just as suspect as introspective psychology: do we trust a psychotic to offer his own best diagnosis? No, individual introspection is almost bound to be warped by the biases of self-deception. Often too much is at stake for an individual subject to see him or herself clearly. Likewise, subjective bias on the grander scale of ethnocentrism is the original sin of sociology: *thou shalt not use one's own ethnic customs as the standard for judging other societies.*

As a consequence of their suspicious origins, the claims of sociologists are often subjected to close scrutiny for tell-tale signs of self-serving biases. For this reason, sociologists have often attempted to be utterly objective and scrupulous in their methods. Knowing that they are stained by the original sin of subjectivism and ethnocentrism, they have sought to be holier (that is, more objective) than the Pope (in this case, the natural sciences).

For the founders, Weber and Durkheim, sociology was supposed to be 'value free' *(wertfrei).* Weber's studies on the relationship between religious beliefs and economics allowed a distance between the subjectivity of the sociologist and the object under study by using evidence drawn from a safe distance. Chinese Confucianism and Indian Hinduism could be correlated with economies and societies separated by centuries and miles from his own perspective. Durkheim's landmark study of suicide attempted to base its findings on cold statistics that had nothing to do with subjective variations among individual suicides. Behavior, not subjective intention, was the object of study. Hence there was less danger that the social scientist's own intentions would cloud his understanding of the object under study. Simply by seeking correlations between actual numbers of suicides and other objective measures like economic performance and demographics, the social scientist could seek out laws that might describe the past, predict its future, and thereby explain the present. By treating society as if it were an aggregate of atomic individuals whose contrary intentions average out under the law of large numbers, sociologists might discover certain valencies, certain tendencies to aggregate and divide, certain iron laws that would unlock the secrets of social organization just as elegantly as the table of the elements unlocked the secrets of the atom. Humanity, though an aggregate of subjects, could be treated as an object after all.

A case could be made for taking Boltzmann's statistical thermodynamics as the paradigm of science to which sociology aspired. Subjective intentions, about which the sociologist could make no truly unbiased claims, could be cancelled out as so much Brownian movement. Human thought is no more than thermal noise: random perturbations at the micro-level of society. Just as the behavior of gasses at a macro-level can be predicted statistically without reference to the mechanics of forces and impacts among individual atoms, so the behavior of a society should be predictable

from some of its macro-level features without reference to micro-level human intentions. Thus the paradigm of science for sociology is not exactly Newtonian, not a mechanics of individual forces and impacts. Yet the paradigm of positivistic sociology is still thoroughly objectivist. Even if society could not be treated like a clock or other complex machine, its movements might nevertheless reveal a *statistical* determinism that makes a mockery of reasoned intentions at the helm of history.

Reasonable people tend to be offended by arguments that wrest their fates from their own hands. Consequently there has been no lack of critics of positivist sociology. The romantic reaction against positivism - 'Yes we *can* choose our destiny! We *do* have free will!' - unfortunately misses the point. Positivism need not deny the efficacy of intentions at the micro-level. The romantic reaction falls into a myth of subjectivism which, by its own one-sidedness, tends to keep objectivism alive - as dialectical antitheses so often do. By missing the point, by confusing statistical with mechanical determinism, the romantics offered the positivists targets for legitimate criticism. As is the case in so many paradigm wars, the parties talked past one another, neither side satisfied that it had been heard, neither side convinced that it had been justifiably criticized. In their eager attempts to find each other's dirty linen, they ended up taking in each other's wash.

As long as the romantic reaction continued to distance itself from positivism's insights as well as its failings, the world studied by sociologists remained divided by a conceptual Maginot line that separated the two camps in the ongoing paradigm war. As Richard Harvey Brown draws the lines in an essay entitled, 'Symbolic Realism and Sociological Thought: Beyond the Positivist-Romantic Debate':

On the side of science	*On the side of the subjective/ Romantic reaction*
truth	beauty
reality	symbols
things and events	feelings/meanings
'out-there'	'in-here'
objective	subjective
explanation	interpretation
proof	insight
determinism	freedom

Any sociology adequate to the task of comprehending a complex society will have to integrate both columns. During the last several decades sociology has shown signs of moving beyond the old paradigm war toward a new synthesis that bears many of the marks of the emergent paradigm.

One of the crucial players is Jürgen Habermas. Heir to the throne of the influential Frankfurt School of Critical Theory, Habermas has achieved

a subtle synthesis of Marxism, psychology and communications theory. Complex to the point of being nearly impenetrable, his prose defies easy simplification. But as is often the case with German academics, a good deal of the obscurity owes more to pomposity than to the subject matter itself. The basic insights are not all that inaccessible.

Habermas begins from a distinction between two kinds of human interest: theoretical and practical. Theoretical interests include elements in the left-hand column above; practical, the right-hand column. Human beings are not interested in just one or the other column, but both. Because our knowledge serves both sets of interests, the criteria for an adequate social theory cannot exclude either set of interests.

One of the themes of his book, *Knowledge and Human Interests,* is ferreting out the 'hidden objectivism' in the works of social theorists like Wilhelm Dilthey, C. S. Peirce and John Dewey. Though firmly rooted in the Marxist tradition, Habermas does not save his criticisms for those outside that tradition. Marxist positivism - claims for an objective science revealing the iron laws of a dialectical unfolding of history - comes in for a thorough critique. After all, Marx was not a disinterested academic in search of an elegant theory. He was a revolutionary, passionately interested in the liberation of the oppressed. But what is necessary for liberation? Is the truth enough to set men free? And what *is* the truth about human potentiality? How can we know until 'after the revolution'?

Habermas grapples head-on with a basic riddle of human society: to the extent that humans are free, the object of sociology is to some extent indeterminate. If ever you pin them down under the glass of theory, what you've got is like a butterfly that cannot fly - or a humanity that isn't free. Habermas is acutely aware of the extent to which humanity makes up its nature as it goes along - and must continue to do so.

What is necessary to assure social freedom? For Habermas the answer is an unconstrained exchange of ideas: 'undistorted communication', to use Habermas's often repeated phrase. Call it freedom of speech - an important if not very novel idea. But Habermas's attention to the free-flowing exchange of ideas marks an important break in a Marxist tradition that had often discounted the autonomous power of ideas.

Marxism has often fallen into its own form of positivism - a belief that the objective world of economics determines everything in human experience. As Marx himself wrote in *The German Ideology,* in a passage that directly contests the significance of paradigms in general: 'The production of ideas, of conceptions, of consciousness is at first directly interwoven with the material activity and the material intercourse of men, the language of real life. Conceiving, thinking, the mental intercourse of men appear at this stage as the direct efflux of their material behavior.' Lest there be any doubt about the reach of this proclamation, Marx goes on to add: 'Morality, religion, metaphysics, all the rest of ideology and their

corresponding forms of consciousness [for example, paradigms] no longer retain the semblance of independence. They have no history, no development; but men, developing their material production and their material intercourse, alter, along with this their real existence, their thinking, and the products of their thinking.' Finally, in an oft quoted sentence that leaves no mistake about the order of causality between the objective and the subjective, 'Life is not determined by consciousness, but consciousness by life.'

Against this solid foundation of economic determinism underlying the entire Marxist tradition, Habermas has taken pains to acknowledge two related points. First, that epistemology is important: the theory of knowledge, the dynamics of consciousness, cannot be ignored in the name of a science that could deduce consciousness from a science of objects, whether that science calls itself psychology, economics, sociology, or some combination of the above. None of these theoretical descriptions of objects can fully capture the choices of subjects. The categories and applications of these disciplines are themselves partly a function of individual and collective choices made by subjects to serve their practical as well as their theoretical interests. In other words, there is always something at stake. So-called disinterested inquiry always serves some interests. Habermas acknowledges the original sin of sociology as inescapable. Marxists have no special dispensation or claim to redemption.

Second, just as the life of the individual or the research of some limited intellectual community is always tainted by the interests and predispositions that color its consciousness, so the policies that guide nations are not purely the result of economic determinism. This, Habermas argues, is more true today than ever. Governments now play an active role in manipulating the economy: through tax policies, tariffs, monetary manipulations and interest rates. Given the extent to which ideas like Keynesian economics or supply-side economics are used to steer the economy, it seems a little backward to say that the forces and relations of production work as independent variables driving the production of ideas. The evolution of consciousness may be very much influenced by economics, but the economy is likewise directed by ideas. Hence, according to Habermas, the importance of a free and unconstrained exchange of ideas.

To put it in a polysyllabic nutshell that captures the relation between these two central points in Habermas's thinking: *social policy is the public epistemology underlying economic policy.* To unpack: liberating the oppressed is not just a matter of taking from the rich and giving to the poor. It is instead a matter of increasing the degree of truly human self-consciousness in society so that each individual and society as a whole make the kinds of choices that serve the human interests of each individual and society as a whole. An individual compelled by an obsession or compulsion to make certain 'choices' is not a free individual, rich or poor.

Likewise, a society driven by economic or technological imperatives is not a free society. Both in the case of the individual and in the case of society, *deliberation among options is a characteristic offreedom.* But social deliberation is no more free than the individual deliberation of a psychotic if social deliberation is compelled by some overriding, determining force.

What the fetish is to the obsessed individual, some comparably unquestioned object of desire might be to a society. If a society forbids an exchange of ideas about some social goal - whether the MX missile, AIDS, or racial equality - then the behavior of that society turns out to be just as compulsive, just as unfree, as the obsessed individual's.

To the extent that sociologists like Habermas and Alvin Gouldner have rescued consciousness from its role as a merely dependent variable in the social equation, they have achieved a paradigm shift in sociology. Like other instances in the emergence of a broad-based paradigm shift, it is a bootstrap operation with resonances within resonances. The paradigm shift that accords more significance to consciousness is a paradigm shift that points to the importance of paradigms and their shiftings. Further, the paradigm toward which they have shifted is one that underlines the significance of thought in determining the course of the world, which in turn exercises *its* mundane and material influence on further thought (Marx was not *all* wrong).

Habermas and Gouldner have been labeled 'reflexive' sociologists for their sensitivity to the feedback loops that confound all attempts to describe society as a machine obeying simple, linear, deterministic laws. This reflexivity plays an important role in their thought about society. Further, it marks their contributions with the *self-referential* feature of the emergent paradigm, and does so with all the dizzying resonances usually found when one plunges into the hall of mirrors that modern consciousness has become. Reflexive sociology has forsworn firm foundations.

The main point of distinguishing practical from theoretical interests is to acknowledge that we are (or at least can be) free to choose what we are. Objective, theoretical science does not have the last word when it comes to humanity. We are (or can be) a bootstrap phenomenon. Always within the context of very real constraints, some historical, some biological, humanity can frame its own laws. This is a liberating lesson.

Curiously, however, Habermas himself remains trapped within several other aspects of an old paradigm, both in the form and in the content of his sociological research. Its form is very much the model of scholarly, abstract, and - ironically - highly distorted communication. He's almost unreadable. Further, the content supports an unproven assumption of universal laws underlying language and communication. Like Lévi-Strauss and unlike Geertz, Habermas seems to harbor the hope that just around the corner of the next research grant, someone is going to come up with the universal, unified field theory of language and communication, and

that from that theory we are somehow going to be able to deduce the legitimacy of a universal ethical order. 'Tis a consummation devoutly to be wished. But if it turns out to be an academic's pipedream perhaps this abstract universalism will do more harm than good.

A new school called 'existential sociology' fulfills the need for an alternative to the universalism implicit in Habermas's extension of critical theory. In a series of books, several published by Cambridge University Press, a group including Jack Douglas, John Johnson, Richard Brown and Stanford Lyman are developing an approach that has all the earmarks of a new school held together and reinforced by a common paradigm.

Like Habermas, they confess their values, their interestedness in practical uses to which their researches may be put. But unlike Habermas, they will come out of the library and enter into the concrete situations they study. The paradigm case that best illustrates the impossibility of the researcher retaining a distance from the subject under study is the book by Jack Douglas and Paul Rasmussen *Nude Beaches.* Imagine the value-free social scientist strolling out onto the southern California sand clad in the white coat of the laboratory technician, clipboard in hand. The phenomena under study would escape him or her.

The existential sociologist is willing to enter into the lives he or she is studying. 'Our emphasis on the problematic and situated nature of meaningful experience contrasts both with the structuralism of Alvin Gouldner's "reflexive sociology" and Jürgen Habermas's "critical theory"' declare Douglas and Johnson. And in their situatedness, they are not afraid to acknowledge the role of feelings. They thus distance themselves from all of the more or less parallel distinctions between the practical and theoretical; between thoughts and feelings; theory and practice; contemplation and action; form and matter; universal and particular.

Richard Harvey Brown and Stanford M. Lyman pull together many of the elements of the emergent paradigm in a virtual manifesto issued as an invitation: 'Symbolic Realism and Cognitive Aesthetics: An Invitation', the essay with which they introduce a paradigm-defining anthology of essays by the school of existential sociologists. These statements deserve to be quoted at length, not only as rich *evidence* of an emergent paradigm; just as important, they are eloquent and original statements *defining* the emergent paradigm.

> In general, it might be said that the current awareness of a crisis in sociology focuses on three main issues. First, no available paradigm has achieved dominion in the discipline. Instead a plurality of approaches rooted in different and even opposed epistemologies, compete for regency. Second, none of these paradigms appears to have attained internal consistency with respect to its own … assumptions. Finally, despite sociology's lack of preparedness, a host of moral and political issues demand from it both explication and resolution. As in earlier crises, the task confronting sociology is complex …
>
> Much of the writing in this volume is informed by what might be called a 'symbolic realist' or 'cognitive aesthetic' perspective. The two terms are not quite synonymous. Symbolic realism stresses ontology; cognitive aesthetics stresses epistemology. The first focuses on the possibility of our having symbolic worlds; the second provides criteria of adequacy for judging whether such worlds constitute knowledge. Cognitive aesthetics is not the romantic aesthetic of the nineteenth century, but instead a critical theory of interpretation and judgment that has much in common with dialectical hermeneutics and semiotics.

What has been gained by allying cognitive aesthetics with dialectic hermeneutics and semiotics? *Dialectical hermeneutics* refers to a school of thought nourished in the tradition of Hegel, Dilthey, Heidegger and Gadamer, with or usually without a little Marx thrown in. *Hermeneutics* is the theory and practice of interpretation. To the positivist its importance is restricted to timid exercises in academic literary criticism or biblical studies. To those who grant a plurality of interpretations, each including slightly different experiences of the same (or ostensibly the same) objects, then the theory of interpretation becomes very important. Dialectics enter in with the play of *rival* interpretations - or *alternative* scenarios.

Semiotics, once again, is the theory of signs. The word came into use with the need for something broader than 'linguistics', which seems restricted to the more literal languages like 'English', 'French', 'German', or 'Swahili'. What about music, or fashions in clothes, or body language? The word *semiotics* also serves as a convenient net for containing syntax (on the relationships among the parts of a sentence), semantics (on the relationships between words in language and things in the world), and pragmatics (the uses to which words are put).

The fact that Brown and Lyman ally themselves with dialectical hermeneutics and semiotics marks their thinking as *perspectival* rather than objective. This next passage combines the exemplary with the elegant in stating and contributing to the definition of the role of perspectives or frames of vision in an emergent paradigm:

> Thinkers from Giambattista Vico to Wilhelm Dilthey to George Herbert Mead have told us that man is the symbol making animal. Unlike animals that merely live, we have lived experience. The world is apprehended and organized through the mediation of our concepts, categories, and structures of thought. To say this is to say that all knowledge is perspectival. Anything we know is known *as* something; it is construed from some point of view. A library, for example, becomes a different object of experience for the accountant, the scholar, and the

custodian. Likewise the rules of baseball define what will be seen as a ball or a strike, much as the rules of psychopathology or of sociology respectively define what is to be apprehended as schizophrenia or role conflict, In this view we cannot know what reality is in any absolute or objectivist fashion; instead, all we can know is our symbolic constructions, the symbolic realities that are defined by our particular paradigms or frames of vision . ..

[A] cognitive aesthetic framework draws attention to the central role of paradigm innovation in the development of science. Both the artist and the scientist, as well as the politician or citizen who is seeking to create a new mode of public discourse, are seen as having a basic affinity: They are creating paradigms through which experience becomes intelligible.

Lyman and Brown not only acknowledge the importance of paradigms and their construction; they also see the inevitability of paradigm wars - the struggles between rival paradigms over whose map provides the best guide to reality. These paradigm wars are not mere academic quibbles. To the extent that their outcomes determine the very meaning of human and social behavior, they amount to titanic struggles over the future of humanity.

The practice of sociology, anthropology and the other human sciences ceases to be a disinterested study of distant cultures. Instead it becomes a poetizing of human purposes: whither humanity? Shall we become more like machines?

[T]he spokesmen for cybernetic systems theory argue that society is (or is like) a great computer, with its input and output, its feedback loops, and its programs; this machine - society - is in turn guided by a servo-mechanism - the techno-administrative elite. To see this imagery as a metaphor, however, is to reject it as a literal description, to unmask it as a legitimating ideology, and to provide a basis for criticizing its rhetorics. By doing a close textual analysis, it becomes clear that in the rhetoric of social cybernetics, there is an atrophy of the very vocabularies of citizenship, moral responsibility, and political community. In place of these, the machinery of governance, initially conceived as serving human values, becomes a closed system generating its own self-maintaining ends. The polity - the arena for the institutional enactment of moral choices - dissolves upward into the cybernetic state, or downward into the alienated individual, whose intentionality is now wholly privatized and whose actions, uprooted from their institutional context, are bereft of social consequence and deprived of moral meaning.

Strong stuff! And their final sentence caps it off: 'Our recognition that social order is a construction invites us to actively reconstruct our worlds.'

In another essay, Brown is explicit about the implication of multiple realities:

Symbolic realism holds that all social reality is symbolic, including sociology itself. In the symbolic realist view there are multiple realities, including those of social scientists, and none has absolute priority over others. The task of the sociologist becomes that of describing these various realities, their structures, their processes of change, and their coming to be. Such analyses are not copies or blueprints of 'reality', however. Instead they represent a kind of decoding or translation by which the realities constituted by peoples are reconstituted into the reality that is social science.

5(b) IMPORT OF EXISTENTIAL SOCIOLOGY FOR FUTURES STUDIES

Once again we arrive at multiple realities underlying multiple scenarios. Anthropology sought a foundation in semiotics and literary criticism. Literary criticism reached toward psychology in its attempt to grapple with the multiplicity of motives of both author and hero. Psychology explodes into sociology with the realization of the relational character of psyche and the importance of social context. And now, sociology, like the anthropology with which we began this tour of the human sciences, loops back into semiotics.

In discipline after discipline the attempt to find some bedrock of unambiguous empirical research, some solid objectivity, dissolves in a confrontation with ambiguity and 'essentially contestable' interpretations. Reality refuses to show a single face. Instead the world of human beings insists on being ever interpretable from different perspectives, no one of which can claim definitive priority over others. The old positivistic worldview, where the physical sciences played the role of secure foundation, gives way to a circular, self-referential process of inquiry where the *coherence* of several disciplines within a single paradigm is more persuasive than any claim to *correspondence* between a conceptual model and reality. For our models, our metaphors, our paradigms define what we take to be reality.

6. TOWARD AN EMERGENT PARADIGM

Having now hurtled through several of the human sciences in sequence, and having lain down their linear movements on the loom of my strategy, I would like to cross this warp with the woof of a few cross-disciplinary comparisons. This weaving maneuver will identify some features of an emergent paradigm that are common to these several disciplines. The point of this exercise, once again, is to guide the argument toward the

outline of normative scenarios that cash in on recent achievements in the human sciences rather than trying to emulate the hard sciences.

The endgame strategy for this overlong essay is as follows: first, to abstract a set of features characteristic of the new paradigm emerging from the human sciences by following their woof across the warp of the disciplines already summarized; second, to clarify what might be meant by *normative* scenarios in an era when the very idea of norms seems suspect, or, at best, weakened by cultural relativism; and finally to sketch the outlines of a scenario that reflects the features of a new paradigm that is emerging in the human sciences and is also normative in a sense that can survive postmodern critique.

Since each of the features of the emergent paradigm has already been discussed several times and at some length in the several contexts of the disciplines that make up the warp, their review on the woof will be brief. The point is to pull the threads of the warp together by weaving this woof across the different disciplines so that a set of conceptual tools will be available for fashioning, first, a new paradigm, and second, a normative scenario. But the application of these tools is not simple or obvious. Indeed there is a danger of using these new paradigm tools in an old paradigm way. That is why, before their application to the fashioning of normative scenarios, there must be an intervening section on norms and values. Like our understanding of the structures relating tacts to one another, our understanding of values is also subject to paradigm change.

Here, then, is a short list of features of a new paradigm emerging from the human sciences, together with some hypotheses about what these features *might* imply for a normative scenario. As we shall see in the next section on a new approach to the normative, these first hypotheses can be misleading. Not until the final section will the true import of these features be fully evident.

1. The semiotic turn

Geertz described anthropology as a semiotic discipline in search of meaning, not a science in search of laws and explanations. Philosophers, particularly Richard Rorty, speak of the linguistic turn in characterizing the significance of Wittgenstein and Heidegger. But Roland Barthes and Michel Foucault apply the tools of linguistic analysis to a wider domain of signs than words alone. Likewise psychologists have liberated themselves from Freud's materialistic meta-psychology to give full weight to Freud's real contribution: his emphasis on the power of symbols. Finally, existential sociology embraces a 'symbolic realism' that accords efficacy and power to symbols. In each of the disciplines reviewed we see a turn away from a materialistic ontology that would reduce symbols to the role

of epiphenomena - pale reflections of material presences following physical laws. In each of these disciplines there is an acknowledgment of the way symbols can motivate action without relying on a reduction to physicalistic causes to account for their efficacy.

The simple but wrong application of the semiotic turn to normative scenarios might run as follows: as opposed to a nominalist reduction of norms to mere conventions of speech, we can now depend on norms that are resistant to nominalistic reduction. We can identify symbols of values that transcend mere conventions. We can locate standards for the Good, the True and the Beautiful in a semiotic order that replaces Plato's realm of Ideas as the locus of normative standards.

Just as I earlier declined the temptation to build the edifice of future studies out of towering stalagmites based on the purportedly firm foundations of the hard sciences, so I now hesitate to hang futures studies on a series of normative stalactites reaching down from the lofty heights of some transcendent order, whether semiotic or idealistic. For it is the achievement of recent studies in semiotics to show that *we have no independent access to a transcendent signified beyond the signifiers.* Instead the distinction between signified and signifiers is a 'floating' distinction. Each signified becomes a signifier of some further signified. The distinction between signifier and signified is real and useful in particular cases, but when you press for an ultimate signified, Sahib, it's signifiers all the way out. So the Semiotic Turn should not be used in the service of some new idealism that would substitute language for Platonic Ideas.

2. Difference over identity

Geertz invites us 'to look for systematic relationships among diverse phenomena, not for substantive identities among similar ones'. He is less interested in what we all share than in how we differ. Likewise linguists are less interested in the identities that abide through the evolutionary changes traced by diachronic etymologies than in the differences that define the synchronic structure of a language at a particular point in time. Words mean what they mean, not by virtue of some one-to-one link between self-identical symbol and self-identical thing. Rather, words mean what they mean by virtue of the usage-place they maintain in a structure of differences, the lattice-work of an entire language. In Guntrip's review of the object relations school of psychologists, he criticized Freud's preoccupation with universals. Instead he focused on the differences that make each individual unique. Finally, in the symbolic realist view of existential sociology, 'there are multiple realities, including those of social scientists, and none has absolute priority over others'.

At the risk of engaging at a level of abstraction that fades off into the vacuous, I cannot resist a very simple observation. Physical things

impress us with their self-contained identity. Apples, rocks, chairs, tables - all the pieces of furniture of the physical world - come in clearly contained bundles with definable borders. Identity is easy for physical things, and to the extent that we are preoccupied with physical things, we take identity as a tacit criterion of existence. To be is to be a clearly identifiable individual. When it comes to symbols, however, identity - and therefore ontological status - is less obvious. What about the number 3? Or Beethoven's Fifth Symphony? Or the gross national product? Or the cause of the Civil War? Philosophers wax scholastic about such things just because categories like identity, borrowed from a common sense schooled on the physical, turn out to be inappropriate and hopelessly clumsy when applied to such symbolically mediated 'entities'.

Just because there are so many different kinds of difference, and my simple observation abstracts from all those second order differences, I feel at risk of broaching the obvious or the vacuous; nonetheless, I think there may be a non-trivial relationship between this second feature of the emergent paradigm and the first feature - the semiotic turn. My very abstract point is just this: preoccupation with the physical will lead one to focus on identities; preoccupation with the semiotic order of symbols demands that one focus on differences. To know a physical thing is to know what is inside its boundaries: its shape, what it is made of, its material. To know a symbol is to know how it relates to what is outside: its grammatical and syntactic relationships, the place it maintains in a logical space, what it is *not.* As the linguist Ferdinand de Saussure discovered with his insight into 'the arbitrariness of the sign', it matters not at all what a word is made of, its letters, the ink on the page, the sound of the syllables. What matters is the pattern of relationships that differentiate the usage of that word from all other words.

This preoccupation with difference rather than identity in the semiotic order might also be prematurely elevated into a Platonic ideal for application to normative scenarios. We might rush off in praise of the organic and unique as opposed to the mechanical and the standardized. We might insist on schooling that treated every student as completely unlike every other. We might demand healthcare that treated every patient differently. We might oppose every attempt at bureaucratic standardization as an obsolete holdover from an industrial order that achieved economies of scale by stamping out the same, same, same from the drill-presses of the industrial economy.

As we shall see in the concluding section, there is something important to be gleaned from correlating the metaphysics of identity with the industrial era, and the metaphysics of difference with the information era. But an over-hasty idealization of difference will get us into just as much trouble as an habitual preoccupation with identity.

3. From explanation to narration

In each of the disciplines reviewed one finds increased attention to narrativity as the form of redescription most appropriate to the human sciences. Whether it is Clifford Geertz giving thick descriptions of the plots that make sense of the rituals of different cultures, or psychologists referring to archetypal myths, or sociologists seeking the meaning of social behavior in the contexts of stories with beginnings, middles and ends, the importance of story, plot and narration is now recognized well beyond the boundaries of literary criticism where it was always acknowledged. Among philosophers probably Paul Ricoeur, author of the monumental three-volume *Time and Narrative*, has done most to show how narration does a better job of capturing the meaning of human actions than explanations that would reduce those actions to the interactions of simpler elements described by the hard sciences.

The implication of narrativity for normative scenarios is obvious: scenarios are narrations with beginnings, middles and ends. Narrativity distinguishes scenarios from predictions, which merely give a state description at some future date. This implication is so straightforward it need not wait for a subtler development after the next section's new look at norms. The narrativity of scenarios isn't something that will be added after an appreciation of new developments in the human sciences. Narrativity is essential to scenarios. The human sciences are emulating those futurists who use scenarios to the extent that the human sciences embrace narrativity. Here we have a clear instance of the potential irony mentioned in the introduction: what a shame it would be if futurists decamped in the direction of the explanatory hard sciences just as reinforcements were arriving from the human sciences bearing justifications for story-telling.

4. The fall into time

Once upon a time there was no sense of historical time. Aristotle regarded the number of species as fixed for all eternity. Neither Platonic Forms nor Aristotelian species were subject to change and evolution. The very idea of historical progress was an invention of thinkers like Vico and Herder. Then Darwin altered the place of humanity in nature. But still the hard sciences followed the paradigm of mathematics: just as two plus two always and everywhere equals four, so the truths discovered by physics and chemistry should be true for all time.

The principal figures discussed - Hegel, Nietzsche, Heidegger, Wittgenstein, Foucault. T. S. Kuhn - transport *us from* a world where we could plant our feet firmly on the ground of foundations laid in the concrete of scientific materialism, then train our gaze upward toward the fixed stars of timeless values . . . *to* a world where we float or fall (in

relativistic space it's hard to tell the difference) and never come to rest on firm foundations. Things change. Nations crumble. Ideologies that had been likened to religions suddenly lose credibility.

Hegel awakened us to history. Nietzsche and Heidegger worked out the significance of history for the individual: a certain amount of despair and confusion at the transience of things and their lack of a clear direction. Wittgenstein and Foucault offer different but equally unsettling perspectives on the semiotic turn: the realization that almost all of our distinctively human experience is mediated by symbols, almost never raw or immediate, always culturally and linguistically tinged and therefore never entirely innocent.

These lessons of the last century or so of philosophy - about time and history and the gradual displacement of the solid by the semiotic - leave us today just a little tentative about our commitments. We know better than to believe that we can catch a quick express called the Absolute. We know that the best we can expect is a local ride on the relative. The Absolute left the station long ago. And we know that we are likely to switch trains a few times before we get to wherever it is we are going.

Rather than suggesting new norms, the Fall into Time seems to undermine the very idea of the normative - at least to the extent than norms are thought to transcend mere fashions. The Fall into Time and the next feature of the emergent paradigm, the Democratization of Meaning, both threaten a Platonic commitment to timeless norms. These two final features of the emergent paradigm therefore make a transition to, and compel us to entertain, an alternative to the Platonic interpretation of normative values.

5. The democratization of meaning

From Reception Theory in literary criticism to communicative ethics in philosophy and sociology, the logic of legitimation is shifting from a dependence on transcendent norms to the immanent process of dialogue among writers and readers and speakers of the language. The *real* meaning of love or happiness or justice is not there to be discovered like diamonds or oil, trapped beneath layers of sediment just waiting for someone with enough intelligence and resources to find it. To a significant extent we are making it up as we go along. Human virtues are renewable resources. They are created and sustained by practices. Reception Theory locates the ultimate authority for interpreting the meaning of a text neither with the author, nor in an autonomous text, but in a community of readers. Likewise futures studies might draw a lesson from Reception Theory by locating authority over the future neither with God nor with policy-makers, nor with scientific futurists, but instead with the citizens of today who 'vote' through a range of symbolic transactions for the shape of tomorrow.

But this prospect of democratization raises a problem, the same problem democracy has always posed: *What if the people are wrong?* There is an abiding and intrinsic tension between the process of democracy and the concept of transcendent norms. To the extent that we surrender arbitration of norms to the will of the people, there will always be some aristocratic voices who protest a descent to the lowest common denominator. Ever since Socrates debated with Thrasymachus (who said that justice was the will of the stronger), ever since Thomas Jefferson defended the need for more direct representation against Alexander Hamilton's support for a more aristocratic Senate, the old debate between transcendent norms and the immanent will of the people has been with us under one rubric or another: the ideal vs. the real, high standards vs. popular opinion, norms (as ideals) vs. the normal (taken as median or average). Even the language of the normative is subject to this dialectical ambivalence. So let us turn to a more focused reflection on a new approach to this very old debate.

7. A NEW LOOK AT NORMS

In both a pre-modern religious context, and in a modern, liberal, progressive context, the idea of a normative scenario is likely to connote some common understanding of some transcendent values. In the pre-modern context those values would be derived and legitimized by reference to the will of God. What is good, everywhere and for all time, is what conforms to the will of God. In a more modern, secular, humanistic regime, norms are legitimized by reference to a science of human nature. The secular enlightenment substituted the universality of science for the universal reach of the will of a monotheistic God. In both contexts - pre-modern religion and modern science - there was a way to legitimize norms that could transcend the particular interests of private individuals or local customs and practices. There was a way of referring to a higher authority, an Absolute that transcended the relative perspectives of different individuals or different cultures.

But now, for better or worse, we live in a postmodern era. Part of what defines the postmodern condition is the lack of definitive criteria - religious or scientific - for progress toward a more perfect humanity. In place of the Christian heaven on earth we are confronted with a plurality of religions: Muslim, Buddhist, Christian, Jewish, and any number of other sects. In place of the modern idea of secular progress we find a plurality of standards for a more perfect humanity: feminist, multi-cultural, indigenous peoples, you name it.

So it's hard to name a norm and claim that it applies to everyone everywhere. And if a putative norm does not apply to everyone everywhere, then perhaps it is not a norm at all, but just one more custom peculiar

to a particular tribe. Jews don't eat pork. Southern blacks like pigs' feet. WASPs cultivate the stiff upper lip, and so on.

To reduce the normative to the sociology of taste seems to rob the normative of the obligatory, imperative power that pre-modern and modern norms possessed. These postmodern 'norms' seem pale and impotent by comparison to the commandments of the Lord or the universality of science.

No wonder normative scenarios seem out of date. No wonder that reference to norms seems naive. No wonder that futurists are tempted into the bad faith of suppressing their wishes for a *better* tomorrow and devote their best efforts to worst-case scenarios. The pre-modern and modern sources for legitimizing transcendent norms have been de-legitimized by a more sophisticated recognition that we live in postmodern times when absolutes like God or secular humanism have lost their credibility.

How, then, is it possible to reconstruct a normative discourse after the deconstruction of transcendent absolute values? How can we justify normative scenarios when norms are essentially contestable? The answer, I believe, is by *entering the contest.* A normative scenario can articulate the force of widely accepted values without requiring either the omnipotence of a Lord of lords or the universality of mathematics. Norms need not be absolute in order to transcend the relativity of individual opinion. Norms need not be completely unambiguous in order to exercise some force of obligation.

Let me give some examples. There are legitimate grounds for differences over the degree to which a government should guarantee the welfare of all of its citizens. Yet some sympathy for the sufferings of underprivileged children seems to be a normal response of most mature adults. Is this because they feel constrained to obey some religious command to act as their brothers' keeper? Is it because some sympathy for other members of the species is part of human nature? It is less important that we prove the superiority of the religious or the naturalistic explanation than that there be an actual *experience* of sympathy and compassion. *Why* the experience occurs is less important than the fact *that* it occurs.

I lack a convincing theory for justifying the source of moral obligation. But the lack of a meta-ethical theory does not preclude the possibility of ethical practice. Having given up God as well as nature as foundations for values, I am well aware of the tenuousness of my grasp on morality. 1 have no knockdown drag out proofs for the validity of the norms I would invoke. Yet it is my belief - and it is only a belief - that the normative dimension of human existence *necessarily partakes of such tentativeness.*

It is my belief that what would count as a *better* humanity must necessarily differ from actual humanity in ways that arc speculative, creative, risky, artistic, and never definitive or obvious. The gap between what ought to be and what is cannot be closed by the force of law or the force of mere familiarity. It can only be closed by a human will that could have acted otherwise.

Things change. Appeals to tradition are not always sufficient for invoking norms. Nor is it wise to throw out all the wisdom gained by earlier generations. It is not easy to improve upon the way life is lived. The lessons of history are not to be despised. Yet if we are to give any credence to *the fall into time* then we must grant the obsolescence of the Platonic correlation of the Good with the Absolute and Eternal. We must acknowledge that the price of holding onto that Platonic correlation is nihilism: we would throw out the baby of morality with the bathwater of absolute, eternal Truth. The only way to preserve the force of morality is to decouple it from a Platonic correlation with timelessness.

Now that we have fallen into time we must figure out how to moralize in time - how to find, create and maintain norms that are appropriate to the times. Rather than imagining that norms must derive their obligatory force from some timeless foundation that would transcend any particular conditions, we must see how the moral dimension of our existence is intrinsically tentative - stretched across a gap between what *is* in any given present, and what *might be* in a better future.

The definition of what would count as a better future cannot be read off from the past or from some great blueprint in the sky that would transcend past, present and future. Instead the criteria for what will count as a *better* future, like the criteria for what would count as better art, are bound to contain some reference to the recent past and present. Like all cultural movements, the evolution of ethics will depend on an interplay between individual creativity and an evolutionary selectivity that operates on a level that transcends the individual.

Knowing this much about the necessary tentativeness of norms, what can we derive from the recent past and present of the human sciences? What hints toward a normative scenario can be drawn from recent developments in the human sciences? The Semiotic Turn suggests the importance of *meaning* in all its ambiguity. Rather than relying on the force of law or aspiring to the grip of necessity, a semiotic anthropology shows us how the values derived from ethnic origins can be constitutive of meaning *inside* a given culture without necessarily having obligatory power over those *outside* that culture.

Salman Rushdie got into trouble by trying to straddle two cultures. As a Westerner he embraced the value of free speech and the liberty of the individual; but as a Muslim he committed blasphemy. He now claims obedience to Islam. It is hard to see how his piety toward Mohammed can be squared with the words that he has written and published so freely.

Most of us do not span radically different cultures in most of our day to day activities. Our values derive from the interplay between the norms of the culture we were reared in and our awareness of a larger, newer

world that calls to our sense of concern. To say that we derive our sense of morality from the culture we are reared in is to admit a vast panoply of influences, given the range of texts we may have been exposed to in our formal education and the range of stories we have internalized from years of television and movies.

The influences that determine one's sense of morality cannot be said to constitute a well-ordered, internally coherent whole. We inherit a dialogue that posits the rights of the individual even as it posits the need for social justice. The dialectic of individualism and collectivism is not about to be settled once and for all, even after the demise of Marxist ideology. So Salman Rushdie's guilt in the eyes of Islam cannot be redeemed by an equal and opposite innocence in the eyes of a Western tradition preaching the right of the individual to free speech. For even in our Western tradition we acknowledge the needs of the collective and the demands it can make for individual sacrifice.

Am I arguing for the death of Salman Rushdie? No. I am only pointing out the *difficulty* of ethical debate across cultural boundaries. For those who acknowledge the cultural relativity of values, there can be no simple appeal to standards that transcend all cultures. One can appeal to norms that operate within and work to constitute a culture. But once one steps outside that culture, or tries to stand between two cultures, then one risks the betrayal of one culture for another. Once you become a cultural double agent, the rules become very messy - which is not to say there are no rules; only that they will often conflict with one another.

To summarize the significance of the Semiotic Turn: we now know that the sources of *meaning* to be found in the myths and values of a given culture can be called upon to give form and structure to an individual life; but further, we know that these sources of meaning can transcend the individual without being absolute or eternal. Norms can be obligatory and contestable at once. This is how norms *are.* They are not to be confused with will o' the wisp opinions at one extreme, or necessary laws at the other. The human sciences show us how to move beyond a laws-and-causes approach to human nature, and still hold onto the role of culturally conditioned *meaning* as constitutive of an individual life.

Literary criticism then helps us to read the text of our culture to determine the inventory of meanings that we can draw upon. By deconstructing the authority of the author, literary criticism reminds us of the shared work of constituting and maintaining meanings within a culture. Reception Theory reminds us of the importance of a literary selectivity in which readers participate in the evolution of meaning.

Critics are the pre-eminent *prosumers,* Alvin Toffler's term for proactive consumers who influence the shape of a product by making sure the producers know what they want; or, through the wonders of modern technology and information processing, actually participate in the production

of a product by feeding their preferences into the design and production software. Critics have been doing as much ever since Milton read Virgil. Critics help to determine the shape of the literary 'product' of a society. But the rest of us participate as well each time we 'vote' with the purchase of a book, or contribute to an opinion survey, or tune in to a particular show on television. In the metabolism of the symbolic economy, we all play a role every time we engage in dialogue, read a newspaper, respond to a new movie.

As with the literal ballot box, so also the symbolic ballot box of cultural metabolism - the production and consumption of images - elects only those options it can understand and appreciate, whether candidates or referenda. Part of the role of futurists in this system of cultural metabolism should therefore be to articulate in an understandable and appealing way images of a better future. We need an antidote to *Blade Runner,* a foil for *Clockwork Orange,* a better sequel to *1984,* a truly humanized *Animal Farm.*

It may be too late to talk about Utopia. 'Utopian' has become a pejorative term. Pragmatism is in better favor than utopianism. But there are times when pragmatism, the philosophy of *whatever works,* doesn't work. There are times when business as usual is doomed, when even incremental reforms are inadequate, when discontinuities are inevitable and radical alternatives the only way out. At such times it is irresponsible to refuse to be Utopian, for only on the other side of a seemingly unbridgeable gap can conditions be once again stable.

Think of Utopia as a new equilibrium, as a new constellation of the same old stuff, but now so arranged that everything works where before everything seemed to be at odds with everything else. Vicious circles turn virtuous. Think, for example, about the relationships between education, state budgets, cultural conflict, and the high costs of high technology. It is easy to see a vicious circle driving ethnic minorities further into poverty because they lack access to expensive new technologies only available to white kids in rich schools. Yet one can also imagine a scenario in which individually paced instruction software allows ethnic minorities to learn better than in crowded classrooms with inadequate numbers of well-intentioned but unwittingly racist instructors. After using the instructional tools of a color-blind technology, a more educated work force improves productivity, super-charges the economy, which pays for better schools with better technology for improved education of ethnic minorities …

What can tip the vicious circle over into its virtuous reversal? If Reception Theory is right, the reversal might happen as quickly and easily as the reversal of figure and ground on one of the famous psychological tests like the vase/face diagram. Now you see it as a vase, now you see two facing faces; now you see a vicious circle, now you see a virtuous circle that is well nigh Utopian.

But it sometimes takes someone to point out the Utopian possibilities in an otherwise wretched situation. 1 have some friends, two noted futurists who shall remain nameless, on whom I can always count for the darkest of perspectives. They are experts in the development of worst-case scenarios. Once, upon seeing them walking down the hall together at SRI International, I saluted them as the Brothers Grim. I value their contributions to the list of warning signals, but their voices are too predictably Cassandran to be balanced or, therefore, trustworthy when it comes to anticipating some of the better possibilities.

Given all of the very real problems facing humanity today it is not easy to see how some of them might be solved. It is easier to see how what has been invented can come unravelled than it is to see how unsolved problems can be solved. It is easier to take apart something that exists than to build an incredibly complex working organism never before seen on earth. So it is understandable that futurists find it easier to draft devolution scenarios than to imagine transformative solutions that would turn vicious circles into virtuous systems of mutual support. In order to draft optimistic scenarios that are plausible, the futurist must be able to imagine solutions and inventions that no one else has yet imagined. This is a tall order that would require the futurist not just to hope for such inventions but to actually invent them.

I, for one, do not feel adequate to the task. I have no solution to the crisis of escalating costs for healthcare or declining standards in our nation's schools. I don't know how to organize an ecologically sustainable market economy. 1 have no elegant answer for housing the homeless or feeding the hungry. Yet I am convinced that if we futurists are to pursue our calling responsibly, we must try to imagine scenarios in which some of these problems have been solved so that we can then get on to dealing with other problems without engaging in the denial of deeply held values.

8. EARTH MIGHT BE FAIR A NORMATIVE SCENARIO

Despite my own postmodern waverings between secular atheism and pagan polytheism, I am nonetheless drawn to the sheer poetry of the Christian hymns I was forced to sing in compulsory chapel at school. 'Earth might be fair and all men glad and wise …' What a wonderful idea, even in its sexist formulation. 'All persons glad and wise' wouldn't exactly scan.

Earth might be fair: the richness lies precisely in the ambiguity as between ethical and aesthetic interpretations of 'fair'. We could certainly do with a little more justice; and we could also do with more beauty, the Shakespearean meaning of 'fair'.

Imagine a world without lawyers, a world where disputes did not have to be settled in court because there were so many fewer disputes to begin with. Imagine a world where generosity and good will were the norm rather than suspicion and defensiveness. Imagine a world where all the resources now devoted to processing and adjudicating insurance claims were instead devoted to preventive health maintenance. Imagine a world where all the resources now devoted to advertising were instead devoted to quality improvements in products. Just as we are now learning to live in a world where the cold war is over and we can entertain the distribution of a peace dividend, imagine a time when we could entertain the distribution of a litigation dividend, an insurance dividend, an advertising dividend.

But what would all the lawyers and insurance salesmen and advertising copywriters *do?* What will all the soldiers do if peace breaks out in earnest? But is it any justification for existing practices that place a high burden on other human beings that the human beings who practice them don't have anything else to do? Let them play. I'm serious. Let me explain.

One of the problems of a postmodern economy is to find alternatives to the industrious productivity of work as a measure of economic health. What if we are working to produce too much of the wrong stuff? Throughout pre-modern and modern times, productivity was a legitimate measure of economic strength. People did not have enough of the basic necessities and we depended on natural science and technology to improve our ability to get more out of less in less time. But now there is general agreement among the techno-elite that the remaining pockets of hunger are caused not by a lack of agricultural capacity but by social and political snafus that leave food rotting in the field; homelessness is caused not by the lack of raw materials for dwellings but by policies that force foreclosures on people who cannot cope with the complexities of a global economy.

At risk of gross over-simplification I want to say that our most vexing problems today are not problems that can be solved by science and technology; they are human problems that call for a degree of social invention that we have not seen since the creation of democracy and the writing of the American Constitution. We don't yet know how to organize our human interactions. Some of us haven't even learned how to play together; or if we have, we've grown up and forgotten. Consequently we try to make up for a lack of joy by enjoying the material possessions that science and technology and the market economy can spew forth with abandon.

Take the nuclear family, one of the principal means for organizing human interactions. Recall poet Philip Larkin's famous line: They fuck you up. your mum and dad.' But they had their problems too: Victorian upbringing, a culture of possessive individualism that has evolved from what social critics called alienation to what a more psychoanalytically oriented critique calls narcissism - learning to live with alienation and love it by loving only oneself.

Surely there must be a better way to raise hairless monkeys. But what might it be? Maybe if mom and dad were less alienated, less over-worked, less tired at the end of the day … then earth might be fair. If more fathers and mothers raised children who retained a sense of wonder, and a sense of humor; if mom and dad could avoid the descent of their own love into squabbles over what he said she said about what he did … then earth might be fair. But until then we will remain locked in the same old Freudian/Frankfurt School family drama that extends from exploitation in the workplace to oppression over the breakfast table … if there is a breakfast table and not a staggered grabbing for Fruit Loops and Pop Tarts on the way to work.

Despite the wonders of modern science there never seems to be enough: enough love, enough attention, enough respect, enough dignity. So we make too much of the things we know how to make: war, toxic waste, bad television. Perhaps there is a better way to organize our lives and our relationships, one that does not pit the demands of work against the delights of love. Perhaps there is a way to reconstruct our world, as Brown and Lyman invite us to do. But in doing so we cannot base our reconstruction on the firm foundations of science. Nor will we be able to depend on transcendent norms as a measure of the better. Instead, like sailors rebuilding our ship at sea, we must fashion our new world from what we have at hand: our existing legal system, our existing healthcare system, our existing educational system, our existing families. So the job is not altogether Utopian.

But let us not forget that radical change for the better *is* possible. Dictatorships in Haiti, the Philippines and Nicaragua *have* been toppled in the last decade - which is not to say that their successors are without problems. Real per capita disposable income in the United States *has* grown over ten-fold in the twentieth century - which is not to say that we know what to do with the money. Nor should we ignore real declines in the same figure over the past fifteen years for the lower quintiles of the population. Finally and most emphatically, the fall of the iron curtain and the end of the cold war must offer lessons of hope regarding other seemingly intractable issues.

I can recall spending a week at a retreat in Wyoming with a very brainy group from the John F. Kennedy School at Harvard, plus assembled experts like Robert MacNamara, Representative Les Aspin, and a former ambassador to Austria, all gathered in the early 1980s to entertain alternatives to nuclear deterrence fifty years into the future. I had been asked to help with the methodology of alternative scenario development. But in the course of five days of intense discussion I was unable to bend the collective wisdom of that group to entertain seriously any scenario that would contain less than 50 percent of the then current force structure over the next fifty years - still enough megatons to make the rubble bounce

and render the earth uninhabitable. Less than ten years later we now take for granted what was then unthinkable to some very good thinkers. Surely there is a lesson here somewhere about the impotence of hope among intellectuals when confronted by the power of entrenched acceptance of the intolerable. We intellectuals would err on the side of pessimism rather than be accused of naivety. World-weary pessimism seems so much more intellectually respectable than even the best educated hope.

But I would argue - and it has been the aim of this chapter to do so - that the fashionable face of all-knowing despair is finally immoral. Granted, the bubble-headed optimism of Pangloss and Pollyanna arc equally immoral. A refusal to look at poverty or oppression can contribute to their perpetuation; but so can an intellectual commitment to their inevitability.

So let us entertain, at least for a moment, a scenario that builds on what we are learning from the human sciences - a scenario that exhibits some of the features of an emergent paradigm. Imagine, if you will, a *sublimation of(he economy.* In fact it is already happening if you can see it as such. The industrial economy of the production and consumption of material things is giving way to an information economy of ephemeral entertainments and services. This is not news. But the *interpretation* of this epochal shift in the way we earn our daily bread has not yet been fully developed in terms of the Semiotic Turn evident in the human sciences. Instead the slogan, *AH that is solid melts into air,* has been interpreted, from Karl Marx to Marshall Berman, as a lament over the loss of normative meaning that the process of modernization has wreaked upon stable cultures. But once we decouple the normative from the eternal, once we fully accept *the fall into time,* then there is a possibility - worth entertaining as one among several scenarios - that the statement, *All that is solid melts into air,* might cease to be interpreted as a lament for lost certainties and become instead an announcement of the advent of the sublime.

Sublimatio was the term the alchemists used for the process by which the philosopher's stone was heated to a point that it melted into vapor - air - without ever passing through the intermediate liquid state. Sublimation was later taken by Freud to mean the process by which erotic and aggressive instincts are redirected into the creation of art, culture and religion - thus allowing him, under the influence of a mechanistic-physicalistic paradigm, to then *reduce* the products of culture to *nothing but* redirected instinctual energy - art as so much smeared shit. But the metaphor of sublimation - and, like the alchemists, I take it only as a metaphor - can just as well be taken as an access to the sublime. When the mechanistic-physicalistic paradigm is shifted by the Semiotic Turn, then there is an opportunity for reinterpreting the efficacy of the sublime *all the way down* rather than reducing culture to the redirection of base instincts all the way up.

In talking this way about the sublime, I know I risk gaining allies I don't want. I do not want the support of New Age enthusiasts who think that the sublime is some esoteric realm that can be accessed by incantations, crystals, or yet another seminar on the Course in Miracles. Nor do I hope to please supporters of that ole' time religion. Virtually every form of orthodox religion - with the possible exception of Zen Buddhism, whose supporters deny that it is a religion - seems to me to be subject to charges of childishness, wish fulfillment, and an indulgence in magical thinking that is inconsistent with the real contributions that science has made to our interaction with our environment. Whatever religions may have contributed to social organization and psychological well-being in the pre-modern world, in our postmodern world their multiplicity means that they are in danger of doing more harm than good. We don't need more *jihads.*

No, the process of sublimation we are now undergoing owes little or nothing to an already completed, eternal sublime. Nor can it be reduced to a redirection of instinctual or material foundations. Instead it is a self-referential, emergent, creative lifting by the bootstraps that generates meaning *where there was none.* It is not impossible, nor are there any guarantees. This is the bane and the blessing of human freedom in the realm of the sublime.

Imagine a scenario in which educational reform was finally taken seriously, not as the imposition of some new religion on the young, but as the cultivation of human potential. The tools are at hand, but today we have not yet applied those tools in our schools. Instead we expose our children to teachers who are drawn from the lowest quintile of our universities' graduating classes. As they say, those that can, do; those that can't, teach. But imagine what could happen if education became the cause of the opening decade of the new millennium, much as civil rights and the Vietnam war preoccupied the 1960s, or feminism and the environment motivated so many in the 1970s, or greed obsessed the 1980s, or globalism and information technology the 1990s. It could happen. Social agendas do change.

If education became the cause of the 1990s, if teachers' salaries were raised and the respect paid to educators enhanced, then by the turn of the century we might be graduating students who were truly skillful, not just in the manufacture of physical goods, but in the creation and consumption of the sublime. And how much lighter on the earth such an economy would be!

The spread of industrial manufacturing to produce more *things* puts our environment at severe risk. This is not news. But only now are we beginning to see that economic growth need not be correlated with energy demand or the exploitation of non-renewable resources. In our work with one of the nation's largest electric utility companies, Pacific Gas and Electric, Global Business Network has helped to fashion scenarios that show PG&E's future as dependent not on generating and selling *more* energy, but on building profitability by helping their consumers consume *less* energy. PG&E can sell what Amory Lovins calls *negawatts* rather than megawatts. PG&E can sell conservation and still stay in business. Paradigm shifts are possible, even for upper management.

Better education can lead to more efficient use of energy. And there are technologies under development that can help clean up the mess we have already made. Nano-technology - the technology of manufacturing at the molecular level - may be able to generate mini-machines that eat toxic wastes or transform them into useful resources. It is possible, according to Eric Drexler, author of *Engines of Creation.* The possibilities were at least sufficiently intriguing to motivate Peter Schwartz, president of Global Business Network, to host the first international conference on nano-technology. Peter, by the way, wasn't paid for this task. He did it because he saw in nano-technology the possibility of a better future. He cares. This is what makes him a good futurist.

Bio-technology promises similar breakthroughs. Of course it is possible that we will release some horrible mutation on the face of the earth. Negative scenarios must be developed as cautionary tales. There is a Faustian hubris to scenarios that depend solely on techno-fixes. But there are some techno-fixes that will be required if this scenario is to advance from its beginning through its middle toward an end.

If this scenario's beginning depends on vast improvements in our educational system, its middle would chart the application of intelligence to many of our more or less technical problems: energy, the health of the environment, the health of individuals. There are feedback loops in this scenario, vicious circles that turn virtuous. Today too many children show up at school too sick and malnourished to learn anything at all. Tomorrow's students might be better fed, healthier, and therefore better able to learn how to stay healthy. It is possible.

It is also possible that the sublimation of the economy will lighten the burden on the earth that our industrial economy creates in the first place. *Pace* Paul and Anne Ehrlich, who trace most of the earth's ills to over-population, perhaps a human species less bent on material possessions and material consumption might be able to raise rather than lower the carrying capacity of the ecosphere. In order to contemplate such a scenario one must pass through a paradigm shift from a mechanistic-energetic physics of reality, through the Semiotic Turn, to the economics of the sublime. For only on the other side of that paradigm shift does one begin to escape the law of the constant conservation of matter and energy. So I want to return to the centrality of the Semiotic Turn as an interpretation of the information revolution, and to the fall into time as an aspect of our self-understanding of human freedom.

I know of no law of the constant conservation of laughter, or any limitation on joy. I see no reason to limit our sense of what is possible for the distribution of delight. These human *goods* need not be subject to a law of constant conservation. If I have more, you needn't have less. Quite to the contrary, there might be a virtuous circle of mutual reinforcement in the spread of sublime delight, like a ripple of laughter that gains momentum in a crowd. According to the economics of the sublime, there *can* be *enough* for all.

I know that this scenario is beginning to sound impossibly Utopian, like something sprouted from the shores of California where the loco-weed grows. So I will hasten to add something about the problems that have *not* been solved by the middle of this scenario.

There is no universal understanding of the best way to live a deeply fulfilling human life. On the contrary there is a rich and variegated ecology of customs and mores. Further, there is a constant risk of *transgression.* Precisely to the extent that people have learned that *being good* is not necessarily about conforming to timeless norms, but rather more about exercising human freedom in the service of creativity and delight, there is a constant danger of decadence. For like creativity in art, creativity in life sometimes requires a bending of the rules for the sake of beauty. But not all novelty in art is successful. Some slides over into the decadent and ugly. The enlightenment rationality of the Minuet will slip over into Wagner, and from thence to jazz and rock 'n' roll. Next thing you know you get heavy metal. I love the Grateful Dead but I draw the line at Metallica. How is one to know where to draw the line?

There are no rules for how to break the rules safely, though *games* can be seen in this context as ways of limiting play to only those moves that are safe, moves that limit risks to contestants. The spread of human freedom means a spread of risk taking, and risks are not risks if they never fail. There will be failures, and there will be the need for means of insuring that failures are not too disastrous for too many people. Maybe we will never get a full insurance dividend, not unless we can avoid experiments on the scale of the USSR. Experiments in new systems of social and economic organization should be smaller, and fail-safe mechanisms far beyond my imagination will need to be built in, checks and balances to rival the inventiveness of the Constitution. For, as I've said, the spread of human freedom means a spread of risk taking, and risks are not risks if they never fail.

This scenario is not Utopian because evil will not have been eliminated. On the contrary, the close bond between freedom and transgression means that some confrontations with evil are virtually inevitable. Though it may sound as perverse as Freud's uncovering of infant sexuality, I see the origin of evil in the play of innocents, in the horsing around that got too rough, in the joke that went wrong. 'I didn't mean it that way,' he said. The Semiotic Turn can end in tears.

Watch the play of cute little kittens and you will see a rehearsal for the brutality of the tiger. See in the tussling of adorable little puppies the vicious attack of the wolf. But there is no viciousness or brutality in the animal kingdom, really. The moral overtones come only from minds that can add an interpretation of cruelty to what, in nature, is a mere act of survival. It takes a twisted mind to turn nature's metabolism into acts of evil. It takes a Semiotic Turn to add cruelty to nature.

It takes a twisted parent to convince a child that he is 'being mean' to his younger sister when all he was doing was playing. This move is called 'attribution' among psychologists. It's one of the ways that mum and dad can fuck you up. 'Don't pinch your sister' is one thing. 'Don't be mean' is another. By the latter I may learn not only how *not* to be mean, but also that, deep down, I *am* mean. Innocence disappears so quickly.

So the very thing that renders the sublimation of the economy possible - the Semiotic Turn - also renders transgression unto evil virtually inevitable. Earth might be fair, and almost all glad and wise, but human beings will not be angels, and evil will not be eradicated.

But human beings can be more truly human, more free, more creative, and less subject to the uniform necessities of nature. We have struggled up through the realm of necessity and now stand, more and more of us, on the brink of the realm of freedom. The shift to an information economy, the sublimation of the economy, is the crucial instrumentality for this transition.

Precisely because the very nature of information is to differentiate, precisely because information theory defines information as a difference that makes a difference - news, not noise or redundancy - an information economy can thrive only where mass-market conformity breaks up into highly differentiated niche markets, even unto markets of one.

There was a fine match - a paradigmatic coherence - between industrial mass-manufacturing and the conformist values of the mass market. If keeping up with the Joneses meant having the same car, and the genius of the industrial economy lay in producing lots and lots of the same car, then the match between supply and demand was, as it were, made in heaven. But this match is coming unglued with the transition from the industrial to the information economy. As Arnold Mitchell, creator of SRI's Values and Lifestyles program, used to put it, the Belongers (we used to capitalize the names of our lifestyle segments) liked to 'fit in', but those who lead the new lifestyles 'prefer to stand out rather than fit in'. Individuation is the name of the game in the new economy. But individuation is (a) precisely what becoming more human is all about according to every wise psychologist from Jung to Eric Ericson, and (b) precisely what an information economy, as opposed to a mass-manufacturing industrial economy, is prepared to deliver.

The VALS program was all about charting the breakup of the mass market into segments or lifestyles that were not, strictly speaking, better

I know of no law of the constant conservation of laughter, or any limitation on joy. I see no reason to limit our sense of what is possible for the distribution of delight. These human *goods* need not be subject to a law of constant conservation. If I have more, you needn't have less. Quite to the contrary, there might be a virtuous circle of mutual reinforcement in the spread of sublime delight, like a ripple of laughter that gains momentum in a crowd. According to the economics of the sublime, there *can* be *enough* for all.

I know that this scenario is beginning to sound impossibly Utopian, like something sprouted from the shores of California where the loco-weed grows. So 1 will hasten to add something about the problems that have *not* been solved by the middle of this scenario.

There is no universal understanding of the best way to live a deeply fulfilling human life. On the contrary there is a rich and variegated ecology of customs and mores. Further, there is a constant risk of *transgression.* Precisely to the extent that people have learned that *being good* is not necessarily about conforming to timeless norms, but rather more about exercising human freedom in the service of creativity and delight, there is a constant danger of decadence. For like creativity in art, creativity in life sometimes requires a bending of the rules for the sake of beauty. But not all novelty in art is successful. Some slides over into the decadent and ugly. The enlightenment rationality of the Minuet will slip over into Wagner, and from thence to jazz and rock 'n' roll. Next thing you know you get heavy metal. I love the Grateful Dead but I draw the line at Metallica. How is one to know where to draw the line?

There are no rules for how to break the rules safely, though *games* can be seen in this context as ways of limiting play to only those moves that arc safe, moves that limit risks to contestants. The spread of human freedom means a spread of risk taking, and risks are not risks if they never fail. There will be failures, and there will be the need for means of insuring that failures are not too disastrous for too many people. Maybe we will never get a full insurance dividend, not unless we can avoid experiments on the scale of the USSR. Experiments in new systems of social and economic organization should be smaller, and fail-safe mechanisms far beyond my imagination will need to be built in, checks and balances to rival the inventiveness of the Constitution. For, as I've said, the spread of human freedom means a spread of risk taking, and risks are not risks if they never fail.

This scenario is not Utopian because evil will not have been eliminated. On the contrary, the close bond between freedom and transgression means that some confrontations with evil are virtually inevitable. Though it may sound as perverse as Freud's uncovering of infant sexuality, I see the origin of evil in the play of innocents, in the horsing around that got too rough, in the joke that went wrong. 'I didn't mean it that way,' he said. The Semiotic Turn can end in tears.

Watch the play of cute little kittens and you will see a rehearsal for the brutality of the tiger. See in the tussling of adorable little puppies the vicious attack of the wolf. But there is no viciousness or brutality in the animal kingdom, really. The moral overtones come only from minds that can add an interpretation of cruelty to what, in nature, is a mere act of survival. It takes a twisted mind to turn nature's metabolism into acts of evil. It takes a Semiotic Turn to add cruelty to nature.

It takes a twisted parent to convince a child that he is 'being mean' to his younger sister when all he was doing was playing. This move is called 'attribution' among psychologists. It's one of the ways that mum and dad can fuck you up. 'Don't pinch your sister' is one thing. 'Don't be mean' is another. By the latter I may learn not only how *not* to be mean, but also that, deep down, I *am* mean. Innocence disappears so quickly.

So the very thing that renders the sublimation of the economy possible - the Semiotic Turn - also renders transgression unto evil virtually inevitable. Earth might be fair, and almost all glad and wise, but human beings will not be angels, and evil will not be eradicated.

But human beings can be more truly human, more free, more creative, and less subject to the uniform necessities of nature. We have struggled up through the realm of necessity and now stand, more and more of us, on the brink of the realm of freedom. The shift to an information economy, the sublimation of the economy, is the crucial instrumentality for this transition.

Precisely because the very nature of information is to differentiate, precisely because information theory defines information as a difference that makes a difference - news, not noise or redundancy - an information economy can thrive only where mass-market conformity breaks up into highly differentiated niche markets, even unto markets of one.

There was a fine match - a paradigmatic coherence - between industrial mass-manufacturing and the conformist values of the mass market. If keeping up with the Joneses meant having the same car, and the genius of the industrial economy lay in producing lots and lots of the same car, then the match between supply and demand was, as it were, made in heaven. But this match is coming unglued with the transition from the industrial to the information economy. As Arnold Mitchell, creator of SRI's Values and Lifestyles program, used to put it, the Belongers (we used to capitalize the names of our lifestyle segments) liked to 'fit in', but those who lead the new lifestyles 'prefer to stand out rather than fit in'. Individuation is the name of the game in the new economy. But individuation is (a) precisely what becoming more human is all about according to every wise psychologist from Jung to Eric Ericson, and (b) precisely what an information economy, as opposed to a mass-manufacturing industrial economy, is prepared to deliver.

The VALS program was all about charting the breakup of the mass market into segments or lifestyles that were not, strictly speaking, better

or worse than one another, just different. But now the segments are shattering still further as individuals internalize the chaos of postmodern mores into the depths of their souls. There was a time when Achievers could be trusted to behave in all situations like Achievers, and Belongers would remain true blue Belongers, and the try-anything-once crowd, the segment we called Experientials, could be trusted to shop around. But now you see people who are Achievers by day and Experientials by night; ladies who shop at Bloomingdales one day and Price Club the next; men who wear black tie one night and a black motorcycle jacket the next. In short, people aren't staying true to type. A marketer's nightmare: people are becoming less predictable.

But this unpredictability should be cause for joy among humanists because it is precisely this unpredictability that we can just as well interpret as freedom flexing her muscles. The old shell of oppressive conformism is breaking. All that is solid melts into air? The constriction of Smalltown's norms for behavior is being broken all over the globe and, one by one, individuals are emerging from the realm of necessity - what nature or nurture tells them they have to do - and they are stepping forth into the realm of freedom. And a new technology, a technology whose essence is to differentiate, will be there to greet them.

This is where we will get the advertising dividend. The old style of advertising depended on broadcasting, a one-to-many communication that blared the same message, over and over again, at everyone. Stage two - the stage that VALS was there to accommodate - was the stage of the partial breakup of the mass market into segments. The first application of the information revolution to mass manufacturing allowed for shorter production runs. Economies of scale could be chopped into smaller pieces that, still economically, could satisfy niche markets. Advertising was then customized to tailor the right message about the right product to the right segment through the right medium. This was called narrowcasting. Advertise MacDonald's and pick-up trucks on Saturday afternoon network telecasts of the bowling championships. Save the BMW ads for the reruns of *Brideshead Revisited.*

We arc still at a stage somewhere between broadcasting and narrowcasting, somewhere between an industrial and an information economy, somewhere between what I have arbitrarily labeled stage one and stage two. But a perfectly plausible normative scenario can be drawn for stages three and four. People, human beings, are pressing beyond mass conformity, and on beyond niche segmentation, to segments of one. Individuation. And information technology is capable of following them there. Computers are perfect for the task. Orwell's *1984* was wrong in this respect. Assembling and recording lots of information about individuals need not mean Big Brother's invasion of your privacy. Instead it can mean the careful tailoring of the traffic of marketing information so that I

receive information about all and only those things that my purchasing behavior shows I'm interested in.

We already see the first signs of this transition, albeit in a form that any fool can see through, namely, the junk mail that shows up announcing that, yes. you James Ogilvy have been chosen .. . But this is just the first adolescence of information technology at work. Stage three follows broadcasting to the mass (stage one) and narrowcasting to the few (stage two) with communication to segments of one (stage three). The American Express bundles of one-page catalogs are subtler than the mailings from Publishers' Clearing House. Amex doesn't plaster your name all over everything. But your bundle is not the same as my bundle. Computers have seen to that.

Soon, I don't know how long it will be, I will no longer receive the Sears catalog, or even more specialized product catalogs. I will receive the James Ogilvy catalog. Stage four: narrow-catching (a word Stewart Brand came up with). This is what American Express is trying to give me. They just haven't got enough information about me yet. But when each of us can receive our own personalized catalog, then we will be ready to distribute the advertising dividend. Then the offensive blare of persuasion will give way to the quieter hum of real information - differences that make a difference to individuated individuals. Then earth might be fairer when fewer billboards deface the countryside or the city skyline. It is possible. This is the direction in which information technology is taking us, and human freedom, I think, wants to go there.

Of course human freedom is very playful, even capricious. And as I've mentioned, in the play of innocents the seeds of evil and transgression are born. But as playwright and philosopher, Friedrich Schiller pointed out in his *Letters on the Aesthetic Education of Man,* 'Man is most truly human when he plays, and when he plays, most truly man.' In our playfulness we will keep remaking human life as we go along, better and belter for the most part, but occasionally worse.

The fall into time will be more widely acknowledged. Imagine a world where people were able to swim in the tides of change rather than drown in confusion. Employers will be looking for swimmers, people who can keep up with time's current. They are the best at coping with change. In a scenario where most people were comfortable with a certain amount of change there would be less reactionary insistence on the sanctity of tradition, and less certainty about the justification for punishing transgressors.

The democratization of meaning in this scenario will take the form of an evolutionary survival of the fittest interpretations of family life, romance, success. There will not be just one pattern of perfection toward which all would aspire in some recrudescence of industrial standardization. [...]