

## Chapter 1

# Technology and the Biasing of Conduct

### *Establishing the Grammar of Our Narrative*

**B**alance is hard to maintain. Things are never “just right” for long. For most of us, these are lessons learned very early on in life. The succor we took from our mother’s breast was only temporary. The vibrant clarity of our awareness upon awakening from a nap gradually and yet invariably diminished, replaced by an unsettling discomfort—sometimes a dull lethargy and at others a buzzing impatience. In fact, nothing in our circumstances lasts forever. Like it or not, things change.

By and large, this means trouble. No matter how hard we work at reaching a point of satisfaction, something inevitably interrupts, our satisfaction dissolves. The state of things being “just right” is quite delicate—hard to attain and very easily disturbed. In a very general sense, technologies are value-laden patterns of conduct oriented in such a way as to successfully correct or forestall trouble. That is, technologies are meant to insure an easier time of achieving and maintaining balance, helping us keep things as close as possible to being “just right.” The liberation rhetoric used to market new technologies is thus not entirely gratuitous. Technology is supposed to free us from some measure of worldly exigency, supplying us with tools for intervening in the process of the world on our own behalf. At the very least, technology should hold disruptions at bay and grant us some advantage in recovering from those that it cannot. How a technology does this will depend on the presuppositions of its basic orientation.

In general, our conduct can effectively be seen as oriented either socially or societally—either toward improvisation with an aim of realizing difference-maintaining harmony, or toward regulation with an aim of realizing universal, difference-eliding agreement. On the one hand, our communal narration—the dramatic dimensions of our interdependence—will shift in the direction of intimacy and the unexpected, and on the other hand in the

direction of institutions and certainty. Likewise for our technologies. Socially constituted technologies orient us toward an increased sensitivity for relational nuances and an enhanced capacity for improvisationally and creatively responding with environmental uncertainty. By contrast, societally constituted technologies will orient us toward the increasingly precise manipulation of objects and an enhanced ability to dictate the terms of our environments. As a shorthand, we can characterize these respectively as technologies of contribution and technologies of control.

Quite clearly, these disparate types of technical development not only reinforce incompatible conceptions of order, they work toward sedimenting quite definite and disparate attitudes about the nature and attainment of freedom and the ideal human life. In fact, technology provides a highly reliable index to a given society's understanding of freedom and personhood and, because of that, an insight into the organization of its world. All technologies are thus deeply political. As systems of value that are definitive of unique worlds, they are also cosmogonic, even religious. Like every religion, a technology is the cultivation of a particular and overtly ideal way of intercourse with the world. But unlike religions, technologies present this ideal in its raw and unjustified form. They are entirely obvious—so much so that it is often easiest to see what values they promote by attending to the broader contexts in which they are rooted, and in which they are either decaying or thriving. In the same way that we need to look into the furthest distance to see the color of the air surrounding us, we need to take a very broad and deep view in order to see how our technologies color our narration, our lives.

I'd like to do that in what follows over the next several chapters. This will mean combining some specific examples with some very sweeping generalizations—so sweeping, in fact, that at times they will border on caricatures. If my greatest concern lay in “being right,” this would be disastrous. Recalling the dictum that the only thing worse than making gross generalizations is failing to do so, I'll be more than happy if we just manage “turning right.”

#### PRIMORDIAL TECHNOLOGY IN THE DRAMA OF CHILDHOOD

It seems reasonable that a culture's most basic values and its root presuppositions about personhood are likely to show up with greatest clarity in the practices surrounding the care and education of infants and the very young. And so, I'd like to begin investigating the technical prejudices of our understanding of freedom and personhood by unpacking two typical (albeit “fictitious”) domestic vignettes involving a two-year-old child, her mother, and a new rubber ball.

Nearly horizontal rays from a late afternoon sun are shining through the aluminum railing bordering the outer curve of a high-rise apartment balcony. The uprights cast shadows that angle across the outdoor carpet and then make a sharp turn up the wall. Sitting among the shadows are a toddler and her mother. From behind her back, the mother produces a new ball. Its bright colors seem to pick up the glories of the coming sunset and hold them captive. "What is this?" she asks her daughter, who replies by stretching out her hands. Holding the ball closer to her breasts, the mother instructs her daughter to say "ball." This takes a while, but finally the daughter complies. Rolling the toy through the bands of dark and light toward her daughter, Mother says, "Now you roll it back to me." This simple game continues for a minute or two with much squealing and bubbly laughter from the little girl who then suddenly stands up with the ball and hides it behind her back. Mother asks her to roll it back, but the girl shakes her head, slowly at first and then as her mother repeats her request, even more demonstratively. When her mother tries sneaking a hand behind her daughter's back to steal the ball, the girl shrieks and runs to stand beside the rail, her smile full of mischief. When her mother advances, she turns and throws the ball over the railing and without watching to see where it lands, runs past her mother to stand against the sliding doors leading into the family room, both her hands hidden behind her back, squirming with delight.

What happens next? If the mother is a typical American, chances are the first words out of her mouth will include "no" (most likely repeated two or three times), "that wasn't nice," and "now look what you've done." The new ball is lost. Depending on the mother's mood and temperament, she may slap her daughter's wrist while directing the girl's attention over the rail and down into the parking lot below. "You could have hurt someone," she informs her. She may even add that her daughter was "a bad girl" for throwing away the ball. Their playing has stopped being fun. The daughter may cry. The mother reminds her that she is the one who threw the ball away and that it's gone forever now. "I hope you learn something from that," she adds, pulling her daughter close to stroke her hair down over her heaving shoulders. "Maybe if you promise to be a good girl, I'll get you another ball tomorrow."

In a traditionally East Asian family—let's say Japanese—the scene plays rather differently. To begin with, when the mother produces the ball, she holds it up to the westering light and admires its colors. Bringing it back down, she extends it toward her daughter with one hand supported by the other—a gesture of offering. If her daughter understands the ritual context, she will receive the ball with a complementary gesture and say "thank you." The mother will ask for the ball in return and also say, "thank you" when it's returned.

This is a deceptively casual exchange. In fact, it encapsulates one of the most important and basic differences between traditional East Asian and

American cultures. In learning language, what is prioritized in America is vocabulary—being able to name things. By contrast, for example, what comes first in Japan is instruction in the social grammar of communication. Names are subordinated to verbal exchanges that announce changes in and nuances of relationship. In short, words are not first and foremost *about things*, but *specific ways of ordering conduct*. Thus, when Confucius, the most famous and revered East Asian teacher, was asked by his students to tell them the meaning of authoritative personhood or *jen*—the conceptual pivot of his entire philosophy—he refrained from ever giving them a definition. In diametric opposition to the Platonic insistence on defining essences, Confucius related paradigmatic stories. Knowing what a word means is not knowing *what it signifies*, but *how to conduct oneself* in situations where it is used. When the Japanese mother asks her daughter to roll the ball back, the emphasis will be on how the ball connects them through play—not on the ball as an independent thing, but as a facet of their relationship.

When the daughter tosses the ball over the rail and escapes to the doors, the mother pauses. Staring over the edge of the rail to see if she can locate the ball, our Japanese mother takes her time responding to her daughter's conduct. Consciously or unconsciously, she is looking for their lost connection. Finding the brightly colored toy at rest in the grass surrounding a flower bed on the edge of the parking area, she motions her daughter over and directs her attention below. The ball is now what allows them to stand side by side and contemplate the space separating them not just from the ball itself, but from the play that it had been mediating. Perhaps the mother picks up a feather from the carpet and tickles her daughter's nose with it before holding it ceremoniously over the edge of the rail and dropping it. Mother and daughter follow the winding, spiraling path the feather takes until it too rests in the grass far below.

Japanese children are not routinely told “no.” While we assume that saying “no” to our children is necessary if they are ever going to learn ‘right’ from ‘wrong’, the Japanese believe that telling a child “no” will only train him or her to say “no” back—often with absolutely no discrimination or understanding of how it changes the relationship they are interrupting with it. So the Japanese tend to elide “no” from their child-educating vocabulary. Instead, they say “yes” to their children as often as possible, granting most wishes, and carefully guiding the attention of their children on to what can be granted when they ask for something they cannot have. This is believed to train children in the art of generosity and respectful compliance or social flexibility.

The American mother emphasizes what is “lost forever”—the ball as a *thing*, playing as a *state* of happy distraction. The Japanese mother stresses the continuity of her relationship with her daughter. Nothing is broken irreparably by the distancing of the ball even though a change occurs in the

quality and orientation of the conduct through which mother and daughter are articulating who they are with and for one another. The communicative model on the American balcony is that of discourse—literally a “flowing apart” of mother, daughter, and ball. The daughter realizes her separation and difference from the ball, which is a thing that can be “lost forever.” She also realizes a difference from her mother who has chastised her behavior and shown disapproval, repeatedly uttering “no” and even punctuating the finality of the word with a raw physical contact. The hair-stroking lets the daughter know that she is still loved, but also that the pain and loss she is feeling are part of her mother’s will. ‘Right’ and ‘wrong’ hurt.

By contrast, the communicative model on the Japanese balcony is one of concourse or “flowing together.” As in the American situation, there is a hierarchy, but there is no contest of wills. Neither the world at large nor the things and people in it are placed in an adversarial role. The American daughter may beg to go down the elevator to retrieve the ball, but the mother is likely to say “no” as a way of making “the consequences” clear and as a way of asserting her place as the one in control—the arbiter of moral reward and punishment. This, after all, is the only way her daughter will learn to act like a “good girl.” The Japanese mother works hard to avoid the conflict and loss of intimacy that comes with opposing or divergent wills. She stresses the pattern of her relationship with her daughter as something ritually performed. What matters most is not individuating wills and responsibilities and consequences, but deepening and extending their partnership.

It is, of course, possible to object that with modernization and the growth of worldwide mass mediation, the “Japanese” version of the above vignette might not play so disparately. Contemporary Japan is a consumer society like no other, and that this will have had an effect on the Japanese family is unquestionable. However, as evidenced in Tobin and Davidson’s, *Preschool in Three Cultures* (New Haven: Yale University Press, 1989), in broad outline, the communicative presuppositions proper to traditional Japan are still very much applicable. Using case-study comparisons of early education in the People’s Republic of China, Japan, and the United States, Tobin and Davidson highlight the extent to which the primary function of early education in each of these cultures can effectively be seen as a modeling of culturally approved strategies for problem solution, conflict resolution, and character development. But more importantly, their studies evidence the extent to which there are radically divergent assumptions about what it means to be a ‘teacher’ or a ‘student’ in these three cultures. And so, while all preschool training can be described as “character-building” activity, there is much less commonality about what “character” consists of than we are likely to have ever imagined. Gertrude Stein’s remark about roses notwithstanding, a person is not always a person.

As evidenced in the raging debates about abortion rights, the American view is that we are born persons. That is, our humanity is contemporaneous with our entry into the world. That we are embroiled in a mortal debate about when this “entry” occurs—at conception, at quickening, with viability, at twelve weeks or upon delivery—reflects our belief that humanity and personhood are basically inherent. East Asian cultures do not share this view and it is one of the principal reasons that human rights conversations with them are so difficult. In these and indeed many of the world’s cultures, our personhood and even our humanity are not given, but acquired. That is, we become persons, and in particular human persons. Personhood is not a minimal fact, but an achievement—a mark of some degree of excellence in conduct. Child-rearing practices in American and East Asian cultures reflect this divergence in how personhood is conceived—as an inviolable ‘state’ or as a particular quality of ‘relationship’.

Inevitably, a profound resonance obtains between how we are conceived as persons, our understanding of freedom, and the kinds of technology we develop and maintain. When persons are seen as distinct, manifestly isolated biological/factual events rather than as lifelong and irreducibly relational processes, it is only natural that freedom be constituted as a status—a particular standing we possess. The antipathy of nature and nurture that is so much a part of our ways of grappling with differences in our identities is a function of the same basic values that associate personhood with individuality and freedom with choice. They also underlie our broad predilections in politics, religion, and technology.

In many societies—and as illustrated in the Japanese mother-daughter narrative—the primary value-orienting conduct is that of cooperation or mutual contribution. Personal training—that is, training in the art of conducting ourselves as persons—emphasizes attention and appreciation. In practice, this means a valorization of virtuosity or the capacity for sensitive improvisation. By contrast, conduct in most Western societies is predominantly oriented by an intense valuation of regulation or control. Instead of personal training focusing on qualities of attention, it emphasizes will and the management of activity and experience. While often quite subtle, the disparity has immense ramifications.

#### FREEDOM AS A DIALECTIC OF PROJECTING SELF AND OBJECTING WORLD

While a newborn is typically considered a person in a minimal sense in the West, it’s popularly understood that a child begins developing a distinct personality roughly between the ages of twelve and twenty-four months. This is usually referred to as entering “the terrible twos”—an attainment synchro-

nous with the child's rapid acquisition of a "will of his or her own." As the popular phrase suggests, it is a trying period, a time when children first learn to vehemently and verbally disagree with and consciously try to control their environment—and so their parents, caretakers, and siblings. It is when children begin saying "no"—loudly and clearly distinguishing themselves from the wills and ways of others and the world at large.

This "no" is in fact the outward manifestation of an assertion of self over and apart from other. It is the birth of a sense of independence. Socialization consists of learning to properly contextualize this independence—to put brakes on the assertion of egoistic will. There is from the beginning, then, a sense in our tradition that actual (as opposed to ideal) freedom occurs as a dialectic between self and other, between will and resistance, between the absolute and relative.

I would like to suggest that this fundamentally adversarial relationship is crucial not only to the awakening of the "Western" personality, but to the identity of our preferred technologies, political systems, economies, and religious systems. In a word, it focuses a set of values that is pervasive in our cultural tradition and that manifests in the virtual synonymy of freedom, independence, and willful control over circumstance. There is, of course, no way to provide anything like an exhaustive proof of this claim in the scope of a single chapter or even a single book. To begin with, our tradition is not a lineage in any literal sense, but a quilting of many traditions taken up in whole or part. Very often, the roots of Western civilization are said to lie predominantly in Greece and its flowering in the emergence of a Christian Europe, but that is a vast oversimplification. Not only did Egyptian and Semitic elements go into the making of Greek and early Christian thought and practice, but the course of our culture's evolution has throughout been dialogic. Thus, the medieval period saw the incorporation of numerous pagan beliefs and ideals into Christianity, and the birth of modern science can be traced in large part to the Indian invention of the zero and the work of Andalusian Muslims and Jews working with Greek and Arabic texts not widely available in the rest of Europe. Nevertheless, there is a remarkable consistency in the kinds of fabric that have been incorporated in the quilt of the "Western world"—a distinctive conceptual aesthetic, especially in the portrayal of freedom.

For example, it has almost unilaterally been supposed in the dominant European/Western traditions that freedom entails perfecting of our independence. Philosophically, this can be traced back at least as far as the Platonic valorization of a personal inquiry into and revelation of Beauty and the Good—an ascent of the soul from the obscurity and confusion of sensed particulars to a direct apprehension of the eternal and universal ideas of which they are but pale renditions. As the famous myth of the cave

illustrates, we are imprisoned in our “natural” estate, living in an impoverishing realm of shadowy forgetfulness. Freedom means rejecting our immersion in and dispersion among the myriad things of nature and so recovering from the multiplicity and dependency into which they’ve driven us. This ideal has evolved over the millennia, but has remained remarkably consistent in its broad outlines.

Thus, the evolution first of “natural philosophy” and then scientific inquiry has run parallel to a movement away from systems of correspondence—and so continued embeddedness in the world—to the isolation of universal laws and a statistical analysis of worldly events. Indeed, the ideal vantage adopted by science so attenuated the importance of our own worldliness that until the unsettling implications of quantum theory began to be understood, it was widely supposed that we could enjoy a “view from nowhere” and (given sufficient knowledge of initial conditions) rationally calculate the shape of the future. Even where the possibility of success in this venture has been systematically denied—as in some of the virulent, contemporary strains of relativism—the *ideal* of independence in and from circumstances remains. The relativist may deny the possibility of some realizable absolute truth, but freedom is no less a function of the independence of the individual than in Platonic eschatology—even if it only comes down to independence from the opinions of others.

Religiously, the association of freedom and some level of independence is already present in the biblical account of the “fall of man” where Adam is said to have chosen wrongly, eating the forbidden fruit in pursuit of his own ends. Since then, religious eschatology has pivoted on choice or the freedom of our will. But, whereas the Judaic understanding was that the tribes of Israel were the locus of independence and so of freedom as well, quite early in its development—and no doubt in part due to the infiltration of Greek ideals—the Christian view of salvation became explicitly individualistic. Divinely guaranteed that we enjoy an absence of any ultimate bodily or spiritual constraints on our choosing either salvation or damnation, each one of us came to be understood as individually deciding the fate of our soul. Though we might be sorely tempted to forfeit our integrity and give in to circumstance, as Job’s unwavering steadfastness illustrates, even in the most extreme cases, the choice remains finally our own. In short, the historical articulation of the Judeo-Christian-Muslim “lineage” marks a shift from communal to individual salvation—from a saving relationship articulated between a temperamental Yahweh and his chosen people, to one established through Jesus the Christ as the Son of God and a sincere penitent, and finally to an “immediate” relationship given in an individual’s willing submission (*islam*) to Allah. The Protestant Reformation—coming at a time when Western technology was being driven by new scientific advances from



a long, relatively unproductive slumber—was more than anything else a movement to free the individual from the mediation and machinations of the Roman Catholic Church, taking back what was perceived as a cleverly usurped responsibility for our own, private destinies.

Politically, the evolution of the ideal of freedom has likewise progressed from the independence of a tribe or people—classically, a monarchic state where the king (or queen) is the “head of the family” and hierarchic relations are the norm—to the radical independence of each citizen. That is, a “progression” is evident from seeing the nature of independence as contingent on our actual place within our society to seeing it as a universal characteristic possessed equally by all, irrespective of place or position. Not coincidentally, the ideal of universal participatory democracy only began taking firm root in our cultural heritage when our technologies made practical cooperation between the royal and nonroyal members of a state decidedly less crucial. Arguably, the notion of individual rights earned widespread acceptance only with the advent of technologies that decentralized power enough that the will of any individual had to be given serious and due consideration. Dovetailing with the Enlightenment ideal of the independent inquirer so trenchantly exemplified by Descartes, political freedom came to be epitomized by our right to vote anonymously and without coercion. In this sense, our right to either directly (as in referendum) or indirectly (through the election of representatives) choose or decide our societal and political destiny expresses in the mundane world the same guarantee understood to prevail in the spiritual. The free citizen is a soul in the body politic.

Finally, and as might be expected, our way of talking about and understanding who we are as persons has shifted from communal/mythical to psychological narrative. Whereas mythic heroes achieved their status by superlative efforts benefiting all who lived in community with them, modern “heroes” manifest their “success” in how much fame, money, and influence they amass. As played out in personal narrative, the valorization of freedom as independence from and control over circumstances has led to the glorification of “self-made persons”—individuals who, against the odds resisting their will, manage to advantageously leverage the world and accomplish what they want. In a contemporary sense, being complete as a man or woman means being self-sufficient.

In keeping with this popular transformation, the seminal psychological theories of both Freud and Jung appealed to the language of independence. Each in its own way exemplified the bias that personal maturation should be understood explicitly in terms of individuation—as a kind of psychological continuation and culmination of the biological process highlighted by parturition, weaning, entering adolescence, and finally leaving the family home to fully enter adulthood. That is, instead of personal maturation and freedom

being seen as pivoting on the deepening of our relationships as such, modern psychology has almost unilaterally insisted that it involves developing an identity embedded in and yet essentially apart from these relationships—the constitution of a self abstracted from the various wombs of our communal setting. If childhood means living in dependence, maturity is realizing our independence—the ability and inclination to choose our lives for ourselves.

Ideally, then, whether philosophically, politically, religiously, or psychologically, the articulation of freedom in the dominant Western tradition has played out historically as the progressive cultivation of an absence of both internal and external constraints on our ability to do what we want, when we want. From the first stirring of humanity in the mythic Garden of Eden onward, freedom has been understood as pivoting on choice. As fortune would have it, however, the world has never been a particularly ideal place. In fact, our day-by-day circumstances seem at times to quite strenuously resist our intentions. We want to lift a stone and find it too heavy. We want to stop a war and cannot. We want someone to love us, but he or she is unmoved by our own emotions and efforts. At a purely physical level, the world apparently runs according to laws not subject to our private whims, according to a caprice impervious to our wishes, impelled by forces of momentum so great as to entirely dwarf our individual wills. It has been the ongoing business of technology to close the gap between this ‘reality’ and our ever-refining ideal of independence. That is, in much the same way that Socrates described his philosophizing as a kind of midwifery for the soul, technology has helped us bring into full flower our embryonic freedom to project our wishes and shout down the world’s objections.

The prevailing tendency of overt technical development in our tradition has thus been to increase the effective range and specificity of our choices. Importantly, while much of this increase is realized reactively—that is, as an ability to bring errant situations back into order—an ever more significant trend has been for cultivating prescriptive control. The ideal of such technologies is not just dealing with trouble when it arises, but so configuring our circumstances that trouble can’t even get its foot in the proverbial door. This means not only securing ourselves from unnamed threats, but actively endeavoring to identify them as such in advance. The fascination we have with ‘things’ of every sort—be these atoms, animals, gods, persons, or what have you—and our desire to break them down into as small and manageable components as possible is not purely a function of intellectual curiosity. To the contrary, it is part of a project of developing an effective taxonomy of objective resistance to our wills—a project of identifying exactly what can or is already proving recalcitrant or intractable. Science seeks out immutable laws and entities—a search that at once isolates what contradicts our will

and establishes a clear grasp of what we can use as “fulcrums” in the technical leveraging of the world.

As might be expected, technologies geared toward controlling our circumstances are energy-intensive. It requires no small expenditure of effort and energy to break up the obdurate continuities of the natural world into manageable units more consistent with the realization of our wishes. An example of this is the refining process by means of which inert stone is first broken down into a slurry of waste and a remainder of useable ore that is then further purified by heating to produce workable metal. The metal is “released” from the stone by subjecting the latter to great enough stresses that it gives up its confused integrity, yielding those more basic and ‘finer’ elements comprised in its structure. Similar processes of “refining” occur when we isolate biological exemplars of preferred traits and breed them to produce superior animals or grains, or when we successfully cook pine sap to make first tar and then turpentine. But such processes, by breaking down established relationships or forms—essentially stable patterns of stored energy—can also release more energy than they consume. Ultimately, the principle lying behind the use of either fossil fuels or atomic fission is that of creating a kind of situational “vacuum” into which an otherwise inert form will be dispersed and to then harness the resulting movement for the purpose of refiguring the world.

We can say in general, then, that such technical processes rely not only on better leveraging our physical or mental powers, but on marshaling or gaining useable access to previously unavailable or contrary forces. Until our ability to break down natural forms (patterns of energy) reached a critical turning point, the vast majority of our technical advances were oriented toward growing and storing food and toward harnessing the energy of other beings. The techniques of animal husbandry, harness and cart manufacture, and so on are thus the relatively “benign” forebears to the technical identification and utilization of energy as such. More literally sanguine and yet often more effective in the long run than husbanding animal labor were techniques for marshaling (or less euphemistically, enslaving) human energy—basically superior weaponry and military strategies. In all such cases, the point was making previously inaccessible amounts of energy available to our individual wills. With the advent of means for practically accessing the energy of fossil fuels through combustion, a great leap forward occurred in technical development because the energy requirements of living, organic forms could be factored out of the equation. Slavery died out not so much for political or so-called humanitarian reasons as because the mechanical capture of the energy stored in fossil fuels and running water made possible both large-scale urban industrialization and rural mechanization. Quite simply, owning and maintaining slaves became unnecessary, if not an outright

liability. It was not altruism, but energy and economics that ended the practice of keeping human chattel.

This technical process of breaking down natural forms to identify or create more useable, generically combinable elements and the parallel endeavor of marshaling the energy of relational disintegration can (not altogether metaphorically) be thought of as stealing the memories of things or robbing nature's graves. Natural forms are places where relationships are in relative stasis, where the disruptive forces of change and the integrative forces of adaptation have come into singular balance. The Native American conviction that mining is a form of desecration is in this sense less a "primitive animism" than it is a recognition that natural forms embody the history of the world—a history that is finally the womb of all our own narratives. Taking what nature has not given is ultimately stealing from ourselves, stealing our own pasts. And while the future is constantly being renewed, once our past has been "refined" and "refashioned" it cannot be renewed or replaced. Erasing our past by clear-cutting forests, by leveling mountains to mine various mineral ores, or by damming rivers to turn electricity-generating turbines is no less dangerous than cutting ourselves off from our families and the wisdom embodied by our elders and our traditions. In short, we condemn ourselves to entirely fashionable lives.

As technologies of ostensive control have become not just more prevalent but more powerful or energy-intensive, our experience of temporality itself has taken on an increasingly interrogative quality. In our own myths about the origins of culture, it is generally agreed that at the dawn of human community people had a basically propitiatory relationship to things. So-called primitive peoples felt—and even today persist in feeling—that it was necessary to ask the elk for the right to use its horns, or the stone if it could be moved in order to build a wall. Natural forces, we say, were perceived as deities that had to be placated. Our epistemic and technical evolution has shifted us from this propitiatory mode of conduct to a proprietary one. Accordingly, our experience of time is now more than ever before based on asking and answering for ourselves whether we want or don't want what is happening. Do we approve or disapprove of our present situation and that toward which it would seem to lead us? If we disapprove—if we don't want it as is—to what extent can we change it? How much time will that take? And at what cost? Time has become a kind of commodity broken down into tradable units. Think of the way, for instance, that information costs are coming to be measured as a function of on-line charges. What we are buying is not data as such, but time on the Net, so many hours of access at such and such a rate. Increasingly, time is becoming money—the most direct measure of how much of our attention-energy is being consumed and how systematically.

By associating freedom with both choice and independence, and by increasing our ability to marshal the world's ambient energy for our individual purposes, we have also unavoidably associated freedom with discrimination and dictation. Most elementally, this manifests in our virtually incessant assertions of "yes" or "no" to the events in our lives. Accepting or rejecting has become so much a part of our experience of time and timelessness that we are typically unaware of our standing in judgment of the world. If at all, we notice this and its potential liability only when the conflict between another's will and our own is both chronic and skewed to the other's benefit—typically because he or she enjoys access to greater technical mediation and so greater power over circumstances than we do. In this light, political dictators must be seen as a threat to freedom not because they categorically limit what we mean by the word, but because they have gathered too much of it to themselves. That is, dictators do not so much pervert (or turn aside from) our traditional ideals about freedom as they invert them—tipping them as fully as possible to their own, private account.

Given all the above and as might have been expected, such techniques as have been developed in our tradition for insuring the absence of internal (as opposed to ostensive) limits on our freedom have centered on safeguarding or shoring up our ability to make and maintain the right choices. This is clearest in the sphere of the religious, where what is at stake is the freedom of our ownmost selves—our souls. According to the root myths of the Judeo-Christian-Muslim tradition, it was only at the point where the alternatives of salvation and damnation were made evident that we were granted genuine independence. That is, freedom primordially appeared as the divinely ordained opportunity to decide the nature of our path—the status of our individual eternity. From that point on, since the alternatives are only two and since they are in fact quite clear, the only relevant direction of technical expertise—expertise geared toward supporting or augmenting our independence—would be that of perfecting and controlling our will. The choices being evident, what we need is the power of choosing rightly.

In the dominant, Western religious traditions, damnation is a linear result of sinning—of knowingly doing what is wrong, a conscious perversion or turning away. The fact that sin originated with Adam—the "first man"—and has since then colored each and every one of our souls means at the very least that knowing what is right is always enough of a given that our salvation ultimately depends on how well we're able to act on this knowledge. It is this presupposition that warrants the central place that has been accorded to the rhetoric of temptation in the Judeo-Christian-Muslim lineage. It is not our lack of understanding that waylays us on our journey toward our salvation, but deficiencies in our will—our ability to confront and control

temptation. The importance of the technique of prayer is thus not epistemological—a means of developing our ability to better perceive the good—but hinges precisely on its role in functionally reinforcing our will.

And so, while Christian theologians, for example, have long debated the ramifications of the fallibility of human understanding, popular Christianity has consistently moved in a conative direction. Temptation came increasingly to be understood in terms of an explicit contest of wills and salvation as the triumph of our own—even if at times only through our faith in or submission to the will of “our Creator.” It would be interesting in this light to analyze the tragic history of Lucifer’s transformation from an impetuous angel suffering from jealousy and “a big mouth” into the personification of evil temptation itself—a history that really only got into full swing during the late medieval and early modern periods when science and then technologies of ostensive control began evolving at unprecedented rates. At any rate, even a cursory glance at the Star Wars film series or at George Bush’s denunciations of Saddam Hussein during the Gulf War shows that the basic image of a moral contest of wills framed in explicitly individualistic and confrontational terms is still with us. We are embroiled in a Manichean battle of the forces of Good and the forces of Evil. And salvation, when it comes, is clearly seen as a triumph, a victory.

In sum, then, Western religious technology has focused on insuring our ability to willfully take the path of salvation. Likewise, much of modern psychotherapy is geared toward revelation—the exposure of those emotional, behavioral, ideational, or obsessive complexes that constrain our ability to choose a “well-integrated” life. In psychiatric circles emphasizing the biochemical basis of “mental illness” or the inability to cope with the world in consensually approved and understood fashions, drugs replace conscious revelations as the means of regaining the ability to choose freely and independently. That is, nonreligious inner freedom is understood in terms of insuring or regaining (even surrogate) control of our epistemic or biochemical circumstances.

In the secular domain as well, choice and will have remained explicitly crucial in articulating our sense of intensive freedom. But whereas the religious sphere admitted little in the way of human engineering—after all, the Creator of the universe set the terms of the battle as well as the nature of the spoils—our worldly circumstances are clearly much more open to re-configuration. Unlike the deep moral structure of the universe, which seemed to have been fired in the kiln of divine will, the world of day-to-day commerce is still quite malleable. In result, we have not been limited to strengthening our wills in an effort to augment or secure our freedom. To the contrary, we have dedicated ourselves and much of our life-energies to extending, generation-by-generation, the range of our choices in shaping

our circumstances. To this end, we have managed to take control over that with which Satan once tried bribing us—good crops, better health, the easing of pain and suffering, the longevity of our offspring. And against the “evils” of fascism or communism threatening our soils and livelihoods, technology has been no less effective—in fact, it has been our best and most proven weapon.

Because our model of freedom has been so much shaped by its intimate association with independence and control, both as a cultural tradition and as individuals we have given very little consideration to the larger narrative ramifications of our brand of technical evolution. In a sense, it is an association that blinds us to the advisability of considering whether the control our technologies afford us is ultimately for the best. We simply continue changing the world, matching it ever more precisely and immediately to our individual needs and ‘desires’ and feeling all the freer for it.

In spite of the scientific admission that the natural world is ecologically—that is, interdependently—organized, this valorization of control has remained basically unchallenged. In fact, one of the reasons it is so difficult to successfully lobby for ecologically sensitive legislation is the unspoken belief that we no longer need to fear nature as we once did. Even if we screw things up, we can always fix them. In classical Greece, it was not uncommon for children of the victorious to be educated by slaves drawn from among the most highly educated and even martially adept of their parents’ enemies. Likewise, what willingness we have shown in setting aside tracts of wilderness for the benefit of future generations can be traced to the extent to which we believe we have vanquished the wilds. For the most part, we are only inclined to preserve nature because we are convinced we could destroy her. It is no longer her moods that determine our fates, but our dispositions that determine hers. Or so we think. Of nature’s greatest contradictions of our will, perhaps only death remains out of reach.

Seen through the lenses of our technical success, the future of the technopian West looks an awful lot like Disney’s EPCOT center or the inside of the Starship Enterprise. It is a future in which the face of time is, for all intents and purposes, ours not only to cosmetically alter, but actually redesign. With the advent of sufficiently sophisticated virtual reality technologies, the distinction between inner and outer environments or circumstances may well blur to the extent that very little point will be seen in maintaining the wild spirit of the nonelectronic cosmos. Regular, predictable, and secure, a world in which novelty is manufactured for the sake of priming our interest, technopia is societality taken to its logical extreme—a world in which worry and the disagreeable have been vanquished.

That, however, is a still imaginary future. And while there are good reasons to be concerned about what we imagine, such a future is much less

relevant than where we are at present and how we have come to be here. Right now, we already have a greater apparent capacity for choosing to do what we want than ever before. Indeed, we are often compelled to make choices. But what if Ch'an master Pai-chang was right in insisting that we see the principle of liberation as "not selecting anything," not making any choices? What if increasing our choices actually means sacrificing our freedom?