

Washington Law Review

Volume 79
Number 1 *Symposium: Technology, Values, and
the Justice System*

2-1-2004

The End of Technology: A Polemic

Louis E. Wolcher
University of Washington School of Law

Follow this and additional works at: <https://digitalcommons.law.uw.edu/wlr>



Part of the [Law and Philosophy Commons](#)

Recommended Citation

Louis E. Wolcher, Symposium, *The End of Technology: A Polemic*, 79 Wash. L. Rev. 331 (2004).
Available at: <https://digitalcommons.law.uw.edu/wlr/vol79/iss1/17>

This Symposium is brought to you for free and open access by the Law Reviews and Journals at UW Law Digital Commons. It has been accepted for inclusion in Washington Law Review by an authorized editor of UW Law Digital Commons. For more information, please contact lawref@uw.edu.

THE END OF TECHNOLOGY: A POLEMIC

Louis E. Wolcher*

Abstract. This essay is a philosophical polemic against the essence of modern technology. The piece does not advance a Luddite's agenda, however, since it describes modern technology's essence as technological thinking, rather than as the manifold of technical instruments and processes. Technological thinking is not just careful planning towards well thought-out ends. Rather, it is an entire orientation to life, and as such it is a monstrosity: it relentlessly and heartlessly transforms the world's beings, including human beings, into measurable units of production and consumption that are constantly being judged for their contributions to "productivity." Nature is thus made into a vast warehouse, and humanity into a standing reserve of "human resources." Absent from technological thinking is any reflection on technology's end, in the sense of its ultimate purpose. A synthesis of the thinking of Heidegger, Marcuse, Weber, and Sorel, this essay claims that the ultimate end of technology as such is, and ought to be, *freedom for responsibility*, and that freedom from necessity is both a condition and a consequence of this. It argues that there is a desperate need for thought and speech to break with technological thinking, and to begin bringing the means of modern technology into contact with its ultimate end.

"The sadness of nature makes her mute."—Walter Benjamin¹

I. THE END OF TECHNOLOGY: ASKING THE QUESTION

What is the end of technology? Although this question does not mean to ask *when* technology will end, in the sense of ceasing to exist, it nonetheless remains ambiguous in an interesting and productive way. Consider the "end of technology" understood as technology's limit. On this reading, the question asks for a determination of the *logical* endpoint of technology: the limit, or boundary, that circumscribes technology as a concept and allows it to stand forth in thought and speech as a comprehensible whole. Since it is impossible to comprehend a phenomenon like technology in this way without paying attention to its social context, this means that technology's logical end is inextricably linked to its end in another sense: purpose. When we notice a thing we tend to notice it *as* something. We notice a telephone as equipment for

* Professor of Law, University of Washington School of Law, William H. Gates Hall, Box 353020, Seattle, Washington 98195. E-mail address: wolcher@u.washington.edu.

1. WALTER BENJAMIN, *On Language as Such and on the Language of Man*, in REFLECTIONS: ESSAYS, APHORISMS, AUTOBIOGRAPHICAL WRITINGS 314, 329 (Edmond Jephcott trans., 1978).

calling someone, a house as a place for humans to dwell, a pencil as a utensil to write with, and so forth. What a thing is, and what a thing is for, comprise two sides of the same coin. Thus, it would appear that the purpose of technology, together with a determination of what technology is, gives critical reason an important and singularly synthetic question to think: *What is the end of technology?*

We live in an age that has been aptly called the “second industrial revolution.”² Unlike the first one, the second industrial revolution is characterized primarily by the fact that scientific discoveries are translated routinely and almost immediately into new procedures of production and distribution—new ways to dominate nature’s beings and to control human behavior. Domination and control are not *necessarily* bad things to strive for, of course. As Herbert Marcuse observes, the instruments of technology *by themselves* “can promote authoritarianism as well as liberty, scarcity as well as abundance, the extension as well as the abolition of toil.”³ As concepts, however, domination and control do shed some light on the meaning of our question. Sadism aside, the phenomena of domination and control belong to the category of means rather than the category of ultimate ends. To inquire about the *end* of technology is thus to ask for it to be determined in such a manner that we can understand what Aristotle called its final cause: its purpose for being what it is.⁴ In short, what, ultimately, is technology aiming at?

Technology’s ultimate end is not the same as the sum of its technical performances. Marcuse rightly distinguishes the paraphernalia of modern technology (“technics”) from the totality of technics and their modes of organizing and changing social relationships, prevailing thoughts, and behavior patterns (“technology”).⁵ If one were to say that the purpose of the telephone is to speak with people at a distance, that of the Internet to provide instantaneous access to information, and that of the automobile to travel rapidly from here to there, all of these particular ends would remain merely intermediate. One is still entitled to ask what the ultimate point is of having instruments that allow us to speak with people at a distance, gain instantaneous access to information, and make

2. HERBERT MARCUSE, TOWARDS A CRITICAL THEORY OF SOCIETY 118 (Douglas Kellner ed., 2001).

3. HERBERT MARCUSE, TECHNOLOGY, WAR AND FASCISM 41 (Douglas Kellner ed., 1998).

4. 1 ARISTOTLE, *Posterior Analytics*, in THE COMPLETE WORKS OF ARISTOTLE 114, 155 (Jonathan Barnes ed., 1984); see also Richard Taylor, *Causation*, in 2 THE ENCYCLOPEDIA OF PHILOSOPHY 56, 56 (Paul Edwards ed., 1967).

5. See MARCUSE, *supra* note 3, at 41.

all of our journeys rapidly. In technology, as in other things, the most obvious truth is often the least visible: the question concerning the meaning and justification of technology is not itself a technological question.⁶

We are used to calculating in terms of intermediate ends, and only rarely do we ever really think about ultimate ends. Indeed, this allocation (or misallocation) of our mental energies may be one of the prime effects of modern technology, which tends towards the production of what Horkheimer and Adorno call “purposiveness without purpose.”⁷ Getting an education that teaches useful job-skills, earning a living, becoming successful by conventional measures of income and status, and so forth—we must not let the self-evident desirability of these ends obscure the fact that they are all merely intermediate. The chain of intermediate ends in a technological society is extremely long, as anyone who has ever spent much time toiling in a modern work cubicle knows. But in the final analysis, they are (or should be) all classified on the level of means. And while Heidegger undoubtedly is correct that the most secure and comfortable path is to make something harmless and insignificant by calling it self-evident,⁸ respect for the capacity to think requires us to conclude that the question where these intermediate ends ultimately lead, as means, remains wide open. However rational we may be in pursuing a “useful” education, a “good” job, and conventional “success,” these means do not *necessarily* bring us happiness or lead to the plausible ultimate end of living a good life.

Max Weber’s notorious “iron cage”⁹ vividly represents the radical difference between intermediate and ultimate ends in the conditions of a technological society like ours. According to the most profound sense of this image, the universal rational pursuit of intermediate ends in such a society (sometimes called the “rat race”) can construct a kind of prison

6. Cf. MARTIN HEIDEGGER, *The Question Concerning Technology*, in *THE QUESTION CONCERNING TECHNOLOGY AND OTHER ESSAYS* 3, 35 (William Lovitt trans., 1977) (remarking that “the essence of technology is nothing technological”).

7. MAX HORKHEIMER & THEODOR ADORNO, *DIALECTIC OF ENLIGHTENMENT: PHILOSOPHICAL FRAGMENTS* 69 (Gunzelin Schmid Noerr ed., Edmund Jephcott trans., 2002).

8. MARTIN HEIDEGGER, *ARISTOTLE’S METAPHYSICS Ø 1–3: ON THE ESSENCE AND ACTUALITY OF FORCE* 68 (Walter Brogan & Peter Warnek trans., 1995).

9. MAX WEBER, *THE PROTESTANT ETHIC AND THE SPIRIT OF CAPITALISM* 181 (Talcott Parsons trans., 1958). We actually owe the phrase “iron cage” to Parsons, who used these words to translate Weber’s German expression, *ein stahlhartes Gehäuse*. The latter can also be translated as “a casing, or housing, as hard as steel.” See DEREK SAYER, *CAPITALISM AND MODERNITY: AN EXCURSUS ON MARX AND WEBER* 144 (1991).

in which the formulation and attainment of any rational ultimate end for the individual becomes difficult or impossible. Perhaps this explains why the couches of psychoanalysts in the West are full of people who have worked very hard to have it all, outwardly speaking, but who inwardly experience their lives as trivial and devoid of meaning. Even retirement, which used to represent the dream of rest, recreation, and the pursuit of personal fulfillment after a lifetime of toil, is under attack from the standpoint of intermediate ends. Consider that a recent article in a prominent magazine asks, rhetorically, "Why should people living longer, healthier lives also feel they are automatically entitled to spend less time working and ever more time in retirement?"¹⁰—as if the ultimate point of life is to live in order to work, rather than just the opposite.

Weber's concept of the iron cage also reproaches the relation between intermediate and ultimate ends when it is considered from the global standpoint of humanity as a whole. According to a recent article on the regrettable persistence of hunger in the world, the World Bank's chief economist, Nicholas Stern, has pointed out that the average European cow receives \$2.50 in subsidies, while seventy-five percent of the people in Africa get by on less than \$2 in global development aid.¹¹ No convincing account of some deep and irreconcilable conflict between ultimate ends explains why Europe gives more money to cows than to starving Africans, especially since it is well known that agricultural subsidies in rich countries actually undercut the efficacy of development aid to poor countries by depressing the price of food on world markets.¹² Of course, the pursuit of short-term self-interest by European farmers and their lobbyists is understandable from the standpoint of their intermediate end of maintaining a high standard of living. But a larger perspective gives thought the warrant to ask how this state of affairs could ever be seen as a plausible ultimate end for modern technology, especially given the enormous unrealized productive power that today's humans have at their command.

With all due respect to Martin Heidegger, who tended to disparage the

10. *Economic Focus: Re-engineering Retirement*, THE ECONOMIST, Dec. 14, 2002, at 70.

11. Barry Bearak, *Why Famine Persists*, THE N.Y. TIMES MAG., July 13, 2003, at 32, 36.

12. *Id.* ("These subsidies also depress commodity prices, undercutting the ability of developing nations to compete in world markets and get their nations off the dole.").

language of means and ends,¹³ the question of technology's ultimate end is the right one to ask because it self-consciously appropriates the terminology of technological thinking (the means-end relationship) in order to question technology on its own terms. If there is something about the essence of modern technology that has inflicted a wound on humanity, then it alone is the sword that can heal that wound. For the essence of modern technology is not something abstract and distant from us—on the contrary, it is in us and around us in the form of our world. In an operational and result-oriented world like ours, a fact is the projection of a method for finding it, and a method is the projection of a human purpose.¹⁴ This double insight into the intimate relation between facts and purposes, Is and Ought, gives critical reason the chance to disentangle the terms of the relation, interrogate the mostly hidden purposes of modern technology for their meaning, and yes, also assess modern technology's ultimate rationality.

The questionability of technology's contribution to ultimate ends is an ancient theme. In the *Charmides*,¹⁵ one of his earliest dialogues, Plato describes Socrates as expressing considerable doubt about the ultimate end of technological progress. After discussing with Critias the meaning of the kind of wisdom that knows where its own knowledge ends, and hence where its ignorance begins, Socrates relates a troubling dream that he had. The dream concerns a society where everything is extremely well ordered, technologically speaking. Unable to tell whether the dream came through "the horn or the ivory gate"¹⁶ (that is, whether its content was bad and false, or good and true) Socrates goes on to describe what he dreamt:

The dream is this. Let us suppose that wisdom is such as we are now defining, and that she has absolute sway over us. Then, each action will be done according to the arts or sciences, and no one professing to be a pilot when he is not, no physician or general or anyone else pretending to know matters of which he is ignorant, will deceive or elude us. Our health will be

13. MARTIN HEIDEGGER, HÖLDERLIN'S HYMN "THE ISTER" 45 (William McNeill & Julia Davis trans., 1996) ("The question as to whether modern technology is a means or an end is erroneous already as a question, because it utterly fails to grasp the essence of modern technology.").

14. Cf. LUDWIG WITTGENSTEIN, PHILOSOPHICAL REMARKS 200 (Rush Rhees ed., Raymond Hargreaves & Roger White trans., 1975) ("Einstein: How a magnitude is measured is what it is.").

15. PLATO, *Charmides*, in THE COLLECTED DIALOGUES OF PLATO 99 (Edith Hamilton & Huntington Cairns eds., 1961).

16. *Id.* at 119.

improved; our safety at sea, and also in battle, will be assured; our coats and shoes, and all other instruments and implements will be skillfully made, because the workmen will be good and true. Aye, and if you please, you may suppose that prophecy will be a real knowledge of the future, and will be under the control of wisdom, who will deter deceivers and set up the true prophets in their place as the revealers of the future. Now I quite agree that mankind, thus provided, would live and act according to knowledge, for wisdom would watch and prevent ignorance from intruding on us in our work. *But whether by acting according to knowledge we shall act well and be happy, my dear Critias—this is a point which we have not yet been able to determine.*¹⁷

Here, at the beginning of Western philosophy, we witness a mind troubled by the relation between technical efficiency and ultimate human ends: a mind willing to *question* that relation.

Socrates knew that so long as we question something exclusively in terms of what it immediately provides us in comfort or material well-being, we are thinking technologically, not philosophically. Accordingly, the italicized words in the previous paragraph indicate that Socrates was unsure how (or even whether) science and technology, viewed as means, contribute to the ultimate end of living a good life. In this kind of questioning he is not alone in the history of Western philosophy. Consider the brilliant twentieth century philosopher Ludwig Wittgenstein, who expressed his own doubts on the question rather more succinctly: “We feel that even when all *possible* scientific questions have been answered, the problems of life remain completely untouched.”¹⁸

If a Luddite is defined as someone who yearns to shatter the instruments of technology so as to return society to a supposedly pre-technological Eden,¹⁹ then it must be said that neither Socrates nor Wittgenstein were Luddites. They were *thinkers* trying to get beneath the glitter of technological progress to reach what is primordial about it. In

17. *Id.*

18. LUDWIG WITTGENSTEIN, TRACTATUS LOGICO-PHILOSOPHICUS, ¶ 6.52, at 73 (D.F. Pears & B.F. McGuinness trans., 1974) (1921).

19. The Luddites were a group of British workers who rioted and destroyed textile machinery between 1811 and 1816, on the belief that it would diminish employment. The term probably comes from the name of a worker, Ned Ludd, who destroyed stocking frames in eighteenth century England. THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE 774 (William Morris ed., 1969).

Socrates' case, the primordial is technology's apparent indifference (or irrelevance) to *what* human beings ought to do with their lives, as opposed to *how* they should do what they happen to have decided to do. In Wittgenstein's case, the primordial is a function of science's commitment to methodological rigor: the scientific need to predetermine the realm of questions that can be sensibly put to the world also narrows the range of permissible answers, thus ensuring that none of these questions and answers will ever touch what he calls the ultimate "sense" and "value" of the world.²⁰

A question like "What is the end of technology?" thus needs to be thought down to its roots before any decently thoughtful answer to it can be attempted. Most of the time we tend to leap over what is simple and original, and get hung up on the complicated and derivative. And so it is with technology: we tend to leap immediately into seemingly intractable political controversies like technological progress *versus* the threats that it poses to our privacy, or the preconditions for inducing investment in future technology *versus* the needs of the poor, in undeveloped and developed regions alike, to enjoy the benefits of present technology. These problems are admittedly pressing and difficult, but they stand no chance of being solved, or even properly understood, so long as the question that grounds them remains unasked. Preceding all questions about particular aspects of technology (including the manifold that is sometimes called "law and technology") is this one: What *is* technology?

As a grounding question, the question just asked does not merely seek to uncover correct information about technology's instrumentalities and support institutions. Before thinking about personal computers, cell phones, global positioning satellites, and "smart" bombs—before inquiring into the laws of patents, copyrights, trademarks, and unfair competition, which institutionally serve modern technology's tendency to colonize ever-greater spheres of social life by transforming its instruments into saleable commodities—before any of this, thought should endeavor to grasp technology's *essence*.

20. WITTGENSTEIN, *supra* note 18, ¶ 6.41, at 71. When all possible scientific questions have been answered, Wittgenstein contends, "there are then no questions left, and this itself is the answer." *Id.* ¶ 6.52, at 73. What is it that the absence of all questions answers? According to Wittgenstein, it answers why language itself cannot solve the most important problems of life: "Is not this the reason why those who have found after a long period of doubt that the sense of life became clear to them have then been unable to say what constituted that sense?" *Id.* ¶ 6.521, at 73.

II. THE ESSENCE OF MODERN TECHNOLOGY

The essence of modern technology is not what medieval philosophers would have called technology's *quidditas*, or whatness. Hence, our problem is not to define the *word* technology, for such a definition would only give us the illusion of a secure and stable content, corresponding to what Heidegger would call technology's "ontical"²¹ determination. Before an entity is defined as *what* it is (the ontical), there always prevails an ontological presupposition, on the part of the definer, of what constitutes the being of the entity. In other words, you have to already know what kinds of things count as really existing, as well as the manner of their existing, before you can go around noticing and describing this or that particular existing thing. For example, a Platonist mathematician will insist that the number π really exists on the number line, whereas a philosopher of mathematics may insist that π does not exist, except in the form of a rule that is useful in making certain human calculations.²² Heidegger succinctly (if rather abstractly) describes this insight as follows:

Whatever is discloses itself only on the grounds of a preliminary (although not explicitly known), preconceptual understanding of what and how such a being is. Every ontic interpretation operates on the basis, at first and for the most part concealed, of an ontology.²³

The difference between what a thing is and how it is (or between a being and the being of that being) invites reflection about the pre-understanding that thought always brings to the project of defining. In a phrase, the ontological difference allows us to see that whatness presupposes howness.

The manner of technology's existence is thus prior to, and more primordial than, its essence in the ontical sense. The simple "whatness" of a thing is the product of a conceptual system that is reified, as Theodor Adorno puts it, "on the model of a functioning apparatus": such a system congeals its object into something solid that exists in a time

21. MARTIN HEIDEGGER, BEING AND TIME 31–35 (John Macquarrie & Edward Robinson trans., 1962) (describing the "ontological difference" that we are elucidating in the text).

22. See Louis Wolcher, *A Meditation on Wittgenstein's Lecture on Ethics*, 9 LAW & CRITIQUE 3, 29–30 (1998).

23. MARTIN HEIDEGGER, PATHMARKS 50 (William McNeill ed., 1998).

that has also been solidified into a uniform series of present moments.²⁴ However useful this process may be to the technological manipulation of the object-world, it is fatal to critical thought *about* technology, for it ignores the dimension of historical, *lived* time that must be accounted for if technology's ultimate end is to come into view. The point is not that "existence precedes essence," as Jean-Paul Sartre once said.²⁵ The point is that a being's manner of existing *is* its essence, at least for our purposes. Thus, "essence" in the context of the present investigation can only name the manner in which technology comes to presence and abides through time: essence in the active sense of "essencing."

Considered dynamically and historically as the ongoing creation of a world in which humans must dwell, modern technology does not *just* reveal new realms or aspects of beings and articulate how they may be manipulated to our advantage. Such a point of view on technology naively imagines that there exist pre-made humans, on the one hand, and then, on the other hand, instruments of technology that human beings simply use or forbear from using. Technical methods are never just procedures for treating objects: they represent a decision, and a presupposition, about what constitutes the very objectivity of the object world.²⁶ More important than any use or project, or than any particular technical performance, the essence of modern technology is such that it has radically transformed our relationship to the real. The essence of modern technology is in a very important sense pre-technological, for it co-determines the attitudes, thought processes, and behaviors of human beings *before* they ever set out to use any of technology's instruments. It is a form of "challenging," as Heidegger says: the essence of modern technology "enframes" the world and challenges human beings to assemble and order it in a particular way.²⁷

In his most important text on technology, *Die Frage nach der Technik* ("The Question Concerning Technology"),²⁸ Heidegger argues that the essence of modern technology (in the sense just described) poses the

24. THEODOR ADORNO, INTRODUCTION TO SOCIOLOGY 149 (Christoph Gödde ed., Edmund Jephcott trans., 2000).

25. Jean-Paul Sartre, *The Humanism of Existentialism*, in EXISTENTIALISM: BASIC WRITINGS 268, 270 (Charles Guignon & Derk Pereboom eds., 1995).

26. See MARTIN HEIDEGGER, ZOLLIKON SEMINARS 128–29 (Medard Boss ed., Franz Mayr & Richard Askay trans., 2001).

27. HEIDEGGER, *supra* note 6, at 19.

28. *Id.* at 3–35.

greatest of dangers to humanity and the world.²⁹ Most Cassandras of modern technology utter warnings about the catastrophic potentialities of its instruments: atomic weaponry, bioengineering, the clearcutting of rain forests, and so forth.³⁰ Contradicting this usual account of technology's dangers, Heidegger says that the threat to humans "does not come in the first instance from the potentially lethal machines and apparatus of technology."³¹ He declines to stir up a "demonry of technology"³² by decrying the destructive power of its instruments. Rather, he attempts to warn us that the real danger to human beings comes from an essence of technology that takes the form of *technological thinking*. The problem is not that human beings employ the means of modern technology, but that they have surrendered their critical reason to the mentality that has brought those means into being: the mentality of *Homo faber*.

Technology in all ages is never merely a means, Heidegger says: it is a way of revealing the real.³³ Men and women do not just use modern technology—they are also used by it. Working all day in front of a computer screen, in a factory, or in a store selling things that people may or may not need, the subject of technology comes home to sit, transfixed, before a television set that constantly bombards its viewers with carefully constructed advertising images, sound-bytes of "news" and "commentary," and reality shows full of attractive young men and women willing to humiliate themselves for cash. Like a sponge, the subject of technology gradually soaks up what the system makes available in the object-world by way of occupations, news, and entertainment, and in the process undergoes a metamorphosis. Under these conditions the subject "become[s] an object of its object"³⁴ as the Chilean philosopher Rolando Gaete puts it, in a dialectical movement that goes from subject to object-world and object-world back to subject. Although modern social theory specifies that the subject-object dialectic

29. *Id.* at 26–28.

30. See, for example, Einstein's warning, in 1950, that the nuclear arms race makes the "fate of humanity" hang in the balance "more truly now than at any known time." ALBERT EINSTEIN, IDEAS AND OPINIONS 161 (1954).

31. HEIDEGGER, *supra* note 6, at 28.

32. *Id.*

33. *Id.* at 12.

34. Rolando Gaete, *Technological Thinking and the Identity of Modern Law*, in BULLETIN OF THE INTERNATIONAL ASSOCIATION FOR THE SEMIOTICS OF LAW 6 (No. 9, Feb. 1993).

characterizes any and all human societies,³⁵ there is something uniquely de-ratiocinating about this one. For *this* dialectic transforms the ancient values of logic and critical reason into their modern doppelgangers: logistics and calculation. A sort of technological philistinism takes hold, according to which all knowledge and performances must be evaluated exclusively by their immediate utility and their contribution to material values.

The essence of modern technology sets upon nature and challenges it to become a constant source of supply: a “standing reserve” (*Bestand*), as Heidegger puts it.³⁶ In this state of affairs the realm of production never stops: what is produced reenters technology immediately as the means of further production. Production becomes production for its own sake, with the result that we consume in order to produce, and live in order to work. This mode of revealing the real is qualitatively different from the ways of thinking that were associated with pre-modern modes of technology. The essence of modern technology manifests what Heidegger calls the “will to planetary ordering,”³⁷ and it is unique in the dimension of its relentlessness and its tendency to colonize everything and everyone: *it never rests*. We feel the need to be rational and productive from the cradle to the grave. Even when it is on vacation, technological thinking is busy organizing the environment to extract the maximum amount of “fun” in the available time, recording it all on a digital camera for future moments of enjoyment in the carefully managed free time that it constructs for itself in the interstices of the workday.

From a Heideggerian perspective, today’s world has become a standing reserve because technological thinking allows nature to reveal itself only in the form of what can be *continuously* computed and counted on for present or future use by human beings. “[E]verything is ordered to stand by, to be immediately at hand, indeed to stand there just so that it may be on call for further ordering.”³⁸ The idea of “enlightenment” in such conditions becomes the monstrous demand that everything be explained in terms of grounds that are readily accessible to

35. See generally PETER BERGER & THOMAS LUCKMANN, *THE SOCIAL CONSTRUCTION OF REALITY* (1966) (understanding social phenomena on the basis of a three-part dialectic: externalization, objectification, and internalization).

36. HEIDEGGER, *supra* note 6, at 17.

37. HEIDEGGER, *supra* note 13, at 48.

38. HEIDEGGER, *supra* note 6, at 17.

procedures of domination and control.³⁹ Thus, technological thinking is not just a reflection of the will to master things—it is also the compulsion to master things *on the basis of correct procedure*: it leads to what Slavoj Žižek calls “the all-pervasive predominance of ‘instrumental Reason,’ of the bureaucratization and instrumentalization of our life-world.”⁴⁰ The chaotic, surprising, and spontaneous in nature and in human relations show themselves as suspicious and dangerous to technological thinking: “problems” to be overcome by appropriate administrative solutions.

One important solution is cooption: the process by which opposition (especially artistic) to the prevailing form of life is absorbed and rendered harmless by the system it indicts. Art at its best has always performed a transcendent and oppositional function *vis à vis* the given reality. However, the members of today’s would-be *avant garde* are barely able to get ahead of the curve before the curve, constantly on the lookout for something new and exciting to incorporate and commercialize, catches up to them and turns them into “celebrities” and their projects into moneymakers. Marcuse refers to the example of so-called “revolutionary art” like Picasso’s *Guernica* becoming fashionable and classical—“a cherished museum piece.”⁴¹ One could also mention the disgusting commercialization, in movies and on television, of Anne Frank and the Holocaust, as well as the transformation of the clothing and symbols of 1960s counter-culture into fashionable “retro” statements that can be worn for fun to the office or to the next hippy theme party.

In a world where productivity and efficiency become the measures of all things, artistic images and new ideas can (and do) pass almost effortlessly into slick advertising, political spots, and other forms of self-promotion: think of Gershwin’s *Rhapsody in Blue* getting us in the right mood to buy airline tickets, images drawn from George Orwell’s *1984*⁴² being appropriated to launch a computer company, the aging former film rebels Orson Welles and Dennis Hopper hawking wine and computer

39. Attributing the origin of this point of view on nature to Cartesianism, Richard Watson characterizes its root premise as follows: “Since there is nothing spiritual or sacred in nature, the entire value of the natural world resides in its utility for humankind.” RICHARD WATSON, *COGITO, ERGO SUM: THE LIFE OF RENÉ DESCARTES* 17 (2002).

40. SLAVOJ ŽIŽEK, *THE TICKLISH SUBJECT: THE ABSENT CENTRE OF POLITICAL ONTOLOGY* 221 (1999) (mentioning this phenomenon in the context of resistance to it from both the left and the right of the political spectrum).

41. MARCUSE, *supra* note 3, at 201.

42. GEORGE ORWELL, *NINETEEN EIGHTY-FOUR* (1949).

solutions for business on television, and ExxonMobil's "proud" sponsorship of *Masterpiece Theater* on Public Television. Under such conditions, artistic images of transcendence are invalidated by their incorporation into the daily reality of production and consumption,⁴³ and the artist's "Great Refusal"⁴⁴—the protest against that which is—is transformed into a Great Affirmation of the latest (un)subversive fashions, modes of transportation, computer games, alcoholic beverages, and television programs. And lest art's insidious and latent affirmation of the commercial world gets lost on the artists themselves, copyright law is there to help them transform their simulacra of protest into profitable exchange values.

Thanks to what Marcuse calls the "frightful science of human relations,"⁴⁵ technological thinking knows just what buttons to push in people, which instincts (primarily greed, sex, violence, and sentimentality) to pander to and gratify in order to lead the consumer docilely into the chute. This cynical practice of "repressive desublimation"⁴⁶ lets loose instincts that used to be strongly repressed by traditional law and social conventions, only to reroute their profitable satisfaction by business into a dialectic of stimulus and response that binds the consumer ever closer to the system. As Marcuse notes, the process of creating repressive needs bears a strong resemblance to political totalitarianism: just as the latter attempts to coordinate all social performances through political control, the technological kind of totalitarianism coordinates social behavior through the manipulation of needs and aspirations by vested interests.⁴⁷ Think of \$10,000 watches that keep the same time as a \$20 Timex; \$1,000 designer handbags and briefcases that hold the same amount of material as durable bags costing a tenth as much; humungous SUVs that transport you with half the fuel efficiency, and at twice the price, of smaller cars; and \$2,000 "high end" shoes that are harder on your feet than a good pair of cheap sneakers. The scary mass consciousness of political totalitarianism finds its analog in the ubiquitous and only slightly less scary "happy consciousness" of technological totalitarianism. This is the carefully nurtured "belief that

43. See HERBERT MARCUSE, *ONE-DIMENSIONAL MAN: STUDIES IN THE IDEOLOGY OF ADVANCED INDUSTRIAL SOCIETY* 70 (1964).

44. *Id.* at 63.

45. MARCUSE, *supra* note 2, at 118.

46. Douglas Kellner, *Introduction* to MARCUSE, *supra* note 3, at 1, 11.

47. MARCUSE, *supra* note 43, at 3.

the real is rational and that the system delivers the goods,"⁴⁸ which makes it well-nigh impossible for the technological subject to break the spell of the things that are by naming the things that are absent in his life:⁴⁹ like a pacified struggle for existence, or freedom from the planned obsolescence that keeps him working overtime to replace things that are already outmoded almost the day they leave the store, or time to *be* free instead of acting like the wage-slave of his expensive wristwatch.

Technological totalitarianism is linked to a radical transformation of the meaning of leisure time. The good news is that more people than ever have it; the bad news is what it has become. Traditionally conceived as time full of freedom for the world, nature and culture for those who were lucky enough to enjoy it, leisure time is now a continuum of blank, vacant time that the workday produces as a sort of by-product. The technological subject feels the need to fill this vacant time by the acquisition and passive consumption of commodified units of "entertainment" that someone is always happy to sell, thereby enabling people to while away the time until the beginning of the next workday. Even the great national parks become structured environments, with well-marked paths and learning centers that are suitable for the work-like task of "enjoying nature"—all under the supervision of a cadre of park rangers whose job is to police them for the kinds of uses that the system deems inappropriate. In the terminology of Michel Foucault, technological thinking is making ever-larger swaths of nature into "panopticons,"⁵⁰ where increasingly refined procedures for monitoring and knowing are creating ever-increasing opportunities for discipline and artificial needs-creation in the service of the system. The end result is a depressingly "comfortable, smooth, reasonable, democratic unfreedom"⁵¹ that compensates individuals for the alienation they experience during their work lives by giving them prefabricated and carefully engineered opportunities for titillation in their vacant time. The cost of this titillation is not just the capital and social labor necessary to produce it, but also the hidden cost of needs manipulation by the system: the technological subject must now work more hours, and incur more debt, to be able to afford the most gargantuan SUV, the latest version of the Xbox, and annual trips to the theme park, where history and reality

48. *Id.* at 84.

49. *Id.* at 68.

50. MICHEL FOUCAULT, DISCIPLINE AND PUNISH: THE BIRTH OF THE PRISON 195–228 (Alan Sheridan trans., 1979).

51. MARCUSE, *supra* note 43, at 1.

are reduced to predigested and wholesome bites of “fun.”

Marcuse’s sober conclusion about the meaning of all this warrants more than a little reflection: “*Free choice among a wide variety of goods and services does not signify freedom if these goods and services sustain social controls over a life of toil and fear.*”⁵² Although the distinction between what is needed and what is merely wanted has always been historically determined, technological thinking does not make it easy for the subjects of technology to draw their *own* informed conclusions about the difference between true and false needs. If, with Marcuse, we define false needs as those that “perpetuate toil, aggressiveness, misery, and injustice,”⁵³ then critical thought requires a certain distance, or dissociation, from what it strives to comprehend if it is to distinguish the false from the true in the realm of needs. But distance from the given reality is precisely what technological thinking tends to deny to its subjects, with the result that individuals in prosperous countries instinctively feel the need to work harder and harder to afford more and more frou-frou. This is not greed, or at least it is not just greed. This is sheer madness, especially when one stops to consider that the finite time available to each individual is the irreplaceable and ever-dwindling font of life itself, and that we live in a world in which hundreds of millions are not even getting their most *vital* needs met.⁵⁴

The essence of technology has not always shown itself in these ways. The word technology comes from *technē*, which to the Greeks meant the human art of revealing what is concealed.⁵⁵ *Technē* is the knowledge that belongs to the activity of *poiēsis*, which means the production and bringing-forth of something.⁵⁶ As Heidegger notes, the word *technē* never named the instruments and material apparatus of technology: it always represented the human know-how to transform the beings of nature (*physis*) into new forms.⁵⁷ Nature tends to conceal itself, said Heraclitus,⁵⁸ and *technē* originally signified *all* modes of revealing what nature hides. The homemaker, the artist, the craftsman, the politician,

52. *Id.* at 7–8 (emphasis added).

53. *Id.* at 5.

54. With Marcuse, we will define vital “needs” as “nourishment, clothing, lodging at the attainable level of culture.” *Id.*

55. HEIDEGGER, *supra* note 6, at 12–13.

56. *Id.* at 13.

57. *See id.* at 12–13.

58. HERACLITUS, FRAGMENTS 71 (T.M. Robinson trans., 1987) (Fragment 123).

and the lawyer: each possesses its own particular kind of *technē*.⁵⁹ Within all of its many spheres of operation, the Greeks thought that human *technē* transformed nature as a whole into particular beings that display their own proper order in the world of human needs and aspirations. However, the ordering effected by the Greek *technē* eventually came to rest, whereupon *physis* (nature) continued to reveal and produce *itself* from out of itself (more on this later). Production (*poiēsis*), for the Greeks, was first and foremost nature's production of itself, on the basis of which human beings could then produce things by means of a different kind of production: *technē*.⁶⁰

The case is otherwise with the standing reserve that modern technology has made out of nature: nature's self-production is hidden, while the earth shows itself in the form of a huge warehouse full of "resources" that just lie there, waiting to be counted and then exploited, or else saved for future use. While *technē* in the Greek sense possesses the object of production only until it is finished, thereafter releasing it into the realm of the non-technological,⁶¹ modern technology never once loosens its grip on the object-world. Here are some examples, which we will place behind bullet-points so that the (odious) technological form will mimic the content:

- The soil becomes a standing-reserve of crops, minerals, and energy to be administered by agribusiness and the energy industry. One no longer runs one's fingers aimlessly or reverently through the loamy soil—one monitors the dirt for its capacity to grow crops and produce ore.
- The rivers become sites for the construction of dams, and flowing cisterns that are used for irrigating vast farmlands and filling reservoirs in sprawling cities and suburbs. What is left over is carefully husbanded so that salmon can find a place to breed for the fishing and restaurant industries, and so that city people can go on guided (and usually expensive) river-rafting tours.
- The air becomes a standing-reserve of oxygen for industry, and then breathable gas to be monitored for "air quality." No longer the

59. HEIDEGGER, *supra* note 6, at 13 (noting that *technē* is not just the art of the craftsman, but also "the arts of the mind and the fine arts").

60. *Id.* at 10–13.

61. MARTIN HEIDEGGER, *PLATO'S SOPHIST* 29–30 (Richard Rojcewicz & André Schuwer trans., 1997).

dome of heaven, the sky also becomes an indifferent medium through which airplanes and rockets can fly.

- The sea becomes a standing reserve of “marine resources” to be harvested by the fishing and whaling industries, gawked at by snorkeling tourists, and filmed for couch potatoes to watch in nature programs on television. No longer Homer’s mysterious and awesome “blue girdler of the islands,”⁶² the ocean becomes a kind of stage set through which vacation cruises sail, and in which suntanned tourists sport and play when they are on vacation at the shore.
- The shrinking patches of primordial nature left to us become a standing-reserve of potential “experiences” to be packaged and sold as McNature by the leisure and tourist industries. Nature as a consumer good thus tends to shove nature as a source of unbought wonder off the shelf. Even conservation is sold as being “good for business,” further confirming nature’s diminishment to the status of an exchange value.
- Life becomes a realm of “bio-diversity” to be divided up, counted, and assessed for its possible contributions to human welfare. The grand spectacle that is life no longer lives for itself—it lives in order to be useful and productive. If they are lucky, “endangered species” get allotted bio-cubicles in the form of a few hundred protected acres; otherwise, they die out, or are whisked away to zoos so their genotypes can be conserved for future propagation and reinsertion into whatever little bits of their habitat remain.
- Language is also radically transformed. First changing from words that uncover beings into words that represent them,⁶³ language then morphs from a technique of representation into a productive instrument: a crisp, hip, quasi-mathematical language that efficiently communicates operational commands and responses.⁶⁴ Thought follows speech’s suit, honing closely to the immediately useful, and steering away from anything that is even remotely contemplative, speculative, or otherwise “useless.” Meanwhile, the constant drone of background music, in public and private places alike, seems to

62. HOMER, *THE ODYSSEY* 161 (Robert Fitzgerald trans., 1992).

63. See HEIDEGGER, *supra* note 6, at 11–12 (comparing the Greek idea of truth as the uncovering of beings (*alētheia*) with the modern concept of truth as the “correctness of an idea”).

64. Cf. WALTER BENJAMIN, *Karl Kraus*, in BENJAMIN, *supra* note 1, at 239, 242.

confirm Adorno's thesis that modern mass music fills the silence that spreads when speech is reduced to silence because of anxiety, work, and undemanding docility.⁶⁵

- The complex web of human actions and reactions, instincts and motives, becomes a standing-reserve of predigested factoids and disaster news to be "spun" and exploited by politics, the media, and mass advertising. Remember the panicky run on duct tape shortly after the attacks of September 11, and the alleged (but as yet unfound) "weapons of mass destruction" that played such a large role in stirring up popular support for the second war against Iraq? Or how about the phenomenon of worldwide terrorism being reduced to evildoers who "hate our freedom," whose real motives and grievances we cannot and should not try to understand, and who deserve only to be exterminated in the glorified bug-hunt that high-tech warfare aspires to become?
- The political realm is diminished to the chance the masses have to select their masters every couple of years from a slate of candidates whose campaigns are funded by vested interests, and who invariably cut their cloth to the wind of opinion polls that collect droplets of pre-manipulated "public opinion" like the atmosphere collects moisture. Indeed, the machinery of politics virtually requires that the form of political thought conform to a set configuration of public opinion that can easily be made available on demand to prove or disprove virtually anything about "what the people think": as if the point of politics were to register knee-jerks instead of engaging widespread public debate on difficult (and often tragic) choices.
- Last, and most ominously, even men and women are transformed into a standing reserve of "human resources," where "[i]ndividual distinctions in the aptitude, insight and knowledge [of workers] are transformed into different quanta of skill and training, to be coordinated at any time within the common framework of standardized performances."⁶⁶ These "human resources" are managed, consumed, and discarded on the basis of what Marcuse calls the "Performance Principle,"⁶⁷ according to which "everyone

65. Theodor Adorno, *On the Fetish-Character in Music and the Regression of Listening*, in THE ESSENTIAL FRANKFURT SCHOOL READER 271 (Andrew Arato & Eike Gebhardt eds., 1982).

66. MARCUSE, *supra* note 3, at 44.

67. MARCUSE, *supra* note 2, at 197.

has to earn his living in alienating but socially necessary performances, and one's reward, one's status in society will be determined by this performance."⁶⁸ In a nutshell: the system tells you to shape up or ship out. Faced with such a choice, it is little wonder that so few people do anything other than shape up.

There are counter-tendencies, of course, within a world that has been transformed into a standing reserve. Were this not so, it would be impossible to account for the enduring popular appeal of Willy Loman's argument to his boss, in *Death of a Salesman*,⁶⁹ for why he should not be peremptorily fired for lack of productivity after thirty-four years with the firm: "You can't eat the orange and throw the peel away—a man is not a piece of fruit!"⁷⁰ (The argument did not succeed, by the way: Willy was fired.) An embattled labor movement, environmentalism and its various Green parties, the grassroots movement to "downsize" career expectations and material possessions, organized opposition to the most pernicious effects of global capitalism on the environment and on the Third World's poor, the international human rights movement: these represent some of the counter-tendencies. However, from the standpoint of technological thinking, these counter-tendencies will never be more than individual "preferences" to be managed and controlled through the political process. The essential terms of the debate—cost-benefit analysis, interest group politics, the language of "resources," "human capital," and "tradeoffs"—are predetermined by the dominant discourse and by the stranglehold that it exerts on the human imagination. Although this discourse does not *necessarily* produce "bad results," it does require thought and politics to imagine the world in purely logistical terms. Logistics in its original sense is the science of procuring, maintaining, and transporting military materiel on command. But in today's world it has come to characterize the way instrumental reason achieves "results" in a political and social environment that is construed as a battlefield of conflicting interests. Logistical methods marshal and disburse arguments, public opinion, and resources in pretty much the same way a supply sergeant assembles and dispatches bullets and C-rations.

Technological thinking is impossible to evade whether we affirm or deny it. "There is no personal escape," writes Marcuse, "from the

68. *Id.*

69. ARTHUR MILLER, *DEATH OF A SALESMAN* (1949).

70. *Id.* at 82.

apparatus which has mechanized and standardized the world.”⁷¹ He illustrates this point with a simple example that has lost none of its chilling accuracy in the sixty-two years since it was written; indeed, if anything, the example has gained in accuracy:

A man who travels by automobile to a distant place chooses his route from the highway maps. Towns, lakes and mountains appear as obstacles to be bypassed. The countryside is shaped and organized by the highway: what one finds en route is a byproduct or annex of the highway. Numerous signs and posters tell the traveler what to do and think; they even request his attention to the beauties of nature or the hallmarks of history. Others have done the thinking for him, and perhaps for the better. Convenient parking spaces have been constructed where the broadest and most surprising view is open. Giant advertisements tell him when to stop and find the pause that refreshes. And all of this is indeed for his benefit, safety and comfort; he receives what he wants. Business, technics, human needs and nature are welded together into one rational and expedient mechanism. He will fare best who follows its directions, subordinating his spontaneity to the anonymous wisdom which ordered everything for him.⁷²

Better choices, more choices, greater efficiency, a smooth and well-ordered existence: how self-evidently desirable this all sounds to those in thrall to technological thinking; yet how pernicious this all can become for those who value spontaneity and freedom above conformity and docility.

Not only is the man’s behavior in Marcuse’s example perfectly “rational,” but the dissolution of all rationality “into semi-spontaneous reactions to prescribed mechanical norms” means that, from the standpoint of technological thinking, only a crank would insist on freedom of action to make journeys in some other, less efficient, way.⁷³ The cold, wet blanket of conformity to the “correct” thing to do makes any dissent that dares question its correctness from the standpoint of its ultimate truth look like a symptom of mental illness, rather than the expression of an alternative vision of what being rational means.

Nowhere is this kind of ascendancy of means over ends better

71. MARCUSE, *supra* note 3, at 46.

72. *Id.*

73. *Id.*

illustrated than in the standard neo-conservative argument that free markets are almost always superior to government planning and regulation for the production and distribution of goods and services. While this argument can be shown to be technically correct in a large number of circumstances (although perhaps fewer than is claimed by free market fundamentalists) the point is not which form of social organization is “best.” Since both markets and government planning fall into the category of means, the word “best” in this context signifies a criterion that focuses on the efficiency of the means of production and distribution, rather than on their ultimate end. “Best” merely signifies what Weber calls the most “objectively rational” means to reach some “subjectively rational” end: an end that must be known in advance if the means are to be rightly called either rational or objective.⁷⁴ But neo-conservatism’s brand of “economic liberalism” interprets the formal liberty to enter into market relationships as an ultimate value *regardless* of the actual ends being pursued.

The argument that the market rightly leaves the formulation of ultimate ends to the individual rather than to the collectivity ignores the fact that the institution of the market, as well as the multitude of contingent laws that make it what it is at any given place and time, are themselves collective (political) decisions. The laws of property, torts, contracts, unfair competition, and so forth *construct* the market—they do not merely respond to it from the outside. That little word “entitlement” hides a secret that most free market ideologues would like to keep under wraps: without entitlements, there can be no market in the modern sense of the word, and without government defining and protecting them, there can be no entitlements. Since entitlements are a form of stealth government, this means that even so-called free market capitalism is really socialism by another name. By intensively specifying the basic rules of the game, and standing ready to back them up by force (law), the collectivity thus becomes at least co-responsible for the range of choices that emerge from it. If you would rather write poetry and live within an unspoiled natural world, but feel compelled by economic and social circumstances to get a job and an apartment in a grungy city, this narrowing of your effective choices is no less a collective decision than if it had been centrally planned. But more importantly, if we are right

74. For an excellent analysis of the distinction between subjective and objective rationality, see ROGERS BRUBAKER, *THE LIMITS OF RATIONALITY: AN ESSAY ON THE SOCIAL AND MORAL THOUGHT OF MAX WEBER* 53–55 (1984).

that technological thinking and the world it creates make the formulation and assessment of ultimate ends extremely difficult for the individual, then the economic liberal's argument comes down to saying that we should always wait for the ultimate ends of individuals to emerge from conditions that are aggressively hostile to them. This is roughly analogous to Henry Ford's reputed remark about consumer choice in the days of the Model-T: "you can have any color car you want, so long as it's black."

The economic subject of early nineteenth century laissez-faire capitalism lived in a world where one could dream of breaking through the flotsam and jetsam of archaic laws, social conventions and popular superstitions that impeded the journey to productivity and profits. Moreover, the individualistic rationality of the industrial revolution "was born as a critical and oppositional attitude that derived freedom of action from the unrestricted liberty of thought and conscience."⁷⁵ Today, however, the race for productivity and profits is taken for granted to such a degree that the modern economic subject has difficulty imagining any other way of life, no matter how miserable he is in this one. Going far beyond Karl Marx's notion of alienation,⁷⁶ technological thinking makes private power relations appear "not only as relationships between objective things but also as the rule of rationality itself."⁷⁷ The prospect of standing up to The Man, while never a safe thing to do in any era, shows itself in our age to be the very height of irrationality. After all, if The Man is "delivering the goods," who but a lunatic would want to question his power? What is more, since just about everyone who works is part of some bureaucracy, whether public or private, this means that just about everyone has *some* degree of power over others in the bureaucratic chain. In such an environment, one can imagine oneself as both administered and administrator, with all the petty pleasures of domination that the latter role makes available to offset the sting of being dominated in the former role. The result of this "you dominate me, and I'll dominate her" mentality is that the system as a whole tends towards what Marcuse calls "technical self-administration."⁷⁸ This nearly endless chain of domination-submission-domination would be

75. MARCUSE, *supra* note 3, at 60.

76. See KARL MARX, *The Economic and Philosophical Manuscripts of 1844*, in KARL MARX: A READER 35, 37 (Jon Elster ed., 1986) (alienation defined in terms of man's "loss of the object and bondage to it").

77. MARCUSE, *supra* note 3, at 57-58.

78. *Id.* at 59.

laughable were it not so damned pernicious.

The historical transformation of the individualistic rationality of the nineteenth century into the technological rationality of the late twentieth and early twenty-first centuries represents a profound shift in the meaning of self-interest.⁷⁹ The radical autonomy of the nineteenth century's pioneer, frontiersman, and swashbuckling entrepreneur has been replaced by people's dependence on institutional expectations to be fulfilled. No longer is proud autonomy an aspect of self-interest: on the contrary, it becomes an *obstacle* to, and heteronomy becomes a condition of, rational action.⁸⁰ The one who goes his own way, who marches to the beat of a different drummer, who dissents and is not a "team player": such a one has never had an easy time of it. But from the standpoint of technological thinking he is both more and less than just an annoying eccentric: on the one hand, he is a troublemaker and a nuisance to the smooth functioning of the apparatus, but on the other hand, he is so easily ignored and marginalized that he hardly poses a threat at all. The complainer and the naysayer may reject what Adorno calls the "traditional thinking which pins things down and organizes them in terms of rigid concepts,"⁸¹ but unlike Adorno they just fade away into obscurity: they do not get the jobs, the company cars, or the bonus checks. As a consequence, today's maxim of rational self-interest has become, more than ever before: "You have to go along to get along."

While the pursuit of self-interest has always been conditioned by prevailing social conditions, never before has the individual's conception of himself and his choices been so *standardized*. If the technological subject is fortunate enough to get a good (and this usually means expensive) education, it is true that he or she can choose from a large menu of careers. But the norms and expectations governing what it means to act, to think, and to consume like, say, a lawyer, a doctor, or a corporate executive are virtually the same everywhere. Today's law students, for example, are right in fearing that their "true" selves are at risk if they become successful corporate lawyers. Unlike the rough-edged and non-standardized lawyering of Lincoln's day, the expectations of the "successful lawyer" in today's world tend to transform people into Lexus-driving, three-piece-suit-wearing, briefcase-

79. The terms "individualistic rationality" and "technological rationality" are Marcuse's. *Id.* at 44.

80. *Id.* at 50.

81. ADORNO, *supra* note 24, at 15.

carrying caricatures, and legal performances into standardized moves in an elaborate game. Whereas one would like to think that the true degree of human freedom is not just determined by the range of pre-made choices open to the individual (e.g., “casual Fridays” at the law firm), but by the freedom to radically *transform* what is chosen, as well as by the existence of a residual freedom to opt out of the system altogether. But what one would like to think is not what the system trains us to think: “The countless agencies of mass production and its culture impress standardized behavior on the individual as the only natural, decent, and rational one.”⁸²

In the nineteenth century, individuals could plausibly escape into what Hannah Arendt calls “non-society strata” lying outside the established order.⁸³ In the days when “society” in principle referred to only certain classes of the population, Arendt notes, a person could identify with excluded groups like the proletariat, Jews, and even homosexuals.⁸⁴ But today, she astutely observes, “[a] good part of the despair of individuals under the conditions of mass society is due to the fact that these avenues of escape are now closed because society has incorporated all strata of the population.”⁸⁵ In other words, most people in advanced technological societies feel that they are part of the system: they can succeed within the system, or they can fail and become mediocrities. Beyond that, nothing else is even imaginable. The law student who chooses to become a public-interest lawyer, for example, stays within an overall system of lawyering that construes progress as successfully manipulating the doctrinal apparatus. However noble this kind of lawyering is when seen from a position that values lifting up the oppressed, it leaves the essential structure of the legal machine intact. The fact that virtually everyone comes to value *legal means* (primarily the discourse of individual rights and duties) is all the system needs in order to perpetuate itself.⁸⁶ For the *occasional* vindication of the rights of undocumented aliens and welfare recipients fits seamlessly into the *perpetual* vindication of the rights of government and big business. The

82. HORKHEIMER & ADORNO, *supra* note 7, at 21.

83. HANNAH ARENDT, *BETWEEN PAST AND FUTURE* 200 (1968).

84. *Id.*

85. *Id.*

86. Cf. Isaac Balbus, *Commodity Form and Legal Form: An Essay on the Relative Autonomy of the Law*, 11 LAW & SOC'Y REV. 571 (1977) (noting that the valued *form* of legal rights, based on equal citizenship, is far more important than particular legal results for maintaining the domination and oppression of a class-based society).

point of mentioning this is not to make the familiar Marxist argument that rights are ideological, anti-radical, and bad.⁸⁷ *The point is that even the legal “rebel” seems perversely fated to become part of the overall system of technological thinking.*

Economic liberalism’s vaunted criterion of Pareto optimality⁸⁸ is only efficiency in the pursuit of intermediate ends in any society where people are forced to pursue *exclusively* intermediate ends in order to survive. For in such a society, the vast majority of the population express their “preferences” first and foremost in terms of what will get them through to the next paycheck or the next mortgage payment. This behavior is admittedly an objectively rational means to the end of survival, but it is subjectively rational only if people’s ultimate end in life is merely to survive the struggle for existence, like a beast that dies of old age. The criterion of a “Pareto-rational society” under such conditions thus tends to sanctify the status quo, no matter how alienated and threatened people actually feel. The result is the glorification of a kind of non-bloody conflict in the marketplace and in the halls of Congress that corresponds to Foucault’s inversion of Clausewitz’s notorious proposition about war and policy: “politics is the continuation of war by other means.”⁸⁹ Conservative and mainstream social science thus decide, explicitly or implicitly, that they are *for* conflict, and they refuse to take seriously the possibility that the category “conflict” could be replaced by a peace that is not merely juridical, but also social and economic.⁹⁰ One is again left with the impression that the widespread belief that efficient markets always make for the best of all possible worlds represents yet another victory for technological thinking, and a triumph of means over ends.

The effect of technological thinking’s “pessimistic anthropology”⁹¹ on our perception of world-wide social inequality, poverty, disease, hunger, and exclusion is predictable: these travesties show themselves as

87. See, e.g., Duncan Kennedy, *Antonio Gramsci and the Legal System*, 6 ALSA FORUM 32, 36–37 (1982) (noting that “people like Marx thought of [rights] as the quintessence of bourgeois false consciousness”).

88. The principle of Pareto optimality holds that “a configuration is efficient whenever it is impossible to change it so as to make some persons (at least one) better off without at the same time making other persons (at least one) worse off.” JOHN RAWLS, *A THEORY OF JUSTICE* 67 (1971).

89. MICHEL FOUCAULT, “SOCIETY MUST BE DEFENDED” 15 (David Macey trans., 2003). Carl von Clausewitz actually wrote (in translation): “War is a mere continuation of policy by other means.” *Id.* at 21 n.9.

90. See ADORNO, *supra* note 24, at 68.

91. Jürgen Habermas, *Afterword to MARCUSE*, *supra* note 2, at 238.

regrettable but inevitable facts of nature, rather than as humanly avoidable consequences. The theory that, in a market society, social protectionism and concrete measures aimed at helping the poor usually wind up hurting them in the end is a powerful narcotic, as the thousands of law students who have learned even a little bit of law-and-economics during the past thirty years can confirm.⁹² Marx, in his day, called religion the “opium of the people.”⁹³ To paraphrase the great labor radical Joe Hill,⁹⁴ by this Marx meant that religion’s promise of pie in the sky when you die takes people’s minds off the fact that they have to live on hay down below while they are alive. It would seem that the resigned viewpoint that market-based instrumental reason aimed at intermediate ends is the only viable course left to us has become the opium of today’s progressive intelligentsia, especially since the collapse of communism in the Soviet Union and Eastern Europe demonstrated the inherent weaknesses of planned economies. But historical communism’s planned economies were always just as oblivious to ultimate ends as technological thinking in Western democracies. The point is not that markets should be seen as the best (or the least bad) solution to delivering the goods. The point is that the obsession with “delivering the goods” has tragically eclipsed all other considerations in public discourse about the relations among technology, nature, and life.

Julia Kristeva recently asked whether “life as an event and a source of questioning [has] become outmoded because it has been secured, standardized, and trivialized by technology.”⁹⁵ But to ask this question is to refute it: the point is, or should be, also to bring technology’s ultimate end into view, so that technological means can be assessed in terms of their qualitative and quantitative progress towards that end. The *essence* of modern technology, in the form of technological thinking, almost guarantees that the *question* concerning technology’s ultimate end is not asked; it almost guarantees that technological means remain blind to any end other than their own perpetuation. Despite these tendencies, thought

92. For a general analysis of the way law school trains students to accept invidious social hierarchies of all sorts, see DUNCAN KENNEDY, *LEGAL EDUCATION AND THE REPRODUCTION OF HIERARCHY* (1984).

93. Karl Marx, *Toward the Critique of Hegel's Philosophy of Right*, in KARL MARX & FRIEDRICH ENGELS, *BASIC WRITINGS ON POLITICS AND PHILOSOPHY* 262, 263 (Lewis S. Feuer ed., 1959).

94. His song *The Preacher and the Slave*, in *INDUSTRIAL WORKERS OF THE WORLD, LITTLE RED SONGBOOK* 36 (19th ed. 1923), contains the following lines: “You will eat, bye and bye, / In that glorious land above the sky; / Work and pray, live on hay, / You’ll get pie in the sky when you die.”

95. JULIA KRISTEVA, *HANNAH ARENDT* 45 (Ross Guberman trans., 2001).

owes itself, and humanity, the task of discovering whether the intense complexity of the means of modern technology may have covered over a possibly intense simplicity of their ultimate end.

III. MODERN TECHNOLOGY'S ULTIMATE END

Technology's ultimate end should not be confused with the previously described *effects* of technological thinking.⁹⁶ If, as we have attempted to show, technological thinking lives in forgetfulness of ultimate ends, this does not imply that technology has (or should have) no ultimate end. And if technological thinking has the baleful consequences that we have attributed to it, this does not mean that technology's ultimate purpose is the dehumanization of men and women and the transformation of nature into a warehouse, any more that the use of a hammer as a murder weapon indicates that murder is (or should be) the ultimate purpose of hammers.

The use of the word "should" in the previous paragraph indicates something important that we have yet to make sufficiently clear: Although it may seem that the effects of a social phenomenon are there for all to see, neither its effects nor its ultimate purpose can come into focus clearly without collapsing the formal distinction between is and ought, fact and value, performance and aspiration. That this has been our guiding thought from the outset is indicated by the proposition that was put forward in the very first paragraph: What a thing is (fact), and what a thing is for (value), comprise two aspects of the same theme. The insight that thought *always* approaches a thing from a particular value-position is what saves the endeavor to determine the purpose of a whole institutional complex like modern technology from becoming what Lon Fuller calls "naïve teleology."⁹⁷ In a sense, *all* descriptions of what is—"the facts"—are teleological, since they represent what the describer thinks is important and meaningful about the situation.⁹⁸ To paraphrase the philosopher Franz Rosenzweig: although a fact is never identical to its classification, it is nonetheless always being judged according to its

96. The first is what philosophy for centuries, following Aristotle, has called technology's own *causa finalis* (final cause), while the second is the effect of technology seen as a *causa efficiens* (efficient cause). See HEIDEGGER, *supra* note 6, at 6.

97. LON L. FULLER, *THE MORALITY OF LAW* 146 (1969). The book as a whole articulates and defends Fuller's thesis that law is a "purposive activity" that cannot be understood merely as a fact. See, e.g., *id.* at 95-151.

98. For an extended engagement with this idea and its implications for social research, see Louis Wolcher, *The Many Meanings of "Wherefore" in Legal History*, 68 WASH. L. REV. 559 (1993).

classification.⁹⁹

It follows that any description of, or meditation on, technological thinking *necessarily* implies some level of satisfaction or dissatisfaction with what it is, as compared to other possibilities for human existence. Since history has given us modern technology, and has delivered us over to its essence, in the form of technological thinking, our task here can only be to comprehend and recognize these facts in terms of what we think they *mean* for humanity. In articulating technology's meaning, thought transcends the semiotics of the here-and-now: thought transforms the self-perpetuating semiotics of description into genuine critique. The concept of the ultimate end of technology that we have been developing thus corresponds to Marcuse's trenchant observation, in *One-Dimensional Man*, that "[i]n social theory, recognition of facts is critique of facts."¹⁰⁰

From the standpoint of the individual, an ultimate end is the idea of a state or performance the consummation of which has value in itself—not because it leads to some other end, but simply because it *is*. Kant, for example, famously elevated the human being to the status of an ultimate end in one of his most powerful expressions of the Categorical Imperative: "*Act so as to treat man, in your own person as well as in that of anyone else, always as an end, never merely as a means.*"¹⁰¹ To put it in rhetorical terms, the statement of an ultimate end represents its own justification. Since the whole of an individual's life is never a project that is completed *during* his or her lifetime, the ultimate value of a human life *as a whole* is more difficult for the individual to bring into view. Nevertheless, most individuals would readily agree with Kant that at least their own lives have ultimate value for them. Even in the midst of the rat race that technological thinking has constructed, people do occasionally manage to take time to wonder whether their life as a whole is going anywhere meaningful. The case of individuals attempting to grasp the ultimate value of something that transcends their here-and-

99. FRANZ ROSENZWEIG, UNDERSTANDING THE SICK AND THE HEALTHY: A VIEW OF WORLD, MAN, AND GOD 50 (Nahum Glatzer trans., 1999) ("The act is not identical with its classification, but it is judged according to its classification.")

100. MARCUSE, *supra* note 43, at 118.

101. IMMANUEL KANT, *Metaphysical Foundations of Morals*, in THE PHILOSOPHY OF KANT 154, 195 (Carl J. Friedrich ed., 1993). Walter Benjamin thought that Kant's categorical imperative had not elevated humanity high enough: "One might, rather, doubt whether this famous demand does not contain too little, that is, whether it is permissible to use, or allow to be used, oneself or another in any respect as a means." WALTER BENJAMIN, *Critique of Violence*, in BENJAMIN, *supra* note 1, at 277, 285 n.*.

now, and that is also never before them in the form of a whole, gives us a pattern, or precedent, for thinking about the ultimate end of technology. For modern technology, like life itself, also transcends any one individual's here-and-now. Hence, however difficult it may be to accept the notion that something like technology could itself have an ultimate end, that is precisely the claim this essay makes. We claim that technology does indeed have an ultimate end, something that leads nowhere else, and that constitutes its own justification.

Although death is the termination of life, the ultimate end of life is not death. The "ultimate" in the context of the present investigation is never merely the last, but also always the first. It is the origin of all comportment, of all that is intermediate. Just as the farthest point at the commencement of a round trip journey is always the beginning, so too the ultimate, as origin, is that to which everything secondary eventually returns. Although the individual may desire much, including happiness, there is something that is more original than any happiness, something that puts happiness into question as one of many possible goals. The origin, the ultimate "wherefore," of all human doing is never this or that condition or state of affairs, for no condition or state of affairs ever abides long enough to be ultimate.

Just as the human being as such cannot rightly be reduced to the merely biological life with which it coincides, so too the ultimate end of technology, as a manifestation of human being-in-the-world, does not coincide with this or that project or performance. If, for heuristic purposes, we follow the Western metaphysical tradition and say that the human being is an embodied soul, this gives us a clue for what we are seeking. We must attempt to identify the "soul" of technology that is embodied in *all* the countless things that humans do with its instruments. In short, the criterion of such a thing must be its propensity to *abide* throughout countless performances, in much the same way that the soul is said to abide through the many changes (including deteriorations) that occur in the aging human body. There is only one thing that abides in this way as long as human life lives, and in its constant abiding it is both the origin and the return of all that is properly human: freedom. Let us then say it plainly: *The ultimate end of technology is a particular kind of freedom.*

A word or two on method: we have both "found" freedom in our meditation on the ultimate end of technology *and* laid freedom down as an axiom for the assessment and further development of technology. It bears repeating that in social criticism the relation between Is and Ought

is always dialectical. Those who wish to “prove” freedom’s impossibility do not escape it: they merely lay it down in a negated form (unfreedom) as the axiom of their lives. They freely choose to bend their necks to the yoke of technological thinking. We choose otherwise. For us, “freedom” names the possibility of decisively breaking with technological thinking—the possibility of changing history, for better or worse.

If we define technology as such to be technical means in the service of an ultimate end, then we are forced to conclude that the previously described *essence* of modern technology is at war with freedom as its ultimate end—at war with that of which it is the *essence!* In this curious state of affairs, it is as if the essence of the human being—*animal rationale* (“rational animal”), as traditionally determined—were subverting the very purpose and meaning of human life: as if man had finally succeeded in outsmarting himself. For the essence of modern technology, as technological thinking, has no ultimate end. In this dimension its rationality is fundamentally irrational, at least if one takes the viewpoint that the purpose of society as a whole is to preserve and unfetter the people of which it is composed.¹⁰²

Like all things human, the essence of modern technology *makes a world*—an odious world, perhaps, but a world nonetheless. In a world in thrall to technological thinking, freedom’s mode of abiding consists for the most part in its withdrawal and quiescence. A manifestation of human being-in-the-world, technological thinking stands in the sharpest possible contrast to what we will now call *freedom for responsibility*. The latter is also a manifestation of human being-in-the-world, but unlike technological thinking it maintains a certain critical distance between itself and its world. In it, freedom awakes. Technological thinking falls into its world wholeheartedly, becoming its world to such a degree that it is incapable of imagining any other possibility of existence. In a manner that will become clear later, however, freedom for responsibility always remains on the hither side of its world in the form of freedom’s *possibilities* and freedom’s *responsibility*. Modern technology, in the sense of technics, has been “captured” by technological thinking to such a degree that the latter has driven the ultimate end of technology as such into darkness and obscurity. It is high time for freedom to rediscover that end—namely, *itself*—and in so doing to transform modern technology’s essence, its mode of being.

102. See ADORNO, *supra* note 24, at 133.

We will attempt to show in the next section that there can be only one ultimate end for technology that is worthy of the name: freedom to take responsibility for what humans-and-nature are becoming *together*. But it is clear that the ultimate effect of technological thinking in present circumstances is precisely the opposite. Marcuse is right in saying that, for the most part, in modern technological societies “the individual’s performance is motivated, guided and measured by standards external to him, standards pertaining to predetermined tasks and functions,” and that “his liberty is confined to the selection of the most adequate means for reaching a goal which he did not set.”¹⁰³ As this passage suggests, freedom should never be confused with liberty. If license is the power to satisfy instinctual drives whenever external constraints are absent, liberty is merely the unimpeded power to follow your motives around, like a dog follows its master. But freedom for responsibility has nothing to do with choosing this or that good from a set of goods that has been extracted, usually by someone else, from the standing-reserve that nature and human relations have become. Rather, genuine freedom is openness to destiny—openness to *being claimed* by something: an aphorism that must remain obscure so long as freedom itself is not thought down to its roots.

IV. THE ESSENCE OF FREEDOM

The phenomenon of freedom shows itself in what the West for two thousand years has called “nature.” Since we are beings-in-nature, the word “nature” necessarily represents the conceptual context in which freedom must be understood, if it is to be understood at all. Thought about human freedom will always remain superficial if it fails to think down to freedom’s ground, which is nature itself. For a long time the idea that man is part of nature has been held captive by a criterion that holds nature to be an intermediate end: nature has been seen merely as the direct means of life and the material object of human activity.¹⁰⁴ This captivity must be broken if freedom is to be understood in a manner that is sufficiently radical. Hence freedom’s grounding question—what *is* nature?—must be asked in a way that does not treat the answer as self-evident.

Fortunately, a nearly forgotten tradition gives us the means to ask this

103. MARCUSE, *supra* note 3, at 45.

104. See, e.g., KARL MARX, *Economic and Political Manuscripts*, in *EARLY WRITINGS* 63, 126 (T.B. Bottomore trans., 1964).

grounding question. In Western thought, before there ever was a “nature” there was *physis*. This Greek word is the root of our words “physics” and “physical.” Roman thinkers later translated *physis* into *natura*, the antecedent of our words “nature” and “natal.” The translation has been decisive ever since: the image of the natal (Mother Nature giving birth to the world’s many beings) supplanted an altogether different image of *self-generation* and *self-renewal*. Lost in the translation was an entire way of thinking about nature. *Physis* was not originally a realm of natural (as opposed to man-made) objects interacting with one another in processes that occupy space and time in a determinate way. Rather, *physis* was conceived as the origin of a kind of unfolding that proceeds, as it were, from out of itself, and that manifests itself in the persistence in being of all that is: a concept that undoubtedly reflects what Werner Jaeger calls the Greeks’ “organic point of view.”¹⁰⁵ Moreover, *natura* was destined to become a theological concept in the Middle Ages (as in “God created nature”), whereas the concept of *physis* transcends theology: the Greeks thought that the gods themselves, just like everything else in the world, were manifestations of *physis*, and not the other way around.¹⁰⁶

This rather odd notion of self-generation contradicts our deeply accustomed way of thinking about nature, at least in modernity, as a realm (*natura*) of created beings that rattle around in space and pass through time. *Physis* names *presencing* as the manner in which beings persist in being. Although *physis* itself is radically simple and obvious, it is hard for modern humans to grasp as a concept, thanks to the ubiquity of technological thinking. *Physis* eludes the common sense of technological thinking precisely because it is a condition of common sense: the eye that sees does not, after all, see itself seeing. Consequently, just as there are color-blind people, so too there will be people who are blind to *physis*.¹⁰⁷ Nevertheless, we will forge ahead with full confidence in the truth of Spinoza’s epigram: “For all that is

105. WERNER JAEGER, 1 PAIDEIA: THE IDEALS OF GREEK CULTURE, at xx (Gilbert Highet trans., 1945).

106. See Heidegger’s classification of the three stages of Western thought on the being of beings: “[A being] in its *emergence* unto itself (Classical Greece); [a being] *caused* by a supreme [being] of the same essence (Middle Ages); [a being as] the extant as *object* (modernity).” MARTIN HEIDEGGER, CONTRIBUTIONS TO PHILOSOPHY (FROM ENOWNING) 120 (Parvis Emad & Kenneth Maly trans., 1999).

107. See HEIDEGGER, *supra* note 23, at 202.

excellent and eminent is as difficult as it is rare.”¹⁰⁸ When the pre-Socratic philosopher Heraclitus said that “the sun is not only new each day, but forever continuously new,”¹⁰⁹ he meant to draw attention to something very uncanny about existence. Foreshadowing Einstein’s general theory of relativity by two-and-a-half millennia, Heraclitus knew that the present moment and all of the beings that are present in it (ourselves included) are *not* like a uniformly aging box full of its contents; he saw that they belong together in an inseparable and dynamic jumble made up of both space *and* time. From the standpoint of *physis*, life and world are never two things standing side by side. Rather, life plus world equals history: not history in the dry sense of something that is past, but history in the active sense of the ongoing making of history in the here-and-now.

If *natura*’s best metaphor is that of birth, then perhaps the most appropriate metaphor for *physis* is that of bud and flower.¹¹⁰ The “fecundity of nature” (*natura*) thus stands opposed to a nature that is like a rose bud unfolding itself into a blossom (*physis*). The true salience of this difference is not to be found in the observation that *natura* connotes the female, and *physis* the male, but in the insight that the image of fecundity represents a kind of *splitting in two*, whereas that of blooming represents the persistence in being of a *unity*. Moreover, the law of cause and effect governs *natura*, while in *physis* there is something about nature that precedes all talk of causation: for the ancients, *physis* is that which is always already here. If *natura* gives us the idea of the real (real beings, real events), then *physis* gives us the idea of reality *as a whole*, which is a lot “bigger” phenomenon than even the biggest real thing. Reality as a whole manages to persist without its persistence being caused by any *particular* real being or event. Although science can hope to explain the behavior of all that is real, it has and can have nothing to say about the mind-boggling peculiarity that there is a reality in the first place.

Continuing with the metaphor of blooming, the indifference of *physis* to causation is like that of the rose in this remarkable couplet from *The Cherubic Wanderer*, a book of poetry written by Angelus Silesius in the sixteenth century:

108. “*Nam omnia praeclara tam difficilia quam rara sunt*,” quoted in ARTHUR SCHOPENHAUER, *THE WORLD AS WILL AND REPRESENTATION* 384 (E.F.J. Payne trans., 1958).

109. HERACLITUS, *supra* note 58, at 13 (Fragment 6).

110. See MARTIN HEIDEGGER, *AN INTRODUCTION TO METAPHYSICS* 14 (Ralph Manheim trans., 1959).

The rose is without why: it blooms because it blooms,
It pays no attention to itself, asks not whether it is seen.¹¹¹

To be “without why” is not an occult or mysterious state; it means, first and foremost, to *persist in being* before becoming a mere object for human contemplation or manipulation. Spinoza had a term for this extraordinary tendency of beings to persist in being: *conatus essendi*.¹¹² Think of this *conatus essendi* as such and in its own right, and the idea of *physis* can begin to emerge from the mists of metaphysics into the sunlight of the here-and-now. In any case: for the Greeks, nature as *physis* must first persist in being before nature as *natura* can exhibit its dazzling array of causal relations to the inquisitive human mind.

In nature conceived as *natura* human beings stand above, and ultimately against, non-human beings in the form of nature’s creatures. In *physis*, however, the emerging, flourishing, and decaying of all beings (human and non-human) are constantly manifesting nature. They *are* nature, in fact. In *natura* humans are the first and best of Mother Nature’s creatures, the “*summum bonum . . . of creation.*”¹¹³ In *physis* humans share with all beings a non-natal origin that Heraclitus described as an ever-living fire, itself without origin, that is constantly being kindled in measures and being put out in measures.¹¹⁴ Nature gives us the idea that we are different from it; *physis* gives us the idea that we are it. Something is “unnatural” if it does not fall into place in the world conceived as a collection of beings governed by “natural” laws. But the negation of the word *physis* does not describe anything unnatural in this sense. From a Greek point of view, *physis* is not so much the antithesis of *nomos* (lawfulness): rather, *physis* makes *nomos* possible by being here in the first place, so that beings can then be observed, by humans, to behave or violate natural or man-made laws.

Modern science and technology are completely, if not obsessively, grounded in the idea of nature as *natura*. Science is the development of a certain way of looking at things: a way that the Greeks originally called *theoria*. However, theoretical knowledge for the Greeks (*sophia*) was

111. The poem is quoted, and information about the poet is provided, in MARTIN HEIDEGGER, THE PRINCIPLE OF REASON 35 (Reginald Lilly trans., 1991) (1957).

112. BENEDICT [BARUCH] DE SPINOZA, ETHICS 135 (W. Hale White trans., 1930). For Spinoza’s original Latin terminology, see EMMANUEL LEVINAS, ALTERITY AND TRANSCENDENCE 166 (Michael B. Smith trans., 1999).

113. Martin Heidegger, *The Problem of Sin in Luther (1924)*, in MARTIN HEIDEGGER, SUPPLEMENTS 105, 105 (John van Buren ed. & trans., 2002).

114. HERACLITUS, *supra* note 58, at 25 (Fragment 30).

sharply distinguished from the knowledge that is appropriate to *technē*. The latter kind of knowledge, which they called *phronesis*, is for the sake of production only, whereas *sophia* lies beyond the sphere of mere utility in the form of seeing and knowing for its own sake.¹¹⁵ Things are otherwise with technological thinking in our era, which demands scientific results (and pays for them, by way of research funding) that can be transformed into a standing reserve of useful things and procedures. In conducting modern science and technology, we are not ourselves: we ask questions the way “everyone” asks them, and we conduct research the way everyone else does.¹¹⁶ From the standpoint of technological thinking, the proud motto of pure science that is carved in the tombstone of the great mathematician David Hilbert—“*Wir müssen wissen. Wir werden wissen.*” (“We must know. We will know.”)¹¹⁷—leads naturally and inexorably to another, more sinister, motto: “We must control and administer what we know. We will control and administer it.” The scientific conquest of nature thus slides easily into the “scientific conquest of man.”¹¹⁸

A *natura* that is fully known implies the entry of all *natura*’s beings into spheres of domination and control.¹¹⁹ This is not so from the standpoint of *physis*, where things are never first of all objects of theoretical contemplation or political and economic manipulation; in emerging with us into the world, beings are always already *here* for our dealings with them. As modes of knowing, science and technology accomplish something other than themselves, whereas *physis* always accomplishes just itself. And although scientific theory in service to technological thinking would like to convince us otherwise, it is only one of the many possible (and valid) ways that we can choose to view and speak about nature in the sense of *physis*.

Take the example of images produced by the human mind. The psychoanalyst approaches human images scientifically, as symptoms of a cause. Freud’s pedantic reduction of the mystic’s “oceanic feeling” to

115. HEIDEGGER, *supra* note 61, at 84.

116. Martin Heidegger, *Wilhelm Dilthey’s Research and the Struggle for a Historical Worldview*, in HEIDEGGER, *supra* note 113, at 147, 164.

117. See *Riemann’s Riddle*, THE ECONOMIST, July 12, 2003, at 74, 75.

118. MARCUSE, *supra* note 43, at xiv.

119. Cf. HORKHEIMER & ADORNO, *supra* note 7, at 95 (“Technical rationality today is the rationality of domination.”).

certain experiences and feelings in infancy is a good example of this.¹²⁰ The psychoanalyst and psychologist seek to explain things, and hence they understandably abandon “ontological investigation of the image, to dig into the past of man,” as Gaston Bachelard puts it.¹²¹ In doing so, however, they more or less inadvertently “explain the flower by the fertilizer,”¹²² for the image itself then loses all meaning apart from its place in the causal nexus. In Heideggerian terms, the sciences of the human mind are characterized by a “forehaving” that interprets being as a series of causes and effects, and by a “foreconception” that addresses and speaks about mental life only in terms of this series.¹²³ Both the forehaving and the foreconception are firmly locked into various academic “disciplines” that suffocate all other kinds of questioning. But of course there are, nevertheless, many *other* possible ways of looking at images. The phenomenologist, for example, aspires to “take the image in its being,”¹²⁴ by merely describing what is seen, rather than explaining or analyzing it.¹²⁵ And there are at least some artists, poets, and aesthetes who are content to make or contemplate the image as such,¹²⁶ all the while remaining indifferent to its proper place in the causal nexus, and sometimes even to its potential to turn a profit. In the present age, however, these and other non-technological ways of looking at things remain as but small islands within a vast sea of technological thinking. For humans everywhere are submerged in a technological anthropology that already knows what man is, and hence can never ask the question of whom he might be.¹²⁷

In nature as *natura* human needs and wants, including the scientific desire to know, are set against a nature that is an adversary to be conquered and tamed. To name nature’s children, to unlock her secrets, to marshal her wealth and resources, to master her processes and make

120. SIGMUND FREUD, CIVILIZATION AND ITS DISCONTENTS 11–20 (James Strachey ed. & trans, 1962) (1961).

121. GASTON BACHELARD, THE POETICS OF SPACE. at xxvi (Maria Jolas trans., 1969).

122. *Id.*

123. Martin Heidegger, *Phenomenological Interpretations in Connection with Aristotle*, in HEIDEGGER, *supra* note 113, at 111, 121.

124. BACHELARD, *supra* note 121, at xxv.

125. See M. MERLEAU-PONTY, PHENOMENOLOGY OF PERCEPTION, at viii (Colin Smith trans., 1962).

126. Cf. Wallace Stevens, *The Irrational Element in Poetry*, in WALLACE STEVENS, COLLECTED POETRY AND PROSE 781–92 (1997).

127. Martin Heidegger, *The Age of the World Picture*, in HEIDEGGER, *supra* note 6, at 115, 153.

them do the bidding of humans: this is the essence of our attitude towards nature conceived as *natura*. The concealment of nature as *natura* challenges humans to pry it open and discover its secrets like the oysterman pries an oyster open to find the pearl within. In contrast, the concealment of nature as *physis* is a great mystery and paradox: it is Heraclitus's "ever-living fire," that keeps on going and going in a way that would put the Energizer Bunny to shame. If *natura* reports itself only in a form that can be ordered within a system of "information," *physis* refrains from reporting itself at all: it simply endures. If, in *natura*, truth is the "correct" correspondence between a proposition and the facts, in *physis* the truth of presencing shows itself long before any proposition is uttered, or fact determined.

Although our previous survey of the effects of technological thinking may sound pretty grim, to loosen *natura*'s grip on our minds and to begin thinking of nature in terms of *physis* does not have to transform us into Luddites or revolutionaries. No reasonable person could doubt that human beings need natural resources in order to live and prosper. Nature in this sense is the irreplaceable source of all our food, clothing, shelter, medicine, and art. However cruelly and unequally distributed they are at the present time, scientific discoveries, the fruits of modern technology, and technological planning are obviously essential means for maintaining and enhancing conditions of life on this planet. It is not the technological base that presents the problem: it is the superstructure of technological thinking that we must break with. Like Rousseau,¹²⁸ we do not urge humanity as a whole to renounce technology's advances in order to avoid the vices of technological thinking. For it is not a question of either/or here. The most pressing question for humanity is whether we also need, or even are able to recognize, nature in the sense of *physis*. Treating nature as *natura* enables life to live. But treating it (including ourselves) as *physis* can begin to make life *worth* living.

Let's be blunt: the life of a puppet—even a healthy and well-outfitted puppet—is a degraded way of living. In *physis*, however, lives a spontaneity that puppets cannot know. *Physis alone implies the idea of freedom: it reflects the image of ourselves as the uncaused origin of our future.* Freedom and responsibility are impossible to imagine if we conceive of nature as a box containing entities (including ourselves) that obey immutable laws. Thus, the ancient debate between those who think

128. See JEAN-JACQUES ROUSSEAU, *A Discourse on the Origin of Inequality*, in *THE SOCIAL CONTRACT AND THE DISCOURSES* 31, 124 (G.D.H. Cole trans., 1993).

we have free will and those who think that all of our actions are predetermined keeps on sputtering inside a concept of nature whose essential ambiguity has never been worked out.

As Schopenhauer demonstrates, in a nature conceived as *natura* there is no genuine choice, only its illusion: although there exist motives that can cause actions, the motives themselves exist only if they have been caused by something else.¹²⁹ This is why freedom cannot properly be classified as the phenomenon of an autonomous and reasonable will,¹³⁰ for in freedom of choice (*liberum arbitrium*) the will is always held hostage to a prior judgment between two or more given things according to a predetermined motive which, as Arendt puts it, “has only to be argued to start its operation.”¹³¹ Nevertheless, in the Western metaphysical tradition freedom is usually classified as a kind of uncaused causality; there is causality in accordance with the laws of nature, and then there is “another causality through freedom,” as Kant describes it in the *Third Antinomy*.¹³² Although this way of thinking about freedom gives us the image of what Kant calls “an absolute causal spontaneity beginning from itself,”¹³³ this account of a cause-and-effect relation between freedom and its output logically resembles a squared circle, and is a far cry from the concept of freedom that we are attempting to show here, on the basis of the idea of *physis*.

The genuine freedom of which we speak is not properly classified as a kind of causality: on the contrary, as Heidegger puts it, the real relation is vice versa: “causality is a problem of freedom.”¹³⁴ This is because causality is the fundamental category of beings conceived ontically as objects that are simply present, and that then change or perish according to natural laws. Whereas freedom in our sense is a self-blossoming origin of a human world that only *then* passes into the category of causation. An origin in the Greek sense (*archē*) is not a cause.¹³⁵ It is not

129. SCHOPENHAUER, *supra* note 108, at 106–09; see also ARTHUR SCHOPENHAUER, PRIZE ESSAY ON THE FREEDOM OF THE WILL 40–42 (Eric Payne trans., 1999).

130. Schopenhauer pessimistically made the illusion of freedom, including the feeling that we choose our motives, into the phenomenon of a will that is essentially a blind form of striving, without any ultimate aim. SCHOPENHAUER, *supra* note 108, at 308.

131. ARENDT, *supra* note 83, at 151.

132. IMMANUEL KANT, CRITIQUE OF PURE REASON 484 (Paul Guyer & Allen Wood eds. & trans., 1998).

133. *Id.*

134. MARTIN HEIDEGGER, THE ESSENCE OF HUMAN FREEDOM 203 (Ted Sadler trans., 2002) (1982).

135. HEIDEGGER, *supra* note 8, at 85.

a thing from which some other thing proceeds, but is rather a kind of *proceeding* in which the origin is constantly passing into the originated. Although Kant himself glimpsed something like this order of priority in classifying causation as one of the categories of our understanding, rather than as a property of things in themselves,¹³⁶ he failed to see that causality is grounded in freedom, and not the other way around.¹³⁷ Freedom stands on the hither side of the actual in the form of *possibilities*. Since the past has already devoured its possibilities, the possibilities of which we speak should not be conceived as being outlined beforehand, as if freedom were limited to bringing about one of them. Rather, we must succeed, as Bergson says, in conceiving of freedom's possibilities in terms of the "radically new and unforeseeable."¹³⁸ Only if we understand freedom in this sense can we break decisively with the view that the present state of affairs in technology is inevitable.

Politics traditionally cares about freedom in its "outer" dimension only. Its context is the decision whether and how to restrain the individual's freedom of action (negative freedom), or to endow the individual with certain freedom-enhancing entitlements (positive freedom). Standing in contrast to these kinds of outer freedom is the traditional metaphysical concept of what Kant calls "inner freedom."¹³⁹ Just as the feeling of inner freedom can be absent despite the removal of all external restraints, so too the inward experience of freedom that the Stoics celebrated¹⁴⁰ can show itself despite all outer manifestations of freedom's absence. As Arendt correctly says, however, this traditional conception of inner freedom presupposes "a retreat from the world, where freedom was denied, into an inwardness to which no other has access."¹⁴¹ Inner freedom thus conceived is a lonely and ineffectual thing. In contrast, our notion of genuine freedom, *freedom for responsibility*, radically inverts the traditional understanding of these "inner" and "outer" dimensions of freedom. The shape and condition of the public world is now felt to be inner freedom's burden and responsibility, while a formerly calm inner freedom feels the need to

136. KANT, *supra* note 132, at 262–64.

137. HEIDEGGER, *supra* note 134, at 205.

138. HENRI BERGSON, *THE CREATIVE MIND* 18 (Mabelle L. Andison trans., 1946).

139. IMMANUEL KANT, *Critique of Practical Reason*, in *PRACTICAL PHILOSOPHY* 137, 268 (Mary J. Gregor ed. & trans., 1996).

140. *See, e.g.*, EPICETUS, *A MANUAL FOR LIVING* 3–5 (Sharon Lebell trans., 1994).

141. ARENDT, *supra* note 83, at 146.

pass from its refuge into the outer world of politics. Freedom for responsibility *intervenes*, and having intervened, it feels a tinge of guilt no matter what the outcome is. This is not a paradox but an existential imperative for anyone who takes the idea of responsibility seriously.

The traditional Western definition of liberty as freedom *from* politics (political freedom) enshrines the private sphere as the site where freedom transpires.¹⁴² And the solemn guarantee (if not the actual achievement) of fundamental human rights, including the right to privacy, is undoubtedly a genuine advance over tyranny and totalitarianism. But it must be noted that freedom for responsibility is never something that ends in the private sphere, beyond the reach of politics. On the contrary, it *begins* there as the individual's recognition that the terms "private" and "public" are inadequate categories for grasping the nature and the scope of the responsibility for the world that freedom makes.

True freedom is experienced only in acting, not in willing; it is not experienced as sovereignty over something or someone, but as a spontaneous participation in destiny. Freedom thus conceived is not obedience to Kant's "moral law within,"¹⁴³ for this kind of freedom *limits* responsibility to compliance with the moral law. It lets you off the hook if you think you have done "the right thing." Whereas, if each moment is full of possibilities for freedom that the next moment eclipses, this means that we are destined to live a life suffused with responsibility for *all* of the roads not taken. Freedom's movement is thus tragic, for as the philosopher Emmanuel Levinas remarks: "The tragic does not come from a conflict between freedom and destiny, but from the turning of freedom into destiny, from responsibility."¹⁴⁴ Life lived in the consciousness of the tragic in this sense is always an occasion for guilt; in fact, freedom and guilt entail one another. In one of his earliest texts, Heidegger helpfully elucidates this point in terms of the phenomenon of conscience, which so often refuses to be soothed by reason's whisper, "I did the right thing":

To choose one's conscience means at the same time, however, *to become guilty*. As Goethe once said, "He who acts is always without conscience, irresponsible." Every action is at the same time something marked by guilt. For the possibilities of action

142. *Id.* at 149.

143. KANT, *supra* note 139, at 269.

144. EMMANUEL LEVINAS, EXISTENCE AND EXISTENTS 79 (Alphonso Lingis trans., 2001).

are limited in comparison with the demands of conscience, so that every action that is successfully carried out produces conflicts. To choose self-responsibility, then, is to become guilty in an absolute sense. Insofar as I am at all, I become guilty whenever I act in any sense.¹⁴⁵

In the terminology of Max Weber, to be free is to be aware of the ultimate *meaning* of human conduct, and this means to live in the “knowledge of tragedy with which all action, but especially political action, is truly interwoven.”¹⁴⁶ Unfortunately, the hackneyed old sports saying, “No pain, no gain,” is also an accurate description of all historical change for the better. Only what Benjamin calls a “quite childish anarchism” could refuse to acknowledge *any* constraint on the individual; only such a one could fail to see that the very meaning of morality and history becomes impossible to think if action, including the violence of radical change, is removed from the sphere of thought and politics.¹⁴⁷ Conversely, only an ideologue utterly and blindly convinced of the rightness of his cause could fail to see the pain and disruption that his effective and even “reasonable” actions cause. As Levinas puts it: “There are cruelties which are terrible because they proceed from the necessity of the reasonable Order. There are, if you like, the tears that a civil servant cannot see.”¹⁴⁸ Freedom for responsibility is thus a way of living that is radically different from mindlessly falling into the everyday world of production and consumption, where everyone does pretty much what everyone else expects them to do, and nature becomes a mere assembly of objects for us to use and abuse, conserve and consume, honor and dishonor, all according to the preferences that technological thinking allows and encourages us to form. To transcend this world requires both the courageous action of a hero and the humility and sorrow of a saint.

Although we obviously need nature’s resources, we do not need technological instruments *as such* nearly as much as we need freedom for responsibility. While the attempt to fly from freedom may quench the fires of responsibility and guilt, at least for a while, such an attempt is none other than a cowardly acquiescence in the status quo. As long as

145. Heidegger, *supra* note 116, at 169.

146. MAX WEBER, *Politics as a Vocation*, in FROM MAX WEBER: ESSAYS IN SOCIOLOGY 77, 117 (H.H. Gerth & C. Wright Mills eds. & trans., 1958).

147. BENJAMIN, *supra* note 101, at 284.

148. EMMANUEL LEVINAS, BASIC PHILOSOPHICAL WRITINGS 23 (Adriaan T. Peperzak et al. eds., 1996).

we think of nature exclusively in terms of *natura*, neither humans nor nature will ever be free. Just as the institution of slavery demeans both slave and master, so too treating nature merely as *natura* demeans both nature's creatures and the human beings who exploit or protect them. From the standpoint of *natura*, environmentalism will never be more than an emotionally driven "preference" to protect and preserve some of Mother Nature's beings while ignoring or decimating others. According to the scientific maxim "What matters gets measured," the earth has to get completely mapped and measured before the reality of environmental degradation can acquire any political currency.¹⁴⁹ Nature recedes, as it were, so that her beings may be computed and counted in that simulacrum of her that is called "the environment."¹⁵⁰ But from the standpoint of *physis*, the environmentalist, no less than the anti-environmentalist, freely decides to take a stand within existence, and steers it, for good or for ill, in a direction. If *natura* gives humans the power to dominate nature, *physis* gives nature and humanity the warrant, and the responsibility, to be what they are becoming together.

Let's be clear: We do not advocate an attitude towards nature that makes it into a "utopian realm of hope" that would miraculously rescue people from the coldness of the market, and from an increasingly frenetic home life that is being "devoured by the monster of competition."¹⁵¹ Nor do we idolize nature the way certain fascist writers did, as a mystical place where blood and race are linked to soil, and where sentimentality for one's "natural" land leads to brutality in defending and extending it.¹⁵² The longing to fly to nature, and to drown one's individuality and responsibilities in it by becoming "one with nature," has nothing to do with our concept of freedom for responsibility. We say, on the contrary, that an awareness of nature as *physis* can bring human beings *genuinely* back to their home and work, back to their individuality, and, more importantly, *back to a sense of responsibility*. Being attuned to nature as *physis* does not automatically make us free and responsible to any particular being or segment of nature. Rather, it makes us responsible *for* the nature that we ourselves

149. See, e.g., *Earth Observation: Flying Blind*, THE ECONOMIST, July 26, 2003, at 73–74.

150. See HEIDEGGER, *supra* note 26, at 244 (commenting on the "unfathomable, essential difference between the relationship to a 'world' [*Weltbezug*] and to an 'environment' [*Umgebungsbezug*]").

151. Leo Lowenthal, *Knut Hamsun*, in THE ESSENTIAL FRANKFURT SCHOOL READER, *supra* note 65, at 319, 322 (attributing this attitude to Ibsen).

152. *Id.* (criticizing the work of the proto-fascist Scandinavian writer Knut Hamsun).

manifest by our actions and inactions. We are like architects whose buildings are fated to be lived in by everyone and everything. The thought of nature as *physis* yields the chance to see oneself and one's choices as mattering to history. While this chance does not necessarily lead to tree-hugging or a sense of stewardship over nature, neither does it necessarily lead to their opposites. And that is precisely why we need the concept of nature as *physis*: to reawaken the monumental insight that we have, indeed that we are, our possibilities.

The freedom of which we are speaking transcends technological thinking to participate as a creative actor in an ever-blossoming world that no single person ever "selects," but for which everyone is, paradoxically, responsible. Choosing freedom thus means saying "Yes!" to the manner in which you-and-nature continue to persist in being. It means first of all having the time and the inclination to *think*, and form an idea of, the ultimate end of technology. It also means holding the unity that is the *world-and-you* accountable for having ignored the question of ultimate ends for so very, very long. Although we risk being mocked in repeating Marcuse's words, in an object world that is at once humanized *and* naturalized in this way one can begin to sense "that an electric garbage disposal unit has a 'soul,' that there can be tenderness in an automobile, and that a bulldozer can not only pulverize but also restore nature."¹⁵³ In freedom for responsibility, we forget that everything is caused, and we make decisions that destiny fulfills as freedom's inescapable counterpart. Only the one who succumbs to the belief that technological thinking is inevitable surrenders to fate. But destiny is beyond fate. As Martin Buber puts it, "destiny is not a dome pressed tightly down on the world of men," but rather freedom's very meaning and fulfillment.¹⁵⁴ Human beings who are free for responsibility believe that destiny *needs* them rather than controls them.

Genuine freedom of this sort is hard to glimpse and maintain in the best of circumstances, though, and it is especially hard for those whose daily struggle for existence is more than just an abstraction written about in an academic paper. We must now confront the relation between what Roosevelt called "freedom from want"¹⁵⁵ and the ultimate end of

153. MARCUSE, *supra* note 2, at 133.

154. MARTIN BUBER, *I AND THOU* 63 (Ronald Gregor Smith trans., Scribner Classics 2000) (1958).

155. See Franklin D. Roosevelt, *The Four Freedoms Speech, 1941*, in 2 *THE PEOPLE SHALL JUDGE: READINGS ON THE FORMATION OF AMERICAN POLICY* 751, 756 (The Staff, Social Sciences, the College of the University of Chicago eds., 1949).

technology that we have identified, freedom for responsibility. Although these two freedoms are not the same, we will claim that they are bound to one another inextricably.

V. THE RELATION BETWEEN FREEDOM FOR RESPONSIBILITY AND FREEDOM FROM NECESSITY

Although there is probably nothing that “bores the ordinary man more than the cosmos,”¹⁵⁶ as Walter Benjamin once remarked, it nevertheless is true that we are cosmologically responsible for the shape of our world whether or not we are aware of it, or bored by it. And it is also true that there is no *logically* necessary connection between the consciousness that one is free for responsibility (as we have described it) and whether one’s material life circumstances place one comfortably beyond the struggle for existence. Experience teaches that even a poor person or a miserable slave can become a philosopher.¹⁵⁷ Nevertheless, neither the threat nor the reality of an empty belly correlates well with a sense of responsibility that extends beyond finding the next meal. Although the Stoic’s advice always to identify the real with the desirable may bring occasional spells of tranquility to the souls of the unhappy and the downtrodden,¹⁵⁸ it is also a recipe for resignation to the effects of technological thinking. From the standpoint of genuine freedom, acceptance of the status quo is the same as a guilty complicity in its perpetuation.

Before people can make a mature decision about the ultimate value of the world that technological thinking has made, they must have both time for reflection and the inclination to reflect. The former is determined by necessity, whether real or artificially perpetuated—a point that we will return to shortly. But the latter requires the mind to make a decisive break with the self-evident naturalness of the world. Only such a break gives thought the critical distance that is necessary to think in terms of technology’s ultimate end. Yet how very hard this is! According to Max Weber’s well-known thesis, the “worldly asceticism,”

156. WALTER BENJAMIN, *THE ARCADES PROJECT* 102 (Howard Eiland & Kevin McLaughlin trans., 1999).

157. For example, the great stoic philosopher Epictetus was a slave. Moses Hadas, *Introduction to ESSENTIAL WORKS OF STOICISM*, at vii, xv (Moses Hadas ed., 1961).

158. “Seek not that the things which happen should happen as you wish; but wish the things which happen to be as they are, and you will have a tranquil flow of life.” Epictetus, *The Manual*, in *ESSENTIAL WORKS OF STOICISM*, *supra* note 157, at 85, 87.

which is characteristic of the earliest stages of capitalist production in Europe, had a religious basis. For the Puritan, Weber writes, “labour came to be considered in itself the end of life.”¹⁵⁹ The early, religiously motivated capitalist saw repression of all forms of “spontaneous, impulsive enjoyment” as a moral imperative,¹⁶⁰ in part because he thought “[u]nwillingness to work is symptomatic of the lack of grace.”¹⁶¹ The decline and disappearance of this religious basis of early capitalism did not, however, diminish the social importance of work in capitalist production. Nor did it alter the attitude of technological thinking about the relationship between work and worth. As Weber puts it, in two oft-cited passages: “The Puritan wanted to work in a calling; we are forced to,”¹⁶² and “the idea of duty in one’s calling prowls about in our lives like the ghost of dead religious beliefs.”¹⁶³ The individual who does not experience the need to work as a religious duty “generally abandons the attempt to justify it at all,”¹⁶⁴ says Weber, thereby confirming our earlier hypothesis that one of the prime effects of modern technology is to channel mental energy away from the consideration and formulation of ultimate ends. People learn that if they think too consistently and too vigorously about their life and where it is going, they can cause themselves all kinds of short-term inconvenience, without any assurance that things can be improved.

Weber’s central insight that reason’s capacity to think about ultimate ends atrophies wherever technological thinking holds sway suggests that a precondition for the recognition and spread of the genuine freedom that we have attempted to uncover—freedom for responsibility—is a material way of life that has been released from the grip of what Marcuse calls “surplus-repression.”¹⁶⁵ Work is repressive to the extent that it forecloses the natural and creative ends that individuals would pursue if their time were truly their own. And it ceases to be repressive whenever an increase in the leisure time available to individuals, corresponding to overall increases in the efficiency of socially necessary labor, is interpreted as a fundamental human right and a cause for

159. WEBER, *supra* note 9, at 159.

160. *Id.* at 119.

161. *Id.* at 159.

162. *Id.* at 181.

163. *Id.* at 182.

164. *Id.*

165. MARCUSE, *supra* note 2, at 22, 140.

celebration, rather than as an occasion for shame and self-hatred on account of being “unproductive” or out-of-work.

As the overall amount of time required for socially necessary work continues to decrease as a consequence of automation and other technological developments, technological thinking is responsible for allowing the realm of unnecessary repression continually to grow: as if the two were inversely (and perversely) correlated. For despite the fact that the *overall* efficiency of the system has improved, the system still requires its unemployed members to “earn a living” in some job or other, no matter how degrading and unnecessary it may be when considered from the standpoint of satisfying vital human needs. Enter the McDonaldization of the workforce in the form of low-paying service jobs, the growth of part-time employment without benefits, and the frantic pace of a work ethic that is keyed to the norm of producing short-term profits for shareholders. This surplus repression is irrational from the standpoint of any ultimate end that values humans over things, since increased technological efficiency in the production and distribution of necessary goods ought to lead to more freedom from necessity, rather than the same amount or less.

Technological thinking makes us prove our worth, to others and to ourselves, in the labor market. But why should the labor market decide our worth if a free human life is the ultimate end of socially necessary labor, rather than just a means to the end of production for its own sake? In a recent essay on Marcuse’s thought, Jürgen Habermas refers to a widespread estimate that in the countries comprising the Organization for Economic Cooperation and Development (OECD),¹⁶⁶ the gross national product could theoretically be produced by twenty percent of those able to work.¹⁶⁷ The social meaning of this estimate is obvious from the standpoint of any plausible non-Puritanical conception of technology’s ultimate end. As Habermas says, with notable understatement, “if a constantly increasing part of the working population becomes ‘superfluous’ for the reproduction of society, the close connection between occupational success and social recognition

166. Thirty member-states belong to the OECD: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, South Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States. See <http://www.nationmaster.com/index.php?kp=OECD> (last visited Dec. 23, 2003).

167. Jürgen Habermas, *The Different Rhythms of Philosophy and Politics for Herbert Marcuse on His 100th Birthday*, in MARCUSE, *supra* note 2, at 233, 236.

can hardly be maintained.”¹⁶⁸ And even if the estimate on which Habermas relies is off by a lot, it cannot reasonably be denied that technological improvements in the efficiency of production and distribution are tending in the direction he describes. Nor can it be denied that we are doing very little to anticipate and prepare for the effects that this technological cornucopia will (or should) have on the relations between work and worth, rich and poor, and Self and Other. Instead, we seem content to accept an absurd state of affairs in which “the power of the system over human beings increases with every step they take away from the power of nature.”¹⁶⁹

Habermas is speaking primarily about the surplus repression of work in highly developed nations. Looking beyond repressive conditions there, one encounters a similar but far more brutal surplus repression in undeveloped and developing regions. This happens to be a world where a large portion of the human population is ravaged by *curable* diseases,¹⁷⁰ where eight hundred million people suffer from *avoidable* hunger and malnutrition,¹⁷¹ where 1.2 billion people live on less than one dollar per day,¹⁷² and where poor working parents all too often have to make the untenable (and technologically unnecessary) choice between protecting their children from harm, including taking care of them when they are ill, and keeping their jobs.¹⁷³ The fact that in such a world technological thinking considers overcapacity in the American automobile industry, currently at twenty percent and growing, to be *bad news*¹⁷⁴ speaks volumes. This fact should be more of a cause for global

168. *Id.*

169. HORKHEIMER & ADORNO, *supra* note 7, at 30–31.

170. Consider the example of tuberculosis: “The world observed World TB Day on March 24, the deadly yet curable disease which has infected one third [of the] world population and kills three million people every year.” *Timely Advice*, THE INT’L NEWS (INTERNET EDITION), Mar. 25, 2003, at <http://www.jang.com.pk/thenews/mar2003-daily/25-03-2003/oped/editorial.htm>.

171. Beth Potier, *UN’s Diouf Addresses Hunger: “The World Hunger Problem Is Clearly Political, Not Technical.”* HARV. U. GAZETTE, Feb. 6, 2003, available at <http://www.news.harvard.edu/gazette/2003/02.06/10-hunger.html>. The article notes that equal distribution of all the world’s food supply would “provide everyone on the planet with a robust 2,800 calories per day, a 17 percent increase from 30 years ago.” *Id.*

172. Robert Hunter Wade, *The Rising Inequality of World Income Distribution*, 38 FIN. & DEV. No. 4 (Dec. 2001) (figures from the World Bank), available at <http://www.mtholyoke.edu/acad/intrel/ipe/inequality.htm>.

173. Jody Heyman, *Families on the Edge*, HARV. MAG., July–Aug. 2003, at 50, 53 (reporting on a global study of this problem and concluding as follows: “The world can afford to ensure adequate working conditions and social supports for families; what we can’t afford is neglect.”).

174. *Corporate Finances: Less Stretched, for Now*, THE ECONOMIST, July 12, 2003, at 54–55.

celebration than it is a cause of short-term worry, since it indicates that technology has at its command an enormous reservoir of untapped potential that *could* be used to liberate the universal community of men, women, and children from the oppression of an unnecessary struggle for existence. Where, except in a madhouse, could advertisements for \$3,000 watches and \$17,000 pearls sit side-by-side with a news report about the cash crisis in global AIDS funding,¹⁷⁵ without evoking the profoundest sense of shame and outrage? Where, except in a world that has been blinded to ultimate ends by technological thinking, could the observation that the annual output of Liberia “is roughly what Americans spend on skiing equipment”¹⁷⁶ fail to elicit feelings of guilt and disgust? When we in the prosperous West think of AIDS in Africa and the millions we allow to die there, the ugly suspicion arises that this “letting die” is, as Jacques Derrida says, a form of killing.¹⁷⁷ The suspicion arises that, in an era of preventable death and disease, “Thou shalt not kill” means that thou shalt cause these others to live.

If the Enlightenment watered the acorn that became the oak of technological thinking (the essence of modern technology), then it also gave us the profound idea and aspiration of *universal* human emancipation. In Kant’s universal ethical subject, bound to be other-regarding by reason in the form of the Categorical Imperative,¹⁷⁸ in Hegel’s idea that the master-slave relation is destined to be dialectically overcome (*Aufgehoben*) by a higher stage of development in which universal human recognition prevails,¹⁷⁹ in Montesquieu’s correlation of the *ability* to be free with true freedom of will,¹⁸⁰ and in Marx’s description of freedom as the development of human potentiality for its own sake, beyond the realm of necessity,¹⁸¹ one can find the origins of the tattered but still lofty progressive notion that technology should aim at *universal human emancipation from necessity*. The universality of this

175. See N.Y. TIMES, July 17, 2003, at A2–A4.

176. *Why Liberia Is Not Somalia*, THE ECONOMIST, July 19, 2003, at 11.

177. GIOVANNA BORRADORI, PHILOSOPHY IN A TIME OF TERROR: DIALOGUES WITH JÜRGEN HABERMAS AND JACQUES DERRIDA 108 (2003).

178. KANT, *supra* note 101, at 195.

179. G.W.F. HEGEL, PHENOMENOLOGY OF SPIRIT 111–19 (A.V. Miller trans., 1977); see also ALEXANDRE KOJÉVE, INTRODUCTION TO THE READING OF HEGEL 43–44 (James H. Nichols, Jr., trans., 1969).

180. “*La liberté ne peut consister qu’à pouvoir faire ce que l’on doit vouloir*” (“Liberty consists in being able to do what one ought to will”), quoted in ARENDT, *supra* note 83, at 161.

181. T.B. Bottomore, *Introduction* to MARX, *supra* note 104, at vii, x.

ideal of universal freedom from necessity is both challenged and measured by the way in which the parts of the historical whole relate to those who, as Žižek puts it, lie “at the bottom.”¹⁸² In short, the ideal requires an effort to satisfy vital human needs on a global scale.

The particular historical forms in which the aspiration for universal human freedom has appeared to date—primarily economic liberalism rooted in mass democracy and totalitarian state communism—do not exhaust its potential to inspire us. If economic liberalism finds freedom only in its negative sense (the right to be left alone by the state in the pursuit of market relations), and if state communism finds it in the perverted positive sense of an enforced conformity to social goals, then the ideal of universal freedom from necessity needs to find its idealization and its expression in a way that transcends both discourses. For when instrumental reason separates from the ultimate purpose of thought, the ideal of knowledge through a “method” becomes tautological, “since it does no more than fulfill the demands of method.”¹⁸³ The biblical admonition “Seek, and ye shall find”¹⁸⁴ becomes the guideline to seek only what you will find according to this or that “useful” method.

It is unlikely that help in our project will be found in the direction of modern analytic philosophy. Analytic philosophy’s primary tendency is to deflate universals like “freedom,” “universal humanity,” and “technology,” reducing them to descriptions of particular given operations of speech and conduct: Wittgenstein’s language-games,¹⁸⁵ for example. Marcuse calls this mode of philosophizing “operational,” defined as the tendency to make concepts synonymous with a corresponding set of operations.¹⁸⁶ And while this technique may clarify and correctly describe linguistic usages,¹⁸⁷ in the end the equation of language and its function is complicit in perpetuating the dominion of technological thinking. For the function of a thing in a society that is governed by technological thinking is itself technological, a point that is

182. See ŽIŽEK, *supra* note 40, at 224.

183. ADORNO, *supra* note 24, at 76.

184. *Matthew 7:7* (King James).

185. See LUDWIG WITTGENSTEIN, *PHILOSOPHICAL INVESTIGATIONS*, at 5e (G.E.M. Anscombe trans., 1959) (1953).

186. MARCUSE, *supra* note 43, at 87.

187. *Id.* at 203; see also ADORNO, *supra* note 24, at 76 (“[T]he only productive knowledge is that which goes beyond pure analytical judgment, which transcends this operational-tautological character.”).

missed or glossed over by such thinkers as Ronald Dworkin, who equates the meaning of his philosophical concept of “right answers” in law with the “ordinary” usage of lawyers.¹⁸⁸ In law, operationalism expresses itself in the form of Hohfeld’s idea of “operative facts”: these are never meant to be objective indices of being or reality, but are only the result of a legal operation that adduces exclusively those kinds of facts that the law predetermines as sufficient to alter legal relations.¹⁸⁹ If the philosophical concept of right answers to legal problems is rigidly circumscribed by what everybody in “real life” says it is in this manner, then there is nothing for critical thought to do except throw in the towel and become a lawyer in ultimate service to the given reality.¹⁹⁰

Universals like “freedom” have always had the potential to reproach what is by juxtaposing it with what might be. Consider, for instance, what Martin Luther King, Jr., was able to do with the words “freedom” and “justice.” If legal and philosophical analyses succeed in demythologizing universals, then they will have rendered them incapable of invigorating the imagination and moving people to oppose the given reality. Whether they mean to do so or not, the atrophied kind of philosophizing and the operational kind of lawyering described in the previous paragraph tend to make the emancipating effects of universals harmless to the system. Such thought represses critical reason’s ability to think beyond operational terms by criticizing as “metaphysics,” “disguised ontology,” or “irrelevant” any view that does not accept the existing order of things, or that chooses to opt out of the stubborn adherence to immediate facts. That law apologizes for the existing order in this way is hardly surprising. But when philosophy makes the same kind of operational moves that law does, it too offers a kind of apology for the status quo—contrary to the proud idea, originating in Socrates, that the philosopher’s proper role is to act as a gadfly to society and the state. One feels compelled to wonder (or lament) where critical reason has gone, until one remembers that even philosophy can succumb to technological thinking. Beyond all language analysis of this sort, beyond

188. Ronald Dworkin, *Pragmatism, Right Answers, and True Banality*, in PRAGMATISM IN LAW AND SOCIETY 359, 365 (Michael Brint & William Weaver eds., 1991).

189. Wesley Newcomb Hohfeld, *Some Fundamental Legal Conceptions as Applied in Judicial Reasoning*, 23 YALE L.J. 16, 25 (1913).

190. For more on this point, see Louis Wolcher, *Ronald Dworkin’s Right Answers Thesis Through the Lens of Wittgenstein*, 29 RUTGERS L.J. 43 (1997).

law, and beyond all political “third ways,”¹⁹¹ we will argue that the idea of universal freedom from necessity should be seen as genuinely mythological, and not merely utopian, metaphysical, or juridical.

The distinction between myth and utopia was first drawn in *Reflections on Violence*,¹⁹² which was written at the beginning of the twentieth century by Georges Sorel, a French anarchist philosopher and former civil engineer for the French state. J.B. Priestley once remarked that if one could only grasp why a retired civil servant wrote such a book, then the modern age could be understood.¹⁹³ In any case, in *Reflections on Violence*, Sorel identifies the mythological with the language and imagery of any individual or social movement that is convinced things must change, but is not sure *how* it can be changed. In contrast, he calls utopian any program of reform that lays down in advance the exact shape of the world that is to be achieved.¹⁹⁴ Sorel sharpens this critical distinction in the following passage:

A myth cannot be refuted since it is, at bottom, identical to the convictions of a group, being the expression of these convictions in the language of movement; and it is, in consequence, unanalysable into parts which could be placed on the plane of historical descriptions. A utopia, on the other hand, can be discussed like any other social constitution; the spontaneous movements it presupposes can be compared with those actually observed in the course of history, and we can in this way evaluate their verisimilitude; it is possible to refute it by showing that the economic system on which it has been made to rest is incompatible with the necessary conditions of modern production.¹⁹⁵

When mythological thinking becomes utopian it exercises its freedom of action in a direction. Prior to that, it dwells at a stage where anything is possible, and nothing is decided yet.

As Sorel’s text implies, technological thinking can always discredit

191. The term “third way” refers to the political slogans of those who, like Britain’s Tony Blair, seek to get the votes of disillusioned liberals and middle-of-the-road conservatives by promising the conservatives capitalism with a compassionate heart, and promising the liberals socialism infused with “rationality” and market discipline. See *Bagehot: A Poodle That Snaps*, THE ECONOMIST, July 19, 2003, at 46.

192. GEORGES SOREL, REFLECTIONS ON VIOLENCE (Jeremy Jennings ed., 1999).

193. *Id.* (frontispiece).

194. *Id.* at 27–31.

195. *Id.* at 29.

utopias on the ground that they are unrealized or unrealizable ends, given the present factual starting point. But its attempt to disparage myths, in Sorel's sense, is always fated to be ineffectual. *A myth cannot be refuted so long as it represents the deepest convictions of those who reject the present state of affairs as beneath the dignity of man.*¹⁹⁶ Technological thinking and mythological thinking both agree that the realm of facts (the given reality) stands opposed to the realm of myth (what is not). But technological thinking construes the rational implication of this opposition to be acquiescence in the status quo, whereas mythological thinking finds its motives, and its hope, in what is not yet a reality. Although it may sound like a shocking exaggeration to say it, only in this way can mythological thought, afloat in a sea of technological thinking, avoid agreeing with Camus that the last genuine philosophical problem remaining today is whether to commit suicide.¹⁹⁷

While Sorel was writing specifically about the conflict, in *fin-de-siècle* Europe, between parliamentary reformism (some of which was based on utopias) and the revolutionary social movements of his day (many of which were based on myths), his distinction between myth and utopia transcends that particular historical context. It gives us a useful conception of the meaning of *responsibility* in conditions that appear impervious to change. For the poverty of any particular utopian vision is nothing compared to the mythological conviction that the end of technology is universal human emancipation. And with such a conviction comes responsibility for the way things are no matter how difficult or impossible movement in the direction of the myth may now appear to be. Those in the grip of a fanatical utopian vision are capable of the most unspeakable outrages, as Sorel correctly observes.¹⁹⁸ This observation implies the large grain of truth in Nietzsche's aphorism that "the *actual* man represents a much higher value than the 'desirable' man of any ideal hitherto."¹⁹⁹ Nevertheless, to recognize a particular utopia as an aim is never a matter of freedom, but of right or wrong judgment, just

196. *Id.* at 30.

197. ALBERT CAMUS, *The Myth of Sisyphus*, in *THE MYTH OF SISYPHUS AND OTHER ESSAYS* 3, 3 (Justin O'Brien trans., 1955) ("There is but one truly serious philosophical problem, and that is suicide.").

198. SOREL, *supra* note 192, at 10 ("During the Terror [of the French Revolution] the men who spilt the most blood were precisely those who had the strongest desire to let their equals enjoy the golden age of which they dreamt and who had the greatest sympathy for human misery.").

199. FRIEDRICH NIETZSCHE, *THE WILL TO POWER* 210 (Walter Kaufmann & R.J. Hollingdale trans., 1968) (1967).

as the power to command is also not a function of freedom, but only of strength or weakness.²⁰⁰ Whereas those who are moved by the myth of universal human emancipation freely accept guilt for the consequences of what is done and undone in the name of this myth. Like Arendt's "principle" of freedom,²⁰¹ the mythological does not come from within, but inspires from without. If the one who believes in universal human emancipation moves now slowly and incrementally, now rapidly and radically, such a one always does so in the form of a freedom that knows itself to be both a "beginning and a beginner,"²⁰² and that knows it alone is responsible for the world that freedom makes. Such a one knows that without the violence of change, there can be no progress, and that without the compassion that comes with a sense of responsibility, there can be no progress that is worthy of the name. If the only thing worse than the nonexistence of a just existence for humanity is the nonexistence of what Benjamin calls "the irreducible, total condition that is 'man,'"²⁰³ this can only mean that freedom for responsibility holds both justice and life in a tragic balance.

The myth (in Sorel's sense) that the awesome power of modern technology can be used to liberate universal humanity from the coils of necessity thus connects the notion of freedom for responsibility with a certain kind of ethical responsibility for the Other. We do not refer to traditional conceptions of ethics based on norms or consequences, but rather to the radical kind of ethical responsibility that is described in the work of Emmanuel Levinas. Freedom for responsibility, as we have portrayed it up until now, is *existential* freedom: it is linked to the manifestations of the world (being) before it is linked to any of our fellow human beings (the Other). But as is more fully explained elsewhere,²⁰⁴ Levinas places ethical responsibility for the Other ahead of any other existential compartment—indeed, he places it in a logical category that he calls, paradoxically, "otherwise than being."²⁰⁵ While this is not the place for an extended discussion of the extraordinary subtlety and originality of Levinas's thought, it is appropriate to say that his central phenomenological insight is that we *feel* ethically responsible

200. ARENDT, *supra* note 83, at 152.

201. *Id.*

202. *Id.* at 170.

203. BENJAMIN, *supra* note 101, at 299.

204. Louis Wolcher, *Ethics, Justice, and Suffering in the Thought of Levinas: The Problem of the Passage*, 14 LAW & CRITIQUE 93 (2003).

205. LEVINAS, *supra* note 148, at 114–15.

for our fellow human beings *before* any explicit calculation based on legal or moral norms. Indeed, our practice of making explicit, norm-based, calculations of whether or not responsibility is owed is one of the principal ways we avoid or shed this primordial sense of responsibility.²⁰⁶ Contrary to an entire tradition of political philosophizing that originated with Hobbes,²⁰⁷ Levinas holds that human beings always experience themselves as sociable *before* they experience themselves as free.²⁰⁸

One does not have to rank existential freedom and ethical responsibility for the Other in terms of priority, however, in order to see that at the very least the former tends towards the latter, and vice versa. If I live with a sense of responsibility for the shape of the world, then the avoidable suffering of others must always show itself as one of the consequences of my actions and inactions; thus, only if I see myself as a monster or a swaggering and egoistic *Übermensch* will I fail to be moved by their plight. Likewise, the one whose heart always bleeds for the suffering of others has the strongest of incentives to exercise his existential freedom by attempting to change any state of affairs that is responsible for unnecessary suffering.

The connection between freedom and ethical responsibility that has just been drawn is not offered as a necessary implication. Unlike John Rawls, we do not seek to deduce from a self-regarding conception of reason, operating from behind the veil of ignorance, the logical conclusion that our institutions must be set up in such a way as to improve the condition of the worst off in society.²⁰⁹ Nietzsche, for one, would rightly object that the more-than-ample historical record of human brutality and greed demonstrates that freedom and practical reason, in the metaphysical sense of will-to-power, tend to negate the necessity of any such conclusion.²¹⁰ Nietzsche to the contrary notwithstanding, however, not only do we maintain that the connection we have drawn is plausible “empirically,” but also we offer it as deeply mythological in Sorel’s sense.

206. For more on this point, see Louis Wolcher, *Human Rights and Human Suffering*, in THE THEORETICAL FOUNDATIONS OF HUMAN RIGHTS (forthcoming Qom, Iran: Mofid University Press 2004).

207. See THOMAS HOBBS, *LEVIATHON* (Ernest Rhys ed., 1914) (1651).

208. LEVINAS, *supra* note 148, at 91 (asserting “the fact of human fellowship, prior to freedom”).

209. See RAWLS, *supra* note 88, at 150–61 (arguing for the “veil of ignorance” and “maximin” rules).

210. See NIETZSCHE, *supra* note 199, *passim*.

As for the empirical, we submit as evidence the countless large and small kindnesses that daily pass between strangers, before being reduced to “history” and “systems of ethics.” We also offer the ubiquitous phenomena of compassion and conscience in the face of the curable suffering of others. True compassion is not an experience that transpires between this person and that person conceived as an *I* and an *It*, for the word “experience” implies the secondary status of the things that are related through experience. Like Martin Buber’s concept of *I-Thou*,²¹¹ compassion is not an experience but a primary human relation. It is a connection that is discovered, not created, a bond that is found, not forged. Unfortunately, as Buber correctly observes, the development of the function of experiencing things and using them technologically comes about mostly through a decrease in the power to discover and sustain relations of this sort.²¹² The historical struggle for existence and modern technological thinking, both quintessential examples of “experiencing and using” in Buber’s sense of the abstract *I-It* relation, thus tend to drive the primary relation of compassion underground.²¹³ However, we would contend that the depressing historical record of human selfishness and brutality in our age and prior ages should be seen as ambiguously relevant counter-evidence at best, especially if we are right that modern technological thinking *artificially* perpetuates the struggle for existence.

But what if we are not right, a critic might ask, as a matter of “fact” about the central importance of sociality and compassion in the way that humans are constructed—what then? More important than any proof that is based on a pessimistic, and ultimately technological, assessment of so-called “human nature,” we say that the expression of the intimate linkage between freedom for responsibility and universal freedom from necessity is, in the final analysis, profoundly mythological in Sorel’s sense. It represents the conviction of anyone who thinks the world has gone mad in the many ways that we have attempted to demonstrate. It authorizes us to say that the meaning of freedom for responsibility *requires* freedom from necessity in order to flourish, and naturally *leads* to the feeling that one is responsible for the artificial perpetuation of necessity and unnecessary suffering in the world. It is nothing other than

211. BUBER, *supra* note 154, at 19–44.

212. *Id.* at 52.

213. *Id.* at 54 (“If a man lets [the *I-It* relation] have the mastery, the continually growing world of *It* overruns him and robs him of the reality of his own *I*, till the incubus over him and the ghost within him whisper to one another the confession of their non-salvation.”).

the shape of hope for what might be in the face of despair over what is.

VI. CONCLUSION

Let us end where we began, and ask once again: What is the end of technology? What this question asks in its deepest signification is nothing technological. Although technology in the largest sense of the word consists of human beings uncovering beings and making them accessible, technology *as such* is not ultimately for the sake of any particular project or outcome. Technology thus conceived exists ultimately for the sake of human freedom, which can only express itself in and by means of technology. Genuine freedom is freedom for responsibility: the kind that knows that it is freedom itself that constructs the very obstacles to freedom that continue to confound a suffering humanity. Freedom from necessity is not a *logical* condition of the possibility of freedom for responsibility, but it is nonetheless an empirical condition of the latter's spreading and flourishing. The harried and overworked, the hungry, the sick, and the downtrodden: their gnawing need to survive a struggle for existence that modern technological progress could make unnecessary relentlessly devours their chances to live in freedom. Thus, not only does freedom begin only when "the I-will and the I-can coincide,"²¹⁴ as Arendt puts it, but it is also the case that those who are already free for responsibility wear other people's avoidable lack of freedom as a shameful stain on their sense of responsibility.

Marx once uttered the profound truth that "we have to emancipate ourselves before we can emancipate others."²¹⁵ If this essay has achieved its goal, then its most important argument will have landed on fertile soil: *The grip that technological thinking exercises on our imagination must be broken, and technology must return to the status of a means to the ultimate end of universal human emancipation.* All progressive thought about the consummation and the ultimate end of technology requires, first and foremost, what Marcuse calls a "consciousness of the blatant contradiction between the scientific-technological possibilities and their destructive and repressive realization."²¹⁶ This consciousness means the ability to think the category of individualism beyond the

214. ARENDT, *supra* note 83, at 160.

215. KARL MARX, *On the Jewish Question*, in MARX, *supra* note 104, at 1, 5.

216. MARCUSE, *supra* note 2, at 139.

making of market choices that implement a life of unnecessary toil and servitude. It means defining individuality in terms of being able to speak one's *own* language, to have one's *own* emotions, and to follow one's *own* heart. And it requires the conviction that true individualism can only begin beyond the realm of necessity: a truth that well-paid tenured legal academics ought to know from personal experience. To those who would disparage and scorn this vision of human emancipation as unrealistic and naïvely utopian, we say: So what? We have seen the world that technological thinking has made, and the irrationality of its rationalism shows itself to the faculty of judgment in a way that is every bit as dysutopic in fact as our idea of universal human emancipation is mythological and "unrealistic."

Like Kierkegaard's "knight of faith,"²¹⁷ the ones who are free for responsibility in the way we have attempted to describe make a kind of three-fold movement. First concentrating their infinite desire for a world that transcends technological thinking by acting to achieve such a world, they quickly learn the tragedy of unintended consequences when their best-laid plans go awry. This leads them, sadly, to a second movement: resignation to the finite reality that their actions are always bound to produce imperfect, and sometimes even disastrous, results, and that they are responsible for these results. But then occurs "still another movement more wonderful than all," as Kierkegaard puts it.²¹⁸ After the two-fold movement of desire and resignation, the ones who are free for responsibility *absurdly accept* the truth of their impossible aspiration for universal human emancipation. They do not (necessarily) do this because they have faith in a God who is believed to make all things possible, as Kierkegaard himself would have it,²¹⁹ or because they are scientifically convinced in the inevitability of progress towards universal human emancipation, as were Hegel and Marx. Indeed, they know that the source of true freedom remains present, as Arendt puts it, "even when political life has become petrified and political action impotent to interrupt automatic processes."²²⁰ *They accept the truth of their aspiration for universal human emancipation simply by virtue of their irrational faith in the fundamental goodness of humanity itself.*

217. See SØREN KIERKEGAARD, *Fear and Trembling*, in FEAR AND TREMBLING AND SICKNESS UNTO DEATH 57 (Walter Lowrie trans., 1954) (1941).

218. *Id.*

219. *Id.*

220. ARENDT, *supra* note 83, at 169.

The empirical possibility that human beings cannot enjoy the continuing benefits of modern technology without suffering the continuing hegemony of technological thinking is simply too horrible to be believed or credited, and this is not just because positivism and empiricism, as tools of technological thinking, tend to conflate the non-actual with the impossible.²²¹ Cicero's bold remark to the effect that he would rather go astray with Plato than hold true views with Plato's opponents²²² captures the essence of our attitude towards the positivist's "bitter with the sweet" argument. For the terrible idea that technical progress can never be *humanized* and *naturalized* in the ways that we have tried to describe in this essay represents the death of all hope, and of all critical thinking. Sadly, the realization of this idea would truly represent a miserable human history that ends not with a bang, but a whimper.²²³

Pursuing no conquest, the social movement to pacify the unnecessary struggle for existence in the developed world, and to satisfy, by means of technology, vital human needs on a worldwide scale needs to make no plans for utilizing its victories.²²⁴ This statement does not reflect an attitude of recklessness and irresponsibility, nor does it abjure the need for careful calculation and planning. Rather, the statement is predicated on the truisms that "universal" means *universal*, and that the very notion of "victory" implies the antithesis of universality: the scission of humanity into permanent camps of winners and losers. It rejects the egoistical sentiment "after me the deluge,"²²⁵ in favor of a slogan that in its deepest sense transcends the status of an aphorism to become mythological. The slogan's particular expression (though not its content) was first rendered by Herbert Spencer.²²⁶ It is just this: No one can be perfectly free until all are free.

221. See MARCUSE, *supra* note 43, at 170–99 ("The Triumph of Positive Thinking: One-Dimensional Philosophy").

222. "Errare mehercule cum Platone . . . quam cum istis (sc. Pythagoraeis) vera sentire," quoted in 1 CICERO, TUSCULAN DISPUTATIONS 39–40 (J.E. King trans., 1945).

223. The reference is to T.S. Eliot's extremely apt poem *The Hollow Men*, which concludes with the following lines: "This is the way the world ends / This is the way the world ends / This is the way the world ends / Not with a bang but a whimper." T.S. ELIOT, COLLECTED POEMS 79, 82 (1963).

224. See SOREL, *supra* note 192, at 161 (using similar language to refer to the proletarian general strike).

225. See *id.* at 93 ("Our bourgeoisie desire to die in peace—after them the deluge").

226. HERBERT SPENCER, SOCIAL STATICS, ch. 30, § 4, at 454–58 (1883) (1865).