The Laws of Cool

Knowledge Work and the Culture of Information

Alan Liu

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Introduction

Literature and Creative Destruction

This book is a study of the cultural life of information or, more broadly, of contemporary “knowledge work.” The specific question I prepare for—but that I can turn to only speculatively here and in my concluding chapter—concerns the role of literature in that cultural life. What is the future of literature and literary study when all culture is increasingly the culture of information and when even literary scholars subordinate literature to an apparently clone of information-cultural context? And a related question: what is the future in general of the humanities and arts when the former seems destined only for what information industries call “content” and the latter for “multimedia entertainment”?

To be honest, my concern is not really with works of literature as such, which from the viewpoint of general society have effectively lost their category distinction on the gradient that blurs textuality and information, imagination and entertainment, authors and celebrities, and publishers and conglomerates. My concern, more crucially, is with the underlying sense of the literary, which is even now searching for a new idiom and role. After all, whether we should eulogize or celebrate “the death of literature” (as in Harold Bloom’s Western Canon or John Beverley’s Against Literature) is now beside the point. Literature as traditionally understood no longer survives as an autonomous force or, put in the cultural-critical terms of the current academy, as a force positioned by larger forces in the guise of autonomy. Since the high point of its avowed
self-possession (roughly from the eighteenth through the nineteenth century), literature has merged with mass-market, media, educational, political, and other institutions that reallocate, repackage, and otherwise “re-purpose” its assets. Such churning of literary capital has only accelerated in the information age as major institutions compete to appropriate that capital under the spotlight of media coverage (e.g., in the canon wars, which pitted political pundits against academics).

But all that is done, and we need harbor no false romanticism about the literature that was. Whatever one thinks of cultural criticism, it has been brutally effective in demonstrating that the churning of literary capital has always characterized literature. Literature could not have been part of the life of culture otherwise. What is of interest now is the distinctive form of that churning in relation to the general economic and social churning that Joseph A. Schumpeter, in his classic phrase about capitalism, called “creative destruction.” A “perennial gale of creative destruction,” Schumpeter wrote in 1942, “incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one.” The real competition, Schumpeter said, is not the normal furor over prices, quality, and sales effort, but “competition from the new commodity, the new technology, the new source of supply, the new type of organization... [competition] which strikes not at the margins of the profits and the outputs of the existing firms but at their foundations and their very lives.” Recent scholars of business and economic history take such furious creativity to be simply postindustrial business as usual. In “post-capitalist society,” Peter F. Drucker says, “creative destruction” is “innovation,” compelling the “systematic abandonment of the established, the customary, the familiar, the comfortable.” The “spirit of informationalism,” Manuel Castells adds, “is the culture of ‘creative destruction’ accelerated to the speed of the optoelectronic circuits that process its signals.” Meanwhile, in the thriving print and television journalism of business, Schumpeter’s dictum has become cliché (his other work and especially his prediction of the eventual demise of capitalism conveniently forgotten). A special double issue of Business Week on “The 21st Century Corporation” in 2000 takes it for granted that “knowledge-based products and networks can quickly disappear in a burst of Schumpetarian creative destruction. So corporations must innovate rapidly and continuously.”

The vital task for both literature and literary study in the age of advanced creative destruction, I believe, is to inquire into the aesthetic value—let us simply call it the literary—once managed by “creative” literature but now busily seeking new management amid the ceaseless creation and re-creation of the forms, styles, media, and institutions of postindustrial knowledge work. In the regime of systematic innovation, is the very notion of the literary doomed to extinction even if—or, rather, especially if—it begins to venture “creatively” into the province of knowledge work, if it dares to imagine a literature of the database, spreadsheet, report, and Web page? After all, next to the great institutional documents of our times heralding “innovation” in their very logos—the legions of “dot com” company prospectuses, Web sites, advertisements, and so on—what could literature be but a minor act of creativity, like a screensaver? This is one way to read the powerful, repeated dirge that John Guillory, Alvin Kernan, J. Hillis Miller, and others have sounded over (in Guillory’s words, in Cultural Capital) the “perceived decline in the cultural significance of literature itself, the perceived marginality of literary culture to the modern social order.” In such wakes, there is a note of mourning that seems excessive until we realize that what is being mourned is not so much literature as the “literary culture” that is the very possibility of literature. Or if literariness is to rise from the dead—to entertain Guillory’s concluding prophetic elegy, his surprising surmise of a redemptive “aestheticism unbound”—where could it go and what does it yet have to do? What is the future of the literary when the true aestheticism unbound of knowledge work—as seen on innumerable Web pages—is “cool”? Cool is the techno-informatic vanishing point of contemporary aesthetics, psychology, morality, politics, spirituality, and everything. No more beauty, sublimity, tragedy, grace, or evil: only cool or not cool.

Or rather, since the fate of the literary is an abstraction unless we also address the fate of literary people, the operative question becomes: what is the relation between the now predominantly academic and other knowledge workers (even “creative writers”) who manage literary value in “cultural context” and the broader realm of professional, managerial, and technical knowledge workers who manage information value in “systems”? What do the well-read who once held power in the name of the aesthetic still have to teach the well-informed who now hold power under the cover of cool?

As may be discerned in the conflicted way I have so far invoked cultural criticism, these questions are interwoven for me with questions about what role that method, and the contemporary humanities education it represents, might play in the emergence of the future literary. I was one of the academic intellectuals in the 1980s and 1990s who staked their careers on joining literary studies at the hip to cultural studies. But now it is time to reflect on the legitimacy of cultural criticism in ways that shift earlier controversies...
about cultural materialism, the New Historicism, multiculturalism, and so on to new ground.

It might be said, with Kafkaesque irony: I went to sleep one day a cultural critic and woke the next metamorphosed into a data processor. It is not just that cultural context and information have come to approximate each other in their gross anatomy (each requiring the same kind of gathering, collating, and filtering work): it is that now even the fine structure seems to mate. We can extend to informationalism Arif Dirlik’s general point about postindustrialism in his Postcolonial Aura (especially the chapter “The Postmodernization of Production and Its Organization”). In a convergence so massive as to be all but indiscernible in normal academic practice, advanced literary study has since the 1970s evolved from structuralism through deconstruction to cultural/multicultural criticism, so as to swing into conjunction with an information society that meanwhile evolved in parallel from logocentric corporations and broadcast empires to the postindustrial equivalents of cultural diversity—flexible-team corporations and distributed information networks. To put it rudely, in other words, perhaps the academic controversies of the past two decades were not really about supplanting the author or canon with the deconstructive intertext or cultural context. Perhaps such controversies were really about recruiting professional interpreters for an impending mental merger with the software-telecom-cable-Hollywood conglomerates now promising that ultimate intertext or context, high-bandwidth information.

After all, any cultural critic who today uses a personal computer to write “files” about literature is from the first incorporated within an information culture closest to hand in the operating system itself. One might say that the well-known epilogue to Stephen Greenblatt’s paradigm of New Historicism, Renaissance Self-Fashioning, needs to be updated. To reshoot for the 2000s the scene in which Greenblatt reads Clifford Geertz’s Interpretation of Cultures while sitting on a plane with a man whose son is grievously ill would require that our camera pull back to reveal the device that all the corporate intelligentsia up and down the aisle have open instead of a book—a laptop or handheld computer. Greenblatt romancing Geertz (and, it must be said, myself romancing Wordsworth’s “sense of history” in the 1980s) is as expert at opening archives of cultural memory as the managerial/professional/technical intelligentsia are at neuromancing databases and spreadsheets. Cultural-critical experts, in other words, read in a manner originally schooled by the technical rigor of formalism. At the same time the corporate intelligentsia processes with an equal technical ritual schooled in the burgeoning corporate learning industry—Dana U., Disney U., Motorola U., Solectron U., and so on. Even the technical jargon seems congruent. Such “politically correct” academic antifoundationalisms as difference and difference are matched by the mytho-Japanese antifoundationalisms of the new corporate correctness: “continuous improvement (kaizen), just-in-time delivery, total quality, statistical process control, and ‘design for’ manufacture and assembly.”

The one consistent difference is that cultural criticism is fundamentally historical. I mean by this more than the obvious fact that most humanities fields are now ipso facto historical (in the noncontroversial sense in which “literature department” is synonymous with “literary history department”). I mean also that even as cultural criticism has rejected older modes of literary or intellectual history, it has not repudiated the necessity of historical consciousness. It has instead proposed rude ways to examine the seeming obviousness of such necessity. Cultural criticism wants to know why historical consciousness became the core of humanities education from the Enlightenment on. What was such consciousness for, and whom did it serve?

Put in the past tense, such questions concern what Jean-François Lyotard has called the “metanarratives” of progressive humanity and speculative reason that academic historicism once sustained but that now, from the viewpoint of cultural critics, seem just so many empty postures. But it is the present tense of these questions—the sense that they bear on a gigantic “now” inclusive of the Enlightenment and the nineteenth and twentieth centuries together—that cultural criticism has found most compelling. That now is modernity. In the broadest sense, the underlying historical concern of cultural criticism has been modernization, the centuries-long “progress” of rationalization, routinization, institutionalization, organization building, and empire building (with their attendant political, market, and media effects) engineered by post-Enlightenment industrial societies. Cultural criticism is the critique by disjunction of such progress. Its characteristic practice has been to bring pressure to bear on the apparently seamless necessity of modernization by foregrounding the otherness of early modern, subcultural, multicultural, modernist, and other alternative historical paradigms. Queen Elizabeth I’s unchanging portrait-face and the singer Madonna’s ever-changing face (the early modern and postmodern, respectively) thus come to look alike in such criticism because both hold up a mirror of historical difference to modern understandings of the relation between cultural display and institutionalized power (the queen’s face constituting a power of display unconfirmed by modern police or military apparatuses, the singer presiding over a “society of spectacle” also empty of rational reality). There are risks in such a notion of history, including the tendency to flatten out all historical difference into the single, politically inert “difference” that
Dirlik has criticized. But there is also much to gain from such a notion, according to which history is not dead to modernity, but other to modernity.20 By contrast, the world of “just-in-time” knowledge work—of astonishingly rapid yet finely calibrated turnovers in supplies, inventory, documents, mission statements, and finally people—waits upon the death, or layoff, of no one, certainly not that of the son of the man in the plane. As arbitrageurs of “creative destruction” might say: he’s history. History—including the history of modernization itself (now identified with smokestack industries and ossified organizations)—is obsolescence.21

Of course, what I called the merger between academic humanities “research” (the very term is symptomatic) and corporate, government, media, medical, and military knowledge work has developed over time—whether we date such convergence from the period circa 1900 when U.S. universities first modernized under the influence of corporate capitalism, from 1900–1930 when the academic and white-collar sectors grew in tandem, or from the boom after World War II when the relation between the academic sciences and the military-industrial-government complex claimed attention.22 Lyotard’s Postmodern Condition is one well-known recent critique of the resulting convergence upon “performative” knowledge or what Bill Readings, extending Lyotard’s case in The University in Ruins, ironically calls corporatist “excellent” knowledge.23 Excellent knowledge, Readings writes, is a posthistorical knowledge that has dispensed with the progressive narratives of Humanity and Reason that once afforded the university its mission, in favor of mere specifications of technical and informational systematics.24

But only with the new millennium are the conditions in place for humanists to grasp the full implications of such convergence upon “excellent knowledge”—above all, to recognize that the defining issue for a field like literary studies really is its position with regard to information and, borne on the carrier wave of information, the juggernaut of postindustrial knowledge work. This is because the combined ideological and material build-up to the year 2000—to its installation in social consciousness as an “event”—focused the problem with sudden clarity. Ideologically, “2000” unlocked an end-of-history enthusiasm that theorizes knowledge work as millennial knowledge—that is, as knowledge that is antihistorical (anti-obsolcet) on principle.25 The centrality of the challenge to academic knowledge thus stands starkly revealed: knowledge work is not just indifferent to humanistic knowledge, it opposes it on principle. The material instantiations of “2000” have been just as bracing. Among all the technological, political, and economic infrastructures put in place to install the new world order and new economy, just one may be mentioned as epitomizing the whole: networked information technology. Networked IT crossed a threshold of scale in the mid-1990s beyond which—as evidenced most spectacularly by the World Wide Web—competing models of knowledge work, once rooted semi-autonomously in academic, business, media, health-industry, government, and other sectors, suddenly seemed to fuse into a single, parsimonious continuum—so-called “worldwide”—able to afford just one global understanding of understanding.26

Nor, it should be added, has the build-up to “2000” been merely a remote abstraction for academics. As indicated by controversies in the late 1990s over plans to “partner” the information systems of major U.S. universities with technology corporations, to restructure other universities according to the philosophy (declared by one university president) of “pretending to be a corporation,” to gear still others for the technological future by eliminating whole suites of liberal arts programs, or, in New Zealand, to reorganize the higher education system into strictly “accountable” corporate units, the academy is increasingly being told by administrators and legislators to attend to business, or else.27 Commentary by humanities scholars such as Bill Readings, J. Hillis Miller, Paul Lauter, Wesley Shuman, Jeffrey Williams, and (in the United Kingdom) Kevin Robins and Frank Webster thus began appearing in the 1990s to express concern over the corporatization of the academy.28 And meanwhile the ballooning numbers of temporary, part-time, nonladder, and other itinerant educators and graduate students have been even more pointed in their concern.29

Wherever the academy looks in the new millennium, it sees the prospect of a world given over to one knowledge—a single, dominant mode of knowledge associated with the information economy and apparently destined to make all other knowledges, especially all historical knowledges, obsolete. Knowledge work harnessed to information technology will now be the sum of all worthwhile knowledge—except, of course, for the knowledge of all the alternative historical modes of knowledge that undergird, overlap with, or—like a shadow world, a shadow web—challenge the conditions of possibility of the millennial new Enlightenment.

If cultural criticism is to be legitimate, I speculate, then together with the creative arts, it must metamorphose not so much into Kafka’s insect as into a different kind of “bug.” I have in mind the slow, sprawling, yet ever so graceful “Kuang” computer virus at the end of William Gibson’s Neuromancer, which can break the densest ICE (intrusion countermeasures electronics) of corporate databases because it transforms its own substance into that of the database, draws nearer and nearer until there seems to be no difference, and then at last injects the one powerful difference it has treated at its core.30 My highest ambition for cultural criticism and the creative
arts is that they can in tandem become "ethical hackers" of knowledge work—a problematic role in the information world but one whose general cultural paradigm needs to be explored. Many intellectuals and artists will become so like the icy "New Class" of knowledge workers that there will be no difference; they will be subsumed wholly within their New Economy roles as symbolic analysts, consultants, and designers. But some, in league with everyday hackers in the technical, managerial, professional, and clerical mainstream of knowledge work itself, may break through the ice to help launch the future literary. For it is the future literary—or whatever the peculiarly edgy blend of aesthetics and critique once known as the literary (and its sister arts) will be named—that can serve as witness to the other side of creative destruction: not the boundless "creation" that has powered the market rallies of the New Economy, but the equally ceaseless destruction that produces historical difference. This is why it now makes sense to think of cultural criticism and the creative arts as having come into special conjunction. Where once the job of literature and the arts was creativity, now, in an age of total innovation, I think it must be history. That is to say, it must be a special, dark kind of history. The creative arts as cultural criticism (and vice versa) must be the history not of things created—the great, auratic artifacts treasured by a conservative or curatorial history—but of things destroyed in the name of creation.

Nor, we may further conjecture, will it be sufficient merely to witness the history of things destroyed in the name of creation. Reviewing the ways in which the avant-garde and subcultural arts of the twentieth century have already influenced the arts of information at the new millennium (as exemplified in the writings and projects of such collectives as the Critical Art Ensemble and Electronic Disturbance Theater), it is difficult to avoid the conclusion that the most ambitious art will henceforth "make history" by itself performing acts of destruction—or at least of blockage and trespass—in a certain manner, against certain targets. Whether it is expressed as appropriation, sampling, defacement, or hacking, there will be nothing more cool—to use the term of the nascent, everyday aesthetics of knowledge work—than committing acts of destruction against what is most valued in knowledge work—the content, form, or control of information. Instantaneous, simultaneous, and on-demand information is the engine of the post-industrial "now" submitting history to creative destruction, and it is the destruction of this eternal "now" or self-evident presence of information, therefore, that will have the most critical and aesthetic potential. Strong art will be about the "destruction of destruction" or, put another way, the recognition of the destructiveness in creation.

The lesser practices of such an aesthetic will be acts of delay, displacement, oblique representation, and stylization—all that information "cool" already unconsciously practices to impede or parody the self-evident force of information. The stylistic repertory from which the future literary may emerge, therefore, is not new. But what may be "new" among the writers, artists, programmers, designers, critics, scholars, and others who push workaday cool to an extreme is the rejection of the aesthetic ideology of critical innovation ("make it new") in favor of an ideology of critical destruction. Such an ideology of art, I argue, will be intended to reorganize the residual avant-garde, subcultural, and counter-cultural elements in cubicle culture (psychedelic screensavers and so on) into a cool that achieves what may be called an "ethos of the unknown." The ethos of the unknown is a zone where those who live and work nowhere but inside the system of contemporary knowledge can paradoxically, and with more than the normal (and normalizing) irony of cool, seem to stand outside it.

Teaching the difference between such an ideology of critical destruction and terrorism—the subtle difference between dark historicism and even darker inversions of creative destruction—will be the special concern of both humanities educators and writers or artists in the future.

But before we can glimpse the future literary, we need to make a serious attempt to grasp contemporary knowledge work and its information culture. What is knowledge work? How does information work sustain it? And how might the culture of such information—self-named "cool"—challenge knowledge work to open a space, as yet culturally sterile (coopted, jejune, anarchistic, terrorist), for a more humane hack of contemporary knowledge?

In parts 1 through 3 of this book, I offer a historical sketch of knowledge work and a theoretical frame for investigating its culture of cool. In part 4, I follow up with an argument about the role of humanities education and the arts in the world of cool. This latter argument turns on the general character of historical and aesthetic knowledge in the information age, and will bring me just to the verge—but no further—of discussing literature and art in particular, both in their similarity and in their difference. There is much "more," of course, as the button at the bottom of any Internet search-

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* See appendix C on ethical hacking.
engine page promises, and the brief prolegomenon on the future literary that closes the book will only mark the path of research and practice yet to come. That is the path along which literary knowledge might yet converge with the other kinds of aesthetic knowledge upon cool. For there is a ghost in the machine. It is called culture, and all the hope of the future literary is to be what Sir Philip Sidney called the companion of the camps of that culture—diviner, soldier, critic, and hacker all at once.33
We are all aware how work both emboldens us and strangles our soul life in the very same instant. It reveals how much we can do as part of a larger body, literally a corpus, a corporation, and how much the wellsprings of our creativity are stopped at the source by the pressures of that same smothering organization.

... We stand to gain a marvelous involvement in our labors, but must relinquish a belief that the world owes us a place on a divinely ordained career ladder. We learn that we do have a place in the world, but that it is constantly shape-shifting, like the weather and the seasons, into something at once new and beautiful, tantalizing and terrible.

Confronted with the difficulty and drama of work, we look into our lives as we look into deep water. We kneel, as if by the side of a pool, seeing in one moment not only the fleeting and gossamer reflection of our own face, clouded and disturbed by every passing breath and the lives of all the innumerable creatures that live in its waters, but the hidden depths below, beyond our sight, sustaining and holding everything we comprehend.

David Whyte, The Heart Aroused: Poetry and the Preservation of the Soul in Corporate America (1994)
in the fleeting copulation of two faculties of expertise divorced since Victorian sages presided over the “idea of a university.”

Or should we allow Lodge’s minor prophets of the new world order—Robyn’s investment banker brother; his financial exchange dealer consort; or, perhaps most tellingly, the “CNC,” or computer-numerically-controlled manufacturing machine in Vic’s factory—to shift the comedy into an altogether different register of satire? Robyn’s brother says cheekily while on holiday from financial London: “Companies like [Vic’s] are batting on a losing wicket. . . . the future for our economy is in service industries, and perhaps some hi-tech engineering.” Vic says somberly, as he and Robyn stare across a Perspex pane at the CNC machine’s inhumanly “violent, yet controlled” motions, “One day . . . there will be lightless factories full of machines like that. . . . Once you’ve built a fully computerised factory, you can take out the lights, shut the doors and leave it to make engines or vacuum cleaners or whatever, all on its own in the dark.” “O brave new world,” Robyn responds.

To glimpse even peripherally such a brave new world order is to recognize that Lodge’s last, best joke—so cruel that only his furiously contrived happy ending can salve the bite of the satire—is the obsolescence of the entire, tired opposition between the academy and industry. “Shadows” of each other, as the novel calls them, Robyn and Vic both inhabit a twilight order on the other side of the Perspex—or more fittingly, computer screen—from true post-industrial night. That night, which in its own eyes seems the dawning of a new enlightenment, is knowledge work, and the information work that is its medium. Knowledge work is the Aufhebung of both academic “knowledge” and industrial “work.”


Was David Lodge’s 1988 novel simply behind the times when it challenged its heroine, Robyn Penrose, temporary lecturer in English literature, to confront the sooty business managed by its hero, Vic Wilcox, product of a Midlands technical college? Was this the utmost challenge that Lodge could imagine for the contemporary academic sensibility: to come to grips with the realism of “smokestack” industrialism as it has appalled fiction since the nineteenth-century industrial novel (Lodge’s elaborate allusion) through at least D. H. Lawrence’s *Sons and Lovers*? If so, then we can adequately attribute Lodge’s comedy to the slow, sly romance he builds between the academy and industry (and their protagonists)—to his deft dance of opposing ideas, if not in a classically comic wedding, then at least...
The clarion call of the new millennium is clear: *Let the academics have pure ideas. Let the Third World (represented in Lodge’s novel by the swarthy, immigrant underclass who serve Vic’s factory) have pure matter work. You, the New Class destined to inherit the earth (or at least cubicle), you who are endowed with the inalienable right to process a spreadsheet, database, or report: have you counted your knowledge assets today?*

But this is too facile a caricature of the age of knowledge work. Just as Lodge’s academic romance can be read in different tones, so too can our contemporary romances of knowledge work. I refer to the immensely influential and best-selling works of fiction-blended-with-reality—let us loosely call them “novels”—by the Victorian sages of our time: management “gurus” (Stewart among them). The mold, as John Micklethwait and Adrian Wooldridge note in their survey of the genre, was set in 1982 by Tom Peters and Robert Waterman, Jr.’s best-selling *In Search of Excellence: Lessons from America’s Best-Run Companies.* The genre came into its own in the early 1990s, with the appearance of works of wide impact such as these:

Michael Hammer and James Champy, *Reengineering the Corporation: A Manifesto for Business Revolution*


Robert M. Tomasko, *Downsizing: Reshaping the Corporation for the Future*

William H. Davidow and Michael S. Malone, *The Virtual Corporation: Structuring and Revitalizing the Corporation for the 21st Century*

Peter M. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization*

Don Tapscott, *The Digital Economy: Promise and Peril in the Age of Networked Intelligence*

Tom Peters, *Liberation Management: Necessary Disorganization for the Nanosecond Nineties*

Jon R. Katzenbach and Douglas K. Smith, *The Wisdom of Teams: Creating the High-Performance Organization*

Peter F. Drucker, *Post-Capitalist Society*

“These books,” Armand Mattelart comments, “which enjoyed a transnational readership far broader than just business executives, provided a medium for the followers of the new business doctrine,” “a veritable cult of enterprise, bordering on the religious.” And this is not even to mention the new journalism of business that, everywhere we look—in newspapers, magazines, cable business channels, and ordinary TV news—amplifies the dominant fictional realism of our times by rehearsing the mantra of rightsizing, just-in-time delivery, flat-structuring, disintermediation, flexibility, teamwork, lifelong learning, diversity management, and (that ultimate arbiter of collective fiction) shareholder value—all instantiated in networked information technology, or “IT.”

Inverting my questions about Lodge, we may pose the following puzzles for the postindustrial business imagination. On the one hand, is the new business literature simply ahead of (rather than, as with Lodge, behind) the times when it promises an age of business that is all information processing? Is the new business literature, in other words, what the word *virtual* may really mean—posthistorical? “When someone asks us for a quick definition of business reengineering,” Hammer and Champy declare in their *Reengineering the Corporation,* “we say it means ‘starting over.’ It doesn’t mean tinkering with what already exists or making incremental changes that leave basic structures intact.” Peter F. Drucker, the dean of U.S. management theory, sums it up: “Innovation,” he says, “means, first, the systematic sloughing off of yesterday.” Read virtually or posthistorically in this way, the business bestsellers are utopian prophecies of what Michael Dertouzos calls *What Will Be,* and Bill Gates refers to as *The Road Ahead* (to cite two titles from the affiliated genre of information-technology prophecy).

On the other hand, is the new business literature so dystopian (pessimistic about the future, where Lodge’s minor prophets are optimistic) that its real subject is the impassibility of history? Witness, for example, the rhetorical dependence of the genre not just on broad denunciations of traditional ways of living and working, but also on long catalogs of specific historical “obstacles.” “So, if management want companies that are lean, nimble, flexible, responsive, competitive, innovative, efficient, customer-focused, and profitable,” Hammer and Champy ask, “why are so many American companies bloated, clumsy, rigid, sluggish, noncompetitive, uncreative, inefficient, disdainful of customer needs, and losing money?” The answer is history: “Inflexibility, unresponsiveness, the absence of customer focus, an obsession with activity rather than result, bureaucratic paralysis, lack of innovation, high overhead—these are the legacies of one hundred years of American industrial leadership.” Similarly, we can take the measure of how Davidow and Malone’s *The Virtual Corporation* excoriates old ways of doing things from the following excerpt, in which history is purely a process of decay:

Here in the United States, the sense of distortion and confusion, mixed with considerable fear, has become an uncomfortable part of our daily lives.
Everywhere there is a disquieting sense of decay—in government, within boardrooms, on shop floors... One by one our industries are losing competitiveness and market share to industries of other nations. Our government seems more concerned with lifelong job security for politicians and spending money it doesn’t have than in enhancing the economic prosperity of the citizenry. Our manufacturing sector often insults consumers with shoddy products and workers with unearned executive compensation—and then blames its woes on foreign competition. By the same token, workers are frequently unmotivated and selfish compared with their foreign counterparts; and consumers have, in the past replaced good sense and security with almost pathological acquisitiveness.

Meanwhile, our major cities, once the jewels of our culture, have become violent, ungovernable places perpetually teetering on bankruptcy. 

Education, of course, comes in for special attention as the very pharaoh of decadent old ways. A plague on education, Boyett and Conn thus say, or, to be exact (citing the business spokesmen they quote in their chapter on education), schools are a “national disaster,” “a third world within our own country,” “the American dream turned nightmare,” “the greatest threat to our national security,” and so on.

To emphasize such harsh, corrosive, often satiric denunciation, we recognize, is to see that the new business literature walks the dark side of the street (the “road ahead”) of prophecy. From this perspective, works in this genre are fire-and-brimstone jeremiads damning sinners in the hands of an angry global competition. Gurus are not sages of the new millennium. They are witnesses to a damned history that is everywhere and nowhere, present in every manifest obstacle imposed by the past, yet profoundly unknowable in the discourse of knowledge work except as monstrous other. History is an imaginary Third World—a reservation for peoples who remain historical—couched within the First World itself. It is the other of the future.

To reflect on the relation between knowledge work and the academy today, in short, is to discover a profound ambivalence. I raise questions of stance or tone about Lodge’s novel and the new literature of business not to suggest that such questions can be firmly decided. Rather, the considerable vitality of both the novel and the business discourse I cite depends precisely on their undecidability. Comedy or satire, prophecy or jeremiad: the underlying contradictions glossed by these modes are structural. As such, they are best approached in the spirit not of decision but of suspense. We are, after all, on the scene of the abiding suspense of the contemporary middle class, which is even more structurally contradictory than the original white-collar class of the twentieth century. To be a white-collar or salaried worker in the 1950s, for example, was to stake the entirety of one’s authority not on the self-owned property, business, goods, or money of the predecessor entrepreneurial classes of the nineteenth century, but on an existentially anxious property of “knowledge” that had to be re-earned from scratch by one’s children. Thus was laid the foundation for the overdetermined relation between business and education. But to be a professional-managerial-technical worker now is to stake one’s authority on an even more precarious knowledge that has to be re-earned with every new technological change, business cycle, or downsizing in one’s own life. Thus is laid the foundationless suspense, the perpetual anxiety, of “lifelong learning.”

Understanding knowledge (and information) work from the point of view of the academy, therefore—and especially understanding the contemporary relation between knowledge work and the academy—means exploring a complexly ambivalent zone of antipathy, cross-purposes, and also, at times, unexpected sympathy. To do so requires the opposite of the decisiveness heard so preemptively—to cite an important example—in the “Final Report of the MLA Committee on Professional Employment” (1998), a white paper commissioned by the Modern Language Association to suggest ways to ameliorate the “job crisis” in the humanities. However acute, consistent, or substantial its recommendations may be (or not), the “Final Report” is clearly fighting the last war when it legitimates itself in its preface:

Lawmakers call for greater productivity on campus, and advisers trained in business management counsel various forms of “downsizing.” In numerous instances, indeed, formal commissions, college presidents, boards of trustees, and the media have pressed for a new efficiency in higher education based on corporate models in which students are defined as “clients” or even “products” and academic institutions are regarded as sites of production. But of course the object of business corporations is to make a profit, while the object of institutions of higher education is to acquire and disseminate knowledge as well as, most important, to develop in students sophisticated intellectual strategies they will use for the rest of their lives, in and out of the workplace.

The Maginot Line here, of course, is the “of course” that refuses at all costs to acknowledge the complexity of the contemporary overlap between the work of education and the knowledge work of business. What the perspec-
To grasp the meaning of "metanoia" is to grasp the deeper meaning of "learning." 15

For the humanities scholar, there is inexpressible irony in the thought that the single most influential contemporary visionary of the One Life and Imagination (as the Romantic poets called it) should be a management guru. 16 Senge offers a whole scholarship of, and about, learning bypassing academic historical knowledge in favor of a fantastic pastiche of classical, Christian, and (the real school of his work) New Age lore. It would be easy for the professional scholar to demystify Senge's lore (etymological speculation on the meaning of words, after all, has been one of the preferred gambits of deconstruction). But this would miss the point, which is that the academy can no longer claim supreme jurisdiction over knowledge. The narrowness of much contemporary academic research is perhaps precisely what allows Senge to claim high-court jurisdiction in the breadth and daring of his intellectual-cum-practical will to know what it might mean to "know."

We are now in a position to understand why a serious study of knowledge work from the perspective of the academy is necessary. Scholars are themselves knowledge workers in a complete sense: they are intellectuals, but they are also middle managers responsible for an endless series of programs, committees, performance reports, and so on. 17 More important, their entire mission is the education of students who, however diverse their backgrounds, are destined for service in the great, contemporary prosperity corps of knowledge work. (Even students who aim for more idealistic, Peace-Corps-style service in government, nonprofit, or low-profit sectors are likely to experience the increasing colonization of all work by the principles and technologies of corporate knowledge work.) Only if scholars now think about business as an intellectual and practical partner in knowledge work, therefore, can the critical issues in the relation of the academy to business be joined. Asking business for nice work need not mean selling out, but only if the contemporary academy engages business in a full act of critique in which it both gives and takes. Such reciprocal critique cannot even be initiated unless it is elevated to the proper level, where scholars first assume that the academy and business have a common stake in the work of knowledge and, second, ask, "What is the difference?" What is the postindustrial, and not nineteenth-century, difference between the academy and the "learning organization"? 18

Since the mid-twentieth century, we may reflect, the U.S. academy has increasingly understood its business to be the education of "all"—or at least as many of the "all" as a relatively liberal notion of the white-collar middle
class (and its more recent New Class techno-managerial-professional overlords) can accommodate. But now knowledge work has called the academy’s bluff. Here is a partial listing of the areas of knowledge production that Machlup included in his 1962 survey:

- Education (at home, on the job, in church, in the armed services, elementary and secondary, higher)
- Research and development (basic, applied)
- Media of communication (printing and publishing, photography and photography, stage and cinema, broadcasting, advertising and public relations, telephone, telegraph, and postal service)
- Information machines (instruments for measurement, observation, and control; office information machines; electronic computers)
- Information services (legal, engineering and architectural, accounting and auditing, medical, financial, wholesale trade)

Now that knowledge—in its training, exercise, and possession—really is presumed ideologically, if not in fact, to be the business of “all,” and especially of business, how will be the academy adapt to its diminished role as one among many providers in a potentially rich and diverse—but also potentially impoverished and culturally uniform—ecology of knowledge? In the “knowledge economy,” education occurs across a whole lifetime in an unprecedented variety of social sectors, institutions, and media: not just schools, community colleges, and universities, but also businesses, broadcast media, the Internet, even the manuals or “tutorials” that accompany software applications. Education, in other words, is now a decentralized field where no one institution individually corner the market and where we encounter a dizzying dispersion of the kinds and scales of learning—all the way from educational programs leading to degrees to CNN “factoids” leading only to the next commercial.¹⁰ What voice will brave, dear Temporary Lecturer Robyn Fenrose have in the cacophonous new world of knowledge work? In broader terms, how can society create the most inclusive, flexible, and intelligently interrelated mix of educational options to take care of all its citizens hungry to “know”?²⁰

What is the idea of knowledge work? What is its relation to the knowledge of the humanities in the contemporary academy? And how does focusing specifically on “information work”—on its technologies, techniques, and, ultimately, culture—help us understand that relation?

Chapter 1

The Idea of Knowledge Work

To understand knowledge work from the perspective of the humanities, let us start by reviewing in a single frame of analysis three explanations of the concept that arose independently and largely in ignorance of each other. Two are academic approaches characteristic of the humanities in their now prevailing cultural critical personality. The third is the neo-corporate business thesis that seems destined to buy out the others. Where there was “identity group” and “cultural class,” there will now be only that elementary unit of corporate knowledge work, the team.

Subject Work

Recall, to begin with, that since about 1980 the dominant, if unwitting, explanation of knowledge work in the humanities, especially in literature departments, has been the cultural criticism of identity and subject. Sketched very broadly, the paradigm of 1980s-style cultural criticism was as follows.¹¹ The paradigm started with the assumption that cultural value—or, put negatively, discrimination—is determined by social structure. Specifically, value is “constructed” by a structure whose implicit or explicit patterning after some hard-core segment of society (e.g., economic structure, patriarchal family structure) made it seem a unitary regime of social “containment” no matter what the evidence of inner “subversion.”¹² An example of such a formulation is Foucault’s social “discursive
First, then, the men must be brought to see that the new system changes their employers from antagonists to friends who are working as hard as possible side by side with them, all pushing in the same direction.

Frederick Winslow Taylor, *Shop Management* (1903)

Windows never would have gained popularity and reached critical mass without the benefits of innovative, user-friendly technologies developed by our Office team.

Preface

"We Work Here, but We’re Cool"

Amid the coldest and richest of our contemporary seas—awash in the bright, quick data streams and great knowledge surges—lies the continent of cool.

The sea is the sea of information in which we variously surf, navigate, explore, and drown (the standard metaphors). We do so in so many ways and with such enthusiasm that it is perhaps no longer possible even to attempt the kind of survey of the “information sector” or “knowledge industry” that economic statisticians such as Fritz Machlup and Marc Uri Porat performed so sweepingly some decades ago. Information today would require a Borges—a Library of Babel or Funes the Memorious—to keep an account. In any event, it will require in this book that we gradually scale back the topic from information at large to the epiphenomenon of contemporary information—the Internet and (especially) the World Wide Web.

We know that the Web—and the combination of networking and GUI (graphical user interface) technologies it encompasses—is the “user friendly” face of information. But the friendliness of the Web, and everything it represents in the long history of work leading up to current knowledge work, is also strangely cold. It is from this coldness—remoteness, distanciation, impersonality—that cool emerges as the cultural dominant of our time. Strip away all the colorful metaphors of information seas, webs, highways, portals, windows, and the rest (like picture calendars tacked to the wall), and what comes to view is only the stark cubicle of the knowledge worker. Yet precisely in this cold space of nonidentity, cool appears as the cultural face—perhaps not the best or truest face, but the interface by which it knows itself—of knowledge work.

What makes knowledge workers clutching a console in a cubicle think they are as cool as the jazz musicians, black British or African American youths, white greasers, and other such subcultures exiled from knowledge work during the early to mid-twentieth-century “birth of the cool”? Or, to refer to a different phylum in the genealogy of cool, what makes such work-ers feel as secretly “beat” or “hip” as the countercultures of the 1950s and 1960s that borrowed subcultural cool precisely to drop out of the knowledge work for which they were destined (school, business, the “military-industrial complex”)? Finally, how do all the phyles of cool mentioned so far—subcultural, countercultural, informational—relate to contemporary, mainstream consumer cool? Certainly, the technology that has been the necessary buzz of everything really cool (e.g., hot rods, reggae “sound systems,” electric guitars, designer drugs, high-speed processors) plugs into the whole cargo cult of industrial age consumer leisure (stereos, DVD players, special-effects movies). How do cool graphics on the Web, then, differ from cool computer-animated dinosaurs in a mass-market movie like Jurassic Park?

Or, to ask my questions in a specifically postindustrial rather than industrial context, what is cool in an age when producer culture dominates everyday life so thoroughly that it renegotiates the whole relationship of production to consumption, work to play? After the “big split” of work from leisure in the first half of the twentieth century (as C. Wright Mills termed it), consumer culture became the darling of both academic and journalistic critique. It stood for the numbing totality of mainstream culture, and also for the limiting horizon of possibility—at once the originary stylistic resource and final embourgeoisement—of the subcultures and countercultures that protested mainstream culture. But today it is producer culture that governs work life and home life alike in the name of a ubiquitous new regime of knowledge: not just company-mandated “life long learning,” but also the “home office,” “telecommuting,” “edutainment,” “investment clubs,” and, as Paul A. Strassmann has observed, the thousand and one other routine jobs that have been shifted to, or created ex nihilo within, leisure time. Even athletic training, tennis, sailing, and other recreations, Wiolet Rybczynski notes, have become occupations of skill and technique offering the chance “to work at recreation.” As documented in Juliet B. Schor’s Overworked American: The Unexpected Decline of Leisure and Arlie Russell Hochschild’s Time Bind: When Work Becomes Home and Home Becomes Work, therefore, the rise of “smart” work coincided with trends that not only added the equivalent of an extra month of work per year from the late 1960s to the late 1980s (and subtracted almost 40 percent of leisure time), but ultimately blurred the sense of a boundary between job and home.

Increasingly, knowledge work has no true recreational outside. Cool therefore arises inside the regime of knowledge work as what might be called an intraculture rather than a subculture or counterculture. Cool is an attitude or pose from within the belly of the beast, an effort to make one’s very mode of inhabiting a cubicle express what in the 1960s would have been
an "alternative lifestyle" but now in the postindustrial 2000s is an alternative workstyle. We work here, but we're cool. Out of all the technologies and techniques that rule our days and nights, we create a style of work that is "us" in this place that knows us only as part of our team. Forget this cubicle; just look at this cool Web page.

At once wise to it all and profoundly ignorant, simultaneously arrogant and vulnerable, and—the specific paradox that is the key to our puzzle here—both strangely resistant to and enthralled by the dominating information of postindustrial life, cool is the shadow ethos of knowledge work. It is the "unknowing," or unproductive knowledge, within knowledge work by which those in the pipeline from the academy to the corporation "gesture" toward an identity recompensing them for work in the age of identity management. Whether watching cool graphics on the Web or cool dinosaurs in that Spielberg film allegorizing the fate of knowledge workers in the age of global competition (where the real drama occurs in the out-of-control computer control room behind the leisure theme park), knowledge workers are never far from the cubicle, where only the style of their work lets them dream they are more than they "know."[1]

Can we dream of anything more humane or less existentially lonely than driving information highways or surfing data seas? Can we do so without immediately fantasizing Jurassic, cold-blooded monsters (not Tyrannosaurus Rex and raptors, but CEOs and shareholders) that embody the worst nightmare of any age of global competition living in denial of history—prehistory?

To evolve an answer, it will be useful to review the history of contemporary knowledge work—specifically, the history of how knowledge workers grew so cold they had to be cool. Cold lies at the heart of the paradoxically bright yet noir alienation of cool ("hiding in the light," Dick Hebdige calls it)—in the way, for example, that a crisp pair of sunglasses worn indoors is very cool.[2]

Cold work originated in alienation as Marx understood it. But what is most relevant in our context is the specifically twentieth-century history of alienation, which I unfold in three ages of ice named after the leading work paradigms of their times: automating, informating, and networking. Automating was dominant from the late nineteenth century through the Cold War (I concentrate on the 1920s through 1950s). Its great sociological achievement was the regimentation not just of blue-collar workers, but also of the salaried "new middle class" ancestral to knowledge workers. What Shoshana Zuboff calls "informating" then took the lead from the late 1950s through the 1970s, when mainframe computing altered the character of automation to redefine white-collar workers (and to some extent blue-collars) as information workers. Networking, together with the personal computer, emerged after about 1982 to escort white-collars into the new millennium of knowledge work.
At lilac evening I walked with every muscle aching among the lights of 27th and Welton in the Denver colored section, wishing I were a Negro, feeling that the best the white world had offered was not enough ecstasy for me, not enough life, joy, kicks, darkness, music, not enough night.


Someday, we'll all agree on what's cool on the Net. In the meantime, the Netscape cool team will continue to bring you a list of select sites that catch our eye, make us laugh, help us work, quench our thirst... you get the idea.

Netscape Communications, Inc., "What's Cool?" page (March 1996)
Preface

“What’s Cool?”

“What’s cool?” the Netscape corporation asked on one of the best known pages of its Web site in 1996–97. The answer offered on the page (quoted as one of my epigraphs above) quickly passes over the “we” who do not yet know what cool is (“someday, we’ll all agree on what’s cool on the Net”) to install a “cool team” charged with generating an empirical definition of cool—a list of sites. These are the sites, the team says (itself now appropriating the first-person plural), “that catch our eye, make us laugh, help us quench our thirst . . . you get the idea” (ellipsis in the original).

For just a moment, it is as if we were latter-day Chaucerian pilgrims questing (“searching,” they call it on the Internet) not so much for a holy site as for any quotidian site along the way whose sensual, even multimedia gusto can help us reintegrate our lives of work and leisure (“eye,” “laugh,” “work,” “thirst”). Or, again, it is as if the cool team were leading us on an exodus out of the pharaoh’s land of routines, procedures, standards, and protocols toward a land of milk and honey far beyond the reach even of company rafting trips, rock climbs, desert hikes, and other such retreats of corporate culture. It is as if . . . you get the idea.

What is cool in the age of networked information? What is cool when even our youngest children know to say “cool” in the presence of high technology?22 when cool and its antithesis, suck (as in, “either you’re cool or you suck”), have become the two most widely diffused slang terms for approval and disapproval among American high-school and college students (with recognition rates above 90 percent)?23 when students and workers entering the corporations are as likely to dress their stereos, TVs, and other high-tech gear as themselves in cool, haute-couture black? and, above all, when everywhere we look (at TV shows or films with their own Web sites, for example), a new king cool, information cool, has been anointed to carry all the rest into the new millennium?24 The day is not yet, perhaps, when we will be cool for the circuitry tattooed under our skins or gold processor sockets inlaid in our heads, though the swarming of sleek cell phones and handheld computers may presage such info-fashion. But already our computer “desktop,” that workday interface of information culture, sports a new look far more seriously cool than any of the screensavers of old. Our desktop, as it were, has grown tailfins. At a click, its window opens onto the World Wide Web, whose hyperbolic, even desperate, cool may be taken to be the insignia of information cool.

If Web cool is the tailfin on the machines that take us down the information superhighway, what do we see when we stare into all that chrome? What is information cool?

The answer, I propose, may be looked for within the ellipsis on that classic 1996–97 Netscape cool page. At once gesturing toward the “idea” of cool and withholding that idea, such an ellipsis is a uniquely paradoxical inexpressibility topos—one whose fullness of implied content (site after site after site) is constrained by a silence that is more than simply neutral or practical. The silence is also a proscription, an interdiction. It takes very little pressure upon cool, after all—asking someone to define it, for example—to bring out the force of that proscription. Those who insist on asking, the Internet has not so subtle ways of declaring, are definitely uncool.4

The proscriptive ellipsis may be taken to be the elementary rhetoric, the mental pixel, of information cool. Inflected in different ways and on various scales, the rhetoric of unproducible knowledge—of knowledge that can never be known and shown simultaneously—is universal to cool online. Of course, there may not always be a literal ellipsis, and the proscription may be less prohibitory than ascetic. But the thought—or rather, unthought—is there. Consider the Project Cool Web site, for example, which in 1997 posed its version of Netscape’s “What’s Cool?” question. “What is this thing called cool?” Project Cool asked on a page titled “About the Coolest on the Web” explaining its anthology of cool sites.2 What is “this thing everyone wants/ and no one can quite define”? The answer came in a poem of (in)definition:

There is no one definition of cool.
There is no one definition of Beauty

Art

Obscenity.

It's a sort of

"I know it when I see it"
type of thing. You can argue
‘til the cows come home
that this was or wasn’t cool,
but it’s all pretty subjective.
Declaring that there is nevertheless "method to our madness," the poem then goes on to list several formal criteria for cool (writing, design, content, graphics, and so on). Yet it is these definitive criteria that the poem at last throws into doubt:

We set up some categories.

They aren't perfect,
but they seem to work.

We started filling them with
sites that exist today,
sites that we like,
sites we think are cool for that category.

We stepped back and,
with reason and deliberation,
deconstructed our gut instinct.

In the last stanza, deconstruct appears to mean "take apart" or "analyze" (one popular misuse of the word). Project Cool is defining cool by taking its "gut instinct" responses to cool Web sites and breaking them into analytical categories. Yet almost immediately any "method" of analysis is destabilized through the introduction of a kind of Lucretian turbulence. According to the gnomic last stanzas of the poem,

Cool isn't static.

Today's hits might not make it
next week
next month
next year.

The definition evolves . . .

Coolest on the web is always in flux,
reflecting current state of the art.

This final evolution of definition into "flux," we may say, is Project Cool's true act of deconstruction. Categorical definition prompts a powerful reticence about, or preemptive deferral of, definition that indicates not so much ignorance as over-full knowledge. There is so much "more" about cool than can be said without falsifying its je ne sais quoi. "The definition evolves . . .," the poem says, ellipsis and all. Step back from the mystery, therefore, even as we approach it. The koan of cool can be put as follows: we know what is cool, but part of what we know is that we cannot know what we know. Cool forbids it.9

What's really cool, after all? At the moment of truth on the coolest Web sites—when such sites are most seriously, deeply cool—no information is forthcoming. Cool is the aporia of information. In whatever form and on whatever scale (excessive graphics, egregious animation, precious slang, surplus hypertext, and so on), cool is information designed to resist information—not so much noise in the information theory sense as information fed back into its own signal to create a standing interference pattern, a paradox pattern. Structured as information designed to resist information, cool is the paradoxical "gesture" by which an ethos of the unknown struggles to arise in the midst of knowledge work.10

Since I am less concerned with the deconstructive rhetoric of cool that Project Cool puts in play (albeit in a debased way) than with the cultural equivalent of such rhetoric—a particularly contradictory social posture or stance—it may be helpful to make an analogy to a human science that is practiced in the paradoxes of culture: ethnography or cultural anthropology. The proscriptive ellipsis, I suggest, tells us as much upon the elementary structures of cool as the incest prohibition—another universal nix—upon what Claude Lévi-Strauss called the elementary structures of kinship.11 "Thou shalt not commit incest" and "thou shalt be cool" are strangely correlative laws, even though in some senses cool is precisely the incest of information (information fed back into its own signal).12 As a preface to an investigation of cool, therefore, we can imagine that we are anthropologists encountering information culture as a new mode of "savage thought." What are the paradoxical laws of cool that give the tribes of the cubicle their secret culture amid corporate culture, their fantasy of knowledge work, their Atlantean cool underneath the sea of information?

Just four themes of cool in the information age—each phrased as an assertion about the life of information, followed paradoxically by its contradiction—will provide an adequate dossier. Cool is, and is not, an ethos, style, feeling, and politics of information.
The men would spread out around a clump of trees where coati had been seen, shoot arrows into the branches, throw pieces of wood or clumps of earth, shout and make such a racket that the animals became completely panic-stricken and could only think of one thing — to flee from the noise. They would scurry down headfirst. But at the bottom would be a man, his left forearm bound in a thick cord made of plant fibers and women's hair ... When the coati reaches the ground, the man pushes him against the trunk with his protected left arm, takes him by the tail with his right hand, swings him in the air, and smashes him against the tree with all his might, which breaks his skull or his spine. With this technique, the hunters can also capture the coati alive and use them as guard animals in the camps.


As you would expect, the Google Search Appliance provides the accuracy, speed and ease of use that have made Google the favorite of web searchers worldwide. When employees have instant access to the best information, they get more done. That makes them happier and makes your company more productive.

“Google Search Solutions,” Google, Inc.
Preface

There is much "more," as I said in my introduction. If we were to press the phantom "more" or "next" button at this point in our argument, we would come to additional topics in the study of knowledge work and information culture. Clearly, for example, my cultural critical approach has meant that this book has concentrated on the "identity," "subjectivity," and even "fantasy" of knowledge work in ways that bypass psychological or psychoanalytic exploration. Clearly, too, I have not dealt in depth with the effect of information culture on any particular aspect of the group identities I observed generally in part I, which scholars in "new media studies" have begun to explore under the topics of digital gender, race, and ethnicity. These latter portfolios of study have the potential to do more than just confirm established modes of identity criticism in the humanities. They promise to add predictable spin to such criticism. For example, how should the cultural critical narrative of "marginalized" minority groups be inflected to take account of "decentralization" as the new, dominant social ideology? Or, to reverse the direction of the question, how should decentralization, which is espoused by business consultants as if it were the cutting-edge discovery of the new millennium, be inflected to take genuine account of peoples with centuries of experience in practicing local or community knowledge outside the "center"? Albert Borgmann—whose *Holding On to Reality: The Nature of Information at the Turn of the Millennium* I have read with widening admiration in the latter stages of my own writing—gives one glimpse of the promise of this line of thought by grounding his expansive explanation of information in part upon the prehistorical, "ancestral environment" of information once habitual to Native Americans in his home state of Montana.

Perhaps most important, my study has focused on the United States and thus does not give due attention to the "world" even while making the "World Wide Web" a case study in postindustrial cool. In broader view, knowledge work, data production, and contemporary business culture are global in their implications. We do not even need to consult such world-spanning scholars of information society as Manuel Castells or Armand Mattelart to glimpse this fact. We need only watch the opening of any ordinary TV news show to see in the now clichéd computer animation of the spinning globe the very image of information as world. From the vantage point of information-mongers, that is, the world is identical with the span (and spin) of information mediated by knowledge workers. Or, put another way, zones in the world opaque to information (what Castells calls "black holes" of marginality) are only precariously part of the world at all. No study of knowledge work, therefore—let alone one centered in a nation like the United States that exerts such influence over the content, media, protocols, and even language of knowledge work internationally—can now ignore the constitutive role of such work in globalization. The contemporary globe, perhaps, is not so much a preexisting object as a standing wavefront of simulation generated by knowledge work as an idea of globalization—named, for example, "new world order," "global market," or "World Wide Web." Knowledge work and information culture must thus be evaluated by the measure not just of individual weal or national wealth but of global commonwealth. The important question is: what standard of well-being might emerge from the seemingly closed circuit of "well informed" citizenry in the West that can transform the U.S.-led vision of the world as all "global competition" into a less fundamentally cruel imagination of wealth in common? Or, to put it another way, a book like this one on the alienation of knowledge workers within postindustrial society requires a companion text like Castells's that also listens to regions of the world alienated outside postindustrial society. Knowledge workers who grow cool when threatened by networked corporate culture share a secret quotient of identity with peoples who grow nationalist or fundamentalist when threatened by the "West" in general. There is thus rich research to be done on the puzzle of why knowledge workers generally think there is nothing more uncool than nationalist and religious revivals—why the cool (high-tech, media-saturated, futurist) and the "uncool" (anti- or last-generation tech, anti-media, traditionalist) see right past each other despite their homologous resistance to postindustrialism.
Nevertheless, I hope I have touched upon a sufficient number of topics to render knowledge work and information culture in their very "subject" or, to borrow from David Whyte's *The Heart Aroused: Poetry and the Preservation of the Soul in Corporate America*, "soul" (see epigraph to part I). And, as all, the recognition that knowledge workers have a soul, which is a way of naming that secret quotient of identity withheld from (or within) the global corporate network, is what is fundamentally at stake in grasping the culture—as distinguished from society, economics, or politics—of postindustrialism.

Let me thus at last offer the anthropology of cool I promised in order to start upon my concluding topic. That topic is the cultural education of the cool and, correlative with the future of the humanities and arts in the information age. The generations of cool destined for the cubicles, let us imagine, only appear to accept a future in which they sit docilely in front of cold computer screens mutely clicking and mousing. In reality, they are wild and sit by hot campfires at night where their soul can sing. What they sing is older than the rock music that the cool used Napster to appropriate in the late 1990s. It is older even than the jazz that an earlier generation of cool (in the first colloquial usage of that term) vented in the nightclubs of the 1930s. To hear that song—a cry of "more!" as primeval as the forests—I will listen to the anthropology of an "archaic" tribe of the forest and make of it a fable for the tribe of the cubicle. My essential question will be: can the cool be educated in their singing so that the song of culture they raise will be adequate to an age of knowledge work that is neither prehistorical nor (even more mythical) "posthistorical," but in the last instance truly historical? And will the humanities and arts—specifically, humanities education coupled with the artistic ideologies, institutions, and practices that make up the aesthetic education of the cool—be up to the task?

The Tribe of Cool

I previously drew upon the work of Claude Lévi-Strauss. Here I turn to another French anthropologist, Pierre Clastres, whose *Society against the State* (1974) is dedicated to the proposition that there are societies without politics. Most Indian tribes of the Americas, Clastres says, "are headed by leaders and chiefs," but "none of these caciques possesses any 'power,'" while "one is confronted, then, by a vast constellation of societies in which the holders of what elsewhere would be called power are actually without power; where the political is determined as a domain beyond coercion and violence, beyond hierarchical subordination; where, in a word, no relationship of command-obedience is in force" (pp. 11–12).

Yet for Clastres, flat societies without hierarchy are not necessarily utopian. If individuals and groups do not have power, then this may mean they are disempowered by an overall system of equality that is in itself all powerful. They are subject, in other words, to the true power of their world: the very laws of sociality that enforce the sharing of power. Such subjection, at times, stirs resentment.

Witness one of the most poignant chapters of Clastres's book, "The Bow and the Basket" (pp. 101–28; supplemented by his earlier *Chronicle of the Guayaki Indians*). The South American Guayaki (or Aché) people, Clastres reports, are no-