

USEFUL DEVILS

"You guys are in trouble and we are going to eat your lunch."

—Michael Milken,
New York Times, November 4, 1999

In his informative and influential book *Dancing with the Devil: Information Technology and the New Competition in Higher Education*, Richard Katz pointed out: "Traditional revenue sources for U.S. higher education are, and will continue to be, under downward pressure. When faced with such pressure, colleges and universities have a limited set of responses. They can cut costs (with or without cutting quality), raise prices, exit existing markets, pursue new markets, create new products, or pursue any combination of these strategies."¹

Katz's use of market rhetoric to describe the challenges facing higher education is calculated to provoke his readers to analyze and respond to the extraordinary changes occurring in the world around them. We are undeniably living in a moment of extraordinary social, cultural, political, and economic transition. As we move from an industrial to an information economy or from modern to postmodern culture, new socioeconomic structures and institutions are transforming *all* aspects of life. What is emerging might best be described as *network culture*. The conditions for network culture have been created not only by the remarkable technological innovations of the past several decades but also by the decentralization and deregulation of the telecommunications and financial industries during the 1970s and 1980s. These changes, which occurred and are continuing to occur at warp speed, are posing enormous threats and unprecedented opportunities for higher education. Unfortunately, educators tend to see threats where businesspeople recognize opportunities. What are the opportunities, and where are the threats?

BY MARK C. TAYLOR

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What the business world understands and the academic world is reluctant to admit is that education is a very valuable commodity.

In a recent article in *The Economist*, Mark Getty, the grandson of J. Paul Getty, observed: "Intellectual property is the oil of the 21st century. Look at the richest men a hundred years ago: they made all of their money extracting natural resources or moving them around. All today's richest men have made their money out of intellectual property."² If information is the oil of the twenty-first century, colleges and universities are sitting on very valuable reserves. A Merrill Lynch research document entitled *The Book of Knowledge: Investing in the Growing Education and Training Industry*, published in April 1999, estimated the value of these reserves to be \$2 trillion worldwide and \$740 billion in the United States. Yet many educators and educational institutions remain reluctant to tap these profitable reserves. What the business world understands and the academic world is reluctant to admit is that education is a very valuable commodity. In network culture, profits are going to be generated not only by selling things online but, more important, by marketing commodities that are distributable through new technologies. Having cornered the market on entertainment, sports, and news, entrepreneurs are taking aim at education. For higher education, this situation poses two alternatives, which might or might not be a zero-sum game: competition or cooperation. If companies and investors are in the same business as colleges and universities, they are going to be much less willing to contribute freely to potential competitors. When Milken declared, "You guys are in trouble and we are going to eat your lunch," he was really saying to higher education: "Your game is over; no more free lunch. Don't come to us looking for handouts; we're not going to give you money and resources that enable you to compete with us. Either cooperate or we will steal your show. You might think you have a choice of playing or not playing, but you do not. The chips are on the table and the clock is running faster than you realize. Play with us or play against us. If you play with us, we both win; if you play against us, we win and you lose big."

That's the deal—that's the hand we've been dealt. How are colleges, universi-

ties, and faculty members responding to these challenges? How *should* they respond? There are, of course, no simple answers to these questions. Faculty, administration, and staff do not all react the same; furthermore, different kinds of institutions respond differently: colleges and universities, large and small, public and private, often have contrasting perspectives on this situation. Even within institutions, the responses of faculties and departments differ significantly. While some faculty members recognize opportunities created by new technologies, many others regard the alliance of technology, business, and education as a pact with the devil. Such a deal, they fear threatens the house of cards where they continue to play their idle games. In many cases, these criticisms are motivated by blatant self-interest. Behind sanctimonious declarations about the importance of protecting disinterested investigation and academic freedom, one can easily detect concern about disappearing jobs and the loss of job security (i.e., tenure). It is, however, far too simple to dismiss all criticisms as mere expressions of self-interest. Many thoughtful faculty members are very concerned about the crumbling foundations of the higher education institution.

To appreciate why many faculty members continue to resist technology and business, it is helpful to consider remarks by a writer and by an artist, two men who might not seem to have much in common: Michael Lewis, the author of *Liar's Poker* (an account of investment banking in the 1980s) and *The New New Thing* (the story of Silicon Valley in the 1990s), and Andy Warhol. In a recent article in the *New York Times*, Lewis wrote:

A few years ago I began to notice that people I was introduced to were suddenly describing their work, not by saying who they did it for. The senior vice president of the Chase Manhattan Bank had somehow vanished. In his place had arisen any number of people with baffling new job descriptions: migrant Web master, kernel hacker, creative director. For about six months it seemed as if the people I met called themselves soft-

ware consultants. What the hell was that? As best I could tell it meant piercing some highly unlikely body part and cultivating an air of independence.

Actually, what these people all were, or appeared to be, were artists. They kept artists' hours. They wore artists' clothes. They had preserved the sort of odd habits that membership in any group—other than the group "artists"—tends to drum out of people. Maybe the most interesting thing about them was their lack of obvious corporate attachments. Corporations usually paid for their existence, but otherwise seemed to have no effect on their lives.³

In addition to his well-known contributions to pop art, Warhol was one of the most astute interpreters of the new media culture and telecommunications technologies. In his provocative book *The Philosophy of Andy Warhol*, he underscored, with characteristic wit and irony, the intersection of business and art:

Business art is the step that comes after Art. I started as a commercial artist, and I want to finish as a business artist. After I did the thing called "art" or whatever it's called, I went into business art. I wanted to be an Art Businessman or a Business Artist. Being good in business is the most fascinating kind of art. During the hippie era people put down the idea of business—they'd say, "Money is bad," and "Working is bad," but making money is art and working is art and good business is the best art.⁴

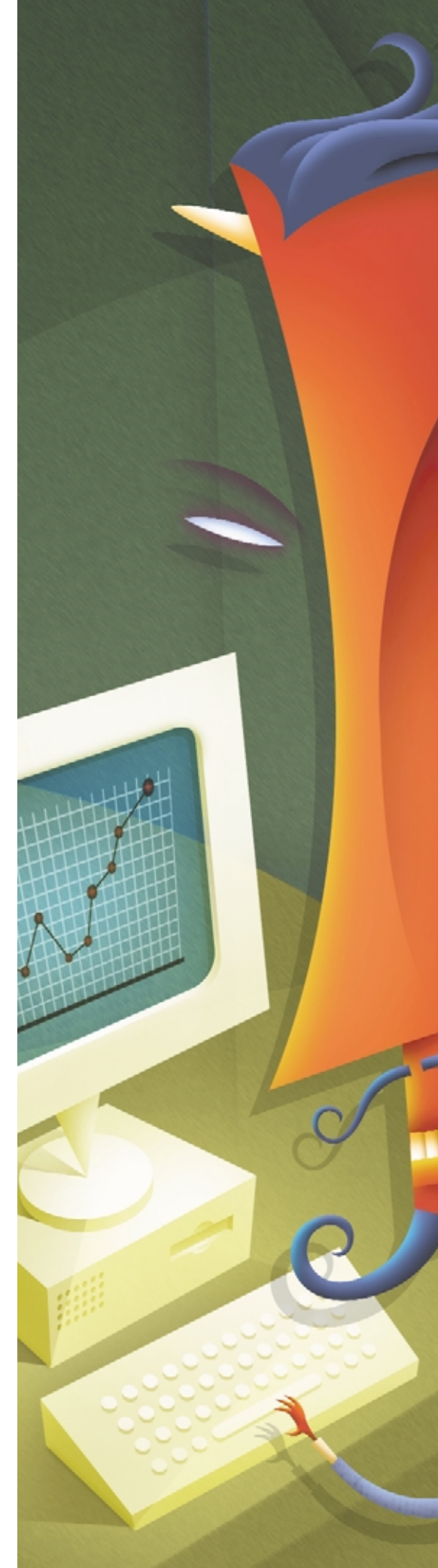
Lewis and Warhol are suggesting that businesspeople are becoming artists and artists are becoming businesspeople. How might this insight help us to understand what is going on in higher education? An answer to this question begins to emerge when we realize that not only hippies but also many educators deem money to be bad and business the work of the devil. Indeed, about the only thing the left and the right in the academy seem to agree about is that money is dirty and that capitalism—not communism—is the evil empire. The

roots of this attitude can be traced to the origin of the modern university.

The first modern university was the University of Berlin, founded in 1810. Immanuel Kant developed the blueprint for this university in a work entitled *The Conflict of the Faculties*, published in 1798. Kant began his analysis by arguing:

Whoever it was that first hit on the notion of a university and proposed that a public institution of this kind be established, it was not a bad idea to handle the entire content of learning (really, the thinkers devoted to it) by mass production, so to speak—by a division of labor, so that for every branch of the sciences there would be a public teacher or professor appointed as its trustee, and all of these together would form a kind of learned community called a university (or higher school). The university would have a certain autonomy (since only scholars can pass judgment on scholars as such) and accordingly it would be authorized to perform certain functions through its faculties.⁵

In this remarkably prescient passage, Kant associates higher education with mass production and, by extension, with what eventually becomes the logic of Fordism. Accordingly, the university is structured like an assembly line with discrete divisions and departments turning out uniform products with predetermined values. The curriculum and the education of students are linear processes, which are programmed by the producer. University professors are divided between so-called higher and lower faculties. The "higher" faculties are law, medicine, and theology, which represent what we today call professional schools. It is important to note that the university Kant designed is supported by the state. The purpose of the higher faculties is to provide the educated citizens that the government needs to maintain a functional society. The "lower" faculty, which Kant defines as philosophical, comprises what we now label the arts and sciences. The higher faculties are charged with providing practical education, whereas the responsibility of the lower faculty is disinterested inquiry and critical reflection:



The value of the education provided by the higher faculties is its social, political, and economic utility. The lower faculty, by contrast, is resolutely nonutilitarian and devoted to reason as such.

While only the scholar [i.e., member of the lower faculty] can provide the principles underlying their functions, it is enough that they [i.e., members of the higher faculties] retain empirical knowledge of the statues relevant to their office (hence what has to do with practice). Accordingly they can be called the *businessmen* or technicians of learning. As tools of the government (clergymen, magistrates, and physicians), they have legal influence on the public and form a special class of the intelligentsia, who are not free to make public use of their learning as they see fit, but are subject to the censorship of the faculties.⁶

Members of the higher faculties, then, are “businessmen” and “technicians of learning” who are the “tools of the government” (and, we might now add, industry). Since the purpose of the higher faculties is extrinsic to the university, reason is instrumental and serves the interests of government and commerce. The value of the education provided by the higher faculties is its social, political, and economic *utility*. The lower faculty, by contrast, is resolutely nonutilitarian and devoted to reason as such. It investigates the principles and assesses the processes by which the higher faculties operate. To fulfill this function, the lower faculty must be grounded in the principle of autonomy, which has three basic tenets:

1. Reason must be governed only by reason and not by any external interests or goals.
2. Scholars cannot be evaluated by outsiders but can be judged only by other scholars (i.e., by peer review).
3. The critical judgments that members of the lower faculty are charged with making require freedom from outside influence and disregard for the practical consequences of their assessments (i.e., academic freedom).

The structure of Kant’s university embodies his central philosophical ideas. The distinction between the critical and the professional (or vocational) faculties mirrors the difference between

theoretical and practical reason. As I have suggested, these polarities can in turn be translated into the distinction between nonutilitarian and utilitarian education. What is not immediately obvious is that Kant maps his philosophy of art onto the architecture of the modern college or university. This is an important insight because it exposes two contrasting economic logics at work in the lower and higher faculties.

Kant presented his account of art and aesthetic in *The Critique of Judgment* (1790). This work is symptomatic of the shift from mechanistic to organic metaphors for interpreting experience—a shift that marks the transition from the eighteenth to the nineteenth century. The most important difference between the mechanism and the organism involves the difference between the means/end relationship in each structure. In the mechanism, means and end are *externally* related, whereas in an organism, means and end—or parts and whole—are reciprocally related in such a way that each promotes and sustains the other and neither can exist without the other. The end or purpose of the organism is intrinsic and does not lie outside the organism itself. The natural organism finds cultural expression in the beautiful work of art. In Kant’s aesthetic theory, true or fine art is art that is created for art’s sake; the value of fine art is intrinsic. The distinction between fine art and craft or, in more contemporary terms, high and low art, arose in the latter half of the eighteenth century. As the patronage system broke down, artists had to enter the marketplace to earn a living. The value of art produced for the market is obviously not intrinsic but is instead utilitarian. Fine art, by contrast, does not grow out of economic interests and is not directed toward utilitarian ends; rather, high art embodies purely aesthetic interests. When understood in this way, high and low art rest on inverse economic logics. In low art, value is *directly* proportional to popularity and profitability; in high art, value is *indirectly* proportional to popularity and profitability. Paradoxically, the value of high art is its uselessness. High art is never popular, because it can be appreci-

ated only by the elite who have adequate knowledge, cultural sophistication, and leisure.

In his consideration of higher education, Kant uses this distinction between high and low art to define the structure of the modern university. This is not immediately apparent because Kant reverses the terms. The higher faculties share the characteristics of low art, and the lower faculty conforms to the norms of high art. Whereas the higher faculties are useful, the lower faculty can function effectively only by resisting every form of utilitarianism. When translated from studio and museum to classroom and university, art for art’s sake becomes knowledge for knowledge’s sake. The conflict between the higher and lower faculties revolves around their inverse economic logics. The economic logic of the lower faculty leads to the conclusion that the devil that most threatens the academic enterprise is usefulness—especially as it is manifested in popularity and profitability. When tenure decisions are made, the fewer copies of a book or article that are read or sold, the more highly the work is regarded; popular works are worthless. These insights suggest that the modern university as Kant defines it is structured by a series of polar oppositions:

- Low/High
- Useless/Useful
- Unprofitable/Profitable
- Disinterested/Interested
- Scholar/Businessman, Technical
- Arts and Sciences/Professional and Vocational Schools

Within this scheme, members of the faculty of arts and sciences regard the work of the devil as transforming the marketplace of ideas into a *marketplace* of ideas. Nowhere is the danger more evident than when technology and business join forces.

This vision of knowledge and understanding of the corresponding structure of the university runs throughout the Western tradition, from Plato to the present day, with astonishing consistency. In his influential dialogue *The Sophist*, Plato distinguishes true from specious knowledge:

The Modern University Structure: Kant’s Polarities	
LOW	HIGH
USELESS	USEFUL
UNPROFITABLE	PROFITABLE
DISINTERESTED	INTERESTED
SCHOLAR	BUSINESSMAN
ARTS & SCIENCES	PROFESSIONAL & VOCATIONAL

Stranger: Take music in general, and painting and marionette playing, and many other things, which are purchased in one city, and carried away and sold in another—wares of the soul which are hawked about for the sake of instruction or amusement. May not he who takes them about and sells them be quite as truly called a merchant as he who sells meats and drinks?

Theaetetus: To be sure he may.

Stranger: And would you not call him by the same name him who buys up knowledge and goes about from city to city exchanging his wares for money?

Theaetetus: Certainly I should.

Stranger: Of this merchandise of the soul, may not one part be fairly termed the art of display?⁷

Knowledge and art are for sale; merchandise of the soul, wares peddled by itinerant artists and intellectuals in the marketplace. Plato labels this art of display “sophistry”—appearance not reality, semblance not substance, illusion not truth. Here as elsewhere, the source of

corruption is money. For those with ears to hear, echoes of Plato and Kant can be detected in the words of contemporary critics of the growing cooperation between higher education institutions and the corporate world. In a recent cover story in *Atlantic Monthly* entitled “The Kept University,” Eyal Press and Jennifer Washburn sounded the alarm about what they label “the academic-industrial complex” and “the market model university.” They concluded their article with a warning borrowed from the historian Richard Hofstadter: “The best reason for supporting the college and the university lies not in the services they can perform, vital though such services may be, but in the values they represent. The ultimate criterion of the place of higher education in America will be the extent to which it is esteemed not as a necessary instrument of external ends, but as an end in itself.”⁸ Hofstadter’s contrast between external ends and ends in themselves repeats Kant’s distinction between extrinsic and intrinsic ends. Press and Washburn’s criticism of instrumental reason directed to practical ends is a call to return to a university model that is at least two hundred years old.

When Kant’s polarities are updated, new conflicts emerge:



Kant's Polarities Updated: New Conflicts	
ELITE	POPULAR
PURE	APPLIED
NOT-FOR-PROFIT	FOR-PROFIT
EDUCATION	MARKETPLACE
IVORY TOWER	REAL WORLD

- Elite/Popular
- Pure/Applied (Impure)
- Not-for-Profit/For-Profit
- Education/Marketplace
- Ivory Tower/Real World

This understanding of the philosophical principles underlying the college and university clarifies some of the reasons for the differing responses to the use of technology and the development of business ventures. Where technology and commercialization have made greatest inroads in postsecondary education are on the low and high ends: practical education and training on the one hand and graduate professional schools (law, business, and medicine) on the other. Where the so-called work of the devil has been most resisted is in faculties of arts and sciences—especially humanists and artists.

But this situation is changing rapidly. The university as we have known it for two centuries is a thing of the past. This does not mean that it will disappear in the near future. To the contrary, resistance to its passing will increase as the far-reaching implications of the convergence of education, technology, and the market become clear. The hierarchies that Kant defined were never as secure as they appeared and now are being overturned more rapidly than anyone could have predicted. In place of traditional colleges and universities, different kinds of institutions and organizations are emerging. There are undoubtedly certain dangers involved

with subjecting all of the activities of higher education to market discipline. Educators and educational institutions *must* retain control over what they produce. Furthermore, basic research and education whose practical value is not immediately evident should continue to be supported. But this important work can continue only if additional revenue streams are created.

The corporatization of the college and university and the commercialization of higher education will accelerate in coming years. Too many educators live with the illusion that they have a choice about whether or not these changes will occur. The only choice we face is who will shape this new educational environment and who will profit from it. I believe it is the responsibility of educators and educational institutions to play a leadership role in setting and maintaining the standards for new educational media. It is also vitally important for educators and educational institutions to share in the considerable profits that the new forms of education will generate.

To accomplish these ends, we must create different kinds of organizations and institutions. If higher education is to thrive in the twenty-first century, for-profit and not-for-profit ventures must learn to cooperate in ways that are mutually profitable. The cost of producing and distributing high-quality online education is prohibitive for most colleges and universities. Competitors have to learn how to cooperate. Educational institutions must simultaneously

enter into alliances among themselves and form partnerships with businesses, which can provide necessary technical assistance and adequate financial backing. Toward this end, educators must learn the lesson Warhol tried to teach artists: being good in business is the most fascinating kind of education. The new education economy will have a significant impact on the administration, employees, curriculum, and students of colleges and universities:

1. *Administration:* The defining characteristic of network culture is *speed*; only the quick survive. The current organization and decision-making structure of colleges and universities cannot respond quickly enough in today's environment. Different administrative procedures will have to be developed that will allow for timely responses to constantly changing situations. In many cases, deliberative processes will have to be streamlined and decision-making responsibility delegated to individuals with the necessary expertise. This will inevitably result in the decline of on-campus faculty power.
2. *Employees:* It is clear that the university work force is undergoing major transformations. The increasingly competitive market in higher education makes many of these changes unavoidable. For institutions to survive, their staffs must be flexible, adaptive, and competitive. Growing pressures will result in the erosion of tenure. This is, of course, already occurring, with the increasing use of part-time faculty. This trend will accelerate in the near future. But tenure will also be compromised by a new era of "free agency" in which outstanding faculty will maintain minimal affiliation with established educational institutions. This tendency will not be limited to faculty but will extend to staff members whose skills in information, communications, and media technologies are highly marketable. Colleges and universities already face major problems when they must compete with business for talented workers.
3. *Curriculum:* New technologies are changing the product that colleges and universities produce and sell. The structure and the content of knowledge are conditioned by the forms of production and reproduction in a society. As technologies change, knowledge changes and vice versa. With the movement from mass production to mass customization, the uniformity of course offerings will decrease. Students will have a greater impact on the content of their courses. Furthermore, the curriculum will become less fixed and more flexible. Classes and courses of study will begin to look more like nonlinear hypertexts than linear trajectories with clear beginnings, middles, and ends. As these changes occur, divisions and departments will be reconfigured or abolished. Traditional disciplinary boundaries all too often function to protect entrenched power and discourage innovative research and teaching. Many schools and especially graduate programs are producing products for which there is no demand and are cultivating skills for which there is no need. This cannot and should not continue.
4. *Students:* The composition of the student body is rapidly changing. As the time and the place of instruction become irrelevant, new markets open. College and university courses are now available to anyone anywhere in the world. Higher education is rapidly becoming as global as the economy. One of the most significant opportunities for growth is the lifelong learning market. With the acceleration of technological change, continuing education becomes a necessity. In addition to practical and technical training required in the workplace, the growing retired population will create a significant market for education that is not directed to practical ends. For many aging baby boomers, education will become entertainment.

Like all other significant change, these developments—and others that cannot be anticipated—involve both losses and gains. I completely disagree

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with people who see only danger ahead and insist that we must resolutely resist the changes that are taking place. There are enormous opportunities for educators who have the vision and conviction to take the initiative. The new education is no more going to displace the old education than the new economy is going to replace the old economy. For the foreseeable future, old and new will coexist in a relationship that can become mutually beneficial. With the cooperation and support of businesses and corporations, e-Ed can provide resources to support many of the traditional activities of colleges and universities. But it is no longer enough to remain committed to a university model that originated in the eighteenth century; nor is it possible. Whether we like it or not, the restructuring that corporations underwent as they moved from an industrial to a postindustrial or information economy is now occurring in higher education. Without denying possible problems, we must try to imagine creative opportunities. New technologies create possibilities for radically novel ways of thinking, reading,

writing, and teaching. It is our responsibility to prepare our students for the world in which they are going to live and work. We might begin by creating opportunities for students from around the world to sit at a virtual table with teachers from anywhere in the world to discuss issues of intellectual, cultural, and social significance. I am naïve enough to think that the world would be a better place if we could create such global classrooms. But it will not happen if educators do not enter into partnerships with businesspeople and technicians.

Change is never easy and always threatening. Yet change is what keeps institutions as well as people alive. Unfortunately, no institution is more resistant to change than the college and university. Perhaps it has always been so, but now time seems to be running out. If colleges and universities do not overcome their smug satisfaction with how they do business, the Michael Milkens of the world will indeed eat their lunch. The challenge that educators face is to turn the useful devils of business and technology to their own ends. If useful-

ness is a devil, it's a devil we must learn to dance with or educational institutions will become more obsolete than they already are. This is neither a threat nor an ultimatum; it is just a fact—a brute fact. And it's time to face this fact directly and honestly. *e*

Notes

1. Richard N. Katz, "Competitive Strategies for Higher Education in the Information Age," in Richard N. Katz and associates, *Dancing with the Devil: Information Technology and the New Competition in Higher Education* (San Francisco: Jossey-Bass Publishers, 1999), 27.
2. Mark Getty, *The Economist*, March 4, 2000.
3. Michael Lewis, "Artists in the Grey Flannel Pajamas," *New York Times Sunday Magazine*, March 5, 2000, 45–46.
4. Andy Warhol, *The Philosophy of Andy Warhol* (New York: Harcourt Brace Jovanovich, 1975), 92.
5. Immanuel Kant, *The Conflict of the Faculties*, trans. Mary Gregor (Lincoln: University of Nebraska Press, 1992), 23.
6. *Ibid.*, 55.
7. Plato, *The Sophist: The Collected Dialogues of Plato*, ed. Edith Hamilton (Princeton: Princeton University Press, 1971), 965.
8. Richard Hofstadter, quoted in Eyal Press and Jennifer Washburn, "The Kept University," *Atlantic Monthly*, March 2000, 54.

This article is based on a presentation delivered at the North East Regional Computing Program (NERCOMP) conference, Sturbridge, Massachusetts, March 21, 2000.

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