

“The University in Ruins? A Report on Knowledge”

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Abstract

Revisiting Montreal professor Bill Readings' posthumous critique of the modern university, this talk offers a new framework for understanding both the history of knowledge and changes in its institutions since the end of postmodernism.

Biography

Ian F. McNeely is Associate Professor of History at the University of Oregon and the author, with Lisa Wolverton, of *Reinventing Knowledge: From Alexandria to the Internet* (W.W. Norton, 2008). A former Junior Fellow of the Harvard Society of Fellows with a Ph.D. from the University of Michigan, he has also written two books on German history.

I. Introduction

When Till asked me to propose a topic for this lecture, I Googled my mental archive for the keywords “Quebec” and “knowledge” and came up with Bill Readings' book *The University in Ruins*. Readings was a professor of comparative literature here at the Université de Montréal until his untimely death on Halloween Day 1994 in the crash of American Eagle flight 4184. The book that became *The University in Ruins* was completed on the basis of Readings' unfinished manuscript by his wife and fellow literary critic Diane Elam and published posthumously with Harvard University Press. It is a document of its times, a polemic about the fate of the university written at the highwater mark of postmodernism, critical theory, and Cultural Studies. Implicitly at least, it offers a rejoinder from the Left to the diatribes of the Right against the evisceration of the canon of Western Civilization and the apparent abandonment of the humanistic pursuit of Truth. In his book, Readings reformulates what observers from all points on the political spectrum then perceived as the collapse of an intellectual tradition. He argues that the research university had ceased to act as a lodestar of national culture, the mission entrusted to it 200 years ago by the German Idealists, in favor of pursuing an utterly vacuous ideal of Excellence borrowed from the university's new overlords in the corporate world.

Part of what gives this slender volume its intellectual heft is a deep engagement with the philosophical tradition reaching from the German Idealists through the French postmodernists and into the humanities departments of late twentieth-century North America. In this sense it belongs to the genre of immanent *Selbstkritik* (to resurrect a term I myself haven't uttered since the Nineties.) Readings was particularly exercised by the work of Jean-François Lyotard, editing his collected political writings and penning a monograph on Lyotard's contributions to aesthetics and political theory. But it is Lyotard's *The Postmodern Condition* that surfaces most frequently in Readings' endnotes. Lyotard's essay is such a canonical exemplar of abstruse French theory that one easily forgets it was actually commissioned as a humble "Report on Knowledge" by the government of Quebec, earning it second place on my mental Google list. In it, Lyotard memorably and succinctly defined postmodernism as an "incredulity toward metanarratives," a skepticism toward all-encompassing stories or grand traditions inherited from the Enlightenment about, say, the emancipation of the individual or the progress of reason. Building on Lyotard's diagnosis, Readings argues that we are not simply witnessing the discrediting of one Grand Tradition, that of national culture, in favor of another, Excellence, but the end of Grand Traditions as such. This realization of the university's incoherence causes him to label it a fundamentally "ruined" institution and seek new ways to inhabit those ruins.

I first read *The University in Ruins*, and through it rediscovered Lyotard's *The Postmodern Condition*, seven years ago at the beginning of a book project that itself originated as a cultural history of the German Idealists' research university, but that grew to encompass the entire Western intellectual tradition from Alexandria to the Internet. My recent book *Reinventing Knowledge* reconceptualizes that Grand Tradition as a series of institutions that have each redefined what knowledge means, how we should pursue it, and how we judge ourselves to have attained it. These institutions are, in chronological sequence, the library, the monastery, the university, the Republic of Letters, the disciplines, and the laboratory. Each arose at a moment of epochal cultural upheaval, each upheaval giving individuals and small communities of intellectuals remarkable creative latitude to pioneer new practices and rationales for seeking knowledge. Their "reinventions" of knowledge established durable, clonable institutional templates that not only governed later generations of intellectuals, but also caused previously existing institutions to be revamped and reformed in their wake. Older institutions get recycled and refurbished, as, for example, the medieval monastery absorbed the libraries of classical antiquity and transformed them from instruments of Greco-Roman cultural imperialism into storehouses of devotional texts in the service of Christ. So too, I argue, perhaps surprisingly, that the university had already lost its centrality as an institution of knowledge some five centuries ago and has since acted as a repurposable shell subservient to its successor institutions as it was repeatedly reinvented by them.

Like Readings and Lyotard, then, I have little use for grand narratives, preferring instead to depict the Western tradition as a succession of several radically discontinuous institutions, not a single unbroken lineage of ideas. But unlike them, I feel that postmodernism posits a Grand Tradition in the very act of denying its possibility. When Derrida, for example, rereads Heidegger on ancient Greek *logos*, even the most sophisticated outsider to Western philosophy

must largely fail to grasp his point. My plea is that we adopt the perspective of just that outsider in order to reassess the trajectories of institutions we ourselves inhabit. This leads me to my argument today. Where Readings discerns the rise of national culture 200 years ago and its demise in the university of today, I see during that same span of time the rise of the disciplines until their eventual replacement, institutionally, by the laboratory. To understand this transformation, which is ongoing in our own times and easily susceptible to misinterpretation, I submit we can take some bearings from Lyotard's *Postmodern Condition* and will return to that text at the end of my talk.

II. Readings

I want to begin by laying out Readings' account of the modern university, then provide an alternative history centered on the disciplines. Lest I appear churlish in critiquing an incomplete, posthumous work, least of all before an audience who may have some personal connection to its author, let me stress that Readings helped me to perceive the German research university both as a fundamental break from its medieval predecessor, but also as a durable template that, despite several waves of mid-level changes, gives the period from ca. 1800 to the late 1900s a certain unity.

Conventionally enough, Readings ascribes an epochal importance to the founding of the University of Berlin in 1810 by a Prussian state hobbled by Napoleon and eager to compensate, in spiritual terms, for what it had just lost in material powers. Appropriately, he has nothing to say about the medieval *universitas*, instead regarding the research university as a radical new creation prepared by a generation of German Idealist philosophers.

Among these, he singles out Immanuel Kant, whose *Conflict of the Faculties* articulated a vision of the university with the untrammelled pursuit of Reason at its core, at least in its faculty of arts, whose very uselessness gave it a better purchase on pure Philosophy than the higher, professional faculties for preachers, lawyers, and physicians, all mere practical occupations. To Kant's defense of "Reason" Readings adds, in a separate chapter, an account of "Culture," drawing here mainly on Kant's successors, Schiller, Schelling, Schleiermacher, Fichte, and Wilhelm von Humboldt, the last of whom helped found the University of Berlin. The melding of Kantian Reason and Humboldtian Culture in the research university, Readings argues, served the interests of the German Nation, awakened to action by French defeat. The use of reason to analyze culture and reinterpret inherited cultural traditions gave rise to the sciences we variously label philological, historicist, or hermeneutic, and this bundle of scholarly methods could in turn be used to construct a national cultural unity where none existed before.

Consistently, Readings conflates "culture" with "national culture," accurately perceiving that university reform in Germany coincided in time with an upsurge in nationalist sentiment, but failing to explain why the "nation" should act as the sole or privileged repository of "culture," or even whether the German Idealists specifically identified German national culture as a value

worth institutionalizing in universities. Among those he mentions, only Fichte—admittedly the first Rector of the University of Berlin—clearly counts as a self-identified German cultural nationalist.

I'll return later in my talk to the elision of "Culture" and "National Culture," but for now I want to explain how the concept of National Culture enables Readings to trace the migration of the German research university model outside of Germany, particularly to the higher education systems of Great Britain and the United States. In the Anglo-American university associated with Matthew Arnold and Cardinal Newman and their followers in North American liberal arts colleges and universities, German Philosophy was simply swapped out in favor of English Literature as the pedagogical foundation for the university's mission and the source of the content of National Culture being inculcated there. Now Shakespeare and Dickens, not Plato and Kant, would form the basis for a national cultural canon. In this way Readings can account for the ongoing influence of the German model without having to argue for the continuity of its specific ideology. One ideology can supplant another in the pursuit of National Culture as long as the institution remains dedicated to some crowning ideal of the nation governing all of its subsidiary activities and giving the university coherence.

With the rise of "Excellence," however, we are in new territory according to Readings. By Excellence he means not a new ideology of national culture but a bundle of managerial and accounting techniques devoid of all substantive intellectual content and instead derived from corporate bureaucracies. Lacking any other means of discernment, university administrators rely upon quantifiable metrics like student credit hours and faculty research grant funding to gauge the success or failure of the university's administrative units. Excellence, unlike culture, lacks a referent, a substantive ideal like the "nation" to give intellectual pursuits in different forms—literary, philosophical, artistic, scientific—their meaning.

Readings holds out no hope that academicians can simply appropriate the concept of Excellence and imbue it with substantive content, just as the followers of Humboldt arguably did with the similarly unformed notion of *Bildung* two hundred years ago. No classicist armed with the ancient Greek concept of *arete* can argue that Excellence has been pursued for 2500 years, and that rereading the *Iliad* is the best way to acquire it.

In part the inherent vacuousness of the ideal of Excellence, to Readings, derives from its being the product of unstoppable forces extrinsic to the university and indeed threatening the nation-state itself. Using Marxian appeals to the agency of capital, he ascribes a commanding, corrosive effect to the multinational corporation operating in a globalizing economy, and eroding the institutions of the nation-state including, preeminently, the university. Here too, Readings entertains no possibility that traditional university academics can parlay this situation to their advantage. One might logically conclude, for example, that economic globalization calls for a similar expansion of university pedagogy beyond the horizons of the nation-state to embrace some kind of global civics or international culture.

The deeper reason this cannot occur, according to Readings, has less to do with Marx than with Lyotard, whose postmodern skepticism toward metanarratives denies the possibility that any overarching ideal can be fashioned to govern and legitimate intellectual activity under the aegis of the managerial university.

As Exhibit A he holds up interdisciplinary programs in Cultural Studies, which are, after all, admirably catholic, cosmopolitan, and global in their vision of culture. Cultural Studies imbibes the theory of postmodernism yet for that very reason is powerless to combat the emptying of Culture by the apostles of Excellence. Programs in this field treat culture itself as an object of technical analysis rather than as a commanding ideal, an ultimate source of value, ethics, and morality which our academic pursuits should aim to discover and elucidate. Cultural Studies in short manifests the ruining of previous ideals of national culture, whether pursued as philosophy in Germany or literature in the Anglo-American tradition, rather than acting to inculcate a new, postnational concept of culture we operate with in a globalized world.

Ultimately, Readings can only counsel that we find ways to inhabit the ruins of the university. What he proposes here seems like a wise tactical concession of the humanistic disciplines' obsolescence and perhaps even a genuinely exciting plea to turn these ruins into playgrounds of pedagogical experimentation. But in the end all he can do is register the death of one incarnation of the university without being able to perceive its recycling as the shell for its successor.

III. The disciplines

In *Reinventing Knowledge*, I identify the disciplines, not the universities they colonized, as the primary institutions of knowledge for the period after 1800. Like Readings, I accept the German Idealist model as the sign of a rupture, not from the medieval *universitas*, but from the institution that succeeded it, the Republic of Letters.

The Republic of Letters arose during the European wars of religion as an international correspondence network keeping scholars in contact as the medieval universities devolved into ideological bootcamps for one or another rival religion. Growing from the handwritten letters of figures like Erasmus and Descartes, the Republic soon encompassed learned academies, museum collections—and above all—printed books and journals. By the eighteenth century, as universities declined into cesspools of pedantry and alcoholism, the media revolution of the Enlightenment created a mass market for knowledge engendering the specialization of academic labor we now call the disciplines. As Adam Smith put it in the very first book of *The Wealth of Nations*, the “subdivision of employment in philosophy, as well as in every other business, improves dexterity, and saves time.” So much for the notion that capitalists waited until the 1980s to sink their hooks into knowledge.

But this is not in fact how the disciplines arose. Bucking the Enlightenment trend toward extensive reading, the promiscuous consumption of printed texts, the counterculture of evangelical Protestantism made Bible study groups the centerpiece of an ever more intensive practice of reading and scholarship. A string of largely unsung eighteenth-century reformers then refurbished the university as a site of face-to-face study one could not find in disembodied print media. Reinventing knowledge, they made seminaries—later called seminars—the seedbeds of disciplined research and disciplinary specialization. This group included A.H. Francke, who instituted a Pietist seminary in Halle, Germany as part of a massive complex of schools, orphanages, printing presses, a pharmacy, a linen factory, a cabinet of curiosities and—a university; J.D. Michaelis, the Göttingen university professor who introduced Pietist Biblical criticism to secular scholars in the Republic of Letters; F.A. Wolf, who adapted Michaelis’ methods of Biblical philology to classical philology in his famous seminar back at Halle; and Wolf’s disciple Wilhelm von Humboldt, the classical philologist who in Berlin founded a university where seminars sprang up in a whole range of humanistic and later even scientific disciplines. Here, then, is one of those epochal moments when a small group of intellectuals engineered a surprising reversal in the accepted metanarrative of knowledge, bringing together disparate cultural resources in unprecedented recombinations as the raw materials of a new institution.

This retelling of the story has a number of implications for how we assess Readings’ argument. First, the German Idealists came very late to the scene, at best acting as *ex post facto* ideologues who merely recognized and reinforced the coalescence of new practices of knowing burbling up around them. Substantively they completed the secularization of intensive reading begun with Michaelis’ break from Bible study. Their philosophy texts all but required seminar-level training in close reading to be understood (Hegel’s *Philosophy of Right*, for example, is literally a course of annotated lecture notes). Ideologically, the Idealists linked the practice of scholarly research, *Wissenschaft*, to the acquisition of personal culture, *Bildung*, and by extension the good of society. But again, at no point did they fashion a specifically national vision of culture and then proceed to institute it in a new university.

This does not mean, however, that Readings’ argument about National Culture is wholly unfounded. Consistently I treat ideology as a lagging indicator of daily practice, and sure enough this applies to National Culture as well. Recall from Adam Smith that large markets are necessary to promote the specialization of academic labor. That market was provided in Germany by the systems of compulsory mass education, beginning with primary school and crowned by reformed universities, erected in Prussia, Bavaria, and other states in the early 1800s. Competition induced the states of a still-disunited Germany to poach professors who freely roamed within the boundaries of the German linguistic region founding their own specialized seminars to train acolytes in new disciplines. These professorial pilgrimages helped define a common German culture through the higher education professors dispensed. The “nation” therefore acted not as the prior legitimator for, but simply the cultural vessel of, this market in tertiary education, a market comprised of a series of far-flung national communities of specialists whose individual members inhabited particular universities as part of a larger career trajectory.

(Incidentally, these disciplinary networks retooled the print media of the Republic of Letters to make academic books and journals into a massive system of professional calling-card distribution.)

Readings observes correctly that the disciplinary university eventually did come to rely ideologically on the nation-state. The nation-state was the first to insist that culture be made the patrimony of all of its citizens and therefore to create markets in education at *all* levels in pursuit of that mission. But the tension between the specialized research of the disciplines and the idealized vision of culture legitimating the university to its external patrons was present at the very inception of the institution, and did not emerge as the sign of a later twentieth-century breakdown. Disciplinary scholars have struggled for 200 years to explain why their specialized research ineluctably redounds to the benefit of national citizenries. Ransacking their cultural archive, they typically extol an ideal of civic, humanistic well-roundedness allegedly pursued since the time of the Greeks and the Romans. But this is merely an atavistic legacy of classical philologists like Humboldt who resurrected this ancient tradition just as *their* predecessors in the Renaissance had done at the inception of the Republic of Letters.

The modern university is plagued, then, by a nagging incoherence, not because it ever had a well-articulated ideology from which it has progressively lapsed, but because its ideology and practice were at odds from the beginning. And this is as it should be. Reconciling the interests of its members with those of the world beyond is what institutions of knowledge do, always imperfectly and indeed always incoherently. Insiders' struggles to legitimate themselves to outsiders define the life cycle of all institutions—just think of today's banking institutions. And yet we are now witnessing something like the eclipse of the disciplines, and in the next section of my talk I want to sketch some of the signs of this before venturing some conjectures about the future.

IV. The laboratory

I begin my chapter on the laboratory in *Reinventing Knowledge* with a familiar account of the way the scientific experiments and demonstrations of the high Republic of Letters migrated into the disciplinary seminar structure of the research university. I define the laboratory as a physical space where controlled experiments could be reliably replicated and then held out as objective truth by scientific experts. Unconventionally, however, I extend my analysis of the laboratory as an institution in two further directions.

First, my account encompasses both the natural and the social sciences. The age of industrialization, particularly in the United States, created entirely novel social spaces whose social scripts and rules of interaction were subject to study and experimental manipulation by self-styled experts. Such spaces included the public school, a site where university psychologists developed large-scale intelligence testing as a means to track both over- and underachievers; the factory floor, where time-and-motion specialists and other species of management consultants

conducted experiments to increase worker productivity; and immigrant slums, where large-scale foundations endowed by robber barons dispensed philanthropy on a scientific basis by informing themselves with foundation-funded social research.

A second characteristic of the laboratory, implicit already in the examples I've given, is that it bestrides the university and non-university worlds, colonizing the corporation and the state in particular. While drawing on disciplinary methods and techniques, laboratory practitioners are not in all instances confined by them. The spectacular successes of entrepreneurial startups in biotechnology and computing, often founded in the shadow of nearby universities, provide ready instances of this hybridity in the natural sciences. But so too the social sciences find lucrative market niches and broad societal impact in practices ranging from management consulting to political polling and market surveying to nongovernmental organizations and development agencies of all stripes.

There is reason, then, to view the university itself as a space ripe for recolonization and experimentation at the hands of “social scientists” whose techniques originate both inside and outside established disciplines. As early as 1945, James Conant, president of Harvard, campaigned for an elite liberal arts curriculum but arguably had more success in applying intelligence testing—in the form of the SAT—to the meritocratic selection of undergraduates. Widespread adoption of management science techniques, abetted by computerization, marked the administration of Clark Kerr, president of the University of California System in the 1960s. No sooner had Kerr, a labor relations expert, proclaimed the virtues of the scientifically administered “multiversity” than Berkeley students donned IBM punchcards pleading “please don't bend, fold, spindle, or mutilate me” and soon commenced rioting.

The corporate-managerial sloganeering of the 1980s, and with it the insinuation of the quantitative metrics of Excellence feared by Readings, are simply the latest stages of a long fitful struggle in which the laboratory remakes the university. Even more recently, the proliferation of semi-autonomous university research centers, technology transfer offices, and fundraising and outreach opportunities capitalizing on marketable scientific achievements emanating from university labs all speak to a realignment of interests and personnel bringing laboratory scientists into closer contact with university administrators and venture capitalists while at the same time distancing them from their humanistic brethren under the traditional rubric of “arts and sciences.”

To recognize the laboratory's institutional ascendancy as a secular trend is in no way to prophesy that scientists in white coats and safety goggles will next invade our classrooms, or that philosophers, historians, and literary critics will be required to adopt quantitative methods, perform experiments, and test falsifiable hypotheses. It means instead that the laboratory's values, practices, metaphors, and rhetoric will prove best suited to reconfiguring our institutions around emergent changes in social needs, political demands, and the collective cultural imagination.

Amidst such changes, the nation-state which legitimates and often directly funds the university has shown little signs of disappearing in the age of globalization. Instead the nation-state, and the citizenry whose will it embodies, have only ratcheted up their demands of the university, demanding an update of its ideology in the process. Today, the laboratory's core values, of experimentalism, social engagement, and entrepreneurship are more congenial to the demands of state and citizen than the appeals to high culture and individuation peddled by the likes of Humboldt and Matthew Arnold, and far more suited to girding national citizenries to undertake the challenges of economic competition on a globalized playing field. Here I need only quote Obama's address to Congress in February: "In a global economy, where the most valuable skill you can sell is your knowledge, a good education is no longer just a pathway to opportunity. It is a pre-requisite... because we know the countries that out-teach us today will out-compete us tomorrow."

Any ideology that abstracts from the tangible achievements of laboratory science to a set of core laboratory values applicable to political and institutional reform risks misapplying examples drawn from daily practice and overgeneralizing in the name of a particular agenda. Certainly this danger attends those, including perhaps myself, who style the laboratory as a hegemonic, all-pervading institution in willful defiance of postmodernism's insistence on, and celebration of, pluralism, rupture, and contestation. The uncritical valorization of natural science, not to mention the large-scale social engineering also associated in my view with the laboratory, is too obviously problematic to need much discussion. Particularly the strain of postmodernism associated with Foucault has already done much to historicize and criticize the growth of this knowledge/power complex.

Even better, however, humanists would do well to embrace rather than to combat the laboratory's remaking of the shell that is the university. Ironically, the adoption of its values—experimentalism, engagement, entrepreneurship—may serve to arrest the crippling disciplinary subspecialization that has finally rendered humanists unable to appeal credibly to the shopworn notion that we educate well-rounded citizens and in some quarters has even painted us as hypocrites.

Interdisciplinary programs of the sort associated with Cultural Studies represent an early but somewhat ineffectual rejoinder to such critics because such programs replicate the structures of the disciplines in the very attempt to challenge them for intellectual turf. Legitimacy is only achieved in our world by founding departments and starting journals, attending conferences and conducting peer review. Those humanists who are the true legatees of Humboldt's well-rounded ideal of *Bildung*, not to mention its antecedents in the Renaissance and among the ancients, might instead adopt a more radical stance. Here is where Lyotard provides some tantalizing suggestions.

V. Lyotard

Lyotard may be most commonly associated with his definition of postmodernism but it is well to remember that he begins *The Postmodern Condition* discussing the sciences of language, the computerization of knowledge, the possibility of machine translation, and the likelihood that massive “memory banks” may someday make information accessible to all through “intelligent terminals.” This was in 1979, by the way, a few years before the great French “Minitel” experiment. Lyotard’s essay culminates in a plea for a new pedagogy centered on “telematics,” “informatics,” and “didactics”—one can easily imagine this sounds better in French—all centered in some way on training in computers, languages, mathematics, and logic. Education should aim to provide “operational skills” fulfilling society’s needs rather than inculcating the “ideals” of traditional humanism. Even such mundane subjects as job retraining and continuing education, perhaps vestigial remnants of the original Quebec government policy report, inspire a vision whereby students “acquire information, languages, and language games allowing them both to widen their occupational horizons and articulate their technical and ethical experience.”

Connecting independent data sets through leaps of computer-guided imagination, citizens of tomorrow will casually violate disciplinary boundaries, engage in interdisciplinary teamwork, and accrue social power through verbal performances showcasing an ability to link heretofore disparate fields of knowledge. Lyotard repeatedly invokes Wittgenstein’s notion of “language games” to describe a situation in which transactions over knowledge can no longer appeal to the transcendental ethical validation that metanarratives once provided. What he calls “language games of perfect information” arise when computers make information universally accessible and enable seekers of knowledge to engage each other on a level playing field. Here Lyotard slips conceptually from Wittgenstein’s “language games” to the “games of perfect information” derived from the game-theoretical economics pioneered by Wittgenstein’s fellow Austro-Hungarian John von Neumann. But unlike well-informed shopping expeditions on Amazon.com, *language* games require participants to command prior facility in language as a precondition to being able to play games effectively. Herein lies a new task for our systems of education: to train up citizens to overcome the degradation of literacy and simple articulate speech in the age of Twitter.

And here I come to my own conclusion, a gloss on Lyotard swapping out “game” for “experiment.” What we have witnessed in the years since the peak of postmodernism is a colossal consensual social experiment called cyberspace, the hybrid space of physical technology and virtual communication spawned in the Cold War laboratory, that for all of its hyping as a revolutionary departure merely represents the latest manifestation of the laboratory’s ongoing supremacy.

Knowledge, in this world, is the opposite of information, that which cannot be disembodied and sent as a message, but that which must be practiced to be learned. The recent information revolution doesn’t betoken the emergence of a new institution of knowledge so much as reveal the stakes for education as the laboratory reinvents the disciplines: the critical

need to acquire interpretive, imaginative, and performative skills to process information when information is available to all and its mere possession is meaningless. Interpretation, imagination, and performance, on this view, function as the humanistic mirror image of, the complement to, laboratory experiment, engagement, and entrepreneurship.

Disciplinary scholarship used to consist in indoctrinating the student into a privileged canon of texts as a prerequisite and accompaniment to the teaching of the interpretive, imaginative, and performative skills needed to derive meaning from them. Discipline in the sense of behavioral conditioning, the mastery of difficult skills, was yoked to discipline in the sense of specialization, the refinement of those skills around particular subject matters enshrined as intrinsically valuable by the metanarratives of individual fields, whether the rise and fall of nations in history, the quest for the subconscious in psychology, or the Grand Unified Theory in physics. The discrediting of metanarratives and the computerization of texts in no way threaten the underlying skills the disciplines impart, only the divisions of turf that give each one its own subject matter—its textual canons and foundational monographs, endlessly extended by further scholarly publications, journals, and conferences.

In sum, both the university and its liberal-humanist ideology will survive but in reinvented form, following a postdisciplinary ideology that increasingly dispenses with specialization for the sake of pure curiosity in favor of a pedagogy of skills that train students to understand the laboratory in all its manifestations and to reflect ethically on its impact on society. What the humanities will likely be forced to do is reconfigure an ancient tradition of values inquiry yet again, not around the model of disciplinary specialization (we've already seen how unnatural that is) but around the criticism and assessment of the social experiments that both the natural and the social sciences bring about. Paradoxically, it is by appealing to innate curiosity and timeless human ethical, aesthetic, and political concerns that we can best motivate our students to acquire the difficult practical skills needed for economic competitiveness and global citizenship.