

Culture and Technology: The Way We Live Now, What Is To Be Done?

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Late in the 19th century Matthew Arnold looked to France as a model for a salutary “Influence of Academies” on culture in general. 25 years ago Arnold’s academic inheritors appeared to be living the realization of his hope. But then came the crash. Humanities scholarship and education has been a holy mess for some time. Looking at the way we live now in the academy, one can hardly not recall Trollope’s dark portrayal of *The Way We Live Now*. What’s going on? Where are the snows of yesteryear?

Something like those very questions drove the editor of *Critical Inquiry*, W. J. T. Mitchell, to summon the journal’s board of editors to a symposium in April 2003 “to discuss the future of the journal and of the interdisciplinary fields of criticism and theory” (324). Some of the most distinguished academics on this continent gathered in Chicago to assess “The Future of Criticism”, and in particular of Critical Theory. I missed the Friday night public forum and pep-rally for the symposium but made it for the key event, the day-long Saturday discussions. From these I departed for home shocked and more than a little dismayed by what I learned.

Most of us registered, one way or another, the malaise that has grown widespread in the humanities and I wasn’t particularly disheartened that we were all uncertain about how best to deal with the problems we talked about. Something else was troubling, however: the degree of ignorance about information technology and its critical relevance

to humanities education and scholarship. I've spent almost 20 years studying this subject in the only way that gives one a chance of mastering it. That is, by hands-on collaborative interdisciplinary work. By designing and building the tools and systems that alone will teach one what these tools are and what they might be, what they mean and what they might mean. You don't learn a language by talking about it or reading books. You learn it by speaking it and writing it. There's no other way. Anything less is just, well, theoretical.

So far as information technology concerns traditional humanities, the issues are more clearly understood in Europe than they are in the United States. Moreover, if you want to engage serious, practical conversation about humanities education and digital culture, our most distinguished humanities research institutions – with few exceptions -- are not the places to go. You want to visit and talk with scholars and teachers in the colleges and in universities whose libraries are primarily organized to meet the pedagogical needs of the faculty.

The CI meeting explained why. We're illiterate. Besides myself, no one on the CI board can use any of the languages we need to understand how to operate with our proliferating digital technologies– not even elementary markup languages. Most had never heard of TEI and no one I talked with was aware of the impact it was already exerting on humanities scholarship and education. The library, especially the research library, is a cornerstone if not the very foundation of modern humanities. It is undergoing right now a complete digital transformation. In the coming decades – the process has already begun -- the entirety of our cultural inheritance will be transformed and re-edited in digital forms. Do we understand what that means, what problems it

brings, how they might be addressed? Theoretical as well as very practical discussions about these matters have been going on for years and decisions are taken every day. Yet digital illiteracy puts us on the margin of conversations and actions that affect the center of our cultural interests (as citizens) and our professional interests (as scholars and educators).

This situation has to change, and in the last part of this talk I will briefly describe a project called NINES that would if successful help the change along. The project is practical in two ways: it addresses some of the most basic needs and self-interests of the working scholar; it circumscribes its work to a specific interdisciplinary region which scholars can, if they choose, direct and control.

What seems to me impractical is to continue framing the crisis in humanities scholarship in the theological terms of “critical theory” and “cultural studies”. Remember that distinction between the base and the superstructure? Remember it. Our ideological conflicts today are deeply imbedded – commercially, economically, institutionally. Fifteen years ago few registered the social and cultural emergency that now grows more and more apparent. E. P. Thompson’s 1978 *The Poverty of Theory*, a prescient work, was scarcely engaged. Thompson seemed one of those truculent British Marxists, good in the trenches, like his revered William Morris, but not equipped to handle the spectacular illusions of Late Capitalism.

Non sumus quales eramus. But if we are all now sadder men and women, are we any wiser? It’s a nice question. From the perspective of the CI participants, the symposium was a gathering of troubled eagles; to the reporters from New York and Boston who covered it, the scene recalled nothing so much as Chaucer’s Parliament of

Foules. Certainly the intramural scene has changed. The Winter 2004 issue of CI collects the thirty “statements for the conference” (324) that we participants were asked to make in order to set up the symposium’s discussions. The commentaries are all searching, serious, often self-critical. But are they self-critical in any meaningful, practical sense?

Judge for yourselves by considering for a moment the way the issue opens: with a lecture Bruno Latour gave at the Stanford Humanities Research Center the week before the April meeting of the CI board of editors. The lecture is a severe critique of critique from what D. G. Rossetti called “an inner standing-point” -- that most telling of critical positions.

Let’s look more closely at Latour’s essay. He summons for review the “dismal” state (“dismal” is his word: p. 241) into which “critical theory”, including his own work, has fallen. It is a splendid display – a Houyhnhnm addressing the horses of instruction – and carried off with superb grace and vigor. “A certain form of critical spirit has sent us down the wrong path”, Latour declares, adding that “If [the critical mind] is to renew itself and be relevant again [it must cultivate] a stubbornly realist attitude [that deals with] what I will call matters of concern, not matters of fact” (231). Latour then proceeds to tease out this distinction by way of an elegant tour of critical philosophy, from which emerges a new hero of our own time – Alfred North Whitehead.

Latour celebrates Whitehead for exposing the symbiotic relation between “matters of fact” on one hand and “cultural critique” on the other. In each case we are delivered over to what Latour describes as

“a poor proxy of experience and of experimentation, and, I would add, a confusing bundle of polemics, of epistemology, of modernist politics that can in no way claim to represent what is requested by a realist attitude.” (245)

I won't spoil Latour's paper with a clumsy *précis* of my own. In this plea for “experience and experimentation”, however, one passage particularly caught my attention. Latour is trying to tell us how to secure our new saving grace, how “To retrieve a realist attitude”:

To retrieve a realist attitude, it is not enough to dismantle critical weapons so uncritically built up by our predecessors as we would obsolete but still dangerous atomic silos. If we had to dismantle social theory only, it would be a rather simple affair; like the Soviet Empire, those big totalities have feet of clay. But the difficulty lies in the fact that they are built on top of a much older philosophy, so that whenever we try to replace matters of fact by matters of concern, we seem to lose something along the way. It is like trying to fill the mythical Danaid's barrel—no matter what we put in it, the level of realism never increases. As long as we have not sealed the leaks, the realist attitude will always be split [sic]; matters of fact take the best part, and matters of concern are limited to a rich but essentially void or irrelevant history. (243)

But big totalities often exhibit enormous staying power: the Roman Church and Christianity are pretty impressive as totalities go. Or look at the American Imperium. It has its feet of clay pretty well firmly on the ground, and even the British Empire is

scarcely an obsolete power. We could all cite numerous examples. Even when these totalities seem as perished and gone as Shelley's Ozymandias, they find ways to survive in their death-states, like Pynchon's Thanatoids. Shelley's more skeptical friend Byron had a clear if mordant view of these creatures he called the "dead but sceptred sovereigns who still rule/ Our spirits from their urns".

Latour's argument, like his prose, seems to have lost something along the way. Surely this jumble of mixed metaphors is but a "poor proxy of experience and experimentation", "a confusing bundle of polemics, of epistemology, of modernist politics that can in no way claim to represent what is requested by a realist attitude". Reading this passage we recall – I recall, anyhow – Lenin, and I wonder: But what is to be done? "Experience and experimentation" signal at courses of action. And then I think of Goethe: "Am Anfang war die Tat". And finally, of course, Marx: "The philosophers have only thought to interpret the world. The point is to change it."

Marx and especially Lenin focus on the practical social actions that bring about real world revolution. They think about how to change the big totalities. But we all live in many worlds, most of them more circumscribed than the ones Marx and Lenin had in view. As that old Beatles song sweetly argued, "You don't have to change the world" to make a difference that makes a difference. Ways of thinking about social action, about wanting "to make a revolution", might be usefully scaled down and re-applied. We don't need to know everything before doing something. There's a time for every purpose under heaven. Sometimes thinking about big totalities is helpful, sometimes it isn't. Helpful for thinking, helpful for social action.

Texts like Latour's, like this one of mine, are forms of social action operating at the level of the superstructure. They are polemical moves looking to bring about change in the operating system of an ideological apparatus – the academy. But can Latour's call for “experience and experimentation” be realized – I mean realized beyond the academy's shop talk, so ludicrous or irrelevant to the nonunionized world around us? I don't think so. Latour's call is abstract, a rhetorical gesture. We hear it and we ask ourselves what Eliot Ness asked in *The Untouchables*? “But what are you prepared to do?”

The call for the scholar to undertake a citizen's active life is imperative, certainly at this time. It is a call we sometimes fail to hear, and often for good reason. For we know that scholarship and science cannot thrive outside a monastery, a library, a laboratory, an ivory tower – even a think-tank! But those places and we who use them must be socially secured. Tennyson's “The Lady of Shalott “ is a cautionary tale for every intellectual. Ladies and gentlemen, we cannot live in art or ideas, we must dispraise those fugitive and cloistered virtues we must also, of course, cultivate. The life of the mind is no life at all unless lived by a citizen in the world.

I won't presume to say anything more on that subject. “Each to himself must be the oracle” about how we fulfill our direct citizen's obligations. The state of our public life today is certainly shameful and dangerous. We have elected a government whose president brazenly tells us that he listens for the infallible voice of a God, rather than to the fallible voices of thoughtful men and women, when he wants guidance in executing grave public decisions. In face of this situation, all of us have clear civic duties.

I am not here to talk about those matters, however, which I know we all know only too well. My concern today is strictly intramural and academic. And if the problems of our tight little island seem less important than our country's problems, they are certainly no less pressing. We have obligations as we are scholars, obligations that society expects us to meet because of our special educator's vocation. What is to be done here, in the academy?

A small beginning might come if we stopped the cant that pervades so much of our discourse. An especially dismal aspect of our professional writing today is its ineffectual angelism, our jargon of moral, social, and political action. "Transgressive" discourse appears, like grace, abounding. But the media have no trouble satirizing intellectuals who write this way. For in a PMLA or CI article "the transgressive" cannot be taken seriously. Yet as we know, that kind of talk is common in our current rhetorics of displacement, the treason of the intellectuals, the sign of a transgression that has no referent, not even an intramural one. The worst of such writing, for the humanities scholar anyhow, is its abuse of the language we have sworn to preserve and protect.

To begin with such a practical self-criticism would make a real difference in the way we execute our scholarship. It would work to overthrow the "cant political, cant moral, and cant poetical" – as Byron called it in his day – that pervades our intramural journals.

But scholars, especially humanities scholars, face another set of problems and obligations – perhaps even more serious, certainly much less tractable. To expose them clearly I shall revisit the crisis in the humanities from a slightly different perspective. Next to CI's apprehensions about the state of Critical Theory let us set Stephen

Greenblatt's pragmatic worry about "The Crisis in Tenure and Publishing". Let us set our inner standing-point at the level of the base this time, not the superstructure.

We'll begin with a fact of great concern to scholars: most university presses are running at increasingly sharp deficits. Given the current model of academic publishing, this trend will not be reversed, as everyone inside the university publishing network knows. We scholars are producing larger and larger amounts of scholarship and passing it to a delivery system with diminishing capacities to sustain its publication. As an editor of a monograph series, the Virginia Victorian Studies, I have seen how this pressure alters what a university press is prepared to undertake. The notorious stigma that has grown up recently against "single-author studies" is only one sign of the difficulty.

But that is to speak only of book publication. We should be aware that a parallel problem, every bit as acute, exists for periodical publication, where a similar dysfunction can be observed. In each of these cases the university library has become almost the only reliable purchaser of scholarly books and periodicals; and every year, as we know, library funds for such materials get cut further

Many also realize that online scholarly publication is the natural and inevitable response to this general problem of scholarly and educational communication. How to bring about the transition to online publication is the \$64,000 question. And it's not the technology that makes the problem so difficult, as the examples of online journal publication, JSTORE (<http://www.jstor.org/>) and Project Muse (<http://muse.jhu.edu/>), demonstrate. The Jordan will not be crossed until scholars and educators are prepared not simply to access archived materials online – which is increasingly done -- but to publish and to peer-review online – to carry out the major part of our productive

educational work in digital forms.

The institutional resistance to such a major change in scholarly work behaviors is widespread, deep, and entirely understandable. It's not in the short-term (immediate) interest of scholars or their institutions to make a transition to digital work. And so we don't. The upfront costs are high, the learning curve is steep. Most telling of all, the design of the in-place paper-based system has the sophistication and clear strengths that come from hundreds of years of practical use. With rare exceptions, established scholars have the least practical involvement with information technology. This too is understandable. The known scholar can still, usually, get his or her work published in the usual paper-based ways precisely because these scholars are known, if diminished, quantities.

The consequences of this situation are apparent. For traditional paper-based work, "the Crisis in Humanities". For digital humanities, another form of that crisis. Digital scholarship -- even the best of it -- is all more or less atomized, growing like so many Topsies. Worse, these creatures are idiosyncratically designed and so can't easily talk to each other. They also typically get born into poverty -- even the best-funded ones. Ensuring their maintenance, development, and survival is a daunting challenge. Worst of all, the work regularly passes without much practical institutional notice. Accepted professional standards do not control the work in objective ways. Most of it comes into being without oversight or peer-review.

"What is to be done?" Lenin's famous question is very much to the point here, for our scholarship is facing a future that is at once certain and unstable. It is going to be

cast and maintained and disseminated in digital forms. We may not now approve of this but it is nonetheless inevitable. We may not now know how to do this but we will learn. Because we have no choice.

Which brings me at last to my main subject, NINES (or 9S: Networked Infrastructure for Nineteenth-century Electronic Scholarship). It is a three-year undertaking by myself and a group of scholars to implement integrated online peer-reviewed research in 19th-century British and American studies. Although the resource will have significant pedagogical and classroom components, it is primarily an institutional mechanism for creating and publishing digitally-organized research and scholarship.

NINES is conceived partly as an professional facilitator and partly as an advocacy group to protect the interests of scholars and educators. It means to be a model and working example for scholarship that takes advantage of digital resources and internet connectivity. It is strongly “results-oriented”, and not just a context for the discussion of possibilities. It will provide humanities scholars with a functioning, standards-based model for uniformly coded digital materials along with a suite of computerized analytic and interpretive tools. These are made available to the scholarly community at large to use as it will. The overriding goal is to expose in a clear and functional way the rich potential in the electronic remediation of humanities methods and materials – beyond the dazzle of digital imaging and the early breakthrough of hypertext.

NINES faces in two directions – toward research libraries and academic publishers on one hand, and toward traditional academic professional organizations on the other. This double focus is imperative because publishers and scholars function in a codependent relationship. With the libraries and publishers NINES is working to develop online publishing mechanisms for aggregated NINES materials. This work is underway even now, most vigorously in a weekly series of meetings hosted by U. of Virginia library. The goal is to produce a pilot publishing venture built around three successful IATH projects: VCDH (The Virginia Center for Digital Humanities), THDL (The Tibetan and Himalayan Digital Library), and *The Rossetti Archive*. The projects are chosen partly because they represent different kinds of disciplinary interests and materials, and partly because each presents special kinds of technical challenges. The pilot projects committees are even now working out the various technical, legal, and administrative problems that any such operations involve. Once the working model is developed – the target date is late in 2005 – it will be scaled up for large aggregations of scholarly and educational materials like those now being developed and coordinated through NINES.

Such an archiving and publishing mechanism cannot function without reliable content, however, which must come from working scholars. The content will be reliable if it is peer-reviewed in traditional ways. But the complex process of creating and peer-reviewing digital scholarship in humanities is prevented because we now have virtually no institutionally-sanctioned professional support for this kind of work. Our scholarship today remains closely tied to inherited paper-based institutions and mechanisms. Even the most distinguished online scholarly projects are more or less atomic entities

subsisting on the enterprise of individuals or isolated groups. A key function of NINES, therefore, is to help traditional scholarly organizations make a transition to supporting integrated, peer-reviewed digital scholarship and pedagogy in nineteenth-century transatlantic studies.

The central problems are institutional and political, not technical or even, in a strict sense, economic. Think about it. Scholarly materials ought to be mediated and validated by existent professional organizations (like MLA, NASSR, NAVSA, ACLA, ASA, etc.). This is what happens in our paper-based inheritance, and the advent of information technology does not overthrow the need for that set of social mechanisms. An academic press or a publishing library should be getting its content – in this case, its digital content -- and having it vetted through editorial functions that these organizations would oversee and certify. But our professional organizations are ill prepared to enter into a liaison of that kind. They have little or no expertise or resources for the necessary tasks, even if they had the thought, let alone the will, to move in such a direction. Our ineffectuality in this situation has made us easy prey for highly capitalized commercial entrepreneurs like Gale, Kluwer, Elsevier.

NINES has organized three editorial boards for vetting the scholarly and educational work that will be aggregated in the NINES environment. These boards cover British Romanticism, British Victorian Literature and Culture, and Nineteenth-century American Literature and Culture. The boards have begun to locate digital scholarship in those three areas for eventual publication within an online environment that will collect and integrate the materials. The editorial boards are now operating under the auspices of NINES and will continue to do so until they can be passed into the authority of existent

professional organizations like NAVSA (North American Victorian Studies Association), ASA (American Studies Association), NASSR (North American Society for the Study of Romanticism), and/or MLA. A key function of NINES is to facilitate that important transition.

Second, beginning in 2005, NINES will run a series of summer workshops for scholars with a variety of digital projects – tools projects, editorial works, critical investigations. A dozen or so scholars will come together for a week to work on their projects with each other and with a group of experienced digital scholars and technicians. The workshops will be oriented toward the practical problems facing the individual projects. Given the remediations that are demanded by digital humanities work, the workshops will include serious discussions of key issues of theory of textuality and interpretive method. Over a period of three years, which is the initial plan, we hope to set 30 or 40 digital projects on sustainable foundations.

Third, NINES is developing a suite of digital aids and electronic tools that will not only facilitate the production of high-quality humanities content, but will promote the development of new kinds of research and interpretive procedures that are born-digital rather than book-based. These include a schema for aggregating diverse kinds of digital objects into a single integrated online network; a text comparison and collation tool called JUXTA; IVANHOE, which is an online collaborative playspace for carrying out research and interpretation of literary and cultural works at highly self-reflexive and imaginative levels; and COLLEX, an intuitive authoring environment that allows users of electronic archives to create virtual "collections" of digital objects and to annotate and share those collections with others in the form of online "exhibits." Each of these tools is

in current development and will be released during 2004-2005. Another tool for advanced interpretative operations, THE PATACRITICAL DEMON, will go into development in 2005. This is a device for tracking the transformations that emerge and mutate in the real-time acts of interpretive investigations of discursive objects, and in particular imaginative objects. It is a device for addressing the following problem: How does one formalize “exceptional” and highly subjective activities like acts of interpretation, and at the same time preserve their subjective status? The Demon derives its name, incidentally, from Alfred Jarry’s proposal for a science that he called ‘Pataphysics, that is, “a science of exceptions”.

Like IVANHOE and JUXTA and COLLEX, the DEMON outputs XML-coded data. Consequently, the work done with all of these interpretive tools can be integrated with the rest of the NINES-environment materials, where xml standards are required.

Oh yes, one other thing. Whatever happens with NINES – whether that institutional event takes hold or not – these critical tools will be built. They will also be freely distributed to anyone who wants them.

For the immediate future NINES will continue to act as an independent agent working with libraries, academic publishers, and professional organizations. NINES will help to model and pilot institutional liaisons and structures within and between these traditional organizations. It seems clear to us that peer-reviewed and integrated online research and scholarship will only come about when such codependent relationships are in place. Entities like Gale and Elsevier have their commercial publishing models out there already, seeking whom they may devour. Unless the scholarly community develops publishing models of its own, these aggressively capitalist ventures will control the work

created by scholars and educators. Such an outcome, in the view of NINES, is not in the best interests of the scholarly and educational communities.

Most important, NINES is not just a committee of concerned scholars who mean to discuss the problems and opportunities presented by digital technology. NINES is a practical undertaking and it is already underway.

Conclusion

Well, as I indicated at the start of this essay, I'm a book scholar, about as traditional as you get. My work, including my theoretical work, is historicist and even philological and my orientation is decidedly humanist. "Glory to man in the highest, for man is the master of things." That witty and impish line from Swinburne is very much to my taste. Men (and women) are indeed called to the mastery of things. Of things precisely. Of people and of life events we are and always will be participants and students, never masters. Drawing that distinction is what it means to be -- as Swinburne was -- a humanist.

Today some new things have to be mastered. In addition -- and to recall Latour -- we have to be concerned about these new things, about how we make them and what we use them for. We will do this by becoming students again -- a role for which, as educators and humanists, we have a special aptitude. For some of us this will be a road not taken. Fair enough. But whether we choose to or not, we should all be clear about the slow train that's coming and that won't be sidetracked. The "Publishing and Tenure Crisis" in the United States is one certain sign of what's happening. So is the digital transformation of our research archives, the seat of our cultural memory.

NINES is a proposal to engage with these problems in specific and practical ways. It takes a relatively short rather than a long view – because in matters of concern to us, we are always humanists, even in the short run. We know that our longest views, our totalizing conceptions, are finally only heuristic and hypothetical. But that humanist understanding is exactly why, in Shelley’s words, we cannot “let I dare not wait upon I would”. We have to get going now, we can’t hang about wondering if there’s more to learn. Of course there’s more to learn, that’s why we must fare forth. How else will we learn what we need to know? We have to set the stage for our failures if we’re to have any chance of measuring success. We will, as the poet observed, “learn by going where we have to go”.

One last point is worth re-emphasizing. Capitalist entrepreneurs are already actively trying to gain control over as much information as they can. Perhaps never before has knowledge been so clearly perceived as a fungible thing, as a commodity to be bought and sold. Humanities scholarship has a calculable market price, and the market will work to buy low and sell high, as the dreadful examples of Elsevier and Kluwer have recently revealed to the science community.

And don’t imagine that our cultural heritage – what Shelley called our poetry -- is safe from commercial exploitation by agents who view our work – what they call “the content” we create – as a marketable commodity. Perhaps the chief virtue of a project like NINES is to supply scholars with a social mechanism for preserving and protecting what we do.

I don’t know if NINES will be successful in its primary objective: to build a viable working model for publishing aggregated humanities scholarship online, peer-

reviewed and born-digital. A model of this kind can clearly work, but whether the agents needed to make it work will decide to do so is unclear. The agents – that’s to say, ourselves. The matter won’t become clear, one way or the other, until we undertake to design and implement the model. NINES can only exist in practice, not in theory.

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