Modern Nervousness: Henry Adams, George Beard, and the Symptoms of Historical Change

Timothy Melley

Arizona Quarterly: A Journal of American Literature, Culture, and Theory, Volume 59, Number 1, Spring 2003, pp. 59-86 (Article)

Published by Johns Hopkins University Press
DOI: https://doi.org/10.1353/arq.2003.0021

TIMOTHY MELLEY

Modern Nervousness: Henry Adams, George Beard, and the Symptoms of Historical Change

> The crisis consists precisely in the fact that the old is dying and the new cannot be born; in this interregnum a great variety of morbid symptoms appears.
>
> Antonio Gramsci

NOT LONG AFTER Henry Adams ended his term as its editor, the *North American Review* published Dr. George Beard's "English and American Physique," one of the many papers that would eventually comprise *American Nervousness* (1881), Beard's popular treatise on neurasthenia, or nervous exhaustion. All of Beard's work is nervous about nervousness, but none of it so much as *American Nervousness*, which asserts that "modern civilization" has caused a "very rapid increase of nervousness" in America (vi). Initially, Beard argues that nervousness is caused primarily by the proliferation of five things: "steam-power, the periodical press, the telegraph, the sciences, and the mental activity of women" (vi). The fact that "the mental activity of women" could end up in this list of technological and discursive shifts requires an astonishing leap to which I will later return. Equally bizarre is the way this rather short list of causes begins to grow as Beard attempts to account more rigorously for the rise of neurasthenia. By the end of *American Nervousness*, he has enumerated scores of secondary and tertiary causes, and eventually this proliferation itself seems to strike him. "More than all, perhaps," he says, is "the heightening and extending complexity of modern education in and out of schools and universities,

Arizona Quarterly Volume 59, Number 1, Spring 2003

ISSN 0004-1610

the inevitable effect of the rise of modern science and the expansion of history in all its branches" (99–100). What Beard finds truly nerve-wracking, in other words, is the proliferation of knowledge or discourse itself—a proliferation his own work not only augments, but actually imitates in its endless, quasi-mechanical inventory of causes.

It would be hard to find a more thoughtful or sustained expression of this anxiety than *The Education of Henry Adams*, Adams' autobiographical attempt to understand the breakneck modernization of the late nineteenth century.[1] Like Beard, Adams expresses concern about the increasing tendency of women to enter the workforce. He also worries about the "rapid increase" of new technologies across America. "The railways alone," he complains, "approached the carnage of war; automobiles and fire-arms ravaged society, until an earthquake became almost a nervous relaxation" (1172). But such technological changes are not nearly as troubling to Adams as is the potential difficulty of ordering and explaining them in an historical narrative. "In 1867," Adams writes, the historian entered "a universe of unities and uniformities. In 1900 he entered a far vaster universe, where all the old roads ran about in every direction, overrunning, dividing, subdividing, stopping abruptly, vanishing slowly, with side-paths that led nowhere, and sequences that could not be proved" (1085). Adams' narrative of the fall from nineteenth-century "unity" to twentieth-century "complexity," "multiplicity" (1083), and "chaos" (1132) is the organizing principle of both the *Education* and the two-volume project it completes (the first volume of which is *Mont St. Michel and Chartres*). This narrative structure and the anxieties it represents are symptomatic of late nineteenth-century attempts to represent modernization and modernity.[2] Like Beard, Adams is not only worried that the world is spinning out of control, but that *he* will no longer be able to reduce its transformations to a clear and uniform sequence—a history.

In the pages to follow, I want to trace the outlines of this epistemological anxiety through *The Education* and very briefly through *American Nervousness*. By juxtaposing the enduring figure of Adams with a debunked neurologist and entrepreneur I do not mean to equate their work or even to suggest they were fellow-travelers. Rather, I hope to illustrate the widespread popularity of a particular conception of modernization and its social consequences. One of the most interesting features of this conception, I will suggest, is the way it disrupts its own

description. As Adams and Beard attempt to explain the social effects of recent mechanization, they become overwhelmed by the difficulty of synthesizing a seemingly endless proliferation of historical causes and effects. In order to handle this flood of information, they forgo sequential, causal explanation in favor of symbolic or symptomatic representation. That is, they reduce "modern complexity" to a sort of "national body," an immense personification registering national "hysterical" regress or historical "progress." They imagine this sublime emblem in highly technological or masculine terms and explicitly distinguish it from more traditional (and presumably outmoded) female figurations of the social order. This strategy allows them to overcome a potentially disabling anxiety about modernization's effects—not only its apparent erosion of sexual difference, but its erosion of the difference between persons and machines and its disruption of sequential, causal historiography. It allows the author to reduce a disarrayed and uncontrollable (though potentially controlling) sequence of causes to a more manageable idea—a symptom, a symbol, or a theory. Yet, it also generates a host of new anxieties about the "mechanical" nature of the scholar's own activities, and it underwrites a regressive gender politics by evoking nostalgia for the more distinct gender roles of the early nineteenth century.

If *The Education of Henry Adams* attempts to document the emergence of "complexity" and "chaos" through a story of perpetual (and perpetually inadequate) education, *American Nervousness* attempts to do much the same through an account of social illness. Beard's treatise is less a source of medical advice than a history of technological modernization glimpsed through a reading of nervous symptoms. In this hysterical historicism, the mechanisms of a vast social transformation become visible on the bodies of its victims and the brilliant doctor becomes a diagnostician of modernity itself. Just when American civilization "appears to hang by a thread" (97), he enters as potential hero, able to offer a healing prescription to the nation.

But Beard's diagnostic project proves more difficult than it first appears. While he traces nervousness primarily to the rise of new technologies and discourses, he also believes it to be caused by increased mental strain (particularly among women). His theory is thus unclear about whether the causes of nervousness are internal or external to its

sufferers. While the first four causes are external social changes, the final ("mental activity") is an internal human activity. This hesitation is related to another in Beard's argument. It turns out that while he locates the threat of modernity primarily in machinery, he also conceptualizes the suffering subject as a "machine," what Anson Rabinbach has called the "human motor"—the dominant late nineteenth-century metaphor for the body. For Beard, the human body is like a battery (42), a bank account (9), a furnace (98), or a steam engine (99). Its energy is built up by the intake of calories and drained down by all other activity, mental or physical. It was on the basis of this model that Beard attempted to cure nervous patients by "recharging them" with the very machines that were supposedly draining vital energy from them in the first place. As Tom Lutz points out in his fine study of neurasthenia, neurasthenics were routinely connected to electrical dynamos or generators. This form of treatment became so popular that mail order companies such as Sears Roebuck sold home-use generators like the "hydroelectric belt," a dynamo-equipped undergarment that delivered "restorative" shocks to the male genitalia.[3] If modernity had feminized men by sapping their nerve-force, then modern technologies could be used prosthetically to restore that lost male virility. In short, modern technologies had become a repository of the masculine energy that was being drained from modern man.

All of these assumptions depend upon a thermodynamic model of the self. Beard understands nervousness as the result of an excessive power demand on the body's limited standing reserve of energy. "The nervous system of man," he explains,

> is the centre of the nerve-force supplying all the organs of the body. Like the steam engine, its force is limited, although it cannot be mathematically measured—and, unlike the steam engine, varies in amount of force with the food, the state of health and external conditions, varies with age, nutrition, occupation, and numberless factors. When new functions are interposed in the circuit, as modern civilization is constantly requiring us to do, there comes a period, sooner or later, varying in different individuals, and at different times of life, when the amount of force is insufficient to keep all the lamps actively burning; those that are weakest go out entirely, or, as more fre-

> quently happens, burn faint and feebly—they do not expire, but give an insufficient and unstable light—this is the philosophy of modern nervousness.
>
> The invention of printing, the extension of steam power into manufacturing interests and into means of conveyance, the telegraph, the periodical press, the political machinery of free countries, the religious excitements that are the sequels of Protestantism—the activities of philanthropy, made necessary by the increase of civilization, and of poverty, and certain forms of disease . . . all these are so many additional lamps interposed in the circuit. (99–100)

This explanation has several notable oddities. First, although attempting a simple explanation of nervousness and its primary causes, Beard cannot stop himself from enumerating scores of secondary causes. This nervous tic—the compulsion to catalogue additional causes—stems from the assumption that modernity is so unwieldy and ineluctable that it can only be described by way of its constant acceleration and growth.

Second and consequently, the endless proliferation of modernity almost immediately disables the central metaphors of Beard's explanation. The figure of the steam engine and the electric "circuit" it powers makes sense only if the engine represents the nerve center supplying the organs of an *individual* body. But the metaphor goes haywire when Beard suddenly assumes that this engine supplies a host of "lamps" that are no longer bodily organs but immense technological and discursive networks, such as the railroad and the press. What can it mean to say that the nervous force of an individual is depleted because it provides power to the railroad or the telegraph? Such incongruities only make sense if the engine and circuit represent the collective nerve force of society. In short, Beard has unconsciously converted the body of the neurasthenic patient into a *national body*, a vast circuit connecting an array of social machinery.

There is certainly nothing unusual about the notion that the nation is like a body; nor is there anything new about the use of technological imagery to describe this body. In his famous "frontier thesis" of 1893, Frederick Jackson Turner remarked that the complex maze of "modern commercial lines" now crossing the nation was "like the steady growth of a complex nervous system for the originally simple, inert continent"

(qtd. in Trachtenberg 15).[4] Beard, however, requires not only that the nation be like a body, but that the body be like the nation, for it is really at the national level that he wishes to issue his prescriptions. He imagines the United States as a technologically innervated "body" composed of "muscle-workers" and "brain-workers." *American Nervousness* is primarily concerned with the latter group—the rapidly growing professional and managerial classes—because they are most "sensitive" and susceptible to nervousness. For a "brain-worker" like Beard, brain-work is not only more difficult than physical work (or "muscle work"), it *is* physical work; it depletes the same thermodynamic reserve powering the body's muscles. Thus, the increased nerve force in "a man whose thinking centres are exerted to the full measure" would leave little energy for other activities and might produce a variety of new ailments (100). If brain workers seemed insufficiently masculine, in other words, this was a trick of the light: in fact, their work required tremendous physical reserves. Such a theory must have been deeply reassuring to pencil-pushing pencil-necks everywhere, for it not only countered the apparently feminizing pressures of modernity, but it offered a new conception of social class. Not surprisingly, both of these compensations were linked to extremely regressive social prescriptions.

Beard's defense of mental labor as "real work" contributed to an emerging managerial discourse by articulating a new sense of bourgeois specialness.[5] Beard argues that a "managed" society is "for the physical well-being of the nation indispensable": "For every brain-worker there must be ten muscle-workers" because "for a people composed wholly of educated millionaires, intelligence would be a curse and wealth the worst form of poverty" (302). What is most important about the nation, in other words, is that it not violate the model of the body. If those who come from the muscle were to become part of the brain, or vice versa, the effects would be "disastrous"—not of course for the lower classes, whom Beard generally ignores, but for the elite. "The activity and force of the very few," he warns, "make us what we are as a nation; and if, through degeneracy, the descendants of these few revert to the condition of their not very remote ancestors, all our haughty civilization would be wiped away" (97). Beard thus uses the model of the individual neurasthenic to promote a sort of social Taylorism, a managed class system whose ratio of thinkers to physical laborers should be maintained at all costs.

Such visions of social degeneration stem largely from anxiety about how technological change might propel manual laborers into the managerial classes. But crucially they also stem from worries about gender. If the male body seems a kind of "generator" to Beard, then the female body is doubly so, albeit a generator of the reproductive sort. What Beard fears most is the shift from a national body that is female and reproductive to a national body that is male and technological. Why? Because the life of the nation (by which Beard means the white upper classes) depends on steady levels of reproduction. "The process of parturition," he writes, "is everywhere the measure of nerve-strength. Had we no other barometer than this, we should know that civilization was paid for by nervousness, and that our cities are builded out of the life-force of their populations" (76). For Beard, the results of excessive female employment are already obvious in the diminished reproductive power of modern women: "The difference between an average of a half-dozen children in a family, which obtained fifty years ago, and an average of less than four which obtains now, is very great, and, abating certain obvious qualifying facts, pretty accurately measures the child-bearing and child-rearing power of the woman of the past and the woman of to-day" (79). It is for this reason that Beard deems "the mental activity of women" a source of modern nervousness. For Beard the movement of women from reproductive to working roles portends the onset of "race suicide," the white, upper-class anxiety about the way shifting gender roles would leave an endangered elite swimming in an uncontrollable proliferation of ethnically different citizens.

Beard thus defined an illness that encouraged members of the professional and leisure classes to resist the shifting definitions of class, gender, and race that modernization seemed to urge. His real accomplishment, however, was to make neurasthenia attractive—to offer a compensatory fantasy for the members of the professional and leisure classes who were being increasingly diagnosed with the illness. Nervousness, Beard asserted, was the mark of a "fine organization" (26), a cultured and "sensitive" temperament. It was a quality of the elite. The fact that it was "at once peculiar and pre-eminent" in America (13)—that America was *the* nervous nation—meant furthermore that the United States was the most modern, technically advanced nation. If widespread neurasthenia was the symptom of an increasingly refined, "free," and intelligent population, then suffering from the disorder was

virtually a patriotic act. In his popular description of neurasthenia, Beard succeeded in describing the modern move from "simple to complex" in a way that not only offered his readers the fantasy of watching historical "symptoms" become manifest on their own bodies, but also encouraged them to *enjoy* the cultural privilege those symptoms signify. The neurasthenic, male brain-worker, Beard revealed, was still a real man, overburdened by strenuous, physical challenges and the responsibility of sustaining his "haughty civilization." If both his well-being and his masculinity had been threatened by technological modernization, Beard allowed him to compensate for these threats by imagining himself as a form of modern technology, which in effect realigned him with a fresh source of masculine virility. Oddly (but appropriately) enough, then, Beard imagined the threat of modernity as internal to his patients and himself. As a result, the modern neurasthenic could, to borrow a phrase from Slavoj Žižek, "'enjoy his symptom' only insofar as its logic escapes him" (21).[6]

What should we make of this intellectual response to the proliferation of technologies and discourses understood to constitute modernity in the last decades of the American nineteenth century? Using Kant's notion of the "mathematical sublime" for a model, Neil Hertz has written powerfully about the epistemological difficulties of attempting to master a disarrayed or proliferating mass of material. As Hertz glosses it, the mathematical sublime is a moment of "sheer cognitive exhaustion, the mind blocked not by the threat of an overwhelming force [as in Kant's 'dynamical sublime'], but by the fear of losing count or of being reduced to nothing but counting—this and this and this—with no hope of bringing a long series or a vast scattering under some sort of conceptual unity" (40). Assuming an analogy between the heroes of Kant's sublime scenarios and the scholar who imagines himself "heroically coming to grips with a chaotic heap of historical matter," Hertz suggests that confrontations of this sort typically lead to a "moment of blockage" in which the mind must reduce the problem to a form with which it can momentarily identify itself—a "double" of some sort. "The task of the historian," writes Hertz, "—the reduction to narrative order of a large, sometimes seemingly infinite mass of detail—resembles the

play of apprehension and comprehension, of counting and organizing, associated with the mathematical sublime" (45).

Although he does not say so, Hertz's examples of "blockage" fall into two categories: those motivated by anxiety about a technological change (Thomas McFarland's worries about a "flood" of computer-generated publications, and Wordsworth's reaction to the chaotic "urban mechanisms" of Bartholomew Fair), and those motivated by theoretical attempts to account for such changes (Thomas Weiskel's and Samuel Monk's concerns that they have imposed a "false and artificial form" [53] on a mass of confusing material). I make this distinction because, jointly, these cases register the uncertain relation I wish to address—the relation between anxiety about an external proliferation and anxiety about the self-generated, and potentially "false," form of one's own theory. If worries of the first sort are incited by troubling forms of mechanism, then worries of the second sort stem from the "automatism" or "mechanism" of theory itself—the way it does one's thinking for one, churning out predictions about individual instances without regard to what individuates those instances. That both worries might be versions of the same thing suggests that the threat of modernity is not clearly external or internal to those it threatens.

This problem is central to Adams' *Education*. Adams believes his primary task as a historian is to reduce a "multiplicity" of factors to some "conceptual unity," as Hertz puts it. "Unity," however, is not a particularly stable term in Adams' work. In most cases it refers to an ordering theory or structure standing in for a more complex, disarrayed set of relations. The Virgin of Chartres, for example, is a twelfth-century symbol of unity because she "alone could represent whatever was not Unity; whatever was irregular, exceptional, outlawed" (*Mont Saint Michel* 584). There are also times, however, when "unity" means a point of origin. "Chicago," writes Adams, "was the first expression of American thought as a unity; *one must start there*" (*Education* 1034, emphasis added). These two senses of "unity" are not necessarily opposed, but while the former sense is of a general law describing particular instances, the latter sense is of a particular instance from which all other instances proceed temporally. The relation between them characterizes a tension, running through the *Education*, between the power of explanatory theory in general and the power of "fixing a point" of

origin—or, better, between a general theory and the specific instances that simultaneously provide a theory's generalizing power and threaten to illuminate its reductions.

These relations are vital to understanding Adams' struggle to understand the transition from medieval unity to modern "complexity." The issue is most visible, and most fraught, in the two sections of the *Education* that will be the subject of the rest of this essay. The most important is "The Virgin and the Dynamo," Adams' famous confrontation with the new "supersensual" technologies on display at the 1900 Paris Exposition. I will turn to this episode after consideration of the other: Adams' struggle to understand evolutionary theory as an expression of original natural unity and historical "progress"—a segment of the *Education* that raises crucial questions not only about historical origins, but also about reproduction and (self-) production.

Adams takes up evolution after volunteering to review the tenth edition of Sir Charles Lyell's *Principles of Geology*. While the older, wiser narrator of the *Education* looks back skeptically on this project—suggesting that in "wrecking the garden of Eden" Lyell and Darwin only established a new, scientific myth of origins—the younger Adams finds himself taken with evolution because it seems to explain how biological complexity might have arisen from an original simplicity.

> Natural Selection led back to Natural Evolution, and at last to Natural Uniformity. This was a vast stride. Unbroken Evolution under uniform conditions pleased everyone—except curates and bishops;—it was the very best substitute for religion; a safe, conservative, practical, thoroughly Common-law deity. . . . Unity and Uniformity were the whole motive of philosophy, and if Darwin, like a true Englishman, preferred to back into it,—to reach God *a posteriori*,—rather than start from it, like Spinoza, the difference of method taught only the moral that the best way of reaching unity was to unite. Any road was good that arrived. . . . Steady, uniform, unbroken evolution from lower to higher seemed easy. (926–27)

"Unity" here is both the ordering law of philosophy and science and a *place* of origin, paradoxically reached by steady, backward, scientific progress. Evolution, then, seems to give Adams precisely what he wants. If his desire is to "aim at ultimate Unity" (932), as he repeatedly

suggests, Lyell's work should lead him to unity in both senses of the term. Because Adams treats evolution as an historiographic model, he aims to apply it to his own intellectual quest—tracing the origins of an ever more complex modernity. And the stakes here are high, for Adams believes that "The man who should solve the riddle of the middle-ages, and bring them *into the line of evolution* from past to present, would be a greater man than Lamarck or Linnaeus" (995, emphasis added). But this is not all. Martha Banta has demonstrated that Adams associated unity with masculinity, and multiplicity with "'female' disconnectedness" (61). For Adams, the struggle for unity of thought amid modern multiplicity was both an intellectual project and an attempt to reassert a specifically masculine identity.[7]

But the study of evolution does not simply lead Adams to "unity." Almost immediately, he encounters epistemological difficulties that take the shine off evolutionary theory. He discovers two "shocking" geological facts that appear to refute the notion of smooth, uniform evolutionary progress.[8] The first of these facts—that the species *terebratula* is identical from the beginning to the end of geological time—suggests that evolutionary "progress" is neither automatic nor necessary. The other fact is more troubling and more interesting to Adams: apparently, the first vertebrate, the ganoid fish *pteraspis*, simply leapt into existence in the Silurian period. There is no fossil evidence of a precursor species from which *pteraspis* could have evolved "smoothly." The only way to account for the mysterious and instant appearance of *pteraspis* is to posit the sudden, spontaneous, accidental *conversion* of one species into another.

Adams' intense interest in pteraspis is symptomatic of a move repeated throughout the *Education*. In a narrative already fraught with implications for historicism, the desire to trace a sequence of developments from simple to complex is suddenly blocked by the appearance, or invocation, of an immense and unbridgeable gap in the sequence. "At the very outset," Adams explains, he "struck on Sir Charles's Glacial Theory or theories. He was ignorant enough to think that the glacial epoch looked like a *chasm between him and a uniformitarian world*" (927, emphasis added). The appearance of this chasm is unsettling, because it throws into question the notion of "unbroken," "uniform" evolutionary progress. Yet, it is also attractive to Adams. Indeed, Adams is drawn to Lyell's *Principia* less because it offers him a clear

pathway from the simple to the complex than because it reveals a radical rupture between past and present, a gap in the historical sequence and a concomitant obliteration or repression of the mechanisms of historical cause and effect. It is this rupture, emblematized by the mysterious appearance of *pteraspis*—and not the substantial evidence in favor of gradual evolution—that gets most of Adams' attention.

But why would a scholar who professes a desire to produce a sequential account of modernization and historical progress be so drawn to evidence of the impossibility of doing so? The answer to this question lies in the way Adams' own narrative replicates the conflict between progressive and catastrophic evolution.[9] As soon as *pteraspis* appears in the *Education* Adams' serious investigation of evolutionary theory comes to an abrupt halt. Just as suddenly, Adams introduces a strange narrative fantasy set on the Shropshire coast, where fossils of *pteraspis* were discovered. In this imaginary scene, the chasm so recently opened between past and present is imaginatively bridged. The pastoral landscape beside the thirteenth-century Abbey on Wenlock Edge, says Adams, suggests "an absence of evolution. . . . Nothing suggested sequence. . . . One might mix up the terms of time as one liked, or stuff the present anywhere into the past . . . without violent sense of wrong" (929). Before long, the concept of progress has disappeared entirely from view. Adams instead imagines "the shepherds of Caractacus or Offa, or the monks of Buildwas" living in peaceful coexistence with the modern railroad and asserts that here "the Roman road was twin to the railroad" (929). What is stunning about this anachronistic juxtaposition is that it does not convey the "violent sense of wrong" suggested by most "machine-in-the-garden" scenarios.[10] Nor does Adams suggest that the Roman road has *evolved* into the railroad; rather, the two are imagined as virtual *equivalents*. This equating of elements from the past and the present is a miniature version of Adams' later and more dramatic attempts to link the Virgin of Chartres and the new dynamo generators on display at the Paris Exposition of 1900. Both of these projects offer a fantasy of heroic hermeneutics—a "fantasy" because the long "line of evolution" from premodern simplicity to modern complexity is never really traced out, but is instead elided or repressed in favor of a more thrilling encounter with one or two stationary, convertible objects.

We have thus arrived at the "moment of blockage" in the mathe-

matical sublime. This moment, Hertz explains, is a "negative moment but nevertheless a reassuring one" (49).

> The scholar's *wish* is for the moment of blockage, when an indefinite and disarrayed sequence is resolved (at whatever sacrifice) into a one-to-one confrontation, when numerical excess can be converted into that supererogatory identification with the blocking agent that is that guarantor of the self's own integrity as an agent. (53)

The scholar's wish is for blockage, but wishing for blockage, in this theory, is only a version of wishing for a theory, because a theory is one of the "unifying concepts" that will stay a complex sequence.[11] In the case of Adams' Shropshire fantasy, the moment of blockage stages and resolves a confrontation between rival conceptions of history: of smooth, evolutionary progression, on the one hand, and sudden, catastrophic change on the other. It is significant that Adams resolves the confrontation—at least temporarily—in favor of the latter model. While the opening of a historical "chasm" is no doubt troubling to Adams, it is also useful: troubling because it suggests that the major geological-historical agent causing human life is either a hidden force or sheer accident and thus not an agent at all; useful because it allows an unmanageable sequence to be represented by a minimum of objects which then stand in for the hidden causal relations between them.

Blockage thus solves—or temporarily stays—a major historiographical problem. But it has another benefit as well. It guarantees Adams' "integrity as an agent" and historian by converting a vast and complex sequence into a one-on-one confrontation with *pteraspis*, which he imagines as both his parent and his *double*. Adams declares himself "an American in search of a father" and claims *pteraspis* as his "earliest ancestor and nearest relative" (929–30). With these assertions, Adams connects his own origins—the central subject of the *Education*—to the apparently originless and self-generating pteraspis. This is a parthenogenetic fantasy—a model of self-fathering without the need for a mother. It is emblematic of Adams' association of modernity with femaleless reproduction—a subject I to which I will return. Through this fantasy, Adams converts the study of modern complexity into self-study and the self on display is both unique and mysterious. Like *pteraspis*, he

continually feels he is shaped more by "chance" than anything else. Despite all his conscious efforts, his most edifying moments always seem to come "by accident" and fresh ideas enter his mind when he is "mentally impassive" (792). Adams is haunted by the sense that he is not an agent in control of himself and he frequently connects his lack of control to modern technologies and discourses. Indeed, he makes technology a model for modern discourses, particularly discourses about selfhood. "The new psychology," he writes later in the *Education*, "seemed convinced that it had actually split personality not only into dualism but also into complex groups, like telephonic centres and systems" (1115). This thought sends a "shudder" through Adams, who cannot tell whether the threats to his integrity as an agent come from external technologies or from a consciousness that is already mechanistic, nothing more than "the simultaneous action of different thought-centres without central control" (1116).[12] This is the tendency I wish to illuminate throughout Adams' thought: while worrying deeply about the effect of modernization, he has already begun to reimagine himself on the model of modern technology.

It is in the context of such worries that Adams determines to "put psychology under lock and key" (932) and to reconsolidate his fragmented self by aligning it with *pteraspis*. His Shropshire narrative concludes with an image of profound self-determination: "out of his millions of millions of ancestors, back to the Cambrian mollusks . . . Henry Adams was the first in an infinite series to discover and admit to himself that he really did not care whether truth was, or was not, true" (932). By "truth" Adams means evolutionary theory, and in rejecting the "automatism" of that theory—its power to do one's thinking for one—Adams reckons himself an agent, the first to break a cycle of infinite repetition. Here, at the moment in which the complex origins of humanity threaten to overwhelm him, he is able to reassure himself that he is an original, a free thinker, utterly undetermined by the past, and (like the baby he later imagines sleeping next to the dynamo) not of woman born.

The moment of blockage and the creation of a double stay the author's anxiety as he confronts the ineffable complexity of modernity and the difficulties locating a foundational unity for his interpretation of history. But this temporary resolution comes at a cost. Eventually, Adams must recognize that it, too, implies an historiographical law—

one that is catastrophic and "supersensual," rather than ordered and progressive. As instances supporting this new historical "unity"—if it may be called that—begin to multiply, they become increasingly disturbing to Adams. Eventually, Adams is forced to confront the fact that his original heroic project—tracing the "line of evolution" from the twelfth to the twentieth century—may not be possible in the way he once hoped. Not coincidentally, these fears come rushing back when Adams contemplates the instances of *pteraspis* and *terebratula* eleven chapters later. The result is a long, frightened rant about the failure of unifying theory itself.

> Natural selection that did not select,—evolution [that] finished before it began,—minute changes that refused to change anything during the whole geological record,—survival of the highest order in a fauna which had no origin,—uniformity under conditions which had disturbed everything else in creation . . . such a sequence brought no peace. . . . Almost any doctrine seemed orthodox. . . . Nothing had been explained, and a bewildering system of huge overthrusts had upset geological mechanics. The text-books refused even to discuss theories, frankly throwing up their hands and avowing that progress depended on studying each rock as a law to itself. . . . Evolution was becoming change of form broken by freaks of force, and warped at times by attractions affecting intelligence, twisted and tortured at other times by sheer violence, cosmic, chemical, solar, supersensual, electrolytic,—who knew what?—defying science, if not denying known law; and the wisest of men could but imitate the Church, and invoke a "larger synthesis" to unify the anarchy again. (1084–86)

Here, as with Beard, an incantatory repetition of evidence that does not fit a theory leads to anxiety about theory itself. The exasperated "who knew what?" toward the end of the passage points to the narrator's inability to continue to catalogue possibilities, his sense that theory has dissolved into sheer "anarchy." Adams is again in "the region of the sublime." But this time the threatening proliferation is not historical evidence but theory itself ("each rock as a law to itself"). To stay this proliferation with yet another theory—a meta-theory or "larger synthesis"—seems equally nervewracking to Adams. It would be merely

a new "unity" that subsumed all the old unities and, in so doing, revealed their initial status as part of a "multiplicity." In other words, the idea of meta-theory forces Adams to confront the groundlessness of his central terms—to see that "the scientific synthesis commonly called unity was the scientific analysis commonly called multiplicity . . . the two things were the same" (1114). Once he starts thinking this way, it is not long before those terms empty out, promising endless displacement—"simple under the complex; then the complex under the simple; then . . ."—which, Adams says, "turned the historian green with horror" (1135). Part of the "horror" of such a prospect is its similarity to Adams' own historical goal—the replacement of complexity with a unifying theory—and his most common approach to this goal: the use of disparate historical emblems that may be equated with one another (the Roman road and the railroad, the Virgin and the dynamo, *pteraspis* and Henry Adams). What upsets Adams, in other words, is what he has been practicing all along, what we might call the thermodynamics of historiography: the practice of setting disparate entities into equivalence and implying that the one has been "converted" into the other through some occult, supersensual historical process—a practice that simultaneously elides the unmanageable sequence of historical changes that the historian originally wished to trace.

There is no finer instance of this practice than "The Virgin and the Dynamo," Adams' famous attempt to elucidate the nature of modernization by analogizing the Virgin of Chartres and the immense power generators of the late nineteenth century. Adams is first struck by the dynamo at the Great Exposition of 1900 in Paris. After passing by the "night-mare" automobile, the "destructive" electric tram, and the "terrible" locomotive (1067), he finds himself enthralled by the Hall of Dynamos. Though the dynamo is a stationary object, Adams finds it no less violent or nerve-wracking than the locomotive technologies. But the subtlety of its violence leads Adams to deem it the definitive emblem of modernity. Adams declares that one might safely place a sleeping baby by it—an image suggesting its replacement of the equally mysterious and powerful virgin mother. Yet the dynamo is a male image, and it is Adams himself who ends up in the place of its child. He declares that "after ten years' pursuit, he found himself lying" next to it "with his historical neck broken by the sudden irruption of force totally

new" (1069). Its paternal role and its sudden appearance make it as disruptive as *pteraspis* to Adams' attempt to bring modernity "into the line of evolution" from the middle ages. In the shadow of the dynamo, Adams feels like the victim of a violent revolution, albeit a "brain"-revolution, like those of Copernicus, Galileo, Columbus and Constantine. What is violent about the dynamo is that, like *pteraspis*, it wrecks Adams' original conception of progressive history.

Much of Adams' meditation on the dynamo is an attempt to conserve some vestige of this conception. He restates at some length his desire to produce histories that move in a clear, causal line. "Historians," he says, "undertake to arrange sequences,—called stories, or histories,—assuming in silence a relation of cause and effect" (1068). His own volumes of U.S. history, he explains, were an attempt to "fix for a familiar moment a necessary sequence of human movement" (1069). Difficult as it may have been, he has always "insisted on a relation of sequence, and if he could not reach it by one method, he would try as many methods as science knew" (1069).

Adams' uneasy encounter with the dynamo, however, is like his encounter with evolution. It shatters the dream of clear sequential change, "breaking his historical neck." And yet it is an attractive object, one that inspires much less overt anxiety than the locomotive technologies. Why is Adams drawn to this emblem of violent modern technology? As with the earlier instances I have discussed, this technology seems attractive because it allows him to represent modern "chaos and complexity" with a single, stationary figure. The dynamo, moreover, is a model of thermodynamic conversion. It does not move matter visibly like the railroad, the auto, or the tram, but is rather "an ingenious channel for conveying somewhere the heat latent in a few tons of poor coal *hidden* in a dirty engine house *carefully kept out of sight*" (1067, emphases added). The dynamo, in other words, is a sublime object. It is not only "a symbol of infinity," a representation of "silent and infinite force," but it also literally *sublimates* matter, "converting" one form into an entirely different form. This process, which results in the production of energy, operates through "hidden," "occult," "supersensual" means. The terrifying appeal of this immense, static object for Adams is that, while it acts as an agent of change, it simultaneously obscures the mechanisms of change, keeping them "out of sight." It

is a model of sublime historiography—of blockage and catastrophic transformation—that offers Adams an historiographical solution to the problem of modernity.

> Between the dynamo in the gallery of machines and the engine-house outside, the break of continuity amounted to abysmal fracture for a historian's objects. No more relation could he discover between the steam and the electric current than between the Cross and the cathedral. The forces were interchangeable if not reversible. (1067)

Like *pteraspis*, the dynamo is a symptom of modernity that elides or blocks sequence.[13] As such it is unsettling, but it is also what saves Adams from the impossibility of proceeding sequentially, along a line of "such facts as seemed sure," to something like "unity." Indeed Adams' fascination with the idea of "converting" one historical moment into another is a version of his heroic desire to trace the line of evolution between the thirteenth and twentieth centuries. The dynamo's mysterious ability to convert coal into electricity is like the Virgin's power to convert the power of the Cross into a cathedral.

The duration and intensity of Adams' enthrallment with the dynamo, his relative disregard for any of the thousands of other machines at the exposition, suggests its usefulness to him as a model.[14] In short, it is his double, continually enacting stunning equivalences and conversions between distant, apparently incompatible forms of energy. This is why, "reduced to his last resources" in the face of this powerful object, Adams adopts his own dynamo-like agenda. He decides to treat all forces as "as convertible, reversible, interchangeable, attractions on thought" (1069–70). As in *American Nervousness*, then, a technological threat quickly becomes transformed into an "antidote" of sorts and the threatened subject himself abates his anxiety by imagining himself on the model of the technology. Adams turns to the dynamo "*as though he were a Branly coherer*"—a mechanical device that improves conduction between loosely connected metals (1071, emphasis added). Of course, Adams' work is to improve the conduction between loosely connected centuries, establishing a direct line between the two. And the distant object evoked by this method is the medieval Virgin, "the highest energy ever known to man, the creator of four-fifths of his no-

blest art, exercising vastly more attraction over the human mind than all the steam-engines and dynamos ever dreamed of" (1071).[15]

A number of critics (Rowe, Seltzer, Tichi) have pointed out that Adams goes to rather extravagant lengths to suggest that the Virgin and the dynamo are versions of the same thing, rather than a pair of oppositions. For Adams, the dynamo is an "occult" moral force, while the Virgin is the "animated dynamo," a queen of force "as potent as X-rays" (1070). Cecilia Tichi sees this as a "severe restriction" (163) and ultimately as a failure. In trying to "equate" Virgin and dynamo, she says, Adams creates "the Siamese twins of literary symbols, attached, mutually restrictive, and ultimately grotesque" (164). One problem with Adams' equation is its superficial treatment of gender difference—its suggestion that female reproductive power, which is characterized by its mystery, has simply been transferred to masculine technologies. But it is important to see that part of the function of the Virgin-dynamo complex is that it "fail" in precisely this way. What Tichi finds offensive is the pattern I have traced throughout *The Education*; this set of symbols opens a vast historical "chasm" and bridges it in the same move—opens it by imagining the underlying sequence too unmanageable to follow, and bridges it by replacing that sequence with a pair of stable markers. As John Carlos Rowe remarks, "individually, neither Virgin nor dynamo can approximate the violent changes involved in Adams' general vision of history. It is their very difference that allows their relation to bear meaning" (124). These markers simultaneously signify and "fix" an endless and endlessly disturbing set of causal relations. Like the body of the neurasthenic and the imaginary body of the nation, the Virgin-dynamo complex demarcates the fall into modernity from a previously simpler period. At the same time, it suggests the fracture of an old historiographical dream—a history that would represent the past through causal sequence, rather than through symbol, elision, or symptom.

Like other sublime "blocking agents," the Virgin and the dynamo register anxieties about the effect of mechanism upon individual agency. One of the things the Virgin-dynamo model signals is the difficulty of moving from a historicism that traces "the sequence of men" to a historicism that traces "the sequence of force." A great deal of Adams' previous work is devoted to the study of powerful men, yet Adams frequently feels that the study of individual human agents is unproductive because individuals do not shape history. In his study of the British

conspiracy to aid the confederacy, for example, he remarks, "the sum of the individuals [British politicians] would still have seemed, to the young man, one individual,—a single will or intention,—bent on breaking up the Union . . . the individual would have been identical with the mass" (872). What *would* have historical meaning, in other words, is a form of collective intention external to any individual subject, but still imagined on the scale of the person ("a single will"). It is this problem—the "dismaying plurality of objects" responsible for the shape of history (Hertz 53)—that encourages Adams to seek a form of representation like the Virgin-dynamo complex. "Artists," he writes, "constantly complained that the power embodied in a railway-train could never be embodied in art. All the steam in the world could not, like the Virgin, build Chartres" (1074). Historical representation is like artistic representation; it depends on "fixed" objects, sublime bodies that can stand in for a network of power too decentralized to be adequately represented by a single body.[16] What makes the Virgin so supremely powerful, so able to move men, is her singularity or unity. The locomotive, by contrast, is powerful only through multiplicity, through its replication and movement across the national body. If modern power is to be represented it must be through a stationary body like the dynamo.

If the Virgin and the dynamo offer a solution to the problem of historicizing modernity they also generate a host of anxieties about the transition from female biological reproduction to male technological production, just as we saw in Beard's attempt to think along the same lines. Narratives like "The Dynamo and the Virgin"—an oddly truncated "history" of the way power has flowed from an icon of biological reproduction to an icon of machine power—are designed partly to dramatize these anxieties. Nowhere is this displacement more clear than when Adams contemplates the recent "production" of "machine-made, collectivist females" (1127). As he describes them, these "new types—or type-writers"—are proliferating uncontrollably, "running into the millions on millions" (1126). This new sort of American woman is frightening to Adams because, having been given steam power in the form of household conveniences (1125), she has obtained the "freedom" to become machine-like herself.

> When closely watched, she seemed making a violent effort to follow the man, who had turned his mind and hand to me-

> chanics. The typical American man had his hand on a lever and his eye on a curve in his road; his living depended on keeping up an average speed of forty miles an hour, tending always to become sixty, eighty or a hundred, and he could not admit emotions or anxieties or subconscious distractions, more than he could admit whiskey or drugs, without breaking his neck. He could not run his machine and a woman too; he must leave her, even though his wife, to find her own way by imitating him. (1126–27)

The notion that running a machine could be like "running" a woman is one consequence of the sort of thinking that views Virgin and dynamo as twin carriers of force. Apparently, a woman whose man cannot run her and a machine at the same time is likely to be "diverted" from her "axis of rotation about the cradle and the family" and to go the way of all machines: "She must, like the man, marry machinery" (1128). In this account, however, the American working woman *is already* a machine, "operated" by her husband. That society might be threatened by her "marrying" another machine illuminates the tautologies necessary to sustain this dystopian fantasy. It is unclear, for example, whether the machine to which the man is already married is his wife or his rapidly accelerating railroad—and this confusion is significant. Adams' regressive anxieties about the erosion of gender difference are persistently structured in terms of a more general erosion of difference between persons and machines. The passage above first erases the difference between persons and machines by confusing mechanical and biological sexuality—"grabbing a lever" and "running a woman"—and then it worries about this confusion in the most hysterical way conceivable. The result of modernization, Adams suggests dramatically, will be not only "a woman as sexless as the bees" but "the extinction of the human race" (1128). Here, as in *American Nervousness*, the notion of race suicide is evoked in the context of mechanization and traced causally to the entrance of women into the workforce. What such moments clarify is how anxieties about the effect of proliferating machine technology on traditional forms of male productivity become channeled into a regressive anti-feminism.

It is tempting, remarks Mark Seltzer, to read such narratives "as a compensatory male response to a threatening female productivity" (157);

yet "the notion of, and promotion of, a rivalry between 'male' and 'female' forces . . . may in fact function as ways of managing . . . anxieties about production" (28). In the case at hand, Adams' efforts to locate a form of production that is both technological and male (is, in fact, his double) suggests the sort of compensatory fantasy Seltzer describes; not only does Adams worry openly about the apparent erosion of gender differences in modern society, but he repeatedly describes his own intellectual development in metaphors of motherless, or mechanical, (re)production. Yet it is crucial to see that Adams eventually identifies with the modern forces he finds so alienating and repellant. It is also important to recognize that he does so in part because these technologies appear to be repositories of masculine energy, power, and "unity," and hence antidotes to the gender-reversing powers of modernity.

Adams' ultimate identification with modern technology is usually ignored because he so insistently suggests his incompatibility with modernity through antique (even prehistoric) doubles. In the *Education*'s "Preface," for instance, he declares himself a "manikin" on which "the toilet of education is to be draped" for other male viewers (721). This early double is not only a traditional figure of mechanical selfhood but a feminizing one—for the manikin is both a "little man" and a model, an object of display. By the end of the *Education*, however, Adams increasingly imagines himself as one of the mysterious and masculine technologies that have assumed the ancient (re-)productive powers of the Virgin. This new sort of doubling is accompanied by a new fear that it has become difficult to tell the difference between a machine and a person, between a converter of coal and a "converter" of historical objects, between a Branly coherer and an historian who imagines himself to be "like a Branly coherer." Such imaginary identifications are not entirely reassuring, but they have the psychic advantage of allying Adams with modern forms of masculine energy and contemporary symbols of heroic (unifying) historiography.

Clearly, then, the historiographic project of *The Education* is inseparable from Adams' attempts to understand and resist the effects of modernization on his agency and identity. These connections in turn explain why the phenomenon of blockage in the mathematical sublime is so repeatedly intertwined with fears about the technological erosion of human agency. In Hertz's first example, Thomas McFarland bemoans the "flood" of scholarly publications in the humanities on the grounds

that they "threaten the very knowledge that publication purports to serve" by reducing "thinking" to "mere reading," among other things. To make this point, Hertz keenly observes, McFarland quotes Schopenhauer making much the same point—thus introducing more "reading" material into his essay precisely when he offers the crux of his own "thinking."[17] This contradiction then gives way to a more striking one. McFarland forecasts the future of scholarship in the humanities: computers will replace "thinking" scholars by "automatically" retrieving and recombining old articles. Soon, he believes, "computers will be writing for computers, and the test of meaningful publication will be to think and write in a way a computer could not" (qtd. in Hertz 42). Most frightening, in other words, is the possibility that scholarly work will be, or *already is*, indistinguishable from that of a machine. Interestingly, while McFarland fears this lack of difference, he evokes it repeatedly. The ability to "retrieve and recombine" other writings not only serves as one definition of good scholarship, it is also precisely what McFarland himself does. His inability to stop the flood of publications, his compulsion to keep writing a tertiary review of the secondary literature, delineates the borders of his anxiety; he is already behaving like a machine, writing a paper that is "a recombination" of the papers of other scholars.[18] The "unity" he calls for—the plea for less writing—is ultimately *his own unity*, his sense of singularity and self-control.

This worry is vital to *The Education of Henry Adams*. "The Dynamo and the Virgin" ends not on Adams' rather strenuous reassertion of gender difference ("all the steam in the world could not, like the Virgin, build Chartres"), but on a long passage in which the historian's own agency seems suddenly to be in question:

> The secret of education still hid itself somewhere behind ignorance, and one fumbled over it as feebly as ever. In such labyrinths, the staff is a force almost more necessary than the legs; the pen becomes a sort of blind-man's dog, to keep him from falling into the gutters. The pen works for itself and acts like a hand, modelling the plastic material over and over again to the form that suits it best. (1074–755)

Here automatic writing reanimates the body, extending it prosthetically. The staff replaces the legs; the pen replaces the eyes and hands. The passage extends human agency along mechanical lines to the pros-

theses themselves, the rudimentary machines replacing the body. In this version of things, the pen, and not the person, writes history. The "occult mechanism" of the dynamo is only a version of the occult mechanism which mysteriously or automatically does the historian's work. But this is only to bring to the surface what has been a concern throughout the *Education*: not merely that history might be written using the machine for a model, but that the historian of modernity himself is already behaving like a machine.

Miami University

NOTES

1. In reading Adams through this frame, I do not want to suggest that the *Education* is relentlessly hysterical about individual agency and technological change. Adams is extremely worried and his tone is, as I will demonstrate, sometimes "hysterical," but it would be a mistake to assert that he is anything other than full of contradictions, at one minute awestruck by the immense potential of the machine and, at the next, afraid that it will lead to disaster. I mention this because a number of critics seem to have taken their cue from Leo Marx, who suggests that Adams "virtually endorses a theory of technological determinism" (346), and that the dynamo represents "hell," among other things, because it evokes the "dense, smoky, impenetrable darkness" of the English "Black District," which Adams toured in 1858 (346–47). (For an account that not only recognizes Adams' ambivalence about technology, but also points to his enthusiasm for it, see Tichi.) I think it is also somewhat reductive to suggest that Adams sees himself in "a universe of specific developing and deterministic forces" (129), as Martin has said, or to suggest that these forces are "both real and ultimate" to Adams (124). Martin later concedes that Adams gives his "mechanical theory of the universe . . . frankly ambivalent, even antagonistic treatment at times" (140), but he concludes by terming Adams' approach a kind of "apocalyptic determinism" (145). While Adams is one moment capable of "seeing lines of force around him, where he had always seen lines of will" (1109), he is equally capable turning around and asserting, "everyone admits that the will is a free force, habitually decided by motives" (1165). As Blackmur says of the former quotation, "the implication [is] that lines of will had always been lines of force, that will was force, and that will and force were interchangeable expressions" (169). The *Education* is an account of a sustained epistemological crisis. The question is why anxiety takes particular forms in this and other attempts to theorize massive historical change.

2. Although "modernity" is a fraught and potentially misleading term, it cannot be avoided. Because the values of modernity are linked to notions of progress and continually improved living through the application of rational techniques to the natural world, one of modernity's most striking features is perpetual modernization. It is important, therefore, to understand modernity as both a stable set of val-

ues and techniques *and* the lengthy period in which those values have been predominant. I want to be clear that I am not using the term to refer to the period of modernism but to the vast social and discursive transformation that began, crudely speaking, with the Enlightenment and whose central features include rationalism, individualism, universalism, and a progressive view of historical change.

3. Beard's lengthy *Practical Treatise on Medical and Electrical Surgery* is replete with such suggestions. See Lutz for a picture of the Sears Roebuck "Heidelberg Electrical Belt," which claimed to send "strengthening, healing, and vitalizing" electrical current to the male genitalia (48).

4. Turner's attempt at a "scientific" historicism based on Darwinian assumptions helps to generate a narrative of "progress" even as it invokes nervousness about the move from a "simple" to a "complex" society. It is significant, then, that Turner's central metaphor is the nervous system and that the quality he finds most characteristic of Americans is "restless, nervous energy" (qtd. in Trachtenberg 14).

5. At a time when people had "a basic difficulty in understanding sorting—information-processing—as work," writes Seltzer, "the real innovation of Taylorization becomes visible in the incorporation of the representation of the work process into the work process itself—or, better, the incorporation of the representation of the work process as the work process itself" (159). Adams registers his disappointment about this revaluing of work by complaining that "an administrator, organiser, manager, with mediæval qualities of energy and will but no education beyond his special branch, would probably be worth at least ten times as much" as a "mathematician, linguist, chemist, electrician, engineer" (1038).

6. The symptom, Žižek suggests, is "a formation whose very consistency implies a certain non-knowledge on the part of the subject": it "causes a great deal of trouble, but its absence would mean even greater trouble: total catastrophe" (21, 78).

7. Banta convincingly shows that Adams assumed a wide range of female roles, viewed himself in feminine terms, and worried about "living up to his credentials as a male with the masculine society through which he moved between 1838 and 1905" (51).

8. Marcell argues that shocking discoveries and occurrences of this sort punctuate the entire *Education* and unify it structurally.

9. Hayles offers an interesting reading of the relation between catastrophic disruptions of historical sequence and "gaps" in the *Education*, suggesting that Adams "himself is the catastrophe that disrupts sequence and gives the lie to continuous evolution" (66).

10. In *The Machine in the Garden*, Marx traces the technological disruption of pastoral American scenes. "What begins as a conventional tribute to the pleasures of withdrawal from the world—a simple pleasure fantasy—is transformed by the interruption of the machine into a far more complex state of mind" (15). On the relations between Adams and the Adam of "Genesis," see, Lyon, especially 116ff.

11. In several of Hertz's examples the "blocking agent" is a theory. The most notable of these is Thomas Weiskel's use of Freudian oedipal theory.

12. Hayles suggests something similar in her discussion of chaos in the *Education*. It is unclear, she says of a passage from "A Dynamic Theory of History," "where chaos is finally to be located. Once Adams has absorbed enough of it, it becomes he and he becomes it" (80).

13. Žižek's discussion of the Lacanian symptom is also helpful in this regard. "The Lacanian answer to the question: From where does the repressed return? is therefore, paradoxically: From the future. Symptoms are meaningless traces, their meaning is not discovered, excavated from the hidden depths of the past, but constructed retroactively—the analysis produces the truth: that is, the signifying frame which gives the symptoms their symbolic place and meaning. As soon as we enter the symbolic order, the past is always present in the form of historical tradition and the meaning of these traces is not given; it changes continually with the transformations of the signifier's network. Every historical rupture, every advent of a new master-signifier, changes retroactively the meaning of all tradition, restructures the narration of the past, makes it readable in another, new way. . . . In the symptom, the repressed content is returning from the future and not from the past" (55–56). Compare that to Rowe arguing that the Virgin is not simply a symbol of thirteenth-century unity, as many scholars have argued: "His study of the Virgin's unity is more accurately an investigation into the origins of modern multiplicity" (66). In Lacan's terms, then, the Virgin is a symptom whose repressed content returns from the future. The relations between Virgin and dynamo, or *pteraspis* and mankind, may be read in this context. Adams goes to rather extraordinary rhetorical lengths to read the significance of the past through the present, to elide or erase gaps between past and present even while the symptom stands in for those gaps. The symptom, in the admittedly loose interpretation I need to give it here, is a version of Hertz's "blocking agent" and Adams' "unity" and I use it as a model only to bring into relation psychoanalytic and historical discourses.

14. For two very different descriptions of the dynamo-like aspects of the *Education* see Westervelt and Cox.

15. In this sense Adams' work prefigures, albeit reluctantly, the anti-evolutionary historiography of the Annals group and of Foucault in particular. It also prefigures the New Historicism. Jameson suggests that one of the primary characteristics of the latter is the formal practice of establishing "homologies" between rather disparate texts or discourses while simultaneously eliding or disavowing the theoretical notions that would authorize those homologies. "Elegance" in the New Historicism, says Jameson, "consists in constructing bridge passages between the various concrete analyses, transitions or modulations inventive enough to preclude the posing of theoretical or interpretive questions" (188). "We will therefore," he concludes "formulate the discourse of the New Historicism as a 'montage of historical attractions,' to adapt Eisenstein's famous phrase, in which extreme theoretical energy is captured and deployed, but repressed by a valorization of immanence and nominalism that can either look like a return to the 'thing itself' or a 'resistance to theory'" (190). Later Jameson adds "We have already noted the tendency of a homologizing method to pose, implicitly or explicitly, some kind of 'structure' that would justify the analogizing juxtaposition of the various raw materials or docu-

ments and provide the form or terms by which they can somehow be affirmed to be 'the same.' . . .This common 'structure' remains a transcendent mechanism which never completely folds back into any one of its surface manifestations, no matter how privileged, and therefore never utterly vanishes into the immanence of ethnographic description" (211). In terms of my comments on *The Education*, the New Historicist method appears to enact conversions, equivalences by a valorized "occult" or "transcendent" mechanism—that is, an untheorized mechanism, which is nonetheless a theory.

16. The sublime object somehow represents the very un-representability of the Thing-in-itself that lies beyond it. In Kant's terms, "even if the Ideas of reason can be in no way adequately represented, they can be revived and evoked in the mind by means of this very inadequacy which can be presented in a sensuous way" (106). This is also the logic of the Virgin, whose "unity" stands in for a multiplicity extending far beyond her.

17. Hertz's argument relies to some extent on McFarland's terms. Hertz reads McFarland's self-contradictions—the introduction of more "reading" material into his paper at the moment when he is stating the crux of his own "thinking"—as compensatory moves of the threatened subject, who "cannot simply think but must read the confirmation of its own integrity, which is only legible in a specular structure, a structure in which the self can perform that 'supererogatory identification with the blocking agent'" (53, 54–55). The terms "thinking" and "reading" are, by this point in Hertz's essay, so heavily associated with the specific case of McFarland that the sentence above appears to have less force as a general theoretical statement than as a description of one instance of compensation.

18. The same sort of evocation of mechanism is present in Hertz's more classical example of the "Bartholomew Fair" section of *The Prelude*. Hertz calls Bartholomew Fair "Wordsworth's computer"—a "scale model of urban mechanisms" (55). "Representation comes to seem like the very pulse of the machine" (57), which is itself both a threat to the poet and something desired, necessary for him to do "his work."

WORKS CITED

Adams, Henry. *Henry Adams: Novels, Mont Saint Michel, The Education*. New York: Library of America, 1983.

Banta, Martha. "Being a 'Begonia' in a Man's World." *New Essays on* The Education of Henry Adams. Ed. John Carlos Rowe. Cambridge: Cambridge University Press, 1996. 49–86.

Beard, George M. *American Nervousness*. New York: G.P. Putnam's Sons, 1881.

Beard, George M., and A. D. Rockwell. *A Practical Treatise on the Medical and Surgical Uses of Electricity*. 2nd ed. New York: William Wood & Co, 1875.

Blackmur, R. P. *Henry Adams*. New York: Da Capo, 1980.

Cox, James M. "Learning through Ignorance: *The Education of Henry Adams*." *Sewanee Review* 88 (1980): 198–227.

Hayles, N. Katherine. *Chaos Bound: Orderly Disorder in Contemporary Literature and Science*. Ithaca: Cornell University Press, 1990.

Hertz, Neil. "The Notion of Blockage in the Literature of the Sublime." *The End of the Line: Essays on Psychoanalysis and the Sublime*. Baltimore: Johns Hopkins University Press, 1985. 40–60.

Jameson, Frederic. *Postmodernism, or, The Cultural Logic of Late Capitalism*. Durham: Duke University Press, 1991.

Kant, Immanuel. *Critique of Judgement*. Oxford: Oxford University Press, 1964.

Lutz, Tom. American Nervousness, 1903: An Anecdotal History. Ithaca: Cornell University Press, 1991.

Lyon, Melvin. *Symbol and Idea in Henry Adams*. Lincoln: University of Nebraska Press, 1970

Marcell, David. "Henry Adams's Historical Paradigm: A Reexamination of the Major Phase." *American Character and Culture in a Changing World: Some Twentieth Century Perspectives*. Ed. John Hague. Westport, CT: Greenwood, 1964.

Martin, Ronald E. *American Literature and the Universe of Force*. Durham: Duke University Press, 1981.

Marx, Leo. *The Machine in the Garden*. New York: Oxford University Press, 1964.

Rabinbach, Anson. *The Human Motor: Energy, Fatigue, and the Origins of Modernity*. New York: Basic Books, 1990.

Rowe, John Carlos. *Henry Adams and Henry James: The Emergence of a Modern Consciousness*. Ithaca: Cornell University Press, 1976.

Seltzer, Mark. *Bodies and Machines*. New York and London: Routledge, 1992.

Tichi, Cecilia. *Shifting Gears: Technology, Literature, Culture in Modernist America*. Chapel Hill: University of North Carolina Press, 1987.

Trachtenberg, Alan. *The Incorporation of America*. New York: Hill & Wang, 1982.

Westervelt, Linda A. "Henry Adams and the Education of His Readers." *Southern Humanities Review* 18 (1984): 23–37.

Žižek, Slavoj. *The Sublime Object of Ideology*. New York and London: Verso, 1989.