



**between science and literature
an introduction to autopoetics**

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foreword by n. katherine hayles

The Order of Things in a Nutshell

Thinking in terms of *observation* cannot help bringing the old baggage of metaphors of vision, especially in positing distance between seer and seen (sometimes in order to claim some kind of objectivity) and by implying that what observers do is hang back and make representations (for instance, world pictures and maps) rather than, more fundamentally, engaging and being engaged by the world. The whole thrust of Luhmann's theorizing is to jettison this baggage, but even when the vision metaphor is used "under erasure" (that is, with implicit ironic quotation marks around it), success can be only partial.

The metaphor can be found pushing up against its limits in Wolfe's characterization of the way observers are "joined to the world and to each other by their constitutive but different blindspots" (70). In fact, a blind spot is located at a juncture Wolfe omits: it is the place where a patchworked organism is *joined to itself*. We are not just big eyeballs. Relativizing the vision metaphor a bit to take an already plural and non-self-identical self into account, one could say that the fruits of second-order observations can be tasted, smelled, or touched even when not seen, that witness is *borne*, embodied, and acted out even while fully denied.

Epistemology is the study of knowledge; an *episteme* is a paradigm or a kind of logic—or more descriptively a kind of *ecology*—that governs various forms of knowledge at a specific time and place. Foucault's *Order of Things* traces shifts in the Western episteme since the seventeenth century, focusing on the interrelated histories of linguistics, biology, and economics. Of course, to call the interrelations among kinds of knowledge an *ecology* is to put an organicist spin on the story; at one time Foucault preferred to call what he was doing an *archaeology* of knowledge, though his metaphors in the *O.T.* tend to be more consistently *geological* (for example, in representing knowledges as deposits that displace and metamorphose previous strata). These metaphors help convey the sense of impersonal processes at work over very large scales of time and place. It may also be helpful to think of epistemic shifts in analogy with more clear-cut events: I like to use as such an analogy the "great vowel shift" in medieval English, in which the pronunciation of vowel sounds shifted, as if each were yoked in tandem, over the course of several centuries, leaving only traces of earlier pronunciations *fossilized* in English spelling. The point of this analogy is that nobody (and especially no governing body as such) *decided* to change vowel sounds; it was instead an *emergent* phenomenon. Nor did people seem to *hear* the sounds changing: the shift, we might say, was a historical phenomenon of too long a wavelength for human ears to hear and thus had to be *discovered* and reconstructed well after the fact. This analogy also helps show how we might remain entirely unaware of the most fundamental and sweeping changes in how we think, which happen across variously linked scales from the most minute to the most total—that is to say, they happen *fractally*.

Once upon a time (Foucault's account begins), in Europe during the Renaissance, knowledge was based on *resemblances*. Some famous examples of such a logic can be found in what has since been called *homeopathy* (the doctrine that cures work by virtue of resemblances between medicine and symptom) or in the Renaissance paradigm of the "Great Chain of Being" (the set of interlocking resemblances supposed to rule between microcosm and macrocosm, particularly the common hierarchical structures supposed to order the individual, the family, the commonwealth, and the cosmos). Where modernity would come to see the most fundamental differences, the Renaissance saw resemblances—for example, *between the sexes*, which were conceived as different not in kind but in degree: women were merely "cooler" and less perfect men, men turned inside out; ova were simply female sperm, and even menstruation was merely a special case of the many ways all bodies purge excesses of various fluids, which themselves were not fundamentally different but capable of transmuting into each other. Perhaps most fundamentally, modernity has displaced the resemblance between words and things, so for "we moderns" it is this resemblance that most characterizes the Renaissance in its difference from us—and notice that this differentiation of modernity from the Renaissance illustrates how much more definitive differences are than resemblances for modern knowledge!

For Renaissance knowledge, "the face of the world is covered with blazons" (Foucault, *Order* 27); nature is a book of these emblems to be read and interpreted, primarily according to the resonances or sympathies among things, where *sympathy* indicates a demonstrable kinship (that is, a kinship "on the face" of things, the real mark of a common *signature*), and signs signify by virtue of their actual resemblance to what they signify. For moderns and maybe even more for postmoderns, this epistemological regime tends to look like it treats both words and things *as words*, or as some hybrid between them that is closer to words than things—for example, as *hieroglyphs* to be deciphered. The kind of resemblance that seems to be returning or emerging in our time is more inclined to treat words and things *as things*, as suggested by an "ecology of discourse."

When a new episteme emerged in the early seventeenth century, knowledge based on resemblance was devalued: it was subsequently the *madman* who saw "nothing but resemblance and signs of resemblance everywhere" or at best the *poet* "who, beneath the named, constantly expected differences, rediscovers the buried kinships between things, their scattered resemblances" (49). Rather than informing all knowledge, similitude becomes a kind of foil, an "undifferentiated, shifting, unstable base on which knowl-

edge can establish its relations, its measurements, and its identities" (68). It is instead "a solid grid of kinships that defines the general configuration of knowledge in the Classical age" (74). Whether the object of knowledge is the economy, living creatures, or language, it is defined by a classical knowledge whose mode is *representation* and whose icon is the *table*, which embodies the notion that

all wealth is *coinable*; and it is by this means that it enters into *circulation*—in the same way that any natural being was *characterizable*, and could thereby find its place in a *taxonomy*; that any individual was *nameable* and could find its place in an *articulated language*; that any representation was *signifiable* and could find its place, in order to be known, in a *system of identities and differences*. (175; emphasis in original)

With the rise of the modern episteme in the late eighteenth century, classical knowledge was devalued in turn. The most characteristic dream of the classical episteme—that of an ideal language whose words and grammatical categories would perfectly and logically mirror the real categories and relationships of things in the world—came to be the province of cranks and madmen (while scientists, representing the most privileged kind of modern knowledge, remained invested in this dream *as a dream*). Modern knowledge invents *depth* and *density*, pushing the links and articulations among things to a place "outside representation, beyond its immediate visibility, in a sort of behind-the-scenes world even deeper and more dense than representation itself" (239). This "obscure verticality" dictates that "from now on things will be represented only from the depths of this density withdrawn into itself" (251). To take one example, whereas classical medicine sought to *taxonomize* diseases exhaustively in their intricate interrelationships, modern medicine *anatomizes*, seeking the hidden structures and origins of diseases in the depths of the body and the germs that attack it. Meaning in language must be sought in the depths as well: "Philology, as the analysis of what is said in the depths of discourse," became "the modern form of criticism" (298). It is as if the *width* of connections and tangled interrelationships that characterized classical words and things had been forcibly compressed so that all words/things became narrow and discrete but deep (as specialized knowledge is often said to be) and where the depths of an object or a self or a discipline are also the depths of its own history, the shapely trajectory of its own unique evolution and growth. This is part of the package deal modern knowledge offers (and in Foucault's account it is an offer you can't refuse): give up a wide world of interrelations (which come to seem unmanageably messy and sprawling

anyway) but gain a depth and a discrete history and a self. *Give up the world, say the devils and angels of modernity, and gain a soul.*

The modern displacement of representation tends to devalue literature: "Literature becomes progressively more differentiated from the discourse of ideas, and encloses itself in a radical intransitivity," often coming to seem more fundamentally an escape from or "ludic denial" of mainstream values than the instrument of their circulation. Literature becomes *self-referential*, "merely a manifestation of a language which has no other law than that of affirming—in opposition to all other forms of discourse—its own precipitous existence; and so there is nothing for it to do but to curve back in a perpetual return upon itself; as if its discourse could have no other content but the expression of its own form" (300). Although self-referentiality as such was attributed primarily to literature, a similar closure affects other disciplinary objects, such as "living beings, objects of exchange, and words, when, abandoning representation, which had been their natural site hitherto, they withdraw into the depths of things and roll up upon themselves in accordance with the laws of life, production, and language" (313). Related organizing principles include *organicism* in biology and in literature (where *organic form* is one that emerges from the complex internal structures of the content rather than being imposed from outside) and *self-regulation* in such diverse sites as the institutional structures of professions and disciplines, machine design (the early steam engine's "governor" is a famous example), and the ideally self-regulating modern self itself.

How do such thoroughgoing changes in knowledge happen? Classical Marxism regarded knowledge (including ideology, theory, and philosophy) as part of a *superstructure* built on the foundation of a particular kind of economic *base* whose broad outlines (and whose changes) it echoes and elaborates. Foucault and others tended to treat knowledge as a semiautonomous realm in its own right or (in his later work) knowledges as parts of heterogeneous patchworks of ideas, practices, and institutions. Whichever model you prefer, imagine the whole assemblage being riven into realignment by some unspecified combination of slow tectonic shifts and sudden earthquakes. Some knowledges and ways of knowing will be abandoned, but most will be buttressed and retrofitted as long as possible (look over there, where priests and professors and politicians are holed up anxiously in their leaning towers!); some crumble altogether, but more often a wall or two collapses and perhaps the structure is cobbled together with another.

If it were possible to study the faults and stresses and anticipate the realignments well enough, would it be possible to find the epistemological

equivalent of *the Nevada seaside*, some now disregarded way of thinking that will come to be repositioned as supremely valuable? Foucault was quite cautious—one might even say *coy*—when it came to forecasting such realignments: "Nothing can tell us in advance on which side the through road lies" (339). Predicting earthquakes is an unreliable business, but the lack of a transcendental vantage point is really not the problem, since after all (to paraphrase Blake), the mole and not the eagle is in touch with what's happening underground. Or to change the metaphor slightly, it is not *in spite of* our embeddedness in the web of forces that we study but *because of it*—because it pulls on us from various directions—that we can (like spiders) have some sense of what may be happening and where, even if "we can at the moment do no more than sense the possibility" (387) of large-scale epistemological change in the making.

Foucault's story of the emergence of the "human sciences"—and in particular of "man" and humanism as the object of study they constituted—ends with the suggestion that if the "fundamental arrangements of knowledge" were to "crumble, as the ground of Classical thought did, at the end of the eighteenth century, then one can certainly wager that man would be erased, like a face drawn in sand at the edge of a sea" (387). Again as in geology, we may be uncertain about exactly where and when big earthquakes will come, but we should at least respect the certainty that they *will* come. When it comes to academic disciplines, one might ask who is crazier, those who stake out land in Nevada for future seaside resorts or those who persist in buying bloated mansions on muddy slopes in Los Angeles?

For Foucault anyway, questions about major reconfigurations of knowledge "must be left in suspense, where they pose themselves, only with the knowledge that the possibility of posing them may well open the way to future thought" (386)—as if a geologist drilling for core samples might trigger an earthquake. Questions about knowledge and language can never be objective observations from safely outside the system in question, just as attempts to *change* knowledges must be *intraventions* and infiltrations. Foucault's mode of doing this is typically to rehearse and rerehearse what a given episteme dictates, actually *to speak in the voice of the episteme* in question with a kind of flattening dramatic irony that distances us from its pronouncements, to act as a kind of epistemic embalming fluid. Historicizing, in this model, is not so much the attempt to ascertain what happened as it is the attempt to *put behind us* the formation in question, to *make it history* in the colloquial sense of relegating it to the past, and especially to neutralize, to undermine, to euthanize a moribund regime of knowledge.

Hegel famously put it this way: “When philosophy paints its gray on gray, then has a form of life grown old, and with gray on gray it cannot be rejuvenated, but only known; the Owl of Minerva first takes flight with twilight closing in.” This means that knowledge of what makes the current episteme tick would necessarily be marginalized, inadmissible. In fact (to develop the metaphor), owls do “spend the daytime in quiet, inconspicuous roosts”—rather like where we are now, dear reader, in this quiet and inconspicuous book, or so I want to say with a combination of humility and grandiosity. But Hegel’s metaphor depends on a very limited kind of “serially monogamous” history in which one very different age or “form of life” completely succeeds another. Foucault’s single-file parade of epistemes is similarly limited: although there is at least some plurality in layering (the new episteme is built on the ruins of the old), it is subordinated to a rigid hierarchy (in which one and only one episteme rules at any time). But what if more than one “form of life” is alive at any time, and what if they are more like species than individuals, not usually dying once and for all but mutating and coevolving? Philosophical knowledge might still be said to reside in the margins (the transitions and interstices between and among species), but the margins would at least be all over the place. Philosophy would no longer fly or stand, like a bird of prey, talons clutching the flesh of a dying age, but would ride, more or less a part of every transaction, like a ubiquitous virus. Like the angel in the film *Wings of Desire*, it would have to give up its transcendent perspective for a lowlier and more transient but more participative role.

ASIDE

Kuhn’s Brilliant Mistake. Another famous version of a linear succession of frameworks is Thomas Kuhn’s 1962 *The Structure of Scientific Revolutions*. Kuhn’s frameworks are *paradigms* rather than epistemes, and they govern work in particular scientific fields rather than whole knowledge systems, but Kuhn and Foucault (at least when he wrote *The Order of Things*) both favored a “serial monogamy” of frameworks with rather abrupt change from one to another, along with a kind of perfect epistemological self-containment. This last feature is known in science studies as “internalism”: treating science as if it cycles through its own changes for its own internal reasons, apart from the other histories in which it is embedded.

Kuhn’s account of the history of science features long periods of stability in which ideas and experiments can be developed *within* a given paradigm—periods of “normal science,” as he called it—punctuated by scientific revolutions in which the old paradigm is stretched to the breaking point and a new paradigm emerges.

Most people understand *paradigm* as a kind of crucial metaphor or central idea (for example, the old solar system model of the atom), but it can also be interpreted more broadly as a common ideology, or more materially as a shared set of institutional structures or procedures, or as a fuzzy set of all of the above, so long as it definitively organizes knowledge in the field in question. Kuhn shares with structuralism more broadly the tendency to emphasize a kind of snapshot account of structure so exclusively as to be incapable of accounting for time and history, making change seem by comparison chaotic, aberrant, or beside the point. Kuhn’s exaggeration of the monolithic stability of paradigms melodramatizes the revolutionary sweep of their shift; this was the same song Foucault sang about epistemes (in other words, “the bigger they are, the harder they fall”). Most scholars seem now to agree that this is not a very good account of how things happen in science and that the fuzzy set of metaphors, practices, apparatuses, and institutions is yoked together in many ways but does not march in lockstep (see Galison). Philosopher Paul Feyerabend, who was especially grumpy about Kuhn and his followers, put it this way: “Whenever one tries to make his ideas more definite one finds that they are *false*. Was there ever a period of normal science in the history of thought? No—and I challenge anyone to prove to the contrary” (160).

I am more inclined to think that the failings and fudgings of *The Structure of Scientific Revolutions* (and of structuralism broadly) must be part of a package deal, the blind spots with which it had to pay for its insights about the contingency of scientific knowledge and the recognition that any given framework enables certain kinds of ideas at the expense of excluding others—Kuhn’s own framework being no exception. After all, even for its most conservative and progressivist boosters, science itself is arguably a series of just such brilliant mistakes, since to be scientific at all an idea must be falsifiable and since arguably every past scientific idea or theory has been falsified or displaced or relativized every bit as much as we should hope (for the sake of progress) our current ideas will be. But the question of how Kuhn managed to be so smart and so dumb as to make his brilliant mistake and how he stuck to it (and how *it stuck*) is only more compelling the wronger he was. Kuhn himself identified (at least in retrospect) what amounts to a kind of “eureka” moment in his studies of Aristotle’s physics, in the late 1940s—the paradigm shift from which his paradigm paradigm emerged. His question about Aristotle was roughly the same as ours about him: how could Aristotle have been so smart and so dumb? Kuhn thought he found the answer when he identified in the notions of *quality* and *position* what amounted to a governing principle (that is, a kind of protoparadigm) in Aristotle’s thinking: “Position itself was, however, a quality in Aristotle’s physics, and a body that changed its position therefore remained the same body only in the problematic sense that the child is the individual it becomes.

In a universe where qualities were primary, motion was necessarily a change-of-state rather than a state" (*Essential Tension* xi–xii).

Ideas that had seemed out of left field in Aristotle fell into place when Kuhn grasped the centrality of this notion, and in the process, he reports, "I did not become an Aristotelian physicist as a result, but I had to some extent learned to think like one" (xii). This kind of formula underlies the notion of progress in relation to the past: that we can come to understand other frameworks but not be bound by them, since our ability to shift frames makes our metaframeworks broader, higher, better. But to the contrary, it seems as if Kuhn *had indeed become an Aristotelian without knowing it*, at least insofar as what he identified as the central brilliant mistake of Aristotle's physics turns out to be pretty damn close to his own central brilliant mistake about paradigm shifts: the fetishization of position (that is, structure) as a primary quality makes motion or change seem revolutionary and all-encompassing. The uncanniness of this is captured by an old joke:

Two Jews walk by a Christian church with a sign promising one thousand dollars to new converts. One wants to go in to see if he can collect the money by making an immediate, superficial conversion. In spite of his friend's objections, he goes in. His friend waits outside. One hour passes, then two, then three. Finally he emerges, and his friend asks (excitedly), "What happened—did you get the money?" and he responds (in a voice heavy with contempt): "*Is that all you people ever think about?*"

The joke suggests that a framework is a package deal and that you can't "get it" without being remade by it, without being subject to it and to its blindnesses along with its insights, its otherings and exclusions (in the case of the joke, its anti-Semitism). The joke is a salutary corrective to the presumption that one could occupy a privileged "metaframework" position, although it does manage to situate itself as "meta-anti-Semitic." But in the process it also makes frameworks all the more monolithic and conversion all the more revolutionary. To begin to suggest an alternative to the conversion model, it seems likelier that Kuhn was already seeing Aristotle through his own protoparadigmatic lenses to begin with, and that even more thoroughly in retrospect, after fully developing the paradigm paradigm, he saw his earlier study of Aristotle as more of a kind of conversion experience in terms of the "paradigm shift" paradigm. This account suggests that a framework is a kind of self-organizing system, a kind of whirlpool in linear time, not something that simply shifts from one to another at a given point but one that has to be ongoingly produced and reproduced and is both stable and unstable for this reason, like a spinning top. This also shows why the statically structuralist metaphor of the "framework" can get us only so far before it has to be pushed aside, like Wittgenstein's ladder.

In any case, historicizing at its best is driven not to try to blow up epistemes and start over but to salvage and use some of what the current or passing episteme has relegated to its margins. Theoretical questions are thus potentially transformative and *performative*, participating in shaping what they study. I will argue later that performativity itself can be thought of as an older kind of knowledge displaced by modernity's fixation on objectivity but now being salvaged from modernity's ruins, something like the figurines of their own gods that the Aztecs hid inside hollow Christian statuary that their conquerors forced them to make and to worship.

What is a performative question? To use a rather homely example, it is as if a sense of growing intimacy between two people getting to know each other were to lead one to ask the other, pointedly, "What is happening between us?" Though phrased as a request for information, the question participates fully in—and in fact *precipitates*—the object of its inquiry; the *meaning* of the question is *what it makes happen*, and who or what is *us* (friends? lovers? what?) hangs in the balance. It is clearly part of an experiment, a trial balloon, but neither the question nor any answer to it could possibly be disinterested, or, rather, it is clear that disinterestedness on the part of the questioner or respondent will also shape in very particular ways what is happening! It is important to notice that the question's participation does not *invalidate* the inquiry: on the contrary, that is what activates it at all, charging it with such interest. The philosopher of science Isabelle Stengers makes the case that it is precisely their *interest* that makes scientific questions work (83–84), where the *inter* in *interest* refers to the betweenness—the relationality—of the questioners and the things in question. One might say (dear reader!) that "what is happening between us" is *the* interesting question.

My book begins, in several senses, where Foucault left off *The Order of Things*, which is in any case the *Old Testament* of the Foucauldian faith. Foucault himself went on to revise the sense of the *episteme* as a closed set of interrelations—a plate tectonics of knowledge as hyperformalized as a kind of four-dimensional Rubik's Cube. In his later works Foucault continued to explore the interrelations of knowledge and power but less as abstract systems and more as *embodied* in practices and institutions and their particular histories and discourses. This shift in Foucault's work—from closed to open systems, one might say—characterizes a more general transition from structuralist to poststructuralist theory (see chapter 13 for an account of how autopoietic systems can be understood only as open *and* closed). In retrospect it seems now that it is the *airlessness* of the theoretical framework of the closed system itself (as much as it is the history presented therein) that gives the sense of impending change such utopian and apocalyptic sublim-

ity—the sense that the angel that had stood guard at the tree of life is about to leave his post, as if the theorist were opening up a translucent rift in time through which he was able only to glimpse, pointing us toward a promised land that he could never hope to enter, a star beckoning us onward to a place where words (now relegated to *semantics*) and things (now situated in the realm of being or *ontology*) will rejoin: “In the firmament of our reflection there reigns a discourse—a perhaps inaccessible discourse—which would at the same time be an ontology and a semantics” (Foucault, *Order* 208).

More than three decades after *The Order of Things*, it is much easier to make the case that we have entered the promised land of the new episteme and, accordingly, much harder to sustain its utopian sublimity, especially given the way it is being sold to us by its many boosters and “scientific salesmen.” Like the United States, the democratic promise of the episteme will have to be worked and tricked and wrung from it.

Artistic Interlude I: The Sick Mind Continues to Infinity

It appears that certain aphasiacs, when shown various differently coloured skeins of wool on a table top, are consistently unable to arrange them in any coherent pattern. . . . Within this simple space in which things are normally arranged and given names, the aphasiac will create a multiplicity of tiny, fragmented regions in which nameless resemblances agglutinate things into unconnected islets; in one corner, they will place the lightest-coloured skeins, in another the red ones, somewhere else those that are softest in texture, in yet another place the longest, or those that have a tinge of purple or those that have been wound up into a ball. But no sooner have they been adumbrated than all these groupings dissolve again, for the field of identity that sustains them, however limited it may be, is still too wide not to be unstable; and so the sick mind continues to infinity, creating groups then dispersing them again, heaping up diverse similarities, destroying those that seem clearest, splitting up things that are identical, superimposing different criteria, frenziedly beginning all over again, becoming more and more disturbed, and teetering finally on the brink of anxiety.

—Michel Foucault, *The Order of Things*

Foucault milked the drama of “the sick mind” in implicit opposition to the supposedly stable and normal categories of language, science, and reason. Of course, it is more than a sick mind’s fancy that things are capable of being categorized in all kinds of ways, capable of entering into a range of different and sometimes mutually irreconcilable kinds of relationships with other things. In fact, this capacity seems to be as fundamental to the things of physics and chemistry as it is to language, culture, and knowledge and to the webs of linkages and disjunctions between and among them. Clearly, though, different orderings of things do have different statuses in different contexts, even if this observation just raises the question of how many

ways the orderings can themselves be ordered (without suggesting whether more or less stability can be manufactured at such a metalevel). You might think that the recognition that different orderings and metaorderings are possible would be especially obvious when examining a broad historical or cross-cultural range; in these cases we have come to expect (thanks a lot to structuralism) irreconcilable differences in how things are engaged, ordered, and valued. It is important to keep in mind, though, that even such differences between cultures and epistemes are mostly far from obvious and have proved to require very careful unearthing and, furthermore, that they are so volatile that engaging them cannot be as simple as producing a metacontext that contains them all: it turns out to be more like a process that changes everything. It is just as important to recognize (as poststructuralism has been better at doing) that a single ordering cannot maintain a seamless and uncontradictory hegemony even at a single historical moment or in a single culture or knowledge system, even if the fiction that it does so may be a very powerful one.

Where certain categorizations become hegemonic, others will be more or less unintelligible or devalued. Foucault argued that when *difference* became the ruling logic, *resemblance* became the province of mere poetry or even of "the sick mind." This became abundantly clear to me in a new way as I began rearranging my library, on a whim, to produce something like poetry or art merely by clustering books according to grammatical resemblances among their titles, as follows:

Chaos (Gleick)
Power (Dowding)
Nova (Delany)
Genome (Ridley)
Zipper (Friedel)
Dracula (Stoker)
Maitreya (Sarduy)
Hysteria (Johnson)
Neveryona (Delany)
Chaosmosis (Guattari)
Neuromancer (Gibson)
Homographesis (Edelman)
Capitalism (Saunders)
Pluralism (McLennan)
S/Z (Barthes)

NASA/Trek (Penley)
Poetics/Politics (Kumar)
Feminism/Postmodernism (Nicholson)
Culture/Metaculture (Mulhern)
Disorder and Order (P. Livingston)
Pride and Prejudice (Austen)
Romanticism and Consciousness (Bloom)
Nietzsche and Metaphor (Kofman)
Beantimes and Lifetimes (Traweek)
Stars and Planets (Ekruitt)
Genes, Peoples, and Languages (Cavalli-Sforza)
Race, Class, and Gender . . . (Rothenberg)
Hustlers, Beats, and Others (Polsky)
Simians, Cyborgs, and Women (Haraway)
Money, Language, and Thought (Shell)
Romantics, Rebels, and Reactionaries (Butler)
Naturalism, Evolution, and Mind (Walsh)
Deceit, Desire, and the Novel (Girard)
Capitalism, the Family, and Personal Life (Zaretsky)
Troubadours, Trumpeters, Troubled Makers (Lee)
Romanticism, Nationalism, and the Revolt against Theory (Simpson)
Gossip, Grooming, and the Evolution of Language (Dunbar)
*Cinema, Theory, and Political Responsibility in
 Contemporary Culture* (McGee)

Positions (Derrida)
Labyrinths (Borges)
Mythologies (Yeats)
Awakenings (Sacks)
Illuminations (Rimbaud)
Investigations (Kauffman)
Disidentifications (Muñoz)
Anti-Semitic Stereotypes (Felsenstein)
Multi-Cultural Literacy (Simonson and Walker)
Middle English Lyrics (Luria and Hoffman)
Molecular Revolution (Guattari)
Monstrous Imagination (Huet)
Satanic Panic (Victor)
Silent Poetry (Mirzoeff)
Stranger Music (Cohen)

Literary Theory (Eagleton)

Natural Supernaturalism (Abrams)
Tennyson's Poetry (Tennyson)
Everybody's Autonomy (Spahr)
Hamilton's Blessing (Gordon)
Pandora's Hope (Latour)
Frankenstein's Children (Morus)
Queer Acts (Muñoz and Barrett)
Second Skins (Prosser)
Sapphic Slashers (Duggan)
Posthuman Bodies (Halberstam and Livingston)
Immigrant Acts (Lowe)
Primate Visions (Haraway)
Symbolic Economies (Goux)
Wuthering Heights (Brontë)
The Black Jacobins (James)
The Black Curtain (Woolrich)
The Persistent Desire (Nestle)
The Female Man (Russ)
The Romantic Ideology (McGann)
The Human Condition (Arendt)
The Postmodern Condition (Lyotard)
The Einstein Intersection (Delany)
The Unabomber Manifesto (Kaczynski)
The Literary Absolute (Lacoue-Labarthe and Nancy)
The Wittgenstein Reader (Wittgenstein)
The Lesbian Body (Wittig)
The Accursed Share (Bataille)
The Many-Headed Hydra (Linebaugh and Rediker)
The Complete English Poems (Donne)
The Nazi War on Cancer (Proctor)
The Norton Anthology of English Literature (Abrams)
Arrow of Chaos (I. Livingston)
City of Quartz (Davis)
Ecology of Fear (Davis)
Anatomy of Criticism (Frye)
Reproduction of Mothering (Chodorow)
Signs of Life (Sole and Goodwin)
Spirits of Fire (Rosso and Watkins)

Forms of Resistance (Deleuze)

Margins of Philosophy (Derrida)
Visions of Excess (Bataille)
People of the Book (Halbertal)
Epistemology of the Closet (Sedgwick)
The Feast of Love (Baxter)
The Well of Loneliness (Hall)
The Rhetoric of Romanticism (de Man)
The Troubadour of Knowledge (Serres)
The Subject of Semiotics (Silverman)
The History of Sexuality (Foucault)
The Philosophy of Biology (Hull and Ruse)
The Taming of Chance (Hacking)
The Botany of Desire (Pollan)
The Moment of Complexity (Taylor)
The Tales of Canterbury (Chaucer)
The Sextants of Beijing (Waley-Cohen)
The Order of Things (Foucault)
The Disorder of Things (Dupré)
The Evolution of Physics (Einstein and Infeld)
The Life of the Cosmos (Smolin)
The Birth of the Clinic (Foucault)
The Politics of the Family (Laing)
The Invention of Modern Science (Stengers)
The Practice of Everyday Life (de Certeau)
The Making of the English Working Class (Thompson)
The Simple Art of Murder (Chandler)
The Traditional Theory of Literature (R. Livingston)
The Elementary Structures of Kinship (Levi-Strauss)
The Presentation of Self in Everyday Life (Goffman)
The Four Fundamental Concepts of Psycho-Analysis (Lacan)
The Politics of Culture in the Shadow of Capital (Lowe and Lloyd)
War in the Age of Intelligent Machines (de Landa)
Gender and Sexuality in Twentieth-Century Chinese Literature and Society (Lu)
Women in the Eighteenth Century (Jones)
Keywords in Evolutionary Biology (Keller and Lloyd)
The Monster in the Machine (Hanafi)
Observations of Modernity (Luhmann)

Exercises in Style (Queneau)
Scaling in Biology (Brown and West)
Bastard Out of Carolina (Allison)
Aliens in America (Dean)

Reading through the rearranged titles reveals surprising consistencies (for example, the way *threeness* in titles seems to function as the sign of plurality in interrelation) and surprising inconsistencies (for instance, the ease with which couplings signify similarity or difference, the unease of the subordinations enacted by modifiers and possessives, the erratic orbit of *of*), along with variously promising ad hoc juxtapositions. The rearrangement magnifies crosscurrents and undertows in the otherwise regular flow of grammar and thus may induce a sense of the underlying turbulence of knowledge and language. I have to admit that just having the books on my shelves in this order feels like a kind of silent rebuke, a constant low-level disturbance, like having an epistemological ghost or alien in the room.

Since art can work with what is abjected by hegemonic categories, it is easy to make epistemological art by deploying grids and combinatories that play with similarity and difference. Here are just a few projects using everyday things around the house (Michel Foucault meets Martha Stewart):

- * Make a grid of twelve-inch squares on your wall, with small nails at the intersections. Hang small objects of approximately the same size on the nails, each as different from each other as possible (for example, a book, a wine glass, a photograph, and so on).
- * Assemble a group of very different objects and spray paint them all uniformly white.
- * Affix labels to a cluster of objects, making the descriptions a mix of congruent and incongruent categories (such as “fork,” “gift from Mother,” “made of wood,” and the like).
- * Using strings, grid out a room into twelve-inch cubes and cut everything in the room along the grid lines (this will be a major technical challenge). Place the cut-out sections into clear Plexiglas cubes and stack them up slightly off-kilter.

6

An Introductory Vignette

Once upon a time, about a billion years ago (or so geologists say), near the middle of the North American continent, the earth split open and oozed out vast amounts of molten rock. As it cooled, the rock collapsed in on itself and formed a giant depression that would later fill up with the waters of Lake Superior. Millions of small air bubbles petrified in the cooling rock, riddling it with hollow vesicles. Rainwater percolated down and volcanic waters pulsed up through hairline fractures of the basalt. As dissolved minerals leached from the rock crystallized out of the water, they lined the interiors of the vesicles with thin layers, filling the vesicles to form nuggets of the semiprecious stone now known as Lake Superior agate. Because of the abundance of iron, mostly rusty reds tinge the translucent bands of chalcedony (a kind of quartz), often alternating with bands of white and crystal-clear. Long, slow erosion, followed by the advance and retreat of Ice Age glaciers, dislodged the agate nuggets from their basalt matrix, scattered them across the upper Midwest, and buried them again in the soil.

The fast, cold rivers that run into Lake Superior have cut deep gorges through the basalt that slopes steeply down to the lake. The rivers are stained the color of Coca-Cola by the dissolved iron, and the names of the rivers (Manitou, Baptism, Temperance, Knife, Gooseberry) speak of the lives and gods of the Native peoples and the white settlers who displaced them—the alternating bands of red and white that settled around the lake. The stalwart Protestants, whose God was a mighty fortress, called the concentrically banded rocks “fortification” agates. It was meant as a compliment. About a century of farming, quarrying, and road building exposed and scattered the