

The Interdisciplinary Fallacy

THE DESIRE TO OVERCOME BOUNDARIES between disciplines of knowledge and to integrate fields of study is nothing new. Specialization has always had its discontents, and programs for interdisciplinary cooperation or the creation of new disciplines out of the synthesis of old ones are a perennial feature of academic life. In recent years, however, the idea of bringing together fields of study has made a turn to an argument against the very existence of disciplines and departments in the first place. Faced with the task of reforming academic institutions and the work that goes on inside them, many advocates for interdisciplinary approaches have come to maintain that a carved-up institution gets in the way of understanding and fails to serve students. I will argue in this essay that this strong version of interdisciplinarity rests on a mistake: namely, that the separate disciplines have a common object to which they can be reduced or oriented. I will further argue that this mistake extends even to the weaker forms of interdisciplinarity with which we have been long familiar and which have independently compelling virtues. Clarifying this mistake would begin with the recognition that a pluralistic array of disciplines matches up with a pluralistic vision of the world: endocrine cells for the biologists, tectonic plates for the geologists, librettos for the musicologists, and so on. Fixing it would begin with the recognition that the best way to be interdisciplinary is to inhabit one's discipline fully.

The present-day quarrel with disciplines has several varieties: from ostensibly scientific reductionism, to the management theory popular in some corporations, to a historicism that overlaps with both. In what follows, I'll describe these movements one at a time, point to their overlapping premises, and provide some account of what I believe to be their origins and goals. What I have to say would apply, in principle, to the full range of study from art history to zoology. And yet no accounting for such things occurs in the abstract. There is a reason literary scholars so often feel that calls for them to be interdisciplinary are attacks on what they do. Arguments

ABSTRACT This essay examines various arguments against the existence of disciplines, from scientific reductionism to the new corporate university to historicism, and proposes in their place a defense of disciplinary life as an epistemic and ethical ideal. REPRESENTATIONS 140. Fall 2017 © The Regents of the University of California. ISSN 0734-6018, electronic ISSN 1533-855X, pages 67–83. All rights reserved. Direct requests for permission to photocopy or reproduce article content to the University of California Press at <http://www.ucpress.edu/journals.php?p=reprints>. DOI: <https://doi.org/10.1525/rep.2017.140.5.67>.

that undercut the rationale for separate disciplines of study apply unevenly to those with depleted capital.¹ Departments of English are far more often called to explain the reason for their existence and far more often encouraged to coordinate their work with what's going on elsewhere in the academy or the world than departments of electrical engineering. That this is so is hardly surprising, but is worth some thought.

Let me begin with some propositions.²

1. A discipline is an academic unit. It is neither a natural kind nor an arbitrary relic of the history of higher learning. Rather, any given discipline is a body of skills, methods, and norms able to sustain internal discussions and perform explanations in a way subject to its own consensus acts of judgment.
2. The world does not have a single order that is reducible to biology or physics. Some things are known only at their own level of explanation. These things are equally real. I will call this a principle of ontological pluralism.
3. Following from the first and second propositions, disciplines explain the part of the world to which they are directed and with respect to which they are organized. I will call this a principle of explanatory pluralism.
4. Following from the third proposition, no one discipline should be reducible to another because such reduction would eliminate the method and norms adequate to any particular level of explanation.

These propositions add up to an apology for the disciplines and to a way of modeling relations among them. Such modeling would be interactive not reductive, even when relations go very deep.³ It would take as its premise that each discipline has something to contribute to matters of shared concern in virtue of its own methods and objects. For reasons that will become clear, we might consider this model to propose a horizontal relation among the disciplines. For now it is perhaps enough to say that the interdisciplinary fallacy tells us not only about intellectual history and the political economy of the university but also about the nature and organization of what we do.

Reduction and the Unity of Knowledge

A common argument against disciplines opens with the premise that some are closer than others to the fundamental nature of the world. On the more radical end of this view, only the natural sciences get at truths about the world, and other disciplines of study should exist only insofar as they are coordinated with these truths.⁴ Interdisciplinarity in this case means reducing the methods, arguments, and norms of one discipline to the supposedly more grounded picture of another. On its own, the reductionist program is not

new. The logical positivists notoriously attempted to unify science by defining its practice as the making of clear statements about observable phenomena so that the terms and theories of one science might reduce to those of another.⁵ Although the positivists were after a unity of *science* established on logical and public forms of expression, they were more interested in confirming the work done in each science than in eroding the differences between them, and in the main they had little to say about the humanities.⁶ In contrast, present-day reductionism assumes a unity of *knowledge* across the entire academy and asserts the priority of basic science as the foundation of everything else. This new model found its early and decisive articulation in the famed entomologist E. O. Wilson's call for "consilience" among the disciplines of study, a term he retrieved from the nineteenth century to describe a "dream of unified learning" that would "jump together" the fields of knowledge "by the linking of facts and fact-based theory across disciplines to create a common ground-work of explanation."⁷ The idea is that there is ultimately just one object and one method of study: the world of living creatures and the science by which it is explained. We only need some time to get the structure of learning in place so that "sound judgment will flow easily from one discipline to another" and the distance between them gradually disintegrate (10). Considered in this fashion, the history of the disciplines tells a story at once of their lamentably fragmented knowledge and at the same time their steady convergence into a unity, as the insights of the more foundational fields travel upward, limit, and reshape the explanatory frameworks of the fields they support: to wit, biology transforms psychology and psychology the humanities.

As befits this sort of story, the vision can be at times messianic. "We are approaching a new age of synthesis, when the testing of consilience is the greatest of all intellectual challenges" (12). But the ultimate upshot beyond Wilson was to provide a picture of interdisciplinary inquiry that would amount to bringing the claims of the humanistic disciplines to task by testing them against the ostensibly more grounded claims of the sciences, a kind of unity by reprimand. So, for example, in a study that defines consilience as the "vertical integration" of the various disciplines of knowledge, Edward Slingerland argues that "humanists need to start taking seriously discoveries about human cognition being provided by neuroscientists and psychologists," and then adds, "which have a constraining function to play in the formulation of humanistic theories."⁸ In what does this constraining relation consist? The answer will be familiar to anyone acquainted with the usual obloquy: "Bringing the humanities and natural sciences together into a single, integrated chain seems to me the only way to clear up the current miasma of endlessly contingent discourses and representations of representations that currently hampers humanistic inquiry" (9). Time to fix the mistakes literature professors or anthropologists or historians make by reminding

them of what science already knows. This swipe at the humanities is less interesting for the by now hoary content, however, than the imaginary relation among disciplines from which it is derived. On the model of vertical integration, the natural sciences would lie beneath and limit the disciplines built on top of them because they are closer to every discipline's common point of reference. Human behavior explained by sociologists, for example, would refer to and be limited by the explanation of the same behavior studied by biologists. Nearer to home, written or performed phenomena studied in literature departments would refer to and be limited by the cognitive or neural explanation of the same, and so on. The more fundamental the part of the world, the more fundamental its discipline of study.⁹

The mistake is to conceive of the disciplines and the relations among them against a common point of reference: the physical or biological world, explained by basic science. Let me be clear about what I consider this mistake to be. Not a word of the present argument would dispute (or have much interest in probing) the idea that the fundamental constituents of the universe are physical and its units of life biological. But each part of the argument presumes that not every part of the world can have a physical or biological explanation.¹⁰ That is why we have disciplines in the first place, as will be the recurring moral of the story. The behavior depicted in novels, say, cannot be explained in the same way as behavior explained by biology because its actors are not biological creatures. The world made present by poetry cannot be explained by physics or botany because it is not exactly physical, or not in the same way. Reading is not the same as seeing, nor writing the same as thinking. All of that sounds obvious, but the intuitive response that it *is* obvious is itself worth pondering. It tells us something about the foundational norms of our discipline. The reduction of any one of these things to an explanation at some more fundamental level would require it to be separated from its presentation in form (in the case of behavior or worldliness) or its encounter with form (in the case of reading and writing).¹¹ The literary disciplines exist in part to refute that separation and to insist that such things matter. Much the same kind of argument could be run, one imagines, for any other discipline. The difference would only be in the procedures and norms that are violated.

The Managerial University

At its most ambitious, the project of consilience is to narrow and eventually erase the gap between the explanations provided by the natural sciences and those provided by the humanities, and it thinks it can do so by holding the second accountable to the first. The objects of humanistic

knowledge remain, on this view, but their explanations become subfields of other more foundational disciplines.¹² This sort of vision takes place against a certain backdrop. In a widely cited essay outlining the program of consilience, for example, Steven Pinker laments that the humanities have “failed to define a progressive agenda” and are resistant to “innovation” because they have rejected any influence from the sciences.¹³ “Art, culture, and society are products of human brains,” after all, so what’s stopping humanists from putting them all together? Whereas this plea for reform remains consistent with the sort of vertical integration imagined elsewhere, the language in which Pinker frames the reform sets itself apart by squarely addressing the political economy of higher education. Consider this ominous anecdote: “Several university presidents and provosts have lamented to me that when a scientist comes into their office, it’s to announce some exciting new research opportunity and demand the resources to pursue it. When a humanities scholar drops by, it’s to plead for respect for the way things have always been done.”¹⁴ One might naturally respond that the juxtaposition of excitingly new and more of the same is glib and moralizing. But equally germane to my present concerns is that Pinker assumes without argument that value ought to fall on excitement and novelty in the first place, that an institution whose distinctive rationale has been with the continuity of research ought to prefer what he calls innovation.

We can get a clue both to why this preference is assumed and what some of its underlying conditions of possibility are by looking closely at Pinker’s terminology. The valuing of “innovation” is of course a familiar move in the logic and idiom of the so-called information economy, often with a tie to some kind of disruptive rearrangement of traditional practice. On its own, that little keyword would arguably be just a bit of today’s jargon making its way into another plea for bringing the humanities up to speed with science’s view of their shared world. But consider it alongside another term showcased in the final two sentences of the essay: “If anything is naïve and simplistic, it is the conviction that the legacy silos of academia should be fortified and that we should be forever content with current ways of making sense of the world. Surely our conceptions of politics, culture, and morality have much to learn from our best understanding of the physical universe and of our makeup as a species.”¹⁵ While the last sentence repeats the program of consilience in relatively bland language, the penultimate one does something quite different. The calling out of academic departments as *silos* in particular brings a noteworthy bit of contemporary management theory to account for the institution of the university. And that is the point. Pinker piggybacks a manner of envisioning corporate workplace structure onto an argument about the consilience of knowledge. According to management theory, a silo is any “system, process, department, etc. that operates

in isolation from others” and thus prevents the efficient flow of information from one unit of an organization to another.¹⁶ The term of art originated in the effort to define optimal conditions for a company to respond to customer needs and technological change. (The earliest use of “silo” that I’ve found in management-theoretic discourse is 1991, after which point the term gets increasingly attached to walled-off units of finance, research, or sales and increasingly associated with a resistance to disruption, to “customer focused solutions,” and the like.)¹⁷ Silos inhibit flexibility with respect to markets and innovation with respect to products and outcomes. A successful corporation therefore should strive to *break down* its silos and “connect the dots” between previously isolated bits of data or practices of expertise. Workplace teams should be routinely shuffled, even well-functioning products remade.¹⁸

The idea of consilience and the idea of corporate silo busting have some affinities, as Pinker notices and makes use of. Both are opposed to the supposed fragmentation of knowledge; both find a positive dividend in the destruction of (at least some) systems of expertise. There are, however, important differences to observe. On the view of consilience, the fragmentation of knowledge results not from one discipline being “siloed” from another but rather from some being siloed from basic science. The vision is fundamentally hierarchical. The sciences sit at the bottom and provide the limit for what other disciplines may say or do. On the view of management theory, no discipline or kind of knowledge provides the ultimate ground of any other, and indeed the idea of discipline itself seems a kind of relic. The vision is fundamentally flat. Every workplace team traffics in the common currency of information and exists in light of some finite project or task or topic drawn from that currency. The gathering of these divergent agendas under the notion that disciplines should be broken down *and* priority should be given to the so-called STEM fields thus papers over some variations with the declaration of mere innovation, of being the kind of program with which the getting amounts to keeping up with the times.

The analogy of a silo as it appears in management theory and a discipline as it exists in the academy would seem difficult to sustain for very long. Just as the rationale of a corporation is different from that of a university, so is its internal structure. The breaking up of routine and redundancy that might be suited to the creation of social media platforms or the design of medicine to control blood pressure is likely a poor fit for an institution organized to explain the highly differentiated constitution of the world. And yet the language and logic of management theory have recently made considerable inroads into academic life, for reasons that are as simple to explain as they are easy to lament: the corporatization of higher education itself.¹⁹ Here the framework of silo busting has been expressed in (at least) two related

manners: first, a translation of the “customer-focused solutions” model to, as it were, a “student-focused solutions” model and, second, a remaking of established disciplines as open-ended clusters matched to demands that need filling and problems that need solving. Compare a recent article from the *Harvard Business Review* on “Silo Busting: How to Execute on the Promise of Customer Focus” to a recent, much-lauded multi-authored study, *The Undergraduate Experience: Focusing Institutions on What Matters Most*. Here is the business school publication:

To deliver customer-focused solutions, companies need mechanisms that allow customer-related information sharing, division of labor, and decision making to occur easily across company boundaries. Sometimes this involves completely obliterating established silos and replacing them with silos organized around the customer, but more often it entails using structures and processes to transcend existing boundaries.²⁰

Here is the book on educational reform:

Strong institutions align their resources, policies, and practices with their educational purposes and student characteristics, just as well designed courses align goals and assessments. While this may sound self-evident, it can be vexing because higher education institutions often operate as collections of strong but separate programs. Thriving institutions transform silos into systems by supporting cross-unit coordination and by paying more attention to the student experience than to how the organizational chart divides up the campus.²¹

Critics of the corporate university often speak of the pernicious influence of actual companies and bottom-line thinking on the governance and ethos of universities. The idiomatic drift one sees in these two gobbets partakes of the larger phenomenon, to be sure, but it does so particularly around the question of organizational structure. The silo busting designed to match “strategic packages of products and services” to consumers glides over to one designed to match “resources, policies, and practices” to “student experience.” Facilitating this move are several other related keywords in the management-theoretic lexicon: “coordination” is one of the “The Four Cs of Customer-Focused Solutions,” for example, and systems thinking is *the* term of art for understanding the entire corporation as “a learning organization.”²² The busting up of academic disciplines thus involves a transposition at once of a dialect and a plan—a dialect that is a plan—to remake the fine composition of the university itself.

A university without disciplines would still fall into parts, but these would be flexible, open-ended gatherings defined in relation to an evolving market: students and the problem-having, challenge-posing world in which they live. The interdisciplinary ideal is of a *cluster* that might take shape on a given problem or challenge while sharing temporary space on a hiring plan.²³

Whereas silos stake their claim on inherited expertise, clusters draw from topics external to the disciplines that fall under them and eventually disappear. Instances of this thinking and these initiatives are many. In 2013, for example, when Ohio State University announced a \$400 million plan to hire five hundred professors over ten years, they specified that the new faculty would be attached to supradepartmental “discovery themes”: health and wellness, food production and safety, and energy and the environment in the first round; data analytics and materials for a sustainable world in the second, and so on.²⁴ By hiring under these themes, Ohio State would “develop transformational approaches to issues of world-wide significance” and bring together “interdisciplinary teams of experts . . . to cooperate in developing solutions to the long-term issues that touch human beings everywhere.”²⁵ This is a form of reductionism, we might say, but of a somewhat different order than what is on offer from consilience. In both cases, existing forms of expertise are broken down so the university better fits a world the disciplines fail to understand or address. Yet, the unity promised by a cluster derives not from what the world *is* so much as from what the world demands or the challenges it poses. The difference is roughly between an epistemological and an instrumental reason for busting up the disciplines. And with this difference a separate set of norms is breached or tossed aside. These norms will vary, once again, by discipline. With respect to the humanities, the first that one might observe is a norm of deliberativeness much heralded in recent attempts to value the “slow” nature of what we do or to define the literary disciplines in particular around an ideal of attention.²⁶ At ostensible odds with corporate values of efficiency, speed, and responsiveness, the humanities on this view value a contrary pause over what might otherwise get passed over or assimilated, what might require linguistic or historical or formal training of one or another kind. I would draw attention also to a related norm that is perhaps less easy to see and less prone to (pardonable) sanctimony. This is the norm of the open question, a tolerance for letting some difficulties stand once they are articulated. One reason to bust up a silo, as we’ve seen, is that it doesn’t pick up on the “issues” plaguing us or cannot offer a *solution* to problems, from climate change to disease and beyond. The intuitive reflex against this sort of language reveals an important if tacit norm embodied in the fine grain of literary critical writing: the hard-to-shake draw to the intractable, the sense that the goal is to state and explore problems rather than provide solutions to them.²⁷ Not all challenges are new, nor is every problem solvable. But more to the current point, the intuitive resistance to utility derives from the pluralism of disciplines themselves. Ontological pluralism requires that what the literary disciplines study is real and meaningful. Explanatory pluralism requires that disciplines encounter what they study on its own terms.

Together they resist any reduction to problem solving or challenge addressing, if only because considering artworks as significant in their own right often means spelling out the open-ended or unresolved. From the standpoint of pluralism, that's not because uncertainty has a value of its own but rather because this sort of practice is what it means to do the work of the discipline.

The Appeal to History

The several versions of antidisciplinary thinking I've discussed so far carry with them an implied, if thumbnail, history, typically of the splitting of knowledge into arbitrarily partitioned domains in some past and the dawning of their reunion in some present. The historical argument in these cases is not the basis of the critique. Rather, it simply comes along for the ride of what is otherwise an epistemological or instrumental argument: Some older configuration of the disciplines had a mistaken or inefficient picture of the world. Some new configuration should fix it to be more rigorous or nimble. There is, however, another argument against disciplines that makes the historical argument first and derives the epistemological or instrumental conclusion second. This is the argument that disciplines lack a grounding rationale precisely because they are historical, as if to reveal the origins of something were to demonstrate that such a thing had no credibility. Whereas the first two versions of antidisciplinary thinking tend to come from outside of the disciplines that will be reduced or clustered, this argument comes from within their very precincts, from literary study especially. There the effort to reveal the historical nature of the disciplines—their beginning in some period and their evolution over time—serves as a kind of unmasking.

My examples here are two accounts of how the creation of disciplines in the late eighteenth century shapes their status today. The first is Mary Poo-vey's study of the intertwined histories of economics and English, according to which a shared interest in the representation of value gave way by the end of the eighteenth century to separate methods for accounting for money, on the one hand, and literature, on the other.²⁸ Financial instruments and imaginative writing once shared a project "to help people understand the new credit economy and the market model of value that it promoted" (1-2). After the differentiation of the economy into a domain of fact and literature into a practice of fiction, however, new disciplines grew up around both, at once leaving behind a shared origin and moving toward a bifurcated future. Historical analysis thus exposes a suppressed commonality between the disciplines and pulls the rug out from under each: "Naturalization has erased

the *historical relationship* between these two sets of genres; it has effaced the common function that once linked them and the historical process by which they were differentiated and ranked” (4, emphasis in original). This process is “the version of naturalization that produced the modern disciplines of economics and Literary studies,” as each discipline drew attention to “the generic differences between them by differentiating between the modes of knowledge they claimed to produce” (8–9).²⁹ Economics laid claim to such abstractions as price and value understood in the language of mathematics; literary studies arrogated to itself works of the imagination understood through methods of interpretation.

For my current purposes it is less important whether Poovey’s history of economics and literary studies is accurate as a history than whether the verdict it delivers is warranted as a critique. Should the history of a discipline be relevant to understanding its purpose? It’s hard to imagine that it wouldn’t be, since historical analysis should provide some account of where the practices governing any given discipline come from and why institutions around such practices arose. Yet, the claim that origins further matter for the validity of a discipline runs the risk of a genetic fallacy: in this case, the deriving of an epistemic conclusion from a historical premise.³⁰ This risk becomes clear when, for Poovey and of course many others, historicism provides a kind of debunking. “I continue to worry about the implication of many developments within Literary studies,” she writes on the first page of the book, “especially as the discipline is now practiced in U.S. graduate programs” (1). Poovey’s worry is that the formalism allegedly bequeathed to the study of literature has cut the discipline off from other areas of study and left it increasingly irrelevant for the world and its challenges:

If Literary writers had not cloaked their participation in the market economy with an ideology that emphasized originality and textual autonomy, if they had not embraced a version of formalism at the end of the nineteenth century that denies virtually every relation except critique between imaginative writing and the market, and if twentieth-century Literary critics had not incorporated aesthetic formalism into the rarified practice promoted in today’s graduate programs, then imaginative writing of all kinds might now seem to have something to contribute to the discussions about value we need so desperately to restart. (418)

This summation of history’s meaning for the discipline of literary studies is remarkable in several respects. For one, the past subjunctive mood casts the existing practice of the discipline as an unwelcome mistake. History is a melancholy set of bad turns: away from the market, toward rarefied language, into a cocoon at once pristine and otiose. At the same time, every conditional sentence also establishes a wished-for alternative or counterfactual shadow to the existing state of affairs: instead of “aesthetic formalism” and

the rejection of commerce, let us have “historical description” and discussions of value.³¹

The appeal to history carries in its train an unhappy assessment of disciplines in their current state. The norms and methods captured by the term “formalism,” for example, have no explanatory rationale or fit with the world. They are, rather, artifacts of a history that might always have taken another direction. Disciplines have the features they do because of the accidents of their formation; these features ought to be discarded to get at something that is more accurate or useful. The trick lies in the derivation of the second point from the first. Once that is done, the usual language of interdisciplinarity can come in easily. “As a discipline devoted to self-culture and the elaboration of ambiguities, Literary studies seems irrelevant” because it “promotes a model of value that ignores the market” or “because it fails to produce information that one might use” (418). So we are left with two alternatives. Either we grind on in “the academic division of knowledge” or we “find ways to reach beyond the constraints of our highly disciplined vocabularies to create new genres that invite more readers of different kinds, instead of limiting who can read what we write by the language and the forms we use” (419). The regrettable mistake of the disciplines was that they became isolated from each other, and the fallout of that isolation is a lack of relevance. To reach beyond the constraints of one’s discipline is therefore to reach out to another—to find, if you are a literary critic, that you share some project with an economist—and at the same time to reach out to the world beyond the academy itself.

Why is the isolation of one discipline from another also the irrelevance of all disciplines from the world? The answer lies in the larger historical argument. Because disciplines may only be understood in the terms of their emergence, not with respect to an independent or intrinsic rationale, they have no fit to a plurality of explanation. And since they have no fit to a plurality of explanation, their separate existence merely occludes a vocation restored by the project of interdisciplinarity itself. At the end of the day, economics and literary studies really have a common object distorted only by the methods and norms of each. Like other forms of antidisciplinary thinking, therefore, reductive historicism turns at the end to an attack on the internal procedures of the disciplines it examines: in this case, all that would have to be tossed aside were the disciplines actually to speak to each other “in a language comprehensible to all sides” or to “readers of different kinds” altogether (418).

To learn of the origins of one’s discipline is to lose confidence in that discipline. Remnants from some unworkable past, the methods of any given field just get in the way of collaborative exchange and relevance to the world. Clifford Siskin’s recent history of “system” thinking and organization, my

second example, also makes the claim that the modern separation of disciplines has become in our period both the irrelevance of disciplines and the condition for their transcendence.³² Where Poovey looks just at economics and literary studies, however, Siskin sets his sights on nothing less than the entirety of “modern knowledge” itself. Over the same rough chronology that stretches from Francis Bacon to the present, “system” first scales up to organize the whole world into a composite framework and then down to create “the narrow but deep disciplines of modernity” (56). These disciplines become “the narrow but deep fields we inhabit today,” whose viability on Siskin’s account is in terminal crisis (61). So the historical point is to trace how “system” gives rise to academic disciplines over three hundred years of institutional time, and the epistemological point is to draw from the history a picture of how the disciplines are now inadequate to understanding and interacting with the world. The late eighteenth and early nineteenth centuries saw the “narrowing of knowledge into disciplines,” as among other developments, “the first courses in English Literature were taught, the first departments of English were formed, the essay and the review—as well as the periodicals that contained them—assumed their modern forms, and our current disciplinary distinction between the humanistic and the scientific was first instituted” (66, 62). By the time we get to the early twenty-first century, these disciplines have become centripetal venues for professionalism and self-regard (130). The time is ripe then for “a ‘reshaping the basic unit of knowledge’” (228).

The reasons for this reshaping and the design for its completion are equally significant. Siskin takes a page from the book of management theory at the outset, announcing that his study participates in the larger effort to find “alternative arrangements” to the “configuration of narrow but deep disciplines” by “taking a form of inquiry out of its current disciplinary silo so that it can track system’s role in the shaping of those silos” (5). This migration of the corporate idiom into Siskin’s book might explain, then, the singular repetition of the phrase “narrow but deep,” which appears no fewer than nine times as a compound modifier to the noun “discipline.”³³ The insistence of the reiteration underscores the lesson of the history: “system” first shaped the silos it wants to bust open now that disciplines have become a kind of upright hindrance to a flat organization. It wants to bust them open as part of our present moment’s supposed reorganization of knowledge around a type of “information” that reaches from observer to object. Siskin stands this point on a joining of the digital humanities to certain claims of (popularized) computational physics.³⁴ Reduction connects an institution repurposed to analyze information to a world composed at its foundation by that information. History just reveals an academy changing shape to match this picture of things.

Once again, the lesson of history takes aim at method, since the procedures and norms suited to a “narrow but deep” organization of knowledge are a poor fit to the smooth surfaces of present-day managerial culture. In principle, any well-formed skill from any discipline should fall under this complaint, so it is telling that for Siskin as well as Poovey the most prominent negative example turns out to be close reading, the skill that establishes the baseline of competence for work in literary studies.³⁵ For Poovey, the closeness of close reading means that one’s attention falls short of historically responsible inquiry while remaining captivated by what she thinks is a limited preoccupation with a text’s form. For Siskin, close reading just doesn’t work to explain the plenum of texts now served up by new information systems like the minable database. So, in place of our grounding practice, he thinks we should develop and expand the computational methods suited to analyze the aggregate of writing now organized into a new system. For both scholars, the ultimate payoff of getting rid of close reading isn’t to do our work better, however; it is to stop doing work that would ground a discipline at all. The fusion of computational methods with information analyses performed elsewhere in the academy just provides an image and basis of a university without departments. In the face of this bright horizon, the giving up of close reading is something like a ritual sacrifice, a surrendering of one’s own method to bring a future that can’t come soon enough.

Silos and Utopia

The use of history in these arguments against disciplines is curious and revealing. To write the story of how any field of study came to be does not itself compel one to disavow its methods. On the contrary, a positive case could be made that institutions respond over time to the different requirements that various objects of study demand of us. Why turn the story in the other direction? Arguments against disciplines invariably appeal to some reason to feel better about a university that wouldn’t have them, whose units, such as they are, would engage in innovative work, tell important truths, and be relevant to the rapidly changing times. The contrasting picture of the disciplines is typically bleak: slow-moving fortresses resistant to change and speaking only to themselves, books read only by the like-minded, articles read by no one at all. I’ll close, then, by drawing out and drilling down on the reason to value disciplinary thinking as an ethos, a way of life, and an orientation to the world.

One might begin with whatever highly developed skill grounds the discipline of one’s choice. This skill likely serves knowledge or use claims

of various kinds, but just as likely it serves a manner of living or finding a way in the world. To remain with our recent example, the practice of close reading sacrificed by the appeal to history and of little probity or use to reductive analysis or managerial form is for many an expressive kinesis joined up with part of the world. From this kinesis comes a certain pleasure of dwelling, to be sure, of doing one's work well, but also a recognition of the work of others. If critics of the disciplines find themselves telling colleagues to stop what they're doing, advocates for the disciplines tell their colleagues to keep it up despite the difficult times. The implication of all of this, I think, is a several-fold ethics: a way of seeing the world as plural rather than as one thing; a way of valuing the work of others; and a reason to see why that work matters.

Nothing lasts forever. Departments of English or Near Eastern Studies might just go the way of the dodo or videocassette. It is likely that whatever replaces them will have some value. It is certain much will be lost.

Notes

1. On the uneven distribution of cultural capital between the humanistic disciplines and the social and natural sciences, see John Guillory's more-relevant-than-ever *Cultural Capital: The Problem of Literary Canon Formation* (Chicago, 1993).
2. On propositions and critical fallacies, see William Wimsatt and Monroe Beardsley, "The Intentional Fallacy," *Sewanee Review* 54, no. 3 (1946): 468–88.
3. If it is at all convincing, the defense of the disciplines I sketch in this essay should imply as well a program for bringing them together on both finite and long-term plans, in such a way that respects mutual expertise. For more on ontological and explanatory pluralism as both a rationale for literary study and a model for its coordination with other disciplines, see Jonathan Kramnick and Anahid Nersessian, "Form and Explanation," *Critical Inquiry* 43, no. 3 (2017): 650–69, and Anahid Nersessian, "Literary Agnotology," *ELH* 84, no. 2 (2017): 339–60.
4. See, for example, Alex Rosenberg, "Cura Te Ipsum," *3:AM Magazine*, January 2, 2014, <http://www.3ammagazine.com/3am/cura-te-ipsum/>.
5. See Rudolf Carnap, "Testability and Meaning," *Philosophy of Science* 3, no. 4 (1936): 420–71. This is the view dismissed with considerable influence by Willard van Orman Quine as one of the two dogmas of empiricism, namely, "reductionism: the belief that each meaningful statement is equivalent to some logical construct upon terms which refer to immediate experience." See W. V. Quine, "Two Dogmas of Empiricism" (1951), in *From a Logical Point of View: Nine Logico-Philosophical Essays* (Cambridge, MA, 1953), 20.
6. See A. W. Carus, *Carnap and Twentieth-Century Thought: Explication as Enlightenment* (Cambridge, 2007), esp. 161–84.
7. Edward O. Wilson, *Consilience: The Unity of Knowledge* (New York, 1998), 3, 8.
8. Edward Slingerland, *What Science Offers the Humanities* (Cambridge, 2008), 9.

9. For a somewhat tempered, “second-wave consilience,” see Edward Slingerland and Marc Collard, eds., *Creating Consilience: Integrating the Sciences and the Humanities* (Oxford, 2011), 3–37.
10. This is a mainstay of the philosophy of science. For classic statements, see Jerry Fodor, “Special Sciences (Or: the Disunity of Science as a Working Hypothesis),” *Synthese* 28, no. 2 (1974): 97–115; Phillip Kitcher, “1953 and All That. A Tale of Two Sciences,” *Philosophical Review* 93, no. 4 (1984): 335–73; and John Dupré, *The Disorder of Things: Metaphysical Foundations of the Disunity of Science* (Cambridge, MA, 1993). For recent treatment of the reduction problem, see Ingo Brigandt, “Explanation in Biology: Reduction, Pluralism, and Explanatory Aims,” *Science and Education* 22 (2013): 69–91, and Anjan Chakravartty, “Scientific Realism and Ontological Relativity,” *Monist* 94, no. 2 (2011): 157–80.
11. That is not to say that one cannot coordinate the analysis of form with an explanation that makes recourse to psychology or even biology. The work of scholars such as Alan Richardson, Ellen Spolksy, G. Gabrielle Star, and Blakey Vermeule (and of course many others) does that all the time. In fact, the success of these scholars lies in the maintaining and coordinating of two levels of explanation, each with a proprietary language and disciplinary home.
12. See, for example, the essays collected in Joseph Carroll, Dan P. McAdams, and Edward O. Wilson, eds., *Darwin’s Bridge: Uniting the Humanities and the Sciences* (Oxford, 2016). This is from the afterword: “Darwin’s Bridge asks an audacious question: What if the borderline between the two cultures of the humanities and sciences has no substance? What if all that’s stopping the free flow of concepts, information, and methods is mental and bureaucratic inertia?” (271).
13. Steven Pinker, “Science Is Not Your Enemy: An Impassioned Plea to Neglected Novelists, Embattled Professors, and Tenure-less Historians,” *New Republic*, August 6, 2013, <https://newrepublic.com/article/114127/science-not-enemy-humanities>.
14. *Ibid.*
15. *Ibid.* Elsewhere, Pinker recognizes the problem of corporatization, even as he uses some of its language.
16. Gillian Tett, *The Silo Effect: The Peril of Expertise and the Promise of Breaking Down Barriers* (New York, 2015), 13 and *passim*.
17. See Lawrence Quillian, “Curing ‘Functional Silo Syndrome’ with Logistics TCM,” *CMA Magazine* 65, no. 5 (1991): 9–14.
18. Tett’s example here is the workplace structure of Facebook, which routinely moves its engineers and coders from one team to another, in so-called “Hack-amonths,” and which continually updates and alters even its best functioning product (like the News Feed) to outpace any future competitor. See Tett, *The Silo Effect*, 164–91.
19. The corporatization of the twenty-first-century university has sponsored a vast literature. My interest here is merely to intimate the relation between that fact and the discourse of interdisciplinarity. For more on that relation, see Jerry A. Jacobs, *In Defense of Disciplines: Interdisciplinarity and Specialization in the Research University* (Chicago, 2013). For the larger phenomenon, see, for example, Christopher Newfield, *The Great Mistake: How We Wrecked Public Universities and How We Can Fix Them* (Baltimore, 2016).
20. Ranjay Gulati, “Silo Busting: How to Execute on the Promise of Customer Focus,” *Harvard Business Review* 185 (May 2007): 104.
21. Peter Felton et al., eds., *The Undergraduate Experience: Focusing Institutions on What Matters Most* (San Francisco, 2016), 7.

22. See Gulati, "Silo Busting," 104–5. For the importance of system thinking, see Peter M. Senge's blockbuster work of management theory, *The Fifth Discipline: The Art and Practice of the Learning Organization* (New York, 1990). Felton et al. borrow all of this, including the exact phrase and logic of the "learning organization."
23. For more on the background theory, and the case of "water" especially, see Manfred Max-Neef's widely cited paper, "Foundations of Transdisciplinarity," *Ecological Economics* 53, no. 1 (2005): 5–16.
24. "Discovery Themes Initiative Takes Next Steps," The Ohio State University, Discovery Themes, <https://discovery.osu.edu/about/news/discovery-themes-next-steps.html>, and "Next Three Discovery Themes Initiatives," The Ohio State University, Discovery Themes, <https://discovery.osu.edu/about/news/next-three-discovery-areas.html>.
25. "Discovery Themes Initiative Takes Next Steps."
26. See, for example, Maggie Berg and Barbara Seeber's short manifesto, *The Slow Professor: Challenging the Culture of Speed in the Academy* (Toronto, 2016). Modeled after the slow food movement, slow academia will "alleviate work stress, preserve humanistic education, and resist the corporate university" (ix). Meanwhile, as readers of this journal are well aware, attentiveness has been a keyword of the so-called descriptive or postcritical turn in literary studies.
27. Some "anecdota" for what it's worth: The five years I spent running an interdisciplinary seminar on culture and cognition continually ran into this difference in sensibility, with the humanists interested in getting to a point where the problems could be stated and the social and natural scientists (and their fellow travelers in philosophy) wanting to solve problems once stated. This was met with good cheer.
28. Mary Poovey, *Genres of the Credit Economy: Mediating Value in Eighteenth- and Nineteenth-Century Britain* (Chicago, 2008). In what follows, I will accept for the sake of argument the content of the history. My interest will be instead with the derivation of an epistemic conclusion from that history, a version, I will argue, of the genetic fallacy. My own work on the history of English in these contexts can be found in Jonathan Kramnick, "Literary Criticism Among the Disciplines," *Eighteenth-Century Studies* 35, no. 3 (2002): 343–60. To the degree that my earlier essay succumbs to a genetic fallacy, it runs in the opposite direction from the historicism of the disciplines I discuss here.
29. Poovey's capitalization of "Literary studies" seems designed to point to the alleged sanctification of literature, as no longer literature but Literature. In keeping with both standard practice and the spirit of my argument I'll keep it in the lower case.
30. The genetic fallacy in epistemology occurs when "the source or origin of a proposition or theory is taken to be relevant to its evaluation"; Margaret Crouch, "A 'Limited' Defense of the Genetic Fallacy," *Metaphilosophy* 24, no. 3 (1993): 229. See also, for an exhaustive discussion, Roger White, "You Just Believe that Because . . .," *Philosophical Perspectives* 24, no. 1 (2010): 573–615. In the succinct formulation of Christine M. Korsgaard, "Showing that something is an invention is not a way of showing that it is not real," *The Sources of Normativity* (Cambridge, 1996), 8.
31. "Historical description" is Poovey's alternative to "aesthetic formalism" and its associated practices of "textual interpretation." See Poovey, *Genres*, 337–52.
32. Clifford Siskin, *System: The Shaping of Modern Knowledge* (Cambridge, 2016).
33. *Ibid.*, on 5, 53, 56, 61, 67, 129, 164, and 205 (twice).

34. It is not my intention to contest the account of physics itself. In the spirit of explanatory pluralism, I would leave that to the physicists. I would note that Siskin relies here on trade expositions of computational applications of quantum theory, including notably Stephen Wolfram's *A New Kind of Science* (New York, 2002) and David Deutsch, *The Beginning of Infinity: Explanations That Transform the World* (London, 2011). There's nothing wrong with that of course. The final section of *System* (227–39) uses the computational account to ally itself with Wilsonian consilience: now that we know the world is entirely made of information, we can come up with a single, discipline-less academy for its analysis.
35. See, for example, Siskin, *System*, 67.