

Introduction: “Narrative against Data”

JESSE ROSENTHAL

The title of this special issue, “Narrative against Data in the Victorian Novel,” raises an immediate question: what would it mean to be against data? What would it mean, for that matter, to be for data? The troubling thing about data, after all, is that it does not seem to care one way or the other *what* you think.¹ The term, at least as we use it now, refers to an object that resists analysis. In this it is different from similar terms, such as *evidence*, which invite scrutiny. Mary Poovey (1998, 1), at the beginning of *A History of the Modern Fact*, asks: “What are facts? Are they incontrovertible data that simply demonstrate what is true? Or are they bits of evidence marshaled to persuade others of the theory one sets out with?” Notice which is the active party in each of the cases: evidence needs someone to “marshal” it, but data, “incontrovertible data,” speaks for itself.

Such a claim, I imagine, is enough to turn any suspicious reader against data—and probably against me as well. So let me hasten to add that this assertion of data’s pre-epistemic irreducibility has a certain amount of tautology. Data is different from facts and evidence not because it is some purer object but because it is defined precisely as that object that cannot be questioned. As Daniel Rosenberg (2013, 18) puts it, “The semantic function of data is *specifically* rhetorical.” In other words, it does not classify a specific object in the world; instead it demarcates the point in an inquiry at which diagnosis of underlying motivation stops.

1. I use *data* in the singular throughout this discussion following the transformation in idiomatic usage that Steven Pinker (1999, 178) has identified: “The noun *data* . . . often refers to large quantities of information and . . . is easily conceived of as stuff rather than things: the word is turning from a plural (*many data*) to a mass noun (*much data*).” See also Rosenberg 2013, 19.

When we call something data, we define what we can do with it and what we can say about it. Consider, for example, the roughly thirty-eight thousand words in Joseph Conrad's *Heart of Darkness*. Taken as a whole, these words make up a novel that has produced countless conflicting readings—nearly all of which take for granted that those words are cues to further interpretations. Taken as individual data points in a quantitative analysis, though, the words no longer invite the same sort of unpacking. We can analyze the set of them in any number of statistical ways, but we are no longer interpreting as we were before. Franco Moretti (2005, 30) makes this point plainly: “Quantitative data are useful because they are independent of interpretation.” Remember, the words are the same whether we are treating them as literary evidence or as data. What has changed is what we allow ourselves to do with them. You can have bad data or misleading data, but those are the results of mistakes in collection or analysis, respectively. It is difficult to be against data simply because data is defined as that which you cannot take a position on.

The essays collected in this special issue, though, share a conviction that narrative form, particularly as it took shape in the nineteenth-century realist novel, can allow us to reflect fruitfully on this stubborn kernel of thought. The novels under discussion do not domesticate the notion of data or show us how to live comfortably with it. Rather, they show how the novel form itself is consistently adept at expressing the discomfort that data can produce: the uncertainty in the face of a central part of modern existence that seems to resist being brought forward into understanding.

On first blush, narrative would seem to be data's opposite. While data remains, in Moretti's words, “independent of interpretation,” narrative flaunts its human mediation. The term suggests communication—between a narrator and an implied narratee—and intention. More importantly, narrative declares itself as a retelling of something that had already existed in another form. Narrative theory has long distinguished between the idea of *fabula* (events as they occurred) and *sjuzet* (events as they were told) (Chatman 1978, 19–20). The former would have occurred whether or not anyone had said a word; the latter only exists in the telling. What is particularly interesting about this classic formulation, though, is that in the case of novels it is not usually true. There is no *fabula*; there were no events that are being now retold. After all, in most fictional discourses the *fabula* did not occur at all—the only thing we have is the *sjuzet* (Culler [1983] 2002, 183). Yet the narrative relies for its coherence on our unexamined belief

that a preexisting series of events underlies it. While data depends on a sense of irreducibility, narrative relies on a fiction that it is a retelling of something more objective. George Eliot ([1876] 1995, 7) begins *Daniel Deronda* by invoking the “make-believe of a beginning.” But what is in fact “make-believe” here is Eliot’s suggestion that her “once upon a time” is arbitrary and could have been otherwise. The coherence of the novel form, then, depends on making us believe that there is something more fundamental than narrative.

One thing that Victorian novels made readers believe in was the idea of data itself. To see how, let us return to the idea of *fabula*: the series of events that provides the narrative’s content. As anyone who has read a Charles Dickens novel knows, the underlying array of characters and events can feel anything but linear. The appendix added to the 1967 Penguin edition of *Little Dorrit*, for example, recapping its underlying generational story (reprinted in Dickens [1857] 1998, 789–90), could hardly be said to be the source of the novel’s narrative. Trying to imagine the elements that inform a Dickens novel or an Anthony Trollope novel seems more like imagining a two-dimensional array of heterogeneous elements that we can access arbitrarily. Here we might be better off turning to another familiar term for what underlies narrative: *plot*. The term has a geographic inflection, which Peter Brooks (1985, 12) draws out: “Common to the original term is the idea of boundedness, demarcation, the drawing of lines to mark off and order. This easily extends to the chart or diagram of the demarcated area, which in turn extends to the outline of the literary work.” Narrative, then, would not refer to a linear succession of events so much as a geographic cordoning off of characters and relations, which the narrative would then arrange in a diachronic account. This geometric image was a favorite of Victorian authors. Nathaniel Hawthorne wrote of Trollope’s novels that they were “just as real as if some giant had hewn a great lump out of the earth and put it under a glass case, with all the inhabitants going about their daily business, and not suspecting they were being made a show of”—a compliment that Trollope ([1883] 1999, 144) proudly repeated in his autobiography. In *Middlemarch*, meanwhile, Eliot ([1872] 1994, 59) draws a comparison between a “telescope” sweeping “the parishes of Tipton and Freshitt” and “a microscope directed on a water drop.” Just like Trollope, Eliot’s narrator is presented, at least in the figural logic, as a giant—the telescope becomes a microscope—in comparison to her characters. In many of the most ambitious Victorian novels, then, narrative does not rely on an underlying *fabula*; it refers instead to an arbitrarily selected set of elements offered for study and interpreta-

tion. The fiction of data, the illusion of data—this was what Victorians understood to be the product of a successful novel.

By this I do not mean to suggest anything genealogical. Sad to say, the Victorian novel did not create the idea of data.² But the idea of data was fundamental to the novel's narrative structure in ways that have not always been recognized. What have often been interpreted as failed novels of experience may be more fruitfully understood as narratives grappling with the problem of data's irreducibility. Each of the essays in this issue considers this connection: reading narrative against data not just in terms of an opposition but also in terms of a juxtaposition. Narrative and data play off against each other, informing each other and broadening our understanding of each.

The Elephant in the Room

Let us get it out in the open: data is a big deal right now. We cannot talk about data and the novel without recognizing the particular importance that the question of data currently has in literary studies. Simply uttering the word in certain circles these days is enough to produce a wide array of reactions: excitement, dread, indignation, weariness. Whatever position one takes, there seems to be a shared sense that the role of data in literary criticism presents a threat to business as usual. What I hope the discussions in this issue might do, though, is allow us to see the relationship between conventional literary criticism (close reading, microanalysis) and data-driven literary criticism (distant reading, macroanalysis) in terms of a relationship between narrative and data that has been going on for over a century.

Imagine for a moment what a piece of traditional literary criticism looks like—what it physically looks like on the page. Now imagine a piece of data-driven literary criticism. I suspect the traditional literary criticism in your mind looked rather like this page: words, sentences, paragraphs. Depending on how materialist your critical tastes are, there might have been an image or two, but they likely captured an artifact of the time period under discussion. I would bet that the data-driven literary criticism, on the contrary, contained visualizations: graphs, maps, or trees (to use the title of one of Moretti's [2005] books). And these visualizations are not just there to supplement the argument: they go a long way

2. For more on the history of the term, see Rosenberg 2013.

toward making the argument. This, I would like to suggest, is a principal distinction between the two modes of criticism, and it is one that should demonstrate the connection with narrative and data. On the one hand, we have a retelling—an artful and opinionated reshaping—of the underlying evidence. On the other hand, we have a synchronic, visual representation that attempts to let the data speak for itself, without mediation.

Why are visualizations such a fundamental element of data’s role in criticism? We can get a hint if we look at an earlier work in Moretti’s turn to quantitative analysis: his map-oriented *Atlas of the European Novel* (1998). Here is how he describes the central method of the book once the various moments of a book have been plotted on a map: “After which begins in fact the most challenging part of the whole enterprise: one looks at the map, and *thinks*. You look at a specific configuration—those roads that run towards Toledo and Sevilla; those mountains, such a long way from London; those men and women that live on opposite banks of the Seine—you look at these patterns and try to understand” (7–8). Thinking is italicized here, but the repetitions make it clear that it is looking that is the game changer. We think differently, it would seem, when we look instead of read. But differently in what way? Moretti’s over-the-top ingenuousness (“such a long way,” “try to understand”) gives us some clue. When confronted with the visual instead of the linguistic, our thought somehow becomes more innocent, less tempered by experience. If data is, as Rosenberg suggests, a rhetorical function that marks the end of the chain of analysis, then in data-driven literary criticism the visualization allows us to engage with that irreducible element in a way that language would not. As Edward R. Tufte (2001, 14), a statistician and author on data visualization, puts it, in almost Heideggerian language, “Graphics *reveal* data.”

Indeed, visualizations have long been central to a certain branch of data research known as “exploratory data analysis.” This approach often begins with setting up a visualization to see what leaps out. The figure most associated with this approach, the mathematician John W. Tukey (1977, v), claims that exploratory data analysis is “about looking at data to see what it seems to say. . . . Its concern is with appearance, not with confirmation.” Data in this formulation speaks to us (or “seems to” speak to us) through a visual medium. And even more importantly, the information it conveys does not confirm or refute theories we already hold. Instead, it seems to bring something new. Tukey underscores this point: “Pictures based on exploration of data should *force* their message upon us. . . . The greatest

value of a picture is when it *forces* us to notice what we never expected to see” (vi). Strong language, but it seems Tukey thinks that such “force” is necessary to offer something new and to go against our expectations.

At the heart of much data-driven literary criticism lies the hope that the voice of data, speaking through its visualizations, can break the hermeneutic circle. We have already seen Moretti’s (2005, 30) claim that “quantitative data are useful because they are independent of interpretation.” This can lead us to new questions, which we can analyze through more traditional means, what Moretti calls “an interpretation that transcends the quantitative realm” (30). Matthew Jockers (2013, 30) is even more conciliatory in discussing what he calls “macroanalysis”: “The computer is a tool that assists in the identification and compilation of evidence. We must, in turn, interpret and explain that derivative data.” These claims are representative of the olive branch usually offered on the border between the digital and the traditional humanities: the idea that the analysis of a literary corpus as data, using the tools of statistics and the expressive power of visualization, will provide more of those all-too-rare “aha!” moments. The computer combing through the data will notice something, in other words. And then it is up to traditional, microanalytical methods to explain it. The message seems to be that literary critics have nothing to fear; there will always be a need of someone to do close readings.

I think, though, that what many literary critics secretly fear is something different: Moretti’s (2005, 30) hope that quantitative methods can “*falsify* existing theoretical explanations.” Certainly, no one wants to see a favorite theory proven false. But what I suspect is even more troubling is that many literary critics are afraid of having their bluffs called: what if a theory is false? What then? Would we stop using it altogether? Let us consider an example that will certainly be close to the hearts of many of the authors in this issue: Ian Watt’s *Rise of the Novel* ([1957] 2001). Watt’s story in that classic work goes something like this: Daniel Defoe introduces formal realism, Samuel Richardson introduces epistolary female subjectivity and the domestic, Henry Fielding introduces third-person male subjectivity and the public space, and the synthesis of Richardson and Fielding produces Jane Austen and free indirect discourse. But as Clifford Siskin (2015, 619) has pointed out, this story skips over fifty years of the eighteenth century, leaving “generations of readers [to puzzle] over when and how a rise of any kind might have occurred.” Even more troublingly to the theory, there does not seem to be any indication that Richardson’s and Fielding’s styles had

much influence, and the actual dramatic rise in the number of novels published occurred during the 1790s, long after Richardson and Fielding and well before Austen’s books saw print (620; Siskin 2005, 819).

So is Watt’s theory true? By nearly any criteria that might expect a theory to accurately describe the objects of the world, it is not. And what should be troubling for many in the humanities is that we do not have a good way of talking about what this means. By invoking Karl Popper’s notion of “falsifiability,”³ Moretti is aligning his own work with the natural sciences and the way those fields describe truth or falsehood. Many in the humanities push back against such a criterion for our work. But I do not know if our usual ethically driven response is entirely satisfying, sitting as it seems to between a radical politics (opposed to the conservatism of positivism) and snobbish aestheticism (claiming sensibility to ward off the philistines). The study of literature is not an endeavor in the natural sciences, or at least it need not be. But what is it?

Let me start from my own experience. I find that I still teach courses based largely around Watt’s theories not so much because I think they are true but because I imagine that in future classes students will be expected to know the structure of Watt’s account. They might then learn that Watt did not understand the importance of amatory fiction, for example. Or that he disregarded the importance of periodical publications in the rise of the novel. Yet when such arguments are put forward, even when they reject key tenets of Watt’s theory, they are presented as part of a dialogue with his theory. Indeed, to be understood they often require an understanding of his theories as a ground for negation. In the natural sciences it is not necessary to cite Galileo or Newton. But in the humanities it is not uncommon to have a bibliography that is in dialogue with every major source on an issue going back to Aristotle. And certainly, not all of these sources are included because the author thinks they are correct. So while scientific truth is falsifiable, truth in the humanities never really cancels out what came before. As Hans-Georg Gadamer ([1989] 2004, 285) puts it:

The great experiences in the human sciences almost never become outdated. . . . the subject presents itself at different times or from different standpoints. We accept the fact that these aspects do not simply cancel one another out as research

3. “Not the *verifiability* but the *falsifiability* is to be taken as a criterion of demarcation. In other words: I shall not require of a scientific system that it shall be capable of being singled out, once and for all, in a positive sense; but I shall require that its logical form shall be such that it can be singled out, by means of empirical tests, in a negative sense: *it must be possible for an empirical scientific system to be refuted by experience*” (Popper [1935] 2002, 18).

proceeds, but are like mutually exclusive conditions that exist by themselves and combine only in us. Our historical consciousness is always filled with a variety of voices in which the past is heard. Only in the multifariousness of such voices does it exist: this constitutes the nature of the tradition in which we want to share and have a part. Modern historical research itself is not only research, but the handing down of tradition. We do not see it only in terms of progress and verified results; in it we have, as it were, a new experience of history whenever the past resounds with a new voice.

The form that evidence and argumentation take in literary criticism is based on composing the right selection of prior voices whether or not we agree with them. We know this, of course: anyone who has received an anonymous reader's report knows the importance of correctly reciting the proper account of past opinions. The method of argumentation is always in some way developed around a reinterpretation of our shared past that will lead to a set of given present conclusions. And those present conclusions will, if we are lucky, become part of another's recited tradition.

Seen in this way, literary criticism is not subject to the same factual negations that scientific criticism is. This is because it is talking about something fundamentally different. Whereas the sciences try to describe the objects of the world, the humanities seek to build on an ongoing relation with the past. Such a formulation might sound essentially conservative, but then there is a certain conservatism about claiming—both to students and to administrators—that there is something important about seeing the connections between ourselves and works of literature from previous centuries.⁴ At the same time, it seems clear that this sort of relation to the past has allowed humanistic study to become something of a laboratory of progressive thought. Ultimately, there is a trade-off here. Ideas persist without the threat of falsification that occurs in the natural sciences, but we sacrifice the ability to have our ideas describe the objects of the world.

So in the study of literature it is not just the digital humanities that distinguish themselves from traditional literary criticism. Any intervention that announces its indifference to questions of tradition and quality—history of the book is another key example—will be playing by different rules. This is not the place to consider the different forms that claims to truth take in different disciplines—logical proof, falsifiable experiment, double-blind study—but it is worth reminding ourselves that one discipline is not just another discipline done poorly. If cer-

4. For a compelling recent look at the connections between the humanities and conservatism, see During 2012.

tain forms of material history or quantitative analysis stake their claims to truth on an elision of tradition through contact with the raw data or object, that makes them a different, if sometimes congenial, sort of analysis.

The point, then, is that data-driven approaches are not just doing the same thing better or at a larger scale. They are doing a different thing altogether: interacting with the objects of the world. Traditional literary criticism, on the contrary, interacts with the past, with tradition. While one falsifies theories, the other develops from them. The figure of one is the data visualization. And the figure of the other is narrative. Yet remember that narrative draws its coherence from the fiction of its underlying, data-rich plot. Literary criticism and the humanities more generally seem to rely for their coherence—and their sense of political urgency—on the questionable claim that they deal with the stuff of the world.

Outliers and Aggregates

“What is the opposite of an outlier?” This was the question asked at a recent conference of the Northeast Victorian Studies Association with the topic “Victorian Outliers.”⁵ Nearly everyone in attendance was in the humanities, so the answers all started from the point of view that an outlier was something particularly worthy of study. A conformist, perhaps? A background character? *L’homme moyen* (the theoretical “average man” of early statistics)? From the point of view of a data scientist, the answer would have been clear: the opposite of *outlier* is *significant*. An emphasis on tradition allows us to focus our energy on a small number of texts, meaningful because they are different. Seen as data, though, these are simply objects off to the side of a larger story—a story whose meaning comes in its aggregation.

We can see this sort of aggregation at work in the famous map Dr. John Snow produced to plot the deaths from cholera in central London in September 1854 (figure 1). Snow’s map demonstrated plainly the cluster of cases around the Broad Street Pump and led to closing that pump. Whether or not this action alone was responsible for the end of the cholera outbreak is a matter of some dispute, but the map has become a famous emblem of the intuitive power of data visualization. Tufte (2001, 24), in discussing this image, suggests that it shows that “graphical

5. I am thinking especially of the conference’s closing discussion led by Jonah Siegel and Talia Schaffer.



Figure 1. Dr. John Snow's map of the 1854 London cholera outbreak

analysis testifies about the data far more efficiently than calculation.” The central reason for this is the removal of a temporal coordinate. All of the deaths are shown as simultaneous events. It is clear why this effect is not one that a narrative account of the sort we are accustomed to in novels could pull off. The central axis of narrative is temporality, and the experience of narrative is one that takes place over time. Snow’s map works by collapsing the temporal dimension, allowing us to see the overlap of cases that occurred at separate times.

With the collapse of the temporal dimension comes a significant shift in focus, from the individual to the aggregate. Snow’s map makes its point through the specifically visual pointillistic effect whereby barely noticeable individual marks, when placed close together, become a significant colored area. These marks only take on coherent meaning as a result of aggregation. When we look at this image, our eyes are drawn toward the area around the pump on Broad Street. But what about that single mark on Great Chapel Street? I do not want to suggest that either Snow or his map’s viewer does not care about that death, but the representation of it here—not combining with any other marks to draw our eyes—causes it to lack meaning. In the terminology shared by both statistics and literary studies, it lacks significance.

Narrative will tend to resist this sort of significance-through-aggregation. If there is one persistent argument in nineteenth-century fiction—or at least in the nineteenth-century fiction we still read and teach—it is that there is something irreducibly significant in these individual marks. In fact, what we usually find in narrative is an inversion of the logic of Snow’s map. On the map, to stand out from the crowd is to fade almost into invisibility; in the novel, to stand out from the crowd is to be a protagonist (Woloch 2003). What we often find, in fact, is the introduction of a rhetorical crowd to make a figure under examination stand out more prominently. Often these scenes took the form of an opposition to a straw man sort of Bentham utilitarianism. As Eliot (1998, 314) puts it in “Janet’s Repentance”:

The emotions, I have observed, are but slightly influenced by arithmetical considerations: the mother, when her sweet lisping little ones have all been taken from her one after another, and she is hanging over her last dead babe, finds small consolation in the fact that the tiny dimpled corpse is but one of a necessary average, and that a thousand other babes brought into the world at the same time are doing well, and are likely to live; and if you stood beside that mother—if you knew her pang and shared it—it is probable you would be equally unable to see a ground of complacency in statistics.

Eliot's stridency makes this scene lack some of its intended punch. But the scene turns rather odd if you try to visualize its figures: one dead baby after another taken away from the mother, a thousand other babies somewhere in the background. The effect of Eliot's imagery here is to isolate the figure of the mother—and her apostrophized consoler—against an anonymous, if somewhat silly, social backdrop.

Similarly, in *Hard Times* we see Sissy Jupe tell of her failure to properly apply the utilitarian calculus. Her method of emphasizing the importance of the outliers who were starved is to multiply the happy millions. "This schoolroom is an immense town, and in it there are a million of inhabitants, and only five-and-twenty are starved to death in the streets, in the course of a year. What is your remark on that proportion? And my remark was—for I couldn't think of a better one—that I thought it must be just as hard upon those who were starved, whether the others were a million, or a million million" (Dickens [1854] 1995, 60). Thus nineteenth-century narrative offers an inversion of the sort of aggregation that produced meaning in Snow's map. It is by increasing the number against whom a character is set off ("a thousand babes," "a million million") that a character's importance is emphasized. We can find versions of this claim throughout the nineteenth-century novel: the idea that numbers—and philosophies that highlight numbers—blind us to the experiences of individuals. But as a representational strategy, the numbers further anonymize those others and bring the individuals more clearly to the fore.

We should see a connection here to the methods of traditional literary analysis and data-driven analysis. One method tends to find importance and value in the close examination of a small number of texts. The large number of other texts—what we tend to think of as *context*—only makes the object of analysis stand out more dramatically in relief. For more data-driven analysis, though, the large number is the most significant. This need not be only at the level of the individual text. Quantitative analysis excels at finding stylistic markers in common words (*the*, *of*, *it*) that would be invisible to the human reader.⁶ In the traditional case, then, it is the outlier, the exceptional, where we look for meaning. But when we see our object not as inherently meaningful evidence but rather as data, we can

6. "The little words—*the*, *of*, *it*—are engaged automatically, spontaneously. . . . These subtle habits give authors away, but they do so in ways that only a machine is likely to detect" (Jockers 2013, 92).

only find meaning in aggregation. As we shall see, this question of aggregation and the difficulties that come with it animate the essays in this issue.

Narrative against Data

Daniel Williams, in his reading of Thomas Hardy’s *Desperate Remedies*, attends to the question of what he calls “serial thinking”: how we put together discrete examples to draw a conclusion about “a continuous process in the world.” Connecting Hardy to thinkers such as David Hume and John Venn, Williams shows how the novel highlights the fraught relationship between individual data points and the larger truths they would seem to represent. Anyone who has read Hardy will recognize two poles in his work: everything is fated, everything is chaotic. Williams shows how these two poles in thought connect to the difficulties in drawing some sense of the future from the limited sequences of data available to us. The difficulties of a Hardy novel, then, become the difficulties of aggregation. And this, Williams suggests, is a problem that Hardy was particularly aware of, because it was also the problem of generic classification: what sort of book is this? What group does it belong in? The difficulty of classifying within the book, then, reflects the difficulty that Hardy experienced in the classification of the book.

While Williams’s essay is a consideration of how we accumulate evidence and transform it into judgments, Geoffrey Baker turns to the tricky question of what it takes to make someone believe in Victorian novels. In “‘I Know the Man’” Baker shows how British thought—from empiricist philosophy to theories of jurisprudence—has long found difficulty in explaining the relationship between evidence and belief. Baker sees the same dynamic at work in novels of the nineteenth century but with one key difference. In these novels “belief . . . turns out almost invariably to be right.” Looking at a wide range of examples—Mary Shelley’s *Frankenstein*, Eliot’s *Middlemarch*, Wilkie Collins’s *Law and the Lady*, and Trollope’s *Phineas Redux*—Baker demonstrates the Victorian novel’s investment in a belief that developed in the absence of evidence and often explicitly in opposition to evidence. That they are rewarded suggests an underlying ethic in these books in which intuition about character is ultimately more believable than the accumulation of evidence.

These first two examples sit oddly with our familiar theories of novel realism in which—Watt ([1957] 2001, 13) again—the central feature of the novel is its “truth to individual experience.” Watt and others who have connected the novel

to modernity have emphasized the connection between the character at the center of the realist novel and the developing epistemology of the time: “that truth can be discovered by the individual through his senses” (12). Williams and Baker, though, both demonstrate that the philosophical tradition is one that is just as uncertain about how to put evidence together into a coherent conclusion—and that uncertainty becomes part of the text as well. When we approach the accumulation of evidence as a subject of the novel and not just as its central theme, we can better understand the failed developments of the Victorian novel, the static characters who seem to resist *Bildung* (experience and maturation). At some level we know this already. Static characters like Fanny Price and Jane Eyre are just as firmly fixed in syllabi and publisher’s catalogs as their more dynamic counterparts. For some, this is a sign of the British novel’s conservative streak or immature nature. Moretti ([1987] 2000, 183) dismissed the British novel, and *David Copperfield* in particular, for a refusal to let experience add up to personal growth: “If then . . . innocence proves to be mistaken—too bad for experience. What has been learned will be disavowed and forgotten, rather than revise that initial judgment.” For Moretti, this counts as a failure of nerve, an unwillingness to change your mind in the face of almost overwhelming evidence. But what if an ongoing concern in the Victorian novel was precisely the question of how evidence could make you change your mind in the first place? Just how much evidence should it take to “overwhelm” us anyway? And as Williams asks, how should we accumulate it into a conclusion if it does?

Caroline Levine answers this question by suggesting that novels will always give us more evidence than we know what to do with—or at least the sense of more evidence. Describing what she refers to as the “enormity effect” in realist fiction, Levine argues that Victorian novelists like Dickens, Eliot, and Elizabeth Gaskell “prompt readers to appreciate a vastness that the novel cannot represent.” Novels gesture at a scale that exceeds their representational abilities and in so doing evoke a shock along the lines of the Kantian mathematical sublime. Many novelists, we discover, turn to this affective representation of immensity—and in fact show a preference for it over a more precise sort of counting. And this, Levine suggests, could be the realist novel’s lesson to us as critics. We live in a moment in which digital humanities seem to promise that scale is no longer a concern. The mind may shrink at the immensity of the Victorian corpus, but it flees in terror when trying to conceive the number of bytes in one of Google’s

data centers. But perhaps instead of trying to master scale “literary critics in the moment of big data might instead take our cue from the sublime and experience a moment of terrifying smallness.” If we read Victorian novels as concerned with the same issues of uncountable aggregates that face us today—bodies instead of bytes perhaps, but the dizziness is the same—then we might find in them an ethical approach to an uncertain critical future. As with Baker and Williams, then, Levine describes a way novels highlight a failure of induction. But once again this failure is understood not as a shortcoming but rather as an essential formal engagement with the problem of the evidence of the world.

But what if the evidence of the world is simply the product of chance? What if the data we collect is just random noise? These are the questions Adam Grener tackles in “The Language of Chance and the Form of *Phineas Finn*.” It is tempting to read Trollope’s novels as providing some connection between the personal and the professional—an especially inviting prospect in the Palliser novels, where the professional is the political. Yet what Grener suggests is that Trollope effectively mobilizes the language of chance to distinguish between a social world that proceeds, in the aggregate, in a predictable fashion and a personal world that proceeds in a more stochastic manner. The emphasis on chance in *Phineas*’s life narrative means that, as Grener suggests, different episodes take the form of “trials” in which the outcome of one has no bearing of the outcome of the other. Where Levine sees the data of the world as presenting an excess of meaning, Grener shows us in *Phineas Finn* a world in which development is hard to attain, because experiences do not accumulate.

One thing all of the essays discussed above as well as my introduction have in common is that they engage with the novel primarily as a fictional form. In “Narrative Form and Facts, Facts, Facts,” however, Sarah Allison reminds us just how tenuous the division between fact and fiction could be in the Victorian period. Looking at Gaskell’s *Life of Charlotte Brontë* alongside Brontë’s *Jane Eyre* and *Shirley*, Allison demonstrates how the way Victorians read Gaskell’s biography was inflected by the representative tropes of realism. At the same time, their reading of Brontë was informed—just as ours is—by a knowledge of the nonfiction elements in her books. This includes both the Lowood scenes in *Jane Eyre* and the elements of *Shirley* that draw from the life of Emily Brontë. Allison’s ultimate claim is not that either biography or fiction is based on the other but rather that their coherence comes from their mutual reference. This is, I believe,

an important reminder when we think about the way nineteenth-century texts were consumed. It was not a case of “either-or” with fictional retellings set off against accumulations of factual data. Reading, then as now, required an ability to understand how both forms drew off the other.

The issue closes with a further consideration of reading and the oscillations it entails. In “Database and the Future Anterior” Nathan K. Hensley considers how a reader might gather the data of Eliot’s *Mill on the Floss* as the novel works its way gradually toward its catastrophic conclusion. Reading Eliot against Victorian geologic and political thought, Hensley shows how the novel seems to subscribe both to a theory of slow uniformitarian development and to a sudden catastrophic change. All the clues to the flood are there, but it still comes out of nowhere. In this Hensley finds a story about social development but also a story about reading. *The Mill on the Floss*’s two senses of time—continuous and catastrophic—seem to also suggest the diachronic experience of narrative and the synchronic experience of data analysis. For Hensley, what is worthy of celebration is the ability to see both: “Any number of seeming datapoints might be zeros at one moment, ones in another, tipping into consequence only retrospectively, down the river of its own unfolding.”

All of the essayists in this issue, I believe, have managed to see both: narrative and data, the graph and the tradition. *Data* can be a troubling term for many in our field. It was a troubling concept, as the essays will show, for many Victorians. But what the essays will also show is that the encounter between the narrative and data was and is an exciting one. We hope this issue communicates that excitement.

Jesse Rosenthal is assistant professor of English at Johns Hopkins University. He is the author of *Good Form: The Ethical Experience of the Victorian Novel* (2017). He is currently working on a book on the idea of tradition in novels and literary criticism.

Works Cited

- Brooks, Peter. 1985. *Reading for the Plot: Design and Intention in Narrative*. New York: Vintage Books.
- Chatman, Seymour. 1978. *Story and Discourse: Narrative Structure in Fiction and Film*. Ithaca, NY: Cornell University Press.
- Culler, Jonathan. (1983) 2002. *The Pursuit of Signs: Semiotics, Literature, Deconstruction*. Ithaca, NY: Cornell University Press. Citations refer to the 2002 edition.
- Dickens, Charles. (1854) 1995. *Hard Times*. Edited by Kate Flint. New York: Penguin Books. Citations refer to the 1995 edition.
- . (1857) 1998. *Little Dorrit*. Edited by Stephen Wall and Helen Small. New York: Penguin. Citations refer to the 1998 edition.
- During, Simon. 2012. *Against Democracy: Literary Experience in the Era of Emancipations*. New York: Fordham University Press.
- Eliot, George. (1872) 1994. *Middlemarch*. Edited by Rosemary Ashton. New York: Penguin. Citations refer to the 1994 edition.
- . (1876) 1995. *Daniel Deronda*. Edited by Terence Cave. New York: Penguin. Citations refer to the 1995 edition.
- . 1998. *Scenes of Clerical Life*. Edited by Jennifer Gribble. New York: Penguin.
- Gadamer, Hans-Georg. (1989) 2004. *Truth and Method*. Translated by Joel Weinsheimer and Donald G. Marshall. London: Continuum Books. Citations refer to the 2004 edition.
- Jockers, Matthew. 2013. *Macroanalysis: Digital Methods and Literary History*. Urbana: University of Illinois Press.
- Moretti, Franco. (1987) 2000. *The Way of the World: The Bildungsroman in European Culture*. New York: Verso. Citations refer to the 2000 edition.
- . 1998. *Atlas of the European Novel: 1800–1900*. London: Verso.
- . 2005. *Graphs, Maps, Trees*. New York: Verso.
- Pinker, Steven. 1999. *Words and Rules: The Ingredients of Language*. New York: Basic Books.
- Poovey, Mary. 1998. *A History of the Modern Fact: Problems of Knowledge in the Sciences of Wealth and Society*. Chicago: University of Chicago Press.
- Popper, Karl. (1935) 2002. *The Logic of Scientific Discoveries*. London: Routledge. Citations refer to the 2002 edition.
- Rosenberg, Daniel. 2013. “Data before the Fact.” In “Raw Data” Is an Oxymoron, edited by Lisa Gitelman, 15–40. Cambridge, MA: MIT Press.
- Siskin, Clifford. 2005. “More Is Different: Literary Change in the Mid and Late Eighteenth Century.” In *The Cambridge History of English Literature*, edited by John Richetti, 797–823. Cambridge: Cambridge University Press.

- . 2015. “The Rise of the ‘Rise’ of the Novel.” In *English and British Fiction 1750–1820*, edited by Peter Garside and Karen O’Brien, 615–29. Oxford: Oxford University Press.
- Trollope, Anthony. (1883) 1999. *An Autobiography*. Edited by Michael Sadleir and Frederick Page. Oxford: Oxford University Press. Citations refer to the 1999 edition.
- Tufte, Edward R. 2001. *The Visual Display of Quantitative Information*. 2nd ed. Cheshire, CT: Graphics.
- Tukey, John W. 1977. *Exploratory Data Analysis*. Reading, MA: Addison-Wesley.
- Watt, Ian. (1957) 2001. *The Rise of the Novel: Studies in Defoe, Richardson, and Fielding*. Berkeley: University of California Press. Citations refer to the 2001 edition.
- Woloch, Alex. 2003. *The One vs. the Many*. Princeton, NJ: Princeton University Press.