COLLECTING LIVES

Critical Data Narrative as Modernist Aesthetic in Early Twentieth-Century U.S. Literatures

Elizabeth Rodrigues

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ELIZABETH RODRIGUES

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Acknowledgments

Books are not driven by data, they are driven by questions, intuitions, drafts, revisions, and all the emotional and material resources it takes to sustain those things. For insight, encouragement, and time to work on this project across many stages of development, I owe deep thanks to many people and multiple institutions.

This project in many ways began its journey at the intersection of two generous communities: librarians and scholars of autobiography studies. It was fortunate to find new communities and interlocutors amidst scholars of modernisms, African American literatures, and digital studies; doctoral and postdoctoral cohorts of colleagues; and an institutional home at Grinnell College, specifically its libraries.

Joshua Miller, Sidonie Smith, Xiomara Santamarina, and Lisa Nakamura formed a methodologically heterogenous and unflaggingly supportive doctoral committee that allowed me to bring together materials and methods in ways that no single disciplinary tradition would have sanctioned. Thank you all for the questions, challenges, nudges, and willingness to let me keep going. Sid and Xiomara, thank you especially for forging paths for studying life writing, as scholars and as women in the academy. Your stories make mine possible.

The Harris Faculty Fellowship of Grinnell College, endowed by the family of Jack and Lucile Hanson Harris, provided a full year of research leave, without which this book would not have been complete for at least several more. Susan Ferrari and Laura Nelson-Lof provided feedback on my draft proposal for this fellowship and nudged me to go for it. Their skilled and tireless work to expand access to research opportunities for liberal arts faculty has been a boon to me and many others.

The Rackham Merit Fellowship and the Rackham Predoctoral Fellowship of the University of Michigan laid the foundation for me to pursue this project and a career at the intersection of emerging fields. I am immensely gratified that this project gets to return to its intellectual home for publication in book form.

Many individuals and several groups provided feedback and settings for discussion of drafts. The earliest version of this project was generously received by the organizers and participants of the International Autobiography Association Biannual World Conference in 2014. At Temple University, Priya Joshi, Ted Howell, and the graduate works in progress group discussed and provided feedback on an early draft of the introduction. I am grateful to John Matteson, organizer of a Life Writing Section panel for the 2016 Modern Language Association Convention, at which an earlier version of the second chapter was presented. It was subsequently published in *a/b Auto/biography Studies*, edited by Ricia Chansky and Emily Hipchen, as part of a cluster of articles emerging from that panel (vol. 33, no. 1, 2017). I thank *a/b Auto/biography Studies* for having an author rights-retention policy that allows me to put forth this version.

I owe the two anonymous reviewers who generously read and provided thoughtful feedback on both the proposal and the manuscript double thanks. I am grateful for these reviews to have been part of a continued conversation, of a kind, and they strengthened the ultimate work in many ways.

This book, and my professional life in general, would have been impossible without the teachers and caregivers of Meadowbrook Home Daycare, The Children's Place Spring Garden, and the Grinnell Community Early Learning Center.

Grinnell colleagues have helped me think through this project, read drafts, taken long runs, and generously supported me in making progress during a year of unforeseen obstacles: Julia Bauder, Micki Behounek, Mark Christel, Sharon Clayton, Kevin Engel, Chris Jones, Phil Jones, Cecilia Knight, Mark McFate, Sheryl Bissen, Rebecca Ciota, Megan Adams, Heather Campbell, Katie Walden, Carolyn Herbst Lewis, Tisha Turk, Dan Reynolds, and Tina Elfenbein. Emma Kelty-Stephen, Cynthia Hansen, Danielle Lussier, and Gwenola Caradec, the members of my Grinnell SWAG, provided especially crucial academic therapy at multiple stages.

My reliance on the work of librarians and archivists who I don't know cannot be overstated. The archivists (digital and analog) of the Beinecke Rare Book and Manuscript Library, University of Massachusetts, Amherst, and the University of Chicago all helped me conduct research for this proj-

"More nearly a transcript of life"

Collecting Lives and Narrating Selves in Early Twentieth-Century U.S. Literatures

Most men and many women prefer to come into closer touch with reality and seek it, often in vain, in the newspapers. Consequently fiction is undergoing a process of fission; the cleft between the realistic and romantic novels is widening. The former are becoming more nearly a transcript of life, and the latter, no longer tethered to earth, are soaring into the ether of the imaginary and impossible.

　　—Edwin Slosson, *The Independent*, April 13, 1905

Human beings are interested in two things. They are interested in the reality and interested in telling about it.

　　—Gertrude Stein, "A Transatlantic Interview," 1946

In or around March 1905, the literary representation of lives changed. Or at least, that's when Edwin Slosson, chemist and literary editor of progressive New York weekly newspaper *The Independent*, noticed it.[1] His description of and explanation for this change plots a complex interaction between readerly desire and a cultural surround of pervasive empiricism. Readers no longer seek the "generalized types of humanity as expressed by the artist in painting and sculpture," Slosson argues, because "romances and poems do not interest them so much as do individuals." Realistic novels are, therefore, "becoming more nearly a transcript of life" (849). The selecting and synthesizing acts of literary narration are seen as less valuable, less real and, perhaps surprisingly, less interesting to readers than the more mechanical

approach of unselectively recording everything that happens within the scope of a life. The preference for and epistemological value attributed to the rigorous recording of observation is also on the ascendant in scientific practice, Slosson continues to point out, which seems increasingly focused on collecting observations for future analysis rather than the proposal of overarching theories. Now, the "candidate for the Ph.D. watches a single amoeba under a microscope and writes his thesis on one day's doings of its somewhat monotonous life" (Slosson, 849). In literature, as in science, Slosson suggests, the representation of reality is taking on a distinct new form, composed of discrete observations of actual lives, exhaustively collected rather than interpretively selected. In other words, lives are coming to be seen as data collections.

In terms of modernist aesthetics, Slosson's conjecture proves prescient. The image of a PhD candidate making a "thesis" of rigorously recording an amoeba's activities during a single day offers a tantalizing anticipation of the narrative innovation for which the literature of the early twentieth century would come to be known. Works such as James Joyce's *Ulysses* (1922) and Virginia Woolf's *Mrs. Dalloway* (1925) make a novel out of one day's doings in the life of an ordinary person, taking up the same chronologically constrained and transcription-like method to rethink the relationship between literary narrative and the reality of lived experience. Robert Musil begins his own experiment with exhaustive observation aimed at an individual life in 1921, eventually published as a three-volume, unfinished novel, *The Man Without Qualities*. As Liesl Olson has noted, "plotlessness is modernism's great revolution" (21), and Slosson's aesthetic pronouncements offer a provocative early twentieth century argument that the rise of data collection as a form of representing lives is part of the reason why.

While none of the writers just mentioned would explicitly claim to be collecting data, the formal confluence between their narrative modes and the practice of data collection is striking. Both modernist narrative and data collection aspire to truly represent a reality that has been obscured by preexisting projections of meaning and causality, and both develop forms that privilege collection over selection as a means of doing so. To frame this confluence using the terms of Gertrude Stein's observation, cited above, the data collection seems to have become a predominant form of representing "the reality" that "human beings" obsessively seek to find ways of "telling about." Differentiating between "the reality" and "telling about it," Stein reminds us that acts of telling mark a persistent space between "the reality" and how we understand it. Even as we amass data in the hopes of

arriving at a representation of "the" reality, there remains an inevitable and vital gap between data and narrative. This book examines how modernist writers who collected data and narrated lives navigate this space, pinpointing an underexplored intersection between the rise of data collection as a method of knowing the human and modernist experimentation in narrative form.

Collecting Lives examines U.S. modernist life writing forms as sites of critical engagement with the data episteme, a cultural surround in which data and its collection are presumed to offer unprecedented access to reality, truth, and power. Data collection, as fundamental to both empiricism and imperialism,[2] is one of modernity's foundational representational forms. Further, it is a form that has an especially prominent role in U.S. attempts to represent and control the minoritized and economically precarious social groups created by modernity. The application of data collection to human selfhood[3] in the late nineteenth- and early twentieth-century United States provides an instructive prehistory to the underlying question of the relationship between data, life, and narrative that animates contemporary debate over algorithmic modes of identification. This historical frame centers U.S. modernist life writers W. E. B. Du Bois, Henry Adams, Gertrude Stein, and Ida B. Wells-Barnett. Working in human-oriented empiricist disciplines in the midst of methodological reconfiguration around the work of data collection, these writers experiment with data as a form of representing lives. Using a comparative approach that situates works from a range of modernist canons in the data episteme, I seek to recognize the long conceptual history of data as a technology of selfhood and its intersection with material histories of power—who has the ability to collect data about whom and whose narration of that data is seen as authoritative. I argue that these writers draw from their work in sociology, history, psychology, and journalism to formulate critical data aesthetics as they confront questions of identity around race, gender, and nation both in their research and their life writing.

These writers reflect on our own data surround in unexpected ways, because they share the desire for, suspicion of, and aspiration to total data representation that animates much of contemporary data discourse, yet they negotiate these relationships to data in a pre-digital ecology of affordances for collection, manipulation, and interpretation. This means that their engagement with data is more literally an encounter with data—more embodied and more often on a point-by-point basis rather than parsed through filters and statistical summaries. As Sara Ahmed elaborates the

significance of encounter, "The term encounter suggests a meeting, but a meeting which involves surprise and conflict" (6). Ahmed's theorization of the encounter includes both face-to-face meetings and the more conceptual, but equally powerful "coming together of at least two elements," such as "a meeting between reader and text" (7). Encounters are experiences that force us to ask, "how does identity become instituted through encounters with others that surprise, that shift the boundaries of the familiar, of what we assume we know?" (6–7). The data collection practices and technologies of the pre-digital era produce encounters that surprise and defamiliarize. When Du Bois, for example, collects data of African American life for *The Philadelphia Negro*, he is not querying a series of dot-gov databases with historical information on household make-up, income, and property values. He walks door to door to complete the five thousand questionnaires that make up his database. He personally enacts the encoding of perception and interaction into number and word. He then stores, organizes, and reorganizes this data in paper form. When Stein, as a medical student, works to model the human brain, she is not using imaging software to apply multiple comparison methods to a set of functional magnetic resonance imaging (fMRI) scans. She is drawing, by hand, every facet of every tissue section put in front of her. Because of these writers' more intimate encounters with the data points they collect, their perspective on data collection as a representational form offers a vantage that has been obscured by contemporary interfaces.[4] While so many of the tools we use as professional and lay readers of a data-enveloped world seem to flatter our pretensions of being able to see everything and know it all, these writers daily perform the lossy translation of experience into data and confront the impossibility of keeping every point in view. This perspective marks them as forebears of critical data studies, a field of "research and thinking that applies critical social theory to data to explore the ways in which they are never simply neutral, objective, independent, raw representations of the world, but are situated, contingent, relational, contextual, and do active work in the world" (Kitchin and Lauriault, 7). In their linkage of data collection and embodied selfhood, the authors considered in this book situate data in time and space, expose the creative processes that underlie its seeming rawness, consider the political ramifications of its collection and interpretation, and above all, challenge the idea that if we only collect enough data, it will narrate itself.

Through their hands-on engagement with practices of collecting lives, these writers confront data's inherent challenge to, rather than confirma-

tion of, narrative traditionally conceived. Narrative becomes meaningful through selection, the designation of a beginning and an ending, and the exclusion of all points that do not help explain the path between. Data, on the other hand, proposes to uncover meaning through collection, or the accumulation of equally meaningful points. When we recognize data's fundamental challenge to narrative, the data point comes into view as a representational form that joins the fragment, montage, and impression in the roster of modernist aesthetics.

The lens of modernist aesthetics allows us to register these writers' innovative engagement with data collection and data representation on the level of both content and form. I bring together the terms "data-driven" and "modernism" to suggest a literary critical framework for apprehending the historical, formal, and epistemological uses of data. In present usage, "data-driven" denotes a process of decision-making that purports to look to data for its direction and justification, implying that decisions can be made more effectively and without the danger of bias or misguided tradition by referring to data.[5] I put a different twist on the term to call attention to how imagining reality as a vast data collection drives that imagination toward certain formal parameters. Data-driven modernists, in my definition, commit to the form of data collection first and then see what narratives result. In this way, they highlight how data complicates, rather than clarifies, our narrative representations of reality. I approach modernism from a historical as well as aesthetic perspective, following interpretive pathways opened by the work of scholars such as Andreas Huyssen, Susan Stanford Friedman, Douglas Mao, Rebecca Walkowitz, and Werner Sollors, who have challenged critics to consider how our methodological concatenation of text and context must shift when we loosen the association of modernism with a few representative works and seek the "effects of synergy or friction [that] result when the many, sometimes contradictory criteria of high modernism are tested against less evidently experimental texts" (Mao and Walkowitz, *Bad Modernisms*, 2).[6] Considering historical context alongside aesthetic practice is especially important for critical consideration of race and ethnicity as factors shaping literary production, as the work of Joshua Miller, Sarah Wilson, and Leif Sorensen has modeled.[7] Focusing on data as a representational strategy with aesthetic as well as epistemological implications brings into a view a friction-generating range of texts and creators, embedded in multiple disciplines and literary communities.

Data-driven modernism entails a critical relationship to the "increasingly dense information environment" (Manovich, 23) of the late nineteenth-

and early twentieth-century United States. This relationship manifests in particular sensitivity to the role of data in representing, understanding, and shaping human life and is elaborated through aesthetic experimentation, particularly with narrative. Understanding aesthetics, broadly, as practices of provoking perception, I see data as a generative tool for such experimentation. In the readings that follow, I argue that the forms of the data point and the data collection constitute a modernist narrative aesthetic evidenced in three broad ways. Modernist data-driven narratives:

1) are fundamentally constructed through collection rather than selection, producing aesthetics of inclusion, excess, and multiplicity that foreground contingency and often displace the ends of narrative in a temporality of deferral;
2) feature narrators who are self-conscious about the relationship between narrative and reality, often explicitly reflecting on the tension between data and narrative and underlining the selective acts that produce narrative; and
3) through these formal engagements with and thematic reference to data, leverage the epistemological and cultural authority of data to challenge narratives of identity claiming to be objective realities of self.

Du Bois, Adams, Stein, and Wells-Barnett not only tell different life stories with data, they tell life stories differently because of data. We must understand the narrative aesthetic effects of data representation to understand data's implications for concepts of human identity. Understanding these aesthetic effects, we are better able to harness their potential for intervention in the essentialization of race, gender, and class that the data of lives has been and is being used to enact.

Fundamentally, the writers examined in this study have two things in common: they collected data as part of their work in an empiricist discipline focused on the human and they wrote life narratives. My focus on life narratives derives from the fundamental condition of life writing as being written and read in relationship to a referential concept of human life. Every instance of life narrative implies a relationship to an exhaustive data collection that would represent the whole of a real life. This inherent relationship to an idea of observable reality makes life writing a particularly fruitful site of investigation for a changing cultural and cognitive relationship to data.

I use the analytic of narrative in this project in three senses: as a traditional literary form, the realism of which is being challenged and re-formed during this period and which individual texts may be read to seek, resist, and/or revise; as an intervention in the representation of lived experience through which we can read for ethical arguments and engagements; and as an act of self-representation that not only represents but, in the minds of many critics and theorists, also constitutes self.[8] Because narrative is a kind of epistemological model for reality, the effects of the formal shifts provoked by data collection as a mode of representing the world are not solely aesthetic. As Michael Elliot notes, "narratives do more than place events into chronological sequence; they arrange those events according to patterns of causation in a way that enables the author and reader to create order out of the chaos of everyday life" (xxiii). Narrative presents an epistemological model for reality, implicitly staking claims about causation and relationship. In this way, the status of narrativity in life writing is a register of concepts of self, agency, and social order. I demonstrate the epistemological effects of conceptualizing lives as data by reading the formal effects data entails for life narrative.

Provoking critical awareness of the gap between data and narrative is a project that has only become more urgent a century or so after these modernist experiments. Data is[9] now constantly being used to narrate our lives. Categorizing algorithms draw from amassed personal data to assign narrative destinies to individuals at crucial junctures, simultaneously predicting and shaping the path of their lives' unfolding. Data is commonly assumed to bring us closer to objective knowledge of reality, perhaps relieving the need for human interpretation altogether if we can only collect enough. In 2008, Chris Anderson, a writer for *Wired* magazine, went so far as to assert, "With enough data, the numbers speak for themselves" (108). But the narrative paths categorizing algorithms have assigned to human lives in areas ranging from public policy to personal finance seem, more often than not, to replicate biases about who an individual is and could become.[10] It has become increasingly clear that, as John Cheney-Lippold cautions, "Who we are in terms of data depends on how our data is spoken for" (*We Are Data*, 48). The question of who we are hinges not on what data says, but on who is granted the authority to speak for it and what forms of representation they employ. The data-driven modernists that populate the juncture between life, data, and story model critical data narrative in ways that prepare us to challenge the claims of algorithmic identification and demand alternative modes of narrating our collected lives.

Data: Point, Collection

Data circulates in public discourse as a synonym for reality, the raw foundation of truly objective knowledge. As Lisa Gitelman and Virginia Jackson have observed, this discourse conceives of data simultaneously as material to be explained and as explanation itself. We commonly think of it as "units or morsels of information that in aggregate form the bedrock of modern policy decisions by government and nongovernmental authorities" (Gitelman and Jackson, 1). Yet as inherently crude and insufficient as anything made up of "morsels or units" must be, data is also commonly thought of as having the power not only to represent what exists, but also to narrate what is to come. "Our data isn't just telling us what's going on in the world," IBM advertises; "it's actually telling us where the world is going" (qtd. in Gitelman and Jackson, 1). In our discourse, data slips, both colloquially and conceptually, from plural to singular, from material requiring explanation to explaining agent. A critical understanding of data begins with awareness of this operational duality and the epistemological desires that underwrite it.

The data point, as we know it, begins its discursive life as the Baconian particular. Francis Bacon, in his 1620 methodological treatise *Novum Organum* (*New Instrument*), enshrines the "particular" as the first object of knowledge. "We must bring men to particulars," he exhorts, "and they must for a while renounce their notions, and begin to form an acquaintance with things" (19). Bacon argues that scientists must first commit themselves to the creation of "a store and collection of particular facts, capable of informing the mind" (78). His formulation encodes the duality of data in its inseparable linkage of "particular" and "collection" as the forms of representation that will bring us closest to knowing and understanding reality.

While I am suggesting that the Baconian particular launches the form and concept of the data point, it is instructive to note that Bacon does not inaugurate the usage of the word "data" as we now know it. *Novum Organum* uses the word "data" only once and its single usage illustrates the radical shift in reference that occurs, as historian Daniel Rosenberg has identified, in the word's journey from Latin to English across the later seventeenth and early eighteenth century. From the Latin *dare*, to give, the most literal meaning of data is "givens" (Rosenberg, 15–16), assumed truths that precede investigation and analysis. Data, in this sense, is exactly what Bacon rails against. Critiquing Galileo's explanation of tides, Bacon writes, "He has, however, imagined this on data that cannot be granted (namely, the earth's motion)" (240). "Data" in Bacon's usage refers to preexisting theories of planetary motion rather than collected particular observations.

Data's concrete referent has shifted from fully formed theories, principles, or explanatory narratives to massive collections of points. This shift makes sense in the context of pervasive empiricism, the belief that in order to know the world, we must rely upon sensory perception. If seekers of knowledge "restore the senses to their former rank," Bacon contends, they will "generally reject that operation of the mind which follows close upon the senses, and open and establish a new and certain course for the mind from the first actual perceptions of the senses themselves" (6). These "perceptions" are the "particular facts" (78) that must now be collected. In his instruction to perceive first and reason later, Bacon sets up an ideal order of operations that temporarily suspends theorizing in order to reach a "new and certain course" that will be superior due to its accord with the world as it really is. This process is often referred to as induction, or reasoning from observation, and set in opposition to deduction, or deriving from first principles. Bacon proposes to shift belief from content to method, discarding a priori principles in hope of as-yet unrevealed principles that the collection of particulars will yield, making them the new "data." Thus, while the literal meaning of data, the "givens" upon which reasoning is founded, has remained the same, the thing to which it refers has become its opposite.

Bacon's collection of particulars is intended to disrupt two human cognitive tendencies: the "operation of the mind" (6) that follows from the desire for all-encompassing coherence of explanation and a too-ready equation of individual experience to total reality. Bacon saw the study of the natural world as helplessly stalled due to reliance on syllogistic methods of deduction. Reasoning from prior principles created a sense of internal coherence to every natural process that, while affectively pleasing, ultimately did not account for the world's diversity of phenomena. Bacon argues, "The human understanding, from its peculiar nature, easily supposes a greater degree of order and equality in things than it really finds; and although many things in nature be *sui generis* and most irregular, will yet invent parallels and conjugates and relatives, where no such thing is" (22). Bacon envisions data-as-collection as a corrective to the impulse to project underlying order when one should instead be confronted by confusion. Additionally, as individuals, our perceptions are unavoidably constrained not only by our cognitive predispositions but also by our physical limitations. "The foundations of experience (our sole resource)," he asserts, "have hitherto failed completely or have been very weak" (78). A commitment to data collection promises to overcome the limits of individual perception and forestall the habit of projecting order onto reality.

Bacon's method thus comes with two mandates: data collection must

be exhaustive and it must be exteriorized. Exhaustivity, as conceived by information science, is a measure of the correspondence of an index to the document(s) indexed, a measure of the distance between the secondary model and the complete world of knowledge, however that world is defined (Van Rijsbergen, 24–25). As Mary Poovey describes, the Baconian ideal insists that the "entire globe and all of its inhabitants ought to be subject to empirical observation" ("Limits," 193). The aspiration to exhaustive collection is essential to data epistemology for two reasons. First, it is only through exhaustive collection that we can be sure to overcome our selective, interpretive nature. Second, exhaustive data is presumed necessary to maximize the material gain that can be leveraged out of an increased ability to predict and control.[11]

In addition to being exhaustive, a data collection must be exteriorized. The "collection of particulars" (Bacon, 81) requires literal and conceptual externalization from the human subject in order to disrupt our mental inclinations and extend our analytic capacities. Foreshadowing our contemporary interest in data visualization, Bacon instructs that we must "properly and regularly [place] before the eyes" the "collection of particulars" (81) once it has been amassed. For, he cautions, "after having collected and prepared an abundance and store of natural history . . . still the understanding is as incapable of acting on such materials of itself, with the aid of memory alone, as any person would be of retaining and achieving, by memory, the computation of an almanac" (80). To make use of collected data, the human memory must be supplemented by material repositories and visualizations. The desire for data in this way necessitates technological and representational innovation, because the requisite "collection of particulars" promises to overwhelm the capacity of any single human memory just as the vastness of the world surpasses the scope of any single eye. By placing data outside the self, Bacon exteriorizes it both literally and in the conceptual sense, by constructing it as "something we feel we can know, reveal or interpret and which will give us a foundation" (Colebrook, 71). Conceived as a "collection of particulars," data becomes a term for something much less coherent than a "given" idea while retaining its telling etymological encoding of our desire for a singular bedrock of knowledge.

While the abundance of data visualizations in contemporary life speaks to the ongoing relevance of exteriorization, the desire for exhaustive collection may be the most important continuity between Bacon's theorizations and the present moment of Big Data. As boyd and Crawford note, "There is little doubt that the quantities of data now available are often

quite large, but that is not the defining characteristic of this new data eco-system. In fact, some of the data encompassed by Big Data (e.g. all Twitter messages about a particular topic) are not nearly as large as earlier data sets that were not considered Big Data (e.g. census data)" (663). A more defini-tive trait, as Rob Kitchin and Tracey Lauriault argue, is Big Data's aim to be "exhaustive in scope, striving to capture entire populations or systems (n = all)" (4).

The aspiration toward exhaustivity underwrites the conflation of data and narrative. Writing nearly two centuries further into the empiricist knowledge project that Bacon helped to launch, Pierre Simon Laplace elaborates on the scope of knowledge—and power—that an exhaustive col-lection of particulars would enable:

> Given for one instant an intelligence which could comprehend all the forces by which nature is animated and the respective situation of the beings who compose it—an intelligence sufficiently vast to submit this data to analysis—it would embrace in the same formula the movements of the greatest bodies of the universe and those of the lightest atom; for it, nothing would be uncertain and the future, as the past, would be present in its eyes. (4)

Laplace's conjecture assumes that there are a set of natural laws that, work-ing together in complex yet predictable ways, are awaiting only our discov-ery to reveal seeming chance for the order that it really is. This revealed order will explain reality from the micro to the macro, subsuming "all events, even those which on account of their insignificance do not seem to follow the great laws of nature" (Laplace, 3) in its predictive power. It is only "in ignorance of the ties which unite such events to the entire system of the universe" that "they have been made to depend on final causes or on hazard" (3). Both a priori "final causes" and chance will be abolished by exhaustive data collection. Wendy Chun has named this figure of "an intelligence sufficiently vast to submit this data to analysis," the "Laplacian subject . . . a sovereign subject capable of 'knowing all'" (109). The imagi-nation of such a subject entails determinist assumptions about the work-ings of both animate and inanimate life and nearly unimaginable power for an individual or group that could wield such definitive knowledge.[12]

By the mid-nineteenth century, Auguste Comte's theorization of sociol-ogy has extended the predictive visions of the empiricist project to encom-pass the human. As Lewis Coser summarizes, "Comte's aim was to create a

naturalistic science of society, which would both explain the past development of mankind and predict its future course," holding that society "is subject to basic laws just as is the rest of the cosmos, even though it presents added complexities" (3). As Bacon condemns the tendency to parallels and conjugates and Laplace decries explanation via final causes and hazard, Comte rejects the assumption that human social life is "always exposed to disturbance by the accidental intervention of the legislator, human or divine" (Comte vol. 2, 215). Although Comte did not believe that clear-cut laws of social physics would be immediately graspable, he did contend that they ultimately would be. At that time, humanity would find "social phenomena, like all others, [subject] to invariable natural laws, which shall, as a whole, prescribe for each period, with entire certainty, the limits and character of social action" (Comte vol. 2, 240). Thus, by the time the writers of this study are experimenting with data collection as a mode of representation, they are participating in a data discourse that posits the human as object of empiricist inquiry in the same terms as applied to the world of material.

More recent enunciations of the dream of exhaustive data collection echo this desire for and presumption of ultimate predictive certainty. On January 11, 2007, computer scientist Jim Gray addressed the Computer Science and Telecommunications Board with a vision of a "fourth paradigm" (Bell, xi) of scientific research driven by the collection, curation, and analysis of massive sets of data. Experiment, theory, and computation would be supplanted by data collection as the primary method of scientific investigation. Gray's "dream of establishing a 'sensors everywhere' data infrastructure" (Bell, xv) is the Baconian ideal and Laplacian subjectivity technologized and imagined as a realizable goal. This is a direct result of centuries of empiricist theory and desire. As one of Gray's respondents puts it, "Data is the result of incremental advances in empiricism-serving technology" (Wilbanks, 211). These new technologies have brought us closer to exhaustivity of collection for all domains, natural and human: "Data comes in all scales and shapes, covering large international experiments; cross-laboratory, single-laboratory, and individual observations; and potentially individuals' lives" (Bell, xiii). The bounds of data's potential to generate knowledge are, again or still, being promoted as limitless.

The connection that Bacon, Laplace, and others make between exhaustive data collection and ultimate knowledge is the basis of what I am calling the epistemology of data: the belief that reality is most accurately represented as and will ultimately be understood through a collection of data

points. Bacon's "collection of particulars" taken to its Laplacian conclusion would create an exhaustive and externalized representation of the world. Through data we would come to know the world by being able to see it, mediated through time- and place-bound points of information that are then unmoored from time and place to allow us access to a reality that encompasses all times and places. Data's epistemology is empiricist in that it reifies and relies on the recording of sensory perception. It is realist in that it places primacy on existence rather than consciousness and assumes that there is a reality to be recorded and understood, even if imperfectly. This belief imparts a sense that data collection is imperative if reality is to be known and understood.

Data epistemology taken to the extreme is what boyd and Crawford have called data mythology, "the widespread belief that large data sets offer a higher form of intelligence and knowledge that can generate insights that were previously impossible, with the aura of truth, objectivity, and accuracy" (663). Data mythology assumes that exhaustive data collection is functionally possible and has the potential to produce atheoretical understanding and universal truth. Because of this assumption, "the apparent empiricism of data-driven research" (Schöch) is often popularly seen to be epistemologically superior to methods, such as those typically employed by humanities scholars, that insist on "context-dependent interpretation and the inevitable 'situated-ness' of the researchers and their aims." Raw data, though an oxymoron,[13] is often presented as the closest thing to a complete proxy of reality as we imagine can be objectively attained. An epistemology of data that anticipates seamless translation of data to meaning, though, is fundamentally challenged by data's core formal features.

Data as Form

Data is simultaneously point and collection: discrete notations of perception[14] collected in order to exhaustively represent reality. Literally, "data" is both a count noun, "an item of information; a datum" and a mass noun, the plural of datum, "related items of (chiefly numerical) information considered collectively, typically obtained by scientific work and used for reference, analysis, or calculation" ("data," Oxford English Dictionary). Data becomes legible as data through the specification of a method of collection. As sociologist Roberto Franzosi explains, "Typically it is a specific methodological school that confers the status of datum to specific types of evidence. Data, in other words, are the result of specific types of data collec-

tion techniques" (186). As these definitions highlight, data is functionally and formally inseparable from collection. Data's grammatical plurality is its implicit collectivity. The colloquial slippage from plural to singular is a telling elision of data's conceptual complexity and an expression of the pervasive belief (or desire) that data, all by itself, *means* and means definitively.

Once put into a collection, each datum holds an equal status, an equal claim to representing a small piece of actually existing reality. Despite the formal effect of commensuration, though, these equally real small pieces are predicated by and represent difference itself. As philosopher of information Luciano Floridi notes, "a datum is ultimately reducible to a *lack of uniformity*" (*Introduction*, 23, emphasis in original).[15] There would be no data to perceive, record, or represent if difference did not define the "real world" (Floridi, *Introduction*, 23). Data collections are inevitably plural, heterogenous, and full of conflicting potential information. Without the interventions of probability and statistics, these collections would yield very little in the way of clarity, prediction, or narrative. So, while the popular tendency is to think of data as a solution to uncertainty and ignorance, its proliferating points, when taken seriously as equally important markers of actually existing reality, agitate against stable knowledge, blanket description, and clear trajectories of development.

Separating a concept of data from the related concepts of information, statistics, and the database is crucial to understanding how it operates as a distinct epistemological concept and representational form. Data does not neatly align with information, which can be roughly defined as data plus meaning (Floridi, *Introduction*, 21). Information, unlike data, is meant to convey a specific message. Claude Shannon, a foundational theorist of information, proposes that information can be understood as fundamentally made up of two parts: signal and noise.[16] Signal is the information intended to be conveyed, and noise is what adds superfluous and misleading information to the signal. It could be said that those who seek, and believe they find, a narrative in collected data make the same distinction. Yet, the distinction between signal and noise is a subjective intervention, an act of selection that overrides the formal equality of the data point to facilitate interpretation. The difference between a data collection and a message (or signal) is that in a data collection, every point is, at some level, a signal as valid as any other, a bearer of potential information about actual reality.

The concept of data also does not neatly align with the theory and practice of statistics, "the mathematical tool for analyzing experimental and observational data" (Porter, 3) that burst forcefully onto the scene

of interdisciplinary quantitative methods during the period from 1890–1930 and is today "enshrined by public policy as the only reliable basis for judgments" and "seen in many scientific disciplines as indispensable for drawing reliable conclusions from empirical results" (Porter, 3). Statistical methods attempt to discern a best fit (and narrative-like) line for collections of heterogeneous data points using concepts of probability. Although, as Theodore Porter uncovers, statistics historically begins as an alternative to deductive sociology, its mode of induction works to reduce the difference represented by the data collection. In statistics, the significance of any given point is a matter of calculation. In a data collection, significance is intrinsic and inherent. To plot a line through data is to choose which are most significant, again a subjective intervention. When data collection is understood as being distinct from statistical methods and forms, the line is exposed as provisional and a multiplicity of other possible lines comes into view. Because of each point's intrinsic significance, a full data set lays out not a trajectory but trajectories, messy potential paths rather than one predictable destiny.

As well, the concept of data is separate from the form and mechanics of the database. Our understanding of data as a collection of observations emerged before digital computation came into being. With the growth of the social sciences and statistical methods in the second half of the nineteenth century, Jonathan Furner observes, "came the proliferation of systematically organized tables of numerical values, recording and reporting the frequencies and quantities resulting from observations and measurements conducted in accordance with the principles and standards of scientific method" (295). These tables' representation of discrete collected observances began to be referred to as data, and therefore "the notion of data as 'content . . . about a referent' pre-dates by some distance the use in computer science, from the 1960s onwards, of the term 'database' to talk about structured collections of recorded instances" (295). As Lev Manovich further explains, "In computer science, database is defined as a structured collection of data. The data stored in a database is organized for fast search and retrieval by a computer and therefore, it is anything but a simple collection of items" (218). Data precedes and is therefore other than the database, and as a concept of reality and representation it exists outside of computers as well.

Most importantly for the goals of this project, data is the formal antithesis of algorithmic determination. "Algorithm" is a term that has taken on many meanings.[17] At its most basic level, an algorithm is a series of steps

undertaken to perform some operation. Present usage typically assumes that these are analytical steps performed computationally on data to arrive at some kind of predictive determination. Many algorithmic determinations are aimed at identifying people for some purpose—as a good credit risk, as a likely criminal, as a future consumer of a particular product. Such categorizing algorithms are what seem to make the massive amounts of data collected in the course of our daily lives speak for itself. While algorithmic assessments of identity come with probabilistic disclaimers and variable accuracy rates, the consequences they entail for the lives to which they are applied unfold on an all-or-nothing basis. If you are determined to be a likely criminal, you will be treated like one. Recovering data as a representational form prior to and other than the algorithm can help us cultivate a needed skepticism about the authority of mechanical determinations.

By considering the data point and data collection alongside and among the roster of modernist aesthetic forms, we recover an archive of resistance to the conflation of data and narrative in the context of lives. The period of this study marks the convergence of data as an epistemological concept with the rise of modernist aesthetic projects founded in various experiences of modernity. A full text search for the keyword "data" in the Modernist Journals Project returns 538 hits,[18] in both literarily oriented and more general interest publications, and in editorials, essays, reviews, and advertisements. A sampling of these usages conveys a sense of the period's data discourse. Most substantively, forty-three of these hits are from *The Crisis*, founded and edited by Du Bois, dedicated from its opening issue to "to set forth those facts and arguments which show the danger of race prejudice, particularly as manifested to-day toward colored people" ("Editorial," 10). The presentation of data, and discussions of the need for data on topics relevant to African American life, are a central feature of this journal. Roughly another dozen hits are from *The Little Review*, and roughly half of these usages come from the pen of Ezra Pound,[19] some deployed in editorials printed alongside the serialized books of Joyce's *Ulysses*. Although these hits include one poem,[20] usages in *Little Review* tend to refer to data in a fairly typical manner, as something gathered and consulted by experts. However, these more or less pedestrian usages sometimes take place in the context of fairly contentious debates over ideas that ostensibly arise from data, such as an editorial on recent scientific investigations into gender.[21] Finally, advertisements position data as a product feature that will advantage savvy users. *Harpers* of January 1911, for example, includes an advertisement for the Mahin Advertising Company's Data Book, which claims to apply data's

powers of prediction to supply ten tests a salesperson might use to judge written sales copy "so that you can pretty nearly tell a selling advertisement before you must pay for it" ("Salesman"). Aside from Du Bois and the *Crisis*, most usages of the term do not imply the type of critical attention to data itself that I argue characterizes the life writing of data-driven modernists. They do, however, demonstrate that data was in cultural circulation as a concept, imagined as collections of facts being accumulated by scientific observers out there, somewhere, slowly revealing the answers to certain questions.

In their fascination with and recognition of the formal ramifications of data collection asymptotically approaching exhaustivity, data-driven modernists pursue dissident representational potentials of empiricism. While there are clear similarities between the data point and the data collection to other aesthetic techniques typically connected to modernism and the representational technologies of the early twentieth century—including the fragment, the montage, and the impression—data proposes a set of distinct formal properties and a distinct epistemology of the real while contributing to the recognizably modernist aims of defamiliarization and narrative experimentation.

Fragmentation, imagined either as the representation of modern destruction of traditional coherence or as a practice of defamiliarization intended to critique conventional representation and provoke fresh perception, shares data's engagement with the collection and assemblage of pieces. Turning to the fragment, as Rebecca Varley-Winter describes in her reading of Woolf's theorization of description in "Character in Fiction," is part of the search to represent the real: "the obscure, and the fragmentary are pleas for accuracy, as if, by focusing on smaller and smaller traces, tangible evidence of truth might be reached" (24). But the modernist fragment also implies a less-than-wholeness that the data point, as a self-contained if highly compressed *whole* bit of reality, does not share. The fragment is typically either a failure—as when Woolf claims that writers of her moment are doomed to "a season of failures and fragments"—or it is exemplary, as in the "luminous detail" proposed by Ezra Pound, which Varley-Winter glosses as "the heart of the work. . . . Only certain details have this encapsulating potential, as if all the other details must be chipped away to reveal them" (31). Fragmentation in this sense is more the result of careful selection than exhaustive collection.

Montage, or the juxtaposition of disparate images, texts, and other representational fragments, is in many regards similar to the mode of assem-

blage that I argue characterizes narratives constructed in relationship to data collections. The practitioner of montage, like the data-driven modernist, seeks to call attention to the fact that observation, whether in the form of a single image or collection of data points, does not speak for itself but requires interpretive intervention. As Sally Stein has said of montage in U.S. photography, "The principle of active mediation underlying photomontage casts doubt on the adequacy of the autonomous photograph by suggesting that meaning required more than the selection of subject matter in the viewfinder" (132–33). Yet the practice of montage is fundamentally different than data collection, because its collecting aesthetics are more directed, toward a predetermined disruptive effect[22] or the telling of a particular story,[23] rather than primarily the result of a commitment to gather exhaustively within a set of chronological or physical parameters.

Similarly, the impression shares many features of the data point, and in some usages is nearly equivalent. Like the data point, the impression is a kind of whole bit of information, but it does not share data's epistemological claims to objectivity. As Jesse Matz has detailed, in terms of its informational content, the impression is overdetermined, variously connoting a type of raw sensory data and extreme subjective reaction. Thus, when Woolf proposes in "Modern Fiction" that modern novelists should "record the atoms as they fall upon the mind in the order in which they fall, let us trace the pattern, however disconnected and incoherent in appearance, which each sight or incident scores upon the consciousness" (161), she is drawing on an incipient data aesthetic but not demonstrably interested in data as an epistemology. She imagines the narrator less as a data collector and more as an exceptional perceiver whose receptivity results in tracing a new pattern rather than exhaustive collection.

Like montage and the impression, data as a modernist form crosses the boundary of textual and visual media. Because my focus is primarily textual, I have limited my analysis to the ways in which these writings analogize important aspects of visualization, such as the effect of parallelism generated by parataxis and descriptive accumulation, but I do not deal at length with visualizations themselves. There are undoubtedly more provocative connections between modernist visual arts and data visualization than this study focused on life writing can encompass.[24]

Many of the formal features I claim for the data aesthetic—such as the abundance of detailed description, repetition, lack of narrative structure, a focus on social others—have also been attributed to naturalism, realism, and postmodernism.[25] Given that these, too, are major aesthetic move-

ments of the data-oriented nineteenth and twentieth centuries, some level of response to and engagement with the concept of data is to be expected across aesthetic movements and some formal overlap as well. I see data collection as one of the methods and forms relevant to David Harvey's assessment that "modernism, in short, took on multiple perspectivism and relativism as its epistemology for revealing what it still undertook to be the true nature of a unified, though complex, underlying reality" (27). What I think differentiates the writers and texts of this study is their explicit engagement with data epistemology as a means of seeking that reality. Data-driven modernists take the thought experiment of data collection further than others as they both question and embrace data's potential for revelation. They are obdurately receptive and committed to continuing collection, which makes them willing to encounter and proclaim the deep strangeness that a data collection approaching exhaustivity reveals as real. The type of modernism I examine arrives at its break with narrative convention through a critical yet committed search for what is real via data collection.

Data and Narrative

While data is driven toward collection, narrative is, traditionally, driven by selection—the designation of an ending and the exclusion of all data points not relevant to unfolding that ending. As Hayden White observes, "every narrative, however seemingly 'full,' is constructed on the basis of a set of events which *might have been included but were left out*; and this is as true of imaginary as it is of realistic narratives" (14, emphasis in original). Coherence is a product of including only what is necessary to model the progression from beginning to end as a causal chain of events. Following the Aristotelian aesthetics of Western narrative, "a thing whose presence or absence makes no visible difference, is not an organic part of the whole" (*Poetics*, pt. 8). Most literary narratives, to be sure, will exceed such a model in multiple ways. As White has suggested, narrative is not a binary designation. Texts can instead be seen to possess varying degrees of narrativity, as it is possible to narrate, or "adopt a perspective that looks out on the world and reports it" (7), without *narrativizing*, or constructing "a discourse that feigns to make the world speak itself and speak itself *as a story*" (7, emphasis in original). In these terms, we might describe the epistemological end of data collection as the total narrativization of reality and see the status of narrativity in data-driven forms as a register of how critically their nar-

rators are approaching not just the data collection before them but also the data epistemology that seeks to authorize that data as other than and superior to human judgment.

As Laplace articulated and contemporary claims on behalf of data often imply,[26] the envisioned ends of data collection are that an underlying narrative will be revealed, allowing knowledge and prediction to coincide. Yet, data's formal and epistemological dependence on the form of collection challenges narrativity rather than confirming it. Data begins as a data point—whether that point is a measurement, description, test result, case study, or life story—but the data point is understood never to stand alone but always to be part of a heterogeneous collection of formally equal points. Prior to analysis, data points exist in a flat order, in parallel, each one as real as the next. These collected points hold sway as more real than any interpretation that arises from them because they are understood as further removed from human intervention, our problematic tendency to rush them into sense-making frameworks. Implicit in the goal of exhaustive representation is the belief that each existing "particular" bears some amount of invaluable potential information. To overlook anything, or to assume one has found the paradigmatic case that will explain all others, is to commit the error of mental projection. The data collector must be willing to record and represent all that she finds. Exhaustivity therefore requires, at least in theory, a subjective shift toward radical receptivity to reality as it is encountered. Bacon chides the squeamish or unduly proper empiricist, "With regard to the meanness, or even the filthiness of particulars, for which (as Pliny observes), an apology is requisite, such subjects are no less worthy of admission into natural history than the most magnificent and costly. . . . For that which is deserving of existence is deserving of knowledge, the image of existence" (95). If we desire knowledge of the real, preexisting assumptions about worthy objects of knowledge cannot circumscribe the collection of data. All that exists must be observed, recorded, and represented.

The view of all phenomena—natural processes and human beings alike—as being first a collection of data points that must be observed and recorded in order to be understood renders each an assemblage because it shifts perception to focus first on parts (produced as empirically discrete) and makes any whole something that requires construction or interpretation, a self-conscious step away from the raw reality of collected points. Narrative dynamics of assemblage arise when the imperative to collect data is conjoined with increased narratorial self-consciousness about the

superior, if ultimately inaccessible, reality of the collection in its entirety. An assemblage understanding of narrative denaturalizes coherence as an innate quality and instead highlights the agentive, constructive act that can allow any two data points to be read as forming a narrative. As novelist Richard Powers observes, "stripped down to its fundamental essence, a narrative could be defined as any sequence selected for its significance. *This happened*, *and then this followed*: the simple act of choosing to relate these data in some order endows them with a second order of highlighted or implied meaning" (458). Meaning does not preexist the act of juxtaposition. Instead, the act of juxtaposition, the selection and arrangement of data points, drives meaning. The narrator is unavoidably revealed as the selector, juxtaposing elements that could have been arranged otherwise; meaning calls attention to itself as contingent upon this assemblage.

Narrators who imagine reality in the form of collected data points face a contingent array of narrative possibilities and must reckon with their agential role in turning data into meaning. Jane Addams, in the "Preface" to her autobiographical work, *Twenty Years at Hull House*, voices the self-consciousness such awareness provokes:

> It has also been hard to determine what incidents and experiences should be selected for recital, and I have found that I might give an accurate report of each isolated event and yet give a totally misleading impression of the whole, solely by the selection of the incidents. For these reasons and many others I have found it difficult to make a faithful record of the years since the autumn of 1889 when without any preconceived social theories or economic views, I came to live in an industrial district of Chicago. (vii–viii)

Addams places primary value on conveying her reality fully. Forming an "accurate report" and "faithful record" is her stated goal, and her concern is that "solely by the selection of the incidents" she might create a "totally misleading impression of the whole." The conceptual force of her life as a data collection exceeding what she is able to convey in her text makes her hyperaware of her inevitable role as a selector of incident. She is concerned with the power of a narrative frame to distort reality, and her sense of difficulty suggests she lacks a narrative form that she can conceive of as both capturing the whole and being a valid life story.

Narrative therefore looks different through the lens of data. It looks more contingent, more provisional, and less like what we would usually

recognize as narrative because the epistemological commitment to collection complicates the process of selection, or the exclusion of points deemed insignificant in light of a predetermined ending. Instead, through its conceptual privileging of collection over selection, data generates aesthetic forms that emphasize parallelism and co-presence of heterogenous elements. Timothy Lenoir offers the following definition of parallelism in formal terms by way of contrasting it with its conceptual foil, seriality: "Seriality is exemplified in narratives, routines, algorithms, melodies, timelines; parallelism is exemplified in scenes, episodes, harmonies, contexts, atmospheres, and images. Parallelism foregrounds presence, simultaneity, co-occurrence" (xxvi–vii). The parallel/serial duo underlies every representational form, but one or the other dynamic can predominate. Data collection as a form emphasizes parallelism. Each data point exists in a formally parallel state, representing an actually existing reality and exerting the conceptual force of equal importance and potential meaning. Beeswarm plots and dot maps, forms of data visualization in which every data point is visible as a discrete presence, emphasize this formal feature inherent to data.[27] As Manovich observes of new media objects built on database structures, many "do not tell stories; they do not have a beginning or end; in fact, they do not have any development. . . . Instead, they are collections of individual items" (218).[28] The conceptual force of commensuration and co-presence inherent to data collection agitates against the finality of any act of selection, complicating the methodological procedures through which we move from data to meaning.

The shifts in narrative form and narratorial stance that data collection provokes have particular salience when narrative is used to model social relationships, as Elliott demonstrates in his study of late nineteenth-century realism and the emerging discipline of Boasian anthropology. Elliott argues that Boas's crucial disciplinary intervention was "to shift the emphasis of his discipline away from a preoccupation with arranging peoples into narratives of development and toward the accumulation of cultural data produced by a single temporal moment" (xxvi). Prioritizing accumulation over selection disrupts the production of narratives with a beginning-middle-end structure. He asserts "that the shift from cultural evolution (which understood culture as a uniform, global process) to Boasian culture (which understood culture as an aggregation of the practices and beliefs specific to a particular group) involved a radical change in the narrative organization of knowledge about group-based alterity" (xxiii). Through these narrative forms, readers were asked to imagine cultures other than their own as co-

present realities rather than earlier stages on a trajectory of development. The desire for data introduces a disordering force into narrative form that ramifies into revised models of sociality and human development.

Data's challenge to narrative coherence also raises questions about the values we attach to coherence. The loss of coherence can seem like a loss of meaning. György Lukács bemoans the formal shift between narrative and description in his 1936 essay, "Narrate or Describe?" He argues that the descriptive turn represents an abdication of authorial responsibility to select, interpret, and make the underlying meanings of a story, and thereby the direction of history, clear. "Description," he writes, "merely levels," acting as "the writer's substitute for the epic significance that has been lost" (127). The formal commensuration of the data collection is exactly what Lukács cautions against, for when "both the important and the unimportant are described with equal attention" literature is "deprived of all human significance" (131). In the same year, Walter Benjamin similarly laments in his essay "The Storyteller" that "the art of storytelling is coming to an end. Less and less frequently do we encounter people with the ability to tell a tale properly" (83). Narrative coherence is also often treated as a proxy measure of the psychological, social, and political potentials of the self. As the editors of the interdisciplinary narratological essays collected in *Beyond Narrative Coherence* summarize, this naïve "coherence paradigm" suggests "the function of narrative and story-telling is primarily to create coherence in regard to experience, which is understood as being rather formless" and "persons live better and in a more ethical way, if they have a coherent life-story and coherent narrative identity" (1–2). Narrative in the age of data forces us to see coherence as constructed and contingent. As data points of self become harder to justify discarding, the story of a life becomes harder to perceive as coherent.

Unsurprisingly, then, one hallmark of the data-driven modernism evidenced by the collecting lives at the center of this study is that their narrative aesthetics have often been read as a crisis of the self and the social. This crisis is the epistemological intersection of narrative, data, and self. Just as the collected, multi-genre essays of Du Bois's *The Souls of Black Folk* or *Darkwater* displace any vision of a unified narrative of Black U.S. identity, the individual life as a collection of equally meaningful points embodied in Stein's *Three Lives* or Adams' *The Education of Henry Adams* displaces any coherent, developmental narrative of self. The effects of this displacement are often read as failure to attain coherent narrative selfhood, due to being excluded from a supposedly common narrative of American identity (as in

most minority and some women's autobiography) or beginning to recognize the contingencies of one's privileged place in that narrative (as in *The Education of Henry Adams*). What we find in these life narratives, though, is not a lack of narrative but a revised relationship to narrative as a representation of reality born of immersion in data as a way of understanding the world and the self. These writers might be seen to share Mark Freeman's assessment that the "challenge at hand is neither to move beyond narrative nor beyond coherence. Rather, it is to find forms of narrative and modes of coherence that move beyond—well beyond—the classical model in order to do justice to reality, in all of its potential unruliness and beauty, violence and horror" (184). These texts use a data aesthetic to defer narrative, to complicate narrative, and to highlight narrative creation as a selective, agential act to expose the meaning-making processes at work when data is purported to speak for itself.

Data and Lives

To propose to narrate a life, whether that life is literally or figuratively historical, is to propose a method of assemblage for making meaning from data. My focus on life narratives derives from the fundamental condition of life writing as being written and read in relationship to a concept of human life as historical. As Sidonie Smith and Julia Watson pinpoint, life narratives are "distinguished by their relationship to and claims about a referential world" (10). Every life narrative implies a relationship to an exhaustive data collection that would represent the whole of a real life. Aristotle explicitly distinguishes between life and narrative: "Unity of plot does not, as some persons think, consist in the Unity of the hero. For infinitely various are the incidents in one man's life which cannot be reduced to unity" (*Poetics*, pt. 8). Life narrators have always been a kind of data-driven narrator, then, but in the period of this study they, too, newly share in a self-conscious sense of their own agency in constructing meaning.

From a broad historical perspective, the rise of data as a mode of understanding the world and the creation of modern selfhood are intertwined. Ivor Goodson observes: "In general, the contemporary, individualized self is a product of modernism, accompanying the development of the new industrial economies which developed from the eighteenth century onwards." As well, the "social science paradigms that grew up alongside these developments reflected a belief in object empiricism, an Enlightenment quest for laws of human nature" (Goodson, 23–24). As Goodson suggests, the

objectification and quantification of the self is both a logical epistemological outcome of the extension of empiricism to the understanding of human life and an effect of the social anxiety brought on by economic and political change. In this context, certain selves became privileged objects of social scientific inquiry because they were seen as particular threats to order and progress. As Hamish Robertson and Joanne Travaglia have pointed out, "The poor, the unmarried mother, the illegitimate child, the black, the unemployed, the disabled, the dependent elderly—none of these social categories of person is a neutral framing of individual or collective circumstances" but are "instead a judgement on their place in modernity and material grounds for research, analysis and policy interventions of various kinds."

The late nineteenth- and early twentieth-century United States bears out this historical generalization. In the wake of Reconstruction and its abandonment, in the midst of record levels of immigration from outside of the United States, in the process of redefining women's roles in social life, and in the grip of industrialization and economic instability, a host of social sciences, modeled after the empiricist methods and aspirations of the natural sciences, emerged with the determination to plot the future of the nation. Across these disciplines, methods of representing the real moved toward data collection and ideals of objectivity. William Graham Sumner, one of the first professors of a social science at Yale University, translates Bacon's call to relinquish prior certainties to the study of social life, urging students and colleagues to "turn away from tradition and prescription to reexamine the data from which we learn what principles of social order are true" (qtd. in Ross, 58–59). Intellectual historian Dorothy Ross has argued that the turn to empiricism and the desire for objective truth is especially powerful in U.S. social sciences because of widespread affective and political investment in the concept of U.S. exceptionalism, or the belief that the United States is foreordained to realize the ideals of democracy, liberty, and capitalist prosperity without suffering the historical fates of prior republican social experiments. Data collection was at the center of progressive as well as conservative approaches to reinforcing U.S. American exceptionalism. More conservative observers tended toward Social Darwinist apologies for inequity and segregation and more progressive observers tended to propose interventions to right a course tending to injustice and economic stagnation, but both sought to secure the destiny of the nation by uncovering universal, mechanistic social laws.

Plotting the destiny of the nation required being able to ascertain indi-

vidual identity. By identity I refer to the philosophical concept of essential self-sameness as it intersects with political questions of human selfhood and communal belonging. In general, I contrast identity, or the designation of an essential nature that does not change, with a more fluid conception of selfhood, formed and represented through narratives open to revision. Identity presupposes its own reality and fixity, enacting the kind of projective thinking that empiricist inquiry attempts to short circuit through the insistence on first gathering data. As Floridi points out, "Questions about diachronic identity and sameness are really teleological questions, asked in order to attribute responsibility, plan a journey, collect taxes, attribute ownership or authorship, trust someone, authorise someone else, make sense of one's own life, and so forth" ("Informational Nature," 554). The need to fix who someone is arises from a desire to exert some degree of control through predetermining their capacities and commitments, and scientific claims for the reality of racial, ethnic, and gender identities have often played a role in legitimizing attempts to exert political and social controls on certain identity groups.

While many types of identity were scrutinized by data collecting social sciences in this period, racial identity is perhaps the most central and the most paradigmatic. Empirical inquiry into racial identity as a biological reality sought to prove fixed racial difference, and in many cases racial groups were placed in a hierarchical order of civilizational development and intellectual capacity. Individual potentials were thought to be predetermined by racial identities. Questions about who should be allowed to claim full citizenship were figured in racial terms, whether the focus of the question was formerly enslaved African Americans, annexed Indigenous populations, or newly-arrived immigrants. If racial identity could be claimed as empirical reality, it would justify the institutionalized inferiority of such groups, even in a nation that claimed to cherish the ideal of equality. As Ruha Benjamin notes, "race itself is a kind of technology—one designed to separate, stratify, and sanctify the many forms of injustice experienced by members of racialized groups" (36). Casting such categorization as self-evident because data-ordained, simply the confirmation of what was always true, obscures its instrumental function.

To pronounce racial identity, to say who someone is or a group of people are based on racial determination, is to project a certain narrative upon their lives. As Laura Doyle has argued, "Race is a narrative concept. . . . 'race' is at base the idea that characteristics are passed from one generation to the next through time; it is the claim that behavior in the present

and future is predictable because it is based on characteristics inherited from ancestors who lived in the past" (250). To claim that this narrative projection is pronounced by data itself is to erase the uncertainty inherent in any data-driven projection, the heterogeneity of any underlying data collection, and the human agency inherent in narrative construction. Data-driven modernists recover that uncertainty, heterogeneity, and agency through their aesthetics of inclusion, parallelism, narrative multiplicity, and narratorial self-consciousness.

Committed to perceiving reality as a collection of data points, the data-driven narrator begins to conceive of self as assemblage. Selfhood as assemblage rather than coherent narrative offers affordances for resisting identity determination. I characterize selfhood narrated in self-conscious relationship to data collection as an assemblage for formal as well as critical-theoretical reasons. On a conceptual level, assemblage thinking offers a critical vocabulary for nonessentialist being and relationality. As Manuel DeLanda puts it, assemblages are "wholes whose properties emerge from the interactions between parts" (5). These interactions are built on relations of exteriority: although parts combine to form wholes that exceed the properties of individual parts, these wholes do not displace the properties and potentials of individual parts. The emergent properties of an assemblage are always in a process of becoming rather than a state of being. Given the ongoing nature of life data collection and the wide arrays of tools available for sorting, recalling, and visualizing collected data, Jamie Sherman has noted, "The ways in which data come to render a person, then, are always also, at least potentially, in a state of becoming" (39). Assemblage also describes a dynamic of relationality that surfaces when we perceive reality as a collection of data points. As Jane Bennett explains, "Alongside and inside singular human agents there exists a heterogeneous series of actants with partial, overlapping, and conflicting degrees of power and effectivity" (33). Assemblage theory sees the human as data does: one point in a contingent collection of presences, variably contextualized and with shifting potentials for agency that is never absolute.

Approaching lives as assemblages emphasizes their material reality and their formal contingency, as well as their annexation by technologies of data collection for governmental, scientific, and economic purposes, in a way that also opens paths of resistance to essentialist identity concepts. For example, the concepts of assemblage and relations of exteriority allow us to think through the definition of race Du Bois offers in *Dusk of Dawn*: "the black man is a person who must ride 'Jim Crow' in Georgia" (153).

In this definition, blackness is an emergent quality, a contingent effect of assembling a specific person and a Jim Crow train car in the space of Georgia. Emphasizing contingency and contextuality, his assemblage-driven definition of blackness is an intervention in the narrative identity projected by race. The acts of identity assemblage performed by algorithmic identification technologies mark a present-day convergence of the technologies of data, narrative, and race. We may not understand the mathematical operations that produce such assemblage, but developing our awareness of assemblages as contingent formations can help inform our own deliberations on the validity of identities algorithms assign.

Collecting Lives as Data-Driven Modernism

The four chapters of *Collecting Lives* examine how W. E. B. Du Bois, Henry Adams, Gertrude Stein, and Ida B. Wells-Barnett configure data collection as a modernist method for representing lives, confronting questions of identity, and narrating selfhood. They do so in the historical context of the late nineteenth- and early twentieth-century United States, a period in which the reality of human identity, or who certain groups of people "really are," became the focus of empiricist social sciences. Their texts demonstrate their authors' immersion in practices of data collection through narrative aesthetics that emphasize collection over selection, paratexts that position their writing as a form of data collection, and narratorial self-consciousness that highlights the contingency and multiplicity of narratives constructed from data collections. With these aesthetics, data-driven modernists remind us that data's key formal feature—its dual existence as point and collection—agitates consistently against deterministic conclusions and naïve empiricism. Prior to the aggregations of statistics and the compressions of algorithmic prediction, data exists as points, each hefting a small, whole detail of the world into our perception. Asking us to reckon with the irresolvable realities of data point and data collection, they call upon the cultural authority of data to contest rather than confirm identitarian notions of the self.

The types of data point collected by these writers vary widely, but each text is explicitly shaped by a method that governs the scope and practice of collection. These texts' collective forms and formal approaches become legible as data through their paratexts' proposal of collection as compositional method. The introductory and commentary materials placed around the life narratives examined in this study position them as data-driven

forms, undertaking projects of exhaustive self-representation. Each articulates a method for collecting discrete points of some kind (description, event, experience, testimony, newspaper account) as data of a life or lives, explicitly counterposing the resulting form with more traditional forms of narrative. None of these writers propose a scope of exhaustivity that includes every detail, every minute, or every day of a life, but each seeks first to collect, rather than narrate life, explicitly privileging collection over selection. This may surface in the presence of more literal and recognizable representational objects of data collection, such as forms and lists (as in Du Bois's *The Philadelphia Negro*) or in the more recognizably modernist mode of parataxis (as in Stein). This methodological framing and these formal features put them into conversation with the epistemology of data.

Chapter one, "'Such A Body of Information': W. E. B. Du Bois, Data, and the Re-assemblage of Race and Self," demonstrates how Du Bois uses data collection—as a conceptual framework for empirical reality, as a method of sociological inquiry, and as a representational form—to intervene in fixed narratives of African American life and selfhood. I locate his methodological innovations in sociology in *The Philadelphia Negro* (1899) as arising from an insistence on more exhaustive practices of data collection. I trace how his embodied collection of and interaction with data leads to ways of seeing the self and the world that surface and develop in his multi-formal autobiographical works. Specifically, the data of *The Philadelphia Negro* creates a parallel aesthetic of inclusion that surfaces complexity where a deadly imposed coherence threatens to stifle the narrative trajectories of African American lives. The aesthetic of complexity continues to inform *The Souls of Black Folk*'s construction of Black collectivity through a multiplicity of rhetorical and formal modes, displacing any single historical narrative, social trajectory, or empirical assessment of African American life.[29] The epistemology of data collection then drives the crowd-sourced politics of *Darkwater*, which translates the ideal of exhaustive representation into an aspirational democratic imaginary. Finally, *Dusk of Dawn*'s recollection of a life ricocheted between disciplinary, geographical, and social spaces creates an assemblage-driven Black self that is not essentially other, but experientially othered by repeated encounter, both mediated and direct, with the physical and psychological violence of racialization. Taken together, these texts also constitute a persistent critique of empiricism as a tool for progressive social change, both for what it cannot represent and what it cannot do.

In the second chapter, "The Educations of Henry Adams and the Anxi-

eties of Assemblage Selfhood," self as data exposes the epistemological privilege of the white male subject. Unlike Du Bois, who we have seen empowered, to some degree, by data's potential for unsettling received narratives of African American life, Henry Adams is beset by data collection's maintenance of contingency and contradiction. Recording the educational experiences of the manikin in which he has cast his selfhood as objecthood, he confronts a self that is perpetually de- and re-assembled by steadily accruing new experiences of a shifting social, economic, and political order. Increasingly aware of multiple collectivities within the nation, he can no longer think of the narrative selfhood he receives from his family as "the" American model. In its migrations and educations, begun and re-begun, Adams's life comes to exemplify not the family tradition of elite leadership but the emerging American vocation of flexibility as he churns through careers and philosophical frameworks. Adams's inability, or unwillingness, to see this flexibility as a valid and valuable mode of selfhood serves not to condemn the data-driven view, but to affirm its potential to unsettle our understanding of ourselves.

The third chapter, "To Tell a Story Wholly: Gertrude Stein, 'Melanctha,' and Self as Data Collection," considers Stein's disavowal of traditional narrative as part of an intervention in data's claim to atheoretical truth, especially as it is used to underwrite theories of gender identity that determine who has the intellectual status to interpret data. While Adams laments data collection's inability to prove his claim to identity, Stein claims her "genius" by using a data aesthetic to confound the equation of data with narrative, thereby calling into question empiricist theories of identity based on biological sex. A woman, according to such theories, would make a good data collector because of her innate propensity for repetitive action but was unlikely to be an excellent interpreter of data because men were innately prone to creativity and innovation. Because of her immersion in psychological and anatomical research, though, Stein was well aware that scientific theories entail interpretation of data, and the meaning of data always depends at least in part on who is granted both access to it and authority to interpret it. Stein's collecting aesthetics dramatize the distance between data points and meaning, forcing the reader to inhabit the uncertain space between data and narrative. Stein's data collecting projects take many forms: the recording of somatic response in psychology experiments, the painstaking visual rendering of brain dissection, the novelistic search for a definitive typology of humanity in the *Making of Americans*, and the radically inverted scope of exhaustivity aimed at the subjects of *Three Lives*.

Stein founds her work, scientific and literary, in an insistence on discarding none of the data points, equating the most real record with the most exhaustive. Her investment in collection as method and form drives her early aesthetic innovation, notably in her formulation of the continuous present. Yet, the data aesthetic she uses to assert her own intellectual potential does not automatically translate into more egalitarian representational practices. In "Melanctha," a work that Stein and many critics claim to be an aesthetic breakthrough, the mixed race, working class subject offers her own collecting aesthetic of selfhood. In each of her relationships, Melanctha insists on the equal reality of each moment of her life, seeking to claim the entirety of her experience as real, valid, and self-constituting, but she finds no one ready to hear this different kind of story. Stein's own intellectual mobilities, cast as Melanctha's life story, become treacherous incoherencies. The aesthetic that establishes Stein's genius, her status as a potential narrator, plays all too readily into projections of racial difference in which Melanctha has no narratorial status to intervene.

Chapter four, "To Reproduce a Record: Ida B. Wells-Barnett and the Labor of Data Collection," returns to a collector of the data of Black life, and death, who defied threats of physical violence to claim the status of data narrator and intervene in such projections. In her investigative reporting on lynching and in her autobiography, Wells-Barnett's critical data aesthetic refracts the dynamics of race, class, and gender that have defined the prior chapters through the lens of Black womanhood. Recognizing that the received narrative about lynching as an aberrational event spurred by Black criminality serves to forestall public outrage and response, she undertakes "an investigation of every lynching I read about" (*Crusade*, 64). She seeks to compile an exhaustive collection of lynching data in order to disrupt this narrative, and she does so by rigorously collecting newspaper coverage of lynchings in the white press. She finds, however, that data collection does not guarantee data circulation. She must go one step further than Du Bois in embodying data, traveling across the United States and the United Kingdom to share it through direct public address. The methods and experiences of this campaign ultimately shape her autobiographical practice, as she assembles a large portion of her life narrative by reproducing newspaper clippings reporting on her work. While Wells-Barnett has recently become more widely known as a forerunner of the contemporary turn toward data journalism,[30] her innovative use of data aesthetics has not been closely considered or connected to her autobiographical work. Her work models data collection as a mode of grassroots activism rather than an

elite professional practice, making the creative labor of data collection visible through her attention to the material conditions of publication, preservation, and circulation of data.

Between the popularity of self tracking devices and the "collect it all"[31] ethos of both state and corporate surveillance, nearly all of our lives are now either collecting or collected lives. Often both. But the uses to which our collected life data can be put, the stories that are told with our data, vary widely and are applied differentially. In the coda, "Data-Driven Modernism Against Algorithmic Identity," I consider how the critical stances toward data offered by these writers' modernist data aesthetics provide insight for contemporary resistance to algorithmic identification, the increasingly pervasive process of "identity formation that works through mathematical algorithms to infer categories of identity on otherwise anonymous beings" (Cheney-Lippold, "New," 165). Algorithmic identification is, in many ways, only the most recent attempt to assign identity narratives on the basis of seemingly empirical evidence, performing the same kinds of narrative condemnation or valuation of lives on the basis of race, gender, and class that these writers challenged. Connecting these pre-digital practices of life data collection with contemporary modes of assembling the self as data demonstrates the continuing necessity of considering the relationship of narrative form to data, especially as data is used to represent lives.

The models of critical engagement with data offered by writers and thinkers who also found themselves excited by the possibility of representation and revelation through data collection may help inform our own answers to questions of how our life data should be narrated. Finally, as these writers show us, data is less reality than a way of seeing reality that, due to its cultural authority and historically powerful effects, offers both tantalizing and terrifying prospects for representing the complexities of U.S. selfhood and sociality. Data offers but does not guarantee to defamiliarize the tropes of race, ethnicity, and gender that discursively constrain our perception of lives, our own and others'. For that important work of modernist aesthetics to continue, data must be approached critically, as an always embodied, contingent, and politically entangled form of knowledge creation. These texts, I argue, begin to show us how.

"Such a body of information"

W. E. B. Du Bois, Data, and the Re-assemblage of Race and Self

> The problem lay before me. Study it. I studied it personally and not by proxy. I sent out no canvassers. I went myself. Personally I visited and talked with 5,000 persons. What I could, I set down in orderly sequence on schedules which I made out and submitted to the University for criticism. Other information I stored in my memory or wrote out as memoranda. I went through the Philadelphia libraries for data, gained access in many instances to private libraries of colored folk and got individual information. I mapped the district, classifying it by conditions; I compiled two centuries of the history of the Negro in Philadelphia and in the Seventh Ward.
>
> —*The Autobiography of W. E. B. Du Bois*

For W. E. B. Du Bois, data begins with the body. As his description (above) of collecting data for his 1899 sociological study, *The Philadelphia Negro*, illustrates, the epistemological commitment to data collection entails physical commitment and ultimately subjective transformation. His recitation of procedural steps calls to mind exhausting and repetitive physical labor—walk for miles, talk for hours, write it up, repeat five thousand times. As he attempts to realize his desire for exhaustive data on African American life, the physical impositions and subtle subjective accommodations that data collection provokes become manifest. His mind is turned from an interpretive tool into a storage device as he appends his memory to the survey schedule and written memoranda, blurring the lines between self and data collection. Still the work continues, with Du Bois going "through the Phil-

adelphia libraries of colored folk and [to get] individual information . . . mapping the district, classifying it by conditions . . . compil[ing] two centuries of the history of the Negro in Philadelphia and in the Seventh Ward" (*Autobiography*, 198). Du Bois becomes search engine, mapping tool, and compiler, as well as an interviewer and writer. The list-like quality of the sentences conveys the repetitive nature of collection pushing the subject out of cause-and-effect narrativity and into method-driven iteration. The movement toward a conclusion—to the act of data collection, to an understanding of race, to the story of the self as investigator—is deferred as he collects more points of data, insisting on a scope of observation that is historically as well as geographically and socially vast. His "I" is a data collector performing both intellectual and physical acts of collection that generate a multiplicity of relationships to self, to others, and to the material contexts in which they meet.

Pulling back the frame to a broader historical context reveals yet another layer of bodily entanglement between the theory and practice of data collection. Du Bois indicates that the University of Pennsylvania's commission to study the African American population of Philadelphia was not granted to him solely on the basis of his excellent credentials. He states, "The fact was that the city of Philadelphia at that time had a theory; and that theory was that this great, rich, and famous municipality was going to the dogs because of the crime and venality of its Negro citizens, who lived largely centered in the slum at the lower end of the seventh ward. Philadelphia wanted to prove this by figures and I was the man to do it" (*Dusk*, 58). He does not specify why he "was the man," but one can reasonably surmise that his racial status was considered a plus for white city leaders seeking sanction for a racialized view of the city's problems. At the same time as the color of his skin qualifies him for this particular academic work, it disqualifies him from the status, support, and security that formal appointment as a professor would have offered. At least part of the reason that Du Bois conducts his surveys personally is that he does not have the funding for assistants or students to conscript, for "the faculty demurred at having a colored instructor" (*Autobiography*, 194). Instead, Du Bois undertakes this study as a temporary employee of the University of Pennsylvania. A Harvard PhD and a student of leading German sociologists is consigned to the "unusual status of 'assistant' instructor . . . given no real academic standing, no office at the University, no official recognition of any kind" (194). Recognition of the importance of his work is no more forthcoming from the African American community. He relates, "Whites said: Why study the obvious?

Blacks said: Are we animals to be dissected and by an unknown Negro at that?" (195). Far from being a qualification, his skin color adds to their suspicion. His body continually places him at the threshold of proscribed opportunity and continually mediates his accomplishments through a racialized lens.

Du Bois's data collection is thus inevitably intertwined with embodiment for reasons that are practically, historically, and epistemologically consequential. As the city of Philadelphia's "theory" demonstrates, Black embodiment is thought to dictate a fixed life narrative, beginning in poverty, ending in criminality and early death, and signaling the decline of social order. This fixed narrative is, as Du Bois begins his study, on the verge of becoming seen as factual, buttressed by sociological work that uses data collection more as rhetoric than method to dignify Social Darwinist theories of racial hierarchy. Du Bois recognizes that the University's commission reflects the city of Philadelphia's wish for "scientific sanction to the known causes" (*Autobiography*, 194) of crime and corruption, namely the "Negro Seventh Ward." In the view of many white sociologists, politicians, and reformers seeking to give this narrative the stability of fact, all that remains is to collect the data. The data collected could then be used to enforce what Sylvia Wynter has called a "narratively condemned" (70) status, the foreordained dismissal of Black claims to personhood enabled by the narrative structures through which Black life is represented. As Wynter points out, this narrative does not operate alone. It is cradled by what Wynter describes as a classificatory episteme that categorizes based on empirical observation, underlining the connection between scientific discourse and social practices. Christina Sharpe elaborates the link between empiricism and narrative condemnation: "We are positioned in the world by an order of knowledge that produces and enforces links, discursive and material, between the womb and tomb in order to represent black maternity and therefore black childhood or youth as condemning one to a life of violence; condemning one to black life lived in/as proximity to knowledge of death" (61). Recognizing data as a medium of representation deeply intertwined with the history of empiricist thought opens an avenue of critique and resistance. For instead of providing "scientific sanction to the known causes" of crime and poverty in Philadelphia, Du Bois's data collection practices point toward routes of representational resistance to narrative condemnation, and these practices must be recovered if we are to confront the contemporary data-enabled practices of algorithmic sentencing, predictive policing, and other forms of selective data reading applied to minoritized lives.

In this chapter, I read Du Bois's sociological methods as a modernist engagement with the concept of data and argue that the narrative effects of this engagement have an underexplored role in his iterative attempts to represent self and community. Understanding how Du Bois's critical engagement with data collection intersects with histories of race thinking illuminates his narrative forms of subjectivity and selfhood. In these narratives of self, we see not only how a racialized subject moves from an essentialist to assemblage-driven definition of race, but also how a self-consciously empiricist subject understands its positions and agencies in the social world. Specifically, I argue that Du Bois creates an alternate epistemology and aesthetic of data. First, he reconceptualizes both the data collection and the data collector as embodied. He recognizes that the move toward data is a move toward disembodiment, and that data disembodies differentially—on the one hand, it grants the data collector a seemingly superhuman vantage on the world. It further relieves this data collector of any responsibility to narrate, for the data speaks for itself. On the other, it turns Black lives into black lines on seemingly inarguable projections of income, life expectancy, and population decline. It subtracts context and abstracts suffering. Du Bois instead seizes on data's epistemological valorization of exhaustive representation to bring historical context, subjective experience, and communal heterogeneity into the empiricist picturing of Black life. At the heart of this innovation, I would argue, lies a particular and a particularly prescient method of data collection and reflection upon its representational potentials. Du Bois's insight into how data could influence the narrative forms of representation—not only in content but also in aesthetic—inaugurates resistance to data's presumed totalization of narrative. He combats narrative condemnation by insisting that excluded or simply unimagined data points be brought to jostle against the sure signposts of Social Darwinist racial theories. The expanded frame of reality and relationality that these representational techniques provoke alters not just the content but the form of narrative selfhood.

This chapter focuses on a trajectory of works from across Du Bois's career to show the influence of data-driven epistemologies on his autobiographical forms, race thinking, and political imagination during phases of his work that are often assumed to have veered from modern equations of empirical inquiry with social progress. I begin by exploring Du Bois's theorization of empiricism and data collection, focusing on *The Philadelphia Negro*. In both method and form, this study constitutes a Black modernist intervention in data discourse. *The Philadelphia Negro* demonstrates how data collection enables Du Bois to combat narrative condemnation by

turning a single, disparaging narrative of African American life and self-hood into parallel, heterogeneous narratives. *The Philadelphia Negro*'s inter-ventions in data collection produce an aesthetic of complexity represented through textual modes of parallelism and assemblage that we can see being translated into the formal innovations of his later life writings and concep-tualization of race.

A Du Boisian data aesthetic continues to drive the formal innovation in the works he groups as "three sets of thought centering around the hurts and hesitancies that hem the black man" (*Dusk of Dawn*, vii): *The Souls of Black Folk*, *Darkwater: Voices from Within the Veil*, and *Dusk of Dawn: Auto-biography of a Race Concept*. Although none of these works continue the dis-ciplinary data collection practices of *The Philadelphia Negro*, all of them draw on the data aesthetic to situate the self in ever widening contexts of consciousness. In *The Souls of Black Folk*, he moves from situating the African American in the city to the nation, collecting genres to critique data collection's epistemology of Black life in the United States. *Darkwater* expands the circle of data-driven consciousness to encompass a world that, after the destruction of World War I, feels painfully globalized, theorizing democracy as a collection of data gleaned from lives. *Dusk of Dawn* draws the local, national, global, and individual together in a mode of selfhood composed not just of personal experiences, but historical events, social forces, and relationships assembled as data points rather than a progressive or Aristotelian narrative, positing a new coherence for selfhood mediated through data as form of representation.

I argue that Du Bois's repeated experiments with collective life writing forms indicate how, over the course of an early twentieth century career straddling the disciplines and practices of social science, literary writing, and activism, Du Bois came to imagine selfhood as a data collection from which the significance of his life could be assembled in multiple ways. Thus, the "three sets of thought" that emerge over the rest of his career are also three sets of data, each reflecting his engagement with data epistemol-ogy. A data-driven way of thinking about the world continues to form and re-form his representation of self and society, constituting an archive of data-driven modernism.

Data Collection and Du Boisian Empiricism

In his autobiography, *Dusk of Dawn*, Du Bois characterizes his formal edu-cation and early career as an immersion in empirical inquiry. He reflects,

"The main result of my schooling had been to emphasize science and the scientific attitude" (*Dusk of Dawn*, 50) and he finds himself "interested in evolution, geology, and the new psychology." His interests are telling. Each of the disciplines he mentions had, during the nineteenth century, introduced profound complications into the determinist projections of early empiricists. In the complexity and contingency brought into view by Darwin's massive species data collection, for example, there was no longer a scientific basis for arguing that racial characteristics or social hierarchies were fixed. What he takes away from the science of his day is an anti-teleological conception of "the world as a continuing growth rather than a finished product" (50). Du Boisian empiricism identifies and seizes upon the paradox of data collection that these contemporary theories brought to the fore: data collection, as a form of empirical inquiry, is undertaken with the hope of revealing laws of nature—transparent mechanisms by which the past is understood and the future can be predicted—but in practice it unleashes profound uncertainty about the possibility of any single meaning for the past or direction for the future.

If Du Bois was bent on developing empiricist approaches to social reality and human life, empiricism was also bent on him, in a crucial sense. It is no accident that, as Ronald Judy and Alexander Weheliye have observed, "the systematic study of black life, which emerged at the end of the nineteenth century, is coterminous with the rise of the human sciences" (Weheliye, 20) such as sociology, history, and anthropology. "These sciences," Judy notes, "were the means by which the Negro's humanity was to be determined once and for all" (132). As these human-oriented sciences turned toward data, they of course turned data toward Black life, the "true" nature of which forms a perennial question of white Western modernity. As a Black empiricist, Du Bois embodies a contradiction that challenges the terms; he is both the studier and the studied, the collector of data and the object that was to be known through data.

Data collection as a method of empirical inquiry, though, was emerging more as alibi than antidote to racist theories and practices. The 1890s marked both the beginning of Du Bois's professional life and the emergence of what Khalil Muhammed has termed "a new social scientific discourse on the Negro Problem . . . set in motion by a racial data revolution" (33). Recapitulating the classic dynamics of data discourse in white supremacist form, studies drawing on data's presumed objectivity and inarguability to make quantitative cases for Black inferiority proliferated. Nathaniel Shaler's "Science and the African Problem" (1890), for example,

published in the *Atlantic Monthly*, sidesteps overtly racist argumentation by calling for massive data collection about African Americans. The data he calls for includes anthropological research into African heritage and anthropometry. Clearly, while these data may be construed as more objective because they are constituted of measurement and historical event, they are conceptualized from a deeply racist theory of human difference, one which assumes whiteness embodies the epitome of development and blackness obvious inferiority. Frederick Hoffman's *Race Traits and Tendencies* (1896) is the ensuing landmark of racial data collection. Hoffman, a German-born insurance actuary, assembled previously collected data on African American crime and mortality to "prove" that African Americans could not only be justifiably charged higher insurance premiums but were also, as a race, destined for extinction and therefore undeserving of organized, sustained social assistance (let alone compensation for generations of forced labor). As Muhammad describes, "Hoffman combined crime statistics with a well-crafted white supremacist narrative to shape the reading of Black criminality while trying to minimize the appearance of doing so" (51). Data collectors like Shaler and Hoffman conjoin data discourse to unreconstructed racial essentialism. Their work was influential not because of its rigor but because its appearance of objectivity provided adequate cover to legitimize blatant white supremacy. The use of data provided only a veneer of empiricism that was used to support arguments for racial inferiority that would appease Northern suspicions of Southern racism and offer a new pseudoscientific cover for revamped racist practices in insurance sales and policing.[1]

In their calls for and practices of data collection, both Shaler and Hoffman demonstrate a key element of white data rhetoric and aesthetics: they suggest that data can speak for itself. Shaler proposes that investigative efforts "should include all who are at once interested in the problem and can give anything better than words towards its solution" and "be guided by those who have been so disciplined by scientific methods that they can keep in its moderately safe ways" (44). His desire for something "better than words" is the Baconian aspiration rephrased for racial science, founded on the belief that by becoming data collectors, human observers can transcend not only the limitations of their own subjectivity but also those of language. Hoffman, in performing his data analysis, employs similar rhetoric. He concludes, "The data which have been here brought together in a convenient form speak for themselves" (310). Words must be thought and spoken, and so bear too much of the mark of the individual human body,

fallibly located as it is in one place, one time, and at least one political environment. Speech, shifted from the body to data, would be truth.

Du Bois sees data differently. He conceptualizes empirical study as his opportunity to intervene in a world "thinking wrong about race, because it did not know" (*Dusk of Dawn*, 58). The narrow scope and reductive forms of data available to build this knowledge are part of the problem. When the data of Black life is constricted to records of criminality and mortality, a simplistic single narrative can be formed and repeated in part because evidence outside of the death-defined plot has been ignored or not collected at all. Further, data used in solely statistical ways performs a dehumanizing abstraction upon its subjects, isolating events and measurements that should be contextualized in circumstances, histories, and locations. Du Bois hopes to disrupt these paths of interpretation through more comprehensive data representation of African American reality. When he receives the commission of the University of Pennsylvania, Du Bois determines to "ignore the pitiful stipend" and build a sociological method built on "facts, any and all facts, concerning the American Negro and his plight" (*Dusk of Dawn*, 51). The value he places on the collection of these "facts, any and all facts" suggests the power that he believes data holds. He is sponsored to collect data because it is assumed that it will confirm preconception, but he conceptualizes data as disruptive and conjectures that it has the potential to tell a different story.[2] He builds his career on data, but he wagers no less than his humanity on the belief that starting with the act of collecting data, rather than the act of proposing a theory, will disrupt predetermined assumptions about racial destiny and potential.

The Philadelphia Negro was not expected to provide anything more than a seal of disinterested empiricism on foregone racial conclusions. Data, Du Bois suggests, is viewed by his sponsors as a nice supplement to what is already known, a way to "prove . . . by figures" that the "great, rich, and famous municipality" of Philadelphia "was going to the dogs because of the crime and venality of its Negro citizens" (*Dusk of Dawn*, 58). The aspiration for data is mapped onto the question of racial difference—and specifically, the desire to affirm it definitively. Du Bois, however, uses the opportunity provided without assenting to its projected narrative ends: "Of this theory back of the plan, I neither knew nor cared. I saw only here a chance to study an historical group of black folk and to show exactly what their place was in the community" (*Dusk of Dawn*, 58). As Mia Bay describes, the same core of empiricism that provided ideological cover to Hoffman's untruths is central to Du Bois's radical intervention. She

observes, "The first empirical study of social problems among American blacks, Du Bois's *Philadelphia Negro* was a radical and deliberate departure from the research methods employed by his white colleagues to study the same subjects" ("World," 42). The empiricist desire for data is the conceptual wedge that allows Du Bois to use the occasion of an institutionally sponsored study to depart from standard methods and expected outcomes. He makes this departure by pursuing more exhaustive data collection, moving from "known causes" to "facts, any and all facts, concerning the American Negro" (*Dusk of Dawn*, 51).

At first glance, Du Bois's call for data seems remarkably similar to that of Shaler, Hoffman, and other scientific racists. All state that they see rigorous data collection as a prerequisite for policy decisions and scientific method as guard against prejudice. All enjoin "readers to arrive at their own conclusions" and "with the data given . . . verify the writer's statements" (Hoffman, v). They all implicitly draw on the presumed authority of data and its ability to reveal truth and reality. And they all, despite these claims, clearly operate with a governing theory in mind. The epistemological difference lies not in the fact that Du Bois uses data and others do not but in how he conceptualizes data itself. It is not that he is an empiricist and others are not, it is how he conveys the findings of empiricism. It is not only a way of saying that distinguishes him; it is a way of seeing.

Du Bois conceptualizes data differently, and the core of this difference is that Du Bois conceptualizes data as inextricably linked to the human body as concrete particular, from collection through interpretation. In "Sociology Hesitant," a manuscript unpublished in his lifetime, written shortly after the publication of *The Souls of Black Folk*, Du Bois provides insight into his more radical conception of empirical social science and the type of data that it would require. He reflects that August Comte, widely-acknowledged a foundational thinker of sociology, had proposed sociology as a science of the human but failed to give it a truly empirical foundation because of his reliance on an a priori theory of society. Du Bois argues that Comte, "steering curiously by the Deeds of Men as objects of scientific study and induction . . . suggested a study of Society" ("Sociology Hesitant," 38). "Society," Du Bois argues, is an abstraction, and assuming its reality as a thing to be studied institutes a theory before its evidence. "It was as though," he analogizes, "Newton, noticing falling as characteristic of matter and explaining this phenomenon as gravitation, had straightway sought to study some weird entity known as Falling instead of soberly investigating Things which fall" (39). In this document, Du Bois's figura-

tion of sociological data aligns with assemblage thinking by placing primary focus on concrete and discrete phenomena, in this case human lives. This version of sociology commits to collecting data first and interpreting it later, deferring narrative until it is empirically justified.

Comparing the opening pages of *Race Traits and Tendencies* with those of *The Philadelphia Negro* illustrates the subtle yet radical differences between Hoffman's and Du Bois's mobilization of data. This difference begins with their construction of themselves as narrators and centers around their recognition of embodiment. Hoffman bodily exempts himself from the United States in order to presents himself as immune from U.S. American racial thinking: "Being of foreign birth, I was fortunately free from a personal bias which might have made an impartial treatment of the subject difficult" (v). Ignoring how his outsider status might also motivate him to ally with the white insiders who are his audience, compromising his ability to remain indifferent to the outcome of genuine inquiry, he at the very least oversimplifies the personal imbrications of racial hierarchy. Du Bois, conversely, draws explicit attention to the limitations of any single investigator's approach:

> The best available methods of sociological research are at present so liable to inaccuracies that the careful student discloses the results of individual research with diffidence; he knows that they are liable to error from the seemingly ineradicable faults of the statistical method, to even greater error from the methods of general observation, and above all, he must ever tremble lest some personal bias, some moral conviction or some unconscious trend of thought due to previous training, has to a degree distorted the picture in his view. Convictions on all great matters of human interest one must have to a greater or less degree, and they will enter to some extent into the most cold-blooded scientific research as a disturbing factor. (*The Philadelphia Negro*, 2)

His data-driven narrator is fully human, entrenched in the limits of method, experience, and self-awareness of his own ethical commitments. This stance shapes the nature of the conclusions that this narrator can draw. While Hoffman purports to be able to draw conclusions about the entire "colored population of this country" (v), and finds no variation between the 8,861 bodies his data show to be living in Philadelphia's seventh ward (14), Du Bois opens by delimiting his claim to "present the results of an inquiry

undertaken by the University Pennsylvania into the condition of the forty thousand or more people of Negro blood now living in the city of Philadelphia" (*The Philadelphia Negro*, 1). Du Bois asks the reader to consider a group concretely bounded in time and place, while Hoffman presents race as a definitive, monolithic category. While Hoffman presents data as innately impartial, making no inquiry into the methods, occasions, and limits of its collection, Du Bois presents data as the outcome of embodied inquiry, necessarily incomplete, subject to individual vantage and motivation.

Du Bois intervenes in data's racialization not by rejecting data but by more fully embracing it as a method of representing reality. Du Bois's primary methodological intervention is to massively expand the scope of data collection. As Michael Katz and Thomas Sugrue succinctly observe, "Du Bois did not sample" (23). His demarcation of the field to be surveyed is both quantitatively and qualitatively dense. In the opening chapter of *The Philadelphia Negro*, "The Scope of This Study," Du Bois lays out the geographic and demographic parameters of his investigation: "The work commenced with a house-to-house canvass of the Seventh Ward" in which "Six schedules were used among the nine thousand Negroes of this ward" (1). These "schedules" were questionnaires which facilitate the collection of a lengthy list of data points representing a family's lived reality, such as earnings, rent, quality of lodging, and education. Augmenting this survey of material conditions, Du Bois devises methods of surveying a more abstract but equally pressing "social environment—the surrounding world of custom, wish, whim, and thought which envelops this group" (3). Finally, he adds the data of historical context, in the form of two chapters outlining the history of Black migration, forced and unforced, and the changing legal status of African Americans in the city from 1638–1896. The scope of these facts is in itself a charged argument. Prevailing notions of race, as demonstrated by Hoffman and Shaler's work, would have attributed social difference to innate, biological difference from time immemorial. Du Bois's material and historical contextualization troubles that belief with its suggestion that environment is implicated in the data of poverty and crime. If this seems unremarkable, an understanding of race that we now take for granted, Aldon Morris reminds us, "It should be born in mind, however, that at the turn of the twentieth century constructivist language did not yet exist and social Darwinism permeated intellectual discussions of race inequality" (44). Data is the epistemological and representational form that allows Du Bois to separate and hold in parallel the invisible contexts of a racialized life.

The Philadelphia Negro: Homogenous Mass to Living Community

Du Bois frames injustice in terms of narrative projection, highlighting the need for intervention in the forms of narrative used to represent and understand Black life. Documenting the challenges faced by African Americans trying to get and keep good jobs, for example, Du Bois writes, "The difficulties encountered by the Negro on account of sweeping conclusions made about him are manifold" (*The Philadelphia Negro*, 236). A single story is applied to an entire group. Individuals seeking employment confront these narratives and typically lose. Du Bois points out, "A man ordinarily does not dismiss all his white mill-hands because some turn out badly, yet it repeatedly happens that men dismiss all their colored servants and condemn their race because one or two in their employ have proven untrustworthy" (236). In one "actual case" that Du Bois collects, a church which "has a number of members among the most respectable Negro families in this city" ends up with no African American employees because the manager with sole discretion over hiring "thought most Negroes were dishonest and untrustworthy" (237). In this chain of narrative projection, "the Christian church joins hands with trades unions and a large public opinion to force Negroes into idleness and crime." Sweeping conclusions allow an abdication of epistemological agency, a bypassing of the work of connecting the dots for oneself. Data, for Du Bois, becomes a form of disarticulation, a means of disconnecting the dots to provoke awareness of the multiple historical, legal, and social dynamics that intersect in the lives of individuals.

Narrative coherence, in the case of these sweeping conclusions, is narrative condemnation. This coherence is only tenable when a single figure of Black life is allowed to stand in for all. Data as a form is simultaneously characterized by breadth and particularity in its insistence on the inextricable coexistence of point and collection. Through the lens of data, "the" Philadelphia "negro" becomes "5,000 persons" (*Autobiography*, 198) of distinct classes, histories, and individual potentials. At the same time as Du Bois collates broad historical context and exhaustive surveying of an entire neighborhood, he fills his text with details and stories of individual lives. Grand narratives, like sweeping conclusions, are not accurate or justified, and in the face of the profusion of data look narrowly focused and unsubtle to anyone who shares an investment in grappling with reality. I do not wish to suggest that what Du Bois ultimately achieves is a truly exhaustive or objective representation—he himself would admit that this is not the case.

Rather, by emphasizing the need for exhaustive data collection, he gathers and brings to the fore elements of social reality that observers more invested in or influenced by ideologies of white supremacy would leave out of their empirical assembling. He can then leverage the commonplace privileging of objectivity to gain an audience for this new collection of facts.

To defamiliarize the received narrative of Black life, Du Bois must also reconfigure the narrator of social reality. *The Philadelphia Negro* ushers the reader into the position of the "careful student" (2) rather than the pronouncing expert, a patient collector of observation whose role is primarily receptive rather than projective. This observer surveys the "social problems before us demanding careful study" and joins the "we" in Du Bois's assertion that "we must study, we must investigate, we must attempt to solve; and the utmost that the world can demand is . . . the heart-quality of fairness, and an earnest desire for the truth despite its possible unpleasantness" (2). The implied reader, a good empiricist, naturally concurs that the data must be collected and confronted. Du Bois proceeds to lay out a careful procedure in place of a neatly packaged narrative of what will be found. For his data-driven narrator, complete and accurate representation of reality is a precursor to all else—interpretation, reform, condemnation: "The student of these questions must first ask, What is the real condition of this group of human beings?" This "student" knows "that a slum is not a simple fact, it is a symptom and that to know the removable causes of the Negro slums of Philadelphia requires a study that takes one far beyond the slum districts" (4). In place of the slum as simple fact, the student must assemble "a complicated mass of facts" which form "the tangible evidence of a social atmosphere surrounding Negroes" (5). The seemingly abstract "social atmosphere" is made tangible through the accumulation of written records as data, an example of the materializing effect that data's exteriorization enacts. During this process of collection, the student must practice indifference to "extreme statements" about what has caused obvious problems or preemptive theories about what is to be done and instead "describe, analyze" and only then, "so far as possible, interpret" (5). The student's first and most important task is to assemble African American reality as collections of facts, forestalling narration by insisting on collection and the complexity it reveals.

Counterposed to this student of social problems is the "average Philadelphian," for whom "the whole Negro question reduces itself to a study of certain slum districts" (*The Philadelphia Negro*, 3). From the outset, this "average" observer is impaired by a lack of self-consciousness about the

act of selection that has already been performed in the choice to focus on these "certain slum districts." Only seeing a selection of slum districts, the "average" observer ignores other parts of reality that lay equal claim to consideration. Du Bois narrates this observer's thought process to demonstrate its unavoidable arrival at superficial conclusions, supported by familiar, received images and assumptions rather than reality. First, "His mind reverts to Seventh and Lombard streets and to Twelfth and Kater streets," calling up images of single street corners to represent the entirety of the African American city. Next, he relies upon a selection of reports circulated through white social networks (and affirming benevolent white agency) to diagnose these isolated places as entirely problematic: "Continued and widely known charitable work in these sections makes the problem of poverty familiar to him; bold and daring crime too often traced to these centres has called his attention to the problem of crime, while the scores of loafers, idlers and prostitutes who crowd the sidewalks here night and day remind him of a problem of work." Crime and joblessness enter his perception as abstract and static concepts, disconnected from the contingency of lived experience. Others' lives are fixed as his own proceeds through the city at will.

Du Bois thus describes a prototype of the middle class white citizen demonstrating what social theorists of race today term implicit stereotyping, having absorbed circulated images of a few as the reality of all in another social group.[3] This observer also has a racially inflected version of the anesthetized subjectivity that modernist aesthetics of defamiliarization attempt to disrupt: he is so entrenched in familiar narratives that he is unable to perceive the very world he moves through, his thought short-circuited. As Eduardo Bonilla-Silva has noted, "The central component of any dominant racial ideology is its frames or set paths for interpretation" (26). The epistemological imperative of exhaustive data collection does not deny that crime and poverty exist but does insist on documenting them in comprehensive material context so as to intervene in the next step of the white observer's thought process: "All this is true—all these problems are there and of threatening intricacy; unfortunately, however, the interest of the ordinary man of affairs is apt to stop here. Crime, poverty and idleness affect his interests unfavorably and he would have them stopped; he looks upon these slums and slum characters as unpleasant things which should in some way be removed for the best interests of all" (*The Philadelphia Negro*, 3–4). The "ordinary man of affairs" cannot perceive particularity; his potential engagement with reality is scuttled by superficial conclusions.

Du Bois's insistence on the reader as data collector is manifest in his motif of physical positioning. He suggests the reader imagine her body in the spaces he records, seeing each facet in turn. In chapter five, devoted to "The Size, Age, and Sex of the Negro Population," he eschews broad summary and urges the reader to take a virtual walk through the neighborhood: "starting at Seventh Street and walking along Lombard, let us glance at the general character of the ward. Pausing a moment at the corner of Seventh and Lombard, we can at a glance view the worst Negro Slums of the city. The houses are mostly brick, some wood, not very old, and in general uncared for rather than dilapidated" (*The Philadelphia Negro*, 38). The repeated verbs "glance" and "walk" place the reader in a mode of receptive accrual of unexplained details—why are these "not very old" houses "uncared for rather than dilapidated"? To glance is to view briefly, recording an observation but not dwelling on it. This might seem in tension with the goal of deep understanding, but it is a step toward breaking chains of association into perception of discrete, heterogenous points. Du Bois induces the reader to hold multiplicity in their conscious awareness. Further, to highlight the narrator's physical presence in the scene of data collection subtly rejects the disembodiment of data.

Du Bois must break the closed perceptual circuit of the "ordinary man of affairs." To do so, he employs formal modes of juxtaposition that create for the reader an effect of encountering data. Most obviously, he includes numerous tables, graphs, and maps. But the prose sections that these visualizations intercut also make use of formal techniques that highlight their representation of data. Using pared-down, descriptive prose nearly stripped of explicit analysis; lists that perform the accruing rhythm of data collection; and a reliance on juxtaposed observation rather than overt explanation, Du Bois brings the multiple, coexisting realities of African American social life into view. In chapter eleven, "The Negro Family," for example, Du Bois implicitly counters the assumption that poverty is the result of overspending on luxuries by detailing the money wasted on premiums paid for insurance policies of dubious value. Rather than narrate a couple of circumstances to prove the greed of these insurance companies, he assembles a list of fifteen examples taken directly from completed questionnaires, such as "5. A family who put $75 into a society and lost it all" (*The Philadelphia Negro*, 133). Using the list form as a way of showing an accumulation of evidence rather than making overt claims is perhaps even more effectively used in chapter sixteen, "The Contact of the Races," when Du Bois attempts to illustrate how thoroughly discrimination in employ-

ment constrains individual aspiration. The section titled "Color Prejudice," for example, relies heavily on lists of personal experiences reported. The list format works to physicalize the encounter with data: the reader either reads through each incident or notes the amount of space the list takes up and thereby feels the cumulative effect of their numerousness. By forcing an accumulative experience of reading, he presses multiple data points into view as distinct, co-present realities. His data aesthetic highlights variation, physicalizes encounter, and defers analysis to provoke productive uncertainty in the reader.

When addressing "Pauperism and Alcoholism" in chapter fourteen, Du Bois uses the list form to complicate preconceptions about the causes of poverty. He incorporates a list of "twenty-five families [that] will illustrate the varying conditions encountered" (*Philadelphia Negro*, 197). To name just a few, this list contains a "wife, decent but out of work"; a "husband, intemperate drinker"; a family with "'no push, and improvident'" (198); and a widow, niece, and baby who "ask for work." There is no concluding summary after this list. After a rather overwhelming encounter with the different circumstances of twenty-five families, the reader is left with a sense of individual people of widely varying circumstances lined up side by side, with some trends of experience but no single identity. Du Bois cannot, obviously, bring his readers face-to-face with African American residents of Philadelphia. By relying on lists, though, he can physicalize the act of reading in such a way as to destabilize the projection of homogeneity. Instead of moving progressively through one life story, he multiplies moments, occurring in parallel.

The data-driven portrait of African American life in Philadelphia allows a reality of internal heterogeneity and uncertain futurity to emerge into representation rather than perpetuating the received perception of group homogeneity and teleological destiny. For example, the demand for exhaustive representation through data overrides the objection of statistical insignificance, which brings middle and upper class African Americans into the portrait of the group and asserts their parallel co-presence in social reality. This is vividly demonstrated in the pull-out visualization at the center of the text (figure 1), in which the seventh ward is mapped with each house color-coded by socioeconomic status. While the average observer practices a selective vision, focusing only on the slums, the data collector, committed to exhaustive collection, perceives there is a "great middle class of Negroes feeding the slums on the one hand and the upper classes on the other" and recognizes that "here are social questions and conditions

Figure 1. Detail from "The Seventh Ward of Philadelphia: The Distribution of Negro Inhabitants Throughout the Ward," *The Philadelphia Negro*, W. E. B. Du Bois, 1899. Digital collections of Widener Library, Harvard University.
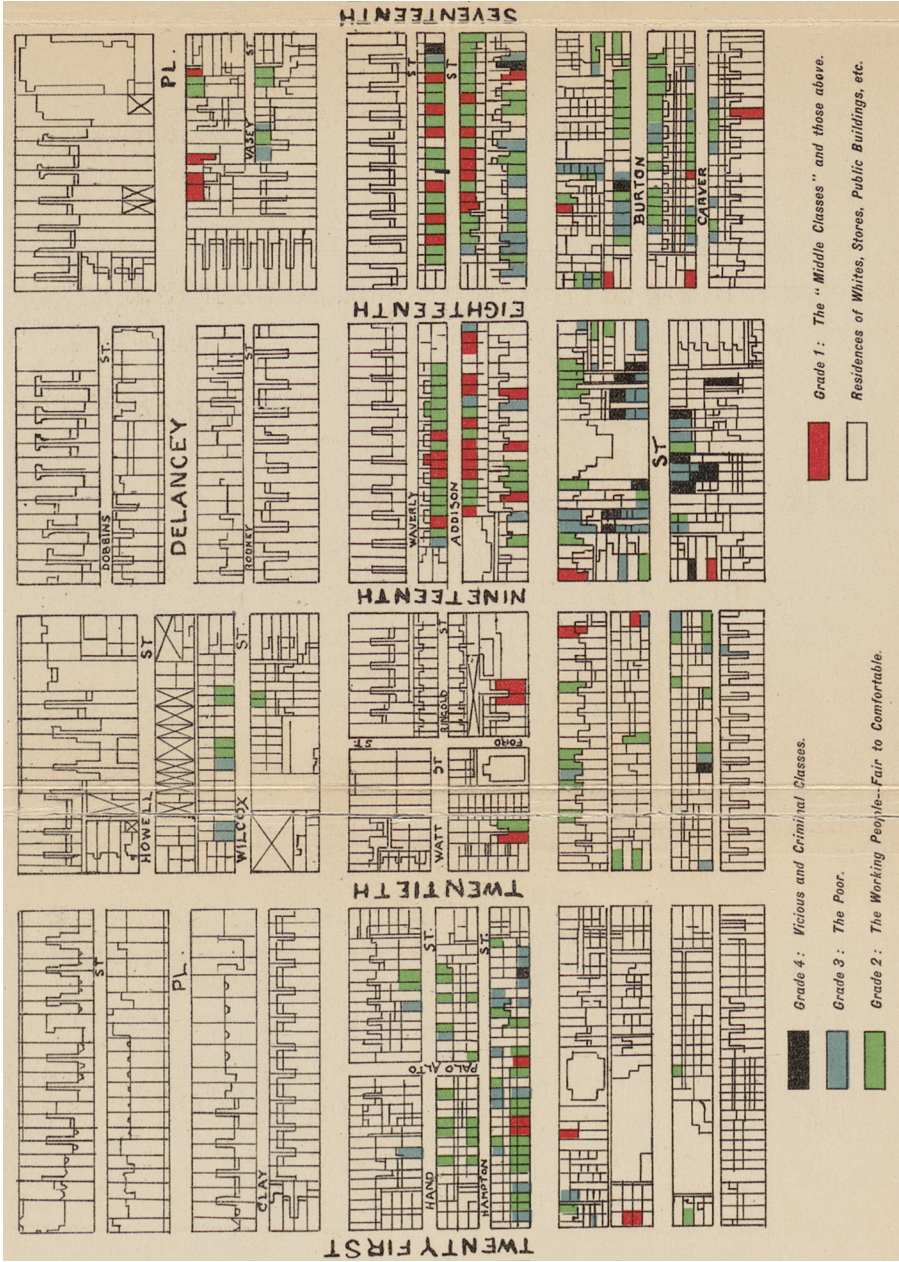
which must receive the most careful attention" (*The Philadelphia Negro*, 4). But "not even here, however, can the social investigator stop," for not even adding a middle class completes the portrait. The investigator "knows that every group has its upper class; it may be numerically small and socially of little weight, and yet its study is necessary to the comprehension of the whole." The concept of a complete data set allows Du Bois to assert parallel co-presence for previously invisible African American affluence.

This generation of parallel co-presence is where the aesthetic effect of data differs from that of statistics. Well-to-do African Americans cannot be written out of the record because they are few in number—they exist, and therefore must be part of the data set. *The Philadelphia Negro* has sometimes been criticized for championing the middle and upper African American classes at the expense of the struggling majority, but viewed in the context of the need to diversify the portrait, their asserted presence provides an empirical hammer for shattering entrenched images and supports the anti-racist argument of evaluating individuals in material and social context rather than applying a transcendent identity to an entire group. Du Bois's emphasis on the achievements of these classes is a move to enlarge the scope of representation. What the data-driven narrator perceives above all is the simultaneity of a full range of achievement within the African American population of Philadelphia. This necessarily includes the middle and upper classes, which his white audience does not currently acknowledge.

Marshalling this mass of data points, *The Philadelphia Negro* represents African Americans as "a striving, palpitating group, and not an inert, sick body of crime" (*Autobiography*, 199). The data aesthetic begins to disarticulate poverty, criminality, and mortality from the Black body by enumerating the external social conditions that induce these outcomes. As Daphne Lamothe observes, "Du Bois's efforts to differentiate within the race implicitly challenged the ethnographic imperative to construct a narrative of a community, or 'field' that was isolated, homogenous, and 'authentic' because of the presumed lack of encounters with contaminating outsiders" (56). By displacing the certainty of a single African American life story, Du Bois reconfigures African American identity and history, moving it away from the essentialism of authenticity demanded by white ethnographers and the certainty of extinction as projected by Hoffman. He has enumerated, in Katherine McKittrick's words, "possibilities that are the iterations of black life that cannot be contained by black death" (20). Data's formal qualities promote defamiliarization of African American life in Philadelphia. Positioned as a data collector, the reader is prepared

to encounter individuals and circumstances that surprise with their particularity, jolting the reader's conceptual model of African Americans as a group from homogenous mass to heterogeneous collection—from body into assemblage.

Given the scope of Du Bois's methodological ambition, his statement of *The Philadelphia Negro*'s end goal may seem oddly modest: "The final design of the work is to lay before the public such a body of information as may be a safe guide for all efforts toward the solution of the many Negro problems of a great American city" (*The Philadelphia Negro*, 1). The study is positioned as a crucial preliminary to future efforts, but it is not intended to recommend what those efforts might be (although Du Bois does slip in a few recommendations as the data accumulates). The emphasis on data collection creates a temporality of deferral, emphasizing that we cannot know the full story until we have all the data. In other contexts, this might be an example of how data collection is used to delay action, but in the hands of Du Bois, this pause is part of a data strategy. The function of the collection is to induce a pause before interpretive selection, a pause that allows a multiplicity of realities and potential ways of narrating them to surface, which creates a consciousness that forever alters the data collector's relationship to the authority, coherence, and inevitability of any single narrative.

Du Bois envisioned *The Philadelphia Negro* as just the beginning of his "plan of studying the complete Negro problem in the United States" (*Autobiography*, 200). Although he found no white, Northern institutions willing to hire him and fund this plan, he secured a position at Atlanta University and some funding to pursue a plan of research that he intended to span decades and record data about every segment of African American social life. Du Bois states that he was invested in this primarily as a data collection project: "I put no special emphasis on special reform effort, but increasing and widening emphasis on the collection of a basic body of fact concerning the social condition of American Negroes, endeavoring to reduce that condition to exact measurement whenever or wherever occasion permitted" (214). "Reduc[ing] the condition," here, is to deflate hyperbolic images and narratives that substitute for empirical evidence of African American life. In this way, "exact measurement" intervenes in white caricature of racial realities in the United States.

While Du Bois remained committed to data collection as a crucial foundation for both scientific progress and the future of African American life in the United States, he also had to face its limitations as both a tool for social change and as an adequate representation of human reality. Despite

having completed a nearly peerless sociological study in a discipline hungry for innovative and rigorous thought, Du Bois could not secure even another adjunct position at the University of Pennsylvania, which had sponsored *The Philadelphia Negro*. At Atlanta University, he managed to complete one decade worth of studies, but found the second plagued by funding crises and ultimately ended by the disruption of World War I.

As well, Du Bois faced constant evidence that professional discrimination was hardly the worst of the irrational behaviors African Americans faced in the United States. Recounting this period of his life in *Dusk of Dawn*, he intertwines the unfolding of a publicized Southern lynching with his realization that no appeal to facts will secure safety for African Americans. "At the very time when my studies were most successful," he writes, "there cut across this plan which I had as a scientist, a red ray which could not be ignored"—the news that "a poor Negro in central Georgia, Sam Hose, had killed his landlord's wife" (67). Du Bois responds by writing "a careful and reasoned statement concerning the evident facts" for submission to an Atlanta newspaper. But, he continues, "I did not get there. On the way news met me: Sam Hose had been lynched. . . . I turned back to the University. I began to turn away from my work" (67). Proximity to knowledge of death, as Sharpe has has argued is characteristic of Black experience in the United States, is exactly what Du Bois experiences as he walks by the newspaper headlines announcing Sam Hose's lynching, a proximity provoked not just by the presence of the newspaper but by his own bodily affinity with the murdered man. Du Bois's conception of his role in the struggle against racism is changed by this provoked awareness of proximity. He reports, "Two considerations thereafter broke in upon my work and eventually disrupted it: first, one could not be a calm, cool, and detached scientist while Negroes were lynched, murdered and starved; and secondly, there was no such definite demand for scientific work of the that sort that I was doing, as I had confidently assumed would be easily forthcoming" (67–68). The cultural desire for data was real but not innately anti-racist. Du Bois could never be solely positioned as a data collector; he would always be an inextricable element of the assemblages of racialization he sought to represent. The inextricability of self from collection is central to the three "sets of thought" that follow from this period. *The Souls of Black Folk*, *Darkwater*, and *Dusk of Dawn* each combine autobiographical and sociological data with an array of narrative modes to represent self and group, individual and race, nation and world, as moving assemblages.

While the *The Philadelphia Negro* presented literal research data, these

texts do not and so have often been read as departures from empiricism. Yet, their repeated use of collection as a mode of representation frequently creates the formal effect of data point and collection, and I contend that this formal mode stems from Du Bois's deep engagement with a data-driven theorization of reality writ large and has a significant impact on how the reader encounters the realities he attempts to represent. By referring to these conceptual, formal data points, I call attention to the repeated conjunction of reference to empirical observation (personal or received through reading, interpersonal encounter, or other mode of perception) and a declaratory formal mode that juxtaposes these observations with minimal explanatory connection. It is not simply that Du Bois is bombarded by information streams, it is also that he feels an epistemological, and at times even ethical, obligation to attend to them—to acknowledge them, to hold them together in his perception as he works toward an understanding of himself and his world. His self-representation ends up becoming a representation of the data points that have assembled themselves as his consciousness.

The Collecting Work of *The Souls of Black Folk*

The fourteen chapters of *The Souls of Black Folk* are composed of what can be roughly described as the following genres: history (2), biography (2), autobiography (2), sociological essay (4), political essay (2), fiction (1), and the uncategorizable blend of the final chapter, "The Sorrow Songs," that draws on anthropology and music history to reprise the aspirations of the "Forethought" and weave the fragments of music that have prefaced each chapter into a mashed up "message of the slave to the world" (*The Souls of Black Folk*, 182). Describing the genesis of this collection, Du Bois recounts being asked for a book manuscript for immediate publication by A. C. McClurg and Company of Chicago. In response, he claims, "I got together a number of my fugitive pieces" (*Dusk of Dawn*, 80). He probably means "fugitive" in the sense that they were essays that had so far escaped publication, but, we might ask, why had they gone unpublished? Perhaps in part because they are fugitive in another sense, as essays in flight from traditional parameters of sociological, historical and autobiographical discourse. As Susan Mizruchi puts it, *The Souls of Black Folk* is a "border text," a "book that crosses disciplinary boundaries while helping to define them" (193). I argue that this crossing and redefining of disciplinary boundaries arises in part from his immersion in the collection and interpretation of

data. Because he has, physically as well as intellectually, grappled with data as both point and collection, he has become acutely aware of the oscillating perspectives of the data collector, zoomed out and zoomed in, individual data points grouped and ungrouped and regrouped. He has perceived multiple potentially valid readings based on these data points erupt from the different assemblages of point, context, and narratorial perspective that the collector moves through. The act of assembling these genres in parallel makes an implicit critique and revision of each genre's claim to knowledge about race by highlighting the limits of each genre's definition of data. The autobiographical and biographical chapters insist on the reality and power of the individual within histories of groups while, at the same, the historical and sociological chapters qualify the centrality of the individual and call attention to the many material influences on realized individual potential. The inclusion of a short story about lynching alongside histories of African American encounters with U.S. legislation suggests that the events that escape official history, that may now be reached only through imagination, call into the question the extent of empirical knowledge and the social dynamics of data's collection. Each essay is formally and generically at variance from the rest but co-present in a collection that must be grappled with as a kind of whole. Du Bois is again expanding the field of relevant data to multiply and complicate the narratives of Black life and embodying data collection to challenge the assumption that data speaks for itself.

In the reading of *The Souls of Black Folk* that follows, I look to this combination of history and biography, statistics and storytelling, as a continued engagement with and critique of the desire for data. I am not arguing that Du Bois consciously modeled *The Souls of Black Folk* on data collection but that his immersion in a data-driven field necessitated his meditation on the role of data collection in not only representing but forming what is understood as reality, and further that Du Bois's formal innovations in life writing are homologous to data collection in ways that illuminate how an epistemological commitment to the framing of reality through data collection can influence cultural production and drive formal innovation in unexpected ways.

Collecting "souls" instead of lives, Du Bois critiques and expands the definition of reality that guided his prior sociological work. While the title of *The Philadelphia Negro* uses terms that represent what most readers would consider objective realities (Philadelphia naming a city and "negro" naming a social group defined by non-whiteness), as a title *The Souls of Black Folk* emphasizes plurality and adds an embodied, subjective dimen-

sion to objective reality. The addition of this subjective dimension serves as an augmentation rather than abandonment of empiricist argument. As the history of *The Philadelphia Negro*'s reception demonstrates, a preponderance of rigorously collected and interpreted data was not enough to initiate a cultural reckoning around the unreality of biological racial difference and the need for social change. Objectivity, constructed as an effectively disembodied, unbiased vantage on reality, has thus proven to be an ideal espoused but not practiced. As Priscilla Wald describes, then, *The Souls of Black Folk* is "*about* objectivity," its "generic hybridity" a struggle "against preconceptions as well as expedient sociohistorical narratives" (174) that continually circulate as fact. Shamoon Zamir has also suggested that the opening essay of *The Souls of Black Folk* functions as an implicit critique of sociological data's scope of representation, for it "makes everything that the positivism of *The Philadelphia Negro* excludes the very basis for a true understanding of historical experience" (98). While Zamir and others have tended to read this as Du Bois's rejection of empiricist inquiry, or a significant milestone on his way toward such a rejection, such a reading overlooks the formal similarities between data collection and the collective form that *The Souls of Black Folk* as a whole employs. While *The Souls of Black Folk* argues for the importance of different kinds of data, it also continues to draw on the aesthetics of parallelism and works to heighten self-consciousness about the observer's role in collecting and selecting data to form meaning.

As data's mandate for exhaustive collection is translated into an aesthetic of inclusion, the resulting narratives are often seen as disrupted and discontinuous. Critical readings of the multigeneric mode of *The Souls of Black Folk* have often noted how its emphasis on expanding the scope of representation in order to highlight and contextualize what has been excluded from representation in the past disrupts narratives of U.S. identity. Wald reads Du Bois's use of discursively hybrid genres to re-form narratives of national belonging as calling attention to the gaps in the national story: "Du Bois's investigation of the strange meaning of being black discloses the troubling exclusions that disrupt that [national] narrative" (220). Kelley Wagers extends this insight: "Refusing the dominant historiographic practices that linked narrative coherence inevitably to national consolidation, Du Bois made discontinuous histories—texts marked by gaps, breaks, and inconsistencies—into new sites of collective identification" (78). Disclosing exclusions and opening discontinuities are vital representational procedures for Du Bois, and they draw from an epistemology of data. In a social context of narrative condemnation, coherent narrative is unfail-

ingly dangerous narrative. "The Coming of John," with its seamless cause and effect narrative mechanics is brutally eloquent on this point. It is the book's only traditionally narrative chapter and its only fictional chapter, but its portrayal of lynching is no less reality-based than any of the others. Its formal coherence reminds us that the U.S. American narrative of Black life, left undisturbed, casts Black men as essentially criminal and enacts their death. As Du Bois collects the "fugitive pieces" of *The Souls of Black Folk*, such a narrative of Black life is in the process of being bolstered by data collection projects and data rhetoric across many disciplines. Combatting these ostensibly empiricist affirmations of fixed narrative requires disclosing the data that has been left out, the plot points that argue not only for an alternative narrative as the preservation of narratives, for uncertainty, for potential branches of other stories.

Reading *The Souls of Black Folk*'s discontinuities through the lens of data aesthetics highlights the text's lessons for our own grappling with how data collections become legible as narrative. To exhaustively collect the data of African American life is to disclose exclusions and gaps through the assertion of presence. Once that presence has been documented, U.S. American narratives—of identity, of history, of progress—must be adapted. If traditional, coherent narrative is no longer a tenable form, what other forms are available and how can these be read as epistemological challenges and social proposals rather than diminutions of former coherence?

The Souls of Black Folk demonstrates a critical epistemological engagement with the discourse of empirical research from the outset. As Zamir has noted, Du Bois wrote "The Strivings of the Negro People"—which would later become the first chapter of *The Souls of Black Folk*—at the same time he was conducting research for *The Philadelphia Negro*. Considered as a methodological complement to the sociological methods he was in the thick of developing, "Strivings" takes on an even more radical cast, reshaping the protocols of research and positioning Black people at the center of knowledge about Black life. Its opening sentence proposes race relations as a research project that has never been attempted: "Between me and the other world there is ever an unasked question" (*The Souls of Black Folk*, 7). This "unasked question," is a kind of research proposal that subtly but certainly creates the figure of the Black data collector as crucial to representing the reality of Black life. As he asks, "How does it feel to be a problem?" (7), he simultaneously positions himself as both the asker and the teller, the collector and the data that will begin to answer the unasked question. His dual role stands in critique of the idea of the disembodied data collector, for it is

only through his embodiment that he gains access to this data. Of course, what "the other world" sees as a "problem"—his very existence—is not actually, essentially a problem. But that Du Bois must constantly encounter and accommodate for the "problem" of his existence is very real. His formulation, then, refracts the empiricist gaze away from the Black body as a transcendent reality and to white circumscription of the Black body as the source of its identity. He shifts the focus from race to racialization, and he suggests that this is what our data must observe and account for.

The continual co-presence of racializing discourses in circulation around and publicly applied to one's self creates a form of selfhood that Du Bois famously describes as double consciousness. Double consciousness as he describes it here is "this sense of always looking at one's self through the eyes of others, of measuring one's soul by the tape of a world that looks on in amused contempt and pity" (*The Souls of Black Folk*, 8). While many critical readings[4] have elaborated the concept of double consciousness and its social and historical production, contextualizing the language of its formulation in the epistemology of data suggests that we must also think about how the cultural force of empiricist thought figures into the production of such consciousness. Du Bois refers specifically to the idea of quantitative measurement—the measuring tape of the soul devised by another world—being used to define the dimensions of African American life. The spectatorial stance of the sociological observer also plays a role in generating this consciousness. The "sense of always looking at one's self through the eyes of others" is the central dynamic of empirical inquiry turned upon the self. To know the self is to see the self as another, for in empiricist terms, only an observer outside the self can truly see. Observation of African American lives is further estranged from the self because the terms of legitimate observation are defined by white cultures of empiricism. And of course, the privileged legitimacy of what this observer sees is underwritten by the idea that such a distanced, objective stance is not only possible but also synonymous with the revelation of the real. While there are elements of this formulation that can be seen as unique to Du Bois's experience and particularly relevant for African American experience at this time, it also enunciates a facet of the modern self: the accumulation and narrativization of data can constitute an externally circulating form of selfhood that disrupts an individual's observation and narrativization of his own experience. As Wynter and Weheliye have argued, Black life is ground zero for the definition of the human, and in this case, ground zero for the constitution of the self outside the self through data.

Because the observations and measurements of others circulate along-side and co-present with his own observations and measurements, there are always two equally present realities of self for Du Bois: "One ever feels his two-ness,—an American, a Negro; two souls, two thoughts, two unreconciled strivings; two warring ideals in one dark body" (*The Souls of Black Folk*, 8–9). While he continues to state that the ultimate "longing" of the "American Negro" is to "merge his double self into a better and truer self," he also describes this longing in terms that do not connote merger but rather preserved parallelism: "In this merging he wishes neither of the older selves to be lost. . . . He simply wishes to make it possible for a man to be both a Negro and an American" (9). Du Bois describes the "end of his striving" as being acknowledged a "co-worker in the kingdom of culture," an equal co-presence in the scope of social history. In Du Bois's formulation of subjectivity, the "dark body" is a frame of aggregation for aspirations and understandings of self that Du Bois must negotiate as distributed selves because they lack a social context in which they can be perceived as congruent.

The shifting subjective and narratorial positions that emerge throughout the chapters that follow formally demonstrate the distributed qualities of the African American empiricist self, juxtaposing a variety of personal, social, and professional "I" roles. This is a self that not only "tell[s] again in many ways" but that must be told again in many ways, for it moves between multiple frames of authority, surveillance, relationship, and identification. Throughout these various approaches to narration, Du Bois makes clear that the "eye role" of the data collector is never not an "I" role. In this way, embodiment of data and narrative multiplicity are linked. By making clear that the collector and interpreter of data is an embodied human being, Du Bois not only strikes at the rhetoric of objectivity that attends data collection but once again challenges the equation of data with conventional narrative and transparent explanation.

Putting chapter seven, "Of the Black Belt," into dialogue with chapter eight, "Of the Quest of the Golden Fleece" provides a powerful example of how the collective form of *The Souls of Black Folk* produces multiple "I"/ "eye" roles and how this form embodies a critical concept of data to argue for the heterogeneity and multiplicity of potential narratives for Black life and lives. These chapters take the reader on two different trips through the Black South—trips that are different not because they cover different territories or different people, but because they construct, collect, and parse data in different ways. They enact what Adalaine Holton has called

"subversive iteration": "Du Bois uses various forms of repetition, reiteration, and re-examination in his writings, not to stabilize essential racial meanings or articulate an unchanging ideological position, but rather to interrogate his own assumptions and to represent most accurately the irreducibility of black subjectivity" (26). These iterations subvert not just white ideas about Black life but also the promise of data to definitively represent life. Using formal modes of juxtaposition to (re)create encounters with data, Du Bois forces awareness of the data collection's formal expansions and foreclosures of perception.

"Of the Black Belt" uses a first-person travel narrative to position the reader as the collector of data in the South. Du Bois uses this mode, however, to destabilize both the first person and travel as coherent containers for experience. Within the chapter, the narrator is most often presented in the first-person plural—a "we" that is never specifically named or given a reason for traveling together, and neither are any biographical details given about the "I" that breaks in only a few times. Thus, the first person, the self of this chapter, does not supply an overriding perspective that can bring order to the data it collects. A train trip is an external, rather arbitrary frame for the collection of data. It does nothing to help the reader understand why she has been brought into contact with the tenant farmers and other residents of the South who speak in this chapter, or what these speakers can elucidate for the traveling researcher (or even what the researcher hopes they will elucidate). The questions of who these observers are and why they are traveling together in the South remains open, and the uncertainty that these open questions create highlights the function of preordained cognitive frames, such as place, time, and professional purpose, in organizing what we see. Withholding these frames puts the reader one step closer to encountering data in the process of collection. Instead of experiencing the South as a coherent whole and its people as consistent types, the "I"/ "we" of this chapter is shuttled through multiple assemblages of place and population. As well, once off the train, they too become a part of the assemblage, their own senses and affects joining the welter of place. This becoming thrusts them into a position of uncertainty, of suspended interpretation that bewilders them while allowing the places and the people they encounter to exist independent of the observers' narrative projections.

While the language of this chapter is quite distinct from the more scientific rhetoric of *The Philadelphia Negro*, the sense of discrete data points presented side by side remains a key formal quality. Paragraphs are strung together as juxtaposed observations through which the reader is

moved with no framing interpretation, mechanically gathered together by the chronological unfolding of the unexplained trip rather than clearly arranged in a narrative. Information is presented in a manner that does not explain how it was received, like the answers of a questionnaire without their accompanying questions. For example, one paragraph begins: "From the curtains in Benton's house, down the road, a dark comely face is staring at the strangers; for passing carriages are not every-day occurrences here. Benton is an intelligent man with a good-sized family, and manages a plantation blasted by the war and now the broken staff of the widow" (*The Souls of Black Folk*, 87). This is the reader's first introduction to Benton, with his house referred to before his existence itself is made known. Many questions are unanswered: How does the narrator know Benton? Is this data the result of a sociological interview, a friendly interaction, or the gossip of neighbors? Who is staring out of Benton's window? Is Benton himself a Black person or a white person? Aside from a couple of more lyrical phrases, this could be an excerpt from the *The Philadelphia Negro* schedules, but without an explanation of the framing inquiry, the strangeness of strung together facts is foregrounded.

The juxtapositional mode of description stylistically embodies what the narrator describes as "a land of rapid contrasts and curiously mingled hope and pain" (*The Souls of Black Folk*, 93). Du Bois enacts textually what his visualization of the African American population of Georgia prepared for 1900 Paris Exposition (figure 2) conveyed visually. The individual elements of this land do not blend or cohere but retain their jarring qualities, lying side by side as discrete points. With this aesthetic, Du Bois suggests that just as the African American community of Philadelphia is not accurately represented by blanket assertions and stereotypes, this community, too, is best conceived through a surveying mode of spatial assemblage that highlights internal variance. The narrator represents this community by composing figures through listing their physical, economic, and geographic markers, moving from person to person as from data point to data point: "Here sits a pretty blue-eyed quadroon . . . and yonder in the field is her dark young husband. . . . Across the way is Gatesby, brown and tall, lord of two thousand acres shrewdly won and held" (93). He forms a survey by looking "Five miles below," which brings a "white New Englander" into the frame, and then looks "five miles above" to "five houses of prostitutes,—two of blacks and three of whites." The image of a South in which two poles, the Black tenant farmer and the white landowner, are representative and explanatory is replaced by the evidence of the internal heterogeneity of
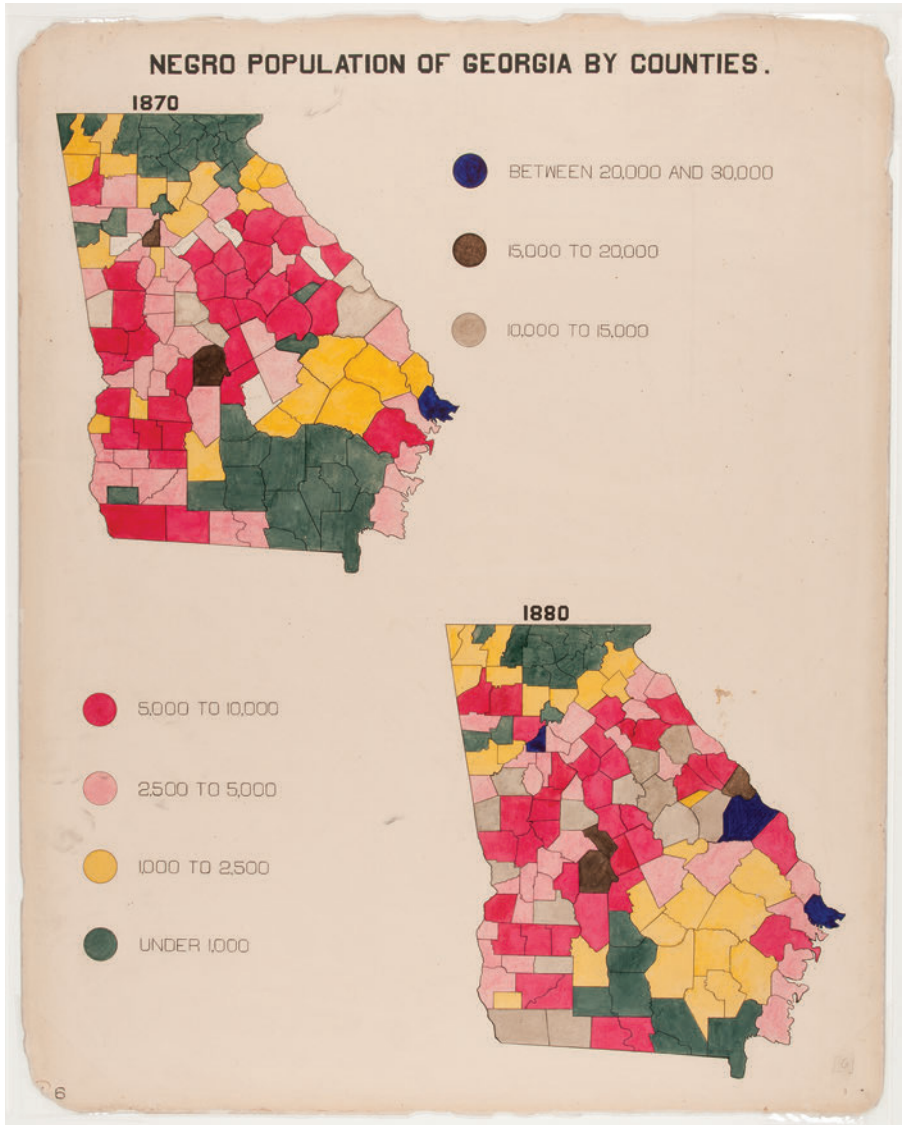
Figure 2. "Negro Population of Georgia by Counties," W. E. B. Du Bois, ca. 1900, prepared for the Paris Exposition. Library of Congress Prints & Photographs.

both the Black and white communities. These figures from across the race and class spectrum become co-present in a geography that does not resolve into a story. Instead, the form argues, the land of "untold story" (91) can only be told through all of these stories, which the list-like paragraph asks the reader to hold all in mind at once, as parallel data points.

Representing "distinct characters" and "rapid contrasts," "Black Belt" constructs a subjective position that preserves the unevenness and opacity of data on the ground, before the clarifying abstraction of visualization with a map or table. Chapter eight, "Of the Quest of the Golden Fleece," conversely, opens with the ultimate abstraction: a sweeping image of the South that conflates Greek and plantation mythology. The narrator of this chapter asks the reader, "Have you ever seen a cotton-field white with the harvest,—its golden fleece hovering above the black earth, its bold white signals waving like the foam of billows from Carolina to Texas across that black and human Sea?" (*The Souls of Black Folk*, 100). Referencing the task set before Jason if he is to reclaim the throne that should be his birthright, Du Bois subtly critiques the logic of capitalism that suggests subjugated Black farmers need to simply earn their way to power. For just as Jason is confronted with three more impossible tasks upon reaching the Golden Fleece, Black farmers in Georgia face numerous obstacles beyond economic achievement, and their history "frame[s] a pretty and not far-fetched analogy of witchery and dragons' teeth, and blood and armed men, between the ancient and the modern quest of the Golden Fleece in the Black Sea" (100). From a distance, the overarching story may seem to be one of redemption through acquisition, but zooming in reveals that this narrative promise has not been kept.

The narrator immediately transforms the broad stroke of this mythology into a pointillist collage of data points. He punctures the grand image by calling out its dependence on deliberate ignorance:

> We seldom study the condition of the Negro to-day honestly and carefully. It is so much easier to assume that we know it all. Or perhaps, having already reached conclusions in our own minds, we are loth to have them disturbed by facts. And yet how little we really know of these millions,—of their daily lives and longings, of their homely joys and sorrows, of their real shortcomings and the meaning of their crimes! (101)

If knowledge is genuinely sought, Du Bois implies, we must first immerse ourselves in an exhaustive and granular collection of data: "All this we can

only learn by intimate contact with the masses, and not by wholesale argu-
ments covering millions separate in time and space, and differing widely in
training and culture. To-day, then, my reader, let us turn our faces to the
Black Belt of Georgia and seek simply to know the condition of the Black
farm-laborers of one county there" (101). Placing the call for data after a
comparison of the South's history to Greek myth equates assumed knowl-
edge about Black life, the "conclusions" already reached and the "whole-
sale arguments" already made, to myth. Narratives of racial identity and
history are like myth in that they are comprehensive, fully explanatory,
and divorced from empirical reality. Like myth, the "wholesale arguments"
apply to such large swaths of history and geography as to render realities
abstract. Du Bois rejects them because they cover "millions separate in
time and space" who "[differ] widely in training and culture." Myth and
wholesale argument deny the granularity of reality, the meaningful dif-
ferences jarringly apparent at the level of the individual data point and
obscured by the abstracting distance of narrative. Readers should no more
rely on such arguments to understand the South than they would rely on
the story of Jason to understand economic development.

As in "Black Belt," "Golden Fleece" again leads the reader through a
collection of data, but this time from vantage of the completed mass survey.
The narrator opens with a quantitative overview focusing on population
and property value: "Here in 1890 lived ten thousand Negroes and two
thousand whites. . . . In 1860, Dougherty County had six thousand slaves,
worth at least two and a half millions of dollars; its farms were estimated
at three millions,—making five and a half millions of property" (*The Souls
of Black Folk*, 101–2). It is as if the reader is moving down a column of
numbers. Rather than using qualitative descriptions, this data narrator uses
numbers. Given their roundness, they are clearly estimates, and they are
a clear departure from the person-by-person mode of description in the
previous chapter. The narrator then goes on to relate how these property
values declined after abolition because the value of farmland was depen-
dent upon the availability of enslaved labor. The chapter continues to lay
out the details of economic systems, like tenant farming, and provides a
quantitative assessment of where that system is leading the population (as
in the statistic that in this region "only six per cent of the population have
succeeded in emerging into peasant proprietorship" [118]), but unlike the
prior chapter, it does not bring the reader into imaginative encounter with
actual individuals. Instead, the narrator refers to "The Negro farmer" (110)
and "the average metayer" (116) as representative figures. This is, in many
ways, a much more satisfying way to know this region. Rather than won-

dering where we have gotten off the train, who Benton is, and why his farm is in decay, the reader has a sense of population, geographical scope, and economic history.

In the midst of providing statistical context for the enigmatic individuals encountered in the prior chapter, though, this narrator also makes a call for a kind of encounter with data that this mode of outlining trends cannot supply. The narrator claims, "It is easy for us to lose ourselves in details in endeavoring to grasp and comprehend the real condition of a mass of human beings. We often forget that each unit in the mass is a throbbing human soul" (*The Souls of Black Folk*, 106). Here again, I submit, is an epistemological artifact of Du Bois's critical engagement with data collection, the self-consciousness of the data-driven modernist who can never permanently isolate or discard a data point, never settle comfortably into a single example or final conclusion because he remains aware of richer data that has been pared away in order to momentarily see the whole. When the narratorial perspectives and formal elements of these two chapters are compared, the call for "intimate contact with the masses" (101) is revealed to be a paradoxical endeavor. The more "intimate contact" with "each unit" comes through the kind of one-on-one encounters that "Black Belt" chapter holds. Yet, the narrator of that chapter can only come into contact with a relative few individuals, while the statistical overview of "Golden Fleece" seems to allow the narrator to glimpse the masses.

Taken together these chapters reveal Du Bois's simultaneous use and critique of data as a form of representing life, individual and collective. The individuals he encounters in "Of the Black Belt" remain opaque without a broader interpretive narrative—and perhaps their embodied reality inevitably resists any narrative—while the broader narrative constructed in "Golden Fleece" cannot fully explain or even represent the lives represented in the prior chapter. By including both of these portraits, both of these methods, and both of these takes on what it is like for Du Bois to move through the South, Du Bois gives them a parallel presence and equal importance. One is not superior to the other; both are necessary. Further, if the data-driven subject is to be a human subject, there are inevitable limits to how many points one person can collect and keep in interpretive play, and there are inevitable constraints to any genre's representation of the exhaustive data collection that could fully capture the objective and subjective realities of human life, the "thought and feeling, the thousand and one little actions which go to make up a life" (*The Souls of Black Folk*, 131). Even when the collection of data has been massively expanded, the problem of

how to determine and convey its meaning remains. The act of assembling these genres in parallel as a kind of whole but differently coherent story makes an unsettling claim about the epistemology of data: it will surface heterogeneity even in the face of our desire for singular revelation.

Darkwater: Democracy as Data Collection

At first glance, *Darkwater* seems even less empiricist, in content and form, than *The Souls of Black Folk* even as it operates in a similar multi-formal mode. Du Bois again assembles an incongruous collection of generic approaches to understanding the present and, perhaps even more importantly, the future. Its essays include an autobiographical account of Du Bois's childhood, political theory, spiritual if not outright religious meditations on the need for a higher power to intervene on earth, and speculative fiction. Perhaps for Du Bois, as for many, the performance of rationality holds less appeal after World War I and in the midst of persistent racial violence. As Evelyn Brooks Higginbotham comments in her introduction to the text: "The world of 1903 was not the world of 1920" (xxv). Du Bois had left his academic position in Atlanta for a post in New York City with the NAACP during a time when the urban North was being reconfigured by massive African American migration. Globally, World War I and the growth of media technologies representing world events made "the world smaller, the fate of nations and peoples more interconnected" (xxvi). Yet, this interconnection had not provided a means of avoiding catastrophic war in the northern hemisphere and colonial exploitation in the southern.

Darkwater proposes a democracy of the data point. Du Bois asserts, "The vast and wonderful knowledge of this marvelous universe is locked in the bosoms of its individual souls. To tap this mighty reservoir of experience, knowledge, beauty, love, and deed we must appeal not to the few, not to some souls, but to all" (68). Ascribing limited but real knowledge of the world to each human self, Du Bois argues for universal suffrage as a precondition for a social order built on collective knowledge that can only be accessed through exhaustive collection. Each voter is an inviolable and impenetrable source of data that can only be collected when all have a voice. Du Bois is in effect proposing the democratic corollary to Francis Bacon's provocation that "that which is deserving of existence is deserving of knowledge, the image of existence" (95). Each soul, or each human source of the crucial data necessary to realizing democracy's potential, has an equal stake in the construction of knowledge, beauty, and justice. The

imperative for exhaustive collection, configured as a political practice, is universal enfranchisement. A data aesthetic drives this vision of democracy, reliant upon exhaustive collection and a commensurality of citizenship.

Cognitive and embodied forms of contact are the engine of *Darkwater*'s vision of this democratic social order. Du Bois describes the history of democracy as "the history of the discovery of the common humanity of human beings among steadily-increasing circles of men" (*Darkwater*, 72). Before the "vast and wonderful knowledge" needed to create a just society can be collected, another kind of knowledge must become universal. Recognition of common humanity is foundational to democracy yet frustrated by the infrastructure of intercommunal information. Presently, he writes, "We do not really associate with each other, we associate with our ideas of each other" (71). "Ideas," here, are implied to be preexisting generalizations that assign entire groups of people to certain narrative destinies. New opportunities for encounter and contact will be needed to expand circles of "common humanity," an assertion that in some ways prefigures present day aspirations towards new forms of community enabled by the kinds of consciousness/conscience altering tools of digital social networks and information circulation. Just as he endeavored not to sample in his study of Philadelphia, Du Bois's democracy will not sample the needs, desires, and wills of the people. The vital, future-oriented data that living people possess is crucial, for "by our ignorance we make the creation of the greater world impossible . . . and try to express by a group of doddering ancients the Will of the World" (68). Du Bois calls for a casting aside of received theories of social order and a receptivity to what will emerge from broader access to governance. In this yet-to-be realized democracy, the living population is conceptually on a par with the past's revered thinkers, because vital knowledge is the data than can be extracted from the present for the present—a departure for a thinker who has previously made strong arguments for empowering a select few based on ability.

Taking this crowd-sourced democracy of the individual as data point as the central political and social argument of *Darkwater* gives new significance to the work's seemingly offhanded but consistent aesthetics of human lives as bits of a larger, collective reality. Du Bois repeatedly describes human lives in images that suggest a kind of aesthetic data point. The title, *Voices From Within the Veil*, begins to suggest that the collection of voices, an embodied trope of personhood, will be the process through which the book's material is assembled. Although this book does not literally collect voices (as a collection of interview or oral histories might), it

does thematize the importance of individuals having not just a voice but a way to speak to each other as a precondition for democratic social order. Two other images continue this emphasis on the individual human life as small piece of a heterogeneous collection. In the concluding sentences of chapter two, "The Souls of White Folk," the narrator asks, "Is not the world wide enough for two colors, for many little shinings of the sun?" (*Darkwater*, 25), equating lives to "little shinings," which in the imagistic shorthand of the Enlightenment makes each life a source of knowledge. As well, in chapter seven, "The Damnation of Women," Black women are described as "like foam flashing on dark, silent waters,—bits of stern, dark womanhood here and there tossed almost carelessly aloft to the world's notice" (83). Here again personhood is compared to a small piece of illuminating material, though in this case, because the personhood in question is womanhood, its potential has been ignored. These images suggest that the human life or self is not a fragment that has a certain place to occupy in a larger puzzle being put back together but a whole among wholes that can be put together in multiple ways. The emphasis placed on reclaiming these "little shinings of the sun" and the need for voices to assemble within the veil underwrites Du Bois's vision of democracy as data collection.

Du Bois's definition of the nation is also influenced by his data aesthetic. In chapter six, "Of the Ruling of Men," he asserts: "The meaning of America is the beginning of the discovery of the Crowd" (50). The United States, in this view, is composed not of a race or even races, but of a crowd, a drawing together of individuals without regard to common ancestry, education, or training. This nation is set apart from others because it is self-consciously an aggregator of heterogeneity. In this nation, each crowd member is the bearer of crucial but incomplete data who along with other crowd members can co-create a social order in which "human possibilities are freed, when we discover each other, when the stranger is no longer the potential criminal and the certain inferior" (50). This statement implies a much different definition of "crowd" than Du Bois offered in *The Souls of Black Folk*, as Mary Esteve observes in her reading of *The Souls of Black Folk*'s "The Coming of John" as a critique of white civilization. By dramatizing how the crowd's "law unto itself" enacts violence upon Black bodies, "John" imagines crowds as white and the African American observer forever outside it. This statement in *Darkwater* continues to figure crowds as characteristic of the U.S. nation, but to a much different end. The crowd is now a collection rather than a mob, its violent narrative dissolved into individual points of potential, in which the African American and all other

formerly excluded subjects are emphatically included. Embodying the data of democracy in the figures of Black bodies enacts a commensuration that is a radical rebuttal of white supremacy.

In *Darkwater*'s project of imagining the future world, a conceptual and formal reliance on the collection and assemblage of distinct, and sometimes jarringly discordant, points—lives, economic and demographic data, descriptions of people and places—is crucial to the visions of race, democracy, and selfhood that Du Bois constructs. Ultimately, this way of seeing the nation undoes the essential collectivity of race. In this work, race is not the defining feature of the history of African American life but a result of forces that intersect to group individuals in various ways at various times and in various places. "There are no races," he writes, "in the sense of great separate, pure breeds of men, differing in attainment, development, and capacity. There are great groups—now with common history, now with common ancestry; more and more with common experience" (*Darkwater*, 48). This statement positions race as a contingent collectivity rather than an essential relation between certain individuals, a collectivity created by a self-conscious act of grouping certain individuals together for certain reasons at certain times.

Conceptualizing democracy as data collection, the essays of *Darkwater* employ a data aesthetic by radically embodying the data points that must be collected in order to construct both future sociality and future consciousness. To these futures, Black selfhood is vital, for the uncollected data of racialized lives must be included if democracy is to be realized. Arnold Rampersad describes the narratorial perspective of *Darkwater* as prophetic, defined by the "attenuation of [Du Bois's] old conflict between the role of the scientist and that of poet-moralist" (174). Du Bois's prophetic stance becomes legible as an activist's claiming of data's temporality of deferral to claim the story is not over, and a subtle way of calling out empircism's supposed rationality. To imagine a world in which the democratic contributions of all are collected and understood is an act of faith. This data collector knows that the potentials of knowledge will go unrealized unless they are sought with the end of equality in mind.

Race as Assemblage, Self as Collection

The problem of the future world is the charting, by means of intelligent reason, of a path not simply through the resistances of physical force, but through the vaster and far more intricate jungle of

ideas conditioned on unconscious and subconscious reflexes of living things . . . I seem to see a way of elucidating the inner meaning and significance of that race problem by explaining it in terms of the one human life that I know best. (*Dusk of Dawn*, viii)

In a mirror image of the scale of *The Philadelphia Negro*, the autobiographical self of *Dusk of Dawn: An Essay Toward an Autobiography of a Race Concept* is no longer one data point among many but a single whole composed of data points that forms a meaningful field of investigation. Instead of canvassing a ward, Du Bois will now canvass his own life. This creates a formal mode of autobiography in which the "I" is self-consciously assembled and re-assembled through context and encounter. As Kenneth Mostern has noted, *Dusk of Dawn* departs from conventions of both the Western and African American canonical forms: "If this is autobiography, it is surely not the story of individuality that invites the identification of the reader with the narrator, as described in Georges Gusdorf's famous analysis of the genre, nor, alternatively, is it the African American testimonial with its ironizing of the dominant 'I was born' narrative" (29). Du Bois himself explicitly rejects any conventional terms of autobiography, describing the text as having "threatened to become mere autobiography," which in his view "assume[s] too much or too little: too much in dreaming that one's own life has greatly influenced the world; too little in the reticences, repressions and distortions which come because men do not dare to be absolutely frank" (*Dusk of Dawn*, vii). Du Bois's self-deprecation is on one level another entry in a long tradition of autobiographers apologizing for writing about themselves, but put in the context of his engagement with empiricist inquiry it also demonstrates a data-inflected ideal of self-representation. The typical autobiographer errs in two ways that would be corrected by a more data-driven way of seeing the world. He "assume[s] too much" regarding his own agency because he has not sought to or been forced to contextualize his life in any broader population or historical circumstance. And, because he lacks a rigorous commitment to exhaustive representation, he commits "reticences, repressions, and distortions." Du Bois instead considers autobiography an empiricist genre, one that must strive to be "absolutely frank," practicing radical inclusion of the data that composes a life.

Unlike the writers of "mere autobiography," Du Bois does not represent himself as the generator of his life's significance: "My life had its significance and its only deep significance because it was part of a Problem" (*Dusk*

of Dawn, vii). Du Bois's externalized parameters of narrative selfhood are immediately apparent in the double meaning of the title of *Dusk of Dawn*'s first chapter, "The Plot." With reference to narrative, plot usually suggests an internal structure driven by a selection of meaningful points. But this "Plot" instead refers to a field of investigation, the external boundaries of chronological time and geographical space that mark off an area in which all details are to be collected. The chapter's opening sentences define his life as a set of years: "From 1868 to 1940 stretch seventy-two mighty years, which are incidentally the years of my own life but more especially years of cosmic significance, when one remembers that they rush from the American Civil War to the reign of the second Roosevelt" (3). Instead of describing his own life as a story, he describes it as a temporal plot of ground. Life is an object that can be described as a space of time, like a neighborhood given coherence by its boundaries rather than its content. The emphasis will not be on how Du Bois became Du Bois (or a writer, leader, sociologist) but rather what happened in this plot of time, on a series of events that are collected under the rubric of a lifespan but that do not necessarily lead from one to the next developmentally. As he closes the chapter, he states that his purpose is to "set forth the interaction of the stream and change of my thought" in order to show "the consequent results of these for me and many millions, who with me have had their lives shaped and directed by this course of events" (7). Du Bois is aware that his life is just one data point among many.

Yet, even this single data point disrupts certain social narratives forming around it. Chapter three, "Education in the Last Decades of the Nineteenth Century" relates how growing knowledge of the world forcibly reforms Du Bois's conceptions of narratives of progress. To his classmates and teachers at Fisk, Harvard, and the University of Berlin, "It was a day of Progress with a capital P," (*Dusk of Dawn*, 26), when "everywhere wider, bigger, higher, better things were set down as inevitable" (27). Du Bois lists the assumptions that govern this belief in a teleology of progress—population growth in "all the cultured lands," "transportation by land and sea was drawing the nations near," and "invention and technique" seem to offer "accomplishment infinite in possibility." His awareness of "the problems of my racial and cultural contacts" (25–26), though, separates Du Bois from "the conventional unanimity" of his classmates at Fisk, Harvard, and the University of Berlin. He writes, "Had it not been for the race problem early thrust upon me and enveloping me, I should have probably been an unquestioning worshiper at the shrine of the social order and economic

development into which I was born" (27). His experience surrounds him with data points that have been excluded from this white- and Western-centered narrative of "progress." He finds "I could bring criticism from what I knew and saw touching the Negro" (28). While at Fisk, he "came in contact for the first time with a sort of violence I had never realized in New England" (30). Du Bois recognizes himself to be the heterogeneous element in the assemblage of progress, "integrally a part of and yet, much more significant, one of its rejected parts" (3) that, when included in the data set disrupts the narrative of progress and forces a reckoning with a more complicated reality.

The self, and more specifically the racialized self, provides the foundation of Du Bois's critique of this seemingly unquestionable narrative of progress, but this critique eventually expands his sense of identification beyond national and racial borders. His own experience is compounded by "newspapers which I read outside my curriculum" (*Dusk of Dawn*, 28) that cover U.S. and international political news and introduce in his mind the question of how "could black folk in America . . . and the colored people of the world [be] allowed their own self-government?" (29). His description of learning to connect the struggles of African Americans to broader structures of oppression illustrates the list-like, accruing nature of events he reads about, casting it as data pouring in to recontextualize his own experience: "in my college days, Italians were lynched in New Orleans . . . and the anti-Chinese riots in the West culminated in the Chinese Exclusion Act of 1892. Some echoes of Jewish segregation and pogroms in Russia came through the magazines" (30). To know these realities, Du Bois, predictably, desires the largest possible collection of data. He describes education through immersion in media flows rather than keeping to selected texts and interlocutors: "I therefore watched, outside my textbooks, and without reference to my teachers, the race developments throughout the world" (29). Even this voracious observation is limited by the availability of reports, though, and Du Bois yearns for a "real and exhaustive knowledge of the facts" (29) in all regions of the globe. He emerges from his formal education "determined to make a scientific conquest of my environment, which would render the emancipation of the Negro race easier and quicker" (32). His resolution to know histories of racialization comprehensively implicitly links better information to better human action.

Chapter four, "Science and Empire," however, encapsulates how his growing knowledge of empire, and the role of racialization in sustaining it, forces him to rethink his equation of empiricism and change, data and a

progressive narrative of social order. Having completed his formal educa-tion, Du Bois determines to "study the facts, any and all facts, concerning the American Negro and his plight" in order to "work up to any valid gen-eralization which I could" (*Dusk of Dawn*, 51). He predicts, at this time, that the problem is not with having a "generalization" or sociological theory of race, but that existing theories that project permanent inferiority have not had all the facts at their disposal. He projects that his life story will be that of a scientist who will bring about social change by undertaking rigorous scientific work to reach such a generalization. As Aldon Morris observes, Du Bois was "confident in the ultimate convergence between science and justice" (51). The narrative line of this life story, though, is immediately flooded with a list-like collection of world events that take over Du Bois's consciousness. In a single paragraph, he notes a series of parallel develop-ments of empire: Japan "rising to national status" through war with China and Russia, "the expansion of Europe into Africa," and the "pushing for-ward of the French in North Africa" (*Dusk of Dawn*, 52). From the initial swirl of global events Du Bois transitions to the swirl of African American politics, and in equally list-like and thorough detail sets forth a chronology of his famously conflicted relationship with Booker T. Washington and the founding of the NAACP. Knowledge of these events troubles the narrative of scientific purpose as a life story. Mostern aptly describes the assemblage quality of this autobiographical mode: "events of his life are followed by local events, which are, in turn, followed by international events, which then always circle back to describe their local meanings" (29). This pat-tern creates a textual effect of parallel social realities piling up in Du Bois's consciousness, battering his attempt "to isolate myself in the ivory tower of race" (*Dusk of Dawn*, 54). The influence of data as form and epistemology, here, can be discerned in both content and form. Du Bois, the retrospec-tive data-driven narrator, is telling the story of his younger self realizing that data and narrative are not synonymous, that accumulating information makes him more and more aware of complexity rather than moving him closer to clarity. His text performs this realization in its accruing, listing form.

Out of this staggering awareness of the global dynamics of race, Du Bois writes, "came a period of three years when I was casting about to find a way of applying science to the race problem" (*Dusk of Dawn*, 54–55) in which he is no longer the self-possessed scientist with a clear-cut question and faith that his findings will lead to change. The way of study that he finds is data collection. To understand why data collection still appeals to

him when grand generalizations do not, we must understand the relationship he now perceives between data and narrative form. The end of this three-year period is the beginning of the study that leads to the publication of *The Philadelphia Negro*, in which he seizes upon a radical mode of data collection for studying a "concrete group of living beings" that would challenge the research of social scientists who are "still thinking in terms of theory and vast and eternal laws" (64). Du Bois emerges from this period of professional discernment with a commitment to represent the actual through data collection because he has glimpsed that the proliferation of particularity exceeds narrative framing.

The perpetual interaction between internal and external forces constructs selfhood as shifting assemblage of local and historical context, and autobiography as a form that attempts "to set forth . . . interaction" (*Dusk of Dawn*, 7) rather than a traditional narrative or trajectory of development. This form of selfhood does not foreclose agency but presents its limits. Du Bois describes his text as presenting the self not in "causal relation" (7) with the world around it but as a series of "intellectual relations" and "psychological reactions." Perceiving the self as one point among millions, and therefore assessing the influence of individual action as existing but small, creates a self that is more formed than forming. Selfhood becomes the interaction of heterogeneous elements, an assemblage of forces, influences, and individual potentials.

This assemblage sense of self is a product of repeated, data point-like encounters with the world beyond the self as mediated through newspapers and other information-bearing publications. Taken together, the lists of readings assembled in *Dusk of Dawn* convey that Du Bois is cognitively accountable to these information sources. He senses an imperative to revise his understanding of the world, his positioning within it, and his actions in response to new data. These seemingly dry, straightforward recountings of reading newspapers and other informative sources thus reconfigure the narrative of development as a process of accruing data. Just as physical immersion in the practice of data collection for *The Philadelphia Negro* alters his subjective stance, cognitive immersion in global information flows does so as well. He becomes, textually, a conduit for these flows, a perceptual aggregator of data rather than narrator.

Du Bois's formal concatenation of personal experience and global event tells us two things about himself, and by extension about the nature of selfhood in the age of data: that he exists alongside events outside of his own experience and that he is aware of existing alongside them. He is aware of

himself as a data point, and to be aware of oneself as a data point is to be neither central nor peripheral but rather to be part of an assembling and re-assembling cognitive landscape. His documenting of the many strands of influence and awareness that assemble in different ways at different times to create his life stories foregrounds the cognitive relationality of self. This autobiographical self is newly hesitant about projecting or even retrospectively composing narrative coherence from the collected experiences of a life because it is hyperaware that for every narrative-enabling selection of representative data made, there are alternate selections, and alternate meanings, equally real.

The data-driven autobiographical self is a differently apt agent for social change in that it models a contingency of self that highlights relationship and the limits of individual perception as well as action. The self as data collection is, to put it another way, perhaps more aware of and amenable to collectivity. Du Bois writes of his wrestling with science, empire, and the politics of African American-led activism, "One may consider these personal equations and this clash of ideologies as biographical or sociological; as a matter of the actions and thoughts of certain men, or as a development of larger social forces beyond personal control" (*Dusk of Dawn*, 95–96). Each experience, or data point, of his life is simultaneously "biographical" and "sociological." The self occupies a dual state as an expression of "actions and thoughts" and "larger social forces beyond personal control." The "I" is aware that its presences are distributed across multiple contexts of empirical reality and aware that its individual agencies are both real in some contexts and ineffectual in others. Attuned to the fact that there is no clear path forward in the welter of contemporary events, the self is not an agentive creator of that path but rather an assembler of constrained choices at the contingent intersection of external opportunity and individual potential.

Bodies into Data, Data into Lives

To understand the difference data has made in the story Du Bois tells about Black life, we might compare the following definitions of race:

> After the Egyptian and Indian, the Greek and Roman, the Teuton and Mongolian, the Negro is a sort of seventh son, born with a veil, and gifted with second-sight in this American world,—a world which yields him no true self-consciousness, but only lets him see

himself through the revelation of the other world. (*The Souls of Black Folk*, 8)

"But what is this group; and how do you differentiate it; and how can you call it 'black' when you admit it is not black?"

I recognize it quite easily and with full legal sanction; the black man is a person who must ride 'Jim Crow' in Georgia. (*Dusk of Dawn*, 153)

These Du Boisian definitions of blackness are separated not only by nearly a half century but also by their underlying concept of Black identity. In the first, he describes the African American as "a seventh son, born with a veil," which suggests race is an interior, inherited quality that permanently demarcates individuals. In the second, blackness is not fundamentally located within the individual; it is a quality that emerges from the assemblage of a person, a Jim Crow train car, and the state of Georgia. This quality takes on the force of reality as it determines who may move in that geopolitical space and how, but its empirical reality is not located in the person. To understand race, Du Bois suggests via this definition, requires conceptualizing the social reality of selfhood as a collection of contingent contextual coordinates and the narratively constructed relations between them. We perceive these coordinates when we commit to exhaustive collection of data, because the observing eye and transcribing hand temporarily force the mind to relinquish the explanatory assumptions that cast the scene of racial difference as a predictable, destined narrative. Du Bois uses data to turn a reading practice into a perceiving practice, disrupting the presumption of coherence with the perception of particularity. Employing an aesthetic of collection to represent race, Du Bois also proposes an alternate data epistemology. He asks us to become, if not conscious assemblers of data, then conscious of the assemblage nature of data. Narratives of difference do not tell themselves any more than narratives of identity. The difference is the process, self-aware, through which they are assembled.

Data is not the epistemological cure-all that Du Bois initially hopes will be his offering to a world "thinking wrong about race" (*Dusk of Dawn*, 58). It can, however, open aesthetic potentials for self-perception, self-representation, and self-narration. Through bringing the assemblage nature of data to our perception, Du Bois untangles the human bodies he studies from the narrative that constrains and condemns them. The "body of information" he builds is an invitation to know better the actual exis-

tence of bodies in the segregated city. His body is information, and his self is the awareness of its multiple assemblages. What Du Bois brings to our perception through his embodied data aesthetic is that data is not self-narrating and not natively narrative. At the same time, a truly data-driven narrator will form narrative differently—more self-consciously, and with a greater sense of the multiple ways in which data points could be linked together. From the complexity of *The Philadelphia Negro*'s collecting forms follows the complexity of self, society, and political imagination that *The Souls of Black Folk* conveys through its range of formal modes, the crowd-sourced politics of *Darkwater*, and the assemblage-driven Black self of *Dusk of Dawn*. Where the emerging social sciences seek to turn lives into data, Du Bois seeks to turn data into lives. He does this not, primarily, as a critique or rejection of data as a legitimate representational form, but as a reconceptualization of what forms data can take and a deep consideration of how these forms should shape our knowledge of the world.

Ultimately, data makes a body as much as it records a body. It materializes the self as a body of recorded traces. For othered selves, data affects the body as it represents the body—as it becomes the basis for public policy that determines access to resources and the skeleton of discriminatory narratives that circulate, at times implicitly, in mainstream media and in turn affect daily encounter. This chapter has explored the cognitive transit between data, self, and body through its examination of Du Bois's work as a data collector and the narrative forms through which he came to represent race. At every point, this exploration highlights the physicality of data, not in the sense of server farms, but in the intertwined physical impositions of data collection and data encounter, and of the material trajectories of data collection projects aimed at the bodies of others.

The Educations of Henry Adams and the Anxieties of Assemblage Selfhood

My studies are indeed all directed to one point, which is pointed out to me by the station that I hold.

    —John Quincy Adams, *Diary*, June 30, 1796

One began to see that a great many impressions were needed to make a very little education, but how many could be crowded into one day without making any education at all. . . . How many would turn out to be wrong, or whether any would turn out right, was ultimate wisdom.

    —Henry Adams, *The Education of Henry Adams*, 1906

The Education of Henry Adams would seem to share many formal qualities with W. E. B. Du Bois's *Dusk of Dawn*.[1] Both autobiographical works conceptualize the human life not as an unfolding narrative but as a chronological and psychic space to be surveyed as exhaustively as possible. For both, this scope of observation leads to such a deep contextualization of the self that the assumption of individuality gives way to a perception of relationality. Du Bois describes his autobiography as a record of "the interaction of the stream and change of my thought" (*Dusk*, 7) assembled in order to represent the "significance of [the] race problem by explaining it in terms of the one human life I know best" (viii). Adams similarly figures his as the observation of a "manikin," himself in the third person, used for "the study of relation" (*The Education*, 8). The significance of their lives, so represented, derives not from any internal exceptionality but from the

accident of birth in times of social transformation. Du Bois states, "My life had its significance and its only deep significance because it was part of a Problem . . . the central problem of the greatest of the world's democracies and so the Problem of the future world" (*Dusk*, vii–viii). Adams similarly positions himself as situated in peculiarly uncertain times, describing the infant Henry Brooks Adams as being born into a moment in which "the old universe was thrown into the ash-heap and a new one created" (*The Education*, 10), as a child whose life would answer the question of what this new universe would be. Both of these life stories are data collections meant to address the question of the future.

A closer reading of these passages, however, makes clear that while Du Bois and Adams present their autobiographical data collection projects in conceptually similar terms they do so from divergent perspectives. Du Bois speaks explicitly of how narratives of racial identity will shape that future on the individual and social level, using the first person to imbricate himself in the generative, if often violent, flux of movement toward racial equality. Adams speaks of social change metaphorically, as an "old universe" in an "ash-heap," and seeks to cast his third-person self as a universal model of modern subjectivity. These two data collectors and life writers have profoundly different relationships to narratives of racial identity and thus profoundly different affective relationships to the multiplicity of potential narratives that their life data collections reveal. For Du Bois, the destabilization of narrative tends toward empowerment as it denies any essential connection between blackness and inferiority. Every time more than one narrative can be imagined for an African American life, a potential future is reclaimed. For Adams, the reverse holds. Born to relative wealth and political status, he believes "a hundred years earlier, such safeguards as his would have secured any young man's success" (*The Education*, 9)—a seemingly guaranteed developmental path, further mirrored in the progress of the nation with which his family sees its own history intertwined. In the multiplication of potential outcomes, Adams perceives loss, not necessarily because personal success and democratic development *are* lost but because he is forced to perceive them as no longer certain.

The two passages of life writing that form the epigraph to this chapter demonstrate how this uncertainty manifests in conceptions of narrative form. John Quincy Adams, writing in his diary as the twenty-eight-year-old son of a U.S. president, sees his life and education as seamlessly intertwined, coherent, and defined by an economy of effort that virtually guarantees his success. His "studies" are "all directed to one point," a single

end of his life story clearly "pointed out" by the "station" to which he is born. His grandson, Henry Brooks Adams, writing a century later from the vantage of midlife, wants to see education the same way: as a path to social and political prominence, a narrative trajectory confirming that "a system of society which had lasted since Adam would outlast one Adams more" (*The Education*, 21). But when he surveys the data of his own education, he sees only the collection of impressions. The impression as educational experience is a haphazard substitute for his grandfather's coherent studies. Impressions imply the diffusion of effort and the accumulation of experience without a direction of development, and they promise nothing so stationary as a "station" for the erstwhile subject of education. Collective, rather than selective, proliferating points without pointing anywhere, the impression as form of education substitutes a data aesthetic for a developmental narrative.[2]

To be an Adams, John Quincy's diary entry suggests, is to experience education as a teleological, developmental life narrative. This narrative works to confirm an identity primarily cast as familial but more concretely defined in terms of race, gender, and nationality. Specifically, to be an Adams is to be white, male, and U.S. American. Each of these identities is understood as essential (innate, immutably present or absent). To be white (or, in Adams's terms, Anglo-Saxon) is to be biologically preordained as one of the "leaders" in a hierarchical ordering of racial identities: "[U.S. American] Society offered the profile of a long, straggling caravan, stretching loosely towards the prairies, its few score of leaders far in advance and its millions of immigrants, negroes, and Indians far in the rear, somewhere in archaic time" (*The Education*, 223). Masculinity, as Martha Banta has incisively analyzed, is agency. For Adams, Banta writes, "male equates with 'influence' (sometimes called 'power,' often named 'force'), the ability to stamp one's presence upon society, upon politics and business (especially in those arenas), and upon the universe; female equates with 'powerlessness'" (Banta, 51). Part of male power so conceived is the ability to perceive or impose order on perception. Adams describes women's minds as "a queer mixture of odds and ends, poorly mastered and utterly unconnected" (qtd. in Banta, 54), suggesting why his own inability to move from data collection to narrative will prove so agonizing. To be U.S. American is to inherit one's claim to leadership, and in this regard Henry Brooks Adams is an "American of Americans, with Heaven knew how many Puritans and Patriots behind him" (*The Education*, 223). To be an Adams, then, is to combine these identities into a teleological life narrative in which self and vocation

form a clear path, to be "like his grandfather, a protege of George Washington, a statesman designated by destiny, with nothing to do but look directly ahead, follow orders, and march" (52).

In Adams's lifetime, though, all three of these constitutive identities seem to have become unstable: immigrant and African American men became eligible for full U.S. citizenship and voting rights; men find themselves working alongside "telephone and telegraph-girls, shop-clerks, factory-hands, running into millions of millions. . . . All these new women . . . created since 1840" (*The Education*, 412); and the relevance of the Adams political legacy seemed to pale in comparison to the influence of corporate capitalists. Adams must count himself among the "new Americans" who "must, whether they were fit or unfit, create a world of their own, a science, a philosophy, a universe" (225)—who, in other words, must assemble selfhood and nationhood without recourse to established narratives of development at the personal or national level. Assembling a self is decidedly not something an Adams would do, or at least, it is not something an Adams of prior generations would perceive himself as having to do. Arriving at Harvard to begin undergraduate studies, Adams believes, "Never in his life would he have to explain who he was" (64). The disruption of essential identity is a burdensome source of uncertainty, creating questions where answers had seemed supplied. Looking to himself, he must now ask, "What work am I to do in the world? What place am I to hold?" (Banta, 50). Looking to his country, he "repeatedly asks—who is, can, and will be an American?" (Bruni, 124). Adams's relationship to narrative multiplicity is one of anxiety, an affective relationship to the future characterized by fear.

An anxious relationship to the future is what data is meant to forestall through modeling and prediction. To combat uncertainty, Adams and many of his social and intellectual peers turn toward empirical social sciences. As Dorothy Ross has argued, the push toward empirical social sciences is especially pronounced in the U.S. context precisely because of the anxieties of a "gentry" class, "largely northeastern in residence, well-educated, liberal or heterodox in religion" (53), accustomed to wielding intellectual authority, ensconced in positions of social power, and highly invested in American exceptionalism.[3] Adams participates in this search for "fundamental laws at work alike in nature and history" (Ross, 60) as a scientific historian, part of a nineteenth-century intellectual movement toward aligning methods of historical inquiry with those of science. Empirical methods are thought to not only provide the best knowledge of reality but also to provide the path back to certainty and security.

For Adams, a rigorous data collector as both historian and autobiographer, data instead becomes the confirmation of uncertainty, due not only to its content but to the form of reality that it suggests. Specifically, the reality of history and self as presented to him by data collection takes on the form of self-conscious assemblage, in which the data-driven narrator must always choose which configuration of points to privilege. He may thus choose to privilege the United States as an exceptional republic and himself as an exceptional U.S. American, but the data suggesting alternate, equally true narrative assemblages will remain to confront him. I do not claim, here, that *The Education*'s textual affinity to data collection is literal. Adams is not actually presenting us with an unedited list of observations. As a number of critics have pointed out, Adams's ironic, aphoristic style is highly polished.[4] The perpetual frustration of narrative, the self-conscious claim that the story is not finished, does not imply that the text itself is less finished or that a data aesthetic requires that the text be fully non-selective. What a data aesthetic calls attention to is that Adams's selections represent a self that cannot justify selecting.

The collection-driven autobiographical form of *The Education* has long suggested a puzzling if not outright diminished version of selfhood to its critics. To T.S. Eliot, one of the work's near-contemporary reviewers, the autobiography's emphasis on the collection of details presents a depersonalized version of selfhood and generically hybrid text: "It is doubtful whether the book ought to be called an autobiography, for there is too little of the author in it; or whether it may be called Memoirs—for there is too much of the author in it; or a treatise on historical method, which in part it is" (794). Eliot's quizzical description of the life represented conveys how *The Education*'s events come across as an agglomeration of occurrences rather than meaningful milestones: "He was born in 1838, and by 1905, when he wrote, he had known a surprising number of people in America and Europe, and turned his mind to a surprising variety of studies" (794). Overwhelmed with details, Eliot resorts to the crudest form of summarizing, falling back on chronological dates to describe beginning and end, characterizing what comes in between as a "surprising number" of trivial events, and emphasizing the work's lack of internal structure. The accumulation of event seems more notable than any single contribution Adams himself made: "He had attended to everything, respectfully, had accumulated masses of information and known nearly everybody" (795). Eliot sees Adams as sheer collection, defined only by accumulation of information and tangential relationship. James Goodwin considers the narrated Adams of *The Education* to be a "non-person in his own autobiography" (118) and suggests we consider

it a "necrospective," written from the point of view of a subject so absent as to be already dead. More recently, Matthew Taylor has also noted the collecting tendency of *The Education*'s form and its effect on narrative selfhood. Taylor links this collecting form with an illegible model of selfhood, arguing that "rather than being integrated into an evolving *bildungsroman*, or even accreting to offer a mosaic of characterological or psychological perspectives on a coherent self, these episodes seem strangely disarticulated from their subject, picturing something both more and less than a self" (57). Adams's more exhaustive and more methodologically oriented account of self is seen as somehow disqualifying him from selfhood rather than proposing an alternate, if anxious, mode of selfhood.

In this chapter, I examine data collection as a method and form underlying Adams's scientific history and his autobiography in order to grapple with the unfamiliarity of the self as data. I begin by reading Adams's theorization of scientific history as a data-driven conception of reality, building from Taylor's argument that "it is Adams's science—not his biography—that provides the best explanation for his impoverished status in *The Education*" (61). I do not seek to discount or ignore the political dynamics of his biography, but I do focus on how empiricist science became his primary lens for attempting to understand and (ultimately failing) to contain those dynamics. Within the broader umbrella of Adams's science, I argue that the concept of data and the practice of data collection are underlying, and typically overlooked,[5] epistemological and formal dynamics driving *The Education* and its model of selfhood. Linking the narrative form of *The Education* to an aesthetics of data collection, I propose that Adams's ostentatious failure to narrate his education marks his confrontation with data collection as a representational form of selfhood. Reading the dualism of unity and multiplicity as a figuration of the dualism of narrative and data collection, I situate *The Education*'s representation of selfhood at the crux of two ontological questions provoked by the epistemology of data: who am I, and what is the status of the human in a paradigm of pervasive empiricism? After repeated attempts to answer these questions through attempted theorization and practice of scientific history, though, Adams finds that any promise of greater clarity is continually frustrated by the addition of new data. Further, as he turns to scientific method to get at history's underlying order, contemporary science begins to claim the reality of disordering forces. Turning this method of history upon his own life, and turning his life upon the pretensions of scientific history, he struggles with an unshake-

able recognition that his modern self is formed not by developmental narrative but by anxious assemblage.

Scientific History as Data-Driven Method

Addressing the American Historical Society during his 1893–94 tenure as president, Adams endorses what might seem like a bizarre endeavor for a discipline devoted to studying the lives of human individuals and societies. "That the effort to make history a science may fail is possible, and perhaps probable," he writes, "but that it should cease, unless for reasons that would cause all science to cease, is not within the range of experience" (*Degradation*, 126). As Robert Sayre describes, the scientific history Adams here proposes seeks to "define the laws of history according to which society moved and to give these laws scientific authority for the prediction of its future course" (133). Adams roots scientific authority in the practice of Baconian empiricism, as he understands Bacon to have "urged society to lay aside the idea of evolving the universe from a thought, and to try evolving thought from the universe. The mind should observe and register forces . . . without assuming unity at all" (*The Education*, 448). To Adams, the "success of this method staggers belief" (450), generating rapid, seemingly irrepressible technological and social change. So powerful is the force of empiricism within Western culture, Adams claims, "Historians will not, and even if they would they cannot, abandon the attempt" (*Degradation*, 126) to make history a science. When he suggests that "science itself would admit its own failure if it admitted that man, the most important of all its subjects, could not be brought within its range" (126), it seems not so much an earnest wager as a foregone conclusion, for it is no more thinkable in his world of the dynamo and the telephone than it is in ours of the genome and the petabyte that science would cede its position as the authoritative method for grasping reality.

Adams's theorizations of scientific history thus forward a prescient data-driven conception of reality and a dogged test of the equation of data with narrative. Adams's most well-known and widely read theoretical writings on scientific history are collected in the posthumous volume *The Degradation of Democratic Dogma*. Literary critics have long puzzled over how to interpret the three essays in this volume, "The Tendency of History" (his 1894 presidential address to the American Historical Association), "A Letter to American Teachers of History," and "The Rule of Phase Applied

to History." One the one hand, they are repeated arguments for a scientific method of history that, quite literally, attempts to extrapolate findings from the physical and chemical sciences to the social. Given Adams's lifelong habit of keeping up-to-date on the latest scientific writings, the number of times he returns to the idea of a scientific history in his writings and letters, and the broadly shared nineteenth-century enthusiasm for applying scientific methods to human-oriented studies in the hope of getting the same kind of predictive results that physical sciences had, there are reasons to believe these attempts are in earnest. Clive Bush argues, "from the beginning of his career Adams showed himself as anxious as any nineteenth-century historian—Thierry, Buckle, Comte, or Taine, among countless others—to penetrate the veil of events and deliver an unchanging truth about historical process" (42). On the other hand, the tone of these writings is obscure and idiosyncratic. Many of the ideas he proposes now seem so clearly unworkable that some critics have argued that they should be read satirically. Keith Burich, for example, argues that "The Rule of Phase" is intended "as a good-natured but pointed jab at his fellow historians for naively assuming that the future is determined by the past" (163). Both of these lines of interpretation seem to have important insights to offer given Adams's astute take on the always tenuous human grasp on useful knowledge, his consistently ironic tone in letters and other writings, and a cultural context that urgently brought the question of the relationship between humanity and science to the fore. My approach, here, is to recognize Adams as a conflicted yet committed humanist interlocutor of scientific epistemology. As James Young suggests, he "sees no alternative to accept science as the path to knowledge. He is so committed, in fact, that in the late essays he pushes the argument to a point where, if taken literally, it threatens to slide into absurdity. But he still remains a scientific modernist" (237). As a conflicted yet committed humanist interlocutor of scientific epistemology, Adams is understandably uncomfortable with science's claims for and claiming of the human. I argue that it is through his commitment to testing the limits of science's applicability to the human that he creates *The Education*'s method of critique. Adams critiques empiricism by practicing its foundational method, data collection, with a rigor that pushes the limits of intelligibility and therefore highlights the inevitable presence of human interpretation in knowledge production and the anxieties attendant to that contingency.

Adams's commitment to empiricism is manifest in his association with the movement toward scientific history. Though far from homogenous

in theory and practice, U.S. scientific historians comprise a "broad trend away from what many came to consider the overemphasis on narrative by so-called literary historians like Macaulay, Michelet, and Prescott" (Jordy, 3). Methodologically, they drew heavily on the work of German historian Leopold Von Ranke (1795–1886). Ranke proposed that the key value of historical research was to "reveal history as it had actually happened" (Jordy, 2). The "actually" here implies a stark difference from the goals of narrative history.[6] Known during his academic life in Berlin as an opponent of Hegelian teleology, Ranke eschews the assumption of an underlying developmental process (or narrative form) that can be projected onto history. Ranke theorizes historical method as primarily a practice of data collection. The historian's goal, as he understands it, is exhaustive representation through the collection of primary source documents. The least mediated sources were to be sought and the historian was to refrain from applying preexisting schemas of understanding in presenting them. Ranke writes in 1839, "I see the time approach in which we shall no longer have to found modern history on the reports even of contemporary historians, except in so far as they were in possession of personal and immediate knowledge of facts; still less, on works yet more remote from the source; but on the narratives of eye-witnesses, and the genuine and original documents" (xi). Ranke's influence on scientific history in the United States is evident in expressions of confidence in the project of data collection. The 1901 Annual Report of the American Historical Association, for example, reports that Edward Cheyney argues that the "simple but arduous task of the historian was to collect facts, view them objectively, and arrange them as the facts themselves demanded, without reference to any especial operating force beyond that clearly shown by actual conditions" (American Historical Association, vol. 1, 29). Albert Bushnell Hart, addressing the same body in 1910, calls for a "genuinely scientific school of history" modeled on the "fortunate analogy of the physical sciences" (232). He contends that if historians follow the lead of Darwin who "[spent] twenty years in accumulating data . . . before he so much as ventured a generalization," then they will find that "in history, too, scattered and apparently unrelated data fall together in harmonious wholes" (232–33).[7] Thus, the aspirations of scientific history echo the Laplacian desire for exhaustive data and anticipate current speculations around historical methods, in which historians have started contemplating what it might be like to have access to vast archives of data recording actual human behavior and thinking in real time.[8] *The Education*'s descriptions of Adams as scientific historian confirm a similar

conception of historian as data collector. Adams imagines historical data as discrete, truth-bearing points through which an ultimate reality outside the self will be revealed. History is the ceaseless generation of material traces that constitute an objective record of these points: "History set it down on the record—pricked its position on the chart—and waited to be led, or misled, once more" (*The Education*, 423). The scientific historian is one who seeks the totality of this record.

As William Jordy suggests, rather than a "coherent idea of scientific history," the fruit of Adams's efforts to unite science and history is better recognized as "an attitude of mind" (vii). Adams imagines the historian in the position of perceiver of data rather than projector of narrative. Adams's conception of the scientific historian is the humanistic complement of the Baconian scientist, focused on collecting particulars and "restrain[ing] themselves, until the proper season, from generalization" (Bacon, 106). As he writes in *The Education*, his relationship with data is first of all receptive: "The historian never stopped repeating to himself that he knew nothing about [Truth]; that he was a mere instrument of measure, a barometer, pedometer, radiometer, and that his whole share in the matter was restricted to the mere measurement of thought-motion as marked by the accepted thinkers" (422). A perceiver emptied of interpretive agency, the historian is more of an instrument than a subject. Jordy further observes, "Adams's scientific point of view . . . stemmed from his belief in the historical facts as hard cores of certainty existing outside the mind of the historian" (14). These "hard cores" offer an image of data points, characterized by their collectivity and their exteriority to the human mind. Any historical narrative, if it is to be epistemologically valid, must arise from the data itself and not through the intervention of the historian—or through the delusional projection of the human subject, engulfed in longing for the ordering power of providential narrative displaced by the same methods now being used to revise it. To achieve this end, the historian must become a collector of data.

Adams's work as a teacher and writer of history demonstrates his methodological investment in data collection. As a professor of history at Harvard University, he "was among the pioneers in this country to introduce the scientific method . . . into the American university," which included a focus on primary sources and the seminar method of instruction (Jordy, 3–4). Adams practiced data collection in his own historical writing through a reliance on primary documents. While preparing to write his *History of the United States*, to take one notable example, he copied out large passages

of his forebears' diaries, practicing a literal, physical form of exhaustive data collection. This is also a telling example of how different disciplinary constructions of rigor and contexts of research can place vastly different burdens on researchers. Du Bois conducts a door-to-door canvass of an entire ward of Philadelphia and Adams copies his family diaries: both may be said to have collected data in a manner that aspires to exhaustivity, but their labors are quite different in quality and magnitude. Nonetheless, Ira Nadel suggests that making these copies impacted Adams's narrative practice as they "established a written archive of the past which would not only influence his memories of his grandfather . . . but also indirectly shape his handling of narrative and the past in a text [*The Education*] in which he conscientiously avoided the diary structure" (xx). The nine-volume work that results from this years-long process of research also demonstrates the formal influences of data collection in its voluminous length, lack of narrative closure, and observational style.

The Education's methodological descriptions also confirm that Adams's conception of history as data collection prompted self-consciousness about the formal effects of narrative itself on the representation of historical reality. He describes the typical historian's work as fundamentally to "undertake to arrange sequences,—called stories, or histories—assuming in silence a relation of cause and effect" (*The Education*, 354). These ordering assumptions, he asserts, were "unconscious and childlike" (354). Adams, committed to being driven by data itself, can no longer allow himself to assume in silence and let his relationship to narrative form remain unexamined. He must question the assumptions, expressed as narrative forms, that make one arranged sequence more valid than another. The method of historical writing he proposes, then, is "the severest process of stating, with the least possible comment, such facts as seemed sure" (355). "Stating" is a formal measure of the scientific historian's commitment to collection and designates an exhaustive process of collecting that inevitably frustrates narrative.

The stylistics of "stating" drive formal parallelism and lack of narrative closure. The opening passages of the *History*, for example, demonstrate the sense of accumulation overwhelming causation that formal parallelism tends to convey:

> According to the census of 1800, the United States of America contained 5,308,483 persons. In the same year the British Islands contained upward of fifteen millions; the French Republic, more than twenty seven millions. Nearly one fifth of the American people

were negro slaves; the true political population consisted of four and a half million free whites, or less than one million able bodied males, on whose shoulders fell the whole burden of a continent. Even after two centuries of struggle the land was still untamed; forest covered every portion, except here and there a strip of cultivated soil; the minerals lay undisturbed in their rocky beds, and more than two-thirds of the people clung to the seaboard within fifty miles of tidewater, where alone the wants of civilized life could be supplied. The centre of population rested within eighteen miles of Baltimore, north and east of Washington. Except in political arrangement, the interior was little more civilized than in 1750 and was not much easier to penetrate than when La Salle and Hennepin found their way to the Mississippi more than a century before. (vol. 1, 1)

This is an Anglo-American and capitalist vision, to be sure, but it is also full of discontinuity and variation that is presented without causal linkage, surfaced by a view of the past as a data collection. Its blindered vision also subtly demonstrates the shaping role of initial selections of scope and category, selections that profoundly shape the way data collections are formed. In this passage, Adams has made at least two acts of selection that function as implicit judgments upon reality. He has limited his inquiry to the people of the United States of America, a political definition that includes enslaved people but excludes Native Americans as co-inhabitors of the continent. And he has clearly set being "civilized" as a measure of progress, denoted here by progress in exploitation of natural resources and ease of transportation of people and goods. But, within these constraints, the picture Adams paints with raw figures is full of parallelism, multiple simultaneous facets of reality raised to the reader's attention without being absorbed into an explicit narrative. The five million people of the United States exist alongside the millions of the British and French territories. While it seems clear that the million able-bodied white men are to be the center of attention, they exist as a statistical minority alongside the half-million enslaved people and three-and-a-half million "other" whites. The well-supplied, "civilized" seaboard is placed directly alongside "untamed" land where agricultural and mineral resources wait untapped. The syntax of this passage, heavily reliant upon parataxis and semicolons, only adds to the sense of a representation being spatially constructed (East to West) from blocks of information juxtaposed and discontinuous. Adams assembles facts to lay out a panoramic view rather than propose an explanation for it.

The spatialized, additive formal parallelism demonstrated in this passage arises from a commitment to exhaustivity that also troubles the status of any end of history. If the goal of scientific history is to arrive at generalization, but the method requires refraining from manipulation of the incorrigibly diverse data that would allow a streamlined generalization to emerge, the scientific historian is in a paradoxical position. He must state in order to narrate, but the process of stating has no foreseeable end. As Jordy notes, "the work of some scientific historians, and none more than Adams's, seems to have no real termination" (15). Adams's *The Education* is not the only work frustrated by the lack of an ending; this is also characteristic of his historical writings. Even his nine-volume history of the United States, covering the administrations of only two presidents, ends with a series of questions and a call for more data: "For the treatment of such questions, history required another century of experience" (*History*, vol. 9, 242).

The formal problem that Adams diagnoses at the end of the *History* derives from the epistemological problem he intuits at the heart of empiricism's championing of data collection. If data derives its authority from the exhaustivity of its collection, how can the scientist or scientific historian justify authoritative analysis based on only a selection of data points? Time continues, and unfolding events could be seen as continuously new endings that cast new light on past events. The commitment to exhaustivity troubles the status of any end of history—either of a certain period or human history altogether, the course of which the scientific historian seeks to reveal. Data-driven history does not offer *an* ending because the historical record, viewed exhaustively, continuously produces ending*s*.

Adams's acute awareness of the internal contradictions of scientific history fosters his dissatisfaction with the claims of much of the science of his day, as illustrated by his critique of developmental applications of Darwinian evolution. Adams looks at the historical record, both collective and personal, and sees numerous data points that contradict Charles Lyell, Herbert Spencer, and others who see a developmental process working uniformly across time and space. "If the glacial period were uniformity," he asks, "what was catastrophe?" (*The Education*, 213). The concept of data underlies Adams's imagination of a complete historical record and his insistence upon attention to what Lyell leaves out.

Adams's criticism of Lyell's and Spencer's selective practices demonstrates his critical awareness of empiricism's mandate to account for all the data, and this awareness becomes his crucial intervention in empiricism's claiming of the human. Adams becomes more and more pessimistic about

the viability of scientific history in light of the implications of contemporary physical science. Physical sciences were, in the early twentieth century of Adams's later career, grappling with evidence that material reality was far more complex than Newtonian physics predicted, perhaps even ultimately chaotic. As Adams writes "Rule of Phase," a treatise applying J. Willard Gibbs's phase rule to history to demonstrate and explain the transition between distinct historical phases,[9] work in chemistry and physics has effectively ended the dream of extending the neatly predictive formulas of Newtonian mechanics to the atomic level. Adams may not have fully understood the science, but he intuited the implications of the reality proposed by theoretical physics, specifically thermodynamics and the law of entropy. Not only does science seem to fail to provide predictive laws, the laws it does provide quash any potential for human creativity and agency in the face of inevitable decay.

The human powerlessness that Adams sees in the findings of physics underlies his final piece of methodological writing, "A Letter to American Teachers of History." In the "Letter," Adams opens with an overview of history's former role as an avowedly human-centered discipline, in which the historian could be certain "that the energy with which history had to deal could not be reduced directly to a mechanical or physicochemical process" (*Degradation*, 146). Yet the authority of science has shaken this belief over time: "Sooner or later, every apparent exception, whether man or radium, tends to fall within the domain of physics. Against this necessity, human beings have always rebelled. For thousands of years, they have stood apart, superior to physical laws. The time has come when they must yield" (228–29). Formerly, the human had been known as what remained outside the determinist grip of physical law, the possessor of a "social energy," which, "though true energy, was governed by laws of its own" (147). Now the human, rather than being the exception in a world of material subject to the workings of physical law, is included in that world, one element among others.

Scientific inquiry, designed to enable prediction and mastery of the environment, has in practice thwarted both prediction and mastery with its most recent findings. Adams contends that while "Bacon's physical teaching aimed at freeing the mind from a servitude" by using collected data to disrupt preconceived beliefs about the physical world, "the law of Entropy imposes a servitude on all energies, including the mental" (251). Thermodynamics puts the science-affirming subject into an uncomfortable relationship to self and history, denying the possibility for predictive

power on the microlevel of individual particles (and lives) and ensuring decline on the macrolevel of the universe (and societies). Entropy proposes the certainty of chaos, but by challenging the core method of empiricist knowledge Adams can call into question the certainty of entropy. Data's temporality of deferral insists that no theory can be final because the final data point has not (and never will be) collected. As a case study, he shows us what the life story in the age of data collection looks like.

The Education as Data Collection

Adams presents his autobiography as an exercise in scientific historical method applied to the self. Like geologists who "[avow] that progress depended on studying each rock as a law to itself" (*The Education*, 372), Adams as narrator undertakes to observe the self, the narrated Adams, as a singular point through which scientific historical law may be found. Conceived in the terms of scientific history and more broadly in terms of pervasive empiricism, the self of *The Education* is represented as an object of observation through which experiences and insights are recorded as data points, a collection of equally potentially meaningful realities of the encounter between self and world. Whether we take the resulting text as an earnest inquiry or ironic performance, its aesthetics stage a formal challenge to developmental narrative at the level of the individual and predictive historical theory at the scale of the social.

Adams's framing of autobiography as empirical investigation helps account for his figuration of self as manikin. The manikin, or self as an object of observation, signals a methodological commitment to empirical observation for revealing the narrative of education. This primary reliance on gathered observations, the data points of experience, exteriorizes the self as a collection of facts. Adams observes that ego, or innate selfhood, "has steadily tended to efface itself, and, for the purposes of model, to become a manikin on which the toilet of education is to be draped in order to show the fit or misfit of the clothes" (*The Education*, 7–8). In contrast to the two self-studiers his preface claims as forebears, Jean Jacques Rousseau and Benjamin Franklin, Adams does not assume he has a preexisting self to represent, only an outcome of the process of education. The essential identity of the individual self is further displaced by the goal Adams claims in representing it, which is not to show the self but its education: "The object of the study is the garment, not the figure" (8). Adams also exchanges "education" for life as the center of his inquiry and narrative, and education, as

described in the citations above, is likened to the putting on of garments, not the pulling out of innate qualities or the acquisition of enduring features. The self is exteriorized as data, perceived as a collection of experiences, events, and relationships rather than as a developing identity shaped by agential effort or innate telos.

The description of the manikin's birth introduces the method of observation through which Adams will collect the data of self and demonstrates how this method leads to awareness of the self as contextualized and contingent. Rather than suggesting a causally related series of events that lead to his birth and identity, the single-sentence opening paragraph emphasizes the accumulation of material and historical circumstances that shape the child's life even before it has begun. Beginning "Under the shadow of Boston State House" (*The Education*, 9), the ponderously long sentence continues to pile geographical and historical landmarks on the child being born, who is not named until the final clause. The self is always contextualized in surroundings he does not control and from the outset is subsumed by an assemblage of historical circumstances. Lest we assume that this assemblage is a singular lineage giving rise to another Adams destined for eminence, the next paragraph spins out an alternate potential set of circumstances for a child born in 1838, claiming "had he been born in Jerusalem under the shadow of the Temple," he would also have been indelibly stamped by circumstances. A different set of material-historical coordinates, the image suggests, would have turned the same baby into a different person. The idea of an innate selfhood is dismantled. By recording the multiple data points, or social coordinates, of his birth in list-like fashion, Adams conveys a fundamental contingency of selfhood.

The "story of an education" (*The Education*, 39) produced by the methodology of manikin observation proves to be neither a story nor an education, at least not as Adams would define them. Education, as Adams conceives it, should be a form of ordering, an intervention in the raw, disordered experience of life. "From cradle to grave," he writes, education was the "problem of running order through chaos, direction through space, discipline through freedom, unity through multiplicity," which "has always been and must always be, the task of education" (17). However, instead of ending in a revealed unity, an order run through chaos, the data collection of his life shows education proliferating rather than consolidating. Adams writes of the college-age Henry, "The education he had received bore little relation to the education he needed. Speaking as an American of 1900, he had as yet no education at all. He knew not even where or how to begin"

(54). This lack of both ending and beginning becomes a refrain. After four years at Harvard, "education had not yet begun" (69). After eight years in Europe, which includes legal study in Berlin, cultural study in Rome, and an intense political apprenticeship as aid to his father, the Ambassador to England during the U.S. Civil War, he declares: "Even then he knew it to be a false start. He had wholly lost his way. If he were ever to amount to anything, he must begin a new education, in a new place, with a new purpose" (210). This cycle repeats itself throughout the text. As Sayre observes, "each chapter of *The Education* is a lesson in itself, and . . . many of them contradict each other" (93). What is learned in each life phase builds toward a knowledge that is proven useless by accumulating events that must be included in the data.

Adams describes the tension between the ordering education he seeks and the proliferating lessons he experiences in terms of narrative form. Comparing education to dramatic structure, he observes of his/the mani-kin's experience, "the old fashioned logical drama required unity and sense; the actual drama is a pointless puzzle" (*The Education*, 149). "Actual" suggests a commitment to a reality beyond the self, and a commitment to cataloging its contents that supersedes the desire for narrative under-standing. Committed to observing this actuality, the data-driven narrator is swamped. Every time Adams thinks he has come upon a defining crisis or a turning point, its lessons are invalidated by the event that follows. Adams expresses similar thoughts about the composition of his life story itself in a letter to William James in early 1908: "St. Augustine alone has an idea of literary form—a notion of writing a story with an end and an object, not for the sake of the object, but for the form, like a romance. I have worked ten years to satisfy myself that the thing cannot be done today. The world does not furnish the contrasts or the emotion" (*Letters*, 490). The con-temporary world, as Adams perceives it, has been shifted toward multi-plicity, revealing the "old fashioned logical drama" as an unsustainable construction in the face of the "pointless puzzle" of the "actual drama" presented by the world-as-data-collection. The "world does not furnish the contrasts" because data epistemology insists that each point is equally potentially meaningful. This empiricist perspective on historical reality is central to Adams's inability to form a coherent narrative of self, or put another way, data's inability to reveal developmental narrative. Because of data's epistemological dependence on collection, his representational form of selfhood cannot sanction the selection of meaningful points (and the discarding of contradictory evidence) that conventional developmen-

tal narrative requires. It is not that the world is fundamentally different now than in Augustine's era; it is that Adams believes he cannot perceive his world or his life as Augustine did. The reason he cannot reprise the elegant (in his view) drama of conversion is that he, an empiricist, must also always see the numerous moments in life and history that contradict, reverse, or negate a linear developmental process.

By the time Adams begins "his third or fourth attempt at education in November 1858" (*The Education*, 71), he has exchanged the educational ideal of a lesson for the actuality of the impression as the foundational form of education. He finds that his sea journey to Europe provides "a great variety of other impressions which made the first month of travel altogether the rapidest school of education he had yet found" (71). The impression constitutes education, but in a contingent, mutable way: "One began at last to see that a great many impressions were needed to make a very little education, but how many could be crowded into one day without making any education at all. . . . How many would turn out to be wrong, or whether any would turn out right, was ultimate wisdom" (71). Adams has deferred to the external, chronological measure of the day to contain the multitude of impressions, rather than being able to shape them into a coherent lesson. The impressions thus accrue, but Adams cannot select among them in order to form a narrative or build confidence in the gradual development of what he perceives as a useful education.

Adams becomes conscious of unity, or narrative, as the intervention of the perceiving self rather than a preexisting fact to be discovered (much less revealed by collected data itself). Adams determines the position of the truly passive historian, the perpetually receptive collector of data, to be psychologically as well as ontologically untenable. Chapter twenty-three, "A Dynamic Theory of History (1904)," instead elaborates history as a perpetually unfinished oscillation between collection and provisional, contingent analysis. The historian seeking to understand the world is figured as a "spider in its web" (*The Education*, 439), spread broadly to catch the "forces of nature" that "dance like flies before the net." As an image of data collection, the web suggests both exhaustivity (it is set up to catch everything that passes near it) and a painfully limited scope (it will only catch, or record, a small fraction of the natural forces at work). Working with the record of forces as the web catches them, the human subject/historian "acquires a faculty of memory, and, with it, a singular skill of analysis and synthesis, taking apart and putting together in different relations the meshes of its trap" (439). Memory, the ability to accumulate data, emerges as the crucial

skill of the historian. Rather than possessing exceptional insight, this historian requires the ability to construct and reconstruct threads between data points, accepting that none is final. Coming to a conclusion requires suspending, at least momentarily, a commitment to perceiving reality exhaustively and thus artificially stopping the process of data collection: "For him, all opinion founded on fact must be error, because the facts can never be complete, and their relations must be always infinite" (380). Yet, as this statement also suggests, without such temporary, knowing suspension, the work of analysis can never yield results. In practical terms, the observer must have an agential function. To recognize this function is to become a different kind of data-driven narrator. As John Carlos Rowe explains, Adams "redefines the idea of the unity as the function of consciousness and man's experience of this function in the relations he composes" (68). This redefinition takes on a fundamentally different form than developmental or traditional narrative because it creates the possibility for unities, for parallel stories that must coexist rather than giving way to a privileged version.

Instead of ending in a revealed unity, an order run through chaos, the data collection of Adams's life shows education proliferating as these numerous temporary threads. One after another, the sense-making models his reading and experience have furnished are shattered by events that will not be contained, and he concludes "the multiplicity of unity had steadily increased, was increasing, and threatened to increase beyond reason" (*The Education*, 369). "Multiplicity" and "unity" stand as epistemological poles. For Adams, they cannot productively coexist; a multiplicity of unity is proof that unity does not exist. Education without end is thus self without beginning, because for Adams there is no selfhood without the sense of agency that unity enables. Adams writes, "Any intelligent education ought to end when it is complete. One would then feel fewer hesitations and would handle a surer world" (149). A coherent narrative of education has palpable effects on lived experience, allowing "fewer hesitations" and the sense of a "surer world." Without a coherent education, the subject will repeatedly find that choices can be neither "justified nor repudiated on the basis of any enveloping code of values" (Rowe, 99) and be beset by hesitation in a world of uncertainty. The diary passage from J. Q. Adams eloquently illustrates the looped temporal relationship between a projected ending and present agency. His "studies are indeed all directed to one point" because it is "pointed out to me by the station that I hold." His present actions toward a future goal are enabled by the backward projection of a future version of his present identity. Collection

displaces these empowering narrative ends of selfhood at the same time as it displaces education as a developmental narrative.

Admitting that unity is an intellectual intervention, not a verifiable reality, requires accepting what to Adams is a diminished form of selfhood. While Adams never explicitly defines the "multiplicity" of which his autobiography is the study, Yvor Winters's gloss illuminates the threat of multiplicity to the agentive self: "Henry Adams saw modern history as the progress from unified understanding, or the illusion of it, towards dispersion of understanding and force" (374). Unity, Winters suggests, is understanding, or a coherent narrative order for the world. Multiplicity, then, is the "dispersion" of this understanding into multiple narratives and therefore a diminution of "force," which Adams defines as "anything that does, or helps to do work" (*The Education*, 439). Adams writes of the manikin-self at roughly age sixty-three:

> The magnet in its new relation staggered his new education by its evidence of growing complexity, and multiplicity, and even contradiction, in life. He could not escape it; politics or science, the lesson was the same, and at every step it blocked his path whichever way he turned. He found it in politics; he ran against it in science; he struck it in everyday life, as though he were still Adam in the Garden of Eden between God who was unity, and Satan who was complexity, with no means of deciding which was truth. (369)

Multiplicity diminishes the subject's capacity to act. It blocks the manikin Adams's path and prevents decision, holding him, in the twentieth century, in the metaphorical position of the first man. Or at least, it diminishes his power to act in the ways in which he had imagined were his birthright—choosing and following the path of a single career, arriving at the point pointed out to him by the station he believes himself to hold, appending his life to a developing nation. Multiplicity's effect on agency not only challenges his identity as an Adams but, as Banta has suggested, also as a man. His professional, social, and personal identities are all thrown into disarray by the thought that a multiplicity of understandings of himself and the workings of the world might be valid. To be an Adams is to act; to be unable to decide what to do is to be something other.

Action-enabling unity is inaccessible to Adams in part due to his commitment to a data-driven epistemology. This epistemological stance forces him to see that unity is not a reality but a chosen perception, requiring

selective attention to the world as he experiences it. In "Darwinism (1867–1868)," Adams observes of his younger self, "One had been, from the first, dragged hither and thither like a French poodle on a string, following always the strongest pull, between one form of unity or centralization and another" (*The Education*, 212–13). Yet, even at this stage, he betrays a self-consciousness about the relationship of his own thought practices to the maintenance of an idea of unity. When he finds himself confronting contradictory data about evolution on Wenlock Edge, "He did not like it; he could not account for it; and he determined to stop it" (218). Stopping it requires choosing to ignore his sense that important details remain to be accounted for, and at first he entertains this as an effective strategy for holding multiplicity at bay. The narrated Adams "had no notion of letting the currents of his action be turned awry by this form of conscience. . . . He insisted on maintaining his absolute standards; on aiming at ultimate Unity" (218). Yet, even as he records his past self's desire to stop "handling all the sides of every question" (218), the text demonstrates that the desire to collect and examine the exhaustive data collection of reality prevails. Awareness of conflicting data is seen as impediment to action, but Adams sees facing the entirety of data as unavoidable. The selfhood of assemblage is, therefore, inescapable.

The Anxieties of Assemblage Selfhood

To understand why Adams's relationship to assemblage selfhood is an anxious one, we might begin with biographer Edward Chalfant's incisive observation: "Adams had not become a great historian out of special interest in the past. . . . It was because he needed to learn where America was going that he had given most of the years of his second life to a systematic survey of a selected sample of the past" (73).[10] Adams sought to understand the past in order to predict, and potentially control, the future. Uncertainty is intrinsic to assemblage form. While narratives operate in terms of cause and effect, assemblages operate in terms of becoming, or unpredictable emergence through ongoing reconfiguration. Unsurprisingly, then, assemblage selfhood is for Adams a source of anxiety, an affective stance toward the future characterized by uncertainty.

Assemblage selfhood arises from Adams's empiricist conception of the self. Bernard Accardi elaborates the conceptual relationship between empiricism and assemblage in his discussion of two background texts for *The Education*: John Locke's "An Essay Concerning Human Understand-

ing" and William James's *Principles of Psychology*. Though written centuries and continents apart, these texts define the mind in terms that emphasize its assemblage through the collection of sensory impressions, the spatial organization of these impressions through a metaphor of externalized selfhood, and a lasting mental collection of impressions that can be called upon to construct multiple forms of knowledge. Just as Locke describes impressions being made upon the mind's otherwise empty page and later constructed into knowledge of world and self, James describes the self in terms of collection and selection: "The mind, in short, works on data it receives very much as a sculptor works on his block of stone. In a sense the statue stood there from eternity. But there were a thousand different ones beside it, and the sculptor alone is to thank for having extricated this one from the rest" (qtd. in Accardi, 263). The data collected by the mind is not self, it is the raw material of self. Self, in the empiricist and assemblage-driven understanding, is always an act of construction via selection and grouping. Although these descriptions share an empiricist conception of the mind, there is a subtle but important difference between the ends of the assembling processes that they project. For Locke, the end of all this collecting is to arrive at truth, a stable foundation upon which to build future knowledge. James, though, does not see the end as singular truth, of self or reality, but as a selection of one among many possible formations. Absent an underlying narrative form that would direct and justify this selection, there are many possible truths and selves, and there are many possible futures, inherently uncertain because perpetually plural.

Committed to an empiricist, data-driven view of the world, Adams cannot simply discard conflicting experiences and evidences of self. He must collect them, and this drives a persistent sense of self as multiple in a world of multiplicity. The parallel, distributed nature of Adam's emergent selfhood is demonstrated by the motifs of doubleness and proliferation that run through the text. Early on, Adams perceives a doubleness of self that is driven by his movement between parallel spaces and conceptual orderings of life: "From earliest childhood the boy was accustomed to feel that, for him, life was double" (*The Education*, 14). Doubleness is not perceived as abundance, though; it is permanent conflict: "Winter and summer, town and country, law and liberty, were hostile" (14). This personal, lived doubleness is accompanied by more conceptual forms of doubleness, with which he frames his life. He sees himself as straddling two disjunct centuries, a "child of the seventeenth and eighteenth centuries" woken up "to find himself required to play the game of the twentieth" (9). The end of the

U.S. Civil War and the assassination of Abraham Lincoln also finds Adams with an "identity, if one could call a bundle of disconnected memories an identity" (198) defined by disjunction and a life "once more broken into separate pieces." Then, again, upon receiving an invitation to teach history at Harvard University while he is still living itinerantly in Europe, "at twenty-four hours' notice, he broke his life in halves again in order to begin a new education, on lines he had not chosen, in subjects for which he cared less than nothing; in a place he did not love, and before a future which repelled" (274).

As this description repeatedly affirms, Adams does not perceive himself as having chosen or willed the doubleness that he sees as pervading his life. Emily Donaldson Field has connected this doubleness to Du Boisian double consciousness. She asserts, "the genealogy of the discourses of alienation and fragmentation claimed by and for the modernists involves a crucial, interracial intertwining; we can see Adams and Du Bois as perhaps unwitting collaborators in the formation of a worldview that would become central to the early decades of the new century" (63). While I concur with Field that the two works share formal features that place them in critical conversation, I do not want to transport a Du Boisian concept of double consciousness as an interpretive lens for Adams, but instead seek to discern an underlying epistemological bent or methodological commitment that drives their formal transformations of selfhood. For both, doubleness is driven by a quality of exteriority that arises from observing the self in history rather than narrating it. Doubleness, in the form of an exteriorized data collection, is an empirical reality of self so observed, and Adams represents it as generating parallel selves: the boy of Quincy and the student of Boston; the slowly acclimating diplomat and the rudderless American; the aimless writer and the grudging professor of history. None of these selves seems to give way to the next in a telos of identity, so each piles up against the next.

The doubled self can be read as an anxious version of parallel selfhood, as Sianne Ngai's formulation of anxiety illuminates. Ngai argues that "while intimately aligned with the concept of futurity, and the temporal dynamics of deferral and anticipation in particular, anxiety has a spatial dimension as well" (210). The anxious subject cannot differentiate between a securely demarcated "here" and a threatening, unknown "yonder" (212).[11] Ngai finds that this affect is particularly likely to manifest for the "knowledge-seeking subject" (212) who must secure "an auratic distance from the worldly or feminine sites of asignificance or negativity" (236). Anxiety can be seen in

the desire to winnow parallelized perception down to doubleness, a clarifying "here" and "yonder" out of the destabilizing awareness of the equally present reality of other people and places.

Adams's anxiety emerges from such unrelenting awareness. The assemblage selfhood of *The Education* also emerges in the thematic representation of the self interacting with data. From childhood on, technologically-driven shifts in his perception of the self and the social incite re-assemblages of self for the narrated Adams. Events far beyond his own home expel him from the world for which his education was to fit him. At age six, "He and his eighteenth-century trogloditic Boston were suddenly cut apart—separated forever,—in act if not in sentiment by the opening of the Boston and Albany Railroad; the appearance of the first Cunard steamers in the bay; and the telegraphic messages which carried from Baltimore to Washington the news that Henry Clay and James K. Polk were nominated for the presidency" (*The Education*, 10–11). Each of these events combines technological with social change to transform Boston's relationship to the world beyond: the railroad links insular Boston with New York and Washington, D.C.; the Cunard steamers connect Boston with England by facilitating the first transatlantic steamship mail contract; and the telegraph carries political news at unprecedented speed. Highly personal events are listed right alongside these wide-reaching ones, including his memory of "the color yellow" on the "kitchen-floor in strong sunlight" (11) and his bout with scarlet fever. Reported and experienced, national and personal, events accumulate and drive a heightened sense of parallel, simultaneous realities.

The Education is also formally marked by doubleness, with two distinct halves. The first focuses on recording biographical details, and the second moves into more thematic and theoretical discussions of historical method, science, and politics. Some critics, such as Taylor, have seen this shift as a moving away from the self: "the second half of *The Education* divorces itself almost completely from Adams's biography" (374). Yet, the second half retains a basic chronological framework, each chapter titled with a phrase and a span of years. While the methodologically oriented later chapters may seem removed from the biographical assemblage of the early chapters, they propose a way of grappling with the form the earlier chapters have given to the life of the manikin, shifting from a manic search for identity revealed to a grudging embrace of contingent assemblage. Narrative, historical or individual, can no longer be synonymous with reality; it bears the traces and shortcomings of human intervention. But the construction of narratives, however temporary and eventually conflicting, is also indispens-

able. Rather than relieving choice and uncertainty, data, in practice, introduces the "constant imperative to choose" (Rowe, 129) because there is no preordained affirmation of an ethically or practically correct choice. The heightened burden of choice is not evidence of the impossibility of a data-driven world view; it is the practical proof of it. The most vital activity of the self in this context is to think through how the self shall be assembled.

The Education's most glaring breach of data-collecting form subtly underscores this understanding of the self's agency not in determining what happens but in selecting how to assemble it. A twenty-year gap separates the first (primarily biographical) and second (primarily methodological) halves of the book, a gap that includes the death of his wife. While Adams has incorporated other catastrophic events (the assassination of Abraham Lincoln and the death of his sister from tetanus), this catastrophe he removes from the record, committing the Lyellian sin of selection. In addition to being an understandable reaction to personal trauma, this selection is also a way of representing discontinuity, or the failure of empiricism to account for all of history's data points. Throughout *The Education*, Adams implicitly juxtaposes narrative and assemblage frameworks for perceiving and understanding historical change. His critique of Lyellian and Spencerian interpretations of Darwin that propose "steady, uniform, unbroken evolution from lower to higher" (*The Education*, 213) hinges on the evidence of unpredictable emergence embodied by the pteraspis, an early vertebrate fish for which there was no fossil record of precursor species. Adams describes, "The vertebrate began in the Ludlow shale, as complete as Adams himself—in some respects more so—at the top of the column of organic evolution: and geology offered no sort of proof that he had ever been anything else" (217). It seems to him, as Timothy Melley has observed, that the "only way to account for the mysterious and instant appearance of the pteraspis is to posit the sudden, spontaneous, accidental conversion of one species into another" (69). Discontinuity becomes the foundation of assemblage, aligned with the dynamic of becoming, giving rise to sudden, profound, and unpredictable new formations, as evidenced by the shift in narrative selfhood marked by the text's methodological turn. For Du Bois, the selection-driven, emergent properties of assemblage selfhood disrupt essentialized versions of the Black self which allows the future to break with the past. For Adams, the lack of telos inherent to a self so assembled is a kind of diminishment—a decoupling of self from identity and destiny, and a recontextualizing of the human as one element of an environmental matrix rather than a privileged agent. In comparison to

teleological or developmental narrative forms of selfhood, assemblage self-hood is bound to result in anxiety if uncertainty is perceived as a net loss.

Charting the impressions that never amount to education, Adams must perceive himself as multiple and his future as uncertain. The perception of multiplicity extends to his view of others' lives, too: "Between 1850 and 1900 nearly everyone's existence was exceptional" (*The Education*, 40). In other words, Adams perceives every life during this period as a singular data point. Adams is not the only one who cannot contain his selfhood in a coherent narrative, as he observes, "No scheme could be suggested to the new American" (461). Adams finds himself ordinary because he is "exceptional" in the same sense that "everyone's existence" is. He can no longer think of the narrative selfhood he receives from his family as "the" American model but must instead perceive himself as one of many models and as a model that must change. Early in *The Education*, he describes the end of education as narrative form by explicitly comparing his own educa-tion to that of "outsiders, immigrants, adventurers" (29). As a child of the first half of the nineteenth century, he bore the "stamp of 1848 . . . almost as indelible as the stamp of 1776, but in the eighteenth, or any earlier cen-tury, the stamp mattered less because it was standard, and everyone bore it" (29). But "men whose lives were to fall in the generation between 1865 and 1900" instead had to "take the stamp that belonged to their time. This was their education. To outsiders, immigrants, adventurers, it was easy, but the old puritan nature rebelled against change" (29). Instead of being stamped, or formed by a single, progressive/developmental educational narrative, the self must become re-stampable, constantly educable. It is not just a matter of trading one stamp for another but trading the idea of a finished, developed self for a readiness to be developed over and over again. While we should certainly question that it was "easy" for the other, less socially advantaged selves he notes, we can still find the perception meaningful.[12] Granting that Adams is, as Kurt Albert Mayer points out, a racialist by the standards of his own time and a racist by the standards of our own, in *The Education* even this strain of narrow concern for self holds insight into a shifting awareness of the self's relationship to social collectivities. Through perceiving the multiplicity of life paths that have come to represent U.S. American selfhood, Adams is thrust out of the idea that his is "standard." He sees the nation as a sprawl of disconnected endeavors, just as he per-ceives himself as a bundle of memories with no inherent connection but those self-consciously constructed.

The erasure of standard U.S. American selfhood is terrifying to Adams.

In the closing passages of the "Letter to American Teachers of History," Adams's citation of French social psychologist Gustave Le Bon's *The Crowd* (1896) reads the imagery of the individual as data point as tantamount to social chaos. Le Bon writes:

> That which formed a unity, a block, ends by becoming an agglomeration of individuals without cohesion, still held together for a time by its traditions and institutions. This is the phase when men, divided by their interests and aspirations but no longer knowing how to govern themselves, ask to be directed in their smallest acts; and when the State exercises its absorbing influence. With the definitive loss of the old ideal, the race ends by entirely losing its soul; it becomes nothing more than a dust of isolated individuals, and returns to what it was at the start—a crowd. (qtd. in Adams, *Degradation*, 252)

A former "unity" is now becoming "an agglomeration of individuals without cohesion" because of increasing self-consciousness about one's "interests and aspirations," or the singular contours of one's ordinary–extraordinary data point of a life. Le Bon sees in this rising sense of individuality unresolved into group identity the same diminution of the social as Adams sees in a self without narrative, composed of events that lack unity. In contrast to Du Bois's affirmation of the value and potential of gathering all the "little shinings" (*Darkwater*, 25) of humanity, neither Adams nor Le Bon seems to see any potential in this social form. For both observers, the perception that social reality and selfhood are composed of distinct points with no overriding, essential connection is equated with decline. What was solid has become "dust," a flurry of data points with no inherent connection, leaving individuals vulnerable to destructive political fads and societies vulnerable to violent discord.

Adams's *The Education*, formally and thematically, evinces a self-conscious awareness of the emergent contingency of selfhood, which he sees as a rupture both from family history and the U.S. American culture his family helped to shape. Data-driven form, emphasizing collection and deferring or pointedly complicating acts of selection that would allow a traditional narrative to arise, plays a role in provoking this sense of contingency. It demands contextualization of the self in a world understood and represented as a collection of discrete and equally real points whose presence must be acknowledged. In the dual context of fin de siècle science and Adams's search for self, this contextualization is an ambivalent positioning.

While it wiggles the human out from under the entropic predictions of thermodynamics, it also untethers Adams from the trajectory of family history and status within U.S. American society. Displacing the certainty of chaos does not replace a narrative orientation for the self; the elusive form of the world as data persists.

The Modesty of Multiplicity

While I would argue that we should see Adams as having gained not an education but educations and recognize the prescient plasticity of a self who can reflectively navigate shifting epistemological and social contexts, for Adams this flexibility is hard to see as a virtue. For him, "The effort for Unity could not be a partial success; even alternating Unity resolved itself into meaningless motion at last" (*The Education*, 437). Or at least, this is how it appears to the narrated Adams during this seemingly failed effort. But in the same passage denigrating "alternating Unity" as "meaningless motion," we also see the narrating Adams offering this frustration as the grounds of a new selfhood—or, more accurately, a new method of constructing selfhood. Though the "old formulas had failed," the prospect of inventing a new formula of self remains: "Every man with self-respect enough to become effective, if only as a machine, has had to account for himself somehow, and to invent a formula of his own for his universe, if the standard formulas failed" (437). The "formula of his own universe" is a departure from prior goals of education. Now, "One sought no absolute truth" but actively seeks "among indefinite possible orbits" that which would best capture "the observed movement of the runaway star . . . commonly called Henry Adams" (437). Putting himself into astronomical terms, he subtly revises the Laplacian vision of cosmology foretold with actual, erratic motion as the revelation of data collection. As the narrating Adams suggests, "Any school-boy could work out the problem if he were given the right to state it in his own terms"—or in terms of himself, the perpetual school-boy. *The Education* has done just that: put the formula in terms of self, and constructed that self's story as stories, without an ending until physical end.

   Although Adams represents himself as largely unable or unwilling to perceive this new self as being defined by its alternate potentials rather than its lack of coherence, his anxiety is instructive. As data collecting technologies continue to surpass the limits of individual perception and challenge the plausibility of singular narrative, we continue to find our-

selves in the position of recognizing selves rather than a self, recognizing the limits and responsibilities of agency in entangled assemblages. Seen in this way, the self of *The Education* is not just a product of the nostalgic, conservative subject's confrontation with outdated life plans and an increasingly visible and viable plurality of value systems, but also a way of adapting to it. The data collecting form of *The Education* seems to represent a self unable to act, but Adams saw the writing of his autobiography as a means of taking agency, specifically from the interpretations of posthumous biographers. Sending Henry James a copy of the first, privately printed edition, Adams urges him to "take your own life in the same way, in order to prevent biographers from taking it in theirs" (James, *Correspondence*, 73). With all of its reported anxieties and failures, this representation of self is one that Adams sees as a positive act, chosen over relinquishing the narrative of his own life to others. In other words, he uses his agency to represent agency differently.

The education of multiplicity arising from a data-driven view of life and world is a modified agency, of choosing how to tell one's story in the face of the reality that there can be no single narrative against which to measure the self. As Daniel Manheim has suggested in his reading of Adams's Tahitian history, the more modest form of agency suggested by such narrative practice is legible as a revision of the Adams identity. As Banta describes, to be an Adams is above all to act, to be an agent: "a son of Adams must resist the temptation *not to do*" (53, emphasis in original). Creating a narrative form of selfhood that allows multiple potential stories to coexist is a way of doing as not doing—not arbitrarily imposing a singular narrative despite being in the position to do so, at least textually. Ceding some degree of interpretive authority is far from active disinvestment from whiteness and masculinity, but it is a cognitive framing of self that might help prepare for more equitable power structures. As Adams calls attention to the space between data and narrative, he recognizes, represents, and laments himself as a new Adams, if not a new American.

In Adams's anxious assemblage selfhood, we see one response to the "something both more and less than a self" (Taylor, 57) that data collection as life story seems to present. The desire for an empirical approach to history entails the perception of a self that is perpetually de- and reassembled by shifts in social, economic, and political order driven by new technologies, immigration, and a cultural discourse of scientific authority. Adams's relationship to this self is an anxious one, because its nonteleological becoming is, for him, the revoking of an identity he thought

essential and a future that could be narratively guaranteed. Adams's anxiety at data's revelation of multiplicity is the inverse of Du Bois's hopefulness, and their affective relationships to the incoherencies of data-driven life narrative hinges on their historical relationship to uncertainty, a relationship in part formed by their racialized embodiments and social positions. In the following chapter, I consider another configuration of the differential relationship to data collection as self representation, examining how Gertrude Stein employs a data aesthetic to position herself as more-than while positioning one of her most famous fictional subjects as less-than.

To Tell a Story Wholly

Gertrude Stein, "Melanctha," and Self as Data Collection

Although her departure from medical school in 1902 marked the end of her empirical research in psychology and anatomy, Gertrude Stein continued collecting lives. Stein frames *The Making of Americans: Being a History of a Family's Progress* (*MoA*) as a project of exhaustive collection aimed at illuminating human selfhood, aiming to "describe really describe every kind of human being that ever was or is or would be living" (*Lectures*, 142). She anticipates "if I went on and on and on enough I could describe every individual human being that could possibly exist." If she described exhaustively, she believed, she would arrive at a complete schema of selfhood, a definitive list of possible forms of self. "I was sure," she remembers, that "the enigma of the universe could in this way be solved" (142). In her distinctively Steinian way that is yet typical of empiricist grandiosity, she brings the Baconian method and the Laplacian goal to bear on representation of the human self.

Stein finds that this commitment to exhaustivity in representation, though, introduces formal potentials that interest her more than completing a schema. Stein claims that *MoA* along with *Three Lives*, also written in the decade after she leaves medical school, mark the origin of an aesthetic she calls the "continuous present." She writes, "In these two books there was elaboration of the complexities of using everything and of a continuous present and of beginning again and again and again" ("Composition," 220). The equation of the "continuous present" with "the complexities of using everything" and "beginning again and again and again" marks it, I

will argue, as a data aesthetic. In its imagination of a mode of writing that uses "everything," it implies a practice of exhaustive collection. The commitment to working out the "complexities of using everything" indicates a desire to keep every data point, not discarding those that would enable the production of a coherent narrative. More committed to exhaustivity in collection than coherence of result, Stein insists on a data epistemology of multiplicity and difference rather than revelation and certainty. Scholars have considered her literary writing in terms of science broadly conceived,[1] in terms of specific theories put forward by her mentors and interlocutors,[2] in terms of specific theories of personality and gender,[3] and in terms of the epistemic virtue of objectivity.[4] What these studies have not so far addressed is data collection as a method of inquiry and representational form underlying her work across scientific disciplines and how it informs her theorization of narrative. Data, the collection of discrete, coequal observations to represent the real, is an unexplored context[5] for Stein's descriptive, paratactic, and repetitive style. This style plays an especially important role in the early prose that she claims led to her "knowing that I was a genius" (*Everybody's Autobiography*, 79) and specifically in "Melanctha" which she claims as "the story that was the beginning of her revolutionary work" (*Autobiography of Alice B. Toklas*, 82).

The resonance between the concept of data and Stein's aesthetic formulations becomes meaningful in light of data's presumed relation to narrative and the consequences of that presumption for concepts of human selfhood. Stein's data aesthetic emerges from her search for the empirical reality of selfhood amidst theories of biological sexual determinism that classed females as intellectually inferior and incapable of creativity. If theories derived from data collection are seen as more authoritative and less prone to subjective bias, they are less likely to be held up to ethical scrutiny. Theories underlie applications, from the gender theory used to argue for or against higher education for women in Stein's era to the numerous modes of algorithmic classification currently employed in public and private sector resource allocation. When these ostensibly data-driven theories operate to determine human potential and opportunity, their narrative projections become life stories. Combating these projections not only involves producing different narratives but recognizing different narrators. And, in the context of claims that data can narrate itself, this requires first recognizing that there is always a narrator, and grappling with how and why that narrator's authority to speak for others' data has been privileged.

In the preceding chapters on Du Bois and Adams, we saw two different

affective relationships to narratives of self formed by data aesthetics, relationships conditioned by the narrators' racialized embodiments. In Stein, we see a third affective relationship, focused, I will argue, not so much on the status of narrative form as on the status of narrator. By "narrator," I mean not only someone telling stories but someone seen as able to tell stories and thereby possess intellectual agency and authority. I use the term narrator broadly, here, to refer to a range of interpretive roles, including scientist, researcher, and writer. In relation to a data collection, the analyst or interpreter holds the status of narrator, selecting which data points will be used to support a claim, and the claim itself will often take on the causal chain of a narrative unfolding. Stein sought to occupy all these roles, and as a woman in science, claiming the status of narrator meant not just practicing narration but creating the epistemological space in which she, embodied as female, could be recognized as a narrator. A data aesthetic is crucial in creating that space because it confronts the reader with the multiplicity of narratives that can be formed out of a heterogenous collection of data points.

The chapter begins with an examination of how Stein's studies in psychology and brain anatomy formulate the self as an object of empirical inquiry and employ methods of data collection to try to create knowledge of human selfhood. In the course of these studies, Stein also undertook original research, moving from a theoretical commitment to data collection to the practice of interpreting data in pursuit of new knowledge and professional recognition. Her scientific writings show an emphasis on incorporating collected data that, based on the feedback she receives, exceeds professional norms. I propose that we see Stein's continuous present, the development of which she dates to the period directly after leaving scientific work, as a data aesthetic, defined by exhaustivity, aimed at capturing a reality of selfhood that exceeds the narrative determination that empiricism projects as its ultimate end. By bringing the reader closer to the heterogeneous, repetitive, and non-teleological nature of a data collection, she exposes and therefore combats the conflation of data and narrative. By exposing the distance between data and narrative, she brings the power of the narrator-interpreter back into view and undermines data's claim to universal, atheoretical authority. She is thus able to claim the potential to wield this power for herself, and she does so, in part, by bringing it to bear on a working class, mixed race woman. "Melanctha," by Stein's own account, is the hinge between scientific training, medical studies, and literary work; between student and genius; between narrative and the continu-

ous present. I close the chapter by exploring this connection through a reading of "Melanctha" as data collection and its subject as a data collector to highlight the differential effect of data representation in the context of unequal access to the status of narrator. Though it mirrors Stein's own intellectual mobility and modernist aesthetics, Melanctha's life story is cast as a series of irredeemable incoherencies. Taken together, Stein's and Melanctha's data aesthetics of narrative selfhood illustrate that data collection as a representational form has differential effects for its subjects based on their access to opportunities for forwarding their own interpretation of the data of self.

"What was inside each one which made them that one": Self as Object of Empirical Inquiry

Stein completed an undergraduate degree at Radcliffe College from 1893–97 and studied medicine at Johns Hopkins Medical School from 1897–1901. In both courses of study, she distinguished herself through participation in her mentors' original research. As an undergraduate student of psychology working with William James and Hugo Münsterberg, she coauthored a published paper with a graduate student, and authored a second. In the year after leaving medical school, she authored an article on brain anatomy drawn from her anatomical research in the laboratory of Franklin Mall, although it went unpublished. Her work in these contexts demonstrates a wide-ranging interest in empirical inquiry into human subjectivity. One approach is focused on the brain, one on the mind, but both entail the labor of collecting data and thereby an immersion in the inherent tension between the insistent particularity of the individual data point and the desire for generalization. In the discussion that follows, my purpose is not to argue for the overriding influence of one these figures or to suggest a chronology of Stein's thought in which one theory supersedes another. I seek to demonstrate that the methodological frameworks and conceptual implications of their work seed a data aesthetic of self. Although the specifics of their theories differ widely, James, Münsterberg, and Mall place data collection at the center of the effort to know the human mind, psychically and physically. They saw the human mind as empirically observable and formulated thoughts, sensations, and brain matter as collectable data points.

Stein frames her study of psychology as an outgrowth of her early interest in the nature of selfhood. Recalling "a period even before I went to college," she writes, "in those early days I wanted to know what was

inside each one which made them that one" (*Lectures*, 136–37). She figures each self as a one-ness, a data point of the nature of selfhood that has the potential to reveal the underlying, universal process of individuation. Each self oscillates between its formal equivalence to other data points ("each one"-ness) and its singularity ("that one"-ness). Stein sees herself as part of this data set, also "tremendously occupied with finding out what was inside myself to make me what I was" (137). Her self, "what I was," is formulated as the product of "what was inside," downplaying essence in favor of a conception of self as elemental assemblage that can be empirically described. She further specifies that "what was inside" herself were "mental and physical processes" (137). Designating selfhood as both mental and physical aligns her thought with a concept of consciousness as "an entity or process embedded in, but irreducible to, the body's somatic life" (Raine, 808), a concept emergent in psychological research of the period. While mind may be considered irreducible to the body, recognizing that it is not independent of the body sets both the intangible and tangible elements of self on a material plane amenable to empirical study.

Empirical study requires minds to be formulated as "*objects*, in a world of other objects" (W. James, *The Principles of Psychology*, 183, emphasis in original), and therefore requires a means of making the seemingly invisible and trackless into something perceptible and recordable. James and Münsterberg do so by framing psychology as a natural science of the mind and the mind as a collection of thoughts, observable by a knowing "I" and composing a knowable "me" (see W. James, *Briefer Course*, 44, 82). In *The Principles of Psychology*, James defines psychology as "the science of finite individual minds" that "assumes as its data 1) thoughts and feelings, and 2) a physical world in time in space in which they coexist and which 3) they [the finite individual minds] know" (vi). Within finite individual minds, he conceives "passing thoughts as integers" (vi–vii), the smallest whole units of measure. These "integers" function as data points and are collected via "introspective observation," the process of "looking into our own minds and reporting what we there discover" (185). While it may shock our sense of empiricism to consider reporting on our own thoughts as a form of empirical observation, James sees introspection as one mode in a fraught spectrum of observation, a method "difficult and fallible, and that difficulty is simply that of all observation of whatever kind" (191). Münsterberg similarly frames psychological method as an attention to the self that results in the recording of discrete elements. He defines natural science as "the description of the universe by dissolving it into atomistic elements"

(*Psychology and Life*, 1) and defines description as "the communication of an object by the communication of its elements" (44). For psychology, he proposes that the "elements into which we can analyze our ideas by means of self-observation" should be termed "sensations." James's "passing thoughts" and Münsterberg's "sensations" evince a conception of individual minds composed of discrete observable and inscribable elements.

Both James and Münsterberg position psychology as a natural science, with methods built on data collection meant to reveal generalizable, causal law. Both, however, also recognize the tension between a desire for data and the goal of generalization. In *Psychology: The Briefer Course*, an abridgement of *The Principles of Psychology* which James assigned in the introductory course Stein took at Harvard in 1893,[6] James formulates psychological research as part of an overarching knowledge project that will be driven by numerous processes of data collection. In the introduction, he proposes "Psychology is to be treated as a natural science" (*Briefer Course*, xxv), one of "a lot of beginnings of knowledge made in different places," whose pursuit shall culminate in fully realized knowledge. As James avers, "Most thinkers have a faith that at bottom there is but one Science of all things, and that until all is known, no one thing can be completely known" (xxv). Each of these "beginnings" is a field of natural science, a "partial and provisional" (xxvi) piece of the larger puzzle that will be revealed when "all is known." Given the immensity of the work required before "all is known," though, the result of total knowledge is deferred and the work of preliminary collection continues indefinitely. James says as much of his own work: "The reader will seek in vain for any closed system in this book. It is mainly a mass of descriptive details" (*The Principles of Psychology*, vii).

Münsterberg's emphasis on data collection is reportedly similar to James's. Biographer Margaret Münsterberg emphasizes rigorous data collection as the prevailing ethos of the research lab he directed at Harvard. She relates, "the attitude of research students was one of conscientious attention to the individual differences of subjects in introspection and to the rich variety of results gained, whether these results were expected or baffling; further that there was no insistence on generalization unless it was perfectly warranted by data, and then only with an accurate statement of exceptions to the rules" (238–39). The overarching "conscientious attention to individual differences" suggests a research method as committed to data collection as to data analysis, delaying generalization until "perfectly warranted," and even then with the recognition that there would remain "exceptions to the rules" that would require another level of rigor-

ous attention until the generalizations predicting those exceptions could be expressed. Margaret Münsterberg cites a student thesis to underscore the centrality of data collection to the work of the lab. The student reports: "Eight years of work culminate in the results we have brought forward, in which years eighteen thousand lines of poetry were phonetically measured and tabulated, involving the enumeration of nearly 540,000 sounds; the measurements of the records obtained in the laboratory involved nearly 300,000 bits of data" (239). That the student felt compelled to give such a thorough account of data collected demonstrates the value attached to exhaustive representation within the given scope of eighteen thousand lines of poetry.

Stein's postgraduate medical training included substantial work in the anatomical laboratory of Franklin Mall, whose teaching methods were considered novel in their emphasis on active student participation in the collection of anatomical data. Maria Farland observes, "Under Mall's leadership, the Johns Hopkins Medical School became the first American medical institution to teach anatomy in the dissecting room rather than the lecture hall" (120). Mall's pedagogy puts the student into the role of data collector, tasked with "wrestling with the part being studied, handling it and viewing it from all sides, and tabulating and classifying the parts worked out" (Mall, 2). Mall placed the same importance on collection of data as a practitioner that he did as a pedagogue, and his data-driven method underpins his noted intervention in typological theories of gender. Farland explains:

> Drawing on the laboratory's research, Mall argued that scientific evidence did not sustain the concept of distinctive male and female brains: "The general claim that the brain of woman is foetal or of simian type is largely an opinion without any scientific foundation." He exhorted his colleagues to provide measurable proof of anatomical differences: "Until anatomists can point out specific differences which can be weighed or measured, . . . assertions regarding male and female types are of no scientific value." (119)

Mall's fundamental insistence on first collecting the data thwarts generalizing gender theory by calling upon data collection's temporality of deferral to suspend projecting deterministic theories of sexual difference. The paper in which he makes this argument is published in 1909, six years after Stein left laboratory research and in the same year that she self-published *Three Lives*, underscoring that the relationship between biological sex and

intellectual potential is a live question during the period in which Stein is formulating her own concepts of selfhood and its representation.

The Collector, the Collected, and the Genius

While data collection is at the methodological center of psychology and brain anatomy as Stein is introduced to them, the data collector is not. The data collector remains a peripheral and preliminary figure whose labor is eclipsed by the selective, interpretive work of the scientist. Even as Münsterberg insisted on rigorous data collection prior to generalization, he held "it is a matter of course that the photographic and phonographic copy of raw material does not constitute a science. Science has everywhere to go forward from the single unconnected data to the general relations and connections" (*Psychology and Life*, 10). Mall envisions his students' immersion in dissection as a precursor to a more selective expertise. Their hands-on grappling with the particularities of individual samples, in his view, allows each student to become "an artist, an actor, an expert, not a dilettant [*sic*]" (2). The scientist is defined by the ability to go from "unconnected data" to "general relations"; the student's practice of attentively observing and recording an object outside the self is meant as preparation for the more selectively attentive subjectivity of an "expert" or "artist" to emerge.

For James, selective attention is even more fundamental, shaping not just professional scientific subjectivity but healthy human subjectivity in general. Through their filtering effects, human sense organs mediate a world that would be incomprehensible and unnavigable: "Out of what is in itself an undistinguishable, swarming continuum, devoid of distinction or emphasis, our senses make for us, by attending to this motion and ignoring that, a world full of contrasts, of sharp accents, of abrupt changes, of picturesque light and shade" (*Principles*, 284–85). The primary selection that a well-adapted human being must make is to prioritize the sensations of self before considering those of others. James contends that each person's "own body MUST be the supremely interesting [object] for each human mind" creating "a minimum of selfishness in the shape of instincts of bodily-self seeking" (323, emphasis in original). The human being who will survive is the one who can accurately select what to pay attention to in order secure their own needs. As Ruddick puts it, "Unselective perception may be exciting, but it is also impractical and ultimately life-threatening" (21) insofar as it leads the self to neglect its

own preservation. An attention that veers too far toward the collecting side of the spectrum is, in these terms, pathological.

Implicit in these differentiations between the collector and the selector is a determination of status in terms of agency, authority, and life potential. The collector's work is rote and preparatory for the creative work that follows. The data collector making the "photographic and phonographic copy of raw material" (Münsterberg, 10) is not an intellectual agent able to make the generalizations that, according to Münsterberg, are the true work of science. Stein expresses this hierarchical view of the labor of brain modeling to her brother, referring to her work as "purely mechanical" and "an excellent occupation for women and Chinamen" (qtd. in Farland 123). Analogous to a machine, the data collector is emphatically not part of what was, in the late nineteenth and early twentieth centuries, "a newly emergent class of 'brain' workers—the category of professionals whose identity was predicated on the originality and inventiveness of their mental labor" (Farland, 121). In these terms, to claim the work of data collection as one's own would be counterintuitive, unless one wanted to claim subordinate status. Yet, even if she did not claim data collection as her work, Stein continued to do it and chose to write in ways that highlight rather than obscure collection as method and form.

The hierarchical distinction between data collector and scientist, machinic recorder and brainworker is compounded by typological models of sexual difference. Farland and Natalia Cecire have elaborated the ramifications of gender for Stein's position as a researcher. As they note, in the fields of inquiry in which Stein was immersed, as well as in Western culture at large, the authority and creative potential attributed to the scientific brain worker were also associated with biological maleness. One source of this association was the gender variability hypothesis which, as Farland traces, was widely advanced during the period of Stein's education (in fact, introduced by a faculty member at Johns Hopkins with whom her brother was a graduate student). The variability hypothesis held that "the female adherence to type—the alleged female tendency toward repetition, habit, and routine" was biologically inferior for intellectual labor given the "male's greater variability—an alleged capacity for innovation, discovery, and genius" (Farland, 118). Given the female tendency to "repetition, habit, and routine," a woman's excellence in data collection would simply be evidence of her natural limitations, despite the fact that high-quality data is essential to every empiricist scientific endeavor. As Cecire notes, "women's scientific labor, precisely because it was done by women, frequently did not

count as scientific labor" (95). Data collection is not science, in these terms, because a woman cannot be the selecting and generalizing scientist who would bring meaning to data.

Stein's use of the word "genius" as shorthand for intellectual agent encapsulates a desire to occupy the role of meaning-maker, in scientific and later literary realms, and suggests the importance of gender identity to her being able to attain this goal. Barbara Will highlights the term's implicit masculinity: "As a figure, the genius—whose gender is always unquestionably male—embodies energy, creativity, originality, inspiration, and the capacity to bring meaning to matter, to transform the world around him" (3). As Will explains, genius is for Stein "a term that authorizes, in the Romantic or modernist sense: a term rooted in an essentializing logic and in a conception of the self as intentional and autonomous" and "an ascriptive term: a name which designates her unique status within the social order, her identity or 'type'—something she indisputably 'is'" (7). In these terms, the question of whether Stein, as a woman, was a genius, first depended on whether a woman *could* be a genius, which was a question under active empiricist investigation.

If gender was the question, type was a common form of the answer. Type as a formal structure of identity underlies both the psychological research in which Stein was engaged and the theories of sexual difference that circulated around her. Understandably, then, typological theories of identity loom large in Stein criticism.[7] While the specifics of these theories vary, they share a desire to classify people and verify essential difference. The typological endeavor is a form of the empiricist move from observation to explanation and prediction. Viewed through the lens of type as essential nature, individual acts of "movement, speech, writing, and [idea]" are "only the fragmentary external expressions of some underlying, embodied character" (Will, 21). Stein clearly subscribes to this idea as she writes, in "Cultivated Motor Automatism," that "habits of attention are reflexes of the complete character of the individual" (299). "Habits of attention" are just one observable feature of "the complete character of the individual," but if one assumes that a unifying type lies behind all observable features, these limited observations are enough. The assignment of type subsumes discrete data points into an overarching identity that not only explains but predicts the subject's actions and reactions. Through these predictions, type assigns potentials, including one's potential to be a genius, a creative intellectual agent. As Will observes, the concept of type precipitates "a change in the perception of 'genius' throughout the course

of the nineteenth century, from a universal capacity to an embodied type, visibly and measurably distinguishable from non-geniuses through the evidence of discrete physical and mental characteristics" (4). And, per the variability hypothesis and others, if you were female you were most likely not the genius type.

Stein, first as a woman pursuing professional scientific training, then as a woman pursuing literary accomplishment, and perhaps always as a woman aspiring to be known as a genius, was in a bind. She had to move from data collector to interpreter of data in order to claim creative status, but there was no room in the typological theories of identity in which she was immersed for her to make this claim for her work. She had to break narrative in order to narrate; specifically, she had to break, at least for herself, the narrative projections of gender identity which were themselves underwritten by an epistemology that equated data with explanatory narrative.

Empiricism is, in theory, to rely on induction from exhaustive data collection, but in practice it moves forward by way of provisional claims made by individual scientists. These claims are inherently selective, choosing specific data points to connect and disregarding others. Stein was acutely aware of the importance of who would be doing the selecting and interpreting once data was collected, at the conceptual as well as the practical level. Even as her mentors extolled methodological commitment to exhaustive data collection and at times distinguished their own contributions by claiming more rigorous fidelity to the diversity of reality that this data surfaced, in her research work in their laboratories she would also have seen that what got published was never the full data collection but an interpretation of it, making her keenly aware of the power the interpreter inevitably wielded over how an object of inquiry would be known.

Because of differing access to the status of data interpreter, data collection is a representational act with differential effects on its subjects. One of Stein's undergraduate composition themes demonstrates an early awareness of how representing the self as data had particular threats for the female subject because of her precarious access to interpretation. Stein describes a female subject's participation in the observation and recording of somatic responses to aural stimulation:

> [T]his vehement individual is requested to make herself a perfect blank while someone practices on her as an automaton.
>
> Next she finds herself with a complicated apparatus strapped across her breast to register her breathing, her finger imprisoned in

a steel machine and her arm thrust immovably into a big glass tube. She is surrounded by a group of earnest youths who carefully watch the silent record of the automatic pen on the slowly revolving drum.

Strange fancies begin to crowd upon her, she feels that the silent pen is writing on and on forever. Her record is there she cannot escape it and the group about her begins to assume the shape of mocking fiends gloating over her imprisoned misery. Suddenly she starts, they have suddenly loosed a metronome directly behind her, to observe the effect, so now the morning's work is over. (Stein, reproduced in Miller, 121)

Both Anne Raine and Cecire have highlighted the gendered dynamics of knowledge construction in this passage. The power to know the "vehement individual" who, in service of the experiment, has made herself "a perfect blank" is accorded to a group of (presumably male) observers, who will have interpretive authority over the writings that the "silent pen" produces. The creation of an externalized record of the self throws the subject into a state of disorientation and discomfort. As the subject imagines "the silent pen is writing on and on forever," she envisions it constituting a permanent, concrete, and incomplete yet irrefutable version of herself outside the self. Forever after "her record is there she cannot escape it." While the recording apparatus described sounds constraining, perhaps even uncomfortable, it is never described as painful, and so her "imprisoned misery" is not attributable to physical experience alone but also to the added, cognitive pressure of confronting an externalized record of the self that will be seen as more authoritative than her own account of experience. The inescapable record created in this experiment is comparable to "memory" in Stein's later essay "Portraits and Repetition." In this essay, memory functions as a record of the historical self that triggers the incursion of the past on lived experience, specifically putting the self in primary relation to its past rather than its dynamic present. Memory, unlike data, remains the purview of the self. Once collected, data becomes available primarily for others' interpretations of it. By creating a version of the self beyond the self, and further imbuing it with the status of objective reality, data collection threatens to compromise the authority of self to describe and narrate its own reality. This threat is heightened for women, categorically dismissed as potential interpreters.

Stein's attempts to claim the role of interpreter in the scientific context show her own shifting relationship with the value of data collection as

intellectual contribution. Two publications resulted from her undergraduate work in psychology, one coauthored with graduate student Leon Solomons and the other with her as sole author. She reports that Solomons did the writing on the first, coauthored piece, and that she disagreed with his conclusions but deferred "as he wrote the article after all I was an undergraduate and not a professional and as I am always very docile" (*Everybody's Autobiography*, 274–75). Her stated reasons for deferring to him have nothing to do with being correct or incorrect and everything to do with social status. She goes on to divide their work in terms that reflect typological gendering of intellectual potential, stating "all the ideas had been his all that had been mine were the definitions of the characters of the men and women whom I had seen" (275). It is unclear why "ideas" are considered more valuable than "definitions," which would certainly also put forth ideas, other than the fact that definitions come from what she "had seen." Because her contribution involved the description of something observed, it is somehow less original. Ideas openly rooted in observation are diminished through their proximity to mechanical recording.

Despite these retrospective dismissals, Stein's second article, published with her as sole author, demonstrates a deeper commitment to data collection than her earlier collaboration had allowed. Her experimental design expands the number of subjects recorded from two to ninety-one. While the earlier piece had included only results from Solomons and Stein themselves, in this piece Stein is only the observer, not the observed, more clearly demarcating the role of the data collector while more firmly aligning data collection with authorship. Much of the article itself is devoted to reproducing case studies rather than developing interpretive argument. And while Stein's argument is that subjects demonstrated two broad character types, she is clear that these types are not absolute or predictive at an individual level: "In this statement of the two types I have given a composite picture. In both cases the variations are many and the cases where the characteristics are found in any kind of completeness comparatively rare, and there is an intermediate place where the characteristics lap over" ("Cultivated," 299). Referring to the types as composites, rather than mutually exclusive classifications, she both claims her own intellectual intervention with the proposal of a typological scheme while acknowledging the existence of a larger, contradictory data set. She also quietly refutes gender as a determinant of character, finding "the difference in response between the male and female subjects was not very pronounced" (304).

While there is little in this article's prose style that seems to prefig-

ure her literary style, initial feedback from her friend and former coau-
thor Solomons highlights an uncommon, and in his opinion ill-advised,
emphasis on including details. He admonishes, "My general comment is
that you ought to be ashamed of yourself for the careless manner in which
you have written it up. . . . The trouble with the article as it stands is that
one has to hunt around too much to find the important points,—it is as
bewildering as a detailed map of a large country on a small scale" (Letter,
December 1897). He urges her to be more selective in her discussion of
her data, which he regards as the essence of good science and good art:
"Dont [sic] make the mistake of thinking that it does no harm to put in
an extra detail here and there. Everything you add to an article is likely
to distract attention from the rest. Dont be afraid of leaving things out.
It is the essence of good writing frequently, and art is as essential in the
presentation of scientific materials as elsewhere." He admits, however that
"of course the article as it stands is as good as most of the stuff that is
published." By his own assessment, Stein's work is adequate to merit pub-
lication, but for some reason he holds her to a different standard. Given
their personal history and the collegial tone of their correspondence, the
wish to urge a friend to the greatest possible accomplishment undoubt-
edly plays a role. But it is also true that his criticisms align with gendered
assessments of intellectual capability, finding that her writing seems to
betray thinking that is weak in analysis and too occupied with concrete
details. To what extent Stein heeded Solomons's advice in final manuscript
revision is unclear, but the article is published, with many more details
included than the coauthored piece.

Stein's unwillingness to relinquish the specificity of the data she col-
lects is again apparent in her postgraduate work in brain anatomy. Her
first anatomical project, undertaken in an attempt to salvage her prospects
of graduating with a medical degree, attempts to model a fetal brain. Mall,
her supervisor, finds her finished work incomprehensible even after con-
sulting fellow faculty member Florence Sabin, who worked at the forefront
of brain modeling. Sabin concurs that the work is useless, not because it is
poorly done but because the sample she used had been deformed during
preparation. As Cecire describes, Sabin judges that Stein has submitted an
"all-too-faithful representation of a damaged, hence atypical, specimen"
(101). In her final attempt to publish research, Stein prepared an article
based on her brain drawings and submitted it to the *American Journal of
Anatomy*. It was not published. The reasons given for this rejection seem to
echo Solomons's assertion that Stein's scientific writing lacked analytical

development. Managing editor Henry Knower wrote to Lewellys Barker, a coeditor and former instructor of Stein, that he found the paper "unfinished, and lacking in constructive thought. . . . I am disappointed to find the author's efforts discontinued just at the point where she seems to have completed preparations to begin the serious work of construction from the data before us" (qtd. in Meyer, 90). Stein submits as finished work drawings that show, in Knower's view, too much commitment to conveying the details of an individual instance and not enough to extrapolating a generalizable model of the brain. In his reply, Barker defends Stein's work on the basis of its novel focus on a fetal brain and states that he is "not ready to pass the paper" (qtd. in Meyer, 91), i.e., definitively reject it. Knower demurs that he is "convinced of the great value of the material" but at the same time believes "she has dropped the subject before finishing the task, and writing it up in a thorough, well-considered manner" (qtd. in Meyer, 91). Like Solomons, he does not see the contradiction in his position. As Steven Meyer cannily observes, "Evidently, Knower was determined not to give Stein any credit for her own work in rendering the value of the material self-evident" (92). Knower does not reject the article because of Stein's gender but because of her extreme fidelity to the actual; however, this fidelity was more likely to be seen as a deficiency in her case because it seemingly confirmed the female tendency toward detailed, non-interpretive work.

Asked to revise, Stein declines, both because she is "going abroad for an extended period" and further claims that the work has "to a certain extent" achieved her goal of expressing a "very clear image which exists in my own mind of a region which the existing literature of the subject leaves in a hopeless mess" (from facsimile reproduction of correspondence, Meyer, 94–95). In this letter, Stein appears to believe she has practiced the selective, interpretive task demanded of her rather than the more collection-oriented method I argue is apparent. She claims her work is aimed at correcting textbooks that "tell so much more that one is confused" and making "a pretty careful selection of sections [*sic*]" to reproduce. That there could be such a disconnect between her assessment of the finished product and that of her colleagues suggests that Stein had a different conception altogether of what type of representation captured reality. Her idea of selection is far more collective than others consider coherent. As Cecire suggests, "Stein was, by the end of medical school, beginning to push her objectivity beyond the norms of usable scientific practice—not retreating from objectivity but, if anything, rather aggressively, even destructively, exploring it

further" (101).[8] Implicitly, Stein's staunch attention to the samples before her in both cases challenges the clarifying ends of empiricist data collection, but she finds this challenge dismissed as the assertion of an amateur rather than considered as an alternative perspective.

Stein emerges from her studies and research with an interest in the relationship between data and narrative in the context of knowing the self. The climactic exchange between Helen and Adele in the novella *Q.E.D.*, one of the first things Stein wrote after leaving Johns Hopkins, enunciates this core question:

> Just as they were returning to the town Adele stopped abruptly and faced Helen. "Tell me" she said "do you really care for me any more?" "Do you suppose I would have stayed on here in Sienna if I didn't" Helen answered angrily. "Won't you ever learn that it is facts that tell?" Adele laughed ruefully. "But you forget," she said, "that there are many facts and it isn't easy to know just what they tell." (*Three Lives and Q.E.D.*, 226)[9]

While Helen suggests that "facts" are what self-evidently "tell," Adele calls back into view the "many facts" that do not fit a single telling but instead demand interpretation. Adele's response reminds us of the space between fact and meaning and therefore the necessity of a process of moving from data to narrative. And in this context, as in the context of typological theory of sexual difference, the stakes of this process are a subject's identity. Adele reinserts human agency in the process of interpretation by calling attention to the multiple potential ways of knowing "just what" the facts tell. In this, we see the beginning of Stein's intervention in the conflation of data and narrative. The observed subject, while her "record is there she cannot escape it," cannot argue with what is on the page but she can point out that what is on the page is not, in itself, an argument. She can, in other words, employ a critical data aesthetic.

Continuous Present as Data Aesthetic

Stein's description of science, as she encountered it under the instruction of James, presents the imperative of exhaustive representation as its defining feature. "When I was working with William James," she writes, "I completely learned one thing, that science is continuously busy with the complete description of something, with ultimately the complete description of

anything with ultimately the complete description of everything" (*Lectures*, 156). The meaning of "description," as Stein uses it in this 1935 lecture, is poised between the observational practices of data collection and the fulfillment of empiricism's explanatory aim. If we put pressure on "description" from the direction of how Stein theorizes elsewhere in *Lectures in America*, it reads as predictive generalization, an inadequate substitute for the vital reality of experience. If we instead read it in a more Jamesian context, description is the opposite of generalization, as James describes his own work as "a mass of descriptive details" (*Principles*, vii). While Stein might be using "description," here, primarily to refer to science's generalizing aim, it also connotes a collecting process of observation and inscription and therefore a form of data representation. More importantly for understanding her aesthetics, her statement emphasizes the desire for exhaustive representation as characteristic of science. The "things" being described build on each other until exhaustive representation is complete. The task is to keep chipping away at "anything" by describing each "something" until "everything" is completely described. Further, no "thing" is beyond the reach of description or science's desire to describe it—to exhaustively represent it through some form of externalized inscription in order to reach explanation.

At first pass, this might seem to put Stein in line with the generalizing tendencies of traditional empiricists and not with an iconoclastic commitment to data collection as I have argued for it. Most critical considerations of Stein's interest in type and typology begin with her retrospective assessment in "The Gradual Making of *The Making of Americans*": "I was supposed to be interested in their reactions but soon I found that I was not but instead that I was enormously interested in the types of their characters that is what I even then thought of as the bottom nature of them" (*Lectures*, 137). In readings that see Stein's interest in typology as a rejection of an earlier, more empiricist bent, this statement indicates that interest in type, or "bottom nature," supersedes attention to data, "their reactions," collected during the course of experiments.[10] Confidence in the eventuality of accounting for the human through a finite number of types is an affirmation of the empiricist project of achieving generalization and prediction. Meyer argues, "Certainly, Stein's understanding of science was initially mechanistic; thus in *The Making of Americans*, written between 1902 and 1911, she attempted to describe the precise mechanisms of human personality in great detail, with the ultimate aim of describing every possible kind of human being" (3). Earnest commitment to the project of discovering

universal law, however, by no means forecloses unexpected results along the way. If we choose not to see data collection and type determination as mutually exclusive, we can see that Stein both confronted and employed typological theories of self because, at different times and in different contexts, she was less interested in disproving type than proving herself as one who could elucidate type. Just because others had forwarded the wrong deterministic model, in Stein's view, did not necessarily mean there was not a correct one, the discovery of which would confirm her genius. This is the same kind of investment that Adams makes in scientific history, and for him it also resulted in more narrative disruption than clarity.

As the project of *MoA* proceeds, though, her commitment to exhaustivity supersedes her desire to verify type. Stein finds her initial affirmation of typology challenged by the scope of description required to realize it (even if it were possible). The project confronts her with exhaustivity of representation as an asymptotic horizon: "I found that as often as I thought and had every reason to be certain that I had included everything in my knowledge of any one something else would turn up that had to be included" (*Lectures*, 144). Still, her investment in exhaustive description is unshaken: "I did not with this get at all discouraged I only became more and more interested" (144). Stein discovers that when it comes to representing lives, between every two data points remains a vast, perhaps infinite, expanse of additional data. She finds, "While I was listening and hearing and feeling the rhythm of each human being I gradually began to feel the difficulty of putting it down. Types of people I could put down but a whole human being . . . was very difficult to put into words" (145). Types begin to seem a shortcut to representation, an insufficient substitute for "a whole human being" that eludes complete description. Becoming "very consciously obsessed by this very definite problem" (145), Stein finds she is "faced by the trouble that I had acquired all this knowledge gradually but when I had it I had it completely at one time" (147). The completion of an inscribed record of a self prompts a final act of interpretation, but Stein finds this act inevitably contaminates the reality she set out to record and that she experienced while recording. The gradual, conflictual accretion of "knowledge" that forms the "complete conception that I had of an individual" (147) does not neatly transform itself into a portable encapsulation. There is no substitute for experiencing the full exhaustivity of another self, the "whole present of something" (146). If the act of collection ends, if the collector moves from data to conclusion, the "whole present" is abandoned and reality once again goes unrepresented.

Arbitrary abandonment is, finally, how Stein characterizes her completion of *MoA*: "And I went on and on and then one day after I had written a thousand pages, this was in 1908 I just did not go on any more" (*Lectures*, 148–49). Although she abandons describing every possible person to declare an end to writing the book, Stein suggests that she keeps adding to the data collection: "And I may say that I am still more and more interested I find as many things to be added now as ever and that does make it eternally interesting" (144–45). She, too, finds that the temporality of exhaustive data collection defers narrative conclusion. Finding "as many things to be added now as ever," she makes a subtle but pointed dig at conclusions drawn from the short time frame of experimental observation. Rather than finding the frustration of results disheartening, she finds it "eternally interesting," modeling an affective response to narrative ambiguity in striking contrast to Adams.

Stein's continuous present uses this emphasis on exhaustivity to provoke the disruption rather than the fulfillment of narrative formation. In "Composition as Explanation" (1926), Stein locates the origin of this aesthetic in the roughly decade-long period of writing that followed her anatomical research and included the writing of *Three Lives* and *MoA*. She writes, "In these two books there was elaboration of the complexities of using everything and of a continuous present and of beginning again and again and again" (220). In its conception of a mode of writing that uses "everything," the continuous present is a representational form built on exhaustive collection. As Donald Sutherland notes of her later portraiture, she "gives an equable list of concomitant phenomena, some relevant, some not, to the main practical event, but all of them equally and simultaneously existing in perceptual fact" ("Gertrude Stein and the Twentieth Century," 149). This commitment to exhaustive representation results in a shift in temporality, namely, a continuous present in which the moment of retrospective narration and selection never comes because the fullness of reality demands continuous collection. This creates an "inevitable" formal shift in narrative, as Stein calls it, the "the beginning of beginning again and again and again" ("Composition," 220). As we saw in Adams, a commitment to collection effaces endings, which require selection, and therefore middles, which only become recognizable in relation to an end. What is left is perpetual beginning; reality is all present tense when collection never ceases.

Stein emerges from this period of developing the continuous present and writing *Three Lives* and *MoA* "knowing that I was a genius" and "almost ready to begin to say something" (*Everybody's Autobiography*, 79). Stein has

gained a sense of herself as genius through a mode of writing that engages "the complexities of using everything" and "beginning again and again." Using everything is a direct strike at what she has been advised to do in her scientific writing. Perhaps even more importantly, the intentional production of beginnings, rather than a beginning, middle, and end, makes a telling intervention in the teleological narrative of ultimate explanation projected under the rubric of natural science. The equation of the "continuous present" with "the complexities of using everything" and "beginning again and again and again" marks it as a modernist data aesthetic because it seizes on the paradoxical nature of data collection in order to disrupt the conflation of data and narrative.

Stein's concept of repetition in relation to "the way that portraits of men and women and children are written" (*Lectures*, 165) suggests not only a way of writing in the form of data but also a way of reading the data collection. In "Portraits and Repetition," Stein defines repetition by saying it does not exist. She declares, "I am inclined to believe there is no such thing as repetition" (166) because the sense of repetition is only an effect of representation. In lived experience, "expressing any thing there can be no repetition because the essence of that expression is insistence, and if you insist you must each time use emphasis, and if you use emphasis it is not possible while anybody is alive that they should use exactly the same emphasis" (167). While this definition emphasizes human embodiment as the source of insistence, in Stein's view the same holds for other types of expression, such as "detective stories" with "the same scene" and newspaper articles with "the same theme" (of making fun of her writing). These stories, articles, and conversations, when gathered together and viewed from a distance, seem to be repetitions of a single form, but examined closely each one will prove to be a unique instance. What written representation masks is insistence, the embodied, real-time variation in emphasis that is immediately apparent in face-to-face encounter. Stein asks us to be able to read two things that seem exactly alike as different by imaginatively recovering, or at least intellectually being aware of, what is lost when expression is disembodied and made static. I do not mean to suggest that repetition is a code word for data collection, but Stein's attention to it suggests a mode of perception more governed by collection than selection and an intention to represent reality, as she understands it, more fully. Aristotelian narrative and typical prose style would both insist on removing repetitive events or words. Steinian repetition demands that they be left in because their repetitiveness is only superficial. When we remem-

ber the difference of insistence, each seemingly repeated point comes to bear equal potential to carry meaning. For Stein, repetition becomes the reanimation of the written self, an aesthetic for conveying the dynamic experience of another person rather than the description encapsulating a life into predigested meaning.

This aesthetic of repetition brings us closer to the ideal of exhaustive data collection and forces us to encounter a reality in excess of narrative. As Meyer notes, "What Stein insists on is a radically inclusive perceptual field . . . Stein continually presents us with a perceptual field that refuses to exclude on our behalf as readers" (56). To demand our attention to repetition is to unsettle the relationship between point and meaning that traditional narrative form has conditioned us to expect. Employing this method to read a data collection, we would realize that we have to decide which points we are going to find meaningful and how to put them into relationship with other chosen points. We would have to reinvest the data point with the imagination of a specific day, time, place, mood, and purpose, and as we did so we would have to realize that we could not, with any certainty, know if we had done so correctly.

Privileging the inclusion of seemingly repetitive points in the name of realism, Stein makes visible the selective, reductive leap that any inductive claim must make in order to offer coherent insight. As Farland notes, by claiming repetition as an innovative aesthetic Stein reveals that the embodied (female) labor of data collection and intellectual (male) labor of analysis always coexist, because "for Stein, inductive reasoning begins with the repetition of concrete, observed phenomena; abstract knowledge must always be rooted in material details" (138). Hers is an epistemology of data collection. By making us aware, as readers of repetition, that the data points, the "concrete, observed phenomena" do not on their own resolve into narrative, Stein makes the agency of the scientist as narrator of reality visible and open to interrogation.

Stein's data aesthetic does not reject typology outright but it does complicate the process whereby the multiple potential meanings embedded in any data collection of self are reduced to type. It does not, on its own, disrupt determinism, but it does heighten our awareness of the authorial intervention required to sustain type as a coherent category of self. As Farland and Catharine Stimpson have pointed out, Stein did not need to discard the concept of type in order to challenge its application to herself. What she needed to do was open up the epistemological space in which she could be seen as potential formulator of type, a potential narrator of the

data collected in the name of scientific inquiry into selfhood. In the reading of "Melanctha" that follows, I argue that she uses the data aesthetic to make her claim on this position in part by distancing another woman from it.

"Melanctha" as Data Collection

Narrating Melanctha's life is Stein's pivotal claim to the status of narrator. Her retrospective accounts of her early career consistently designate this story, the second fictional life collected in her *Three Lives*, as a breakthrough creative experience. In "Composition as Explanation," Stein recounts that "Melanctha" marks the inception of what will become her search for a "continuous present" in narrative: "In beginning writing I wrote a book called *Three Lives* this was written in 1905. I wrote a negro story called *Melanctha*. In that there was a constant recurring and beginning there was a marked direction in the direction of being in the present" (219–20). In *The Autobiography of Alice B. Toklas*, published in 1933, she (through the voice of Toklas) positions "Melanctha" as the threshold between medical study and literary innovation: "the end of [Stein's] last year [of medical school] was approaching. It was then that she had to take her turn in the delivering of babies and it was at that time that she noticed the negroes and the places that she afterwards used in the second of the Three Lives stories, Melanctha Herbert, the story that was the beginning of her revolutionary work" (81–82). Finally, in "A Transatlantic Interview" with Robert Bartlett Haas in 1946, "Melanctha" is again given pride of place in her aesthetic development. Stein relates, "Cezanne conceived the idea that in composition one thing was as important as another thing. Each part is as important as the whole, and that impressed me so much that I began to write *Three Lives* under this influence and this idea of composition. . . . I was obsessed by this idea and the Negro story was a quintessence of it" (15). In each of these accounts, "Melanctha" is singled out as aesthetically crucial to launching Stein's literary project and as a "negro" story. Two dynamics, then, connect these seemingly disparate accounts of aesthetic innovation: an underlying conceptualization of reality as, at its most real, an exhaustive collection of data points coequal in meaning and Stein's perception of a Black woman subject as exceptionally available for or compatible with this mode of representation. Stein's representation of Melanctha was crucial to her claim to authorship, and the data aesthetic is crucial to that representation.

A data aesthetic is first legible in the biographical form of *Three Lives*. Although clearly a work of fiction, in the context of Stein's sustained inter-

est in the representation of human selfhood and numerous formal cues, I read *Three Lives* as an experiment in the life writing genre of biography. As Ulla Haselstein notes, the titular use of *Lives*, a revision of Flaubert's *Three Histories*, "expressly invokes the genre of biography, which promises the reader a narrative focused on the unique choices and experiences of a historical subject" (391). The biological life offers a scope of observation rather than a narrative arc. As Sutherland has observed, the move to substitute biological boundaries for aesthetic parameters connects trends in artistic and scientific thought. It aligns with a modernist sense that Aristotelian "unity in terms of external events no longer accounts adequately for full reality" at the same time as it reflects "the scientific climate of the 19th century" in which "the single life took on the meaning of a case history, or the natural and inevitable performance of any instance of a species" (Sutherland, *Gertrude Stein*, 266–67). The *Three Lives* read more like biographies than novels, and more like observational notes than literary biography. The biographical frame shifts life story toward data collection.

The text pushes toward exhaustivity in its biographical framing and in its representation of its subjects' lives within this frame. Much of its distinctive style and narrative form results from the narrator pushing toward the exhaustive side of the representational scale. As Lisa Ruddick has characterized, the narrator's impulse to simply record creates "the rhetorical effect of a bland accumulation of facts" (50). This is especially pronounced in "Melanctha," the longest and, by both Stein's reckoning and that of many readers, the most formally innovative of the *Three Lives*. Though "Melanctha" certainly does not include every moment of its subject's life, the ones that it does are recorded as if in real time, collecting each contradictory determination, reversal, and mood as it occurs, without the appearance of editing. These moments are made into dense repositories of data by being overloaded with description. Daylanne English has argued that, given Stein's medical training, the *Three Lives* should be connected to the form of the medical record, which had just undergone a technological and disciplinary shift from being written down in a common notebook to being compiled as an individual file. Each patient would be represented by this single file, with updates added for each medical encounter, always (or as Stein might say, continuously) in the present tense and never synthesized with prior notes (English, 100). Composed in this way, the medical record would display the kind of intermittent exhaustivity that the text does. Only the moments in the presence of the medical professional would be recorded, but those would be recorded in detail and these details would not

be edited in light of later findings. Like English, I do not suggest that the form of the medical record or social work case study clarifies all of the text's idiosyncrasies, but I do seek to connect the historical development and circulation of these genres, the professional observational mode that produces them, and the representation of racialized womanhood that results.

The third-person narrator of "Melanctha" seems sometimes omniscient and sometimes focalized as an anonymous, objective researcher. Oscillation between omniscience and focalization is a type of textual form that could result from a series of encounters between a researcher and subject (or, as English argues, medical professional and patient). Some of the details about Melanctha that suggest narratorial omniscience resemble the kind of information gleaned through oral history—the researcher could conceivably have learned of Melanctha's childhood through an interview. Other details are of the type that an outside observer could not actually observe, such as minute variations in emotion. Given the prevalence of such details, attributing a distinct personhood—not just subjectivity—to the narrator introduces another interpretive problem: much of the text demonstrates a kind of omniscience that is plausible for a narrator but less plausible for a person. But this inconsistency itself presents a number of potentially interesting critiques of an empiricist conception of selfhood and the assumptions of knowability that empower empiricist professionals. What if a person could observe and record all these things about another person? Would knowledge of that person's "real" self be more forthcoming? The "Melanctha" narrator might be seen either as a kind of thought experiment—what if the workings of interior selfhood could be recorded, seen by an outsider as readily as experienced by the subject?—or an exaggerated, nearly parodic version of the arrogant researcher claiming access to every part of another's selfhood.

Data collection as form and practice also provides an illuminating context for the text's distinctive use of repetitive diction and parataxis. Read as a genre of professional observation, be it medical or sociological, the text's repetitive vocabulary functions as a controlled vocabulary—a professionally determined lexicon of terms. A controlled vocabulary leads to the highly repetitive use of a limited range of descriptive words. Character descriptions in *Three Lives* frequently contain multiple adjectives, but most of the time only one adjective per category (e.g., race, perceived character, affect), mimicking the effect of checking off boxes on a survey, a formalized version of observational practice using controlled vocabulary. A day, a year, or a life represented through exhaustive and unedited data collec-

tion would look very repetitive indeed, especially when transcribed using a standardized vocabulary. For example, the text is shot through with the repetition of seemingly binary temporal designations, "always" and "never" used to refer to what are actually time-limited states. The use of these blunt, blanket terms conveys the seeming solidity of the present when it is cast as a data point: in the now, one is either always or never doing a particular thing. Only when surveyed retrospectively can the transience of specific states appear and be assigned a trajectory and relative lengths. As discussed earlier, repetition is also legible as conceptual play with the ideal of exhaustivity. If exhaustivity is the prerequisite to definitive revelation, why is it so confusing to read?

In addition to rooting "Melanctha" in her period of medical training, Stein also explicitly connects its composition to the influence of Impressionist painter Cezanne. This might seem like a disavowal of the earlier emphasis on psychology and medicine (and by extension data collection) supplying the context for her development of the continuous present mode and "Melanctha" in particular, but Impressionism itself is often aligned with scientific theory and practice. Impressionism as an aesthetic movement is associated with the search for a representational form that is driven by the capture of sensory data. As Jayne Walker observes, Impressionism is one of many late nineteenth-century aesthetic responses to "the demand for ever-greater fidelity to immediate sensory data" (xix). She further argues that Impressionism and Jamesian psychology shared similar understandings of the physiology of perception, which enabled their shared belief that raw sensory data could be captured by a careful observer: "Because they shared a common model of perception, the sciences of psychology and optics served to validate the painters' claims that they were rendering the empirical data of immediate retinal sensations" (7). What Impressionism and Jamesian psychology share is representation of the real through the collection of points. Even as Stein claims "I was only being a scientist for a while, I did not really care for science" ("Transatlantic," 15), her précis of Cezanne's impressionism highlights formal features that align it with data collection. She writes, "Cezanne conceived the idea that in composition one thing was as important as another thing. Each part is as important as the whole, and that impressed me enormously" (15). The description emphasizes a parallel form of co-present points (parts and things), in which no point can claim greater inherent interpretive significance. She sees in Cezanne an artistic corollary to the representation of self undertaken by empirical sciences, but committed to it in an even more extreme way,

retaining the equal reality of each point in a way that the generalizing aims of scientific method curtail.

Stein associates "Melanctha" in particular with this compositional mode, continuing, "I was obsessed by this idea of composition, and the Negro story was a quintessence of it" ("Transatlantic," 15). The designation of "quintessence" can be seen as a commentary on both the text and its subject. Stein could mean that this story is the most successful embodiment of her emerging aesthetic. Stein might also mean that there is something about the story's subject, Melanctha, that makes her life story especially amenable to a mode of representation in which "each part is as important as the whole" (15). It is the only one of the *Three Lives* focused on a non-white subject, suggesting that what makes Melanctha exceptionally available for representation in such terms is her racialized status. On a historical level, as a working class, mixed race woman she would have been a common subject for the social scientific or medical gaze, as Stein's comments corroborate. On a symbolic level, Melanctha's status as a racial other provides an acceptable space for Stein's imaginative projection, especially around sexuality.

Melanctha's racialized status is simultaneously referential and abstracted, historical and fictional. One line of critical thought has argued that Stein's prose signals a degree of aesthetic invention that makes it clear her intention is not to realistically represent an actual mixed race woman. Her use of racial language, unmoored from reference, should instead be seen as either aesthetic play or part of her critique of essentialist notions of identity.[11] Further, the romance plot (to the extent that there is one) of "Melanctha" is, by critical consensus, a rewriting of the highly autobiographical *Q.E.D.*, cast in racialized terms in order to deflect attention from her own identities as woman, lesbian, and Jewish.[12] The autobiographical element of the story muddies any argument that Stein attempts to portray the reality of a working class, mixed race woman's life. Yet, as another robust line of criticism has established, Stein's language in "Melanctha" is so clearly rooted in the mainstream racializing discourse and racist equations of skin color with health, morality, and intelligence that it cannot be disentangled from historical questions, and injustices, of race and representation.[13] Stein's narrator is, at best, "passive to the status quo" (Ruddick, 50), using the vocabulary at hand. As well, as seen in the cited passage above from *The Autobiography of Alice B. Toklas*, Stein at times suggests she gains inspiration from her encounters with African Americans in Baltimore. Seeing *Three Lives* as an experiment in the genre of biography and proposing to read "Melanctha" as a data collection, I am inferring that we should read it as if it seems to represent an actual

person. These framings entail reading racial descriptors as referential, in which case there is no question that, as the latter group of critics has argued, the describer is uncritically employing racist language, freighted by exactly the kind of narrative projections of identity that Stein wants to avoid having projected onto herself as a woman. It is in part through the use of this language that Stein effects her own escape from narrative projections onto her gender and into the identity of genius, innovator, and modernist. My purpose in reading this language as part of a data aesthetic is not to absolve or explain, but to examine how it works to empower the narrator but entrap the narrated. "Melanctha" stages a battle for self narration in which the data aesthetic proves to be an ambivalent tool.

Seeing the narrator as a data collector and Stein's continuous present as data collection, we also, however, get a glimpse of how a commitment to representational exhaustivity opens space for dissident claims to knowledge and the power to narrate. Refracted through the lens of professional practices of observation and girded by claims of empiricism, the narrator's omniscience is a rhetorical effect, not a final word. While this narrator's declarative syntax makes her seem flatly comfortable with the condemnations her observations constitute,[14] as a data collector she is also impelled to collect even what does not accord with the social types and narrative structures these observations are meant to substantiate. For this reason, the text her observations form exceeds the determination her terms seek to enact. While her terminology aligns her with a presumption of type and inherent racial difference, her commitment to exhaustive collection of data compels her research to include data that could undercut that presumed reality.

The ambivalent potential of this narratorial stance is illustrated by the narrator's selection of Melanctha as an object of study. Rose, as a new, Black, urban-dwelling mother, would have been a more likely object of study for a visiting medical or social worker. Melanctha, however, quickly becomes the focus of the narrator's attention. The narrator is sidetracked from reporting on Rose by the puzzle of Melanctha's presence:

Why did the subtle, intelligent, attractive, half white girl Melanctha Herbert love and do and demean herself in service to this coarse, decent, sullen, ordinary, black childish Rose, and why was this unmoral, promiscuous, shiftless Rose married, and that's not so common either, to a good man of the negroes, while Melanctha with her white blood and attraction and her desire for a right position had not yet been really married. (*Three Lives*, 89)[15]

This is, specifically, a question about why her life story does not conform to that predicted by racial typology. Being "half white" should, the narrator's question implies, set her on a different social trajectory from the "ordinary, black" Rose. Rather than discarding Melanctha as an outlier, though, the narrator redirects her collecting attention to her. The resulting narrative positions Melanctha's life as a confounding nexus of typological narratives of race, womanhood, masculinity, and knowledge creation.

Melanctha as Data Collector

As much as the narrator's commitment to collection can be seen to complicate the relationship between Melanctha's life story and typological narratives of race and gender, it does not unsettle the fundamental power dynamic of collector and collected, narrator and narrated. The narrator, it seems, cannot countenance Melanctha as a potential narrator of her self, reporting:

> Melanctha all her life did not know how to tell a story wholly. She always, and yet not with intention, managed to leave out big pieces which make a story very different, for when it came to what had happened and what she had said and what it was that she had really done, Melanctha never could remember right. ("Three Lives," 98)

We might ask, though, whose desire is it "to tell a story wholly"? If we read it as solely the narrator's desire, obliquely expressed via criticism of Melanctha's narrative practices, to have a story told wholly would presumably mean to skillfully execute the template of traditional narrative, the intentional formation of a coherent beginning-middle-end sequence. In a way, then, the narrator accuses Melanctha only of doing what all narrative practitioners must, of "leav[ing] out big pieces which make a story very different." Lest we confuse Melanctha with a narrating peer, though, the narrator adds a clause to specify that she does this "always, and yet not with intention," taking special care to deny Melanctha creative agency and aesthetic aims. If we grant the narrator sole prerogative to desire and determine what constitutes a whole story, the passage functions as a short treatise on narrative aesthetics wrapped up in an assessment of the eponymous subject's moral character, representational agency, and cognitive ability.

Given the shifting perimeter of the narrator's limited omniscience,[16] though, we might question whether the desire "to tell a story wholly" is

solely that of the narrator. If we saw it instead as the narrator's report of Melanctha's desire and we took that desire at its word, we might read its judgments another way. Melanctha's alleged lack of intention to "leave out big pieces" could be the narrator's uncomprehending description of a positive intention to include all the pieces. The equation of telling a story "wholly" with being able to represent "what had really happened . . . and what it was that she had really done," bears a resonant resemblance to Stein's plea on behalf of another narrative subject, Julia Dehning in *MoA*. Stein implores "those who read much in story books surely now can tell what to expect of her, and yet, please reader, remember that this is perhaps not the whole of our story either . . . for truly she may work out as the story books would have her or we may find all different kinds of things for her" (*MoA*, 15). To apply narratives formulated and circulated in "story books," would be for Stein, "to take the character from our Julia" (15), foreclosing the self's potential to hold "all different kinds of things." Given the importance of having this whole story for understanding a woman's life narrative, we might question the "Melanctha" narrator's presumed monopoly on the desire for practices of representation that would more nearly realize it.

Although a data aesthetic is also legible in the other two of Stein's *Three Lives*, "Melanctha" is a special case due to its overt thematization of knowledge and narrative, and even more importantly due to Melanctha's relative agency in self narration. Melanctha seeks to represent her life in a way that preserves and claims the totality of her experience. As the narrator records, Melanctha's central self-authoring act is to insist on her own complexity; she "had not made her life all simple like Rose Johnson" (*Three Lives*, 91). While most of what the reader knows about Melanctha is mediated through the narrator's seemingly objective but clearly also judgmental view, this view includes a significant amount of reported dialogue and limited but telling glimpses into Melanctha's thinking about herself. The inclusion of this data enables a sense of Melanctha as a narrator of her own selfhood to emerge, and it reveals that a second data-driven narrator of this text is Melanctha herself. This life story is not only Stein's search for a narrative form driven by exhaustive collection, but also the story of a subject who seeks to be able to tell herself exhaustively. She is equally invested in collecting the data of her self and more committed to reckoning with the fullness and contradiction of it.

This data takes the form of experience, and desire for experience is one of Melanctha's defining traits. "Melanctha all her life," the narrator notes, "was very keen in her sense for real experience" (*Three Lives*, 96). The col-

lection of experience is one of her lifelong practices, via her "wanderings after wisdom" (96). Though the denotative meanings of "wandering" and "wisdom" are nearly opposite the purposive activity of data collection and the pre-informational status of data, the way Melanctha seems to define and practice wandering for wisdom goes against the grain of these literal definitions. She wanders repeatedly, as a practice and a process aimed at accumulation rather than completion. The product of these wanderings, wisdom, shares a cumulative character. There is always more of it to be collected, and therefore reflection upon it is deferred. While she is constantly seeking wisdom, she actively resists explaining herself through selective narrative, indicating an epistemological commitment to collection.

Through her practice of "wanderings after wisdom," Melanctha seeks to claim the status of knowledge worker in her own right. Ruddick argues that "references in 'Melanctha' to the heroine's many 'wanderings' have rightly been considered part of a sustained euphemism for sex, but one might easily reverse the emphasis and say that sex itself stands in the story as a metaphor for a certain type of mental activity" (18). Melanctha also undertakes this activity in a manner that aligns with practices of exhaustive data collection. Ruddick continues, "Melanctha's promiscuity is part of an experiential promiscuity, an inability or unwillingness to approach the world selectively" (18). While Ruddick links Melanctha's non-selective attention to Jamesian psychology, which finds it pathological, we might also link it to the ideal of exhaustive data collection that drives empiricist inquiry, which would make Melanctha's mode of perception not unscientific but radically so. Cecire describes Melanctha as doing "camera work, the mechanical female scientific labor of abject mimesis" (97), a description that unlocks a range of resonances with data collection and locates Melanctha in the historical context of professional science, which has typically assigned women to roles requiring the most precise hewing to objectivity but then devalued that objectivity as mindless automatism.[17] In this light, she is Stein's autobiographical double in her persistent fascination with and insistence on the value of exhaustive collection. Both collect data, and using that data both seek to construct life stories governed by an aesthetic of inclusion, or stylistic and thematic insistences on including more information than is necessary to tell a conventionally plotted story. Their aesthetics of inclusion are a willful expansion of realist representation that paradoxically seems like a diminution of significance. In place of traditional plots of marriage or self-discovery, there are records of multiple, temporarily realized and ultimately frustrated, desires for knowledge of self.

In her relationship with romantic partner Jeff Campbell, Melanctha pursues a debate over the nature of selfhood and the methods through which it can be discerned. Both Melanctha and Jeff pursue knowledge of life. Melanctha's friendship with Jane Harden is described as "attempted learning" in which she seeks "the right way, that certain way that was to lead her to world wisdom" (*Three Lives*, 100). In seeking this "certain" way, or as it is described elsewhere, "the best way for her to do" (91), Melanctha is like any other committed empiricist. She is not collecting data for its own sake but in search of definitive revelation. Her atypical subjectivity arises through the commitment to collection of experience. It is not so much that Melanctha rejects narrative as a framework for her own identity, but that she refuses the acts of selection, the privileging of some elements of self over others, that would finally produce such a framework.

Jeff's pursuit of knowledge highlights the difference of Melanctha's method. He "loved best science and experimenting and to learn things" and is "always very interested in the life of the colored people" (*Three Lives*, 105). Unlike Melanctha's empiricism, though, Jeff's understanding of the reality of self is strongly theory-driven. He advocates being "regular in all your life . . . to always know where you were, and what you wanted, and to always tell everything just as you meant it" (109). Melanctha's method of continuous collection of experience as a path to knowledge is specifically contrasted to Jeff's application of theory. She does not "feel the same as he did about being good and regular in life . . . the way that Jefferson Campbell wanted that everybody should be, so that everybody should be wise" (108) and instead sticks to her "strong sense for real experience" which is why she does "not think much of [Jeff's] way of coming to real wisdom" (108). Her "real experience" cannot be contained by his "regular" life, which she sees as constraining rather than enabling wisdom. Ruddick has read this opposition as a rejection of "instrumental thinking" in favor of "a wisdom grounded in the body" (13) which would seem to distance Melanctha from the position of scientist. But viewed in a broader conceptual and historical context that takes into account the difference between experiment and data collection as scientific methods, this does not mean that Melanctha is simply ascientific. Through Melanctha, Stein in part figures the disruptive, subversive commitment to exhaustivity that is also overlooked by her own scientific interlocutors during her anatomical research.

Their competing methodologies lead Melanctha and Jeff to disagree about the "real" nature of a person. "Real," for Jeff, is conclusive, an intrinsic nature revealed and fixed through the evidence of individual action.

For Melanctha, it is a continuous commitment to experience, resulting in a collection of equally real experiences constituting the self. It is through the collection of data about Melanctha's past behavior that Jeff believes he will be able to know who she "really" is. Yet, he finds that more data does not lead to conclusive knowledge. Instead, he finds, "'I certainly know now really, how I don't know anything sure at all about you, Melanctha, though I been with you so long, and so many times whole hours with you'" (*Three Lives*, 124). Continuous contact, "whole hours" over many days, seems to obscure rather than clarify knowledge of her. Instead of the one "regular" self he believes all people should adopt, he finds, "'Sometimes you seem like one kind of girl to me, and sometimes you are like a girl that is all different to me'" (123), each "'certainly seem[ing] to be real for the little while it's lasting.'" He pleads with her to tell "'which is the way that is you really'" (123). Rather than assuaging his anxiety by making an argument for one real self, Melanctha gives him more data: she shares her reaction, which is to be hurt by his dismissal of all she has seemed to be. She does not answer his question, but instead asks for him to remain open to experience as it unfolds rather than freezing it into an assessment. Like all knowledge of self and other in this text, this argument is not decisive. The two go through a series of these confrontations, with Jeff each time getting caught up on conflicting evidence.

Melanctha and Jeff's interactions also constitute a debate over the relationship of narrative to self. Life narrative, in Jeff's view, functions as a rubric for predetermination of action and the evaluation of experience. Jeff advocates a structured narrative of living, not only as a matter of preference but as an ideal of racial uplift. Being "always very interested in the life of the colored people" (*Three Lives*, 105) and "what he could do for the colored people" (108), he formulates an ideal of "living regular" that he wants this community to follow. For Jeff, "to be regular in all your life" (109) means being a "decent," or rational and middle-class subject who will "live regular and work hard and understand things" (109). Living regular means not only following a daily routine but subscribing to a constraining narrative frame of action. By eschewing "excitements" (109) or data points of experience that lie outside this narrative line, and performing the routine of work, the subject will attain a coherent status. Melanctha sees the narrative parameters of "living regular" as an inadequate, reductive approach to the reality of self. "'Don't you ever stop with your thinking long enough ever to have any feeling" (119) she asks of him. She is not asking him to stop thinking, but rather to expand the type of data that he admits as evidence in his search to understand human life.

For Melanctha, the effects of occupying the position of data-driven narrator of self are ambivalent at best. On the one hand, her insistence on collecting experience and claiming all of it as equally real establishes a claim on intellectual agency and epistemological sophistication. She introduces an aesthetic of inclusion in the narrative of selfhood, having "not made her life all simple" (*Three Lives*, 91). Her insistence on and the consequences of this conception of self is most clearly articulated in her repeated debates with Jeff over "which is a real Melanctha Herbert" (123). She uses two tactics in these debates, both of which hinge on linking real selfhood with the entirety of experience. She asks him to recognize his own complexity, the contradictions between idea and deed that an exhaustive accounting of his own past surfaces, as well as asking him to form his own conclusions based on his entire experience with her, not others' accounts. Her refusal to summarize herself or to refer back to any past version of herself as definitive marks her participation in Stein's career-long project of representing "the whole of anyone" (*Lectures*, 139).

On the other hand, this intellectual project also has disempowering consequences in the context of Melanctha's social milieu. Seeking to know and tell this whole story of self leads Melanctha into conflict with the narratives of middle-class morality and masculinist empiricism.[18] Her relationship with Jeff ends in part because she refuses to disavow an earlier version of herself, when she was in close relationship with friend Jane Harden, who repeatedly behaves in ways that violate Jeff's ideal narrative of self and who intimates to Jeff that Melanctha took part in activities that would also violate his ideal. Jeff is unable to reconcile Melanctha's past with the future wife he imagines, and Melanctha refuses to renounce this past, instead claiming the coherence of her entire history and what appear to be conflictual selves. Ultimately, "Melanctha is too many" (*Three Lives*, 147) for Jeff, and theirs is one of a series of relationships that cannot encompass Melanctha's insistence on self as movement and multiplicity. Her allegiance to holding the seemingly contradictory aspects of her historical self in parallel precludes conforming to the shape of available narratives of womanhood.

Read as part of a data aesthetic, the ending of "Melanctha" is primarily a characteristic of biography as a genre and biological reality, unsurprising and unavoidable. Lives end in deaths, and like any other moment of a life, the moment of death is just one data point. Most biographies, though, make some attempt to interpret the death of their subject, either as the end of the narrative or as a coda to a narrative that had actually concluded some time before. The narrator as data collector refrains from interpretation. The final three paragraphs, composed of two sentences each, simply

report Melanctha's illness, recovery, relapse, and death. The final sentence, for example, is brutal in its simplicity: "They sent her where she would be taken care of, a home for poor consumptives, and there Melanctha stayed until she died" (*Three Lives*, 187). The narrator's flat, denotative language does not attribute meaning or convey affect in response to Melanctha's death. It is the chronicle of the end of a life, a series of observations recorded at seemingly arbitrary intervals. Nothing that the subject does signals the beginning or the end of a particular story.

Leaving the ending's meaning open forces the reader to confront the role of interpretation in understanding life data collections. Still, temporarily suspending interpretation is not the same as offering a new one. The data collection as a form may create the preconditions for new readings of self, but it also creates a vacuum of meaning into which potential narrators of data will project their own assumptions. Nowhere is the data self's vulnerability to others' narration more clear than in the representation of Melanctha's death, which is all too readily interpretable as the stereotypical end of the tragic mulatta figure, an interpretation that stabilizes racial and social incoherence as doom. The bleakness of the end of Melanctha's life seems clear to many readers, but whether she herself would attribute bleakness to it remains unverified and inaccessible in this mode of representation. The stories told about her data will depend on who is able to claim the status of narrator.

Under the gaze of both Jeff and the narrator, Melanctha is in the position of experimental subject as Stein describes it in her undergraduate composition theme, forced to account for herself in relationship to an externalized record. Embodied in Jane Harden, Melanctha's "record is there she cannot escape it" (Stein, reproduced in Miller, 121). Her relationship with Jeff is constrained by the very existence of this record, and Melanctha's claims that it is incomplete and unrepresentative cannot overcome Jeff's insistence on its reality. The narrator likewise keeps accumulating data points, forming a text that continually displaces Melanctha from narrative frameworks because of its insistence on exhaustivity and parallelism, refusing to designate certain points as more significant than others. The consequences of portraying another's life in a manner which represents "each part as important as the whole" (Stein, "Transatlantic," 15) are different for the representer and the represented. As Lisa Ruddick has argued, in the context of Jamesian psychology losing, or willfully abandoning, a guiding narrative of self is a moral and practical failure.[19] In the world of the story itself, Melanctha's data aesthetic of self has similarly negative con-

sequences. As Corrine Blackmer suggests, she is "an embodiment of the acute invisibility and vulnerability of those who belong to many worlds and whose inability to discover a 'right position' results from the failure of others to perceive and, therefore, to 'read' them competently" (232). Melanctha never finds a partner willing to share her approach to selfhood, a commentary on the exclusionary nature of social narratives and the illegibility generated by being excluded from them.

Collecting Conclusions

The data aesthetic is crucial to Stein's claiming of the status of narrator and intellectual agent in at least three ways. It drives the emergence of Stein's recognizably modernist style, challenges the typological paradigm of gendered selfhood promoted in both psychological and biological studies of the human through its implicit claims about the relationship between data and narrative, and it reinforces Stein's privileged position as collector rather than collected.

Stein, with the writing of "Melanctha," takes one step farther on the path of "knowing that I was a genius" (*Everybody's Autobiography*, 79) and authorizing her own voice. She goes on to write more books, and the narrator presumably lives to collect another life. Melanctha does not, and no one has asked her to share her version of what the data of her life has meant. When we read Melanctha as a data collector denied, we see the differential effects of data representation stemming from unequal access to data narration. The comparison is meaningful not because Melanctha and the narrator are as real as Stein, but because their fictional positions anticipate real contemporary situations. In our moment of pervasive, persistent collection of our digital traces, our records are out there, and we, too, will not be able to escape them. As Kevin Haggerty and Richard Ericson observed in their 2003 article, "The Surveillant Assemblage," "we are witnessing a convergence of what were once discrete surveillance systems to the point that we can now speak of an emerging 'surveillant assemblage,'" recording observational data of countless types across numerous platforms that are "reassembled into distinct 'data doubles' which can be scrutinized and targeted for intervention" (606). "Melanctha" reminds us that how our data is spoken for will be refracted through who is doing the speaking.

Although I see Stein, the narrator, and Melanctha as sharing methods of data collection broadly defined, I think it is important to see that their practices are not identical nor are their conclusions equivalent. The alter-

native form of subjectivity that Melanctha proposes is at once avant garde, mirroring the aesthetic innovation that Stein claims distinguishes her writing and anticipating data collection technologies that will become the cutting edge of self-knowledge, and at the same time retrograde, repeating the inscription of minority narrative as incoherent (as in the figure of the sexual deviant) or overly coherent (as in the figure of the tragic mulatta). The narrator accepts and employs a vocabulary of racial typography that corrals subjects into categories and narratives they demonstrably do not fit, while Melanctha seeks a vocabulary for self that will convey the radical difference of her own experience. The narrator is seemingly relieved from presenting her own conclusion or questioning the conclusions implied by her terms, while Melanctha is repeatedly forced to account for herself and, when she refuses to offer a conclusion to a collecting process that is ongoing, is rejected. Melanctha's striving to "tell a story wholly" means that she tells no story others recognize as a claim to selfhood.

The representational difference of Stein's continuous present arises from a drive toward exhaustivity and the parallelism that emerges from a refusal to select certain points for emphasis and discard others. It is thus an aesthetic born of radical commitment to data collection in the face of practices of data interpretation that too readily cast selves into types used to assign intellectual and social potentials. As her plea on behalf of Julia Dehning in *MoA* intimated, Stein is particularly aware of how narratives get projected onto women's lives. But "Melanctha" also demonstrates the limits of narrative incoherence as a liberatory strategy. If we see the narrative incoherence of "Melanctha" primarily as Stein's creative challenge—to traditional literary form, to theories of biological sexual difference, and to the empiricist teleology of knowledge revealed through data—it serves to authorize a voice that might otherwise have been marginalized. If we see how that creative challenge depends, in part, on the narrative incoherence produced through application of that innovative form to the representation of a minority subject's life, we see how it can also work to reproduce marginalization. Expanding access to data narration does not need to be Stein's interest, but in light of the limits of Stein's intervention, it should be our own. When marginalized subjects claim the status of data narrator, new data stories emerge, as the work of Ida B. Wells-Barnett considered in the following chapter demonstrates.

To Reproduce a Record

Ida B. Wells-Barnett and the Labor of Data Collection

It becomes a painful duty of the Negro to reproduce a record which shows that a large portion of the American people avow anarchy, condone murder, and defy the contempt of civilization.

  —*Red Record*, 1895

There was no record from which she could inform herself. . . . It is therefore for the young people who have so little of our race's history recorded that I am for the first time in my life writing about myself.

  —*Crusade for Justice*, written ~1930, published 1972

"Record" is something of a keyword for Ida B. Wells-Barnett.[1] She uses it in the title of her widely cited anti-lynching publication, *A Red Record: Tabulated Statistics and Alleged Causes of Lynchings in the United States*. She uses it to describe her own autobiography, written as a contribution to African American history. She uses it to name the core of her intellectual and activist project: to "reproduce a record" of white violence against African Americans. The Society of American Archivists defines a "record" as "data or information that has been fixed on some medium; that has content, context, and structure; and that is used as an extension of human memory or to demonstrate accountability." Wells-Barnett's anti-lynching[2] writings suggest another definition, one that both intersects with and critiques the technical language offered by contemporary archival science. She writes, "no one who reads the record, as it is written in the faces of the million

mulattoes in the South, will for a minute conceive that the southern white man had a very chivalrous regard for the honor due the women of his own race or respect for the womanhood which circumstances placed in his power" (*Red Record*, 13). In her figuration, "faces" are the medium on which crucial data has been fixed. These faces, described as mulatto to infer their origin in what were almost certainly non-consensual interracial sexual relations, evidence at least a "million" instances of white male sexual violence against Black women. Yet, if a record is meant to serve as a site of memory and therefore accountability, this one has so far failed. News accounts of the lynching of African Americans by white mobs repeatedly tell a story in utter contradiction to the facts this record should be able to represent. As Alison Piepmeier has delineated, the white "lynch narrative" (135) casts the Black male as "a rapist, bestial and savage" and the white male as "chivalric" hero. White supremacy is allowed to circulate as fact not, Wells-Barnett points out, because no refuting record is available for reading but because the existing record has not been read. The data of white supremacy is already recorded on the Black body, but data so embodied has also been deemed illegible and forcibly made ephemeral, in both the literal and representational sense. The pain of the duty to reproduce this record arises not only from the trauma of this violence but also from the recognition that, in its original form, the record will never be read. Wells-Barnett sees that Black data collectors face a non-negotiable "duty" to reproduce the data of Black life in a form sanctioned by the terms of white empiricism. In calling attention to data as reproduction of a reality white observers refuse to perceive, her use of data to intervene in the lynch narrative is also an intervention in data epistemology. Wells-Barnett foregrounds the labors of reproduction inherent in the data representation of Black lives, and in so doing challenges a data epistemology built on the imagined objectivity of the collector and the erasure of the work of data preparation, circulation, and preservation.

The duty of record reproduction arises, in part, from the failed project of Reconstruction. Ida B. Wells was born in 1862 to enslaved parents. Upon emancipation, her father was able to support their family as a carpenter. His status as an independent tradesperson made him one of the African American elite of Holly Springs, Mississippi, and he was known for his commitment to African American political organization. Wells-Barnett completed enough schooling to take courses at Rust College, but her education was disrupted when she was orphaned in 1878 at age sixteen. This personal calamity unfolded alongside the white political abandonment of

Reconstruction, forming the defining contexts of her life and work. The end of federal support for and protection of African American civil rights allowed violence, disenfranchisement, and economic oppression of African Americans to flourish at the state level. As Rutherford B. Hayes was taking office and officially ending Reconstruction efforts, Wells was leaving school to take a rural teaching job to support herself and her five surviving siblings. In the scraps of time she could spare outside of paid employment and housekeeping, she developed her love of writing into a budding career as a journalist, editor, and co-owner of a newspaper, the *Memphis Free Speech*. It is in her capacity as editor of the *Free Speech* that she writes a two-paragraph editorial denouncing white excuses for the lynching of three African American businessmen. Because of this editorial, she sees her business destroyed, her life threatened, and her career as an itinerant data collector, writer, speaker, and anti-lynching activist begun.

Wells-Barnett is distinct among the writers of this study for multiple reasons: she never completed her undergraduate degree and had not even a toehold in academia; she was overtly activist; and while her certification as a teacher moved her from the working to the middle class, she was never financially stable before marriage and often in a precarious position even after that. That Du Bois, Adams, and Stein were data collectors and modernists has not been in question, by virtue of their formal education, institutional affiliations, and history of critical reception. Wells-Barnett, by contrast, is a writer whose innovative data collection practices and contributions to modernist literature are only beginning to be recognized. Her achievements have often been seen as more activist than aesthetic. Given her nearly singular contribution to fighting anti-Black racism in the form of lynching, the attention given her activism is surely warranted. Approaching her work through the lens of data-driven modernism also allows us to see how a critical data aesthetic is central to both her writing and the activist project to which it was devoted.

Her engagement with data revisits the themes raised by prior chapters—including embodiment, narrative coherence, the subjectivity of the data collector, and the claiming of that subjectivity's epistemological privileges—through the lens of Black womanhood. While Du Bois rearticulates data and the body through narratorial perspective, Wells-Barnett does so through sustained attention to the material conditions of data collection and circulation. While Adams finds that his data collection offers no coherent narrative of history or self, Wells-Barnett finds that hers reveals a coherence denied by white supremacy allied with white ignorance. While

Stein uses the cultural authority attached to the role of the data collecting scientist to flout gendered expectations of literary style and position herself as a genius, Wells-Barnett had her life threatened and womanhood challenged because of her insistence on presenting comprehensive data.

In this chapter, I read Wells-Barnett's project to "reproduce a record" as a critical recasting of data collection. Wells-Barnett's use of data collection as knowledge production is self-consciously reproductive in multiple senses, standing in explicit contrast to the language of discovery that pervades much data discourse. Her most famous data sets are reproductions of data originally collected by white newspapers; she labors to ensure that her (re) collections of that data are (re)printed for broader circulation; her speaking engagements reproduce the data that she has collected in oral form; and, at the deepest level, she is reproducing the violence inflicted upon Black bodies and communities as data. In her explicitly reproductive practices, she reveals that data never simply exists but is always created, circulated, and preserved through an orchestration of idea, effort, and material resources. She makes transparent, in other words, that all data collection is political: undertaken through human choice in pursuit or support of specific political goals, whether these are made explicit or not. Among data collectors, Wells-Barnett is not exceptional in her political commitment but is exceptional in her explicit claiming of commitment. Her representation of self as data collector constitutes a direct challenge to the rhetoric of data as objective, neutral, and transcendent. It embeds the data-driven narrator in historical-political contexts from the outset, imagining the narratives formed by data as a site of continuing contestation rather than inarguable revelation.

Wells-Barnett's reproductive data labor intersects with broader concepts of reproductive labor and reproduction. Reproductive labor is typically defined as the labor of childbearing, child rearing, and domestic maintenance that reproduces the conditions upon which waged labor depends. It is typically unpaid and low status labor, and it is typically performed by women. In the context of critical data and information studies, the concept of reproductive labor has more recently been used to illuminate the gendered power dynamics of academic labor and knowledge creation. For example, Roxanne Shirazi observes, academic librarians "perform labor that reproduces the academy," including "selecting, cataloging, and preserving materials for current and future use" (88). While original research is highly valued, the operations necessary to support that research are cast, and compensated, as uncreative and unintellectual. In other words, they are seen as reproductive rather than productive.

Reproductive labor is particularly important to data collection and analysis, but it is also rarely recognized. As Jean-Christophe Plantin notes, "data never comes as raw, pristine, or ready to use" but rather, "multiple interventions are always needed before data can be reused" (67). The work of the data curators who draw on both skill and judgment to perform these interventions, though, is made doubly invisible. It is devalued within the research community and intentionally repressed from public view to promote the ideal of the "pristine" data set, uniformly formatted and stripped of local idiosyncrasy.[3] Making data appear "pristine," on the one hand, makes it more easily usable, but it also perpetuates a sense of data as disembodied and unmarked by historical situation and human choice. In claiming that her work is "to reproduce a record," Wells-Barnett calls attention to labor that the rhetoric of empiricism wishes to disavow. No record of reality, she suggests, simply exists.

Characterizing Wells-Barnett's project as reproductive also highlights her challenge to longstanding concepts of modernism, a field long defined by valuation of authorial autonomy and innovation. Wells-Barnett's writings, on first examination, seem to fail both requirements, being more or less traditional at the level of prose diction and clearly engaged in political advocacy, making it, to earlier generations of modernist scholars, one of the "at first quite unliterary promotions of feminism, socialism, nationalism, and other forms of social change" (Mao and Walkowitz, "New Modernist Studies," 744). More recently, though, scholars have begun to recognize a strain of Black women's modernist authorship that is characterized by reproductive labor. Teresa Zackodnik, examining the editorial practices of Jessie Fauset and Amy Jacques Garvey, has argued for recognition of the "black feminist press practice of recirculation" (439) as literary technique and political strategy. Fauset's work as the literary editor of *The Crisis* and Jacques Garvey's use of the "collage column" form in *The Negro World* demonstrate that reprinting others' writing is not merely a labor-saving device or perfunctory editorial duty but an intentional, creative method. Their careful selection and layout of previously published material creates "dissonant juxtaposition" (440), demanding interpretation and thereby working to "effectively produce other politicized, critical, and conscious readers" as part of a widening network of Black thought. Zackodnik cites Wells-Barnett as an important precursor to this tradition.[4]

Wells-Barnett's work, while a form of recirculation, is also distinct in its reliance on data aesthetics. While Fauset and Jacques Garvey derive their primary impact from careful selection, Wells-Barnett emphasizes processes

of collection aiming at exhaustivity. Formally, her writing embodies the characteristics of data-driven modernism with its aesthetics of collection and exhaustivity deployed to disrupt the white lynch narrative. Thematically, her writings theorize the role of data collection in social change and present the labor of circulation as crucial to any power it might have. Viewed as an example of data-driven modernism, her advocacy itself is intimately connected to the modernist representational project not only because it represents a critical encounter between race and modernity[5] but also because its political intervention relies on a self-conscious relationship to narrative form.

Reproduction as a mode of modernist authorship takes on an additional layer of significance in Jacqueline Goldsby's tour-de-force reading of Wells-Barnett as a modernist practitioner of parody. Goldsby argues that Wells-Barnett "parod[ies] then-emerging genres of news writing in order to show how those styles—together with the professional practices that characterize them—shaped the public's knowledge of lynching" (*Spectacular Secret*, 48). Parody, here, is not equivalent to satire or caricature. Goldsby extends Linda Hutcheon's characterization of parody as "repetition with critical distance that allows ironic signaling of difference at the very heart of similarity" (185). To parody is to reproduce with a difference, and the goal of Wells-Barnett's reproduction is to reveal difference, in the sense of a revealing a different narrative account of lynching and a multiplicity of narratives for Black futures.

While Goldsby's reading focuses on the powerful ironies produced by Wells-Barnett's parodic experiments with journalistic genres, I instead ask what meanings are produced if we see Wells-Barnett's practices as critical engagements with data as a representational form. By casting her data collection as reproduction of a record that would otherwise be lost, Wells-Barnett is able to call attention to the difference between white lynch narrative and an empirical record of lynchings, the difference between the ideal of the data collector and the actually existing Black woman data collector, between rhetorical calls to data discourse and genuine encounter with data. Reading her record reproduction as a mode of authorship calls attention to the human choices that determine what data will be collected (i.e., what reality will be represented) and how. Data collection is always data creation, and in foregrounding this insight, Wells-Barnett asks us to see both data collection and modernism differently.

If reproduction is Wells-Barnett's method of data collection, the resulting record is its form. James E. Ford III reads Wells-Barnett's formulation

of "record" as part of "an intellectual project [that] begins and ends on the theme of reconstruction, especially reconstruction of the 'record'—or in contemporary parlance, 'the archive'" (187). In referencing "contemporary parlance," Ford defines "the archive" in its broadest academic sense, as "a term for the entirety of historical records/evidence that exists to work from" (Owens). Within this broad sense of record as archive, Ford argues that "for Wells, the fragment, not the completed treatise, is the most significant portion" because it "rejects the notion of a single logic" and "provides the basis for rethinking the whole" (201). Ford's reading of the fragment and record distinguishes between part and whole in a general way that I would extend as data point and data collection. Data collections, like archives, provide the building blocks for future narrative, but their physical existence is not only materially but conceptually distinct. The language of archival science groups materials by provenance, not by topic. The papers of a particular individual or organization, for example, would constitute an archive, and their maintenance as an archive would privilege a sequestered and sequential organization based on a logic internal to the materials themselves. Data points, on the other hand, are generated by observation and recording of a particular phenomenon. They exist as co-equal points within a broader collection that can be segmented, reordered, and parsed in multiple ways. Wells-Barnett's collection of news stories and interview notes related to lynching is more formally akin to a data collection, which comes into existence when a collector devises and executes a method for observing all instances of a phenomenon within a given scope, defined by some combination of temporal and spatial limits.

Examining Wells-Barnett's early diaries and published writings, we see her practice of data collection develop at the conjunction of writing as a vocation, journalism as a profession, and African American political organization as a necessity for survival. Data collection becomes increasingly central to her writing and activism, as evidenced by the formal differences between her first self-published pamphlet, *Southern Horrors* (1892), and her second, *Red Record* (1895). Wells-Barnett collects and circulates data to turn the narrative apology for Black death into the narrative condemnation of white supremacy. She wields narrative form as a tool to remake knowledge, prying open the false coherence of the white lynch narrative and replacing it with a new, and damning, coherence born of close attention to data. Her relationship to narrative is not experimental in the sense that she wants to subvert a beginning-middle-end, causal structure. It is experimental in the sense that she wants to put white supremacy at the beginning, middle, and

end of a story of modernity that belies its ostensible commitment to equality and evidence-based practice. Ultimately, Wells-Barnett's deep connection of data and Black life narrative is embodied by her own autobiographical writing, in which she makes of herself a record, her data collection and circulation becoming both the content and the form of her life story.

Writer, Journalist, Data Collector: The Emergence of Wells-Barnett's Data-Driven Modernism

> This mob took out of their cells Thomas Moss, Calvin McDowell, and Henry Stewart, the three officials of the People's Grocery Company. They were loaded on a switch engine of the railroad which ran back of the jail, carried a mile north of the city limits, and horribly shot to death. (Wells-Barnett, *Crusade for Justice*, 50)

For Du Bois, encountering the news of Sam Hose's lynching is figured as an eruption of irrational violence that casts his work and belief in empiricism into absurdity.[6] For Wells-Barnett, close encounter with an act of lynching is the revelation of a crucial object of inquiry. The lynching of Moss, McDowell, and Stewart becomes data point number one in the collection that will define Wells-Barnett's life and career. In response to their lynching, she "began an investigation of every lynching I read about" (*Crusade*, 64). In other words, she undertook the exhaustive collection of data to represent the reality of lynching. To register how her approach marks a significant shift toward data epistemology, it is useful to consider the other ways she might have represented the life—and death—stories of Moss, McDowell, and Stewart. She might have started a campaign based on the innocence and social worthiness of these three entrepreneurs and family men. She might have focused on their widows and orphans. Instead, she adopts the method of a data-driven modernist, undertaking exhaustive collection before forming any narrative representation.

While the other writers of this study would have been exposed to data collection as a method of knowing reality through disciplinary training, it is harder to pinpoint when or where Wells-Barnett would have had similar exposure aside from her wide reading and later writing for print periodicals. How did these tacit exposures lead to an explicit commitment to data collection? I locate the emergence of Wells-Barnett's data-driven modernism at the intersection of her aesthetic, professional, and political goals. For Wells-Barnett, journalism was a politically engaged form of writing

and data collection was an engaged form of journalism. This section examines her early diary and journalistic writings as evidence of literary ambition and aesthetic self-awareness, places her work as a journalist in the historical context of the field and its adoption of empiricist methods, and argues that her turn toward data collection results in the disruption of both lynch narrative and life narrative.

Aspiring Writer to Practicing Journalist

Before Wells-Barnett became a data collector, she became a journalist. And before she became a journalist, she wanted to become a writer. Her extant diaries chart her youthful desire to become a writer of fiction being channeled by aptitude, motivation, and circumstance toward journalism. Following Goldsby in "taking her decision to write for newspapers instead of publishing novels as culturally significant" (48), I argue that we can also see her early reflections on narrative form and data collection as prefiguring her choice of how to intervene in the narrative aesthetics of Black representation. Throughout her early determinations to write fiction and her later practice of journalism, she sought a narrative form that would disrupt the narrative coherence of race and its attendant disenfranchisement of the Black subject from modern U.S. society.

The combination of life writing, journalism, and political action characterizes Wells-Barnett's work from the beginning. In 1883, she had been working as a teacher in a town outside of Memphis for two years, commuting there and back by rail each week. She typically purchased first class tickets, which afforded her an individual seat in the nonsmoking "ladies' car" reserved for first class passengers. Then, one Saturday in 1883, the color line crossed her commute. The conductor that day refused to take her ticket in the ladies' car and told her she must move to the second class, "smoker" car. She refused, and the conductor required the help of two other men to physically remove her from the train. She immediately filed suit against the railroad company for assault and discrimination. When she attempted to ride the train again while the suit was pending, she was again physically barred from entry. As biographer Mia Bay notes, "Wells's first published article chronicled her legal battle with the railroad" (*To Tell the Truth*, 45). She translated her personal experience into legal action and then into writing.

Other early reflections on writing also demonstrate a keen awareness of aesthetics and desire for recognizably literary achievement. Wells-Barnett's

diary entry of December 29, 1885, contains a lengthy commentary on the writing of Augusta Jane Evans in the novel *Vashti*. Her comments demonstrate attention to writing at the level of word choice, as she shares "I especially admire her novels tho' for the beautiful if labored finish of every thing; the description of the least minutiae of person, surroundings, nature" (*Memphis Diary*, 25). She brings the same careful attention to her own writing. In the same entry, she notes "Mr. Fortune sent me 10 copies of the paper with my article entitled 'Woman's Mission.' . . . It reads very well, but a little disconnected" (23). In these early stages, she seems to aspire to mastering traditional forms of narrative. Her diary entry of January 28, 1886, relates her correspondence with Charles Morris, a fellow journalist. She recalls his advice to "write the book I spoke of; to make it classical, representative and standard and I shall make myself loved, honored & respected" (35).

Wells-Barnett's aspiration to write a recognizably "classical" literary narrative to some extent went beyond the page to frame her expectations for her own life. Her diaries and autobiography hint that, as she sees careful style and coherence as essential to literary accomplishment, she sees coherent narrative form as a valid measure of life achievement. Given that she reports having "formed my ideals" based on her reading of "Dickens's stories, Louisa May Alcott's . . . and Charlotte Bronte's books" (*Crusade*, 21), it is not surprising that she sought to apply a progressive, developmental narrative to her own life story during this period. In the January 28, 1886, diary entry, she compares her own life path unfavorably to Morris's in narrative terms, writing, "He is progressing, his path is onward and upward while I—am drifting along with no visible improvement" (*Memphis Diary* 35). Her autobiography will also frame the advent of her anti-lynching activism as a disruption of a hard-won career trajectory, a narrative framework that would have made her life coherent: "While I was thus carrying on the work of my newspaper, happy in the thought that our influence was helpful and that I was doing the work I loved and had proved I could make a living out of it, there came the lynching in Memphis which changed the course of my whole life" (*Crusade*, 47). Her reflections demonstrate that she was aware of narrative's formal pressures both on fiction and on life, and thus thinking critically about the relationship of narrative to reality in ways that presage her data-driven modernism.

The desire to write in a "classical, representative & standard" form proved incommensurate with her commitment to represent the reality of racialized experience. Her diary entry of February 18, 1886, illustrates how

Wells-Barnett's conception of literary form was already being influenced by practices of data collection. She writes: "Mr. B[rown] has told me of an incident of Judge Greer's court that for fear I will not remember it when I write my 'novel' I will jot down now" (*Memphis Diary*, 46). The passage that follows notes in short, descriptive sentences a case involving an African American girl being sentenced to the longest possible workhouse term allowable for the offense of defending herself against a white girl's attack on her way to school. Immediately after this passage, Wells-Barnett records two more incidents in a similar, list-like fashion, both involving attempts at interracial marriage. The passage also contains one of her earliest recorded uses of the word "facts" in connection with seeking racial justice, a term that will become central to her journalistic method. As Miriam Decosta-Willis, editor of the diaries, notes, "The cataloging of incidents is the same process that she uses to make a case against lynching" (45) in her later writing. Wells-Barnett at some level saw these three incidents as data points for collection, brusquely juxtaposed with no additional commentary. She also specifically sees them as related to the "novel" she assumed she would one day write, drawing on actual events to represent racialization as an empirical absurdity with devastating consequences for individuals and families on the Black side of the color line.

This figuration of the novel as a medium for recasting the reality of racialized life provides context for why Wells-Barnett's turn toward non-fiction prose published in periodical outlets is consistent with her view of literary vocation. While she wanted to write fiction that would be seen as aesthetically accomplished, she also wanted her writing to be meaningful for African American communities. Soon after the railroad lawsuit, she was appointed to teach in a Memphis school, which allowed her more time to develop social connections in the city. It is during this period that she begins to attend a teachers' weekly lyceum, which included a reading of a newsletter produced specifically for the group called the *Evening Star*, "with its news items, literary notes, criticisms of previous offerings on the program, a 'They Say' column of pleasant personalities—and always some choice poetry" (*Crusade*, 23). When the editor of this newsletter leaves to take a job elsewhere, he asks Wells-Barnett to assume the role. She later writes, "I had no training except what the work on the *Evening Star* had given me" (23). Her work in this role hones her desire to write into the beginnings of journalistic practice.

Wells-Barnett's work as the editor of the lyceum's *Evening Star* was successful in sustaining and growing attendance at its events, and it also

brought her to the attention of the wider African American press. One of the new lyceum attendees was the publisher of a Memphis weekly, and he invited her to contribute in the form of "weekly letters" (*Crusade*, 23). Her description of how she approaches the writing of these letters demonstrates again that her journalistic practice is driven by communally-focused fact gathering. She sees herself as possessing "no literary gifts or graces" but instead finds her qualification in having "observed and thought much about conditions as I had seen them in the country schools and churches" (23). She elects to write "in a plain, common-sense way on the things which concerned our people" (24). Her educational mission takes the focus off literary style and puts it on the clear transmission of observation for the purpose of community building and education.

Journalism, for her, arises from a practice of observation and thought grounded in a commitment to education in the context of African American community. From childhood, Wells-Barnett sees the newspaper as a communal tool for self-education. She writes in her autobiography, "My earliest recollections are of reading the newspaper to my father and an admiring group of his friends" (*Crusade*, 9). Reaffirming her commitment to journalism as communal education, she writes in her first pamphlet, "The people must know before they can act, and there is no educator to compare with the press" (*Southern Horrors*, 23). Her early articulation of journalism to education prefigures her data activism in its recognition that information alone does not change human behavior; the forms and contexts of its presentation determine its efficacy.

Wells-Barnett's writing for African American periodicals in the late 1880s and early 1890s continues a negotiation between traditional narrative forms and the representation of African American life. The essayistic fiction short "A Story of 1900," published in the *Fisk Herald* in 1886, provides an example of a more typically narrative work. In contrast to her jotted down incidents, this story exemplifies the playing out of a narrative of uplift. The protagonist is an African American teacher who decides to supplement academic with moral instruction and "earnestly exhorted [students] to cultivate honest, moral habits, to lay a foundation for a noble character that would convince the world that worth and not color made the man" (*Light of Truth*, 18). Through this teacher's efforts, small but meaningful change is made in the lives of her students and, by extension, the social position of African Americans. What characterizes Wells-Barnett's later works is not a change of political direction, then, so much as a change in the narrative form in which it is represented. The narrative projection

enacted by this short speculative fiction is one driven by individual agency and focused on racial uplift, and it is exactly the kind of developmental narrative that white violence will prove untenable as strategy or aspiration.

Journalism as Empiricist Discipline

In 1889, Wells-Barnett bought a one-third interest in the Memphis weekly *Free Speech and Headlight*, at the invitation of two co-owners, the Reverend F. Nightingale, a popular African American minister, and J. L. Fleming, an African American journalist. Nightingale served as the sales manager, Fleming served as the business manager, and Wells-Barnett was primary editor. She loses her job as a teacher after publishing a signed article critical not only of the conditions of schools for African American children, but also of suspected corruption in the teacher appointment process, a provocative charge that insinuated an interracial affair between a school board member and a teacher. With no other employment, she decides to "strike out and see if I could make a living from the paper" (*Crusade*, 39). Using a rail pass granted to her as a newspaper agent (i.e., traveling salesperson), she travels from town to town throughout Mississippi, Arkansas, and Tennessee. She seeks out meetings of community groups to solicit subscribers and finds "in nine months time I had an income nearly as large as I had received teaching and felt sure that I had found my vocation" (39). The extent of physical and emotional labor required to build the subscription base to a point that allowed her to support herself illuminates the relatively precarious position of the African American journalist. It also demonstrates that, from the beginning of her career, she saw financial resources, news writing, and physical mobility as interconnected necessities for disseminating information for and about African American life.

At the beginning of 1892, Wells-Barnett is a full time, self-supporting, nineteenth-century journalist. Historian of nineteenth-century journalism Hazel Dicken-Garcia suggests that the word "journalist" in this period be used to refer to "all those involved in gathering, preparing, and presenting newspaper content" (8). This description captures Wells-Barnett's varied and intertwined roles throughout her writing career. She was undoubtedly a journalist, but what it meant to be a journalist was more defined by practice than credential. Even compared to the relatively young fields of sociology, psychology, and scientific history, journalism as a standardized discipline was in its nascency. The first university degree program was not launched until 1893, and the first widely published textbook was not

released until 1894.[7] Wells-Barnett had no formal training, but then again, neither did most working journalists. To say that she was a journalist does not imply that she ascribed to an explicit set of principles taught in a formal program, but rather points to the focus of her writing, the source of her livelihood, and her commitment to newspapers and print periodicals as vehicles for communal education. In this commitment, she was not alone. As Jean Marie Lutes notes in her survey of periodical studies in nineteenth- and early twentieth-century literature, "Between 1895 and 1915, more African American newspapers—some twelve hundred—were launched than in any other era of American history" (337). While formal training was not widely available, African American journalists, as documented by I. Garland Penn's 1891 compendium, *The Afro-American Press and Its Editors*, formed a flourishing network of writers, editors, and publications. The Afro-American Press Association held an annual convention, which Wells-Barnett attended, and she also served a term as secretary to the Association.

While journalistic methods as we understand them today had not yet been fully codified as Wells-Barnett began her work, journalistic practice was being influenced by some of the same epistemological pressures toward empiricism as the other disciplines represented in this study. Michael Schudson has argued, "Reporters in the 1890s saw themselves, in part, as scientists uncovering the economic and political facts of industrial life" (71). As in other disciplines, in journalism a more empiricist approach gave rise to an emphasis on data collection as method and form. The figure of the newspaper writer as a gatherer and transmitter emerged as a foil to the charismatic and wise ace reporter, and the "word 'observe' was all important" (Schudson, 73). Schudson relates this shift to the growing cultural predominance of an "idea of science as a process of data collecting as open to all" (75) throughout the nineteenth century. News media began to be equated with exhaustive data collection. Ralph Julian, a writer for the *New York Sun*, describes in his 1903 autobiography, *The Making of a Journalist*, "News is now gathered systematically by men stationed at all the outlets of it, like guards at the gates of a walled city, by whom nothing can pass in or out unnoticed" (10–11). His description, emphasizing systematic and exhaustive collection of news, analogically aligns the late nineteenth-century ethos of news reporting with sensors-everywhere data collection.

The turn toward data collection is also evident in the emergence of objectivity as a keyword of journalistic practice. Schudson writes, "'Objectivity' is at once a moral ideal, a set of reporting and editing practices, and an observable pattern of news writing'" (149). The 1890s mark the codifi-

cation of the "inverted pyramid" (Schudson, 149) as the standard form for writing news.[8] The inverted pyramid form puts basic referential details in the first paragraph, often only a sentence long. The longer, more detailed paragraphs that may follow are subordinate to this seemingly straightforward recitation of primary facts. Events and people are taken out of historical context as the news is threshed through a template of "who/what, how, when, where?," as Theodore Dreiser recalls having it presented to him in 1892 (52). This fact-forward form was a departure from prior practice. As David Mindich notes, "Until the end of the nineteenth century the telling of news nearly always took the form used in classical storytelling: first, an announcement of the utility or importance of the story . . . leaving the surprise, or what Aristotle called 'Reversal of the Situation,' for last" (64). The inverted pyramid exchanges temporal unfolding framed with moralistic interpretation for a set of summary facts. Mindich underscores that this formal change to "a system that appears to strip a story of everything but the 'facts'" has epistemological consequences, "chang[ing] the way we process news" (65). Presenting human reality through discrete and concrete points of information, it facilitates faster, more superficial reading and acceptance of reported fact as transparent truth. Put another way, formally and epistemologically, the inverted pyramid form turns news into a kind of data collection, and it allows the appearance of objectivity to elide the still-present human interventions of selecting the scope of observation and language of description.

The advent of the telegraph and wire service reporting also fomented the trend toward prose that conformed to an objective mode. The telegraph allowed for events reported in one location to be transmitted quickly enough to be printed in newspapers everywhere, omitting any context or analysis that would be deemed irrelevant to a national audience. Stripped of local detail, distinct events were represented using templated patterns, unfolding in roughly equivalent ways across time and space.[9] These objectivizing tendencies form a background against which Wells-Barnett's turn to data collection becomes legible as a critique of empiricism as performative, a critique executed by employing empiricist method more rigorously and therefore more radically.

In the case of the lynching of African Americans, the perception of newspapers as bearers of inarguable, objective social reality worked in a destructive tandem with white ownership of media technologies. Wells-Barnett ruefully observes, "The press agents, telegraph wires, and newspapers belong to the Southern whites—the colored man has no facilities

if he has the courage to tell his side of the story" (*Light of Truth*, "Bishop Tanner"). Wells-Barnett grasps the material conditions underlying the dissemination of data and therefore determining the potential for knowledge to be created from it. This insight proves crucial to her ability to forge a professional and political path when her life is thrown into disarray by white violence.

The First Data Point

Through the investigation of "every lynching I read about" (*Crusade*, 64) launched after the lynching of Moss, McDowell, and Stewart, Wells-Barnett "stumbled on the amazing record" (64–65) that in every reported case over the prior three months the charge of rape had been made only after the revelation of a consensual interracial relationship. Here, as throughout her writing, the "record" that she refers to is not a single document but the result of her intentional aggregation of dispersed data points. The surprise implied by having "stumbled on it," then, is the surprise of the narrative that has emerged. Voicing this surprise, Wells-Barnett embodies the epistemological promise of data at its most idealistic: when collection precedes explanation, it can unsettle preconceptions and offer a better way to understand reality.

Wells-Barnett credits this first foray into data collection as having spurred her to write the editorial that leads to her expulsion from home and business, recalling, "It was with these and other stories in mind in that last week in May 1892 that I wrote the following editorial" (*Crusade*, 65) Reproduced in full both in her autobiography and in *Southern Horrors*, the infamous editorial marks the clear emergence of Wells-Barnett's data aesthetic. It opens with a single, long sentence putting forth collected facts, marking a departure from the more traditional rhetoric that opened Wells-Barnett's extant earlier newspaper writings. The opening clause dives straight into delivering data without introduction or framing: "Eight negroes lynched since the last issue of the 'Free Speech'" (*Southern Horrors*, 4). The rest of the first sentence lists off numbers, places, and brief circumstantial detail, an early experimentation with bringing data directly into the text. The second paragraph works to dismiss the stated motive for the lynchings as "alarm about raping white women" (4). In light of the collected data, this motive is an "old thread bare lie." With a laconic prediction that, when this lie is revealed, "a conclusion will then be reached" that is "very damaging to the moral reputation of [white] women" (4), the

second paragraph telegraphs rather than declares its thesis: the charge of rape is a cover for consensual interracial relationships.

Upon publication, the allusive mode of accusation proves no less incendiary than bald statement, and the violent destruction of her newspaper office and equipment is followed by threats on her life if she would return to Memphis. These scant two paragraphs mark her formal turn toward data collection, forcing her out of the newspaper business she has painstakingly built up and ending her promotion of individual uplift as the solution to racism. Her encounter with the data of lynching disrupts the framing narratives of life and social position that she had heretofore accepted.

These narrative shifts in her own life are a direct consequence of her commitment to using data to disrupt the white narrative of lynching. The lynch narrative casts the Black male as "a rapist, bestial and savage," the white male as "chivalric" hero, and the white female as "passive, virtuous, and terrified" (Piepmeier, 131).[10] Although the lynch narrative was reiterated frequently across numerous media, it also asserted that lynching was fundamentally unpredictable and rare. As Wells-Barnett notes, lynch narrative presented lynching as "irregular and contrary to law and order," provoked by "unreasoning anger over the terrible crime of rape," and "justified" as an act of communal self-defense (*Crusade*, 64), insinuating that lynching was such an exceptional response to such an exceptional crime that no intervention could avail. The lynch narrative was so entrenched that according to Wells-Barnett, after the publication of her initial article in the *New York Age*, Frederick Douglass himself "came from his home in Washington to tell me what a revelation of existing conditions this article had been to him. He had been troubled by the increasing number of lynchings, and had begun to believe it true that there was increasing lasciviousness on the part of Negroes" (*Crusade*, 72). Joanne Braxton notes there is no direct evidence verifying this exchange and questions whether Douglass ever believed any change in African American character contributed to lynching. Even as a fabrication, though, it is telling that Wells-Barnett felt it rhetorically necessary to have this assessment come from the figure of Douglass. Douglass's credulity serves as proxy for the narrative's degree of acceptance as fact.

At a formal level, the coherence of white lynch narrative hinges on causality, the assertion that one thing happens, which causes one other thing to happen. The case of Moss, McDowell, and Stewart disproves every causal connection so frequently asserted as universal fact. As Wells-Barnett notes, they "had been lynched in Memphis, one of the leading cities of the South,

in which no lynching had taken place before, with just as much brutality as other victims of the mob; and they had committed no crime against white women" (*Crusade*, 64). This lynching is not a provincial attempt at justice in the face of inadequate law enforcement, it is a coordinated process carried out in full view of a city and its leaders. Their victims' crime is not even alleged to have been sexual. Most fundamentally, their crime is "acquiring wealth and property" (64), triggering an escalating campaign of harassment by the white owner of a grocery store that had held the monopoly in the neighborhood before the three murdered men opened theirs. She credits the lynching of Moss, McDowell, and Stewart with "open[ing] my eyes to what lynching really was" (64): a tactic of economic terrorism. Her close examination of this instance of lynching throws the accepted narrative out of line.

In the series of publications following her exile from Memphis, she iteratively expands the scope of her data collection. Following the editorial and her exile, a "seven-column article on the front page" (*Crusade*, 69) of the *New York Age* expands the scope of the collection considerably from the eight represented in the editorial to give "names, dates, and places of many lynchings for alleged rape" (69). *Southern Horrors*, her first, crowd-funded pamphlet marks the third iteration. By the time she has completed the collecting work that will constitute the basis of *Red Record*, she will have established that out of hundreds of lynching accounts collected "not one-third of the victims lynched were charged with rape, and further that the charges made embraced a range of offenses from murders to misdemeanors" (*Red Record*, 20). The white lynch narrative does not even superficially hold on an empirical level for a supermajority of the cases.

Despite losing her home and business for it, she commits to data collection as a primary mode of activism. Through this data, Wells-Barnett constructs an alternative narrative grounded in an analysis of political and economic power. As Piepmeyer argues, Wells-Barnett's anti-lynching strategy is fundamentally an intervention in narrative form: "Wells recognized that the familiar and often-repeated rhetoric surrounding lynching was a nationalizing narrative, a narrative constitutive of American personhood, and she intervened in this narrative in order to question its inevitability and evacuate its meaning" (130). The narrative framework is crucial to lynching's social acceptance. Lisa Arellano observes, "lynching practices have a unique and dependent relationship to and on lynching narratives" (121) and call upon "a recurring set of narrative conventions used to justify and legitimate their practices" (16). Without the epistemological framework

provided by such legitimating narratives, extralegal execution is simply murder. Arellano continues, "Wells understood that dismantling the practice of lynching would require dismantling the narrative justifications used to constitute and legitimate these violent acts" (121). As Wells-Barnett employs it, data is not only epistemologically central but also formally crucial to dismantling the white lynch narrative.

The Data-Driven Lynch Narrative

The imperative "to reproduce a record" (*Red Record*, 14) drives both method and form in Wells-Barnett's anti-lynching writings. Her first two pamphlets, *Southern Horrors* and *Red Record*, embody her methodological and narrative innovations, demonstrating that the data aesthetic is inextricable from her anti-lynching writings. Her subject position as a data collector and her method of data collection are incipient in *Southern Horrors* and more fully realized in *Red Record*. Comparing the two texts illuminates her development of and growing commitment to this method. In the discussions that follow, I focus on these pamphlets' explication of method, by which I mean their discussion of the source, scope, and rationale for data collection, and their form, by which I mean how the collected data is used in the representation of the reality of lynching.

Southern Horrors

In *Southern Horrors*, Wells-Barnett links her exile to her determination to collect and publish data: "Since my business has been destroyed and I am an exile from home because of that editorial, the issue has been forced, and as the writer of it I feel that the race and the public generally should have a statement of the facts as they exist" (5). Formulating her project as "a statement of the facts as they exist" begins to align her writing with a practice of collection and her position with that of a data collector, recording preexisting facts rather than asserting authorial control. In her later autobiography, Wells-Barnett further connects her exile with the commitment to exhaustive data collection. She writes, "having lost my paper, had a price put on my life, and made an exile from home for hinting at the truth, I felt I owed it to myself and to my race to tell the whole truth now that I was where I could do so freely" (*Crusade*, 69). Instead of citing a particular reading, conversation, or methodological tenet of journalistic practice as her motivation for this project, she presents her turn to data collection as

a radicalization born of experience. She rejects "hinting at the truth" in favor of "tell[ing] the whole truth" after alienation from the stabilities of career and home. Characterizing her new project as "tell[ing] the whole truth" suggests that she consciously sought a form of witness that was not limited to her own experience or details of one or two exemplary events. The desire to discover and present this "whole truth" taps into the broader empiricist equation of more data with more knowledge and therefore more power. In the hands of a Black woman, however, pursuing more knowledge and more power is a radical act.

Being able to "tell the whole truth" not only requires collecting data, it also requires a representational form that will go beyond the selective contours of personal testimony or argumentative essay and a format in which it can be circulated. With *Southern Horrors: Lynch Law in All Its Phases*, Wells-Barnett shifts from newspaper column to pamphlet, a form that she will go on to employ often throughout her writing. The pamphlet as format is integral to her ability to circulate her data collections and develop her own data aesthetic. In material terms, a pamphlet is simply a set of stitched or glued pages, commonly printed in a limited run at the behest (and usually the expense) of the author. Because they are simply printed paper, pamphlets are comparable to newspapers in cost and speed of production, but because they are bound and typically devoted entirely to one essay or subject, they also function to "preserve words and deeds in a discrete, individual, and long-lived object" (Rael, Newman, and Lapsansky, 2). Pamphlets hold a special role in U.S. print culture as a primary means of disseminating protest writing, with Thomas Paine's *Common Sense* being perhaps the most famous example, but there was also a robust tradition of African American pamphleteering.[11]

Self-published and self-circulated, the pamphlet offers unique affordances for Wells-Barnett's data narratives. Primary among these affordances was the pamphlet's economic autonomy. As long as she could fund its printing, she would not have to work within word limits, pitch her writing toward a publication's core audience in order to boost sales, or negotiate over content with editors nervous about the potential for violent backlash. More fundamentally, the pamphlet's economic autonomy allows Wells-Barnett's representation of lynching to stand as a factual record rather than a sensationalist product. As Goldsby notes, "By producing [her work] as a pamphlet instead of the book, news feature, or magazine article it could have been, Wells refused to commodify lynching into a topic for this system of literary trade" ("1895"). Reproducing the record as a

pamphlet also makes important formal interventions on the temporality of newspaper publication. Collecting data from news stories originally dispersed in time and space disrupts the perceived singularity of events, the perceived exceptionality of lynching victims, and ultimately the transparent factuality of news writing. The aggregation and parallelization of news reports of lynching disrupts the perceived exceptionality of the individual event, which is a vital element to the lynch narrative.

Wells-Barnett's first pamphlet, *Southern Horrors* is published in late 1892, using funds raised by African American community leaders Victoria Earle Matthews and Maritcha Lyons.[12] It includes a preface by Frederick Douglass. In their prefatory materials, both Wells-Barnett and Douglass work to recast the African American witness as data collector. They emphasize Wells-Barnett's narratorial position as one who gathers and presents. Wells-Barnett describes the work as "a contribution to the truth, an array of facts" (1). "Array" connotes collection, an ordered multiplicity of coequal points brought together to serve some purpose. While the data collector as active arranger may seem to conflict with the figure of the data collective as receptive observer as I have discussed in prior chapters, collecting data does not mean one refrains from ordering it. Data collections, through the sorting of different metadata fields, are constantly ordered and reordered to pursue a line of inquiry.[13] No matter what acts of ordering follow, data collectors maintain primary commitment to collection. Douglass's prefatory description of Wells-Barnett's work in *Southern Horrors* also acknowledges her data collection as a distinctive mode of authorship. He observes, "You [Wells] give us what you know and testify from actual knowledge. You have dealt with the facts with cool, painstaking fidelity and left those naked and uncontradicted facts to speak for themselves" (3). Rather than emphasizing her style or her story, he emphasizes her role as a conduit for the circulation of testimony. He also notes that this testimony takes a particular form: the putting forth of "naked and uncontradicted facts" (3). Douglass's turn to the commonplace of facts "speak[ing] for themselves" can be seen as a savvy deployment of data rhetoric, legitimizing Wells-Barnett's testimony by marking it as an objective, impersonal mode of authorship not typically accorded to women of color. Declaring that "there has been no word equal to it in convincing power" (3), Douglass tacitly endorses data collection as a liberatory practice in Wells-Barnett's hands.

Describing her "unvarnished account" as "an array of facts," Wells-Barnett shifts the formal terms of autobiographical text and the subjectivity traditionally accorded to African American autobiographical narrators.

Claiming the position of the data collector is a crucial intervention in the constraints placed upon African American narration to that point, most visibly evidenced in slave narratives. As scholars have pointed out, the slave narrative, typically commissioned and published by white abolitionists, is bound to a performance of authenticity in exchange for the hope of political efficacy. Acceptable metrics of authenticity shift over time,[14] but all require the discursive "carting out of black bodies onto the stage to bear witness to their authentic experiences of slavery" (McBride, 4). Thus, the possibility of a Black person's testimony was premised on the (re)sacrifice of the body and assent to be seen primarily as a body, an object upon which others would gaze for their own edification. By claiming that her collecting work forms a "true, unvarnished account" (*Southern Horrors*, 1), Wells-Barnett articulates her narratorial position as that of the data collector, downplaying her own intervention and holding herself up as an impartial conduit. This links her method to the tradition of the autobiographical slave narrative, constructed, received, and valued as evidence against the practice of enslavement. Applying the value of a "true, unvarnished account" to a data collection rather than a more typical autobiographical account extends, rather than sacrifices, her epistemic authority by allowing her to marshal data beyond her personal experience. By decentering her own experience in this way, she claims the role of the data collector, distancing herself from the stance of the victim. Yet, there is no question that her own experience is in the data set of white violence against African Americans, so the role of the data collector is also repositioned as a grassroots observer. *Southern Horrors* is a re-formation of the autobiographical as one data source in a text that oscillates between point and collection, self and collectivity.

The first two chapters of *Southern Horrors* employ the aesthetics of collection to challenge the empirical basis of the white lynch narrative. Chapter one, "The Offense," presents an autobiographical account of the events leading up to her exile from Memphis in a collecting rather than narrative mode. It reproduces in full both her editorial and the editorial published in response by the *Daily Commercial*, reprinted on the same day by the *Evening Scimitar*. These reproductions are not integrated into the prose or edited for flow. This sometimes leads to a sense of repetitiveness, as in pages 4–5 of *Southern Horrors* when the *Daily Commercial*'s response itself reproduces half of Wells-Barnett's original editorial, which has already been reproduced in full in the preceding paragraph. The textual effect is to give the reader a sense of wading through direct evidence, evincing a commitment to collection as a form.

The second chapter takes this commitment to collection even further, predominantly employing a list form and expanding the scope of collection beyond the bounds of personal or local experience. Most paragraphs reproduce reports of alleged rape of a white woman by a Black man, with no transitional, introductory sentence or concluding analysis. Wells-Barnett begins the collection with a paradigmatic incident in which the consensual nature of the interracial relationship eventually recast as rape is exceptionally well documented. She then proceeds to incidents in Memphis, then in the wider South. Even though she makes no pretense of this collection being exhaustive, admitting "hundreds of such cases might be cited" (*Southern Horrors*, 11) while clearly not having cited all of them, the formal emphasis on accumulation and presentation of data points is crucial to the epistemological effect. Systematically expanding geographical scope reinforces the argument that lynching is not a local aberration but a national system, and the accumulation of data points makes it clear that lynching is not the rare, exceptional event that white lynch narrative portrays it to be.

While the remaining chapters of *Southern Horrors* employ more traditional forms of prose argumentation, each focuses on how the data assembled in the first two chapters refutes the justifying narratives promulgated in the white press. Chapter three confronts the rape charge as cover for lawlessness and white supremacy, forcefully stating that the white Southern excuse for lynching "falls to the ground in the light of the foregoing" (*Southern Horrors*, 13) with "the fact that only *one-third* of the 728 victims to mobs have been *charged* with rape, to say nothing of those of that one-third who were innocent of the charge" (14, emphasis in original). Chapter four, notably, focuses on the role of white news media in constructing and circulating the white lynch narrative, reproducing two apologies for lynching published by Memphis newspapers after the lynching of Moss, McDowell, and Stewart. One of these stands staunchly by the claim that lynchings are committed after the rape of white women, bearing no relation to the reality of lynching that her data has revealed. The other argues that white people are within their rights to murder African Americans for "lack of manners" and "outrageous conduct toward the whites on the streets" (17), not only a blatant statement of white supremacy but also a mockery of rule by law. Neither piece acknowledges the recent lynching in their own city, in which sexual assault was never alleged. She further connects these evidence-free apologies with the coverage of the lynching of Moss, McDowell, and Stewart that portrayed them as "'toughs'" and "'Negro desperadoes who kept a low dive'" (19), also without evidence. In calling attention to these pieces,

she highlights the vicious conjunction of the newspaper's growing reputation as a source of objective information and the material power, concentrated in white hands, to print and circulate false information. Data collection as method and form will constitute a radical assault on both fronts.

Wells-Barnett's closing call to action recognizes the role that information can play in social change. She argues, "The strong arm of the law must be brought to bear upon lynchers in severe punishment, but this cannot and will not be done unless a healthy public sentiment demands and sustains such action" (*Southern Horrors*, 21). She outlines a two-pronged strategy of militant self-defense and the expansion of the African American press. These directives might seem somewhat discordant, but they go hand in hand with an interpretation of lynching as lawlessness that will only be checked by a campaign of persuasion. The "Winchester rifle should have a place of honor in every black home" to provide "that protection which the law refuses to give" (23). Self-defense is a vital but temporary measure until a campaign of data activism is realized, for "the people must know before they can act" (23) and the material resources for teaching them do not yet exist. The data assembled in *Southern Horrors* has "substantiated . . . that the press contains unreliable and doctored reports of lynchings," and so Wells-Barnett urges that "one of the most important things for the race to do is to get these facts before the public" (23). This will not happen in the white press, but African American newspapers currently "lack means to employ agents and detectives to get at the facts" (23). She calls for the "race" to "rally a mighty host in support of their journals, and thus enable them to do much in the way of investigation" (23). Her insistence on the importance of the African American press connects material resources, knowledge creation, and political change as equally necessary to end lynching. Although these latter chapters do not forward data as explicitly as the first, they lay the methodological and aesthetic groundwork for her next major publication, the epitome of Wells-Barnett's data aesthetic.

Red Record

By early 1893, Wells-Barnett has formulated data collection as a strategy for radical action against lynching. She records the following response to learning of a lynching in Paris, Texas while in the early days of the first speaking tour following the publication of *Southern Horrors*: "I had said in newspaper articles and public speeches that we should be in a position to investigate every lynching and get the facts for ourselves. If there was

no chance for a fair trial in these cases, we should have the facts to use in an appeal to public opinion" (*Crusade*, 84). Wells-Barnett's strategy moves from local fact finding, gathering information about particular events in the mode of an investigative reporter, to exhaustive data collection, aggregating facts into larger data sets that aim to assemble as close to an exhaustive representation of "every lynching" as possible.

Wells-Barnett's strategy is a significant reformulation of the data collection tradition in the struggle for African American liberation not only in its aspiration to exhaustivity but also in its centering of African American epistemological agency. As Jeannine DeLombard has argued, the presentation of factual accounts of enslavement was a crucial part of abolition's legal strategy. The collection of facts aimed to provide an unassailable preponderance of corroborating evidence for the evils of slavery. The antebellum data collection *American Slavery As It Is: Testimony of a Thousand Witnesses* was "the most widely read antislavery publication until the novel *Uncle Tom's Cabin* was published serially in 1851" (Garvey, 89–90). As Ellen Gruber Garvey has demonstrated, this text, collaboratively produced by Angelina Grimke Weld, Theodore Weld, and Sarah Grimke, "was an important gesture in the move away from theology or exhortation, and toward reliance on documented, factual information to change the minds of white Northerners" (90). The words "testimony" and "witnesses" in the title speak to the imagined context for these facts—the court of law. While this context creates an opening for African American subjects to enter this imagined courtroom as witnesses (a role the law denied them at the time), it also constrains that subject to existing as a source of information rather than an interpreter or architect of argument. Positing the African American community, which she refers to as "we," as data collectors, Wells-Barnett seizes the role of guiding intelligence from the exclusive hold of the white subject. The data collected by African Americans is intended to form an "appeal to public opinion," establishing an alternate means of adjudication in the face of an extralegal process that has specifically withheld such from its victims.

Wells-Barnett's second pamphlet, *A Red Record: Tabulated Statistics and Alleged Causes of Lynchings in the United States, 1892–1893–1894*, epitomizes her project of unsettling received narrative through exhaustive collection of data. The formal shifts induced by her deepening commitment to data collection are in evidence from the opening pages. It is nearly four times as long as the first pamphlet, a physical manifestation of the aspiration toward exhaustivity. While *Southern Horrors* opens with Wells-Barnett's own expe-

rience, *Red Record* withholds use of the first person until the penultimate paragraph of the first chapter, and even then, it is a fleeting use of the first-person plural. While *Southern Horrors* began *in medias res*, *Red Record* begins with a methodological statement. The resulting text is an iterative, multi-formal set of perspectives on the data collection Wells-Barnett has assembled. Like *Souls of Black Folk*, the chapters of *Red Record* are formally varied: sociological essay, barebones list, reproduction of news articles, analytical prose, and a call to action. Adopting the narratorial stance of a data collector, Wells-Barnett's data aesthetic in *Red Record* combines exhaustivity of data collection with a self-conscious emphasis on constructing a multiplicity of interpretive views.

Red Record is prefaced with a reproduction of Douglass's letter of introduction for *Southern Horrors*. The letter's seamless relevance in a new context highlights the continuity of Wells-Barnett's emphasis on data collection as her primary intervention. Although there is clearly no way Douglass could have known of this future work when he wrote it, the letter serves just as well to introduce this second project. Whereas giving us "what you know" from "actual knowledge" (3) in *Southern Horrors* referred to her relation of the inciting incident of her exile, in preface to *Red Record*, "actual knowledge" refers just as readily to her collection of news reports. And, even more so than in *Southern Horrors*'s relatively conventional prose, in *Red Record* Wells-Barnett has "left those naked and uncontradicted facts to speak for themselves" (3) by prominently employing the list form.

The methodological nature of *Red Record*'s opening chapter further highlights Wells-Barnett's explicit commitment to data collection. She addresses her work to the "student of American sociology" (*Red Record*, 7), signaling that this investigation is an empiricist endeavor and placing it in a specifically U.S. context. Goldsby has noted, "It is not surprising that Wells should have been attuned to the newfound importance of empiricism to national politics given that she wrote and published *Red Record* in Chicago, the city that was to American sociology . . . the intellectual hub of the field's development at the turn of the nineteenth century" (82). This form of address serves as a strategic employment of data rhetoric, aligning her perspective with the presumed authority of empiricist science but offering a radically different conclusion. Wells-Barnett's addition of the adjective "American" underlines her equation of lynch narrative with national narrative, and the association strikes at an idealized conception of a nation ruled by law and devoted to justice.

Wells-Barnett's first intervention as a collector of lynching data is to

name "a system of anarchy and outlawry" (*Red Record*, 7) as her object of inquiry. With this focus, she flips the purview of study from the lynched to the lynchers. Although the data she collects is, mostly, white newspaper accounts of lynchings and therefore focused primarily on the victims, her framing highlights the negative space around these data points as the true area of interest. Unmentioned or unnamed, a white perpetrator or group of perpetrators is implied by every instance of the extralegal, unpunished act of lynching. While we, as twenty-first century readers, might assume that the study of lynching implies a condemnation of lynchers, this would not always have been the case for Wells-Barnett's readers. Most white commentators, if they did not openly condone lynching, considered it unpreventable, tacitly accepting sexual assault against white women as a singularly provocative crime and lynching as its unfortunate but under-standable result. Wells-Barnett cites the writing of Bishop Atticus Haygood, a white Southerner known as a relative advocate for African Americans, as an example of this apologist discourse. In an 1893 article for the *Forum*, he writes, "Unless assaults by Negroes on white women and little girls come to an end, there will most probably be still further displays of vengeance that will shock the world" (Haygood, 168). By labeling her object of a study a "*system* of anarchy and outlawry" (emphasis added), she suggests that lynching is actually not an exceptional event but an antici-pated one, integral to a broader structure through which the rule of law is consistently flouted to the economic and political benefit of white people. Having subtitled *Red Record* as "respectfully submitted to the Nineteenth Century civilization in 'the Land of the Free and the Home of the Brave'" (*Red Record*, 3), she seeks to draw a stark contrast between the system of lynching and the claim to civilization. The inversion of focus from lynched to lyncher functions as a critique of data epistemology by calling attention to how the naming of a scope of inquiry shapes the knowledge that will result.

The methodological statement that closes *Red Record*'s first chapter marks Wells-Barnett's full claiming of the positionality of the Black woman data collector. She proposes, "The purpose of the pages which follow shall be to give the record which has been made, not by colored men, but that which is the result of compilations of reports made by white men, of reports sent over the civilized world by white men in the South" (*Red Record*, 15). She explains that she works primarily from the Chicago Tribune's annual "compilation of statistics touching upon lynching" (15). To appear in this record, the lynching must first be reported by the Southern white press and

then vouched for by the Northern white press. Wells-Barnett is collecting data on lynching, but she is also collecting instances of journalistic representation of lynching. Her re-presentation of news articles as data points marks news stories as a particular form of data with particular limits, refusing them the position of bedrock fact and calling attention to their status as representational media.

Rather than conducting original research, her data collection intentionally reproduces "the record which has been made" in the white press. Downplaying her own agency in building this data collection is a strategic move in at least two regards. By using the white press as the data source, she heads off charges of exaggeration. Or, if a white reader were to quibble with the report of the white press, they would at least have to concede that white observers were not automatically objective and infallible. By positioning herself as a reproducer of others' work, she also slots herself into a more acceptably feminine role. Still, even with these checks on her own agency, she has claimed a space for the Black woman investigator of the white world, collecting and analyzing "news gathered by white correspondents, compiled by white press bureaus and disseminated among white people" (*Red Record*, 71). If her method distances her from the ideal figure of the data collector, it also stakes out a critical position on that figure by foregrounding its embodiment and the effect of this embodiment on the concept of exhaustivity in data collection.

Wells-Barnett's method of data collection aspires to exhaustive representation (the "investigation of every lynching I read about" [*Crusade* 64]), but the scope in which she is able to collect exhaustively is constrained by her lack of physical proximity to the events and the inevitable challenge to her epistemological authority. On a practical level, Wells-Barnett had neither the financial resources nor the physical ability to conduct original data collection efforts, because she would have been putting her life in danger to conduct the kind of in-person collection that enabled Du Bois's method. At the same time, even if more exhaustive data collection were a feasible undertaking, it would not necessarily have been advantageous, because expanding upon the white-sanctioned record would open her to charges of exaggeration. Thus, one of the underlying data practices that Wells-Barnett must reproduce with a difference is the definition of exhaustivity. To accept the white press's coverage of lynching as the full scope of her data collection is to accept a collection that is far from truly exhaustive. At the outset of *Red Record*, she demonstrates that she is aware that this data source is incomplete, plainly declaring, "Not all or nearly

all of the murders done by white men, during the past thirty years in the South, have come to light" (8). As well, there is virtually no written record kept of white male assault on Black women, rendering the comparison of white and Black male rates of sexual assault impossible. Exhaustivity, for her, explicitly means examining not everything there is but everything that is accessible to her. While her data collection methods are inherently not exhaustive, she remains a data-driven modernist because she engages critically with the ideal of exhaustivity. She bluntly declares that no objectively exhaustive data collection is possible. At the same time, she collects and considers what is available exhaustively. Her most fundamental intervention in the lynch narrative is based on her commitment to looking at all of the available data.

By proceeding with her investigation in this seemingly compromised way, she reveals the socially and politically imposed limits on her data collection and puts a check on empiricist fantasies of exhaustive representation. She demonstrates the embodied nature and social context of knowledge and thus challenges the Enlightenment assumption that the world can be objectively and exhaustively represented through data. Or, at least, the world cannot be fully known until equality obtains for all human subjects as collectors of data and producers of knowledge. In effect, the data that she must work with—newspaper reports of lynchings supposedly provoked by Black crime—is a data set of Black deficiency, produced by the unacknowledged project of white supremacy. If all lives were equally important, meaning, if Black lives mattered, this would instead be seen as a data set of white deficiency, and that is what Wells-Barnett repurposes it to be. If the Enlightenment-drenched "Civilization" to whom she presents this data cannot accept it as such, they must acknowledge that Black life matters less and admit racial hierarchy is at the core of the Enlightenment knowledge project. Wells-Barnett's complicated relationship to exhaustivity parallels the Enlightenment's complicity in white supremacy.

Viewed exhaustively, the data she collects shows that the majority of lynching victims are not even charged with the crime held to be singularly responsible for provoking lynching. Wells-Barnett devotes the bulk of *Red Record* to immersing the reader in that data. Chapter two presents a "computation of lynching statistics . . . referring only to colored victims of Lynch Law during the year 1893" (*Red Record*, 16). A comparison of the chapter and its source (published in the January 1, 1894, issue of the *Chicago Tribune*) shows that Wells-Barnett has not simply transcribed the record but, through reorganization, produced a new version of it. The

original *Tribune* statistics are a chronological list, grouped by month, and they include victims of all races. Reading through them, the reader might be overwhelmed by the sheer number, but the format would not allow a ready grasp of the range of alleged offenses that the perpetrators claimed as provocation. Wells-Barnett has separated out African American victims and regrouped incidents based on the alleged offense of the victim. With the data sorted in this way, it becomes visually obvious, even if the reader does not read each name in each category, that there are a multiplicity of alleged offenses and that the charge of rape does not predominate. To this, Wells-Barnett appends summary data for the lynching record of 1892, again showing that "not one-third of the victims lynched were charged with rape" (*Red Record*, 20). She has empirically demonstrated that charges of rape do not adequately account for lynching.

Chapters three through six slice[15] this base data collection along the facets of different alleged offenses and types of victim to drive home the multiplicity of alleged offenses and the barbarity of the lynchings that follow. Chapter two's list format emphasizes the sheer quantity of allegations that were seen as an excuse for lynching, but it also lulls perception of the vast differences between these allegations and the fact that lynch victims had rarely been tried in court, let alone proven guilty. Each chapter's dive into a specific facet of the data set allows a different dynamic to emerge in focus. For each chapter, Wells-Barnett collects and reproduces additional data, most often in the form of newspaper coverage and sometimes in the form of correspondence with local investigators. Chapter three, "The Lynching of Imbeciles," for example, documents two cases in which the victims had a history of mental disturbance. These chapters continue to use aesthetics of data collection to construct their alternate narrative of lynching, specifically through extensive quotation of news accounts, emphasizing collection over selection, and the use of re-categorization as epistemological intervention.

Wells-Barnett's extensive use of quotation creates the textual effect of reading a data collection rather than a narrative. The bulk of the text in these chapters comes from reproduced newspaper articles. Wells-Barnett typically limits her own prose to brief introductory paragraphs and offers no concluding analysis. The unflinching commitment to quotation and collection stands in contrast to her earlier criticism of her own writing as "a little disconnected" (*Memphis Diary*, 23). Disconnection has become a feature rather than a flaw, creating an effect of encounter with data points. Chapter three, for example, ends with the reproduction of two accounts

of the lynching of Henry Smith in Paris, Texas. The first is a newspaper account of the lynching published in the *New York Sun*, and the second is an eye witness account from "a well known colored minister" (*Red Record*, 30) who had had fled threats on his own life for his attempts to halt the lynching. His account is later published in a different New York daily newspaper. The final sentence of the chapter is left to the minister's voice, stating "the impressions of that awful day shall stay with me forever" (32). It ends, then, with a focus on the ongoing, communal trauma of lynching for African Americans—the view from one named and embodied person rather than the view from a nameless, locationless observer. There is no final containment of the data; the aesthetic of collection leaves it to stand in its simultaneous predictability, strangeness, and horror. The final word on a particular incident will be from the data itself and not tied back to an overarching analysis.

Reproducing two views of the same event under the rubric of collecting more data, Wells-Barnett sets the white and Black social realities surrounding lynching in sharp contrast. The white account emphasizes racial solidarity and power, reporting that a crowd of ten-thousand spectators "cheered" (*Red Record*, 29). The Black minister's account, by contrast, is one of an individual's sheer terror. He is physically apprehended, assaulted, and nearly killed himself when he tries to intervene in the most protracted forms of torture being committed by the white leaders of the mob. The initial account, carried in the white press, is revealed as simply *an* account rather than *the* account. Her collecting methodology works in tandem with her collecting form to expose journalistic representation as representation, laying claim to the space between data and narrative as one that will be crossed differently by different narrators. The existence of this space is inevitable, and it does not doom the data enterprise but rather marks it as a human and political space.

Chapter five, "Lynched For Anything or Nothing," is the most powerful example of how her interventions in categorization and organization draw new meaning from the data. In this chapter, she groups incidents for which there is no recorded charge with incidents allegedly driven by minor offenses, such as "because they were saucy" (*Red Record*, 44) and "stealing hogs" (43). Not only does the data show that there can be multiple alleged offenses and that offenses can be minor, there can be no recorded offense at all. She writes, "Perhaps the most characteristic feature of this record of lynch law for the year 1893, is the remarkable fact that five human beings were lynched and that the matter was considered of so little importance

that the powerful press bureaus of the country did not consider the matter of enough importance to ascertain the causes for which they were hanged" (43). In fact, two of the five victims listed under the subcategory of being lynched for "No Offense" are themselves nameless, listed as "unknown," a doubly negative presence in the most complete record available. Instead of letting these null points nullify significance, she reads them as the most representative. In calling attention to the vacuum of action and care surrounding the lives that would be represented by this absent data, she reveals the press to be not an omniscient and impartial observer but rather an instrument calibrated to the white gaze. Decades before the work of Michel Foucault, Wells-Barnett observes the intimate relationship between the law and the archive. Because the killing of these two men was deemed lynching rather than murder, no investigation was undertaken, and because no investigation was undertaken, no written record of the crime was created, and because no record was created, the event was "dismissed from the public mind" (45). Lynching for no offense is also called murder, but when the victim is a Black person and the crime goes unreported, murder becomes a commonplace of "Civilization."

The category of "Lynched For Anything or Nothing" goes beyond proving that the charge of rape does not drive the majority of white lynch mobs. It also founds Wells-Barnett's new narrative, because it demonstrates a more generalizable explanation: white supremacy. As she frankly observes, if a person can be extralegally executed for anything or nothing, the common thread is that these victims "were simply lynched by parties of men who had it in their power to kill them" and decline "to submit their grievances to court" (*Red Record*, 44). By expanding each of the data points in a particular category and grouping them together, Wells-Barnett demonstrates that another pattern, and therefore another potential narrative, exists in the data. Lynching is not most accurately seen as a pattern of Black crime but of white violence abetted by legal impunity in the service of white social, economic, and political dominance.

Like *Southern Horrors*, *Red Record* ends with a call to action, but in this call a very different kind of militancy is envisioned. Wells-Barnett offers five concrete strategies, and two of them focus on forms of data activism. The first strategy she recommends is for readers to "disseminate the facts contained in this book by bringing them to the knowledge of every one with whom you come in contact . . . let the facts speak for themselves, with you as a medium" (97). Rather than casting readers in the role of persuaders, she casts them in the role of circulators, using their bodies and social

networks as she has, to circumvent white media and force a confrontation with the "facts," the collected data, themselves. The fifth strategy she suggests is working for the passage of a congressional resolution to "investigate and report the number, location and date of all alleged assaults by males upon females throughout the country during the ten years last preceding . . . for or on account of which organized but unlawful violence has been inflicted or attempted to be inflicted" (98). She counts it an important political victory to have the U.S. government take responsibility for reproducing the record of a reality it has refused to acknowledge.

In some ways Wells-Barnett's data-driven prose would seem to be, of all the texts considered in this book, the least experimental and most in line with what a mainstream expectation of "data-driven" should be—building narrative explanation based on data as evidence, hewing to conclusions based on the preponderance of that evidence. But the difference of the data-driven narrative she produces marks her practices as radical. Lynching demonstrates a pattern of white violence, a pattern that unfolds predictably and systematically rather than irrationally and unpredictably, and a pattern that undermines legal institutions at the core of U.S. governance. Through the collection and reproduction of data points, she seeks the dismantling of one dangerously coherent narrative to be replaced by an equally coherent but powerfully dissident one.

"With you as a medium": Self as Record Reproduced

Crusade for Justice: The Autobiography of Ida B. Wells, was written in the final years of Wells-Barnett's life and released in 1970, after years of effort by her daughter Alfreda M. Duster to secure its publication. Throughout the work, Wells-Barnett frequently exchanges the authorial mode of narration and commentary for an authorial mode of collection, reproducing newspaper accounts of her anti-lynching work rather than recalling them in retrospective narration. These reproductions occupy much of her autobiography and have profound effects on the overall narrative form. Akiko Ochiai notes, "The eclectic quality and the choppy form of these lengthy quotations sometimes ruin the flow of sentences and the balance of the story" (372). Perhaps in part because of this idiosyncrasy, it has received relatively little attention as an autobiographical work. Through the lens of a modernist data aesthetic, *Crusade*'s extensive reproduction of newspaper articles becomes meaningful as continued experimentation with the aesthetics and epistemology of data collection in the project of reproducing a record. In

this, she joins the work of "black thinkers [who have] articulated the importance of assembling material objects: words, paper, evidence" (Helton, 83) to form the "infrastructures for inquiry" (84) that enable the future of Black thought. These infrastructures include developing descriptive vocabulary for cataloging, compiling bibliographies of Black-authored texts, and creating indexes of the ideas in those texts. As evidenced by these projects led by Dorthy Porter, Daniel Murray, Albert P. Marshall, and countless other Black information professionals, "one goal of African American thinkers at the turn of the century was to build data sets" (Helton, 85). Wells-Barnett shared in this goal as an activist and autobiographer.

Wells-Barnett's autobiography is a continuation of her work to reproduce a record. She frames her life story using the same key terms of "record" and "facts," and reproduces her life in this form as a means of supplying tools for communal self-construction. She is spurred to begin her autobiographical writing after being queried by a "young woman" (*Crusade*, 3) who had recently offered Wells-Barnett's name as an exemplary figure on parallel with "French heroine and martyr" Joan of Arc. As "the only colored girl present" in the discussion, she felt compelled to put forth the name of an African American woman. The girl laments that, when asked why she thought Wells-Barnett exemplary, she is unable to answer, being unfamiliar with the specifics of her renown. Wells-Barnett attributes the young woman's ignorance to the lack of textual record, observing "there was no record from which she could inform herself" (4). She quickly promises "to set it down in writing so those of [the girl's] generation could know how the agitation against the lynching evil began" (4). She sees her own life record as one piece of a much larger record of Reconstruction history on the verge of being lost. The record of African American action and achievement is "buried in oblivion" while "the southern white man's misrepresentations are in the public libraries and the college textbooks of the land" (5). She conceptualizes a different record composed of "facts of race history which only the participants can give," a record of which her own life story is a part. She refers to her own story as "the facts contained in this volume," emphasizing its value as a collection of data points.

Despite the importance of these materials to the story of African American history, the text offers relatively little in the way of overt narrativization. As Braxton notes, it is "chronological rather than thematical or topical" and has the "same 'disconnected' quality of many women's narratives" (104). The sense of disconnection that Braxton notes arises in part from the valuation of collection over selection, giving the impression that it is

more important to record as many events as possible than to highlight the most meaningful. It is also an effect of the sheer number of times that Wells-Barnett's life is forcefully thrust off the path of a developing narrative. Her parents' death ends her formal education, the Memphis lynching of 1892 ends her newspaper ownership, and, although not unhappily, marriage and family alter the trajectory of her political activism. Finally, and poignantly, her death prevents her from finishing her autobiography, a fact that her daughter and editor preserves by letting the published version end mid-sentence just as the manuscript does. The sense of iteration and accretion that comes to define her life narrative is both an experimental literary choice and a reflection of her expulsion from traditional developmental narratives because of her insistence on presenting the "whole truth" of lynching. Her life narrative reads as a series of efforts rather than a career because tangible political progress toward this goal was scarce and hard-won.

Crusade demonstrates Wells-Barnett's sustained reflection on the material conditions of publication and the circulation of data as a prerequisite for knowledge production. Like Du Bois, Wells-Barnett reports that she first perceived her task as collecting facts to present to a world "thinking wrong about race, because it did not know" (*Dusk*, 58). She relates, "Before leaving the South I had often wondered at the silence of the North. I had concluded it was because they did not know the facts, and had accepted the southern white man's reason for lynching and burning human beings in this nineteenth century of civilization" (*Crusade*, 77). The placid reception of her expanded data set in the white North demonstrates that making the facts available does not in itself change knowledge. While her initial publication in the *New York Age* did not bring new death threats from Northern readers, it also did not provoke a reconsideration of the lynch narrative frequently reprinted by Northern papers. Wells-Barnett laments, "Although the *Age* was on the exchange list of many of the white periodicals of the north, none so far as I remember commented on the revelations I had made through its columns" (77–78). Even after nearly a year speaking in Northern cities, she finds "the [white] press was dumb" (86). Wells-Barnett cannot rely on white media networks to circulate the data she has collected, let alone to engage it. Yet she knows it is precisely these networks she must break into, because it is "the medium through which I hoped to reach the white people of the country, who alone could mold public sentiment" (86). Data's potential to provoke better knowledge and therefore better action is dependent on favorable material and social conditions.

Recognizing the entanglement of knowledge and material conditions, she exposes the multiple types of labor necessary for a data collection to exist and for its potential contribution to knowledge to be realized. Her research expands the scope of data collection, but only her body can expand its circulation. She must reproduce the record she has assembled over and over again to generate its reception. The labor required for data to be useful to others extends beyond preparation, however. As Plantin observes, "data do not circulate by themselves: they must be prepared, even 'packaged,' to circulate among different parties and to 'jump' between different contexts" (67). Wells-Barnett's work is a late nineteenth century case in point. Without her work, the statistics of death by lynching published by the Chicago Tribune in a single day's edition would, for most readers, be discarded the very next day. By collecting the data and publishing it as a pamphlet, she prepares it for a type of reuse their original creators may not have envisioned. She further sees that the data she has collected will not reach powerful white audiences without her active, embodied labor to bring it to their attention. Her twofold reproduction of the record, through collection and then circulation, is crucial data labor.

To make her data jump into the context of white readership, she must develop personal networks of circulation. These networks begin with "two colored women" (Matthews and Lyons, mentioned above) who "during a visit with each other . . . thought that the women of New York and Brooklyn should do something to show appreciation of my work and to protest the treatment which I had received" (*Crusade*, 78). As Wells-Barnett remarks, these women's initiative is "an agency that was little expected" (78). The effort to circulate her data emerges not from other writers, not from elected officials or institutional leaders, but from women whose influence is seemingly limited to social gathering. Their efforts to "get other friends together to talk over the idea" result in "further meetings, which grew in interest and numbers until no house was large enough to hold those who came" (78). It is through the agency of African American women and the embodied presentation of her data that Wells-Barnett begins to have an impact.

The outcome of Matthews and Lyons's efforts is a public address by Wells-Barnett, held at Lyric Hall in New York City on October 5, 1892. As Well-Barnett describes delivering her speech, self becomes inextricable from data collection. She writes, "Although every detail of that horrible lynching affair was imprinted on my memory, I had to commit it all to paper, and so got up to read my story on that memorable occasion" (*Cru-*

sade, 79). In this description, she is the source of the exhaustive data—"every detail"—that must be collected and externalized. She recalls that she "kept on reading" despite being so overwhelmed by emotion that she begins to cry, tears running down her face while "nothing in my voice, it seemed, gave them an inkling of the true state of affairs" (79–80). Her aural reproduction of the record is at once disarticulated from and co-present with her embodied humanity. The centrality of embodiment to data is underscored by the gendered dynamics of her presentation. She turns the performance of self into a presentation of data, but she shields herself from charges of usurping the masculine role of empiricism by juxtaposing it with a feminine display of emotion.

Wells-Barnett's presence becomes synonymous with the presentation of this data. Her speech in Lyric Hall activates an expanding network of audiences. She is soon invited on speaking engagements in Boston and other eastern cities. During this tour, she is for the first time able to directly address a white audience, which leads to "the first notices and report of my story of any white northern papers" (*Crusade*, 81). At these speaking engagements, she reproduces the record she has assembled again and again, "read[ing] my paper, the same one that I had read at the first meeting in New York" (82). Her emphasis on the talks as repeated delivery of the same written material harkens as well to the speaking tours of formerly enslaved people in the antebellum United States, but with a difference. By including the detail that she wrote it down, she contrasts herself with the primarily oral composition and delivery of those speakers.

Wells-Barnett's expanding network leads to invitations to speak in England, which will prove even more fruitful for generating the press coverage crucial to the campaign to move white audiences to condemn lynching. At the point of Wells-Barnett's departure on her first speaking tour in England, the text abruptly switches from first-person retrospective narration to document collection. It begins with nine diary entries from her Atlantic crossing, which focus mostly on seasickness and inject a frail and human Wells-Barnett into what had been a developing portrait of heroism. These diary entries are followed by reproduced articles and letters that continue for most of the next hundred pages, comprising roughly a quarter of the entire book. The coverage of her first trip to England, in 1893, is written by local correspondents. The coverage of her second trip, in 1894, is written by herself, as part of a guest correspondent position she negotiated with the *Inter-Ocean*, a progressive Chicago newspaper with a largely white audience. Her inclusion of the *Inter-Ocean* letters also demonstrates, once

again, her keen awareness of the necessary material conditions for data circulation and knowledge production. As her brief background statement on the publication mentions, it is at the time of her autobiographical writing an "extinct" (*Crusade*, 127) publication, a lost node in an all too sparse network for anti-lynching information sharing. She cannot count on its preservation of her record and must reproduce it for herself. She reports that she undertakes a cross-country U.S. tour in the year after her return from the second English tour, but has only a single article to reproduce as a representation, "a sample of the way in which the newspapers of the country gave out the reports" (238) because her "trunk full of such clippings" has been destroyed in a house fire. Sometimes, she includes multiple clippings covering the same event, valuing more exhaustive collection over narrative coherence. Her incorporation of press coverage authored by herself and others, along with her stated desire to have incorporated more had it been available, marks an extension of her data collection practices into the project of self-representation.

At the level of content, the incorporated articles emphasize Wells-Barnett's position as embodied data collection. She describes her first speaking engagement in England as a reproduction of her Lyric Hall talk: "I told the same heart-stirring episodes which first gained for me the sympathy and good will of my New York friends. The facts I related were enough of themselves to arrest and hold the attention. They needed no embellishment, no oratory from me" (*Crusade*, 90). She downplays narrativity in favor blunt empiricism, using "facts . . . of themselves" to "arrest and hold the attention," or put in modernist terms, to defamiliarize and disrupt her white audience's perception of African American life in the United States. She maintains this strategy of pared down, data-forward presentation. *Crusade* reproduces an account in the *Birmingham Daily Post* that notes her "quiet but effective address" (96). Another reproduced letter to the editor published in the *Christian Register*, "the leading Unitarian organ of the United States" and later republished in an English newspaper, directly links her reticence to her effectiveness. The writer claims to have never "met any 'agitator' so cautious and unimpassioned in speech" (147) but finds her "indictment is all the more telling from the absence of rhetoric" (148). In body as in word, she has developed a mode of address in which the facts appear to speak for themselves, although the necessity of her presence for these facts to gain a hearing belies that fantasy.

The content of these reproduced articles illuminates how the rhetoric of data is part of Wells-Barnett's strategy of appeal, but their formal signifi-

cance in the context of life narrative is of at least equal importance. At this crucial juncture in her own history, Wells-Barnett relinquishes direct self-narration and instead reproduces a record. Braxton has discussed *Crusade*'s incorporation of news articles as evidence of Wells-Barnett's primary auto-biographical goal of "definition, documentation, and authentication; her story is intended not only as her own but as the story of her people and her times" (109). Robert Stepto's careful attention to the relative integration of authenticating documents in an earlier mode of African American life writing, the slave narrative, provides a useful spectrum for understanding how their incorporation has typically functioned to authenticate the African American narrator. Early slave narratives appended multiple external documents by white authenticators. This mode, in Stepto's reading, gave way to a second wave of texts in which a more unified narrative incorporates such documents directly into the text, and a third phase in which authenticating documents are subsumed by the African American writer's asserted authorship. He argues that authenticating documents, left unintegrated, distance a text from the status of "first-person narrative that possesses literary features to distinguish it from ordinary documents providing historical and sociological data" (6). *Crusade*, of course, is not a slave narrative, and Stepto's typology was not conceived to address it specifically. But in the context of African American authorship, his formulation does offer a relevant starting point for examining Wells-Barnett's incorporation of external documents. Wells-Barnett's documents are integrated in the sense that they are not relegated to an appendix, but they are not smoothly integrated into the text itself. They are usually reproduced in full, leading to noticeable and sometimes long absences of Wells-Barnett's authorial voice. Some of the included pieces are written by white authors, and some are written by herself. For Stepto, these features might seem like a step away from self-authentication and full assertion of authorship. I would note, however, that she is authenticating herself differently, specifically through the reproduction of a textual record as a data collection of the self. In the United States, the Black subject has often been claimed as data but rarely associated with the role of data collector. In collecting and analyzing data for herself, Wells-Barnett is not reproducing but transforming the terms of authentication and authorship. She is aware of the fragility of the record and claims agency through reproducing it, ensuring its potential for continued circulation, especially to future generations.

The final article that Wells-Barnett incorporates into *Crusade* is an account of her wedding published by the *New York Age* and that she relates

was "largely copied in the Negro papers throughout the country" (239). Aside from the article, she offers only a few recollections of how the event was organized—and three times postponed so she could accept speaking invitations—leaving the news article to report on details of the ceremony itself. Relating her wedding via a newspaper account is a fitting apotheosis of self-representation through reproduction of a record. By the conventions of middle-class womanhood, her wedding should mark the end of her public life. To offer this ending in a form that not only calls attention to its publicness but also unites her public persona and private life subtly rewrites the classed and gendered plot she seems to enter.

As the remainder of the autobiography attests, marriage was far from the end of her political engagement, writing, or activism. None of the following sections, though, employ such an overt commitment to reproducing her record in the form of collecting news articles, possibly because her copies of later news stories were destroyed in a house fire that claimed most of her personally assembled print record. Still, she has chosen record reproduction as the method of self representation for the period of her life for which she is most well-known. Instead of claiming it with the construction of a more traditional narrative or interpretation, she chooses the collection of documents to constitute her legacy. This choice reprises her role as an embodied, historically situated data collector. Just as she surmised that her epistemological authority was less likely to be questioned if she relied on white accounts, she surmises here that her account of her own work will be most convincing if it comes through the assemblage of others' accounts, or her own contemporary accounts. It also calls on her readers to take an active role in constructing what that legacy will be. She cannot make herself Joan of Arc, nor can she complete the crusade for justice. Others will have to join the work. Reproducing herself as a record, she ultimately uses the same methods she used to represent lynching to represent herself, indicating how a life collecting, circulating, and advocating with data has shaped a narrative form of selfhood critically aware of the multiplicity and contingency of historical narrative in the ongoing struggle for racial justice.

Speculative Data for Black Futures

The press dispatches of October 1, 1919, heralded the news that another race riot had taken place the night before in Elaine, Ark., and that it was started by Negroes who had killed some white officers in an altercation. (*The Arkansas Race Riot*, 3)

While data collection might seem like a method of representation confined to knowing the past, Wells-Barnett's final published pamphlet, *The Arkansas Race Riot*, demonstrates data's potential role in understanding how white violence ramifies across the futures of African American communities. The pamphlet's opening sentences, cited above, waste no time in establishing that the harmful representational dynamics she fought in her earlier work still obtain. The "press" has the power to circulate an account of events in Elaine, Arkansas that cast them in the predictable narrative of white self-defense against African American violence. Wells-Barnett travels to Elaine and investigates for herself. She learns that the "riots" began when white men attacked a meeting of African American tenant farmers who sought to form a chapter of the Farmer's Union. As a group, they planned to refuse to sell their bumper cotton crop to their white landlords and instead take it directly to market. While there are enduring historical questions about what happened, including the actual number of African Americans who were killed during these riots, historians have established that the reality is much closer to what Wells-Barnett reports than what the white press reported at the time.[16]

The text that results from her investigation continues Wells-Barnett's activist data collection and extends her vision of what data might be used to activate. She travels to Arkansas to collect statements from nine of the men who survived the riots but have been sentenced to death for their alleged roles in the riot. The pamphlet contains these statements, statements made in court, and a set of data that Wells-Barnett derives from them: that of the money lost by these African American farmers when their white landlords seized their crops, cattle, and homes with impunity. Had the farmers been able to organize and sell at market rate (rather than the below-market rate traditionally demanded by landlords), Wells-Barnett calculates that the sale of the cotton alone would have generated $86,050 for the twelve men on death row. The dollar amount itself is less important than what it would have meant to these farmers. Many if not all of them would have been able to end the season with savings rather than being in debt to their landlords for seed, equipment, and household expenses. With those savings, what might those families and that community have been able to do for themselves? With the established right to take their product directly to market, how might future years have gone differently? Her speculative data documents effects of white violence that would otherwise go unseen. While this might seem like a departure from her project to "reproduce a record," it is of a piece with her insistence that records do not create themselves.

In some ways, Wells-Barnett's method of data collection is a typical

example of the Baconian model. She commits to collection as a practice preliminary to interpretation, she aspires toward exhaustive data collection, and she formulates explicit parameters of observation that will structure her collection. In other ways, though, she is and can only be radically different in her approach. Wells-Barnett occupies the position of the Black-embodied data collector committed to exhaustive representation within the boundaries imposed by the systems of race, gender, and class that produce the very object of her inquiry. She shows us, again and again, that power is at the root of narration; that data must be collected and recollected; that categorization matters; and that data and the narratives we build from it do not circulate on their own. Because of this distinct vantage, she may also be the most relevant data collecting modernist to our own era of algorithmic narrative destiny and mass movements for racial justice. Her practice combines rigorous data collection, narrative advocacy, and political organization to model a committed, critical data epistemology. This epistemology sees knowledge as embodied and embedded in relations of power. In this view, data is not the transcendent representation of what is but a tool of targeted revelation, and it can only reveal what we have decided to value the revelation of. If those values are to place human thriving over private sector profit and government austerity, the corporate and state actors whose power is amassed behind algorithmic identification tools will almost certainly need to be challenged collectively. In her commitment to creating data to support knowledge *for* a community rather than *of* it, Wells-Barnett stands as a foremother to many contemporary data activists at the critical vanguard of collecting lives, to which the concluding pages of this study will turn.

Data-Driven Modernism Against Algorithmic Identity

In or around 2008, Gary Wolf "noticed that the daily habits of millions of people were starting to edge uncannily close to the [self-tracking] experiments of the most extreme experimenters" (40). With this observation, Wolf, the co-founder of the Quantified Self (QS) website, now the hub of "an international community of users and makers of self-tracking tools who share an interest in 'self-knowledge through numbers'" ("What is Quantified Self?"), plotted one contemporary trajectory for Edwin Slosson's 1905 prediction for literary form. Data collection was making a crossover from niche disciplinary practice to popular hobby. The rise of wearable tracking technologies, ubiquitous connection to cloud storage, and a belief in the power of data to transform our knowledge of self continue to converge in local QS meet-ups, which now span the globe if not the socioeconomic spectrum. Practitioners of QS often start collecting their life data to answer a specific question, Wolf observes, but "they continue because they believe their numbers hold secrets that they can't afford to ignore, including answers to questions they have not yet thought to ask" (41). The epistemology of data has become an epistemology of self, as these trackers believe their own data has the potential to surprise them, to confront them with a reality of self they would have been unable to perceive without having committed to collection. If we believe Wolf, many ordinary people now hold a relationship to the data of self once imagined, I have argued, by certain modernist life writers of the early twentieth century.

Wolf's observation is one possible data point to select as the beginning

of this coda, a story about what the work of data-driven modernists means for our present moment of life data collection. Yeshimabeit Milner's "Open Letter to Facebook" is another possible data point to select, and its selection would significantly change how that story begins:

In or around 2018, the year Facebook's decision to sell user data to Cambridge Analytica for the purpose of influencing a U.S. presidential election became public knowledge, many white U.S. Americans became aware that their lives were now being collected as data and that these collections had consequences. Black U.S. Americans, conversely, had long known exactly that. As Shaka McGlotten observes, "Assigning numerical or financial value to black life, transforming experience into information or data, is nothing new; rather, it is caught up with the history of enslavement and the racist regimes that sought to justify its barbarities" (263). Community organizer Yeshimabeit Milner centered Black U.S. Americans' long experience as the targets of data collection to found the Data for Black Lives movement (D4BL). "In the world we live in," she writes, "data is destiny. . . . I grew up seeing hardworking families become homeless because of a three digit FICO credit score. Seeing people who would never otherwise steal if it wasn't for lack of economic opportunity, over-sentenced for crimes that should have no jail time, all because risk assessments have replaced judges and juries" ("Open Letter to Facebook"). In Milner's reflections and the work of D4BL, we can see the interrelated but ultimately divergent paths of the ideas surfaced by data-driven modernist life writers. All lives may be represented by data, but for Black lives, data has most often been collected, interpreted, and used to control Black communities without their input, let alone their consent. But Milner, McGlotten, Faithe Day, and other leaders at the forefront of theorizing and organizing around the data of Black lives see alternate potentials in data as a representational form. In the aftermath of the Cambridge Analytica revelation, for example, D4BL led a call for Facebook's proprietary data to become a public trust, "a clearing house where students, community leaders, organizers, scientists and developers can access anonymized Facebook data for research in service of the public interest" ("Open Letter to Facebook"). Data justice, the proposal implies, will not be synonymous with more data or "better" data as defined by traditional understandings of objectivity, portability, and manipulability. It will not be achieved by taking human judgment out, but by putting it back in, visibly and democratically. Although she has witnessed too many data-driven evictions and incarcerations, Milner has also "seen the power of data to build social movements, amplify the voices of those who have been

disenfranchised, push forward policy and set forth new blueprints for the future" and wants all of us to see that "behind the power of technology, and behind every massive data set—are people" ("Open Letter to Facebook"). For Black U.S. Americans and their communities, it is clear that the only effective intervention in these modes of data collection is collective action to change the narratives being told on their data's behalf.

My purpose in rehearsing two possible beginnings is both formal and thematic. On a formal level, I hope that to show both is to naturalize neither. Seeing both of these data collection projects as potential beginnings dramatizes the process of selection that I have argued underwrites all processes of turning data collection into narrative. It also keeps both projects, with their divergent aims and strategies, co-present in our field of perception. On a thematic level, I hope that the juxtaposition highlights how these projects' divergence is shaped by histories of racialization, in many ways mirroring the divergences between the writers and projects examined in this study. The fact that QS mission statements do not mention race, gender, class, or geographic location, despite the movement's ostensible focus on embodied experience, confirm its imagination of the white, male, upper middle class, autonomous individual as default subject. On the other hand, D4BL is explicitly Black-led and Black-centered. QS seeks actionable insight into individual experience, while D4BL aims to change the living conditions of entire communities by using data to advocate for structural change, including structural change around how data is collected and used. The differences between the white and Black writers studied in this book are similar. Adams and Stein primarily consider how the data aesthetic affects their perception of self, while Du Bois and Wells-Barnett come to their data aesthetics by way of being forced to recognize the inextricability of self from a racialized and oppressed collectivity.

Yet, to simply call one project individualistic and one project communal, one neoliberal (for its isolation of self, emphasis on individual choice, and disinterest in structural conditions) and one progressive (for its commitment to collective action, democratic deliberation, and resource redistribution) would be to overlook their potential intersection in the space between data, narrative, and self. This intersection is embodied by Jordan, "an African American student at a major research university in the Northeast corridor, deliver[ing] his presentation at the 2018 Quantified Self summit in Oregon wearing a T-shirt printed with the words 'Data for Black Lives'" (Schüll, 919). Jordan is a subject profiled by cultural anthropologist Natasha Dow Schüll in her ethnographic work on QS. His project is to

record his own experience of racial microaggressions through a combination of photo, text, and biodata. He shares these experiences on social media, forming a real-time record of microaggressions that provide, in his words, "a data trail so people understand where I am coming from, and how I am affected" (qtd. in Schüll, 922). He tracks personal experience to make a political point, but he also reports a profound personal impact from collecting these experiences as data. Schüll describes, "Externalizing his inner experience in the form of social media posts restored to his life a sense of agency and the necessary bandwidth to sleep, work, and live free of excess tension" (922). Schüll's analysis and Jordan's own insights suggest that he regards data collection with the type of critical perspective that I have argued is prefigured by data-driven modernists. Jordan "regards data as a way to speak his truth" but "his position on the truth-telling potential of data is anything but naive: he is well aware that data can be harnessed to biased algorithms and agendas such that it can distort and 'lie'" (Schüll, 923). But, for Jordan, "this is no reason to abandon data altogether as a tool for understanding and narrating the dynamics of self and society" (923). Jordan also shares data-driven modernists' keen awareness of how perceiving himself through data changes the narrative forms through which he understands himself, "emphasiz[ing] that data tracking liberates him from narrative emplotments that are negatively charged and entrapping . . . and enable[s] the creation of more open-ended, multi-perspectival, empathic stories" (Schüll, 924).

Jordan's relationship to data and narrative is in many ways exactly what the data-driven modernists modeled. Jordan doesn't see data as able to reveal the truth, but he does see it as having "truth-telling potential." Through interacting with the data of his life, he understands data not as providing a single, overarching revelation but rather a fuller picture of heterogenous experience, representing the flux of personal experience alongside the continuity of racial microaggressions. A "more open-ended" story is a positive effect of data's temporality of deferral, the ongoing nature of data collection serving to forestall the certainty of a particular ending. The multiperspectival aspect of his new stories is a corollary of the parallelism produced by data collection as a form. His self-conscious use of narrative form arises from a new experience of self and creates a new experience of self, fostered by his encounters with data. He does not expect a single application or algorithm to spit out a metric that will guide his future actions, but rather expects to interact with his data to create meaning. Indeed, he cannot expect that his data will even appear to interpret itself—the app that

combines microaggression tracking with biodata does not exist. Even if it did, Jordan would already know that no app on its own could change the culture that generates such data, just as Du Bois and Wells-Barnett knew that presenting white audiences with data did not automatically change their minds or their practices. For Jordan, the power of data is at the intersection of QS and D4BL, the intersection of the individual and the collective, where he is able to externalize collected observations and claim a kind of agency through the process of narrating self in relationship to that collection, employing narrative forms that he would not otherwise have imagined.

Both QS and D4BL are contemporary projects of collecting lives, and both projects imbue data with the power to disrupt preexisting narratives and reveal new ones. Taken together, while keeping sight of their divergences, these projects mark a spectrum of present-day resonance for the work of data-driven modernists. I have argued that data-driven modernists call attention to the space between data and narrative as they narrate lives in relationship to data. As they negotiate and illuminate this space, they ultimately challenge the projection of identity, a narrative conjecture about who people really are, onto lives. Their narrative aesthetics vary greatly but share a central relationship to data as a concept of how reality can be known, and engagement with data collection as an embodied practice that alters the collector's relationship to narrative temporality and coherence. Du Bois uses data to drive an aesthetic of complexity and inclusion that combats the narrative condemnation of Black life by demonstrating the multiplicity of life trajectories within Black communities. Adams produces the data of his own education to demonstrate that data cannot reveal himself to himself, let alone reveal causal laws governing the history of human society. Stein pushes narrative toward collection with the parataxis and repetition of the continuous present, reminding her readers of the selective and human interventions underlying any interpretation of data. Wells-Barnett reproduces the record of lynching to replace the false coherence of criminal Black identity with the damning coherence of white supremacist violence. Their narratives reject the idea that if we have enough data, it will narrate itself. The practices of data collection they use to narrate others' lives (in social, historical, psychological, and journalistic terms) also affects their perception of their own. Du Bois comes to see himself as an assemblage of historical contingencies, Adams as a manikin formed by the accrual of experience, Stein as a writer with a claim to genius, and Wells-Barnett as an itinerant data medium. And because they occupy different

social positions, their altered perceptions of self have different affective and material effects, engendering empowerment for some and loss for others; varying degrees of opportunity and precarity; different scales and modes of attention for their work.

Similar changes in perception, I and many others would argue, are occurring for more and more contemporary selves, as data collection pervades cultural discourse, professional practice, and often personal life. While data derived from our records and our digital traces is being collected across populations by corporate and state actors, it is also increasingly being collected by individuals about themselves. Both of these levels have significant cognitive impacts. Dawn Nafus, Gina Neff, Jamie Sherman, Kate Crawford, danah boyd, Natasha Dow Schüll, John Cheney-Lippold, and Jaqueline Wernimont have done in-depth work on the evolving impact of big data epistemology on individuals' lives, both on the level of structure and the level of individual experience. As citizens and consumers, most of us are increasingly aware of data as something out there somewhere, collected, hoarded, and weaponized. We are also increasingly more likely to encounter ourselves as data collections whether we engage in self tracking or not—as we check our Google Maps timeline out of curiosity, get time usage reports from employer-sponsored analytic tools, or turn over our finances to a budgeting app that quickly turns out visualizations and suggested actions. We are all more likely to have a version of the experience of one QS practitioner described by Wolf, interacting with a personal data collection spanning twenty-five years, "with its million plus entries" (40). As Wolf observes, this QS-er "navigates smoothly between an interaction with somebody in the present moment and his digital record, bringing in associations to conversations that took place years earlier. . . . What for other people is an inchoate flow of mental life is broken up into elements and cross-referenced" (40). The practice of recording requires conceptualizing life as discrete points, shifting an "inchoate flow" of life to a series of encounters with discrete "elements," being recalled and combined in multiple ways across multiple times and spaces.

Nafus, Sherman, Schüll, and Cheney-Lippold have all argued that the experience of negotiating the self as data on a personal level can help prepare us to adopt a critical stance toward larger scale data collection and analysis. Nafus and Sherman argue that QS practitioners, through their efforts to aggregate and understand their own data, develop an intimate familiarity with the limits of data representation that sparks modes of "soft resistance." Developing work-arounds to retrieve and aggregate personal

data from a range of proprietary platforms that were never intended for such user agency, self-trackers are constantly reminded that data may be "big" but is "never total" (Nafus and Sherman, 1786–87). Searching for personalized insight, they discover that what is "'healthy for me'" is a category "too on-the-move, too always emergent, and ultimately too reliant on what is outside computers to be captured and modeled computationally in some totalizing way" (1785). As self-trackers see the failure of predetermined categories to capture their own experiences, they begin to question "the totalizing coherence of data sets, and commitments to automation" as they "assert greater control over what their data ultimately means" (1792). Schüll similarly finds that, far from reducing experience to a number, QS practices often spark a renewed attention to narrative formation. One of her ethnographic subjects suggests, "If self-quantification, breaking ourselves down into bits, enables us to create new experiences of ourselves, then those experiences are gateways to new degrees of freedom in how to act. . . . Allow[ing] you to imagine new types of self and move in new directions; you are no longer trapped in a limited set of pathways" (918). The interviewee equates "breaking ourselves down into bits" with the suspension of projected identity. Seeing these bits as discrete, real elements, as points potentially meaningful in multiple ways rather than preemptively contained by a particular narrative of self, is a kind of liberation.

As the QS practitioners cited above demonstrate through their imagination of self as discrete bits, selfhood as assemblage is not just a formal effect or theoretical potential. It is both technological reality and lived experience. The conceptualization of self as parts and emergent wholes is, arguably, a part of the epistemological shift enacted by a data-driven perception of the world but also certainly a byproduct of ubiquitous networked computing, filled with technologies that enable and promote mass collection of life data. This, of course, is also known as surveillance. Some of this collection proceeds actively, through more or less formal instruments like surveys or job applications, and an increasingly vast amount operates passively, capturing traces of our digital actions as a matter of course. Further, as Kevin Haggerty and Richard Ericson have described, the stores of data collected about us are tending toward convergence, becoming accessible to each other across "centres of calculation" such as "forensic laboratories, statistical institutions, police stations, financial institutions, and corporate and military headquarters" where the discrete elements of a life captured by data are "reassembled and scrutinized in the hope of developing strategies of governance, commerce and control" (613).[1]

I have so far focused on and argued for continuities between the collection of data in the period of this study and today, but at this juncture, it is important to note the difference that digital, networked affordances make in the ramifications of data collection. The writers of this study collected data in analog formats—surveys, documents, lab notes, anatomical drawings, newspaper clippings—and they did so actively. Today, the data of our lives is collected mostly in digital format and mostly passively, as a record of some type of digital interaction. Because it is digital, it is much easier to aggregate, although certainly not effortless. The potential for aggregation is a constant threat to privacy, because even data that is functionally anonymized in one collection could be reidentified when joined with another.[2] Although we might think our data is partitioned, with some actors only having access to our Internet browsing habits and others only having access to medical records, those boundaries can become permeable through official (e.g., cross-institutional collaboration, subpoena) and unofficial channels (e.g., data breaches). Most fundamentally, and perhaps most ironically, the epistemological framework of Big Data has, in many contexts, altered the definition of useful knowledge. Eric Siegel notes that when using predictive analytics, "we generally don't have firm knowledge about causation, and we often don't necessarily care. . . . It just needs to work; prediction trumps explanation" (120). Where Bacon once sought prediction through the clarity of universal laws of nature, Big Data shrugs at explanation, satisfied with the instrumental uses of correlation.

In this context, the assemblage selfhood catalyzed by data collection is not a liberatory potential but a means of boosting sales, justifying law enforcement decisions, and allocating resources such as healthcare and welfare benefits. These decisions are based on a supposedly data-driven identification of who individuals are and therefore what they are likely to do. Cheney-Lippold has defined such "algorithmic identity" as "an identity formation that works through mathematical algorithms to infer categories of identity on otherwise anonymous beings" ("New," 165). Identity, here, does not even aspire to refer to an empirical reality but instead takes statistical correlation as its own empirical reality. As Cheney-Lippold puts it, "Who we are in this world is much more than a straightforward declaration of self-identification or intended performance. . . . Who we are in the face of algorithmic interpretation is who we are computationally calculated to be" (*We Are Data*, 5). These calculations can change over time, but the classifications they apply act decisively on our lives at specific times and their determinations are often not revisable in any practical

sense. When we are algorithmically identified, if we even know we have been, we don't have access to the personal data fed into the classifier or to the model that the classifier is using. The criteria generated by machine learning classification algorithms, as Jenna Burrell has pointed out, are typically not human-legible and are not intended to be. Even those who develop and implement a specific model are likely unable to determine what data features (e.g., age, ZIP code, number of Facebook friends) are being correlated with what outcome. Algorithmic identity is conceptually nonessential, but in practice acts to essentialize, thus serving as a new and empowered instantiation of identity narrative. Narrative coherence is produced in service of classification, projecting that someone who has these qualities is this type of person and will therefore do this type of thing in the future. All the while, this process is supported by a concept of data as real, objective, empirical, and ultimately self-revealing. And although the race scientists of the late nineteenth- and early twentieth-century United States may have been soundly discredited, the desire to assign categories so as to constrain or justify opportunity remains, and algorithmic identification methods are but the latest instance of the attempt to ground racial identity in data so as to justify differential treatment while forestalling ethical or political objection.

Given the opacity of such algorithms and their use, intervention into the narrative projections of algorithmic identification is work that must take place outside the algorithm. As Ruha Benjamin asserts, strategies for diverting data's power toward creating equity rather than reproducing exclusion "can be focused on computational interventions, but they do not have to be. In fact, narrative tools are essential" (192). It is not just the narratives that data supposedly creates that demand intervention, but also the story we tell ourselves about data. In the data episteme, she writes, "too often the story that dominates is the one that purports to rise above the genre, becoming *the* story of reality because it deploys the language of big data, thereby trumping all other accounts" (193, emphasis in original). The current cultural authority of algorithms is underwritten by a persistent conflation of data and narrative, the fantasy that a vast enough data collection will render the need to interpret it moot.

Modernist data aesthetics prepare us to challenge algorithmic identification. By incorporating self-conscious reflection on the agential and contingent process of constructing narrative sequences out of data points, they remind us that the singularity and coherence projected by an algorithmic classification is empirically untenable. As these aesthetics surface, the

data points submerged in the prediction of the algorithm demonstrate that the form of algorithmic identity is incompatible with the multiplicity data asks us to perceive. This re-forming of the relationship between data and narrative prompts us to reconsider our narratives *about* data. Adopting the stance of the data-driven modernist is a strategy for tempering our desire for and credulity toward claims for algorithmic authority. At the same time, though, data-driven modernists do not dismiss the possibility that careful attention to data can reveal, surprise, and change what we know about ourselves and others.

Data driven modernists illuminate the space between data and narrative to remind us that there are always multiple ways to move across it. Formally and thematically, their modes of narrating with data constitute interventions in the conflation of data and narrative. These narrative interventions anticipate and intersect with the flourishing work of critical data studies,[3] Black data theory,[4] queering data,[5] Indigenous statistical methods,[6] and feminist data practice.[7] In closing, I wish to briefly underscore the primary intervention modeled by each of the writers I have examined. To some extent all of these writers employ all of these interventions, but some more centrally than others. Their writing of critical data narratives suggests strategies for becoming critical data readers. They expand the scope with care, expect multiplicity, ask who is narrating, and see data as labor.

For Du Bois, the crucial intervention is to *expand the scope* of data collection in order to surface heterogeneity within a group cast into a fixed identity. That identity could be presented as empirically real because the narrow scope of collection virtually preordained its confirmation. Du Bois expands the scope in multiple dimensions. He surveys an entire ward of Philadelphia, gathering data by the household rather than by the crime. He adds historical context to show that life outcomes of African Americans relate less to inherent capacities and more to the constraints imposed by generations of legalized discrimination. He compiles individual experiences of that discrimination to document its daily effects. His data points are not only more numerous, they are contextualized and embodied. Adding these dimensions to the data fundamentally changes what can be seen and how it can be understood.

Rather than seeing this lesson from Du Bois as an absolute directive, though, we should follow his lead in considering context and expand the scope of data collection "in good faith and with extreme care" (Richardson, 8). As Bonnie Ruberg and Spencer Ruelos caution, "Even as we strive for social justice through and within data, we must acknowledge the worrisome

tension in calling for marginalized lives to be better 'captured,' translated into data, and put to use by corporations and regulatory bodies" (4). The emerging work of data justice activists and scholars has begun to develop frameworks for community-centered data collection that put a number of brakes on the process of expanding the scope of collection. The Detroit Digital Justice Coalition, for example, has released a set of recommendations that include developing data collection projects in collaboration with the communities that they will be used to represent, gaining consent for collection, clearly delineating storage and usage guidelines, and presenting findings back to the community. As well, the call for more data can become a pernicious co-optation of data's temporality of deferral. When it comes to the needs of marginalized communities, it is often the case that no additional data needs to be collected to discover urgent needs or how to address them. Data collection may need to give way to political action sooner rather than later.

Adams's frustrated attempts to ascertain a unity underlying the seeming chaos of his experience alerts us to *expect narrative multiplicity* when understanding self and world through data collection. Adams draws on the form of the data collection to dramatize a self unable to justify the selection of points that would enable unity to emerge. Without that unity, he cannot affirm a narrative of development culminating in agential selfhood as he has expected to be able to claim it. For Adams, the reality of multiplicity is a source of anxiety. Being unable to decide which narrative his life is unfolding renders him unable to know how to act, threatening his identity as a man, a U.S. American, and an Adams. His autobiography demonstrates that the affective consequences of data's destabilization of coherent narrative selfhood depend on the self's initial relationship to the narrative being destabilized. The more modest sense of agency at which he arrives feels, to him, like diminishment. As intimacy with our own data gives rise to more assemblage-driven experiences of selfhood and more modest conceptions of our own agency, some of us may expect to be assailed with similar doubts. Adams reminds us, perhaps unintentionally, that the ideal of the agential, autonomous, and decisive self has only ever been a narrative projection of Western subjectivity, never its reality.

Stein shows us to *ask who is narrating* when claims are being made based on collected data. Whether representation of self through data collection offers potential or peril depends in large part on one's say in how that data is narrated. For Stein, the ability to have a say in what data meant, or the authority to narrate, was foreclosed by the identity of biological sex pro-

jected onto her. She challenges the reality of this identity by demonstrating the incoherence of data in its exhaustively collected form. Taking repetition and parataxis past the limits of comprehensibility, Stein's continuous present takes the reader closer to the experience of reading data points in the name of representing reality. This experience is halting and puzzling, raising awareness of the selective and interpretive acts of sense-making required to read data. Through her data aesthetic, she rejects the possibility that data will speak for itself in order to be able to speak for herself.

But to see Stein's data aesthetic solely through the rubric of destabilizing narratives of gender identity is not to see quite far enough. Stein claims a sense of her own genius by using the data aesthetic to represent the life of a mixed race, working class woman. The resulting illegibility of Melanctha's life illustrates the power dynamic at the core of data representation. The data collector claims the authority of objectivity but is inevitably already a kind of narrator, choosing where to focus attention and employing a predetermined vocabulary to record observations. Further, Melanctha is not asked to make her own meaning of the data so conceived and collected, even though she demonstrates a desire to know through collecting experience that should mark her as a kind of peer. Her position illustrates the kind of structural imbalance of power around data representation that emerging tenets of data justice seek to mitigate through calls for including those whose data is collected in the process of evaluating and using it. What if Melanctha had instead been represented by a researcher adopting the recommendation Ruberg and Ruelos make for collecting the data of queer lives: "Allow respondents to account for the complexities of their identities and remember that all of the elements of their identities are valid; unless a respondent states otherwise, no one element of their identity, in the present or the past, is more 'real' or 'true'" (10). Which is a "real" Melanctha? All of them, as Melanctha tries to tell both Jeff Campbell and us.

Wells-Barnett teaches us that *data is labor*—creative, custodial, and committed labor. Data collection is data creation, even when it seems to be merely reproducing a record. Before the first point is collected, the creative work of determining scope, developing method, formulating descriptive vocabularies, and defining categorizations is filled with choices that constitute not "the reality" but one particular, situated way of seeing it. We are only beginning to recognize the immense creativity that can be brought to bear on data collection and representation, and Wells-Barnett stands as a forerunner in this work. In hindsight, her project seems so necessary that it

almost appears inevitable, but the effort she put forth and risk she endured to carry it out refute this appearance. The method of collecting, recategorizing, reproducing, and offering new analysis of accounts of lynching in the white press was a creative solution to the constraints on mobility that she faced and the under-resourced infrastructure of the African American press. After she has collected the data, she finds that its circulation depends on her own movement into a variety of social and media spaces. The idea that data will speak for itself is quickly disproven; she instead comes to embody data in order to justify her own speech. Another, often overlooked, element of custodial labor is her constant struggle to support herself and fund the travels necessary to pursue her work. The slim archival record of her life is a heartbreaking illustration of the direct connection between her living conditions and data preservation, as most of her papers were destroyed in a house fire later in her life. Preceding and surrounding these labors, crucially, is commitment in the political and ethical sense. As Benjamin observed in a talk delivered for the inaugural Data for Black Lives conference, "before the data there were, for Du Bois, Wells-Barnett, and many others, the political questions and commitment to Black freedom" (192). Commitment is not a compromised epistemological status but rather a given feature of any knowledge project. Given the resources necessary to collect and preserve data, as Wells-Barnett so carefully makes visible, we must always assume that data is collected for a purpose, even if that purpose goes unstated.

Applying these strategies as readers of narratives put forth on behalf of data collections is work that we can do whether we interact closely with data or not, whether what we encounter is an infographic or a spreadsheet. We can query the scope, creator, and creative process that produced data collections and the stories drawn from them. We can assume that every data collection could tell many stories, whether we are hearing them or not. Not all of these stories will be equally representative or worthy of attention, but their existence should remain in view to assert a moderating force on the desire to declare certainty. We can consider the commitments and purposes of those who have collected the data, whether they align with our own values, and how we will act to challenge them if they do not.

We who practice literary studies might also see and seize upon the proliferating proposals for methods of reading in the twenty-first century—such as distant reading, surface reading, hyper reading, and machine reading[8]—as attempts to define literary scholarship and humanist studies not just in reaction to a cultural climate that accepts too credulously the allure of the quan-

titative, but also in relationship to the new awareness that the data of literature provokes: the reality of a vaster textual domain than one reader, one method, one algorithm, or any number of canons could ever account for. Important work arises from engaging with this data as data. Important work also arises from troubling the perceived tenability of knowing something about whole centuries or national corpora of literature through data by raising awareness of archival exclusions and the limits of encoding.

As I drafted this coda in late 2020 and early 2021, the COVID-19 pandemic was a co-present context for the challenge of how to narrate and read data well, and justly. From the outset of the pandemic, data has been collected, unevenly but massively. While epidemiologists construct population-level narratives in the form of models, journalists and public health advocates fight to convey their findings in a way that can effectively inform governmental and individual choices. Scanning data dashboards, heatmaps, and headlines has become (for those with the desire, time, and access) a daily ritual of trying to make sense of the novel coronavirus as a viral entity and a human catastrophe.

Approaches to representing COVID-19 data display the same striking oscillation between point and collection employed by the writers examined in this study. The May 24, 2020, front page of the *New York Times* was covered by a list of names, followed by age, hometown, and a one-sentence obituary. This list of nearly a thousand names was roughly one percent of the lives lost to COVID-19 in the United States at that time. On Sunday, February 21, 2021, the front page was again dominated by an attempt to represent both the scope and particularity of loss in a one-dot-per-death vertical timeline to represent the nearly 500,000 lives lost to COVID-19 by that point. Yet, at the same time as efforts to regain a sense of scope by reminding us of the sheer number of individuals lost relied on list and dot forms, certain clear narrative lines were emerging from the collected points that should also have been able to move us, to mourning and to action. Indigenous, Black, Asian Pacific Islander, and Latino/a communities in the United States were, and as of this writing are, experiencing a death rate of double or more than that of whites and Asian Americans.[9] Our understandings and actions must constantly shift between the formal frames of point, collection, and narrative if we are to realize data's epistemological potential to improve not only our understanding of reality but our support for lives, human and nonhuman, within it. As well, we must reckon with the historical and political contexts that make the processes of turning data into meaning into just action anything but frictionless.

The starting point, for a critical data narrator of a century ago or today, is recognizing data's potential to disrupt claims of objective knowledge or singular narrative. To practice narrative experimentation is to claim creative agency and affirm human deliberation, imperfect but appealable, in the face of arguments for the inevitability, superiority, and apolitical nature of the algorithm as ultimate revelation. Literarily and politically, the potential of data lies in holding ourselves accountable to a perceptive field as wide as the exhaustive collection, remaining receptive to the multiple narratives of reality that such a field will surface, and committing to action in collective frames of consequence.

Notes

1. Specifically, Slosson opens his column with a reference to the recent death of Jules Verne, crediting Verne with the pronouncement that "the novel had reached its height and would soon be displaced from its present position of influence and popularity by new forms of literature" (849).

2. See Poovey, *History of the Modern Fact*, and Purdon, *Modernist Informatics*.

3. I distinguish between the interrelated, but importantly different implications of the biographical history implied by "life," the essential nature suggested by "identity," the matrix of contextual, conceptual coordinates (gender, race, social position, etc.) that form "subjectivity," and the narrated versions of life that form concepts of selfhood.

4. Interesting to note, however, is that many Quantified Self practitioners report to opt for manual modes of data collection even when automatic means are available, because they find that the physical act of recording each point contributes to their understanding of the ultimate collection. See Nafus and Sherman, 1789.

5. See Provost and Fawcett, "Data Science and its Relationship to Big Data and Data-Driven Decision Making."

6. See Friedman, "Planetarity"; Huyssen, *After the Great Divide*; Mao & Walkowitz, *Bad Modernisms*; and Sollors, *Ethnic Modernism*.

7. See Miller, *Accented America*; Wilson, *Melting-Pot Modernism*; and Sorensen, *Ethnic Modernism and the Making of US Literary Multiculturalism*.

8. For key arguments around selfhood and narrative, see Eakin, *Living Autobiographically*; Rudd, "Selfhood and Narrative"; and Hyvärinen et al., *Beyond Narrative Coherence*.

9. I will typically use "data" as a collective singular in order to capture its presence in cultural discourse as a concept, often referred to as a broad phenomenon rather than a specific set of data points. The use of "data" as a collective singular has been common since at least the eighteenth century (see Rosenberg) and is fairly standard in style guides for major publications, such as the *New York Times* and the *Wall Street Journal*.

10. See especially Ruha Benjamin, *Race After Technology*; Eubanks, *Automating Inequality*; Noble, *Algorithms of Oppression*; and O'Neil, *Weapons of Math Destruction*.

11. Bacon is always aware of the potentially instrumental uses of the knowledge that data collection will create. He lists "three species and degrees of ambition" by imagining three types of men (Bacon, 104): "men who are anxious to enlarge their own power in their country," "men who strive to enlarge the power and empire of their country over mankind," and those who "endeavor to renew and enlarge the power and empire of mankind in general over the universe." Of these three, Bacon commends only the final, but sees the second as a moderate good. I focus here on the conceptual history of data because it continues to animate contemporary data collection projects, but there is an equally important history of data's connection to instrumental power and imperial projects close alongside.

12. As a modernist counter to LaPlace's desire for a subject position for which "the future, as the past, would be present in its eyes," see T. S. Eliot's gloomier take in "Burnt Norton": "If all time is eternally present/ All time is unredeemable."

13. See Bowker, *Memory Practices in the Sciences*; Gitelman and Jackson, *Raw Data is an Oxymoron*.

14. By perception, I refer to the instantaneous receipt of sense. I do not intend to naturalize perception; if there is such a thing as raw sensory input, it is not accessible in an unmediated form and will always be filtered through language, ideology, and prior knowledge.

15. Somewhat more technically stated, Floridi offers the following as a complete definition of data: "Dd) datum =def. x being distinct from y, where x and y are two uninterpreted variables and the relation of 'being distinct', as well as the domain, are left open to further interpretation."

16. Although, as Hayles observes in her reading of Shannon ("Information or Noise?"), this is a somewhat reductive, instrumentalizing view of Shannon's initial argument, which suggests that the addition of noise to signal actually increases the number of potential meanings, a reading which would align it more with data in my argument. This view, though, has not been typical in theoretical considerations thus far.

17. See Gillespie's "Algorithm." for thorough delineation of these various meanings.

18. While I have not read the full context for each of these hits, I have verified that the vast majority are legitimate and not the result of optical character recognition errors. In many, more hastily scanned, historical periodicals, hits for "data" are inflated by misscans of the word "date."

19. Outside of *Little Review*, see also Pound's "The Serious Artist" in the *New Freewoman* in which he argues that art is the essential data through which humanity can be truly studied.

20. "Whitehall," signed by Crelos (otherwise unidentified), in volume 6.2, 31, which uses the image of "data/Dead data" as part of its depiction of a soul-deadened British office functionary.

21. See Hueffer, "Women and Men," in *Little Review* as part of an essay assailing the conclusions of Otto Weininger, whose gender theory has been considered, by some, to have been highly influential on Stein. Outside the *Little Review*, see also Richardson's piece in *Freewoman*, "The Disabilities of Women," 254–55.

22. See Adorno, *Aesthetic Theory*, 155–56: "The principle of montage was conceived as an act against a surreptitiously achieved organic unity; it was meant to shock."

23. See Wollaeger, *Modernism, Media, and Propaganda: British Narrative From 1900 to 1945*, 65–66, especially his reading of Sergei Eisenstein's reflections that "Soviet cinema . . . deploys montage in order to generate metaphor and allegory that coalesce to reveal a coherent ideological concept fused into an organically unified image."

24. Notably, in *W. E. B. Du Bois's Data Portraits: Visualizing Black America*, Rusert and Battle-Baptiste have recently stewarded the publication of data visualizations created by Du Bois and a team of collaborators for the Paris World Exposition in 1900, a tantalizing point of overlap that I hope future work, my own or others', will explore further.

25. For basic definitions of naturalism and realism aesthetic categories in U.S. literatures, I look to Pizer, *The Theory and Practice of American Naturalism*, and Kaplan, *The Social Construction of American Realism*. There have also been recent and important departures from these broad definitions that are relevant to my argument. I am particularly indebted to Fleissner's attention to repetition (in relation to naturalism) in *Women, Compulsion, Modernity: The Moment of American Naturalism* and Michael Elliott's attention to the details in ethnographic forms (in relation to realism) in *The Culture Concept*. My characterization of the postmodern stance toward narrative follows from Francois Lyotard's well-known summary definition of postmodernism as "incredulity toward metanarratives" (xxiv). I also draw from Linda Hutcheon's connection of postmodernism to "historiographic metanarrative," or the attempt in narrative to make sense of how the reality of history might be constructed that ends in arguing that it cannot be.

26. As in, for example, Nowicki's report from the Local Data Summit: "The future of search won't need to listen to what you ask for in order to know exactly what you mean. Searches and results will appear before a consumer even knows he or she needs it. It will simplify everyday life by taking over the minutiae that were previously taking up time and energy."

27. For examples of these two data visualization forms, see the Racial Dot Map, http://racialdotmap.demographics.coopercenter.org/, created by Dustin Cable, Weldon Cooper Center for Public Service, Rector and Visitors of the University of Virginia; and "500,000 Lives Lost," by Sam Hart of Reuters Graphics, https://graphics.reuters.com/HEALTH-CORONAVIRUS/USA-CASUALTIES-CHRONOLOGY/xklpyomnrpg/index.html

28. For in-depth explication and discussion of databases and interactively generated Web forms, see Manovich, *The Language of New Media*; Hayles, "Narrative and Database."

29. As illustrated by this sentence, I use the terms Black, African American, and Black U.S. American at various times in this study, because I understand them to be irreducible to each other. My use of "Black" refers to theory and practice that builds transnational solidarity rooted in history and experience of racialization. My use of "African American" points to communities in part defined by histories of both African ancestry and the experience/collective memory of enslavement in the

United States. "Black U.S. American" proposes a community or affinity group that, at least potentially, exceeds these historical boundaries to define itself in primary relation to Black theory, culture, and politics.

30. See the "About" narrative of the Ida B. Wells Society for Investigative Reporting, for example.

31. See G. Greenwald, "The Crux of the NSA Story in One Phrase: 'Collect It All.'"

CHAPTER I

1. Crime statistics were not the first form of scientific racism to gain a disciplinary and popular foothold in the United States. As Leys Stepan and Gilman note, "Scientific racism was significant because it provided a series of lenses through which human variation was constructed, understood, and experienced from the early nineteenth century until well into the twentieth century if not until the present day" (73). A list of a few of these "lenses" includes: polygenism, anthropometry, craniometry, eugenics, and IQ measurement along a bell curve.

2. Morris notes that the disruptive relationship between data and narrative stems in part from Du Bois's German graduate education: "Schmoller, who became Du Bois's primary mentor, and the other members of [Schmoller's] group rejected grand theories and deductive reasoning" (20). Theory is only to arise from data.

3. An implicit stereotype is an unexamined association between qualities and members of a social group. Such stereotypes lay the mental groundwork for implicit bias. A. Greenwald and Krieger offer a concise working definition: "Implicit biases are discriminatory biases based on implicit attitudes or implicit stereotypes" (951).

4. For background on the history of critical interpretation of Du Bois's concept of double consciousness, see Reed, *W. E. B. Du Bois and American Political Thought*, 92–97.

CHAPTER 2

1. This chapter is derived in part from an article published in *a/b Auto/Biography Studies*, 2017, copyright The Autobiography Society, available online http://www.tandfonline.com/10.1080/08989575.2018.1389839

2. The individual developmental narrative, or bildungsroman, has frequently been argued to have a privileged relationship to broader historical and social narrative. See Hirsch, "The Novel of Formation as Genre"; Slaughter, *Human Rights, Inc.*

3. For further discussion of the concept of American exceptionalism, see Ross, *The Origins of American Social Science*, xiv–xv.

4. See Kazin, "History and Henry Adams," and Nadel's introduction to *The Education*, for example.

5. Winters does use the word "data" in his reading of *The Education* as evidence of "the radical disintegration of [Adams's] mind" (405): "Nothing was comprehensible; each event and fact was unique and impenetrable; the universe was a chaos of meaningless and unrelated data, equivalent to each other in value because there was no way of evaluating anything" (404). In this passage, Winters draws attention

to the same formal dynamics I wish to emphasize—the form of the data collection as an epistemology of the parallel coexistence of differing points—but he attributes this sense to Adams's (and his society's) loss of religious faith.

6. Or at least, this was how U.S. historians tended to interpret Ranke's famous motto, "wie es eigentlich gewesen." See Iggers, "The Image of Ranke in American and German Historical Thought," 18.

7. I am indebted to Novick for drawing attention to the statements by Cheyney and Hart. For further discussion, see Novick, 38–39.

8. See, for example, Beam, "#Posterity."

9. For further discussion see Burich, "'Our Power Is Always Running Ahead of Our Mind': Henry Adams's Phases of History," particularly 166–67.

10. Chalfant refers to Adams's "second life" as part of a biographical framework that interprets Adams as having had three lives, roughly equivalent to the educational and political work of childhood through young adulthood, the historical work of middle age, and the more avowedly literary vocation of later middle age and seniority.

11. Ngai's spatialization of anxiety draws from both psychoanalytic and existential theorizations. For the purposes of my reading, it suffices to note that data-driven self- and world-awareness induces a kind of spatialized anxiety, but for deeper discussion of these two traditions of theorizing anxiety, see Ngai, *Ugly Feelings*.

12. As well, there are problematic expressions of anti-Semitism, nativism, and condescension toward women in many of his writings, especially those of his later career. For a summary of the conflicting interpretations of Adams and his work, see Fuller-Coursey, "Henry Adams, Scientific Historian: Even into Chaos," 122.

CHAPTER 3

1. See Meyer, *Irresistible Dictation;* and Chodat, *Worldly Acts and Sentient Things.*

2. See Ruddick; *Reading Gertrude Stein,* Farland; "Gertrude Stein's Brain Work", and Martin, "The Making of Men and Women: Gertrude Stein, Hugo Münsterberg, and the Discourse of Work."

3. See Leon Katz, "Weininger and *The Making of Americans*"; and Stimpson, "The Mind, the Body, and Gertrude Stein."

4. See Cecire, *Experimental.*

5. Stephens, in *The Poetics of Information Overload*, has explored Stein and the concept of information, but not data and data collection as a distinct form.

6. See Ruddick, 14.

7. See especially Katz, Farland, and Martin.

8. Specifically, Stein in this case takes mechanical objectivity to an extreme. See Daston and Galison, 121, for definition and further discussion of mechanical objectivity. While Cecire ultimately argues that Stein's turn toward structural objectivity is a turn away from empiricism, I want to argue that it is actually through a deepening, even extreme, engagement with empiricism via data collection that she undertakes her sustained inquiry into the nature of selfhood.

9. I am indebted to Winant's reading of this passage in relationship to philosophical proofs of explanation, 99.

10. See Sutherland, *Gertrude Stein: A Biography of Her Work*, 27; Katz; and Cecire for discussions of Stein's interest in type as overriding. However, as Farland observes, Stein's method of reaching abstraction was rigorous collection of concrete particulars: "Strikingly, what is perhaps the ultimate abstractionist undertaking—'a history of every one'—proceeds through exhaustive, detailed description—the very laborious, mechanical labor that variability's proponents understood as antithetical to high-order abstraction" (138).

11. See North, *The Dialect of Modernism*; and Doyle, "The Flat, the Round, and Gertrude Stein: Race and the Shape of Modern(ist) History."

12. See Stimpson; Damon, "Gertrude Stein's Jewishness, Jewish Social Scientists, and the 'Jewish Question'"; Wagner-Martin, *Favored Strangers*; and Jung, "Why Is Melanctha Black?: Gertrude Stein, Physiognomy, and the Jewish Question."

13. See Cohen, "Black Brutes and Mulatto Saints: The Racial Heritage of Stein's 'Melanctha'"; Saldívar-Hull, "Wrestling Your Ally: Stein, Racism, and Feminist Critical Practice"; and Hovey, "Sapphic Primitivism in Gertrude Stein's 'Q.E.D.'"

14. As Saldívar-Hull has pointed out, "From the first page of 'Melanctha,' the racial slurs obscure any sympathetic portrayal of a character in Stein's story" (190).

15. All citations from "Melanctha" are drawn from the Bedford critical edition of *Three Lives* edited by Linda Wagner-Martin.

16. For a detailed accounting of shifts in perspective, see DeKoven, 81–82.

17. See Oreskes, "Objectivity or Heroism? On the Invisibility of Women in Science," 89.

18. See Ruddick, 13.

19. See Ruddick, 38–39.

CHAPTER 4

1. Wells-Barnett is often referred to by her maiden name only, perhaps because her most famous writings were published before she was married. After marriage, though, she chose to hyphenate her maiden and married surnames. Because I examine writings across her lifespan, and most particularly her autobiography which is published under her hyphenated name, I refer to her throughout as Wells-Barnett.

2. Lynching is the premediated, extralegal mob killing of an individual. For a genealogy of lynching as discourse and practice in U.S. history, see Carr, "The Lawlessness of Law: Lynching and Anti-Lynching in the Contemporary USA." While, historically, the victims of lynch mobs have come from all identity backgrounds, my use of the term in this chapter refers exclusively to the lynching of African Americans by white mobs in the post-Reconstruction period.

3. See especially Plantin, "Data Cleaners for Pristine Datasets: Visibility and Invisibility of Data Processors in Social Science," 66.

4. See Zackodnik, "Recirculation and Feminist Black Internationalism in Jessie Fauset's 'The Looking Glass' and Amy Jacques Garvey's 'Our Women and What They Think,'" 456, note 26.

5. For more on this aspect of Wells-Barnett's work, see Johnson-Roullier.

6. See *Dusk of Dawn*, 67.

7. See Mindich, *Just the Facts*, 116.

8. See also Mindich, 116–17.

9. See Goldsby, *A Spectacular Secret*, 90–91 for a fuller explanation of the wire reporting process.

10. Notably, Piepmeier observes, the lynch narrative contains no stock role for the Black woman. For deeper discussion of the role of the Black woman in lynch narrative, see Gunning, *Race, Rape, and Lynching*.

11. See Rael, Newman, and Lapsansky's edited collection, *African-American Pamphlets and Protest, 1790–1860*.

12. See *Crusade for Justice*, 78–79.

13. In contemporary usage, "array" is also a key term in computation. An array is a data structure that stores groups of values aligned to a single key or index value. In general programming terms, a data set would be an array. Wells-Barnett, of course, would not have encountered this usage, but its later history demonstrates its latent connotation.

14. See Stepto, *From Behind the Veil*, especially 3–31.

15. Slicing is a colloquialism of data science. David Paper explains: "Slicing and dicing is breaking data into smaller parts or views to better understand and present it as information in a variety of different and useful ways. A slice in multidimensional arrays is a column of data corresponding to a single value for one or more members of the dimension of interest."

16. See Stockley, *Blood in Their Eyes*.

CODA

1. See Deleuze, "Societies of Control," for a foundational, and decidedly pessimistic, consideration of these convergences.

2. See Ohm, "Broken Promises of Privacy: Responding to the Surprising Failure of Anonymization."

3. See Kitchin and Lauriault, "Toward Critical Data Studies"; Thatcher, Shears, and Eckert, *Thinking Big Data in Geography*; Gillespie, "Algorithm"; Iliadis, and Russo, "Critical Data Studies: An Introduction"; and Loukissas, *All Data Are Local*.

4. See McGlotten, "Black Data"; and Day, *Black Living Data Booklet*.

5. See Ruberg and Ruelos, "Data for Queer Lives: How LGBTQ Gender and Sexuality Identities Challenge Norms of Demographics."

6. See Walter and Andersen, *Indigenous Statistics*.

7. See D'Ignazio and Klein, *Data Feminism*.

8. See Moretti, "The Slaughterhouse of Literature"; Felski, "Critique and the Hermeneutics of Suspicion"; Love, "Close but Not Deep: Literary Ethics and the Descriptive Turn"; and Hayles, ""How We Read: Close, Hyper, Machine."

9. See "The Color of Coronavirus: COVID 19 Deaths by Race and Ethnicity in the US," American Public Media Research Lab, www.apmresearchlab.org/covid/deaths-by-race, published March 5, 2021.

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