Introduction

Digital Writing before Digital Technology

You don't always need a computer to do computer rhetoric.

-Elizabeth Losh, Virtualpolitik

Habit enables stability, which in turn gives us the time and space needed to be truly creative, for without habit there could be no thinking, no creativity, and no freedom. Further, habit, as a form of second nature, reveals the power of humans to create new structures and reactions in response to their environment. . . . A habit, of course, is also a literal covering, and the nun's habit reveals that, even as habit covers and fits an individual, it also connects bodies.

-Wendy Hui Kyong Chun, Updating to Remain the Same



opy, paste, combine, update, share, reply. These writing habits are imperatives for a participatory culture that demands constant responses to crisis and change, ranging from editing web templates to replying to trending tweets to adding friends to an expanding social profile. While such habits of engagement

are hallmarks of the digital era, we acquired them long before digital technology. Wikipedia's principles of collaborative knowledge production were practiced by medieval scribes, who compiled manuscripts containing florilegia, bestiaries, and chronicles. Twitter's circulation of abbreviated commentary expands upon the thriving industry of annotators who interpreted and updated theological and legal texts in medieval manuscripts. YouTube's reuse of artistic objects develops out of an ancient practice of appropriation, especially among Aesopic fable au-

thors, ranging from Marie de France to Geoffrey Chaucer. And Facebook's expansion of social networks builds upon the medieval arts of letter writing, which encouraged the sharing of private thoughts publicly with friends.

The massive proliferation of social networks such as Twitter and Facebook has demonstrated the power that crowdsourcing can wield, seemingly with little help from credentialed experts in higher education. Rather than turn to university-trained specialists for reliable information, the public is increasingly investing in the collective intelligence of the crowd, which digital platforms such as Wikipedia are harnessing outside of the classroom with unparalleled success. Such networked forms of writing and knowledge production have been greeted with equal measures of enthusiasm and trepidation. On the one hand, the social nature of editable spaces has inspired many to celebrate the prevalence of writing environments in which readers can easily become writers, important information can be efficiently compiled, and friendships can be quickly formed. On the other, it has provoked fear among many who perceive the social nature of digital writing habits as corrosive for language usage, the right to privacy, and textual authority. Despite such polarized views of digital media, most agree that such networked writing is fundamentally new and unquestionably different from its predecessors, especially writing on the printed page.

Habitual Rhetoric: Digital Writing before Digital Technology makes two related claims. First, premodern manuscript cultures established the rhetorical principles for digital writing practices, from copying to updating to sharing, centuries before the invention of the computer. Second, social media thrive on the speed and scale of these digital habits, creating algorithmic networks that sever writers from writing, challenging the social and embodied character of these ancient writing practices. By establishing precedents for the habits that fuel the power of social media, we can identify their habitus, both a singular and plural Latin rhetorical term that describes dispositions, conditions, or principles that activate particular writing habits within particular digital environments. Habitual Rhetoric therefore describes a set of compositional practices that shape and are shaped by a habitus, which is developed within a field of writing. Rather than reduce digital writing to the impulsive or automated habits demanded by social platforms and software algorithms, habitual rhetoric is defined by dispositional forces that are creative, social, and embodied. Habitus does not merely refer to an ornamental dress ("habit") that one takes on and off in response to a crisis it refers to a rhetorical way of life, a compositional habit that connects writers to the field of writing they may extend and transform. When we recognize habits as rhetorical forces, we can identify the dangers of passive participation within market-driven networks, articulate transparent connections between members of writing communities, and amplify voices of the previously unheard.

Digital before Digital

This book joins a rich conversation about the many oral, material, and cultural practices that set the scene for digital writing. Much work has already been done by scholars such as Angela Haas, who has established the predigital roots of hypertext in American Indian wampum weaving, and Adam Banks, who has demonstrated the reliance of remix culture on African American rhetorical practices, ranging from singing the blues to mixing breakbeats. This book draws upon their pan-historiographical perspectives to examine premodern cultures of alphabetic writing that emerge from medieval university settings, specifically handwritten letters and codices produced both before and after the rise of print capitalism in the West. By focusing on writing, I suggest that studies of manuscript cultures offer productive contexts for pushing the boundaries of Aristotelian "available means of persuasion" to emphasize the rhetorical canons of memory and delivery that flourish within multilingual, multiauthored, and multimedia writing environments, which range from the handwritten codex to the digital annotation platform. While much of the focus of media-studies research has been on the tension between social forces and the material agency of writing technologies, this book considers the changing relationships between writer and reader and the rhetorical habits that emerge to negotiate them. I argue that once we recognize the pan-historiographical connections among these interactive rhetorics, the increasingly unstable, infuriated, manipulated, and exploitive forms of crowdsourced authority can be interrogated from the perspective of their precedents.

This is not, however, the story of the digital revolution that we have been told. The tale usually unfolds this way, as narrated by the cowriters of *Digital Humanities Manifesto 2.0*:

Like all media revolutions, the first wave of the digital revolution looked backward as it moved forward. Just as early codices mirrored oratorical practices, print initially mirrored the practices of high medieval manuscript culture, and film mirrored the techniques of theater, the digital first wave replicated the world of scholarly communications that print gradually codified over the course of five centuries: a world where textuality was primary and visuality and sound were secondary (and subordinated to text), even as it vastly accelerated the search and retrieval of documents, enhanced access, and altered mental habits.²

While this story of remediation may be all too familiar to many of us, thanks to the work of Jay David Bolter and Richard Grusin,³ the linearity of this media history—from spoken to chirographic to printed to digital representation—is surprising, especially since the manifesto begins with a warning against those "looking for linearity." The digital world, according to this model, begins by reproducing a print-based world "where textuality was primary and visuality and sound were secondary," only to mature into a world in which the visual and the aural gain a new primacy. As Jessica Brantley demonstrates in her study of the late fourteenth-century Vernon manuscript, the medieval world also privileged sight and sound through verbal decoration and arrangement in manuscripts that were designed for performance. In the case of the Vernon manuscript, the Paternoster becomes a bilingual diagram that "alternates the colors and dispositions of words, making spoken language into a variety of visible forms." Given the prominence of illumination and spoken performance within medieval book culture, architecture, and heraldry, digital media may more accurately be described as postmedieval media.

Even in the same collection in which Brantley's essay appears, it is not difficult to find oversimplifications of premodern manuscript culture. N. Katherine Hayles and Jessica Pressman acknowledge that "writing surfaces have always been complex," but they still perpetuate a teleology of increasing complexity by suggesting that "when writing was accomplished by a quill pen, ink pot, and paper, it was possible to fantasize that writing was simple and straightforward, a means by which the writer's thoughts could be transferred more or less directly into the reader's mind."6 Given the arduous and multifaceted process of making most manuscripts, which required the collaborative efforts of a writer, stationer, scribe, rubricator, and illuminator, it is difficult to imagine that such a fantasy was indulged by many before the modern era of mass reproduction. As Bonnie Mak notes, we have all too often assumed a "simple coordination between physical platform, mode of production, and historical period . . . that pages were written by hand on parchment in the Middle Ages, were printed with moveable type on paper after 1455, and are encoded for digital display in the twenty-first century." The fields of comparative media studies and media archaeology have productively challenged the work of Marshall McLuhan and Elizabeth Eisenstein to demonstrate the layered and recursive histories that inform new media in ways that are both horizontal and vertical.8 Yet, we still cling to our desire for linearity and simplicity and rarely acknowledge that particular media forms have complex relationships between their materials, their interfaces, their cultures, and their historical moments.

Habitual Rhetoric confronts this technological determinism by shifting the focus away from media in the direction of rhetoric. This push for the importance of rhetorical studies within the digital humanities writ large has begun to be addressed by the work of a growing group of scholars, especially Jim Ridolfo and William Hart-Davidson in Rhetoric and the Digital Humanities, and Jamie "Skye" Bianco, Ian Bogost, Elizabeth Losh, and Jentery Sayers in Debates within the Digital Humanities, among others who are theorizing the contributions that rhetoricians can offer to new media materiality, analysis, and production.9 Through comparative analyses of manuscript and online environments, this book demonstrates the importance of moving beyond material analysis of page design to consider the ways interfaces operate rhetorically, identifying the persuasive, memorializing, and dialogical character of translated, compiled, and annotated writing environments. This recognition of writing habits that have experienced especially vibrant, seemingly parallel, premodern and digital lives offers insight into current challenges to the romanticized figure of the autonomous writerly body, which is increasingly fragmented, distributed, and circulated as consumable property. Digital writing, following its premodern predecessors, relies more on absence than presence, often rupturing the assumed one-to-one relationship between writer and reader. Like the rhetorical apostrophe, an address to an absent audience, digital forms of writing reach out to uncertain, unidentifiable, or unintended recipients. Advanced forms of machine learning, such as ChatGPT, now produce algorithmic writing that sacrifice the autonomous figure of the writer for the sake of establishing an accretive space for writing to continue to happen and circulate. ¹⁰ The instability that accompanies transitions to new writing technologies, from the handwritten codex to the printing press to the digital platform, results in cultures of unending accumulation, in which the persistent and palimpsestic act of writing upon writing becomes inseparable from the act of reading. Such a radical revision of the reader's role raises the stakes of digital reading and establishes a collective ethos of written participation. Just like medieval glossators of legal texts who codified new laws through marginal annotation, Twitter readers are compelled to become writers, endorsing, retweeting, tagging, and replying to texts as acts of interpretation. Any individual failure to respond to new information creates dead letters that become passive objects available for bots to acquire and redistribute. Given the pedagogical implications of this participation imperative, this book poses the problem of a future written authority that is increasingly incorporeal, networked, and distributed. How might we responsibly engage in online spaces in which all readers and users are expected to be entrepreneurial writers and designers?

This intervention therefore attempts to address the underdeveloped relationship that exists between the highly performative and visual objects of medieval and digital rhetoric. While scholars such as Dànielle Nicole DeVoss, Laurie Gries, James Porter, and Jim Ridolfo have been working to recover the canons of delivery and memory often neglected within print culture, more attention needs to be paid to the medieval arts of memory and writing that inform the architecture of digital forms of storage, distribution, and circulation. 11 This gap is the symptom of most rhetorical histories, which typically begin with Aristotle and Quintillian and then skip the Middle Ages entirely to continue with Peter Ramus and Giambattista Vico. In an otherwise excellent book that is foundational for scholars in this area of study, Digital Rhetoric: Theory, Method, Practice, Douglas Eyman attempts to define digital rhetoric by distinguishing it from the rhetoric of previous ages. After discussing the golden age of rhetoric in ancient Greece and Rome, Eyman descends into the "dark ages": "The rise of Christianity in the medieval period led to the devaluation of rhetoric (it was seen as pagan and antithetical to the church) until Augustine recognized that the persuasive modes of rhetoric could be very useful for the church; however, the focus of rhetoric during this period was primarily in the development of rules for preaching and legal letter writing (all in the service of the church)."12 Leaving aside the errant assertion that the Church was the alpha and omega of medieval rhetoric, Eyman places Augustine squarely within the Middle Ages, even though he dies in 430 CE, well before the traditionally accepted starting point of the medieval period. The next figure discussed is the sixteenth-century Peter Ramus, leaving the thousand years that comprise the Middle Ages completely unaddressed.

The narrative that Eyman tells is so common among historians of rhetoric that it is rarely questioned, except by the few medievalists—notably Martin Camargo, Mary Carruthers, Rita Copeland, Jody Enders, Cheryl Glenn, James J. Murphy, and Marjorie Curry Woods—who have demonstrated the vital contributions that medieval rhetoric offers to the arts of prose and poetry, letter writing, and writing pedagogy.¹³ The neglect of their work has not only led to an impoverished view of rhetoric in the Middle Ages, but also resulted in the development of a field of digital rhetoric based on hyperbolic claims to innovation and incomplete assessments of the history of interactive, performative, and visual rhetorical habits. Important books such as Kathleen Welch's Electric Rhetoric (1999), Collin Brooke's Lingua Fracta (2009), Elizabeth Losh's Virtual-politik (2009), Adam Banks's Digital Griots (2011), and Douglas Eyman's Digital Rhetoric (2015) have effectively distinguished the salient features of digital writing, but they have done so by relying on rhetorical histories based in oral, print,

or computer cultures.¹⁴ This book complements their work by considering the contributions of manuscript cultures to digital rhetoric, attending specifically to the work of rhetoricians teaching within early universities, such as Giovanni di Bonandrea, Geoffrey of Vinsauf, and John of Garland, who develop an explicitly corporeal and material conception of rhetorical habitus in the twelfth through fifteenth centuries that has immeasurably shaped accumulative and public forms of writing production ever since.

Pan-Historiographical Methodology

The claims that I make in this book, especially the argument that digital writing began before digital technology, may seem cleverly exaggerated and overly provocative. To some extent, these objections are warranted. On the one hand, the digital writing that precedes digital technology is only digital in a semantic sense: the fingers, or digits, that hold the quill or tap the key are as digital as the binary numbers, or digits, that encode the computer software. On the other, the teleological claim that digital writing is defined by its computational character (e.g., bytes and chips) dramatically limits our understanding of how digital writing habits obtain their rhetorical potential. Digital writing, in other words, has a history before digital technology that has contributed more to its habitus than any computer algorithm, operating system, or internet server could ever provide. As Elizabeth Losh suggests in her groundbreaking study of digital rhetoric, "many who purportedly study the rhetoric of digital discourse focus almost exclusively on the technological apparatus, so that a conventional view of the subject directs attention to the mechanical responses of the computer to input rather than the theories behind the design and continuing evolution of digital media and networked systems."15 Following the lead of Losh, I pursue the theories and histories that establish the principles for digital writing in order to understand how the persistence of these habits interacts with changing material conditions, ranging from handwritten parchment to web templates.

This pursuit of the persistent habits of the distant past requires a somewhat unorthodox methodology that is expansive in scope across space and time, and tightly attuned to archival objects within manuscript and digital environments. As Debra Hawhee and Christa J. Olson observe about the current state of rhetorical studies, "It is far more common these days to see book-length rhetorical histories bound tightly by a short span of dates or by the lives of particular figures than to encounter texts that explain or explore the rhetorical histories of a concept of cultural group." Given the obvious value of highly specialized and narrowly focused research projects, this book assumes the risk of not only leap-

ing across centuries of time, but also transgressing disciplinary boundaries—notably those of medieval studies, digital rhetoric, and book history—to achieve its goals.

My approach therefore adopts a methodology that Hawhee and Olson call "pan-historiography," which entails "writing histories whose temporal scope extends well beyond the span of individual generations" and describes "studies that leap across geographic space, tracking important activities, terms, movements, or practices as they travel with trade, with global expansion, or with religious zealotry."17 By tracing these digital habits across space and time, I often encounter tensions and gaps within and between research fields that are difficult, and sometimes impossible, to reconcile. This means that, as Hawhee and Olson might suggest, my work within each discipline "moves through its histories, by turns zooming and hovering, simultaneously posing big-picture questions and fine-grained ones."18 Even though the scope of this project is large, much of my focus is on the way writing habitus emerge in the smallest of material environments, including manuscript marginalia and Twitter replies. According to Hawhee and Olson, the pan-historiographical approach allows "archival materials to, in a sense, move," offering the accompanying opportunity "to attend to what is necessarily absent from or barely present in archival, documentary materials: bodies, habits, activities." 19 While occasionally "barely present," the digital writing habits of this book often emerge prominently within and across my research materials, from manicules (little hands) in the margins of manuscripts to archived comments in the editorial histories of Wikipedia pages.

This pan-historiographical methodology suggests a continuity and connection between objects and practices across space and time that, in turn, risks anachronistic and naive claims to origins. When I suggest that our current digital practices were "established" within medieval manuscript cultures, I am not arguing, for example, that the habit of amplification began ex nihilo in a scriptorium in Bologna with the first stroke of the quill in the margins of the Corpus juris civilis. Instead, I am claiming that the repetitive practice of glossing, empowered by the institutional capital and influence of the University, codified and authorized a habitus that we can identify within digital annotation platforms. This argument does not discount the origins and developments of amplification in other times and places, especially within Eastern and Indigenous practices throughout the world, which are too numerous and too varied to count and track within a study of this size and scope. My study is limited to alphabetic writing in the West, primarily as it emerges within university educational en-

vironments, where I believe we can trace the developments of these habits and their digital replications.

One way to understand this pan-historiographical connection is through what Alexander Nagel and Christopher Wood call the artistic theory of "substitution," the tendency for art objects to habitually replace their predecessors over time: "Under such a model of the temporal life of artifacts, one token or replica effectively substituted for another; classes of artifacts were grasped as chains of substitutable replicas stretching across time and space. Modern copies of painted icons were understood as effective surrogates for lost originals, for example, and new buildings were understood as reinstantiations, through typological association, of prior structures. The literal circumstances and the historical moment of an artifact's material execution were not routinely taken as components of its meaning or function." Such a methodology is what they label "anachronic," a repetition or copy of the past that produces a compelling similarity with a difference. While the material circumstances of each moment and practice are important, my study focuses on the habits that persist within and across these physical environments.

This book is also a rhetorical comparison of similarities and differences within two historical eras (medieval and modern) and two forms of media (manuscript and digital). Yet I do not pretend to provide a balanced comparison and instead focus more on the similarities than the differences, an imbalance that is common, and often necessary, in a comparative study like this one. In a survey of comparative methods across the humanities, Devin Griffiths concludes that "the grounds of similarity and the grounds of difference in comparative study do not need to be the same."²² After all, two obvious differences between these periods and media are speed and scale, the primary engines for generating the discourses of neoliberal innovation and technological exceptionalism, which erase or obscure the contributions of the past in order to indulge and perpetuate the pervasive and damaging myth-of-progress narrative. At the same time, a focus on difference, or the alterity of the Middle Ages, can lead to nostalgic fantasies of the past that seek to mourn or recover what has been supposedly lost.

Even though this book at times may celebrate the potency of particular premodern writing habits, my main objective is to highlight as many positive and negative attributes of our habitus as possible, including the homophilic desire to identify with those similar to ourselves, an instinct that marginalizes differences in ability, sexuality, gender, race, and class. On the one hand, such elements of our dispositions have created solidarity among writers, creating collectives of Wikipedia editors and Twitter followers. On the other, such homophily drives xenophobic habits, such as edit wars and tweet shaming, that become engines of exclusion and oppression. The crises of the present created by practices of the past therefore provide a main exigency of this book, which seeks to find ways to shape our digital habitus into an agent of change. This requires that I embrace what Wai Chee Dimock, describing a 2018 Modern Language Association panel, calls "a cautiously adopted presentism [that] might allow humanists to bracket the nontrivial differences among historical periods and act as a cumulative force under conditions no less adverse." By adopting this pan-historiographical methodology, this book assumes an "anachronic" and comparative disposition that is consistently future-oriented. For Dimock, such a perspective refuses "to accept the past as a foregone conclusion" and "to accept the present as inevitable." If I, like a plagiarizing Wikipedia editor, could copy and adapt this language for this book's methodology, it would express the following: it refuses to accept the past as so far gone and refuses to accept the future as inevitable.

Structure and Content of the Book

Using this methodology to define and to establish the history of digital habitus within the field of rhetoric, this book grapples with the following paradoxes: How have cultures of sharing both disseminated knowledge widely and transferred rhetorical capital to elites? How have crowdsourced websites both encouraged democratic participation and excluded certain populations? How have social media both accelerated dialogue and created wider ideological divides? How have annotation platforms both invited commentary and limited fields of interpretation? How have remix cultures both inspired creativity and restricted the capacity to create? And how have social networks both established new opportunities for intimacy and violated the privacy of their users? To address these questions, I identify six writing habits—translation, compilation, disputation, amplification, appropriation, and salutation—that have experienced vibrant premodern and digital lives. Through a comparative analysis of two historical moments—in which print is not the dominant medium for writing—I reveal how these seemingly cooperative compositional habits have become mechanisms of exclusion and oppression, especially for women, queer communities, and people of color. This "digital before digital" investigation suggests how readily such collective forms of knowledge production relinquish universalism for elitism, dialogue for monologue, intellectual labor for intellectual property, and social justice for the security of sovereign power and white male supremacy.

Before I address the six habits that comprise the majority of the book, the

first chapter, "Habitual Rhetoric: A History of Rhetorical Habitus," establishes a background and traces a genealogy for habitus from antiquity until the present day. I begin with Aristotle, who grapples with the supernatural and moral elements of this human disposition, and lays the groundwork for medieval debate about the "neutrality" of this ethical condition, its capacity to do good or evil in the world. By the twelfth-century, habitus was largely considered to be a changeable disposition, one that could be taught, not just how to act, but also how to speak and write. This latter development is reflected in the production of writing manuals, known as the artes dictandi, which offered instruction in letter writing, one of the central skills learned within the early medieval universities, particularly at Bologna, Paris, and Oxford. Nearly all of these treatises rely upon the rhetorical texts of Marcus Tullius Cicero (first century BCE), who claims in his De inventione (On Invention) that habitus is "a stable and absolute constitution of mind or body in some particular, as, for example, the acquisition of some capacity or of an art, or again some special knowledge, or some bodily dexterity not given by nature but won by careful training and practice."²⁵ Medieval teachers of writing, such as Giovanni di Bonandrea, adapt these Ciceronian principles of stability, corporeality, and practice for university students who go on to form a bureaucratic class of notaries and lawyers, producing writs, deeds, and memoranda for a burgeoning documentary culture.²⁶

Having set the scene for a rhetorical understanding of habitus, I then trace its afterlife into the sociological work of Pierre Bourdieu, the most influential commentator on the topic in the modern era. Drawing on Erwin Panofsky's identification of the scholastic "habit" that shapes the architecture of Gothic cathedrals and medieval manuscripts, ²⁷ Bourdieu first defines habitus as "a system of internalized schemes which have the capacity to generate all the thoughts, perceptions, and actions characteristic of a culture."28 Bourdieu proceeds to develop the concept as a kind of "feel for the game" or "second nature" that explains shared behaviors, especially by individuals of a common social class.²⁹ As a response to Bourdieu's focus on socially embodied dispositions, I describe the modern alternatives offered by Bruno Latour, Annemarie Mol, and Nigel Thrift, which set the scene for more recent network analyses, including Wendy Hui Kyong Chun's recent studies of media circulation and network culture, and Thomas Rickert's analyses of the material and ambient features of rhetoric.³⁰ To conclude the chapter, I argue for the institutional force the university has on habitus formation, engaging with critical university studies, notably the work of Kandice Chuh and la paperson, to explain the ways in which higher education and liberal humanism have excluded and delegitimized the habits of Black and

Indigenous people and other people of color.³¹ This brief case for the antiquity of "post-print" writing habits sets the stage for the book's call for attention to our digital habitus, the social, embodied, and reflective dispositions that shape the practices and spaces of writing.

The second chapter, "Translation: Online Education and Transfers of Authority," begins by confronting the democratic ideal for a digital commons, which is built upon ancient beliefs about the purpose and function of translation. Translation is a fundamental rhetorical habit that provides access to knowledge and power. Within digital environments, translation is motivated by the desire for making languages (especially English) and learning more accessible to more people. For many early translators, even Saint Jerome, translation was an act of linguistic and cultural appropriation, "carrying over" important knowledge from one culture to another, usually to an imperial power. Over time, we have obscured the nefarious, and often racist, origins of translational habits, what Cedric Burrows might call a "rhetorical crossover," in favor of altruistic notions of access—making writing more widely available to a new set of readers.³² While the internet has vastly expanded access, the availability of information is now filtered by algorithmic regimes that control and track online behavior in the name of intellectual property, national security, and crowdsourced authority. The situation has inspired a number of movements, largely inspired by Silicon Valley tech start-ups, to transfer face-to-face instruction to online educational formats, all done in the name of the common good, but mostly motivated by the promise of revenue. Digital texts are therefore subject to both translations of language—speech as well as code—and translations of power, that is, cultural appropriation. Tensions between competing interests always arise within acts of translation because, as Talal Asad has argued, languages are fundamentally unequal—one is always subservient to the other, 33 Lost within such clamor for access is the specific audience for whom translations are produced, which is not the generalized "public" often invoked to justify translations, but rather a readership that has a market value.

In chapter 2, I argue that late fourteenth-century translation debates in England provide a helpful context for understanding the elite interests that drive or impede so-called access-oriented translation projects, both in recent online mass-educational environments and throughout the twentieth century when English became a language of American schools. To demonstrate this point, I turn to John Trevisa's Dialogue between the Lord and the Clerk on Translation, which was published in 1387 as a preface to his English translation of Ranulph Higden's Latin universal history, the Polychronicon. As a clerical translator working at the behest of an aristocratic patron, Trevisa presents translation as a rhetorical habit that can both empower some and disenfranchise others. He also reveals translation to be what Rita Copeland calls "a primary vehicle for vernacular participation in, and ultimately appropriation of, the cultural privilege of Latin academic discourse." Within the long history of English language education, Trevisa's work represents an early example of the vexed relationships between languages of authority and mass education, which has both inspired cross-curricular writing movements within American colleges and led to the privatization of the public educational sphere via online "open" coursework.

The third chapter, "Compilation: The Encyclopedic Habits of Wikipedia," addresses pervasive medieval and digital habits of compilation, which have rarely been associated with each other. According to Wikipedia, a compiler is "a computer program that translates source code written in one programming language (the source language) into another language (the target language.)"35 In other words, the agent of compilation is a nonhuman digital translator that carries over source code from one language to another. This appears to be in stark contrast with anything remotely medieval, even Geoffrey Chaucer's claim to be a "lewd compilator" (uneducated compiler) in his prologue to the Treatise on the Astrolabe, but the figurative sense is strikingly similar: compilers effectively translate knowledge from one realm to another, ideally adding nothing new.³⁶ Seemingly absent from such objective understandings of compilation is the authoritative power of multiplicity, selection, and arrangement that drives both compilational creation and reception. For Arthur Bahr, compilation can be understood "not as an objective quality of either texts or objects, but rather as a mode of perceiving such forms so as to disclose an interpretably meaningful arrangement, thereby bringing into being a text/work that is more than the sum of its parts."37 A compilation is therefore an active construction, composed of multiple texts or objects, often with the aim of creating new meaning and authority that transcends the possibilities of singular contributions.

I argue in the third chapter that this premodern practice reemerges with a renewed vigor within online, crowdsourced environments, creating what I call a *compilational habitus* among its writers and readers. Building on Bahr's formulation of compilation as a mode of perception, I suggest that open online platforms operate as compilations composed of multiple texts or objects, often designed with the aim of creating new meaning and authority. These expandable and combinatory spaces accommodate the unfinished and unstable nature of collaborative writing, whose authority relies upon the dynamic dialogue between juxtaposed sources of information. Openly editable web templates establish

their legitimacy through the habit of ongoing compilation, which depends upon the contributions and revisions of interested editors. Their popularity reflects a compilational habitus that drives digital information gathering, a force embodied by Wikipedia, the primary destination for seekers of knowledge about the world. As I demonstrate, the principles of such information compilation were established well before the *Encyclopedia Britannica*, specifically in the emergent genre of the medieval encyclopedia.

From the patron saint of the Internet, Isidore of Seville, to England's first printer, William Caxton, medieval compilers obsessively collected, selected, and juxtaposed passages from previous textual authorities (auctores) to create what they called an imago mundi, an image of the world. And as the readership for such encyclopedias expanded, their producers sought to maintain a dialogue between older, classical sources and recent discoveries through multiple languages and early printed formats. Because of the increasing authority of these compilations, writers such as Isidore had to defend their enterprise, comparing their appropriation of previous sources to the wresting of a club from Hercules. This knowledge grab is unsettling for many readers, an anxiety that is reflected both within these medieval encyclopedias and their digital prodigy, Wikipedia. Anyone may contribute to its entries, creating Stephen Colbert's "Wikiality," which requires that their users verify the information presented and view it in dialogue with other sources. As Wikipedia has increased its authority, it has consistently relied upon an encyclopedic habitus of compilation, which relies upon the interpretation, participation, and scrutiny of its users.

In the fourth chapter, "Disputation: Medieval Debate and Digital Dialogue," I address the persistence of premodern habits of dispute within dialogical spaces like Wikipedia. The website's claim to encyclopedic authority is persuasive because it is rooted in a democratic ideal—anyone can edit and contribute to it. Disputes about content are settled largely through the approvals of the largest numbers of editors, who base their decisions on source verifiability and volume. A discussion page accompanies each entry, providing a forum for disagreements to be settled. Yet like many tech platforms, Wikipedia is dominated by white men. The introduction page offers the following call to editors: "Anyone can edit almost every page, and millions already have." Embedded in the middle of that sentence is the qualification "almost every page." Wikipedia administrators monitor and lock down pages to avoid cases of overwhelming bias and vandalism, and unfortunately there are disturbing consequences for such editorial exclusion. A 2010 survey revealed that only 13 percent of Wikipedia editors identified as female, and a 2013 revision to that data set only increased that

number to 16 percent, which supported the growing sentiment that Wikipedia, like many crowdsourced websites, was dominated by men.³⁹ On the one hand, the spirit of Wikipedia thrives on its grassroots and decentralized character, which resolves disputes through a dialectical process that includes both interested amateurs and credentialed experts. On the other, this revolutionary ethic replaces one form of domination with another, displacing exclusive priesthoods of specialized expertise with brotherhoods of internet access. According to Mathieu O'Neil, this leads to a scenario in which "educated white males . . . distinguish themselves as the exclusive repositories of technological expertise; coding for code's sake allows hackers to profit from the interest in being perceived as disinterested."40 This hidden hegemony operates relatively unquestioned, because it appears to espouse no ideology and legitimates itself through an ethic of "dialogue." We witness this habit of "both sides" debate on Twitter feeds as well into popular and scholarly blogs, in which bloggers inspire conflict, often through the guise of an avatar, about a range of subjects, from patriarchal gaming journalism to campus rape culture to police violence.

Using Geoffrey Chaucer's rooster-hen debate in The Nun's Priest's Tale as a rhetorical example, I propose that these free, online, and editable platforms have been shaped by the medieval educational habit known as disputation, a pedagogical role-playing exercise, in which a schoolmaster would propose topics for debate, requiring one student to play the opponent and the other to play the respondent. Disputation became so popular a mode in the thirteenth century that it burst out of the universities into many areas of public life, including debates performed openly in the square and literary genres such as the debate poem and prose dialogue. Yet it is in these same venues that we witness the patriarchal heritage of medieval disputation, which largely excluded women, either through direct disenfranchisement or through silent indifference. It is well known that women were not educated in the universities, but their exclusion is also demonstrated, as Ruth Karras has effectively shown, through the topics that men would dispute, which range from the superiority of theologians over canon lawyers to the sin of assaulting a woman publicly (the lack of consent not being an issue).41 It is this legacy of indifferent disputation that haunts the habitus of many male-dominated online spaces, such as Wikipedia, in which peer-to-peer dialogue too often becomes male-to-male monologue.

The fifth chapter, "Amplification: Inhabiting and Annotating the Page," examines how digital writing privileges quantity over quality, compelling writers to update or amplify their writing constantly. Despite laments over what Mark Andrejevic calls "infoglut" and its propensity to overwhelm and subdue its read-

ers into complacency, the accommodation of a high volume of commentary in online writing spaces often expands the demographic of participants, allowing for a diversity of voices and opinions. 42 Henry Jenkins has famously characterized this proliferation of new environments for media commentary and fan writing as the rise of "participatory culture." For Jenkins, this is a salutary phenomenon because it empowers the voices of the previously disenfranchised. Moreover, digital platforms that host such commentary provide flexible writing spaces that may be amplified at will. As Naomi Baron points out, "Today's digital technologies place no limits on text length or complexity. . . . The real question is whether the affordances of reading onscreen lead us to a new normal. One in which length and complexity and annotation and memory and rereading and especially concentration are proving more challenging than when reading in hard copy."44 Baron objects to the unruly nature of digital textuality, leading to what Clay Shirky has more optimistically called a "publish then filter" reading culture and a "cognitive surplus." Digital writing is defined by its potential amplification, which can be facilitated through any number of social media apparatus, from Twitter feeds to Facebook comments to Wikipedia pages.

Medieval writing, on the other hand, is not often associated with abundance or surplus. Readers were scarce, and their books were often scarcer, which led to textual communities that were elite and exclusive. It was not until the advent of the printing press that readership began to be drastically expanded. As Ann Blair suggests, we have not witnessed as great a challenge to information management since the age of early print, which spawned what she calls a "newly invigorated info-lust that sought to gather and manage as much information as possible."46 Nevertheless, chapter 5 demonstrates that medieval writing embraced amplification through its privileging of commentary and annotation. Medieval bookmakers were faced with many more constraints and the scarcity of books transformed an individual codex into a kind of creative commons in which multiple readers and writers interacted through interlinear glosses and marginalia. One important rhetorical foundation for this compositional framework can be found within the teaching of amplificatio (amplification) in twelfth- and thirteenthcentury writing instruction throughout Europe. University teachers of writing from Geoffrey of Vinsauf to John of Garland composed textbooks that include extensive treatments of methods of amplification, ranging from comparison to digression to exclamation.

While the development of this habitus can be identified within the commentary traditions of a number of theological texts or legal books, I have selected one set of pedagogical texts, Aesop's fables, as a representative example for anal-

ysis. These animal tales are now known for their moral lessons, but they were primarily utilized in medieval classrooms for writing instruction. Students and teachers would insert interlinear glosses to challenge their expanding vocabulary and then rewrite these fables, both in abbreviated and elaborated forms. And while these techniques were largely focused on strategies for expanding a composition, they also reflected a habitual and material culture of accumulation, encouraging interpretative multiplicity within books that accommodated amplification through varying sizes of script and page layouts with wide margins for annotation. Web templates often foster the illusion that the online spaces for expansion are limitless, but these platforms are run on physical servers that can become saturated with data in the same ways that medieval manuscripts became overwhelmed with marginalia and commentary. Chapter 5 confronts the problem of space for rhetorical circulation by detailing its preprinted contexts, which reveal the pressing need to develop a new amplificatory habitus for developing habitations for writing on the digital page.

In the sixth chapter, "Appropriation: Stealing Bodies and Properties," I turn to perhaps the most overwhelming aspect of digital writing: its vulnerability to intellectual theft, from illicit copying to database hacking. While the threats to artistic autonomy and intellectual property are significant, many forms of digital appropriation are undeniably innovative, creative, and valuable. If we set aside the privacy/security debates surrounding efforts to make information transparent, especially given the volatile responses to WikiLeaks and Russian interference in US elections, we can recognize the artistic potential of hacking, which often results in stunning music remixes and viral video mash-ups. The result, of course, has led to much handwringing, especially from corporations crying foul over violations of copyright.⁴⁷ Yet such artistic acts of appropriation have become so "cool" that they have led scholars such as Alan Liu to suggest that "strong art will be about the 'destruction of destruction' or, put another way, the recognition of the destructiveness of creation."48 Within the digital world, such a neo-avant-garde aesthetics of destruction has fostered an environment of textual vulnerability, in which texts are radically at the will of their users. At the same time, it is crucial to acknowledge that such an emphasis on "creative destruction" can lead to an uncritical acceptance of all forms of "innovation," one of the most powerful euphemisms for capitalism. Joseph A. Schumpeter pointed out in 1943 that the desire for new markets leads to "industrial mutation," part of what he later called a "perennial gale of creative destruction" that "incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one."49 This phoenix-like logic, in which a

new power rises from the ashes of the old, also undergirds medieval theories of sovereignty—what is often referred to as translatio imperii, or the translation of power.⁵⁰ Histories of imperialism teach us that such an optimistic view of destruction often serves the interests of the elite who benefit from such "innovation" while disenfranchising others, especially those cultures or industries that have been "mutated" or "superseded." Liu turns to the writings of the Critical Art Ensemble (CAE), as an example of a neo-avant-garde collective that will use their technical skills of "disturbance" and "hacktivism" as a means to disrupt these forces of exclusion, but even the CAE adopts the elitist logic of creative destruction by claiming that "the only groups that will successfully confront power are those that locate the arena of contestation in cyberspace, and hence an elite force seems to be the best possibility."51 As Patricia Ingham warns in her book The Medieval New, such an embrace of complete destruction and confrontation means that "we have bought entirely the notion that innovation lays waste to what has come before," as opposed to the practices of "ambivalent homage" that define many medieval perspectives on innovation.⁵²

In this sixth chapter, I argue for the importance of understanding the politics and ethics of medieval forms of appropriation, which are rarely acts of complete destruction and more often premodern forms of sampling, remix, and mash-up, which rely on degrees of "homage" to ancient authorities. As Kathleen Kennedy has demonstrated in her book Medieval Hackers, we encounter early evidence of "hacker culture" during the later Middle Ages, when governmental, educational, and ecclesiastical institutions attempted to control information.⁵³ Reactions to these forms of control varied, but graduates of medieval schools had already been trained to appropriate texts critically, a practice many of them learned in their writing exercises, which emphasized citation and reuse of existing authorities. Once again, Aesop's fables prove to be a fruitful site for analysis, since rhetorical amplifications often became acts of appropriation, revisions of fables that bear the names of Avianus, Walter of England, and even Robert Henryson. I track the transformation of the Aesopic corpus, both the textual tradition and representations of Aesop's body, which coalesce to challenge the relationship between artistic production and corporeality. Rather than extending a generative, deeply somatic, and grotesque habitus of multiple fabular authors and commentators, the modernized Aesop obtains value as a "property," paving the way for the notion that creative corpuses can be "owned," effectively stealing away corporeal features from intellectual production. Given the clarion call that media scholars are sounding for incorporating appropriation skills within twenty-first-century curricula,54 I suggest that a premodern orientation toward intellectual bodies,

instead of properties, may produce more responsible uses, critiques, and reuses of creative work.

The seventh chapter, "Salutation: The Public Intimacy of Social Networks," addresses the premodern habitus of digital written correspondence, which has recently experienced radical transformations. Whereas email increased the speed of the personal letter, social media outlets such as Facebook and Twitter drastically expanded the reach of such writing through the creation of networks of "friends" and "followers." For scholars such as Richard Miller, this public "epistolarity" dissolves the boundaries between the public and private domains, resulting in "the greatest change in human communication since the invention of the printing press."55 Thanks to Edward Snowden and WikiLeaks, we are acutely aware of the public and surveilled nature of email, but email has always operated rhetorically as personal correspondence. Now that social platforms facilitate instantaneous connection between geographically distant people, Sherry Turkle suggests, "technology proposes itself as the architect of our intimacies."56 For Turkle, this desire for distant friendships has resulted in a situation in which we are "alone together," preferring the isolation of spending time together online over the messiness of face-to-face contact. And because these environments are "open" and relatively accessible to all, friendships are made public, which introduces the potential for performance and inauthenticity in the service of selling products or self-promotion.⁵⁷ For some media scholars, such as Turkle, authentic forms of intimacy cannot be experienced in these spaces, but for others, such as di readies (Craig Saper), these environments host a variety of distributed forms of friendship and collectivity, including what he calls "bureaucratic intimacies." Citing the examples of resistance movements such as Occupy Wall Street, di readies argues that such "intimate networks offer connectedness and shared responsibility in the face of lack of power."58 While Twitter may not be able to provide the kind of small-scale intimacy that can be gained from private conversation, it fosters friendship networks that thrive and gain authority through massively distributed intimacies.

When we consider intimacy to be more than just private interaction, we can see that public forms of friendship have a deep and venerable history. One of the most pervasive, and vastly inaccurate, stereotypes about medieval people is their lack of intimacy. This misperception has been supported by misguided assumptions about medieval sexualities (or lack thereof), but the most powerful engine behind this mischaracterization is the Renaissance ideology that claims that the rise of the humanist subject was a distinct break from an unenlightened and muddled medieval millennium and a triumphant return to the classical past.⁵⁹

For some Renaissance scholars, this rupture was marked by a singular event: Petrarch's 1345 discovery of Cicero's personal letters to his friend Atticus in the cathedral library of Verona. ⁶⁰ Kathy Eden even goes so far as to suggest that this "famous encounter between Petrarch and the epistolary Cicero sets the primal scene for the Renaissance rediscovery of intimacy." ⁶¹ It is possible for Eden to call this a "rediscovery of intimacy" for at least two reasons. First, this claim assumes that intimacy is limited to personal, one-to-one interaction. Second, this claim assumes that intimacy did not exist in medieval correspondence, an assumption that is widely shared among scholars because the medieval art of letter writing, the *ars dictaminis* or *dictamen*, was the product of a largely bureaucratic habitus, one that relied heavily on rhetorical teaching and formulaic phrasing. As clearcut as this narrative seems to be, it discounts the existence of public intimacies, which have become pervasive within digital spaces.

Medieval dictamen was not developed for private correspondence. In almost every dictaminal manual, known as the ars dictandi, the part of the letter that receives the most extensive treatment is the formulaic address to the recipient(s), otherwise known as the salutation. Teachers of dictamen, known as dictatores, concentrated their efforts on the salutation because it served as both an artful expression of intimacy and a mechanism of rhetorical capital for lowly clerks who were attempting to persuade their superiors. And even when letters were only addressing one person, Giles Constable notes, they were "self-concious, quasi-public literary documents, often written with an eye to future collection and publication."62 In addition, these letters were often recited publicly, which expanded their reach to audiences who could not read or had no access to the letters themselves. 63 Poets such as Geoffrey Chaucer and Gavin Douglas recognized the intimate potential of the ars dictaminis, actively including its elements in their poetry, often drawing directly on the rhetorical teachings of dictatores, ranging from Guido Faba to Boncompagno da Signa to Geoffrey of Vinsauf to Giovanni di Bonandrea. In chapter 7, I argue that the later Middle Ages witnessed and nurtured an important development in the history of rhetoric, in which epistolary style could be harnessed for the development of public networks of friends.

In the book's conclusion, "Breaking Bad *Habitus*," I offer a series of recommendations for digital writing and design that emerge from this rhetorical understanding of habitus. As a fourth-declension Latin noun, *habitus* is both a singular and plural form, both an individual disposition and a social condition that motivate rhetorical actions. The premodernity of this concept provides a persistent structure for understanding the reemergence of particular habits

within particular writing spaces. Once we define our habitus, we may recognize those people and practices that our digital habits include and exclude; we may also influence and design writing environments that encourage the development of habitus that challenge homophily and recognize difference, thereby setting the conditions for the participation of rhetorical actors previously omitted or obscured.

When we have identified the features that comprise our writing dispositions, we can more responsibly contribute to the dynamic arts of digital habitual rhetoric, anchoring our writing strategies firmly within material environments, old and new. In the end, this book seeks to demonstrate the importance of developing stable, yet flexible, digital habitus that draw on what Bethany Nowviskie calls a "usable past" that will allow us to "step back from patriarchal, colonial, heteronormative, and white mediation, and from its sense of control over time, in order (as Afrofuturist thinkers would have it) to make a new space-time in which broader and more diverse publics can assert that agency and imagine alternate futures."64 Too often our writing practices are distilled to a discrete recipe of practices that can be automated as "content delivery" within learning management systems. Writing should not be reduced to replication or supersession an object that can be packaged, reproduced, sold, and then replaced by the next "new" thing within the "gale of creative destruction." Our habitual rhetoric should entail a careful, but often ambivalent, process of reflection, accretion, and selection from a long and accessible history of writing—a history that both surrounds and punctures its printed era, looking both forward and backward toward habits that could bear repeating.