Introduction
Readers and Machines in Modernist Novel Theory

Literature's relationship with technology has seemed to have a teleology. As writers across the twentieth century incorporated technologies into their works not just thematically, as content, but as strategies, techniques, and media, the resulting texts became increasingly interactive. The more immersed the novel was in technology, the more writerly the reading experience became, and the more power and control accrued to the reader. The reader's experience came increasingly to define the text and its value. This narrative rose to prominence with Marshall McLuhan, who argued that the electric age would "cool" the media environment, producing more media that would require participation from audiences: computers, not print. The dominance of cool media would change society, McLuhan argued, so that "electrically contracted, the globe is no more than a village," where everyone participates in everything.[1]

The story would continue through the second half of the twentieth century, when hypertext was canonized as the first genre of fully electronic, computer-based literature. Hypertext, Robert Coover argued, "provides multiple paths between text segments."[2] Its webbed, multidirectional structure "presents a radically divergent technology, interactive and polyvocal, favoring a plurality of discourses over definitive utterance and freeing the reader from domination by the author."[3] In this democratic, nonhierarchical environment, "reader and writer are said to become co-learners or co-writers, as it were, fellow-travelers in the mapping and remapping of textual (and visual, kinetic and aural) components."[4]

Even after the first generation of hypertexts has become largely unreadable by contemporary computer systems, interactivity remains a defining characteristic of electronic literature. Certainly, the early theories of hypertext, offered by critics such as Coover and George Landow, have been thoroughly critiqued for ignoring the limitations on readers' choices that exist in the hypertext environment, as well as the choice and

interactivity that even print can create.[5] Nonetheless, critics have continued to see the reader's active involvement in the work as an integral component of technology-based literature. Espen J. Aarseth, for instance, argues that the reader of an electronic text pursues an "ergodic" task: she must actively create a path through, because one is not provided in advance by the text itself.[6] The foreword to a 2015 anthology of criticism, *Interactive Digital Media: History, Theory and Practice*, provides another example. Nick Montfort justifies the title's key category as an inclusive term for describing electronic literature, even though "there are some related activities that would seem to be left out of IDN [interactive digital narrative] strictly interpreted," including "story generation systems that are noninteractive."[7] Electronic literature can be defined as interactive, Montfort demurs, because doing so excludes only a nonrepresentative minority of texts. And even though McLuhan's theory of cool media has fallen out of the mainstream, his historical projections are congruent with those of Lev Manovich, who notoriously set interactive and noninteractive media structures in opposition to each other in his 2001 book *The Language of New Media*. Interactive media – he calls them databases – present a set of choices that a user must order. Narrative media, by contrast, create an order in advance, making choices for the user. For him, database and narrative are "natural enemies," and database is winning: he argues that database, the coolest of genres in McLuhan's terms, would be the dominant genre of the twenty-first century.[8]

As electronic literature has continued to develop, however, a minor tradition of works specifically, pointedly designed against interactivity has emerged. Young-Hae Chang Heavy Industries (YHCHI) – the Seoul-based collaboration between Young-Hae Chang and Marc Voge – is the best known example. Their minimalist, Flash-based works pair jazz or electronic music with text that moves across the screen. YHCHI's texts make the reading process uncomfortable by removing any control the reader might have.[9] There is no capacity to pause, rewind, or fast-forward; the reader's choices are to stop the text by hitting the back button on the web browser or closing the window, or to let the text play on. The text moves at its own pace, one that is sometimes too slow for comfort, and sometimes a bit too fast for readers, especially for those struggling to apply techniques of close reading.[10] These texts actively frustrate any reader's attempts to skip to the end or to a favorite part, or to pause or review difficult sections. Some works, such as "Artist's Statement No. 45,730,944: The Perfect Artistic Web Site," are looped so that they continue replaying, complicating even the emotional payoff of getting to

the end of a story. As Warren Liu puts it, YHCHI's works are focused on "address, rather than on exchange": these texts challenge a reader's desire to participate in them.[11]

YHCHI have defined their practice against the expectation that electronic literature should require a reader's choice and input, maintaining that theirs is a "simple technique that shuns interactivity."[12] By 2008, they presented this quality as the most well-known characteristic of their repertoire: "Those who are interested in our work know by now that we've never been big on interactivity."[13] YHCHI compare interactivity to "channel surfing," where a viewer has only fake choice between options fully determined in advance.[14] Channel-surfing is also the classic example of twentieth-century boredom and procrastination: an unproductive, emotionless activity that gives the watcher the ability to choose but results in her not actually watching any specific work. Channel-surfing is perhaps the best example of a kind of interaction between beholder and text that results in the text's disappearance – something YHCHI's works are designed to prevent.

This genre of machine-based literature that is self-consciously anti-interactive challenges McLuhan's teleological media narrative. These works suggest the possibility of an alternative history of literature and the machine, one that is not motivated by increasing interactivity. Such a history would be particularly modernist. Michael Fried differentiates between the central strains of modernism and postmodernism in terms of their relationship to what he calls "theatricality."[15] Postmodern texts are often theatrical in that they demand a "special complicity" from their beholder – something very close to interactivity.[16] The postmodern work is "an object in a *situation* – one that, virtually by definition, *includes the beholder*."[17] Postmodern works are directed toward a reader, whose response and involvement are constitutively part of the meaning of the work. Modernist texts, by contrast, tend to reject the viewing or reading experience as a component of the work of art. The work is defined by its autonomy from its beholder, who is irrelevant to the meaning and value of the work. Modernist works are anti-interactive, in this view. Certainly, modernism was a heterogeneous collection of modern*isms*, but it would still be accurate to say that a major strand of it was invested in anti-theatricality, and deeply concerned about what theatricality could do to art.

Gertrude Stein's aesthetic theory exemplifies anti-theatrical modernism. In her 1936 lecture "What Are Master-pieces and Why Are There So Few of Them," Stein argues that a true masterpiece can only exist as "the thing in itself."[18] The masterpiece can be defined in opposition to what

Stein calls "identity": how people exist in relation to time, other people, and memory. Nothing that is part of identity can ever be singular – "the thing in itself" – because identity is the state of being in relation to other people and things and one's own memories, so that "two [are] present instead of one."[19] For a work to be a masterpiece, it must escape from the world of identity; it must be self-contained.

Audiences, viewers, and readers are troubling to Stein's masterpiece, because they threaten to bring it into the world of identity, where, as Jennifer Ashton explains, it will be "the object of a *subject's experience*."[20] Works that are, by their nature, directed at an audience – oratory and letters are Stein's examples in this essay – cannot ever become masterpieces:

> One of the things that I discovered in lecturing was that gradually one ceased to hear what one said one heard what the audience hears one say, that is the reason that oratory is practically never a master-piece very rarely and vary rarely history, because history deals with people who are orators who hear not what they say but what their audience hears them say.[21]

When an audience receives a work, Stein claims, it is replaced, even to the speaker herself, by its reception. By contrast, Stein's masterpiece is ontologically independent and contained, in that it is not "for" anyone; by definition, it is something that can never exist as someone's experience of it.

YHCHI point toward Stein's aesthetics, and a specifically modernist trajectory for literature and technology emerges. Jessica Pressman reads the work of YHCHI as exemplary of what she calls "digital modernism": works of twenty-first-century electronic literature that return to modernist techniques and situate themselves in a modernist lineage. These contemporary digital works, Pressman argues, sometimes challenge the expectation that electronic literature is defined by "reader-controlled interactivity."[22] *Novel Theory and Technology in Modernist Britain* reveals the full significance of this connection. Building on Pressman's work, I excavate a significant tradition within modernism of theorists imagining technology as a source of strategies for making the novel anti-interactive and anti-theatrical. When YHCHI create electronic narrative works that use technology to resist interactivity, they not only gesture toward modernism, but enact what modernist novel theory envisioned.

This book focuses particularly on the novel because, especially in modernism, this genre had a particularly vexed relationship to reader interaction. For modernism, the idea that the work of art should be independent of its beholder was most readily associated with poetry, with imagism's valuation of the hard, static, visual object. This association

continues: while YHCHI's works generally have narratives, they are definitely not novels and are most often aligned with concrete poetry. To thinkers such as Wyndham Lewis or Percy Lubbock, a poem could be reasonably thought of as a visual object that one looks at from afar, but the novel seemed to be a far more insistently temporal genre, one that must unfold over an extended series of pages as the reader turns them, borrowing the time of the reader's experience and merging with the reader. Yet modernist novel theory undertook precisely the challenge of designing an anti-theatrical novel: theorists such as Lewis, Lubbock, and Stein wanted to figure out how the novel might exist fully without needing to be lived by its reader.

Rethinking the novel's relationship to reading was an urgent task at this moment in history. In the years between Henry James's infamous critique of mass reading habits in "The Art of Fiction" (1884) and Q. D. Leavis's *Fiction and the Reading Public* (1932), novel theory in Britain was the site of deep concern about how readers treated novels. Increasingly, middlebrow reading tendencies encroached. Readers sought familiarity and closeness: they wanted to merge with novels, to become part of them, to live in and through them. Especially in what some writers diagnosed as the emotional poverty of the years following World War I, readers wanted to form emotional bonds with novels or to use them to provide experiences that were lacking in their lives. At stake was the relationship between the novel and the real world: does the novel's value derive from the role it plays in readers' lives? Or does the novel's value instead come from its form, often imagined as a quality that should distance the novel from its reader? These debates about form and character preoccupied British novel theory, especially in the 1920s, when it seemed to many critics that social forces were increasingly pushing the novel into life and away from form.

This study shows that for critics who were concerned by readers' growing desire to get closer and closer to the novel in order to make it fill gaps in their lives, the modern machine seemed to face a similar problem: instrumentalization. Both novel and machine were increasingly reduced to an instrument for meeting an end that had been determined in advance. The novel could be made to act as the friend a middlebrow reader needs; the machine had become a means to produce what we already know we desire. A novel that is a reader's old friend is always already familiar and thus loses the ability to communicate anything new or different. Like the novel, technology no longer seemed capable of bringing anything heterogeneous into the world, instead producing a

society that hurries incessantly toward something that seems new but is really more of the same.

Yet these theorists also saw the potential for another, noninstrumental vision of technology – in the technical functioning of devices stripped of their current social function, for example, and in premodern machines. Conceptualized in a certain way, technologies might offer strategies for protecting the novel from the demands and desires of its readers, for designing a novel that could still unfold and "move" without requiring input from or the participation of a reader, for theorizing how the novel works without referring to how readers apprehend it, and for understanding how the novel produces knowledge. In making such arguments, these writers were also theorizing technology, this book argues. They intervened in debates about how to understand technology's defining qualities, and how to theorize machinery's effects on art, culture, and society. Such interventions can be found in the discourse of mainstream modernist novel theory, and not only at its avant-garde edges, where writers such as Bob Brown designed literal machines to develop reading practices appropriate to the Machine Age.[23] The modernist novel theory that emerges is also a theory of technology.

The Problem with Reading

Our well-rehearsed standard history of novel theory situates its origins in modernism, with Henry James and Percy Lubbock.[24] According to this history, reading was simply never a prominent category in thinking about the novel, at least until postmodernism began to allow us to recover from New Criticism's institutionalized critical practices. For contemporary historians of novel theory such as Dorothy J. Hale and Nicholas Dames, resisting or complicating this origin story has been an overriding priority. They trace an earlier history of thinking about the novel, and uncover layers of modernism's novel theory that do not fit into this narrative.[25] Expanding on their work, this book recuperates the complexity of the historically particular debates surrounding novel-reading in modernism. Whether theorists were excited or horrified by the modes of reading they saw in their culture, reading was a site of deep anxiety in both social and aesthetic terms, an issue requiring immediate critical attention and a new theory of the genre.

Modernism emerged out of a Victorian context in which reading was the dominant focus of thinking about the novel. For thinkers such as G. H. Lewes and Alexander Bain, one studied the novel by analyzing its

physical and psychological effects on readers. The novel and its reader were deeply and inevitably intertwined, according to such a view. As Dames puts it, this criticism was concerned with what a novel does to a reader, not what it is on its own, and could even be described as a "physiology of the novel."[26]

Coming out of this tradition, critics in early twentieth-century Britain thought that readers' relationships to novels were in a state of flux. There was a common refrain in criticism during this period: that readers were being drawn ever closer toward an emotional and experiential bond with the novel. They wanted not only to grasp the novel, to hold on to it, but to turn it into an effect they could integrate into their lives. Critics across the spectrum diagnosed the rise of this phenomenon, whether they saw it as positive or negative, for aesthetics or for society. For those who were worried by this deepening proximity between reader and novel, there was also no simple way to avoid it or theorize it away: they almost obsessively returned to dwell on the intractability of the problem of reading.

For example, Q. D. Leavis thought that readers behaved differently toward novels following World War I. People were reading more than ever before, she argues in *Fiction and the Reading Public*, and more books were being written to meet the demands of the expanding literary public – a claim repeated frequently across novel criticism in the period.[27] While some might imagine that cinema and radio reduced the influence of the novel, Leavis thought that novels had become more important – perhaps even too important – to English society. Postwar England guaranteed a good readership for novels, Leavis argued, because people felt a deep gap in their lives that could best be filled by the novel: "fiction for very many people is a means of easing a desolating sense of isolation and compensates for the poverty of their emotional lives."[28] These readers demanded novels driven by characters they could think of as "real people," who could make them feel through a process of "emotional contagion."[29] And fiction could "provide compensation for life more effectively" than could its competitor media.[30] Readers needed to live through novels, to make up for what was lacking in their own lives. Highbrow modernist novels that refused to cater to such middlebrow desires would never find popular success, Leavis imagined. The common reader would certainly reject a work such as Virginia Woolf's *To the Lighthouse* because it emitted "no glow of companionship."[31]

It was the middlebrow novel, which emerged in the 1920s and became a dominant force in fiction in the 1930s, that fulfilled these readers' demands, in Leavis's view. While the division between the high

modernist and middlebrow novel was certainly unstable and permeable, these two categories were often distinguished from each other on the basis of their relationship to reading. The middlebrow novel could be defined by the fact that it prioritized readability and accessibility: "I have trained myself to write quickly, punctually and readably to order over a wide range of subjects," wrote novelist Winifred Holtby.[32] The middlebrow novel aimed to open itself up to, not to protect itself from, its readers. It courted the affective relationship that readers so deeply desired, in Leavis's critique. As Storm Jameson put it, the writer "must think first how I can make you laugh or cry": whatever social, political, or intellectual aims a middlebrow novelist might have, the emotional engagement of the reader was essential.[33] The middlebrow novel, Leavis argued, existed to fill in the gaps in modern readers' experiences, "to pass time," to provide "the longest surcease from ennui at the least expenditure of time and money."[34] Such novels were "designed to be read in the face of lassitude and nervous fatigue," to inspire emotion rather than to require intellectual effort.[35] In turn, reading these novels fit into one's daily routine. You read "in your bath, for instance, or late at night when you are too tired to go to bed, or in the odd quarter of an hour before lunch," as George Orwell put it.[36] Or you read "while you wait for the bus, while you strap-hang, in between the Boss's dictations, while you eat your ABC lunch," according to Graham Greene's description of other places where one might read the books appropriate for reading on a ship journey.[37] The middlebrow novel would be fully integrated into its readers' lives.

This study focuses on the period when the middlebrow was coming into its own and modernism was negotiating its relationship to these changing dynamics of novel-reading. This sense of growing proximity between readers and novels, the sense that the middlebrow mode of reading was beginning to dominate, was at the heart of one major critical debate in British modernism in the 1920s, over whether the novel should be understood as an aesthetic object governed by the externality of form or as an experience contiguous with the rest of life. Percy Lubbock's *The Craft of Fiction* (1921) exemplified the former position for many critics, while E. M. Forster made the key statement on the novel as life in *Aspects of the Novel* (1927). By 1928, Edwin Muir described Lubbock's and Forster's work as setting up two critical poles between which critics must choose. Lubbock, he argues, goes almost too far toward analyzing the novel in formal terms, to the point that "difficulty in a novel becomes to him, one might almost say, an additional source of aesthetic enjoyment."[38] Forster, on the other hand, rejects structure and is "content so

long as the novelist 'bounces' us into a belief in his characters and gives us 'life.'"[39] By 1932, Virginia Woolf would criticize the middlebrow writer for incoherently refusing to choose between these two sides: "The middlebrow is the man, or woman, of middlebred intelligence who ambles and saunters now on this side of the hedge, now on that, in pursuit of no single object, neither art itself nor life itself, but both mixed indistinguishably, and rather nastily, with money, fame, power, or prestige. The middlebrow curries favour with both sides equally."[40] The middlebrow writer would chase what sells and what reviewers, book clubs, and libraries would approve, Woolf implies. Such a writer would not see any tension between form and life, and thus could avoid making any honestly intellectual, aesthetic decision about where to position her work.

Lubbock sought to analyze form, and argued that to do so one must attempt to achieve distance from the novel rather than being absorbed by it. For him, point of view was the key technique of the novel. Lubbock thought that novels could be categorized by the kind of point of view they utilize – but the idea that all novels have a point of view implies that the novel, as a genre, always imposes some kind of mediating aperture between viewer-reader and subject matter. As the metaphor of point of view suggests, Lubbock imagined the novel as a visual object that one sees at a distance, rather than feeling up close, and thus the critic can subject it to critical scrutiny and create objective taxonomies. Forster critiqued the distancing procedures that Lubbock promoted, arguing that in "moving round books instead of through them," reader-critics had an incomplete and impoverished relationship to their subject matter.[41] For Forster, the novel cannot be separated from the reader's life and viewed, objectively, at a distance. Instead, it must be fully experienced and is embedded in and indissociable from life. In *Aspects of the Novel*, the most central category of the novel is character – and character for him just means "people" in literature. For Forster, novelistic characters differ from real people only in that they are described beyond the kind of evidence that is available to the historian, to reveal the inner life.[42] Beyond his famous categories of flat versus round, Forster refuses to typologize character, arguing instead that characters are as infinitely various as people.[43]

In Woolf's view, these two approaches were opposed primarily on the basis of where they positioned the reader with respect to the novel. In a 1922 essay, she criticized Lubbock's *The Craft of Fiction* for trying to interrupt the close relationship between reader and novel: "whenever Mr. Lubbock talks of form it is as if something were interposed between us and the book as we know it. We feel the presence of an alien substance

which requires to be visualized imposing itself upon emotions which we feel naturally, and name simply, and range in final order by feeling their right relations to each other."[44] She sides largely with Forster, because he argues that criticism should "work[...] from the emotion outwards," through the closeness of feeling rather than the distance of sight.[45] Like Leavis, Woolf often argued that the modern reader wants to be the friend of the novel, but for her this could be a positive development: it brought readers into closer emotional connection with writers and encouraged a democratic feeling of equality between the parties.[46] Ironically, Leavis saw Woolf as just the sort of writer whose books would never be embraced by the common reader she so idealized, because those readers could not help but see the form of her high-modernist novels – and this would get in the way of them relating to the characters as real people.[47]

Critics on both sides of the debate thought that when readers related to characters as real people, they could no longer see the novel itself. They see only their own emotions, and the novel as an object disappears as a sort of mirage. In her 1922 review of *The Craft of Fiction*, Vernon Lee came out on the side of the novel of character in these terms. She preferred novels focused on characters, she argued, because they are more real and less like playing with dolls. Novelists who focus on character have access to what she called, adapting John Ruskin's term, "imagination penetrative."[48] Defined as a capacity for "otherness," this kind of imagination "allows us to witness even the drama of our own life as if it were the drama of others."[49] For Lee, Henry James, who is primarily interested in working out his novel's "logical mechanism," definitively lacks this capacity.[50] Lee's "imagination penetrative" was another version of the concept she is well-known for integrating into English aesthetics: empathy, translated from the German *Einfühlung*. Empathy is the "projection of our own dynamical and emotional experience into the seen form" and "attribution of our life to seen shapes": we feel something or have an experience, and then attribute that feeling or experience to the art object.[51] Reading works through a process like empathy, Lee argued: the novel itself is a screen onto which readers project their own feelings. The novel ceases to have an independent existence, and "lives in the mind which contemplates it."[52]

For Lee, the disappearance of the novel behind a reader's feelings is not a negative phenomenon but simply how aesthetic apprehension works. Lubbock largely agreed with Lee that the novel disappears when we read it – though for him this posed deeply troubling problems that needed to be solved. While Lubbock wanted to distance readers from novels, he