

**Reflective Essay—Tenure Review**

Since coming to Michigan State University in fall 2011, I have built an international reputation as a scholar of eighteenth-century literature whose innovative work contributes to vital, ongoing discussions about the history of cognition and about how and why we read literature. It has been a pleasure to do so as part of MSU's English department, one of the leading programs supporting interdisciplinary studies of literature today. I have completed a book, *Distraction: Problems of Attention in Eighteenth-Century Literature* [REDACTED] five major research essays—two of which appear in collections by leaders in digital humanities and cognitive literary studies [REDACTED]. In addition, I have received a series of increasingly competitive grants, culminating in an [REDACTED] “The Neuroscience of Reading: Integrating Digital Humanities and Literary Cognition,” revealing how research in literary neuroscience can advance digital humanities by reconnecting its broad-scale algorithms and maps to the individual reader and mind. I have been invited to speak at a number of prestigious universities, such as Stanford, Duke, NYU, Vanderbilt, Carnegie Mellon, Ohio State, U. Michigan, U. Arizona, and Lund University in Sweden. My research on Jane Austen also has received extensive media coverage, including interviews with NPR, BBC, and Scientific American. Throughout, I have actively served my department and academic community, particularly as co-founder [REDACTED] of our new humanities lab in English, *Digital Humanities and Literary Cognition* (DHLC). Leading the DHLC has allowed me to join—and engage graduate and undergraduate students I'm mentoring in—unique interdisciplinary collaborations that reach across MSU, across institutions (Stanford, Duke, U. of Arkansas), and, recently, a series of global initiatives.

The main elements of my tenure packet are: 1) my book, *Distraction*, in eighteenth-century studies; 2) my publications in literary history of mind and the new field of literary neuroscience; 3) a description of the DHLC, our three experiments, and the grants that made them possible; 4) evidence of excellence in teaching, service, and outreach; and 5) a vision of my future work, particularly my second book project, *Literary Neuroscience and the Aesthetics of the Brain*. I highlight central facets of my research below.

***Distraction: Problems of Attention in Eighteenth-Century Literature***

My book, [REDACTED] traces the history of the scattered, unfocused mind. Mapping the cultural dimensions of diversion and its literary consequences, I engage readers with a diverse historical archive, including everything from popular novels and essays to [REDACTED], from sermons and conduct books to medical treatises and brain anatomies. From this analysis emerges a new vision of the relationship between literature and the science of mind—one that underscores the powerful role artistic expressions of fictional thought played in advancing and complicating contemporary views of cognition. Much early scholarship in cognitive literary studies focused on trends in fiction that stretched across historical periods. By contrast, *Distraction* historicizes ideas about attention in modern cognitive science and reveals their Enlightenment roots.

If in the early modern period, writers predominantly associated distraction with sin, vice and madness, authors of the eighteenth century radically reconceived distraction as a creative faculty.

These competing theories of focus, I argue, transformed how writers portrayed the fictional mind. Friction between theories of attention rendered distraction into generative literary trope, reshaping traditional narrative techniques for crafting authorial persona, point-of-view, style, plot, and characterization.

Reading eighteenth-century literature in terms of distraction complicates our conventional story of the novel's genesis. It reveals not simply an attempt to represent middle-class readers, but an ongoing struggle to get their attention. Indeed, one of my book's central arguments is that eighteenth-century writers increasingly sought to forge literary structures meant to *work with*, rather than reform, distracted readers.

One of *Distraction's* most original contributions is its use of cognitive science as a framework to interweave the history of mental states, the history of science, and the history of literary form. This methodology allows me to distinguish between cognitive types of distraction—such as mind wandering, scattered focus, divided attention, and selective blindness—and offer a more complex account of distraction's literary history. My chapter on *Tristram Shandy*, for instance, reveals “scattered attention” to be the organizing principle of [redacted] style, which seeks to evoke the hop-scotch rhythms of the distracted mind with a grammar of dashes. I argue that Austen's portrayals of “divided attention” reshape characterization in the nineteenth-century novel, demonstrating how *Pride and Prejudice* turns the capacity for cognitive multitasking into a tool for building characters' psychological depth. *Distraction's* ambitions, however, go beyond eighteenth-century studies. The book aims not only to rethink the rise of the novel by way of its engagement with Enlightenment theories of distraction, but also to historicize modern views of focus—from discussions of ‘attention span’ in popular culture to experiments on attention in neuroscience. In making this argument, I provide a reevaluation not only of how we look back at the Enlightenment, but also a new vision of how we can conduct historical work in cognitive literary studies. This aspect of the book's intervention has been applauded by [redacted] who commends *Distraction* as “one of the best books to date in cognitive literary studies.” Describing the book as “lucidly argued...and highly original,” the reader's report suggests that the Coda (which discusses my fMRI study of reading Jane Austen) “shows how cognitive historicism can provoke changes in neuroscientific experimental design, and how the resulting experiments might challenge or confirm the hypotheses generated through the historical work.”

### **Literary Neuroscience and a New Interdisciplinary Lab**

Over the last five years, I have become a leading figure in the emerging field of literary neuroscience, pioneering a series of experiments at the [redacted] that use neuroscientific tools to explore the cognitive dynamics of literary reading. Because the passions that inspire my research lie at the intersection of literary history and cognitive science, I not only use literary methods to historicize neuroscience, but also to refine—and, at times, overturn—traditional experimental practice. My study of Jane Austen, the lab's current centerpiece, integrates technologies for brain imaging—fMRI and eye tracking—to investigate differences between two styles of focus we can bring to a work of literature: pleasure reading and close reading. Its early results point toward the cognitive intricacy of close reading ([redacted]), revealing from a new angle the intellectual sophistication of this core skill in the liberal arts. This work across humanities and sciences has been made possible, not only by a group of amazing students, but by

interdisciplinary support I've received both from MSU [REDACTED] as well as from external grants I've received from [REDACTED] Stanford's *Neuroventures*; and the final round of the [REDACTED], where we were one of seven projects selected out of a highly competitive pool of national applicants.

Excitement generated by our Austen study has not only motivated new grant writing; it also has inspired two new studies at the DHLIC, demonstrating the breadth of research in literary neuroscience. The first, *Poetry and the Neuroscience of Aesthetic Pleasure*, emerged from a request to join a global initiative at [REDACTED] devoted to designing experiments on the neuroscience of art, music, and literature. Here my interests broadened to include the cognitive processes involved not only in reading novels, but also in poetry. Preliminary data is intriguing, suggesting English majors find more unique poetic metaphors and personification (e.g. "weary eyes [that] close like folding flowers," or moments when "the ocean breathe[s],") more appealing, whereas those without literary training focus more on how much they like a sonnet's message or identify with its topic. Our newest experiment, *Narrative Perceptions of Music*, explores when and how we create narratives to understand music. This work builds on provocative results from our [REDACTED] at U. Arkansas, where a majority of students said they heard a "story" while listening to a short piece of orchestral music, and described that narrative in writing. Astonishingly—and what excites us most for future research—the student storylines imagined are often quite similar (with up to 88% topic consistency), reliably linking a specific musical excerpt, for instance, to a cat-and-mouse chase, a fancy ballroom dance, or a pastoral scene. This collaboration has inspired two new grant proposals [REDACTED] [REDACTED] and shows our lab's focus on literature expanding to include connections across the arts.

Although affiliated with both the English department and the cognitive science program, I identify as a literary scholar first and an interdisciplinary researcher second; in fact, my eighteenth-century research motivates my studies in neuroscience. Cognitive literary studies often risks modeling a one-way traffic from science to the humanities; however, all of my work in literary neuroscience—be it on a sonnet, an Austen novel, or a student narrative inspired by orchestral music—is committed to carving out new experiments that model a horizontal cross-traffic between the disciplines. Admittedly, working simultaneously on a book in eighteenth-century literature and on new experiments in literary neuroscience creates methodological frisson. Yet I believe tensions between humanities and sciences can yield productive friction. The fact that our experiment on reading Austen integrated literary methods alongside the cognitive made it ground breaking in the neuroscience of reading, attention, and memory, the first fMRI experiment to study how we read a sophisticated literary work. In all this work, my goal is to demonstrate that literary scholars can enter into real dialogue with cognitive science—not by importing neuroscientific technologies or looking to science for answers—but using the tension between literature and neuroscience to reshape experimental methods, create new studies, and engage in a more reciprocal conversation about reading and the mind.

### **Teaching, Mentorship, and Service**

I bring the same energy from my research to my teaching and service (detailed in a separate document). Over the last five years, I have co-chaired or served on seven dissertation committees and supervised six undergraduate theses, led five independent studies, and mentored over fifteen students on undergraduate research fellowships. More importantly, I have taught numerous

graduate and undergraduate courses. These include a gateway course to the major, a popular class on eighteenth-century literature that traces the history of curiosity, wonder, absorption, boredom, desire, happiness, and beyond; and an advanced seminar in cognitive literary studies, one of the first courses across the country to integrate literary history and neuroscience. The last of these, which brought together students from English, Neuroscience, Biology, Anthropology, and History of Science, was so successful that I was asked to offer this course three more times, twice tailored as a graduate seminar (see syllabi attached). My teaching evaluations have been incredibly positive, describing my courses as “energetic and engaging,” as creating an “atmosphere of exploration and discovery,” and one of “the best at MSU.” My students nominated me for three major teaching awards—one for outstanding faculty [REDACTED].

While completing my book in eighteenth-century studies, I also co-founded the DHLC lab (now with over 30 members) including faculty and students in literature, neuroscience, linguistics, digital humanities, biology, anthropology, engineering, and English education. Leading an interdisciplinary lab has provided me with unusually rich opportunities for student mentoring. I’ve been particularly excited to work with graduate students in English through the DHLC, where I have been delighted to be able to provide unexpected opportunities. One graduate RA has become a recognized young leader in digital humanities; another now has two co-authored publications; and a final student just presented two talks on cognitive narrative studies and online gaming at international conferences. Our first undergraduate lab lead, [REDACTED], a triple major in literature, neuroscience, and molecular biology, went on to become a [REDACTED] our current undergraduate lead, [REDACTED] is a neuroscience major with a dance minor who choreographs [REDACTED] for individuals across the disability spectrum as well as to raise mental health awareness. These are the students who join the DHLC; they model its interdisciplinary mission.

I also have maintained an active record of service to my department, university, and academic community, contributing (most notably) to public outreach that advocates for the value of literary studies [REDACTED] work continuously to support the humanities by giving interdisciplinary talks that translate the value of literary studies, by organizing and chairing eighteenth-century panels and talks (see ASECS), and by serving as a book and peer reviewer (*PMLA*, *ECF*, *Theatre Review*). In my department, I have served on the graduate committee, the undergraduate committee, the merit committee, the digital humanities committee, a major medieval search committee, as faculty [REDACTED] and as a three-time faculty speaker for our graduate student organization in English. Based on my service to Honors students, I was selected as MSU’s one faculty speaker for the Honors College Commencement (2014); I have also been invited to speak to the President and the MSU Board of Trustees. Most interestingly, I was asked to represent the humanities in a group of “Institutional Leaders” across colleges in a university-wide venture to create an interdisciplinary “Brain Institute” at MSU. This culminated in my co-authorship of the main proposal describing the institute’s mission for MSU’s upper administration; later, the administration asked me to translate this highly technical document into a more humanities-focused proposal that emphasized the importance of neuroscience and the arts for Eli Broad, founder of the Broad Art Museum at MSU.



### **A New Book Project: *Literary Neuroscience and the Aesthetics of the Brain***

This interdisciplinary work has grown into a second book project in eighteenth-century studies, tentatively entitled *Literary Neuroscience and the Aesthetics of the Brain*

The idea began in the classroom where I paired Margaret Cavendish's "The Circle of the Brain Cannot Be Squared," a seventeenth-century poem that fiercely critiques early brain anatomy, with a famous engraving of the brain by Thomas Willis from 1664. The vibrant class discussions led to my presentation on the panel "Fictions of Mind" at ASECS 2012. Cavendish's geometric metaphors, I argued, suggested that the representations of thought in contemporary anatomical engravings were dangerously flat and reductionist: "Since Archimed's or Euclid's time, each Brain / Hath on a Line been stretched, yet all in Vain." The "in vain," we learn, comes from an impoverished attempt to pin mind to brain, yoking thoughts and brain regions in a simple one-to-one ratio. Against these flat, linear frameworks and equations, Cavendish offers an alternate metaphors for thinking about the brain that leverages thought's multiplicity. In her poem, it is because "thoughts divide," or co-occur, that no "Figures" linking an idea to one spot in the brain "will agree." Multiplying math jokes, Cavendish uses the circle, traditional sign of infinity, to suggest the impossibility of taking the mind's square root or reducing it to any raw numerical core: "while the Brain is round, [indeed] no Square will be." My eighteenth-century colleagues found the poem so rich they suggested it become the introduction to my second book.

*Literary Neuroscience and the Aesthetics of the Brain* will explore a series of literary and artistic renderings of the mind and brain from the long eighteenth century, focusing on how each work problematizes experimental debates still going on in modern neuroscience. Part of what makes this book unique is that each chapter's central literary example is paired with—and offers the crucial historical backdrop for—one of the interdisciplinary experiments in neuroscience currently being conducted or developed in our lab. Chapter one contextualizes our fMRI study of *Mansfield Park*, discussing Austen's own long-standing interest in attention, memory, and reading. Fortunately, much substantial work has already been done

(2017), which argues that Austen's unique focus on collecting comments on her novels from individual readers can draw our attention to something oft overlooked in neuroscience: individual differences. Chapter two traces the eighteenth-century history behind our experiment on attention and aesthetic pleasure in poetry. This section of my book (key portions of which have also been drafted) sheds light on an under-explored set of beliefs about poetry, particularly the popular Enlightenment notion that the rhyme and rhythm of iambic pentameter couplets could organize attention far better than narrative

My final two chapters—in progress—will provide literary-historical context for two experiments in a similarly early stage of development at the DHL: 1) our collaboration on *Narrative Perceptions of Music*, and 2) an experiment-in-progress on online gaming. My book's aim is to reveal how significantly eighteenth-century depictions of the brain in literature and art shaped Enlightenment theory of mind. More broadly, my goal is to open up new space to theorize what it means to do truly interdisciplinary experiments in literary neuroscience, studies that model—indeed, grow out of—humanistic knowledge.