"I am not what I am": Shakespeare and Artificial Intelligence Seminar organizer: Don Rodrigues; Respondent: Diana Henderson

Generating Shakespeare: AI, Access, and the Early Modern Archive

Thomas Dabbs, Aoyama Gakuin University

Now that we are fully beings of the brave new world of generative and transformative language models that are both natural and large, we must face the fact that many of our observations at a given point in time will likely time out before they reach print. Much of we discover about generative AI now will be quickly rendered obsolete by AI as it learns more and, more importantly, learns how to do more. This said, it may be some time before we can fully utilize AI, and in particular LLMs, in recovering and organizing archival material related to Shakespeare and the early modern period. For starters, so much material has yet to be digitized and is therefore out of digital reach. Also, after a bit of exploratory research it is clear that much of what is currently available online exists behind a pay wall or is as yet unreadable or is not part of the training parameters of, say, ChatGPT. Though one can set ChatGPT to gain Internet access, there are fairly strict limits to what it can reach. Its capabilities in this regard are controlled by strict protocols to ensure compliance with privacy, copyright, and other considerations. Finally, if and when an LLM receives archival material in our field as part of its training, there will be requisite human training in how to ask the right questions to receive the output a researcher wishes to gather. One can only speculate, but the hope would be that we would soon be able to explore archival material online with queries much more sophisticate that using search terms and search parameters. With a focus on ChatGPT coupled with an examination of select online resources, this paper will attempt to assess what the future might hold for using LLMs to interact with and research archival records.

Towards an AI-Friendly Shakespeare Edition

Eric Johnson, George Mason University

Most of the innovations in Shakespeare publishing occurred before the middle of the 19th century. The age of the Internet – now three decades old – has offered an alternative distribution medium, but has prompted few true improvements. Today's editions can be consumed through eBooks and digital platforms, but except for the various multimedia objects grafted onto them, they could have been published in 1994 (or arguably 1894). Even the most ambitious modern digital-forward editions have largely replicated the content plans of the great 18th- and 19th century Shakespeares. This paper asks what a thoroughly, fundamentally digital Shakespeare edition could be, as artificial intelligence (AI) emerges as a major disruption within the digital landscape. The first half of the paper uses the language of digital publishing to examine the changes in Shakespeare editions over the initial two-and-a-half centuries after Shakespeare began to write. It explains how the features and content plans of each edition built upon each other, and how they used structures and media that presaged the potentialities of digital publication. The second half offers a sketch of how an AI-driven Shakespeare edition could offer a way to move beyond the traditional editorial and publishing model. It would use an infrastructure centered on interfaces with various AI tools to provide various functions for users. It would be radically open to interrogation, exposing its structure and substance in such a way that other AI tools (whether or not they are associated with this edition) could consume the entire content corpus. AI could also be trained to generate certain types of content for inclusion in the edition, particularly descriptive metadata and perhaps certain types of plain-text descriptions. It could form associations with external content (including

copyrighted material) so it could point outside itself without direct intervention. An AI-driven edition would also require a revolutionary editorial approach, since the edition would be as much the result of technical labor as editorial labor. The editor would have to orchestrate and mesh the technical and editorial aspects; indeed, the technical would have to assume parity with the editorial. The paper's conclusion offers some ideas about how this edition could be economically sustainable, as well as an addendum containing a list of additional features that could be explored and developed.

Visualizing Variety and Thinking Generatively with Shakespeare's Sonnets Lynn Maxwell, Spelman College

In this paper, I take up Shakespeare relationship to AI and machine learning to ask, "What does Shakespeare mean for AI?" and "What might AI mean for Shakespeare studies?" The paper surveys the uses made of Shakespeare to prove the efficacy of AI models and their ability to write "like Shakespeare," generate sonnets, or otherwise mimic his literary output. The turn to Shakespeare by engineers and software developers testifies to Shakespeare's cultural capital while simultaneously revealing how empty and unexamined the idea of Shakespeare is for the software developers and engineers who evoke him. This casual use of Shakespeare mirrors the possibilities and threats of casually deploying machine learning models and generative AI in Shakespeare studies, which is the subject of the second half of my paper. After surveying the threats posed by student use of generative AI and the limitations of current chatbots, I consider what we might generatively do with AI in our classrooms and our own research. Ultimately, I suggest that there are uses for AI in Shakespeare studies, especially if we develop models that can testify to their uncertainty and provide sources for their work. I end by sketching out one possible machine learning project: a metrical parser that could scan lines of poetry, identify metrical variation, and signal its level of certainty about its outputs.

Between Virtuality and Humanity: A.I., Shakespeare, and the History of Character Harry Newman, Royal Holloway, University of London

Why are chatbots often described in the same terms as Shakespearean characters? It's striking that attempts to categorize the ontological status of Large Language Models and other A.I. systems—"counterfeit people," "virtual humans," "artificial persons"—resonate strongly with tech-inflected identifications of Shakespeare's dramatis personae—"virtual persons" (Jonathan Crewe), "automaton[s] ... that perform[] humanity" (Justin Kolb), and, again, "artificial persons" (J. Leeds Barroll). This paper suggests that descriptions of artificial intelligence on the one hand and of fictional characters on the other share deep roots in foundational early-modern attempts to express both the virtuality and humanity of imagined persons. What might recent debates in A.I. reveal about the history of ideas about character in early modernity, and vice versa? I argue that recent efforts to articulate what it is chatbots do to, with and for humans have implications for how we understand explorations of the nature of dramatic character in the sixteenth and seventeenth centuries, including notions of personation, counterfeiting, and the transmission of what the anti-theatricalist Stephen Gosson called "impressions of mind."

To explore connections between A.I., Shakespeare, and character in a teaching context, the paper finishes with a reflection on my experience making a film for students--BardBot Debate--with a digital theatre company, Creation Theatre. In the film, a chatbot tasked with writing a student's Shakespeare essay decides to stage a chaotic debate between A.I.-models of Sigmund Freud, Sarah Siddons, and L. C. Knights. The film (18 minutes long) is an open-access teaching

resource, and is free to view here: https://vimeo.com/creationtheatre/bardbot. It's designed to get students thinking about the history of ideas about Shakespeare and character, but also to prompt contemplation of what's at stake when A.I. impersonates humans, or humans impersonate A.I.

"Spirits to Enforce, Art to Enchant": Ariel as Prosthetic AI in *The Tempest* Sarah Olson, University of Wisconsin-Madison

In his service to Prospero over the course of *The Tempest*, the spirit Ariel performs inhuman and wondrous feats: he can manifest in multiple places at once; conjure elaborate illusions, entertainments, and traps; and easily cross vast distances. Ariel's capacity for transformation, surveillance, and travel defies the limits of human embodiment as well as human understanding. Although Ariel allows Prospero to exert control and mastery over the island on which *The Tempest* takes place, Prospero does not and cannot fully understand Ariel's 'workings,' in echo of contemporary discussions regarding the 'black box' of artificial intelligence.

In this paper, I argue that Prospero uses Ariel as a 'living' sensory prosthesis – a kind of assistive, autonomous, and chat-based AI – as Prospero attempts to make manifest fantasies of disembodied control over nature and other people. While degradation and enslavement are not inherent to the act of providing prosthetic assistance or wielding artificial intelligence, Prospero does (ab)use Ariel in order to 'escape' the confines of his aging, marooned body through the mediation of Ariel's supernatural abilities. Building on scholarly frameworks that examine the ways in which prostheses and the bodies that use them become co-constitutive and mutually-affected (Merleau-Ponty, 1964; Shildrick, 2015; van Schaik, 2019), "Spirits to Enforce" explores the extent to which Prospero and Ariel are changed by each other, as the former treats the latter as an extension of and replacement for his own powers of perception. This interplay can in turn inform our modern conceptions of artificial intelligence: how we are changed and directed by interactive AI we do not fully understand, just as we change and direct AI in return.

Shakespeare, AI, and Access

Aaron Rodriguez, Florida State University

AI and other computational technologies are radically changing the way we read, research, and teach Shakespeare; however, technological advancement is not foreign to Shakespeare studies. In many ways, the Shakespearean canon provides an ideal textual, material, and multimodal dataset for scholars to use with emerging AI and computational technologies. Just because we can use computers to interact with Shakespeare, however, does not mean that we always should. This paper looks at current AI and computational approaches to reading, researching, and teaching literature, and applies some of these models to Shakespeare as a material object, a textual object, and a multimodal performance. To determine whether AI is an appropriate tool in specific situations, I propose following Frank Pasquale's "New Laws of Robotics," specifically his first law that states, "Robotic systems and AI should complement professionals, not replace them." This paper first investigates the application of AI to books as material objects to fill gaps in digital archival metadata. Second, this paper investigates how AI and computational approaches are used with text and how these technologies change the way we read. Finally, it investigates how AI can generate accessible translations of performances for blind and low vision audience members. The overarching view of this paper is that AI and computational technologies can help provide intellectual and physical access to Shakespeare.