

category of trans subjectivity becomes intelligible when staged as “a journey through ‘elsewhere’ spaces” (3). The life of Christine Jorgensen, “the first publicly known American transsexual” (23), illustrates this transnational process: “Jorgensen’s travel narrative,” specifically her trip to Denmark for the purpose of gender reassignment, “contains the temporal moment of gender indeterminacy within a spatialized elsewhere. As this had already taken place, her ability to be accommodated within the narrative of American social recognition and legitimacy, premised on individual triumph over the odds, increased” (49). Still, legibility within a (neo)liberal-individualist imaginary is a double-edged sword: Aizura reminds us that the comparative hypervisibility of trans women is often predicated on transmisogyny.

Aizura’s project of “provincializing” (9) transness and trans studies, or disrupting the mapping of trans subjectivity onto “a domestic or national *here* and an unfamiliar or unimportant *there*” (9), proves momentous. Aizura attends to the imbrication of geographic and economic mobilities under a “neoliberal racialized citizenship” (40) system to chart the sorting of trans populations into deserving and underserving recipients of recognition and support. As does Dillon with queerness, Aizura posits transness as integral, rather than external, to national and transnational circuits of exploitation and oppression. These authors turn to “queer” and “trans,” then, not to speculate exceptions to the historical present but to decrypt it.

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***Enumerations: Data and Literary Study.* By Andrew Piper. Chicago: Univ. of Chicago Press. 2018. xiii, 243. Cloth, \$90.00; paper, \$27.50; e-book available.**

***Passwords: Philology, Security, Authentication.* By Brian Lennon. Cambridge, MA: Harvard Univ. Press. 2018. xviii, 207. Cloth, \$41.00.**

***The Digital Banal: New Media and American Literature and Culture.* By Zara Dinnen. New York: Columbia Univ. Press. 2018. viii, 223. Cloth, \$65.00; e-book, \$64.99.**

In *Computer Power and Human Reason: From Judgment to Calculation*, computer scientist Joseph Weizenbaum asserts the existence of two distinct

modes of human thought: intuition and logic. Intuitive thought is generative in ways that logical thought can never be because intuition holds itself to less rigorous standards of evidence. Yet, logical thought keeps intuition grounded by turning impressions and hunches into testable hypotheses. For Weizenbaum, intuition belies the aggrandized claims made on behalf of logical computation by his peers in the field of artificial intelligence. Intuition, in essence, eludes the mathematical formalism necessary for calculation because it is the very thing lost in the rationalization of individual impressions. It takes human reason and judgment to recognize that computer power and calculation do not make up for intuition's loss. Computers will never be capable of such insight no matter how far artificial intelligence advances.

Weizenbaum's argument, made in 1976, is wholly compatible with a disciplinary vision of literary studies rooted in hermeneutics and critical theory. Indeed, Weizenbaum cites the Frankfurt School and late literary critic Steven Marcus as formative influences on his book. Yet, with the ascendancy of the digital humanities, the future of disciplinary identity is a tense subject of discussion. Each of the books reviewed here are by scholars trained in literary studies. They all focus on the convergence of computing technologies with literary inquiry and revisit the relationship between judgment and calculation. However, Andrew Piper, Brian Lennon, and Zara Dinnen model such entirely different methodologies and perspectives on reading that it is hard to imagine their books in sustained dialogue.

Instead of trying to manufacture consensus among these monographs, I will use this review essay to follow the distinct axes along which computation has riven the discipline of literary studies. I'm inclined to take this approach because each book is excellent on its own terms. Yet read collectively, these studies raise fundamental questions about disciplinary identity and futurity. Piper advocates for a statistically driven computational criticism, Lennon for a critical history of computation's literary and linguistic applications, and Dinnen for a theoretically informed close reading of novels and films engaged with computational culture.

In *Enumerations*, Piper's goal is to build on the translational imperatives central to humanism, but instead of studying distinct natural languages, he foregrounds letters and numbers. Opposed to siloing literacy and numeracy, he argues that translating texts into quantities is part of an "ongoing intellectual drama that tries to understand the act of commensuration, of making sign systems compatible with one another" (5). He draws on methods from computational linguistics and data science to show how the quantitative study of large sets of literary works can and should change our understanding of literature. Whereas Weizenbaum emphasized the incommensurability of intuition and logical calculation as modalities of thought, Piper sees quantification as correcting for disciplinary literary studies' overprivileging of the intuitive and impressionistic capacities of the critic. The field's formation around interpreting select passages of individual texts leads to the disciplinary failure to generalize adequately about literary history. Piper calls this the "metonymical crisis" at "the core of literary criticism"—a crisis metonymized by Erich

Auerbach's *Mimesis* (1946) (7). Piper translates between letters and numbers in order to invest the humanities with the power to contemplate the representativeness of its own evidence. In other words, computation enables humanists to generalize more accurately by replacing the commensurability of part and whole with the commensurability of letters and numbers.

"All models are wrong, but some are useful," as British statistician George Box famously wrote. For Piper, the penchant of the literary critic for metonymic particularity has outlived its usefulness. Scaling literary history up demands not more criticism but rather more calculation. This is the familiar claim of distant reading, but *Enumerations* moves beyond the binaries of close and distant. Computational reading, in focusing upon representativeness, does not presuppose an objective totality. It treats the modelling of data sets as Auerbachian forms of represented reality (9). Quantification can return us to the ineffable qualities of literature by way of testing dominant beliefs within the discipline.

Piper combines critical theory and computation by using punctuation frequencies in poetry to explore Georges Bataille's idea of general economy. He employs topic modeling, latent semantic analysis, vector space modelling, and various other methods of natural language processing to revisit disciplinary notions of plot, characterization, corpus, and fictionality. The decision to incorporate computation into the questions of longstanding literary concern serves the purpose of yoking the subfield of cultural analytics to the mainstream of literary study, yet critics unschooled in statistics will likely struggle with the intricacies of Piper's findings and the implications of his diagrams. I found Piper most intriguing when reframing conceptual problems such as the supposed unquantifiability of fictionality. Given enough training data, what was once unquantifiable (the fictionality of an utterance) becomes readily quantifiable. Classifiers can learn to identify a fictional work through semantic content, essentially circumventing as opposed to overcoming the contextualism of interpretive communities and speech acts (96–97). This is not to say that machines are insightful or intuitive, but that their classificatory powers tell us something about the inference of fictionality that we did not know before.

One of Piper's major arguments for computational criticism is that data will make individual and disciplinary self-assessment more disinterested. Numbers confirm with precision the inequities within literary studies as tracked through articles published in leading journals. Piper believes computational modelling is the best way to understand how scholarship is implicated in inequality, yet his delimitation of implication to published works is too narrow a metric for understanding the history of disciplinary complicity with unsavory distributions of power. Brian Lennon's *Passwords* steps in here to argue that judgments about literary studies as a discipline are best made by historicizing computation rather than performing more calculations. He traces the literary use of computational methods back to little known partnerships between researchers of literature and national security agencies. His goal is to return computational criticism to a "material institutional context" that illuminates its implication in and compatibility with the surveillance state (18).

Lennon's preferred term is actually not computational criticism but "computational philology" and more specifically "cryptophilology" (xv). "Crypto" because Lennon treats computational criticism and the digital humanities more broadly as primarily ideological formations, which conceal their historical genesis through stressing the novelty and interdisciplinarity of automated forms of analysis. Cryptophilology is also a portmanteau evoking the intersection of cryptography and philology. Both fields treat text as cipher, and Lennon's titular concept of the password encapsulates how their respective forms of disciplinary knowledge converge with the security apparatuses they serve.

Lennon's training in comparative literature yields a fascinating and worldly account of cryptophilology that takes the reader from Quranic scholarship and Arab cryptology to Renaissance cryptology and Egyptology. These early periods and epistemologies, while temporally removed from his twentieth-century focus, offer a genealogy of cryptophilology. They situate the development of frequency analysis (a common strategy of natural language processing) within the espionage practices of early empires and city-states. When Lennon explains the industrialization and automation of cryptography, he takes readers to the more familiar territory of Bell Labs, Claude Shannon, and the cyberneticists working on machine translation. Following the research of Henry Veggian and Robin Winks, he also ventures into the lesser known Riverbank Labs (a conservative foundation) and Office of Strategic Services (or OSS, a US intelligence agency). In Riverbank, he finds literary scholars of authorial attribution offering cryptanalytic training to American soldiers (43), and in the OSS he unveils the ties between military intelligence gathering and the founding of Yale's American Studies program (50).

Passwords ultimately invites humanists to prioritize political judgment over data-driven calculation. This is not out of a facile rejection of numbers but out of the desire to see digital humanists reckon more fully with the proximity of their methods to military intelligence and appropriation. The impulse to collect more data and train better models does nothing to acknowledge, resist, or curtail the adoption of humanities computing (e.g. stylometry, authorship attribution, authentication) for more nefarious ends: policing, profiling, doxing, and other forms of information warfare. Lennon's preferred disciplinary future is not computational philological but counter-Enlightenment philological as represented in the anticolonial stances of Edward Said, Paul Bové, and Aamir Mufti (122–23).

Lennon historicizes the complicities of humanities computing as a way of dampening the optimism around digital technologies for literary study. While properly wary, this stance occasionally relies too much on an outdated portrait of the digital humanities as mediated by journalistic exaggerations of the field's game-changing effects. Optimism is no longer the prevailing mood around technology, start-up culture, and, within the context of the university, MOOCs and laboratory models of humanistic study.

Zara Dinnen's *The Digital Banal* tells us that banality has become the primary affect of twenty-first century computational culture. Novelty is de rigueur, folded into sped-up product cycles (think Apple iPhones), constant

updates to apps (think new features that barely register), and overstated promises of a revolution to come (think *disruption* as a mantra of Silicon Valley startups). Dinnen builds on media theory by Sarah Kember and Joanna Zylinska, Wendy Hui Kyong Chun, Alexander R. Galloway, Bernard Stiegler, and others to argue that users of everyday digital technologies participate in life after “new media.” The role of the literary critic is to recover “the novelty of mediation” from the faux novelty of the commodity or “the endless procession of shiny new things” (4). Dinnen’s assembled archive includes works by Mark Amerika, Jennifer Egan, Dave Eggers, David Fincher, Jonathan Lethem, Ellen Ullman, and Colson Whitehead.

Dinnen largely takes us out of the conflicts over quantitative methods raised by Piper and Lennon. However, her approach revisits disciplinary identity from another angle. She observes that only a fraction of contemporary monographs and edited collections in literary studies address the digital conditions pervasive in twenty-first century novels (166). The result is the perpetuation of a misperception that novels are silent on technology and that literariness itself is achieved through the rejection or fear of digital culture. Dinnen’s observation is impressionistic and draws on a sense of disciplinary cultures rather than a data set of all scholarly monographs published in, say, the last five to ten years. Perhaps, a literary study of the future would have to back up such observations with numbers, but to me her claim feels right. English departments and media studies departments have traditionally found themselves in conflict, and that has sometimes masked literature’s own medial identity in print, on screen, and through earbuds.

Dinnen’s book underscores the complex process by which human being is made legible as a “becoming-with” technology (31). The mutual constitution of man and machine drove Weizenbaum’s research into artificial intelligence and his subsequent distinction between human judgment and computing power. The mutual constitution of disciplinary identity and technical method drives Piper’s, Lennon’s, and Dinnen’s investigations into professional reading. How we can read and how we should read remain the core questions of disciplinary literary studies especially as computational culture exerts pressure on the tools, scales, and conceptual vocabularies of the humanities.

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