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# Taking the Middle Road: Reflections on Mixed Methodology within the Digital Humanities

Parham Aledavood, Département de littératures et de langues du monde, Université de Montréal, CA, parham.aledavood@umontreal.ca

In the rapidly evolving field of digital humanities, methodological considerations, especially the interplay between "distant reading" and "close reading," play a prominent role. This paper, presented against the backdrop of these two critical approaches, undertakes a comprehensive exploration of reflections on mixed methodology that have emerged within the field, emphasizing calls for a blending of distant reading and close reading. Starting with an evaluation of the origins of such terminology in the field, the paper elucidates the ongoing debates surrounding the tensions between these two reading paradigms. Highlighting the multifaceted terrain of these debates, the paper enumerates the terminology on such methodology that has been explored and expanded by digital humanists. Furthermore, through analyzing a number of methodological reflections, the affordances and the practical implications of a mixed methodology in computational literary studies are discussed.

Starting from bringing distant reading and close reading together in the research process, the focus shifts from a mere juxtaposition of these two reading modalities to a broader contemplation of the objects of study in digital humanities projects. Then, moving from scale to scope, collaboration emerges as an integral element in the discourse. Recognizing both its opportunities and inherent challenges, the paper examines the need for collaboration between scholars from different disciplines and explores the emergence of mixed methods in a collaborative context. The need to employ both distant reading and close reading in such context is formulated as a way to appeal to more traditional humanists. In its conclusion, the article heralds the significance of "alien reading," emphasizing the need for understanding machine reading as a distinct, albeit integral, component in the digital humanities' tapestry, especially in the age of Al and LLMs.

Dans le domaine en rapide évolution des humanités numériques, les considérations méthodologiques, en particulier l'interaction entre le « distant reading » et le « close reading », occupent une place prépondérante. Cet article, présenté dans le contexte de ces deux approches critiques, propose une exploration approfondie des réflexions sur la méthodologie mixte qui ont émergé dans ce domaine, en mettant l'accent sur les appels à combiner la lecture de loine et la lecture de près.

Digital Studies/Le champ numérique is a peer-reviewed open access journal published by the Open Library of Humanities. © 2024 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC-BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See http://creativecommons.org/licenses/by/4.0/. @OPEN ACCESS En commençant par une évaluation des origines de cette terminologie dans le domaine, l'article éclaire les débats en cours autour des tensions entre ces deux paradigmes de lecture. Soulignant la diversité de ces débats, l'article répertorie les terminologies liées à ces méthodologies, explorées et développées par les humanistes numériques. De plus, à travers l'analyse de plusieurs réflexions méthodologiques, les avantages et les implications pratiques d'une méthodologie mixte en études littéraires computationnelles sont discutés.

En partant du rapprochement entre lecture de loine et lecture de près dans le processus de recherche, l'attention passe d'une simple juxtaposition de ces deux modalités de lecture à une réflexion plus large sur les objets d'étude des projets en humanités numériques. Ensuite, en évoluant de l'échelle à l'étendue, la collaboration apparaît comme un élément central dans le discours. Reconnaissant à la fois ses opportunités et ses défis inhérents, l'article examine la nécessité d'une collaboration entre chercheurs de disciplines différentes et explore l'émergence de méthodes mixtes dans un contexte collaboratif. Le besoin d'employer à la fois la lecture distante et la lecture rapprochée dans ce contexte est formulé comme un moyen de s'adresser aux humanistes plus traditionnels. En conclusion, l'article souligne l'importance de la « alien reading » (ou « lecture étrangère »), en mettant en avant la nécessité de comprendre la lecture par la machine comme une composante distincte mais intégrale dans le paysage des humanités numériques, notamment à l'ère de l'IA et des grands modèles de langage (LLM).

The popularity of self-reflection in digital humanities (DH) highlights the ongoing need for theoretical and methodological dialogues and debates within the field. This need can be observed through scholarly interventions such as the multiple essays dedicated to theories and approaches, methods and practices in each new edition of Debates in the Digital Humanities, or through a recent issue of the journal Cultural Analytics, "dedicated to questions of theory and epistemology related to computational methods in the humanities" (Herrmann et al. 2022). Another example would be the recent special issue of New Literary History, entitled "Culture, Theory, Data," which provides an array of contemplations on the methodological intricacies and potentialities inherent in computational literary studies (Underwood et al. 2022). In the evolving landscape of DH, few debates have sparked as much intellectual fervor as the juxtaposition of "distant reading" and "close reading." Although these approaches have been developed in literary studies, the broader DH community has incorporated them into their research. This article examines the significance of these methodologies in DH, exploring their practical implications and the calls to bring them together, and argues for a balanced, integrated approach to literary analysis in the digital age. It looks at the juxtaposition between the two reading methods from different angles, such as the research process and the object of study, and discusses the strategies and the need to manage this gap. Furthermore, it delves into collaboration as a means to better incorporate such mixed methodology within a literary project and, finally, points to a different perspective on the gap between the reading paradigms.

Taking a closer look at the scholarly interventions discussing a mixed methodology of distant reading and close reading reveals the nuances of this popular, broadly defined, and sometimes misunderstood notion in the digital humanities. However, as the "distant" in distant reading is clearly meant to juxtapose with the "close" in close reading, it is important to consider the divergent intellectual histories of these two concepts before delving into the efforts to merge them. Simply put, close reading involves an in-depth, detailed analysis of a text. This practice emphasizes careful examination of language, structure, and meaning, enabling scholars to uncover nuanced interpretations and insights. Originating in the early twentieth century, close reading became a cornerstone of New Criticism, focusing on the intrinsic elements of the text itself, devoid of external context. However, rather than the "primary methodology" of literary studies, as Matthew Jockers puts it, "the practices of close reading have [...] been a persistent feature of Anglo-American literary studies" (Jockers 2013, quoted in Smith 2016, 57), and the term has taken on a broader meaning than when it was originally conceived (see Smith 2016 for an excellent overview of close reading, its intellectual history, and how distant reading came to be regarded as its antithesis). Conversely, distant reading is a more recent development, popularized by Franco Moretti in the early 2000s. As many have noted before, Moretti was not the first to suggest such approach; moreover, he does not mention using computers or algorithms in his earlier proposals and only suggests a computational, digital approach in his later writings (see Underwood 2017; Goldstone 2017). This approach leverages computational tools to analyze large corpora of texts, identifying patterns, trends, and structures that would be impossible to discern through traditional methods. Distant reading allows researchers to gain a macroscopic view of literary history and cultural phenomena, revealing broad trends across extensive datasets. As scholars grapple with the vast potentials of computational methods, they are often met with a pivotal challenge: How do we reconcile the macroscopic insights offered by distant reading with the nuanced, granular interpretations inherent to close reading? This question is not just methodological but also epistemological, challenging the very tenets of literary and data analysis within the field of computational literary studies.

As Ted Underwood—a scholar with an exceptional background of both reflections on mixed methodology in DH and putting it into practice-reminds us, even using JSTOR or Google search has machine learning algorithms and thus "the digital" written all over it (Underwood 2014). Consequently, it can be argued that engagement with the digital in the humanities is almost inescapable. Elsewhere, Underwood writes in his genealogy of distant reading that, despite popular belief, distant reading and digital humanities are not the same, and one does not define and/or subsume the other (Underwood 2017). Underwood argues that although Moretti coined the term "distant reading" around the year 2000, the tradition of analysis on a large scale goes way back. He associates this concept with already existing notions in the sociology of literature and book history. Nevertheless, there have been numerous debates from both within and outside DH on the tension between distant reading and close reading as somewhat conflicting approaches that cannot be brought together within the same project. However, as Moracir de Sá Pereira argues, "while literary studies—or the humanities more generally—perhaps has no real analog to the paradigm wars, a conscious use of mixed methods would push aside the binarism and let literary study be a counting discipline at the same time as a reading one" (Sá Pereira 2019, 405). He argues that DH practitioners have a thing or two to learn from social sciences and how they manage what he sees as the conflict zone between the quantitative and the qualitative.

In the introduction to the special issue of *Modern Language Quarterly* focusing on "scale and value," James English and Ted Underwood discuss prevalent misconceptions and highlight potential pitfalls associated with borrowing methods from other disciplines (English and Underwood 2016). They talk about the methodological

exchanges of social sciences and humanities, how they have borrowed content and methods and resisted each other all at the same time: "literary scholars read social scientists to borrow their conclusions rather than their methods" (English and Underwood 2016, 284; see also English 2010, xiii-xiv). Along the same lines, Heather Love shrewdly observes that "[i]n the academic division of labor, literary critics still tend to that part of the world that has been 'kept safe from sociology'" (Love 2010, 388). Therefore, introducing computers and algorithms into the sacred tradition of literary studies is still seen by many traditional humanities scholars as blasphemous. Yet, English and Underwood affirm that "the intellectual shifts of the last fifteen years have created a host of novel methodological exchanges between the humanities and the social sciences. In fact, it is increasingly difficult to know which discipline is borrowing methods from which" (English and Underwood 2016, 284). They envisage two possible outcomes when it comes to transforming the humanities: the pessimistic view would be humanists continuing to use computational methods without fully grasping their scope, bias, and challenges and contributing to the demise of the humanities. A more optimistic view would be adopting a mixed methodology to think with rather than think through computers. They invite humanists to an informed borrowing, yet at the same time demonstrate their scepticism:

While our discipline is now more than ever open to experimenting with large-scale analysis, most such experiments will continue to place high value on information gleaned from close reading of individual texts. Even literary historians who contemplate extremely long timelines will tend to default to the logic of the case study, illustrating general trends through rich description of selected particulars. (English and Underwood 2016, 286)

They seem to be warning of an enthusiasm to borrow methods from social sciences without possessing the theoretical foundation for it or the willingness to let go of one's old habits, (i.e., close reading). Their argument tends to be valid in many instances. The excitement of exchanging with other disciplines, borrowing methods, and trying to localize them without fully grasping their foundation seems to be a temptation many could not resist. Yet, English and Underwood conclude their introduction on a more positive note: "it is now possible to leave the reading wars behind, accept the coexistence of different approaches to literary history, and move forward to a stage of this conversation where we ask how different approaches can be productively combined" (English and Underwood 2016, 292). It may be possible, but at the same time, there has been no shortage of more traditionally inclined literary scholars bashing distant reading as damaging the spirit and contributing to the demise of

literary studies (for an overview of these critiques, see Bode 2017, 78–79). Therefore, this is an important question to ask, especially because there seems to be a trend in digital humanities, and especially computational literary studies—which is the focus of this paper—to return to methods like close reading as a way to appeal to more traditional humanists, to reassure them that the machines are not taking over the field. However, implementing a productive combination of methods and adopting a mixed methodology within a literary project is easier said than done.

# Towards mixing distant reading and close reading

In recent years, numerous scholars from within the field of digital humanities and computational literary studies have attempted to theorize the necessity, the possibility, and the challenges of mixing distant reading and close reading, especially when it comes to studying literary history. The most celebrated proponents of distant reading and macroanalysis, Franco Moretti and Matthew Jockers, have repeatedly shown their disdain for mixing the two methods. Moretti has clearly stated that he does not believe in "the middle road" (Saint-Amour 2019), and Jockers believes that macroanalysis is able to "unearth, for the first time, what [...] corpora really contain" (Jockers 2013, quoted in Bode 2017, 82), a statement that, as Katherine Bode puts it, "conflates analysis with achieving complete access" (Bode 2017, 83). However, Alison Booth points out that "Jockers notes the danger of 'generalization [...] when the texts examined are not representative of the whole,' and he denies that 'macroanalysis is [...] pitted against close reading'" (Booth 2022, 578; see also Jockers 2013, 47–49). In fact, as I argue later, employing distant reading without resorting to close reading at some point could be pointless and even meaningless.

English and Underwood were not the first nor the last DH scholars to propose an informed (or productive, as they put it) mixed methodology based on the two reading methods. This could be seen through the multiple terms coined in the recent years describing a mixed methodology within the digital humanities. Here is a nonexhaustive list of terminology that focus on blending distant reading and close reading:

- "Rapid Shuttling" (Kirschenbaum 2009, quoted in Hayles 2012)
- "Scalable Reading" (Mueller 2014; see also Krautter 2024 for a discussion and critique on Mueller's notion of scalable reading)
- "Computational Hermeneutics" (Piper 2015; Mohr, Wagner-Pacifici, and Breiger 2015)
- "Literary Pattern Recognition" (Long and So 2016)
- "Parallax reading" (Sample 2017)

- "Mid-range reading" (Booth 2017; Booth 2022)
- "Telescopic Reading" (Unamuno 2017)
- "Critical search" (Guldi 2018)
- "Medial Humanities/Humanistic Meso-analysis" (Saint-Amour 2019)
- "Middle reading" (Chun and Elkins 2022; Elkins 2022)
- "Multifocal (Telescopic) Reading" (Ringler and Argamon 2022)

While this compilation is by no means comprehensive, it underscores the prevailing inclination within the discipline to proffer methodological roadmaps integrating both reading modalities. It should be noted that the list above merely contains interventions that have suggested a new terminology for the mixed approach; however, there are multiple other scholarly writings left out, not because they do not entail exciting disciplinary suggestions, but merely for the fact that they do not coin a new term for their suggested mixed methods approach (examples include Howell et al. 2014; Rockwell and Sinclair 2016; Herrmann 2017; Jänicke et al. 2017; Aurnhammer et al. 2019; Sá Pereira 2019; Ringler 2022; Parks and Peters 2022.) Moreover, with a few exceptions like Guldi (Guldi 2018, focusing on historical corpora) and Aurnhammer and colleagues (Aurnhammer et al. 2019, analyzing political discourse on social media), all these interventions concern the study of literary texts and its various aspects revolutionized by the digital humanities (or its subfield of computational literary studies). This seems normal when taking into consideration the literary roots of both distant reading and close reading, as discussed in the introduction. What all these methods have in common is a special emphasis on close reading in addition to reading the texts quantitatively and engaging with them rather than reducing them to data and generalizing, as well as suggesting a circular approach. While these proposed methodologies share many other features, most notably a constant move between macro and micro, distant and close, qualitative and quantitative, they have important differences in study subject, scope, and method that need to be further studied. Another point in common in these interventions is their attempts to put their proposed methodologies into practice: since the authors are mostly digital humanists, they share the affordances and the pitfalls, albeit to a lesser extent, of such approaches in their proposals. I will briefly go over some of these methodological reflections and their practical examples to pinpoint certain implications and highlight some differences.

In his 2015 essay, "Novel Devotions: Conversional Reading, Computational Modeling, and the Modern Novel," Andrew Piper proposes a computational model to engage with literary works. He argues that his aim "is to offer a methodological polemic against the either/or camps of close versus distant reading or shallow versus

deep that have metastasized within our critical discourse today" (Piper 2015, 69). His proposed methodology consists of an iterative process between distant and close reading, a circular act of hermeneutics that moves from a hypothesis (belief) based on close reading a text, then puts the hypothesis to test by distant reading (measurement), to be followed in what Piper describes as an oscillatory or spiral-like fashion (iteration) by close reading a high-scoring sample from the corpus (discovery/validation). This step leads to remodelling, which is arguably absent in many projects based on distant reading. The problematic aspect of these projects could be summed up as a tendency and an enthusiasm to perform exploratory text analysis on big data to state results that in many cases are obvious even without resorting to distant reading.

To address this problem, Piper bases his model on three ideas, which he alternatively calls rules or laws of computational hermeneutics:

- 1. "Simplification is the cost of understanding complexity at a greater degree of scale" (Piper 2015, 70).
- 2. "Validation does not validate; it provides the means for further testing" (Piper 2015, 77).
- 3. "Technology impacts argument not solely through the new truths it produces, but also in the ways it changes our affective attachments to the texts that we read" (Piper 2015, 93).

The first rule could be used to justify the introduction of distant reading to literary studies from the beginning, as it pinpoints the question of scale in literary studies. Especially when it comes to literary history, this rule would lead us to breaking with canonical conventions and imagining alternative histories. The second rule highlights an important link between discovery and validation that seems self-evident, yet it is shockingly absent in many DH projects, especially those dealing with literary texts as their subject matter. In his 2017 article "The Double Bind of Validation: Distant Reading and the Digital Humanities' 'Trough of Disillusionment,'" Adam Hammond argues that in some DH projects validation is perceived as an endpoint in and of itself:

Many distant reading projects have produced disappointing results because they have been more interested in validating their tools—showing that their computational methods are able to confirm existing stereotypes—than in pursuing genuine discoveries. Many others, meanwhile, produce provocative results that cannot be meaningfully validated. (Hammond 2017, 1) Piper's understanding of validation, however, differs from this counterproductive, yet common, perception. He sees validation as a step towards remodelling, which would contribute to the iterative process and work towards completing the hermeneutic circle. This, I believe, highlights an important distinction between two common distant reading practices: on the one hand, those that claim to adopt mixed methods only because they "read" the computational results while having a superficial understanding of close reading as simply interpreting the results. On the other hand, there are projects based on a mixed methodology of distant reading and close reading, which go back and forth (the process dubbed zooming in and out by some) to produce more meaningful results, the sort of results that do more than just affirming the expected outcome before going into the project.

As for the affective attachments mentioned in Piper's third rule of computational hermeneutics, the distant reading step might lead to transforming affective attachments; however, this is a two-way street. The choice of close reading in the case of such methodology comes to the subjective affinities of the reader/scholar who chooses the excerpts of the texts to read closely. And the bigger the corpus, the more problematic the choice. Martin Paul Eve signals this as a problem in Piper's own analysis of punctuation in twentieth-century English poetry (Eve 2022). Eve believes that selective close reading might result in losing "many of the systematizing advantages trumpeted for the merits of computational methods" (Eve 2022, 159), which brings to mind English and Underwood's observation earlier. In a way, just as distant reading could be subjective due to the choices that we make in constructing the corpus, adopting methods, and selecting criteria, the close reading step could be equally subjective due to our choices of excerpts or chunks of corpus to read closely. Eve finally concedes in what he calls "a more generous reading" that "this merely shows a symbiosis between empirical computational findings and the continued need for readerly poetic engagement. It is not as though we need fear that one replaces the other" (Eve 2022, 159). Indeed, the emphasis on the role of a human reader (human-inthe-loop), which is here romanticized as "readerly poetic engagement," is a common feature in most methodological reflections of mixing distant and close reading listed earlier. Digital humanists share a tendency to remind their readers, themselves, and perhaps their "anti-digital" colleagues that there is always a qualified human critic behind the wheels of any computational reading of literary texts.

It is worth comparing Piper's "computational hermeneutics" to another proposal, which details a mixed methodology and puts it into practice through a different approach. In her 2017 paper, "In a Test Bed with Kafka: Introducing a Mixed-Method Approach to Digital Stylistics," J. Berenike Herrmann conceives of mixed methodology as "a third empirical paradigm" (Herrmann 2017, 3) and contends that "DH stylistics should move beyond the dichotomies of 'close vs. distant,' 'qualitative vs. quantitative,' 'explanatory vs. exploratory,' 'inductive vs. deductive,' 'understanding vs. explaining'and, possibly even 'hermeneutic vs. empirical'" (Herrmann 2017, 2). She argues that the field of digital stylistics in general and employing digital methods in literary studies more specifically relies in many cases on crunching big data: it departs without a hypothesis, detects patterns and trends, and provides findings/conclusions based on generalizations (Herrmann 2017, 4). In the case of Herrmann, her digital hermeneutic strategy consists of 4 steps: (1) hypothesis generation from literary criticism, (2) quantitative hypothesis testing, 3) quantitative exploration, and 4) qualitative text analysis. She provides an example analysis of Kafka's oeuvre by comparing it to a corpus of German literature and close reading one of his short stories to pinpoint the anomalies and refine her model. The main difference between her method and Piper's "computational hermeneutics" lies in the last step, where she performs what she calls a "digital close reading," which consists of analyzing one of Kafka's short stories through a Key Word In Context (KWIC) approach, instead of close reading it in the more traditional sense of the term. Moreover, her proposed methodology does not necessarily possess the iterative nature of computational hermeneutics, where close reading leads to refining the computational model. Yet, there is one specific point where the two proposed methodologies converge: defining a mixed methodology based on the research process (an approach also suggested by Rockwell and Sinclair 2016; Sample 2017; Chun and Elkins 2022, among others).

Herrmann is especially critical of reducing the mixed approach to the question of scale; in discussing such scholarly interventions as Martin Mueller's "scalable reading" or Hugh Craig's "Middle-distanced reading" that call for a mixed methodological approach, Herrmann points out that,

many may have mistaken them for the examination of "mid-sized data sets" that are neither "big data" [...] nor individual texts, but something in between. In my view, this data-size-driven reading of the term is overly simplistic. Rather, the emphasis should lie not so much on the scale in terms of the size of the data volume examined, but on the research process. (Herrmann 2017, 2)

As suggested by Herrmann's differentiation, there are multiple interpretations as to what a mixed methodology in the digital humanities should entail. For instance, another interesting take on the middle road in such context could be seen in Katherine Elkins and Jon Chun's notion of "middle reading" (Elkins and Chun 2019; Chun and Elkins 2022). In addition to moving back and forth between the two types of "reading," their approach is differentiated through choosing larger chunks of texts (a few pages) for close reading than is customary (a short excerpt such as a paragraph). The direction Elkins and Chun take in their approach shows that beyond the size of the corpus and the research process, there lies a deeper question: How should we conceive and frame the objects of our study in DH? While both Herrmann and Piper emphasize the research process as the linchpin of mixed methodology, there are other dimensions to this discourse, as other scholars have proposed a more nuanced take on the term. The heart of the debate, on this side of the argument, is not merely the steps of the hermeneutical circle, but more fundamentally the very object of our study in DH.

# From research process to the object of study

There have been multiple articles that have called for revisiting the object of study in digital humanities projects rather than, or in addition to, the research process (see for example Bode 2017; Risam 2022; Booth 2022; Murrey 2022). In her 2017 paper, "The Equivalence of 'Close' and 'Distant' Reading; or, Toward a New Object for Data-Rich Literary History"—which she later developed into a book (Bode 2018)—Katherine Bode argues that both distant reading and close reading suffer from too much emphasis on the text itself; she sees the problem to lie in the object of study rather than the approach or the research process, at least not the sole problem. Following this line of thought, she introduces the scholarly edition as the new object for what she terms "data-rich literary history." She argues that both close reading and distant reading neglect the plurality of a text in their distinct ways:

Where "the stylistic protocols of literary criticism" mean that issues deemed methodological are relegated to footnotes or "methodological caveats" (Underwood and Sellers 2015)—as if they qualified rather than constituted the basis of the arguments offered—a scholarly edition of a literary system provides a dedicated format for demonstrating and justifying the foundational argument of data-rich literary history: its modeling of a literary system. (Bode 2017, 98)

In her view, a literary system represented through a scholarly edition would be much more fruitful than those works done by the likes of Moretti and Jockers, who claim in a sense to study everything all at once (Bode 2017, 102). Bode calls for attention to contextual and paratextual details, arguing that we are past the point where focusing on texts, whether a small corpus or huge amounts of data, can yield any significant results for literary history. We need to include metadata in our analyses of literary history because "constructing literary data is just as much an interpretive and critical activity as its analysis and that the historical nuance of such analyses foundationally depends on the historical knowledge embedded in those constructions" (Bode 2017, 101). Andrew Goldstone interprets Bode's call for turning away from the text as the sole object of study as breaking away from "the doxa of reading" (Goldstone 2017, 639), which, following Bourdieu's example, he defines as "the assumption that the primary activity of academic literary study is textual interpretation" (Goldstone 2017, 637).

While Bode emphasizes the significance of reimagining our primary object of study by introducing the scholarly edition, Simone Murray (Murray 2022) extends this line of thought even further, which could be read as a response to Goldstone's call for "[b]reaking with the doxa" (Goldstone 2017, 637). She argues that not only should we move away from literary text as the sole object of study, but we should move our gaze to "new things to study; new ways to talk about them; and—crucially—new audiences who may well want to hear what we have to say about how contemporary literary culture actually functions" (Murray 2022). In a way, her appeal is against the inherent elitism of English departments. She applauds the critical works of scholars such as Andrew Piper, Richard Jean So, Hoyt Long, and Martin Paul Eve, yet believes their work

has been less ready to ask *qualitative* questions of the digital paradigm itself, specifically, how the rise of digitization affects the inter-relationship of traditional agents in the literary field. As a result, the digital tends to feature as transcendent—a neutral, external tool invoked to aid analysis but not itself complicit in the economic or sociological framing of the object of study. Where the textual corpus chosen is largely historical, this factoring out of the digital's agentic role may be defensible, though it occurs also in contemporary-focused work. (Murray 2022)

Murray argues that in our era of "post-critique literary studies," we need to focus on the "*materiality* of contemporary literary culture" and adopt new "theoretical, methodological, and pedagogical tools" (Murray 2022).

As we transition from focusing solely on research processes to emphasizing the objects of our study, it becomes evident that the digital humanities require more than just a change in scale—they demand a re-evaluation of our foundational subjects and paradigms. It would be unreasonable to ask a traditional literary scholar for a complete rebranding to incorporate both new methods and new subject matters, or to implement a mixed methodology that requires acquiring multiple skills, employing novel tools, and going beyond literary subjects, all the while coping with the ever-changing demands of academia. One could say that this is not a task humanly possible, at least not by a single human being, but one that a group of humans might achieve through collaboration.

# From scale to scope: The role of collaboration in DH

So far, the methodological proposals discussed have focused more or less on the question of scale. This is, at least partially, due to the fact that, from the get-go, distant reading was introduced as a way to broaden the scale of literary studies (Moretti 2013, 48–49). However, one other important factor that should be taken into consideration is scope. In the excerpt cited from Hammond earlier (Hammond 2017, 1), he points to the fact that many distant reading projects have failed to produce any meaningful results. He relates this lack to the closed-off nature and a lack of attention to collaboration among distant reading practitioners. He believes that literature experts and computational linguists should be more in touch, and, more generally, humanists and scientists should learn to work together in the spirit of interdisciplinary adaptation.

Notwithstanding the fact that interdisciplinarity and collaboration do not necessarily mean the same thing and that each come with their own intellectual history, Hammond's call has been echoed by many other DH scholars, including those cited in this paper, such as Underwood, Herrmann, Murray, and Guldi, albeit through different lenses (Underwood 2014; Herrmann 2017; Murray 2022; Guldi 2023). Jo Guldi, for example, asserts that a more useful approach for a collaboration in this context would be a "hybrid" one (Guldi 2023, 443). To take the popular "silo" metaphor, interdisciplinarity can mean expanding one's silo in a superficial assemblage of methods, while collaboration can equal connecting two silos with a bridge but without that many meaningful exchanges. Hybridization, however, would mean coalescing the two silos into one giant silo that results in generous and fruitful exchanges. Another example of such calls could be seen in an essay cluster in *Modernism/Modernity* titled "What Is the Scale of the Literary Object?" As the editor, Rebecca Walkowitz, mentions in her introduction, what most essays in the collection have in common is an emphasis on shifting scales, adopting new and broader subject studies, and more importantly collaboration among researchers (Walkowitz 2019). Accordingly, Paul Saint-Amour, one of the contributors to the collection, writes: "bridging multiple analytical scales also means—and should mean—bridging multiple epistemologies" (Saint-Amour 2019).

Collaboration has already cemented its place in digital humanities, but it comes with its challenges and limitations that make it a hot topic for discussion in DH conferences, as manifested in the number of panels and interventions dedicated to the nature of collaboration at each major DH conference. The good news is that collaboration seems to be thriving in the field: in one of the latest editions of the annual ADHO conference, DH2022, hosted online by the University of Tokyo, from a total number of 257 short and long presentations, 76% or 196 presentations were collaborations among two or more scholars (of course, the nature of these collaborations needs to be studied to reveal the level of interdisciplinarity, the hierarchical imbalances, and the power relations at work). This tendency could also be observed in the slogan of the following edition of the conference, DH2023 at the University of Graz, "Collaboration as opportunity." Despite these initiatives and the undeniable place of collaboration in digital humanities, it is essential to revisit its foundational debates to truly grasp its significance. When we talk about a mixed methodology of distant reading and close reading in a collaborative context, there are multiple questions to be asked: How do we distribute the tasks and balance the research stages? How do the distant readers and the close readers work together? Is there a way to collaboratively close read a text or a corpus?

While this paper is not offering any clear-cut answers to these questions, we can take a first step to think about a mixed methodology at work in academia. In the abstracts of the DH2022 conference mentioned earlier, 5% of all the projects state mixing distant and close reading as their core methodology. This trend has been growing in popularity with each new edition of the conference, which is corroborated through an analysis of correlations of "close reading" and "distant reading" in the corpus of ADHO conferences from DH2005 to DH2018 (Posner 2023). Arguably, these are not the only projects that draw upon a mixed methodology. I take the projects that mention the reading methods explicitly as an example of self-reflection and a nod towards a trend to bring distant reading and close reading together as a methodological strategy in DH projects. More than half of these cases are collaborations among two or more scholars, which shows that close reading in a collaborative context could happen, at least on paper. Yet, reading these abstracts more closely reveals that in many cases close reading is conflated with taking a closer look at the results of distant reading. In other words, it is equated with interpreting the results in most cases. In a sense, close reading in these DH projects has little to do with its original foundation in literary theory and is often employed to prove the active involvement of a human critic in the project to analyze what the computer has "read." As mentioned before, one way to interpret this misinterpretation would be a necessity of insisting on the role of a human in the loop to reassure more traditional literary circles—which are incidentally those who still hold the most power in literature departments-that digital humanities, or computational literary studies, are conscious of and faithful to the accepted critical analysis norms.

### Reimagining the DH reading paradigms

In theoretical reflections on a mixed methodology in digital humanities, we can observe two tendencies: borrowing and collaborating, as in borrowing methods from other disciplines and collaborating with scholars from other fields. However, as it is evident from all the scholarly reflections discussed in this paper, there is no distant reading without close reading; every act of computational analysis needs to be interpreted. Therefore, in a sense, it is pointless, or at least not that fruitful, to insist on a "mixed" methodology as a paradigm shift. In a reflection that echoes Stephan Ramsay's argument on "algorithmic criticism" in Reading Machines (Ramsay 2011), N. Kathrine Hayles argues that "[t]he tension between algorithmic analysis and hermeneutic close reading should not be overstated. Very often the relationship is configured not so much as an opposition but as a synergistic interaction" (Hayles 2012, 31). It seems that in some projects, foregrounding a mixed methodology of distant reading and close reading acts as a strategy to avert the readers' minds from the fact that computers were involved in the analytical process, to reassure us that there was a human in the loop to oversee the machine. These considerations emphasize a pressing need in the age of Artificial Intelligence (AI) and Large Language Models (LLMs). Beyond the binaries of distant reading and close reading, or beyond the methodological reflections on their integration, there emerges a concept that might initially seem outlandish but is profoundly insightful: "alien reading," as posited by Jeffrey Binder (Binder 2016). His is an invitation to regard machine reading as alien reading, as something not necessarily pernicious but fundamentally different from how we think, argue, and write, to view machine reading as not just a mechanized process, but as a distinctly different mode of comprehension. Binder's thoughtful proposition has been followed by a recent wave of reflections on the question of employing a blend of digital and critical toolboxes (see Duede and So 2024, for example), ignited by the release of ChatGPT-3.5 in late 2022 and the speed with which it entered both the public and the academic discourses. New questions have resurfaced and come out in regard to the reading paradigms, such as: What does it mean to collaborate with a computer? Can we ask the machine to do the close reading for us? Is the need for a human in the loop becoming obsolete? Or, on the contrary, do we need the human critic more than ever to oversee a stochastic parrot (Bender et al. 2021) that tries to pass hallucinations as facts? Digital humanists, including many of those cited in this paper, are turning to LLMs more and more in their research. This calls for new reflections on the subject of methods, on how to mix distant reading and close reading when working with a machine that is gaining more "intelligence" with each update. In the meantime, one thing is certain: the transition from distant reading to close reading and back, or from a macro to a micro perspective, should pass through another station first, and that is alien reading. This, I believe, pinpoints the importance of and the need for critical digital humanities more than ever.

# **Competing interests**

The author has no competing interests to declare.

# Contributions

### Editorial

#### Special Collection Editors

Jason Boyd, Toronto Metropolitan University, Canada Bárbara Romero-Ferrón, Western University, Canada

### Section, Copy, and Layout Editor

A K M Iftekhar Khalid, The Journal Incubator, University of Lethbridge, Canada

#### **Copy and Production Editor**

Christa Avram, The Journal Incubator, University of Lethbridge, Canada

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