Spatial Analysis, or The New Literary Geography

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Abstract The analysis of textual geography has occupied an important place in literary and cultural studies over several decades. This chapter anatomizes the three major forms of geo-textual analysis: *thematic, deep,* and *schematic.* It finds a place for each of these forms in the history of the Digital Humanities, and argues that the schematic form of analysis is the basis of a computationally intensive New Literary Geography. Presenting case-study results from large-scale research on ethnicity and national origin in British literature, on the historical evolution of American authors' geographic attention, and on the relationship between literary and economic production, the chapter shows how a range of cultural issues can be addressed with the help of computationally produced textual-geographic evidence. It also suggests that the New Literary Geography both anticipates and precipitates concrete changes in the practice of literary scholarship – including convergence with other disciplines, increased attention to popular sources, and decreased linguistic diversity – that are now shaping the humanities as a whole.

Keywords Literary Geography, Cultural Studies, Literary Studies, Scientific Culture

Among Virginia Woolf's earliest published writing was an essay titled *Literary Geography* (1905). It was a review, in the *Times Literary Supplement,* of two biographical field guides that, she wrote, allowed readers the "sentimental" pleasure of knowing "that Thackeray rang this very doorbell or that Dickens shaved behind that identical window" (Woolf 1905, 81). She had, as we might have guessed, nothing notably kind to say about either of them.

If the work that has appeared under Woolf's heading has improved over the intervening century – and it has, to the point that it now constitutes one of the most promising avenues of socially inflected textual studies and one of the major varieties of Digital Humanities – critical reception has remained uneven. Franco Moretti's *Atlas of the European Novel* (Moretti 1998), one of the most ambitious works of literary geography to date, remains best known as a methodological precursor to the quantitative practices he would name "distant reading" two years later and demonstrate at greater length in *Graphs, Maps, Trees* (Moretti 2005). Andrew Thacker's research on the geography of modernism has been deeply influential in the relevant reaches of that subfield but hasn't traveled as widely as one might have hoped. Studies of literary

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regionalism of the type pioneered in the eighties and nineties by Judith Fetterley, Marjorie Pryse, and Richard Brodhead have remained primarily historical affairs. And the broad spatial turn that was an integral component of much of the theoretical energy of the last generation only very rarely became a turn to the geographic as such.

Yet literary geography is more relevant today than at any point in its long history. It is helping critics to grasp the relationship between the natural world and human society, to decipher the complex structure of textual genres and of individual narratives, to integrate readership with social and public history, to connect writing to other media arts, and to build bridges between cultural criticism and the social sciences. It is a rich set of critical practices that stretch across intellectual domains. It is also almost embarrassingly well positioned to benefit from the use of digital and computational tools, and it has, in consequence, become one of the most important areas of the Digital Humanities. If we want to know where Digital Humanities and cultural studies alike are headed in the next decade – toward closer integration with media studies and with the social sciences, toward a fuller incorporation of popular sources and genre fiction, away from multilingual comparatism – we could do worse than to understand how literary geography came to occupy this position and what its unique affordances allow, as well as what they obscure.

1. What is literary geography?

If literary geography is so important, why haven't more people heard of it? Part of the reason is that it hasn't always been clear what literary geography as a field, rather than as a series of isolated results, *is* or what one can do with it. Discounting biographical studies of the type that failed to rouse Woolf at the start of her career, geographical engagement with literature and other narrative texts generally falls into one of three categories. These could be called *thematic, deep,* and *schematic. Thematic* work is devoted to geography and space as elements of textual content, the things that readers can see and understand if they read certain books in the right way. *Deep* literary geography – or deep or thick literary mapping, as it is more commonly called – is about assembling and exploring the networked layers of cultural material that can be attached to textual places. *Schematic* analysis involves explicit modeling of texts' geographic content, usually with an eye toward scale and formal comparison. The last two of these (the deep and schematic forms), and especially the last one, are at the center of the new literary geography. It probably should also be said that, while a concern for texts unites all three areas as domains of humanistic studies, any purported line between literary geography and the discipline of geography proper will be an indistinct one.

Criticism that performs close readings of geography as theme is what we might call the old literary geography. If "old" sounds pejorative, substitute "established," or

"proven," or the like; the old literary geography is old only in the sense that it has been practiced longer (by a generation or more) than the new literary geography. The idea is simply that there is established critical interest in the ways that texts and authors are shaped by place and in the ways, they shape readers' experiences of geographic space. Raymond Williams' *The Country and the City* (Williams 1973) was an important early example, tracing how his titular terms organized centuries of English literature in the service of capitalism. I have already mentioned the American reorganization of nineteenth-century local color fiction under the banner of regionalism that took place in the 1980s and '90s, led by Fetterley, Pryse, and Brodhead. The theoretical investments of traditional literary geography more broadly are many, but Mikhail Bakhtin and the idea of the chronotope (the distinctively inseparable mixture of time and space in narrative modes) loom large for many, as does Martin Heidegger's uncomfortable analysis of the links between land, place, and culture spread across many of his essays.

But it's not as though literary geography of the classic sort had a moment near the heyday of theory in the United States and then disappeared. Hsuan Hsu's *Geography and the Production of Space in Nineteenth-Century American Literature* has made a major recent intervention in the ongoing reconsideration of American literature and transnationalism, doing so by way of an explicit embrace of methods borrowed from cultural geography. Barbara Piatti has been exploring the geography of European literature for most of the last two decades. There is an active journal named *Literary Geographies*.[1] The list is an easy one to extend, but the point isn't to create a catalog. It is only to observe that a literary geography built on close readings that emphasize the role of geography as a structural and thematic element of major texts has been a fruitful and ongoing part of literary studies and allied disciplines for more than forty years.

2. Maps in depth

If thematic literary geography is akin to conventional critical reading, deep mapping more closely resembles the intellectual ambitions of the critical edition. Just as editions have been transformed by digital media and online access, the current form of the deep map owes much to the existence of digital tools. Like the old literary geography, deep mapping seeks to understand, and often to multiply, the nuances of geographical use in relatively small amounts of text. There are practical reasons why this should be so; deep mapping is difficult, time-consuming work. But, like the best

1 For the continuing relevance of the Bakhtinian chronotope in geographic analysis, see the work of the Chronotopic Cartographies project by S. Bushell et al.: www.lancaster.ac.uk/chronotopic-cartographies (Accessed: 23 June 2024).

close readings, deep mapping is more than incidentally limited in scope. Deep maps are interpretive, layered, interconnected collections of knowledge about place. The term itself is usually attributed to William Least Heat-Moon, whose book *PrairyErth – A Deep Map* presented a model study of Chase County, Kansas by way of hand-drawn maps, literary excerpts and commonplaces, historical writing, and personal narrative. Today, deep maps generally take the base form of a recognizably cartographic map, to which are attached annotations, routes, essays, photographs, spatial reprojections and transformations, audio and video clips, and so forth. Maps with some of these features are not entirely new – see, for instance, Charles Minard's 1869 cartograph of Napoleon's Russian campaign, sometimes called the "best statistical graphic ever drawn" (Tufte 2001, 40f.), or many of the nineteenth-century thematic maps collected by Susan Schulten in *Mapping the Nation* (Schulten 2012) – but deep maps have become much more accessible as they have been freed from the stasis (and the expense) of print.

Deep maps can be as simple – and as shallow – as a set of pins placed on an arbitrary base map to indicate the locations where a book's events take place. Maps of this type are common pedagogical tools, but they're also often useful to working scholars as *aide-mémoires* and as visual plot summaries (cf. the chapter by J. Peters in this volume, pp. 321–322). Deep maps can be as complex as fully modeled three-dimensional cities rendered through gaming engines and virtual reality systems (Harris et al. 2016). Most fall somewhere in between, often using *Google Maps* or *Earth* to provide annotated location information along with contemporary street view images, historical photos, and other media (see, e.g., Thomas Bruce Wheeler's *The Mapped London of Sherlock Holmes,* 2016).

Overall, however, deep maps remain, even today, more deeply theorized (David Bodenhamer and Todd Presner are major figures, Bodenhamer 2010; Presner 2014) than comprehensively executed. This is true in part because systems of academic credit do not accommodate them especially well (as is similarly true of critical editions, cf. the chapter by A. von Stockhausen in this volume, p. 341), but also because it is much easier to speculate about what deep maps *could* allow than it is to build them. Even Piatti et al.'s excellent and boundlessly inventive *Literary Atlas of Europe*[2] remains a series of suggestive sketches toward an imagined whole that has yet to emerge.[3] Products beyond *Google*'s, including *Neatline, Historypin, Peripleo,* and *ArcGIS StoryMaps,* have helped reduce some of the barriers to entry in the field, with results strongly reflected in the work of cultural institutions (where large archival holdings and a mandate for public engagement are good fits for the effort involved) and interdisciplinary grant applications (for similar reasons).

2 See http://www.literaturatlas.eu (Accessed: 23 June 2024).

3 For useful reflections on the challenges and affordances of deep literary mapping, see also Barker et al. and the essays collected in *Literary Geographies* 9.1, "Mapping as Process" (2023).

3. Geographic patterns and the new literary geography

Geographic reading and deep mapping are labor-intensive practices. They are generally useful, at least for individual researchers and critics, only when dealing with a few texts of special interest. That state of affairs describes much of what both theology and literary studies have always done, which is why literary geography of the older and deeper types has been relatively well assimilated to those disciplines over the last few decades. But related forms of spatial thinking and the same advances in computation that have made deep mapping increasingly tractable have also spurred a fundamentally different critical relationship to the geography of literature. This is what I earlier called "schematic" literary geography. It is also, increasingly, what is meant by the term computational literary geography.

Schematic literary geography is concerned with patterns of geographic attention, almost always as revealed across multiple texts. Its best-known instance is Moretti's work in *Atlas of the European Novel* (Moretti 1998) and *Graphs, Maps, Trees* (Moretti 2005). In each of those books, Moretti examined the geography of European novels, concentrating not on explications of lived spatial experience, nor on a deeper understanding of geographic settings, but instead on abstract relations between geospatial entities.

Significantly, however, Moretti's literary geography in *Atlas* and *Graphs,* while often quantitative, was never computational. His analyses were built on readings that emphasized geographic relations, readings that could presumably be carried out more quickly than most others and that, therefore, could be extended to dozens of novels in the span of a few pages. Computational text analysis, which has taken a prominent place alongside hand-extracted literary-geographic data over the last decade, is both more and less than this. Nuances of affect and irony that are clear to human readers can be difficult to detect algorithmically (cf. the chapter by R. Sprugnoli in this volume, p. 269), and even the mid-distance schematism characteristic of Moretti's work on the subject is a challenge that few computational studies have attempted. And yet computation makes truly large-scale corpora tractable. Ryan Heuser and his colleagues at Stanford have combined natural language processing with historical gazetteers to study the emotional valences of London places in nearly 5,000 eighteenth- and nineteenth-century novels (Heuser et al. 2016a; b). Ian Gregory, David Cooper, and colleagues have been engaged in a years-long series of projects to scale up their work on the literary geography of the English Lake District (Rayson et al. 2017; Cooper & Gregory 2011). Blevins (2014) used computational methods to extract place name mentions in more than 20,000 pages of nineteenth-century Texas newspapers, tracing important shifts in both regional attention and the construction of American identity over time.

Elizabeth Evans and I have used computational techniques including named entity recognition, automated geocoding, and statistical analysis to help understand the intersections of genre, ethnicity, and national origin in British fiction of the long

modernist era (1880–1940). Our methods are typical of those that have dominated recent quantitative literary geography, though we have been perhaps more explicit than most in our desire to reassess existing literary and cultural claims in light of new, large-scale geographic evidence. We have shown that canonical modernism's much-noted international turn was smaller and arrived later than the same phenomenon in the full run of the period's fiction (Evans & Wilkens 2018). We also note important differences between the geographic attention of native-born white British writers and that of foreign-born authors, white and nonwhite alike. And we argue, contrary to much of the foundational thought in modernist studies, that the period is best understood in terms that deëmphasize discontinuity and rupture.

To see how computational literary geography enables such claims, as well as the challenges it involves, consider the development of our research. We began with two goals: to test the modernist internationalism hypothesis and to assess some of the differences and commonalities between native and foreign writers in the period. We assembled four sets of texts, each consisting of digitized books originally published between 1880 and 1940. These sets (called corpora) ranged in size from as many as 7,399 volumes to as few as 131. Each reflected a version of part of the literary field at the time. The largest contained all the era's British fiction held by the *HathiTrust* digital library; another was an expanded representation of authors and texts widely recognized in the existing critical literature; one comprised books by foreign writers who lived, for at least some years, in Britain; the fourth was drawn from bibliographies of London regionalist fiction.

From each of these corpora, we used natural language processing techniques to extract the names of locations mentioned in the texts, then paired those names with detailed geographic records that allowed us not only to place them on maps, but also to order them within political-administrative hierarchies (Trafalgar Square is a public space in London, England, UK). This allowed us to measure, e.g., the fraction of location mentions in each text that fell within and outside the borders of modern Great Britain. The results are shown in fig. 1.

What else does our data help us see? For one thing, that international attention was common decades earlier in non-canonical volumes (fig. 1a) than in books by well-known authors (fig. 1b). This in turn suggests that at least some important aspects of literary modernism were circulating widely in popular fiction before they appeared in the more widely studied books that critics often associate with modernism proper.

There were also important differences between different kinds of London writing. Fig. 2 shows the centers of gravity, for London locations, of the four corpora before and after 1914. The specific location of each center isn't independently important, since it represents the average of a large set of points, but the positions of the centers relative to one another capture significant aggregate differences in geographic attention between the corpora. Notable is the westward bias of geographic attention (toward wealthier areas of the city) in books by prominent authors compared to that in the larger run of British fiction and, especially, to that of London regionalist fiction.

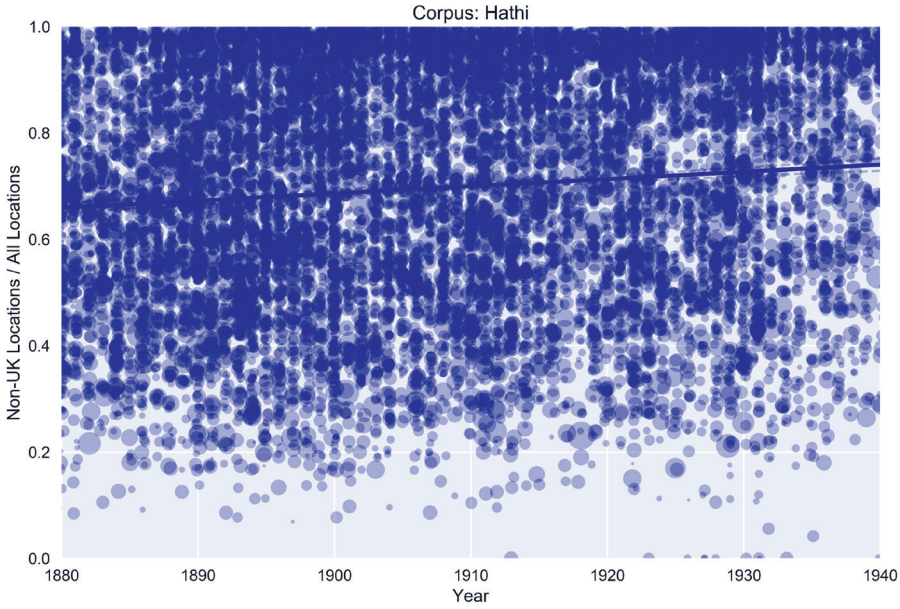

Fig. 1a Fraction of location mentions outside the United Kingdom in 7,399 volumes of British fiction, grouped by volume and ordered by publication date.

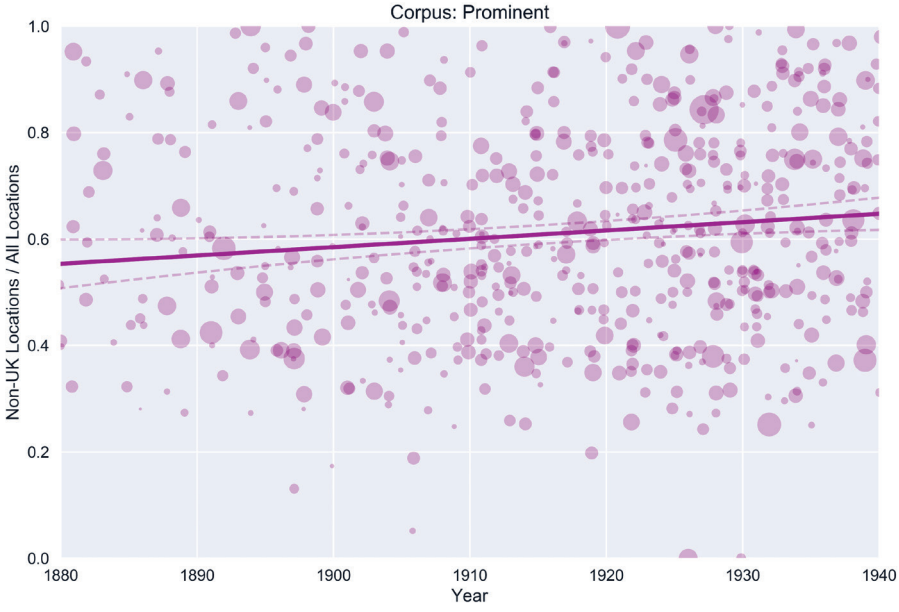

Fig. 1b Fraction of location mentions outside the United Kingdom in 576 volumes of fiction by prominent British writers, grouped by volume and ordered by publication date.

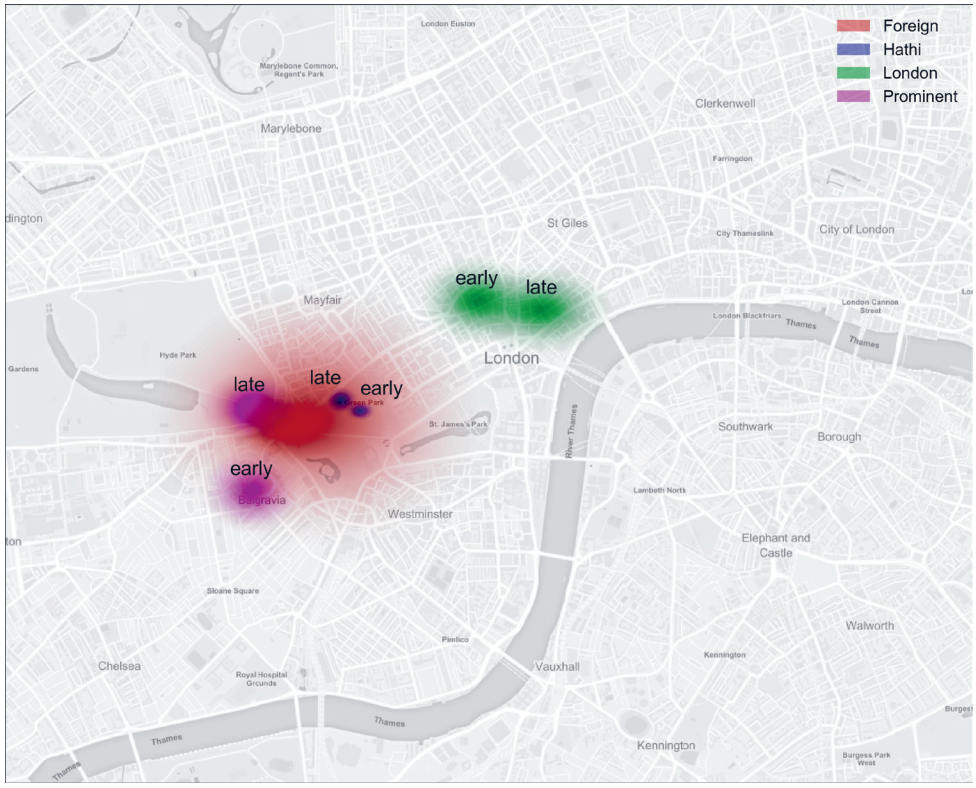

Fig. 2 Centers of gravity for London locations in the four corpora.

The regionalist corpus is distinguished in part by its higher concentration of mysteries and detective stories, as well as its greater inclusion of what we might call sociological fiction concerned with the (often sensationalized) lives of the poor. The corpus of foreign writing is the most diverse of the bunch and the only one not significantly distinct from the others.

A methodological aside: The clouds around each center represent levels of statistical uncertainty, fading to zero shading where there is less than a 1% chance of finding the true center. The most probable center is left deliberately unindicated to emphasize the probabilistic nature of these regions. It is my sense that research in the Digital Humanities is becoming more aware of the value of statistical analysis in conjunction with quantitative methods, though there is little doubt that, as a field, we are behind our friends in the social sciences in this regard.

Finally, our work on the geography of modernist-era literature serves as a reminder that, while there certainly are aspects of fiction that change in important ways over time, it can be difficult to find sharp periodizing discontinuities in large literary corpora. Part of this is a matter of recalibrating expectations. *Mrs Dalloway*

is genuinely, deeply different from *Bleak House.* But it's almost impossible to imagine that modernist fiction in sum should differ from the Victorian novel to anything like the same extent. Critics know this, yet the magnitude of the difference between the cases can be difficult to appreciate until it becomes possible to examine explicitly and more nearly comprehensively some of the features of "modernist fiction" and "the Victorian novel." A central task of Digital Humanities and literary studies alike in the years ahead will be to provide a range of answers to the question "what constitutes an important shift in a range of textual properties at scale?" There won't be a single correct answer, and the answers we do produce will likely have only a small amount to do with statistical significance. But we won't know what they are until we've produced the data and, much more importantly, made the arguments.

4. Geography as symptom

As compelling as large-scale geographic data can be for what it reveals to us directly about the shape of literary-geographic attention, perhaps its greatest promise lies in its overlap with other varieties of social and cultural information. The conjunction of literary geography and geographic aspects of other fields, from economics and urban studies to sociology and history, is the core of the truly new literary geography.

To the extent that literary studies is a field invested in deciphering the relationships between aesthetic production and the cultural contexts in which that production is embedded – and it is clear that this describes a large subset of the discipline, though not all of it – quantitative literary geography offers a unique opportunity. That's because, like literary geography itself, many social scientific questions have obvious spatial components. Urbanization, the great demographic change of the nineteenth century, can be measured and tracked via census data. Economic regionalism and globalization are the subjects of huge amounts of data-driven work in economics and history. Ethnicity, immigration, and national origin are measured and tracked by government offices, sociologists, and many scholars within the humanities proper. All these social phenomena bear on and are affected by literature. If we can assess how they co-vary, we will have produced new evidence through which to interpret the larger place of literature.

What does this work look like? Consider the problem of lag between cultural changes and their representation in literature. This lag might, in principle, run in either direction. What did it actually do? Do changes in textual attention lead or follow changes in demography? If we examine US fiction in the decades around the Civil War, we can measure how thousands of books distributed their attention to the nation's rapidly evolving cities. We can then compare the fraction of all literary location mentions devoted to a fixed set of cities (and to locations within those cities) against the fraction of US population for which those same cities accounted at different times.

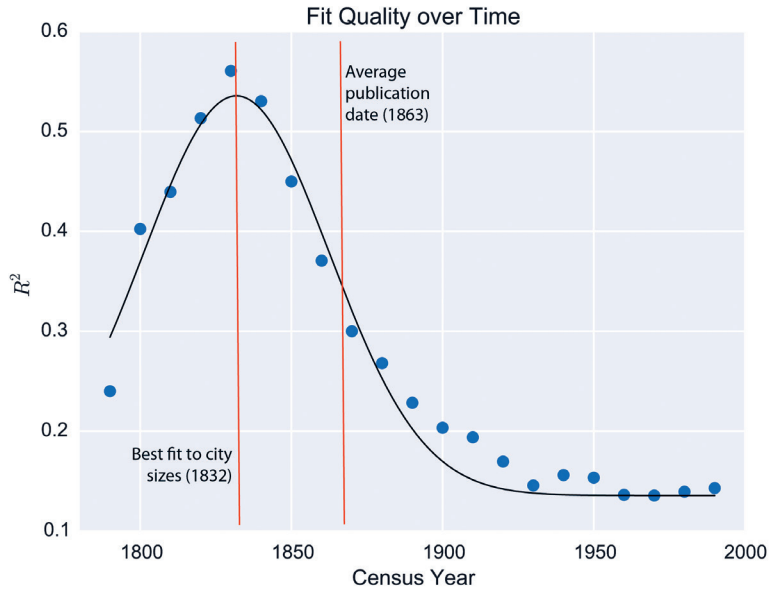

Fig. 3 How well does the distribution of literary attention in a corpus of mid-nineteenth-century US novels match the population of selected US cities across many decades of census data?

So, for instance, if Chicago contained 0.8% of the US population in 1870 and accounted for 0.7% of literary-geographic attention in the Civil War-era fiction corpus, we would say that Chicago was (slightly) underrepresented in the literature. We could then extend the same analysis to more cities and more dates, seeking to identify the historical point at which literary attention most closely matched an existing urban population distribution. The result of that analysis is shown in fig. 3.

What we find is that for American novels published between 1851 and 1875, their distribution of attention to urban areas matched most closely the population of those areas as it stood in the 1830 census, falling off smoothly as one moves forward or backward in time from that date. The average publication date of a book in the corpus was 1863, implying a roughly thirty-year lag between spatial population shifts and their reflection in fiction, with the caveat that the process is not a matter of recognition switching on and off, but of gradual convergence across many hundreds of authors and books.

This provides us, in turn, with a new interpretive opportunity. How should we explain the direction and length of this lag? If we think that a writer's experiences are relevant, we might note that the average age of the authors in our corpus at the time each of their books was published was 42 years old. That would pin the lag to the school days of the average author, suggesting a role for the geographic education that was increasingly popular in the early nineteenth-century US (see Schulten 2012) and suggest a kind of post-schooling stasis in which aspects of worldview formed at

a young age remain relatively stable thereafter. If we are (perhaps properly) wary of such psychologizing and drawn instead to historical explanations, we might emphasize that 1830 represents about the latest date before large-scale immigration transformed Eastern cities and that it fell at the leading edge of the rapid, sustained westward expansion that continued through the end of the century. Or readers' tastes may have been important, driving literature toward an imagined urban geography that was conservatively familiar without the estrangement of explicitly historical writing that, in the American case at the time, would have been primarily rural.

The data of literary geography do not answer these interpretive questions. They are not meant to. But they provide the impetus to see these questions as important, unresolved aspects of mid-century American literary history. If scholars are sometimes inclined to treat data-intensive inquiry as "mere" description or hypothesis testing, antithetical to the open-ended aims of the humanities (whether or not our aims are really so open-ended is a separate question; I have my doubts), here is an instance – like every other one I know in the best of the Digital Humanities – in which quantitative analysis feeds qualitative, interpretive inquiry in the most direct way.

So computational literary geography, in combination with demographic data, can help us understand the temporal dynamics of cultural uptake in fiction. What other social data might be similarly useful? The possibilities are many. We could use household income and manufacturing data to help characterize the environments in which novels are set, helping us to examine class dynamics in large corpora across long time spans. We could track changes in transportation networks and in mass media circulation to compare their effects on the experiential geography and social structure of fiction. We could look for natural experiments in market incentives or corporate structure – the introduction of new prizes or subsidies for writers, the advent of corporate conglomeration in the publishing industry (Sinykin 2023) – to see how they affect both the locations of literary production and the geospatial content of that production. Or we could use global economic and literary geographic data to assess and to reevaluate, if necessary, long-standing assumptions about the relationship between economic neoliberalism and the outlook of twentieth-century and contemporary fiction.

The last possibility, combining historical economic data with literary-geographic information to assess the impact of rising neoliberal orders on American novels, is work that now exists (Wilkens 2016a). The underlying hypothesis is that the market came to function, over the course of the twentieth century, as a horizon of possibility for thought, for experience, and for action. To the extent that this hypothesis holds at a given moment, we would expect aspects of literature to resemble aspects of markets. Geography gives us a useful way to quantify the nature and extent of one version of this resemblance. As the distribution of economic output shifted markedly in the twentieth-century, we would expect to see the distribution of literary-geographic attention move in at least roughly similar ways and, importantly, for the two to track one another more closely toward the end of the period than they did at the beginning, as neoliberalism became ever more hegemonic. What we observe, using a corpus of

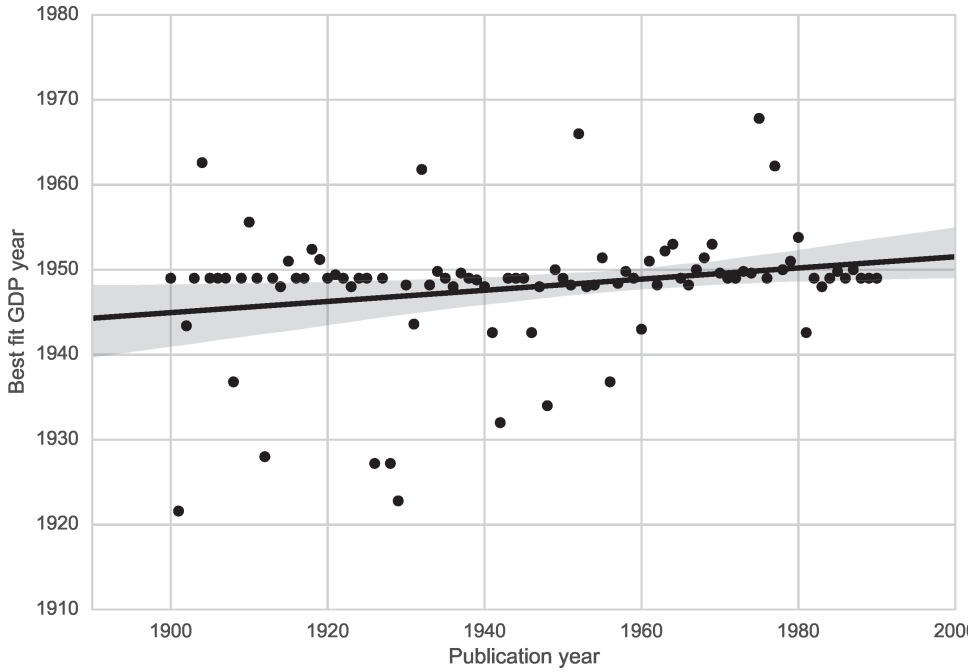

Fig. 4 Average year of closest fit between global GDP distribution and global literary-geographic attention as a function of literary year of publication.

6,942 US novels published between 1900 and 1990 and the historical GDP shares of ten major nations, is that, as far as American authors were concerned, it was always 1950 (see fig. 4). A large sample of US fiction, published both before and after 1950, distributed its global geographic attention in ways that most closely matched the distribution of global economic output as it existed immediately after the Second World War. It's impossible to assess whether changes in economic output became more or less closely aligned with changes in collective literary output over time because, when it came to international literary attention among US authors, there was no real change over time.

What's going on here? The issue, in brief, is that American authors wrote overwhelmingly about locations in the United States, consistently devoting about 80% of their place name mentions to domestic toponyms. Economic geography shows far more variability, but that variation simply isn't reflected in American literary-geographic practice. The years between 1945 and 1950 just happen to have been the peak of US global GDP share (on the order of 40% in 1945), meaning that those were the years when the two distributions were most closely aligned.

This finding of literary-geographic stasis is important for at least three reasons. For one, it reveals a large difference between domestic and international responsive-

ness in aspects of US fiction. That is, while it is relatively easy to find significant redistributions of attention within the United States in response to domestic demographic and economic changes, American novels appear to have maintained across almost the whole of the twentieth century a much more static (and generally inward-looking) treatment of the world (see also Wilkens 2021). Second, this situation produced in effect a growing conservatism on the part of American literature in the postwar era as those books' perpetual disregard for the world beyond US borders grew increasingly out of step with the global system of economic production. Finally, we must concede that, in this case, it is difficult to find support for a critique of neoliberalism that understands its object to take the form of an inescapable horizon of thought or condition of possibility. This isn't to say, wildly implausibly, that neoliberalism doesn't exist. Nor does it constitute some deep blow to its ontological interpretation. But it does provide a counterexample to think with, a case in which we were able to make a clear prediction following from a theoretical position yet failed to observe the predicted result. I'm a Bayesian, not a Popperian; there's no falsification here, but I think we should be willing to update our critical priors.

5 New literary geography, new literary studies

Where does all of this leave us as we contemplate the near future of the Digital Humanities and of humanistic disciplines alike? As I suggested at the outset, I see three clear implications from the rise of the new literary geography.

5.1 Convergence with adjacent fields

Literary geography is attractive to many scholars because the geography of literature is interesting and important in its own right. It allows critics to provide better answers to complicated interpretive questions and to track underlying contrasts in the ways different literary traditions relate to the environments around them. This is work that can often benefit from the addition of computational techniques, though it is no more constitutively computational than most other areas of literary studies. The advantages of computation in both cases – for literary geography and for literary studies in general – are, at first order, those of scale (cf. also the chapter by W. Mattingly in this volume, pp. 177–179). This is a long-standing point, to which one need only add two small elaborations. One, scale is a relative term. There exists excellent, persuasive, computationally assisted work on corpora as small as a handful of novels or the set of Shakespeare's plays. In literary geography, Cooper & Gregory's (2011) studies of the English Lake District bring new insights using as few as two book-length texts. Small-corpus work highlights the fundamental interplay of scales that is almost always at work in

literary scholarship and that continues to inform quantitative studies. And two, even when the computational scales involved are much larger, critics will often return to individual authors and texts to read them in light of their place in a newly visible context. Virginia Woolf's geographic attention, for example, was very different from that of most of her peers, canonical and otherwise (more specific and London-centric within Britain, less international and less geographically intensive overall; see Evans & Wilkens 2018). The outline of her differences isn't altogether surprising, though we should be wary of our ability to offer easy post hoc claims about whatever we observe. But the magnitude of her difference is genuinely unexpected; quantification helps us to recognize that Woolf's work represents a species of geographic pole within modernist literature and to revisit it and its interlocutors accordingly.

The core of the new literary geography, however, is only partly about deeper access to individual texts or to geography as such. It is also, even primarily, about the production of spatialized data in support of critical cultural analysis. By that I mean that the new literary geography represents an extension of the cultural turn that has driven much of the best, most important literary scholarship of the last two generations. Literary texts remain at its heart because literature is a notable site of cultural production, one with its own history, its own forms, and its own interpretive tradition. But the largest goals of the new literary geography have much more to do with describing and explaining cultural formations than they do with any final investment in literature per se, even when they proceed entirely by way of literary texts.

5.2 A larger role for popular and genre literature

While the advantages of computation aren't solely those of scale, the fact that computers can deal with billions of words interacts constructively with the broader cultural turn just noted. As literary scholars have come increasingly to treat books as socially symptomatic, the logic of limiting critical work to dozens or hundreds of widely read texts has been progressively eroded. There is no reason, in principle, to believe that an aesthetically good book will tell us more about the culture that produced it than will a bad one. Computation, in turn, has chipped away at the remaining practical justifications for strictly canonical work. As we have seen in the examples of what I've called schematic literary geography, there is much to be gained through the relatively new ability to situate known authors and texts within a larger literary field that includes far more unknown and understudied work.

The larger point is that the types of computational analysis native to the new literary geography in particular and to (part of) the Digital Humanities in general have accelerated a shift already long underway toward greater engagement with what Merve Emre has recently called (in a different context) "paraliterary" reading (Emre 2017). When combined with an increased, field-wide emphasis on social and cultural questions, the future of literary studies again looks convergent with that of disciplines

that share an interest in cultural production across media and from both sides of the production-reception equation.

5.3 Decreasing linguistic diversity

I take both of the preceding developments to be straightforwardly positive. They make literary studies broader, more relevant both inside and outside the university, and more interesting to more people and for more purposes. But the long-term evolution that has been assisted by computation has some obvious downsides (see also Chun et al. 2016). Among these is the lamentable waning of multilingual and comparatist work that is reflected indirectly in declining non-English language course enrollments at American universities since 1960 (over 50% per capita; Looney & Lusin 2018, 12). We should be careful about cherry-picking start dates for these sorts of comparisons, and we should acknowledge that universities are very different places, enrolling different students and offering different opportunities, especially for women and minorities, than they were in 1960. Most of the decline in foreign-language enrollment happened in the 1970s; they've remained roughly flat for the last 40 years. But let us stipulate that English hasn't exactly *declined* in prominence as a global language or within the academic modern languages of late. Most of this is down to factors far broader than the rise of what remains, today, a small subfield of a few humanities disciplines. But it is true that some techniques in computational text analysis depend on labor-intensive software development and linguistic training data that are much more likely to cover English-language texts than those in other languages. To the extent that these techniques become more important to the field, they will exert further pressure away from multilingual literary research.

That said, there are reasons for optimism on this point. For one, many computational methods are largely language-agnostic. Apart from a bit of hand-waving about tokenization, computers are happy to count words in any language and many computational techniques are, at bottom, matters of manipulating word counts. Even where language-specific training data is necessary, as it generally is in computational literary geography, there are good, open-source language models for many languages beyond English. This is especially true for the major European languages and for Chinese, Japanese, and Arabic, each of which has either (or both) a major funding constituency or a robust active user base. There will be more such resources in the future as they become more important for scholarship and commerce alike. Still, there is a real danger that languages that are currently marginal in the academy will fall further behind in the face of new barriers to entry for scholarship.

Linguistic uniformity is an area of concern for DH and for literary studies in general, both of which need urgently to become more diverse in any number of ways. We should acknowledge, though, that doing more computation may help language departments on this score more than it hurts them in the long run. It doesn't undermine

near-term efforts to increase diversity to note that a more diverse DH ultimately depends on a more diverse humanities. There is evidence that majors that are perceived to lead to more immediately lucrative careers are more attractive to students of comparatively lower socioeconomic standing (Ma 2009; Morgan et al. 2013; Pinsker 2015). If the ability to integrate close reading with statistical literacy, programming, and data science makes humanities disciplines an easier sell to students from families outside the top income brackets, this is a strong mark in its favor. It is also how fields grow and adapt over time, by recruiting and retaining new people and new perspectives. This isn't the whole solution to the lack of diversity in DH and in many humanities departments, but is, I think, an important component of building the kind of vibrant community we rightly desire.

6 Conclusion

The new literary geography is, finally, an orientation toward narrative texts. It treats texts as complex, socially symptomatic objects, valuable both singularly and in aggregate, from which can be extracted information that advances the ends of literary studies as the field is configured today and in dialogue with its existing methods. While it legitimately encompasses – via deep, thick, and digital mapping – the kind of close attention to individual texts that has long characterized humanities disciplines, its most innovative aspect is its explicit embrace of new opportunities for integration with the social sciences. It is also one of the most actively evolving and expanding varieties of Digital Humanities. For both of these reasons, the new literary geography itself serves as a symptomatic proxy for the future directions of the larger literary field in which it is embedded. It portends a more vibrant and diverse humanities, though only if both areas can resist the gatekeeping urge to maintain purity under the guise of either rigor or resistance.

Thirty years ago, Fredric Jameson wrote, in a discussion of postmodernism and late capitalism, that "the decision as to whether one faces a break or a continuity [...] is not an empirically justifiable or answerable one, since it is itself the inaugural narrative act that grounds the perception and integration of the events to be narrated" (Jameson 1991, xii). My sense is that discussions of the place of the Digital Humanities within the larger humanities, both pro and con, too often make that decision in favor of rupture. This is perhaps ironic in an essay devoted to defining something called the new literary geography. But as I have tried to show, computational methods in general and literary geography in particular differ substantially in detail but much less in aims and outlook from older forms of textual analysis and cultural studies. The more deeply we can appreciate the fundamental continuity between quantitative and traditional methods, the faster and better will be the evolution of textual studies as a whole.

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Fig. 1a: Evans & Wilkens 2018, 21.

Fig. 1b: Ibid., 22.

Fig. 2: Ibid., 34.

Fig. 3: https://mattwilkens.com/2015/01/13/literary-attention-lag [Blog] (Accessed: 24 June 2024).

Fig. 4: Wilkens 2016a, 195.