

1 Introduction: Literary Maps

1.1 What Is Literary Geography?

Literary geography is, first of all, an exploration of place and how place marks literary narratives; as a field, it sits at the intersection of literary studies and human geography (Alexander, 2015). There is more than one way to do literary geography, since literary geography is, as Barbara Piatti has argued, “a topic” rather than a “practice” or a “method” (Piatti et al., 2009; Piatti, 2008). Since setting and spatial relations are core elements of fiction, they have been explored from Marxist, Deleuzian, feminist, psychoanalytic, and other critical approaches that do not necessarily seek to link literary place-names to geographical coordinates. In recent years, Francophone literary geography has opened a conversation between physical geography and literature that has often had a social-scientific bent (Brousseau and Cambron, 2003). Others have made a philosophical turn in the form of *la géocritique*, a critical phenomenological approach to cultural geography that has much in common with postcolonial studies and Deleuzian philosophy (Westphal, 2011), or they have combined *la géocritique* with *la géopoétique*, the analysis of rhetorical structures linked to geography (Collot, 2014). As a topic, literary geography can be approached by way of a number of distinct methods, such as thematic discussion, philological analysis of place-names, or theoretical analysis of “fictional worlds.” Indeed, “setting” is such a flexible and ubiquitous concept in literary studies that it can be hard for critics to arrive at one definition. Further, literary geographers can intervene at various levels, exploring themes of place and place-making within fiction at the level of the region, city, or neighborhood.

Literary cartography is a set of practices for mapping and making legible spatial relations within a literary world. In comparison to the concepts of geography or setting, literary cartography has been far more sporadically practiced. Literary maps have, nevertheless, appeared in a variety of literary periods, genres, and schools of literary criticism. Mapping has sometimes been dismissed as positivistic and has played a comparatively minor role in literary criticism despite its long-standing role in book history (Moretti, 1999, pp. 3–6). From maps in medieval manuscripts to map illustrations of the late medieval or early modern texts like Thomas More’s *Utopia* and Dante Alighieri’s *Divine Comedy*, maps have often served as supports or supplements to texts, both fictional and nonfictional. Works of literary criticism have less often integrated literary cartography than literature itself has done. One of the most audacious and voluminous projects in literary cartography is Malcolm Bradbury’s *Atlas of Literature*, a collective work that put forward more than one hundred examples of literary cartography, primarily of realist and modernist works, many in the

English language, starting with Dante and Geoffrey Chaucer and moving through the twentieth century. James Joyce's Dublin, William Faulkner's American South, and Honoré de Balzac and Stendhal's France all feature in Bradbury's edited collection of short essays with illustrated maps of the literary geographies discussed. While the material remains rather general, the *Atlas of Literature* demonstrates the foundational truth for literary geography that, as Bradbury observes in the introduction, a "very large part of our writing is a story of its roots in a place: a landscape, region, village, city, nation or continent" (Bradbury, 1996, n.p.). Bradbury and his coauthors likewise draw attention to geographical patterns within and between literary traditions. The book's designers conceived of a simple method for overlaying toponyms, or place-names, on maps that corresponded roughly to maps that were contemporaneous with the setting of the fiction or the sociohistorical context in which the author lived, many of which are historical maps. My own practice of literary cartography, including the style of the maps in this Element, owes a great deal to the *Atlas of Literature* and other pre-Internet literary geographical projects.

Digital humanities projects that map literary locations and spaces have multiplied in recent years. To name but a few projects focusing on European geography, Barbara Piatti has created *A Literary Atlas of Europe* [*Ein literarischer Atlas Europas*], an atlas of European literary cartography that focuses on Central and Eastern Europe. One of the most attention-grabbing digital humanities studies of place in the European novel was Franco Moretti's *Atlas of the European Novel, 1800–1900*, in which he looked at the geographical distribution of characters and settings, as well as the geography of book circulation, in mostly realist European fiction (Moretti, 1999). From the marriage market in Austen's novels to friend/enemy relations in Balzac, this founding work in literary cartography revealed how mapping social relations among characters could expose the geographical patterns in social relations and hierarchies. In France, there is the Programme de recherche "Vers une géographie littéraire," of the working group l'UMR 7172 THALIM (Théorie et histoire des arts et des littératures de la modernité), a collaboration between the CNRS, the Université Sorbonne nouvelle–Paris 3, and the École Normale Supérieure. At the University of Lancaster, the group "Spatial Humanities: Texts, GIS and Places" has explored mostly British literary geography, especially the Lake District during the Romantic era (Cooper, Donaldson, and Murrieta Flores, 2016).

What, then, are the usual practices of literary cartography? Many digital literary cartographers do find geographical locations that correspond roughly with modern latitudes and longitudes, often mediated by a historical gazetteer or a historical map. Of course, literary maps are culturally determined and do not

always correspond exactly to the political and geographical distinctions made by historians and geographers, much less to contemporary divisions of land and peoples. Most literary cartography relies on the modern system of latitudes and longitudes to map the fictional worlds of novels and other fictional works but does not take the cultural and political divisions of the world at face value. Mapping fictional settings requires making base assumptions about how language relates to place; for example, we must decide where the Paris of a particular text is located and how tightly or expansively its geographical boundaries should be drawn. The boundaries of a literary setting may be fragmentary or partial; they may also correspond to a part of a city or other place that is far from the coordinates that designate that place in databases like GeoHack. In my experience, the process of locating a reference on the globe and delimiting its boundaries is not so much a positivistic procedure as an attempt to translate semantics into coordinates in a way that retains as much literary meaning as possible; this process has made me more aware of the vagaries of literary geography. Georeferencing may sound like a simple enough task, but what is meant by “Paris” is surprisingly unstable, varying over time, changing from text to text and even within the same text, fluctuating with the shifting viewpoints of characters. For these reasons, connecting language to a geographical system – in most digital humanities projects, the global information system (GIS) – is not a neutral or unproblematic process (Hill, 2009).

Then there is the question of what we mean by the globe or the global. French studies has borne witness to the many fundamental debates about how the global is cast in literature and literary studies. The edited volume *French Global: A New Approach to Literary History* brought many diverse approaches together in a comparative framework that I have sought to adopt in my own work (McDonald and Suleiman, 2010). But we can do more to pay attention to what is occluded in the articulation of the global. The idea of the global often encodes ideas of center and periphery that perpetuate colonial and postcolonial inequalities. Cities have attracted much attention, with significant projects in literary geography for many European cities; rural areas much less so. Much of the work in European literary geography has focused on themes of travel, exchange, exploitation, and colonialism that are linked to European colonialism rather than the concerns of non-European geographies and peoples. And the global has often been coextensive with human geography to the exclusion of natural environments and nonhuman animals. Notable recent work that is recasting the study of European geographies within a more egalitarian global perspective includes the vast literature on colonial and postcolonial relations; relations with the Pacific, the Caribbean, and the Americas (Lionnet, 1993; Lionnet, 1992); the emergence of digital trans-Atlantic and Atlantic Black

studies (Risam and Josephs, 2021); literary geographies of the sea and Island nations in their relation to Europe (Prasad, 2003); and Indigenous literary geographies, all of which play an ever larger role in European literary studies. These are but a few literary critics, topics, and fields that are expanding the connections between European spaces and other geographies without prioritizing European perspectives. By taking on the theme of the global, European literary geography has opened up diverse perspectives, as well as painful stories of exploitation from the perspective of non-European peoples, and literary geographers have discovered previously ignored connections between far-flung locations and peoples as they are reflected in literary works.

1.2 Tools for Digital Literary Cartography

Literary cartography is more accessible than it has been in the past, in large part because of the great number of advanced technologies – from GPS to ArcGIS to Google Maps – that make mapping geographical locations more manageable for non-cartographers and nonexperts. The process of creating a literary map can be at least partially automated at several stages. The first stage is to generate a list of toponyms through the identification and tagging of tokens in a text, which can be extracted automatically (Moncla, Gaio, Joliveau, and Lay, 2017). The second step is to associate these toponyms with modern geographical terms via a gazetteer, which can also be done automatically but often involves manual associations when older place-names lack modern equivalents. This process can be trivial, as I have found it to be at the regional and national levels. It can also be quite tricky, as I have found it to be with streets and smaller buildings located in Paris, a city that has been transformed since the 1830s by the creation of boulevards and wider streets, notably in the 1853–1870 renovation known as Haussmannization; older Parisian streets often bisect modern ones or extend over only a small part of a modern boulevard. Once the toponyms have been extracted, the list of modern place-names can then be geolocated with a geocoder. With a precise list of modern places, this step can be completed mostly automatically, although some homonyms, such as Paris, Texas, may cause trouble. Finally, a list of latitude and longitude coordinates can be placed on a map with visualization software like Google Maps or ArcGIS (Solina and Ravnik, 2010). While these digital tools have equivalents among traditional cartographical tools, automating some of these processes makes literary cartography a far more accessible practice than the painstaking work of georeferencing without digital aids.

Just as automated technologies can help with the extraction of place-names and the construction of maps, the traditional book infrastructures of

concordances, indexes, and paper maps can serve as models for digital literary geography projects. The multimedia revolution associated with the development of the Internet and mobile phones has made paratexts and interpretative guides available to more readers and to computer-aided searching. The two corpuses studied here, Honoré de Balzac's *The Human Comedy* [*La Comédie humaine*] and Marcel Proust's *In Search of Lost Time* [*À la recherche du temps perdu*], have been extensively studied for generations from a geographical perspective, as well as for the socioeconomically and psychologically complex fictional worlds they create. Both Balzac's and Proust's toponyms and other place references have been extensively catalogued and analyzed by literary critics. Indeed, Balzac's Paris and Proust's Normandy are often evoked in projects such as Bradbury's *Atlas* and Moretti's *Atlas* because they evoke two seemingly rival models: (1) Balzac's detailed realist model of Paris as a sociologically and economically complex geographical society, and (2) Proust's lightly painted impressionist depictions of Normandy and north-central France. While these two literary geographies are distinct in terms of how much they rely on historical places, I am more interested in how these places relate to global geography than the differences between their French geographies. In their representation of non-French places, these realist and post-realist fictions share a common commitment to historicity and referentiality; indeed, the break from realism to post-realism was never as absolute as has been claimed, nor was realism so thoroughly overthrown as has been argued (Prendergast, 1986). This is as true of geographic representation as of other aspects of literature.

Maps are not the only digital tools that help with the study of literary geographies. In many ways, information visualization has taken the role of indexes and lists of places as the primary medium for the communication of the details of literary geography (Dear, Ketchum, Luria, and Richardson, 2011). Still, these visualizations often build on earlier models for creating and interpreting diagrams (Bender and Merriman, 2010). Even the earliest examples of literary geography often include legends, notes, and other non-cartographical elements. Tools for the visualization of multivariate data sets like R, Tableau, and Palladio let users pair maps with charts and graphs that display non-geographical aspects of multivariate data and data analytics. Visualizations, graphs, and charts can be included with the works themselves or presented in lieu of maps. Digital technology and the Internet have only multiplied the complexity of representations of literary geography, expanding our ability to present interactive visualizations that include maps that can be filtered, that link to images or text, or that display analytics related to parts of maps.

1.3 Characters, Places, and Time

Central to my argument in this Element is the distinction between experienced places and referenced places. Rather than thinking about literary places as either “real” or “fictional,” it is productive to see the toponyms used as “historical” if they also occur in historical documents or “nonhistorical” if they do not. Similarly, it is worthwhile to track whether places fit into the narrower category of “experienced” – that is, visited and inhabited by the characters – or the larger, comprehensive category of “referenced” – that is, mentioned, inhabited, or imagined by the narrator or by the characters. Further, even in vast literary geographies, some places are of greater weight and others are merely mentioned in passing. Some places are of greater psychological importance to the characters and some are less noteworthy. In this Element, I review various methods for counting, weighting, and analyzing place references in ways that take account of the literary significance of these references, a process that is not without complications (Bushell, 2016). Literary geography can make use of these quantitative aspects of texts, such as the number of times a geographical term is mentioned in a text. It can also explore the connection of characters and their psychological states, emotions, and the language they use to places within the fictional world; these emotions can be teased out using tools like topic modeling and mapping (Heuser, Algee-Hewitt, and Lockhart, 2016). In realist novels, most of these places may be equivalent to historical places on official maps. However, even in exceptionally geographically realistic texts, literary toponyms can be fluid and their meanings subjective; literary maps, even in realist texts, often function as symbolic maps rather than literal ones (Bray, 2013). There are, moreover, significant differences between literary toponyms and other toponyms, most notably poetic resonances and intertextual references to other literary works. The quantitative study of toponyms is, therefore, a starting point rather than an end point in the interpretation of literary texts.

I have chosen the corpora of Balzac and Proust as case studies because these novelists refer to a similar range of places, some of which are fictional and some of which correspond to historical places. Both Balzac and Proust locate their stories primarily in Paris and a few other provincial French cities and towns while referencing places throughout Europe and, indeed, the world. While Proust’s two primary provincial settings, Combray and Balbec, are fictional and Balzac’s provincial towns almost all carry the names of historical places, there is a similar imaginative reworking of limited data that applies to places further from Paris regardless of whether the toponyms used correspond to historical places. Due to the salience of Paris and the provinces in both series, the concreteness of international references in both corpora has been less frequently noted. Although the experience of reading Balzac’s *The Human*

Comedy and Proust's *In Search of Lost Time* is not necessarily similar, we shall see that they rely on a similar set of tricks and architectural techniques to build a geographical structure for their characters to inhabit; further, that structure departs from the historical world in consistent ways. There is no doubt that Balzac's place references are more numerous across the entirety of *The Human Comedy*, being a much longer text composed of many more books. The proportion of place references by region remains similar, however. Moreover, the level of abstraction in these geographies is more or less coextensive with the fictional world and the experience (both direct and indirect) of the characters who are, for the most part, more familiar with the names of minor streets in Paris than the names of major cities in Africa or the Americas.

Like other computational fields, the digital study of textual and literary geography can fail to take into account nonquantitative elements that are important to the interpretation of the texts studied. Taking a purely “bag of words” approach and counting the occurrences of words or types of words risks missing out on some of the constituent parts of the novel as a genre – notably, textual order and the relation of toponyms to characters and plot. Similarly, looking only at the textual order of geographical references, divorced from the chronological sequence, risks ignoring narrative elements like flashbacks, the interweaving of different timelines, and the pacing of the revelation of the plot (Hones, 2008). This Element looks at the quantitative aspects of geography, how places can be mapped to modern longitudes and latitudes, and how those data can be visualized to make them available to readers, while considering what is not captured in the data. Taking Balzac and Proust as exemplary of novelistic geographies, I present strategies for visualizing literary geographies with large numbers of place references. I draw upon the data of the Mapping Balzac project, a database of all place references in *The Human Comedy* that I have constructed, alongside a data set of the more limited number of place references in Proust.¹ The methods for classifying, visualizing, and analyzing these place references can serve as a model for analyzing other literary texts, most obviously novels, but also fiction or nonfiction that builds up a complex geographical world that is at least partially coextensive with the globe.

2 Balzac's Map of the World

2.1 A Model of Realist Geography

The Human Comedy, a series of more than eighty texts, including novels, essays, and short stories, has been studied as a model of literary geography, mostly for its

¹ All of the figures and data for this Element can be downloaded from <http://doi.org/10.6084/m9.figshare.14925177.v1>.

detailed maps of Paris and the interconnected industrialized French nation that was coming into being with the era of the railway (Schivelbusch, 1986). Balzac's geography is strongly identified with Paris – and, to a lesser extent, with the French provinces, including his native Touraine, the Loire Valley, and the areas surrounding Paris. Balzac's use of non-French place references – what I am calling Balzac's "map of the world" – has been studied more often from a thematic perspective than cartographically. Although Balzac is one of the great global authors based on the circulation and influence of his works, the predominance of Paris within his fictional world has made references to foreign places less notable. In this section, I look at Balzac's world geography, including Paris and France, but emphasize places outside of France. Using digital mapping, I model the socio-spatial network of one of the first great novelistic series to reveal its truly global footprint. Through the movements of its characters, especially financiers, merchants, and soldiers, *The Human Comedy* traces the growth and decline of the First French Empire and gestures toward some of the military and commercial conflicts to come. The primary settings of *The Human Comedy* are overwhelmingly Parisian or provincial, with the majority in the Hexagon or metropolitan France. It has, however, gone almost unrecognized that *The Human Comedy* refers to places throughout the known world of Balzac's time. While Paris is fundamental to an understanding of the novels, the diversity of referenced places is remarkable for a series of novels that takes place primarily between 1820 and 1840. Only Antarctica, observed for the first time in 1820 and officially discovered in the 1840s, does not figure among the continents referenced.

I take Balzac's geography as a model of realist geography – that is, a fictional world in which most locations correspond roughly to historical locations with the same names and other shared characteristics such as country, language, population, topography, or landmarks.² Of course, no fictional world is entirely coextensive with the historical world to which it alludes. Balzac's geography is no exception, with many inventions, errors, and fictional locations not intended to be taken for real places. Yet his fictional world beyond France is predominantly generated in reference to maps and atlases – unsurprising, since he only briefly left France shortly before his death. His interest in foreign countries was cultivated by his father; as a young man, Balzac was very confident in his comprehension of foreign cultures, no doubt overconfident in his knowledge of places like China (Robb, 1995, p. 38). An author can have many reasons for hewing to a realist geography in creating a fictional world, including a sociological or anthropological interest in people or an interest in physical

² The recent volume *Balzac géographe: territoires* brings together various recent approaches to Balzac's geography (Dufour, Mozet, and Andréoli, 2004).

geography. In Balzac's case, he saw himself as a kind of scientist or naturalist studying various "types" or "species" of the human population, their behaviors, mentalities, and interactions, much as a zoologist would study animal species in their natural habitats. For Balzac, the depictions of faraway locations and peoples in the works of authors like James Fenimore Cooper or Walter Scott were a model for his studies of Parisians and provincials, inverting the usual relation between sociology and anthropology by making the faraway the model for what is known. For Balzac, faraway places are more easily understood scientifically and without bias and descriptions of familiar locations are likely to be less objective. This belief in the systematicity of human behavior leads Balzac to pepper the narration of his fiction, even fictions entirely set in Paris, with references to faraway places and people, often in analogies to the main characters and principal settings of his fiction. The complex network of analogies, together with references to the backstories of minor characters, accounts for many references to far-flung places in Balzac's work.

What complicates this analysis is that Balzac's *The Human Comedy* is not one novel but a series of novels, short stories, and other texts, some of which were finished after the author's death. Some of these texts are humorous; others are quasi-academic essays. Some are hundreds of pages long; others are very brief and tightly plotted. Still, the fictional world and geography obey an overall logic, however haphazardly conceived by the author as he wrote the series. We cannot, therefore, treat Balzac's geography as scientific, as he saw it, nor as disinterested, in the sense of establishing a reliable geographical system of the world as it existed in early nineteenth-century France.³ Balzac's geography, like the atlases he based it on, is a projection of French power structures. We can make note of the echoes of historical power in Balzac's geography, but we must also be aware of the gaps, the places that do not appear in Balzac or that appear much less than one might expect based on their geographical importance, population, or prominence in the French culture of the era. Even without a comparison to historical geographical knowledge, the many settings, plotlines, and character perspectives of *The Human Comedy* complicate the attribution of any set of ideas or attitudes to Balzac or the series as a whole. The complexity of *The Human Comedy* as a text is a reminder of why a purely quantitative approach is rarely sufficient for literary geography. While there are major quantitative differences in the weighting of various places and their significance in different texts and storylines, the way geographical references

³ Far from being apolitical, cartography and geography were fundamental to the emergence of European states and territories as the major powers used territorial maps as "instruments of rule" in a way that was distinct from cartography in the medieval period or even the early sixteenth century (Biggs, 1999).

appear in a text and how they relate to voice, narration, and characters is equally fundamental to literary analysis.

2.2 A Global Novel

When taken in its entirety, the global geography laid out in the various texts of *The Human Comedy* is vast, despite its disproportionate focus on Europe. *The Human Comedy* connects place references on six continents (all of them except Antarctica) through the stories and backstories of more than two thousand characters (Cerfber and Christophe, 1902; Pugh, 1974). Indeed, it can be argued that *The Human Comedy* is the first series of novels with a truly global footprint that mentions cities, regions, and countries around the world in connection with its network of characters. These connections between characters and places often involve travel by merchants or soldiers in a story's recent past. Military characters like Colonel Chabert and Général Montriveau travel throughout Europe, Egypt, and Russia as a part of the Napoleonic army, returning to France to recount their stories after the wars. Merchants like Charles Grandet and Gobseck travel to Europe outside of France and to the West Indies, India, Malaysia, and European colonies. They travel to exploit natural resources and get rich trading in diamonds and spices, profiting from the emerging colonial connections between France and Asia, the Pacific, North Africa, and former colonies in the Caribbean and North America. Balzac's global geography is thus inextricably tied to war and colonization rather than to disinterested cosmopolitanism.

The global nature of Balzac's geography has often been ignored due to the omnipresence of Paris in Balzac criticism and the sheer volume of references to Paris in the text. There is little doubt that Balzac, himself no great traveler, was well versed in the obscure places of the world. The vastness of his erudition is well on display in allusions to African tribes, Chinese regions, and Eastern European towns. References to places from outside of Europe tend to be more abstract – to the West Indies (“les Indes”), the Orient (“l’Orient”), Central Asia (“la Tartarie”), and India (“les Grandes Indes”), rather than specific countries, regions, or towns. In a sense, Balzac's map of the world looks much as one would expect based on the balance of power in the nineteenth century: London, Rome, and Berlin figure prominently; China, Russia, and the Orient appear too, as do South America, the Antilles, and the eastern parts of North America. Compared to previous French literary geographies, Balzac's map of the world is far vaster and more reflective of the extent of French military and commercial connections in the early nineteenth century.

This section draws on the place references enumerated in the works of Balzac critics Léon-François Hoffman (Hoffman, 1965, 1968) and George Raser