Chapter 37 The Novel and the Map: Spatiotemporal Form and Discourse in Literary Cartography

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There is a moment in Don Quixote where the hero and his squire board an enchanted ship, in reality a small rowboat lacking oars, and set forth to "such longinguous ways and regions" as it may carry them. After floating a few yards downstream, the knight feels certain that they must have traveled at least two thousand miles. "If I only had an astrolabe here with which to take the height of the pole." he says, "I would tell you how far we have gone; though if I know anything, we have passed, or soon shall pass, the equinoctial line which divides and cuts the opposing poles at equal distance." In response to Sancho Panza's question about this "noxious line," Don Quixote cites Ptolemy, and observes that Sancho knows nothing of "colures, lines, parallels, zodiacs, ecliptics, poles, solstices, equinoxes, planets, signs of the zodiac and points, which are the measures of which the celestial and terrestrial spheres are composed." In lieu of this scientific body of knowledge, the knight proposes another sure-fire test: "that according to the Spaniards and those who embark at Cadiz to go to the East Indies, one of the signs by which they know that they have passed the equinoctial line I mentioned is that the lice die on everyone about the ship." Don Quixote entreats Sancho to check his person for lice, and the squire determines with absolutely certainty that they must not have yet crossed the equator, "not by many a long mile." 1

As so often occurs in this novel, the humor of the scene lies in the sometimes violent disjunction between reality and appearance, where rowboats can become enchanted ships, roadside inns take the form of grand palaces, or windmills in the shape of giants menace wayfarers with their mighty arms. But the comedy is heightened in this instance by the dual systems of knowledge by which to perceive and analyze the putative "reality" in question. That is, Don Quixote's reference to Ptolemaic geography and cosmography, complete with an entire vocabulary of

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¹Miguel de Cervantes, *Don Quixote*, trans. J.M. Cohen (New York: Penguin, 1950), 657–659.

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scientific terms and concepts, is ultimately supported by what would appear to be a folkloric myth or sailor's fantasy about the disposition of vermin at a certain latitude. The grand abstractions of geometric figures and astrological signs yield to the visceral, earthly experience of lice on a peasant's thigh.

These two modes, the abstract and the experiential, could be said to reflect the narrative modes of the novel itself, which projects in its totality a vast map of the world it simultaneously presents and represents, while also carefully tracing the trajectories of its peregrinating protagonists, whose adventures give flavor—indeed, meaning—to the places and spaces laid out in this literary cartography. This is not just the case in Don Quixote, which has long served historians and theorists of the novel as an exemplary model of the form; arguably all novels, if not all narratives, are engaged in one type of mapping project or another. The map-like projection and meticulous description that so frequently characterize the form of the novel interact with the narrative exploration and movement of the plot, making for a spatiotemporal novelistic discourse that serves as a form of knowledge, but also as a form that troubles systems of knowledge, insofar as its imaginative and figurative language can, at times, serve to delegitimize or corrupt official discourses. In its heteroglossia and multiplicity of styles or forms, which Mikhail Bakhtin famously identified as the determining features of novelistic discourse, ² the novel directly addresses basic concerns of epistemology, while also undermining its own findings.

In this chapter, I examine the novel as a form of spatiotemporal mapping of a world system it both mirrors and constructs. The novel, like the map, is a form a knowledge, registering accumulated information and experience, archiving and categorizing their relatives significance, framing the data and their interpretations, shaping it all into an intelligible array, and projecting potential future formations. The novel thus makes possible a visualization of the world system, as with such classic atlases as Abraham Ortelius's Theatrum Orbis Terrarum, except that this "theater" stages historical as well as geographical knowledge, which in turn must include the social, political, and economic forces that give form to the world system as it discloses itself in the novel. Formal techniques and narrative conventions help to define the world's spaces. Correspondingly, from the reader's perspective, matters of scale affect the perception and the interpretation of space and place, while the subject's position within these different scalar diagrams affects her or his ability to recognize their significance. In this sense, the novel's own theatrum geographicum sets the stage for a broader consideration of literary cartography of the world system, of which world literature is a protean counterpart.

Ortelius's 1570 atlas, titled *Theatrum Orbis Terrarum* (literally "the theater of the earthly orb," but more simply a "world map"), is among the most influential works of Renaissance art and science. One of the first atlases, collecting and binding in one volume some 70 maps, later expanded to include 167, the *Theatrum* quite literally defined the space of the world for generations. Along with Gerardus

²See Mikhail Bakhtin, "The Discourse of the Novel," in *The Dialogic Imagination: Four Essays*, trans. Caryl Emerson and Michael Holquist (Austin: University of Texas Press, 1981), 368.

Mercator's 1569 world map, which had employed Mercator's innovative projection, the Ortelius map world map gave form to the continents and seas in a new way, exaggerating the spaces furthest from the equator, while condensing those spaces closest to the line. The resulting misrepresentation of space has had notorious ideological uses and abuses, as the Global South could be actually diminished while the northern territories swell in size and purported value. (Mark Monmonier, in *How to Lie with Maps*, ³ observed that the cartographers and navigators of the British Empire embraced the "flattering" Mercator projection, with its use of Greenwich as the center and its enlargement of Canada, especially.) Ortelius was also the first popular world map to give the continents of the western hemisphere the label *America*, thus solidifying the legacy of Vespucci in this name over and against such rival toponyms as Columbia, New India, and so on. Above all, the new world map depicted the world as a political and geographical system, one that could be synoptically presented by the mapmaker and taken in by the user. The whole world, brought before one's eyes, in a single, theatrical moment.

When Ortelius's Theatrum Orbis Terrarum was first published, Miguel de Cervantes Saavedra was a soldier, freshly inducted into the Infantería de Marina (the Spanish Naval Infantry or Marines, although the phrase is quixotically suggestive of walking on water). It is not clear whether he was able to test the louse-at-the-equator theory personally, but he would take part in the Battle of Lapanto in Greece, pitting a "Holy League" against the expanding Ottoman Empire. Cervantes was wounded in battle and spent time convalescing in Italy, then he continued fighting elsewhere in the Mediterranean over the next few years. Sometime afterwards, famously, he was taken hostage by pirates and enslaved for five years in Algiers, before returning to Spain. Even if it limited itself to this period, Cervantes's biography already makes for the stuff of adventure novels or romances. His own trajectory from Spain to Italy, thence to the Greek isles and northern Africa, traced a personal itinerary through a key part of the emergent world system, that Mediterranean of Fernand Braudel's "geohistory" and Immanuel Wallerstein's sixteenth-century European "core." Even before he began writing his own works, Cervantes's adventures placed him squarely on the map, while indubitably highlighting the crucial differences in the specific places, languages, and cultures of the various stops along his journeys. The "big picture" vision of the world figured on Mercator's and Ortelius's maps undoubtedly influenced the novelist's perspective on the new world into which the heroes of his own novels would move, but his own peripatetic movements, characterized by a good deal of peripety, certainly colored his understanding of those spaces.

The experience of place, as the geographer Yi-Fu Tuan has repeatedly observed, comes down to this fluctuating mixture of movement and rest. Tuan has that "Space

³Mark Monmonier, *How to Lie with Maps* (Chicago: University of Chicago Press, 1991), 94–99. ⁴See Fernand Braudel, *The Mediterranean and the Mediterranean World in the Age of Phillip II*, trans. Siân Reynolds (New York: Harper & Row, 1972); Immanuel Wallerstein, *The Modern World-System*, 3 volumes (New York: Academic Press, 1974).

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is transformed into place when it has acquired definition and meaning," at which point it becomes the subject of interpretation, the traditional purview of literature. Yet the more abstract conception of space, as a largely undifferentiated zone in which the subject moves without awareness or identification of discrete places is also crucial to literary discourses, since the distinction Tuan makes requires a sort of symbolic or representational activity whereby the individual subject connects his or her direct experience to a broader system or structure that, in various ways, gives form to or makes sense of that experience. As Fredric Jameson has argued persuasively, narrative is itself a socially symbolic act by which the writer coordinates the subjective or existential experience with the broader social totality, a national allegory or world system, that makes possible the "truth" of that experience.

The grand world maps and atlases of Ortelius and Mercator were both representative and productive of the age of exploration that witnessed the rise of cartography. One tends to think of mapmaking as an innate, universal, and even "natural" aspect of human understanding of the world, and undoubtedly certain forms of primitive geographical sketches, along with the portulans charts and the medieval T-and-O maps, existed long before the fifteenth century. However, the explosion of ever more and more elaborate maps and charts in this age indicated that a revolution, not only in geography, but in the arts, sciences, and culture for generally, was under way. As Tom Conley has pointed out, "at the beginning of the fifteenth century, maps were practically non-existent, whereas only two centuries later they were the bedrock of most professions and disciplines." The advent of this new age of cartography literally transformed the way we see the world and ourselves in it.

Recent scholarship on the theory and history of the novel has troubled the ease with which critics formerly named *Don Quixote* the first modern "novel" or identified the "rise of the novel" with sixteenth- and seventeenth-century literature, 8 but one may still observe that the novel form rapidly became a dominant genre in both European and world literature during this epoch. Philosophers as diverse as Georg Lukács and Michel Foucault have identified *Don Quixote* as the turning point, and the emergence of the novel as the aesthetic form expressing mankind's

⁵Yi-Fu Tuan, *Space and Place: The Perspective of Experience* (Minneapolis: University of Minnesota Press, 1977), 136.

⁶See Fredric Jameson, *The Political Unconscious: Narrative as a Socially Symbolic Act* (Ithaca: Cornell University Press, 1981); see also, Jameson, *Postmodernism, or, the Cultural Logic of Late Capitalism* (Durham: Duke University Press, 1990), especially 410–418.

⁷Tom Conley, *The Self-Made Map: Cartographic Writing in Early Modern France* (Minneapolis: University of Minnesota Press, 1996), 1.

⁸See, e.g., Alexander Beecroft, *An Ecology of World Literature: From Antiquity to the Present Day* (London: Verso, 2015); see also Franco Moretti's enormous editorial project, *Il Romanzo*, a five-volume collection of essays reconstellating the theory and history of the novel in a global context. It appears in English in two volumes as *The Novel, Volume 1: History, Geography, and Culture* and *The Novel, Volume 2: Forms and Themes* (Princeton: Princeton University Press, 2007).

"transcendental homelessness" brings to the fore the fundamentally literary cartographic project of the novel. For Lukács, "The novel is the epic of a world that has been abandoned by God." Whereas the ancient and medieval epic had somehow assumed a clear connection between human experience and the world at large, a metaphysical unity essentially guaranteed by divine providence, the modern condition demands a form that attempts, and likely fails, to make those connections, to project that "archetypal map," as Lukács calls it. The rise of the novel, not surprisingly, corresponds to the rise of cartography.

In *The Order of Things*, Foucault asserts that "*Don Quixote* is the first modern work of literature," which he explains by distinguishes the novel's epistemology from a Renaissance *episteme* characterizes by similitude. In the Renaissance world not yet abandoned by God, resemblances in nature could disclose the Almighty's signature; thus the natural world could be read like any other text. As Foucault explains, however,

Don Quixote is the negative of the Renaissance world; writing had ceased to be the prose of the world; resemblances and signs had dissolved their former alliance; similitudes have become deceptive and verge upon the visionary or madness; things still remain stubbornly within their ironic identity: they are no longer anything but what they are; words wander off on their own, without content, without resemblance to fill their emptiness; they are no longer the marks of things; they lies sleeping between the pages of books and covered with dust. Magic, which permitted the decipherment of the world by revealing the secret resemblances beneath its signs, is no longer of any use except as an explanation, in terms of madness, of why analogies are always proved false. The erudition that once read nature and books alike as parts of a single text has been relegated to the same category as its own chimeras: lodged in the yellowed pages of books, the signs of language no longer have any value apart from the slender fiction which they represent. The written word and things no longer resemble one another. And between them, Don Quixote wanders off on his own.¹²

After this moment, the novel will have as its vocation the attempt to give some sort of reasonable shape to a world no longer guaranteed of its recognizable contours by a transcendent reality. Like the modern map, which uses figuration, exaggeration, and distortion in attempting to "realistically" represent the spaces on its surface, the novel cannot simply hold up a mirror to reality, but shapes and molds the images, characters, events, and places it represents.

The novel is what Lukács calls "a form-giving form," which also suggests its epistemological role, since the natural or social world it presents cannot simply be known objectively. Knowledge had to become the province of the knower, and the writer cannot be expected merely to reveal the truth, but like the reader must interpret the world. Hence the novel is an essentially epistemological form, and like

⁹Georg Lukács, *Theory of the Novel*, trans. Anna Bostock (Cambridge, MA: The MIT Press, 1971), 88.

¹⁰Ibid. 31

¹¹Michel Foucault, *The Order of Things*, trans. anon. (New York: Vintage, 1973), 48.

¹²Ibid., 47–48.

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the map, it is a form of knowledge as well as an attempt to know. Bakhtin makes this very point in contrasting the epic and the novel. Whereas in the epic or ancient literature in general "it is memory, and not knowledge, that serves as the source and power for the creative impulse," writes Bakhtin, "[t]he novel, by contrast, is determined by experience, knowledge and practice (the future)." Bakhtin concludes by saying that, when "the novel became the dominant genre, epistemology became the dominant discipline."

The epistemological or scientific impulse underlying cartographic and novelistic practice should not be taken in a strictly empirical sense. The will to knowledge in such work confronts a persistence of ambiguity that ultimately frustrates, but at the same time sustains, the project. As it becomes apparent that there can be no "true maps," as Jameson noted in a "digression on cartography," since there can be no perfectly mimetic representation of the spaces depicted on them, "it also becomes clear that there can be scientific progress, or better still, a dialectical advance, in the various historical moments of mapmaking." The knowledge to be gained or advanced through these practices thus will remain provisional, tentative, incomplete, and therefore ultimately erroneous, but this means that the epistemic efforts can be directed at producing better maps or narratives, with it also understand that what counts as "better" may vary from time to time and place to place. As I have put it elsewhere, "[i]f failure is inevitable, the goal must be to fail in interesting ways." 15

A more recent novel, Daniel Kehlmann's *Measuring the World* (2005), explicitly takes up the epistemological and cartographic projects of the modern novel. *Measuring the World* is not exactly a historical novel, but by interweaving the fictional and real lives of mathematician Carl Friedrich Gauss and geographer Alexander van Humboldt, Kehlmann evokes the intellectual fervor of the Goethezeit and its aftermath in Germany and elsewhere. The plot involves the crucial distinction between the scientific methods of these giants as they go about their revolutionary work, each measuring the world, thereby changing it forever, but it vastly different ways. Gauss rarely left his home in Göttingen, conducting the occasional experiment and consulting his telescope, but for the most part his labors involve speculation and deduction. Humboldt, famously, travelled to the Americas, scaling mountains and descending into volcanoes, exploring the Amazon, interviewing indigenous peoples, and always, taking special care to measure everything and record his finding. The abstract mathematical speculation is thus contrasted with the physically intensive empirical exploration. (Somewhat lesser characters in

¹³Bakhtin, "Epic and Novel," in *The Dialogic Imagination: Four Essays*, trans. Caryl Emerson and Michael Holquist (Austin: University of Texas Press, 1981), 15.

¹⁴Jameson, *Postmodernism*, 52.

¹⁵See my "Translator's Preface: The Timely Emergence of Geocriticism," in Bertrand Westphal, *Geocriticism: Real and Fictional Spaces*, trans. Robert T. Tally Jr. (New York: Palgrave Macmillan, 2011), xi.

the novel, like Gauss's son Eugen who wishes to study languages or Humboldt's gifted brother Friedrich, the philologist and philosopher, provide the barest glimpse of other forms by which we measure our world.) The two approaches, so different yet entirely complementary to the impossible project of the novel's title, also represent the two discursive modes of literary cartography, as the speculative or totalizing abstraction of the map provides the necessary framework for an experiential perambulations of the itinerary, which in turn gives shape, texture, color, and other characteristics to the places figured on the map.

In the end, this mapping affects the territory, which itself conditions the possible way in which its maps can be imagined, and so on. Late in *Measuring the World*, Kehlmann's Gauss thinks about this very thing, only he does so while he is engaged in his own wanderings, and he realizes that the mapping project forever alters the landscapes.

In the afternoon he [Gauss] took long walks through the woods. Over time he'd ceased to get lost, he knew this area better than anyone, he'd fixed every detail of it on the map. Sometimes it was as if he hadn't just measured the region, but invented it, as if it had only achieved its reality through him. Where once there had been nothing but trees, peat bogs, stones, and grassy mounds, there now was a net of grades, angles, and numbers. Nothing someone had ever measured was now or could ever be the same as before. Gauss wondered if Humboldt would understand that. It began to rain, and he took shelter under a tree. The grass shivered, it smelled of fresh earth, and there was nowhere else he could ever want to be but here. ¹⁶

Gauss's surmises, punctuated by the sensual pleasure and homeliness of the sylvan scene, brings the abstract and the experiential back into amenable relationship to one another.

The realism of a novel, as with the basic practicality of a map, can lead one to miss the intensively figurative, imaginative function of the form. For all their epistemological value, the novel and the map are far better at reminding us of the artificiality of representation, of the trickiness associated with languages and images, and of the potential for these forms to create radically alternatives visions of the world. "While the map is never the reality," the great geographer J. B. Harley once observed, "it helps us to create a different reality." The various anecdotes and examples of this essay suggest the ways in which novels and maps, two exceedingly powerful forms of knowledge, give form to or make sense of the world system presented in and by them. Together, they disclose a *theatrum geographicum* in which the places and spaces of our world are made meaningful.

¹⁶Daniel Kehlmann, *Measuring the World*, trans. Carol Brown Janeway (New York: Vintage, 2006), 229.

¹⁷J. B. Harley, *The New Nature of Maps: Essays in the History of Cartography*, ed. Paul Laxton (Baltimore: Johns Hopkins University Press, 2001), 168.