

LITERARY GEOGRAPHIES

Geospatial Semantics: A Textual Perspective

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In our recent article (Gavin and Gidal 2023), we borrow and adapt two concepts recently developed in the field of literary geography: ‘interspatiality,’ which Sheila Hones has introduced as a means of ‘naming and enabling engagement with the dynamic plurality of texts, spaces, places, authors, readers and other agents’ (Hones 2022: 17) and ‘the spatial hinge,’ which James Thurgill defines as ‘a process which extends a reading (and with it the text itself) into places previously unassociated with the text’ (Thurgill 2021: 153). We are literary historians who collaborate in the field of spatial humanities – a branch of digital humanities that uses digital mapping and geographical information systems to study cultural and literary history. Our projects focus on geographical text analysis; we use computers to identify, locate, map, and analyze the representation of places in texts. Whereas a traditional approach to computational criticism might ask, ‘How are the novels of Jane Austen different from those of Herman Melville?’ We ask, ‘How are descriptions of Glasgow different from those of Edinburgh?’ By correlating analyses of documents with the locations mentioned in those documents, geographical text analysis makes it possible to map textual references to a wide variety of phenomena, including industry and commerce, physical infrastructure like buildings and roads, geomorphology and ecology, as well as historical and cultural events. We

can even see how the associations of words vary from one place to another. For example, the word *fish* will have different connotations when used in descriptions of inland river towns than when used to describe coastal villages. The spatial distribution of a word can tell us a lot about its historical meanings and connotations. Geographical text analysis combines the study of places with the study of words into a single line of inquiry we call ‘geospatial semantics.’

As might be clear, the study of geospatial semantics depends most fundamentally on the ability to identify which places are mentioned in any given document. Sometimes called ‘geotagging,’ ‘georeferencing,’ ‘named entity recognition,’ or ‘toponym resolution,’ this process matches words in the texts (like *London*, *San Francisco*, or *Peru*) with places marked on maps or listed in gazetteers. Georeferencing represents a primitive ideal in the study of meaning. In *Philosophy of Literary Form* (1941), Kenneth Burke contrasted the acts of ‘semantic and poetic naming’ (139). The ideal form of semantic meaning, he argued, could be epitomized in the genre of the postal address: a name, street number, city, and country. It tells us *what is where*: ‘Semantic meaning would be a way of pointing to a chair. It would say, “That thing is a chair”’ (143). At its most ideal, and extended through all arenas of human discourse, ‘the semantic ideal [aims] to evolve a vocabulary that gives the name and address of every event in the universe’ (141, emphasis original). By contrast, ‘poetic meaning’ deals with subtle connotations, significances, and feelings that, Burke argues, ‘cannot be disposed of on a true-or-false basis’ (144). They reflect attitudes and morals that are fundamentally subjective and that can’t be tied down to any particular location: ‘The semantic ideal would attempt to *get a description* by the *elimination* of attitude. The poetic ideal would attempt to *attain a full moral act* by attaining a perspective *atop all the conflicts of attitude*’ (148, emphasis original). We might choose to see in Burke’s distinction an idea very much like that, in geography, between ‘location’ and a ‘sense of place’ (Agnew 1987). Location refers to a place on a map and can be measured by area, by latitude and longitude, by elevation, etc. Sense of place refers to all the meanings, thoughts, attitudes, and values that people associate with places. Burke’s semantic ideal names the locations of things; his poetic ideal reveals their various associations and values.

However, Burke takes pains to emphasize that these two kinds of meaning are not opposites, but in fact mutually interpenetrating. Even something as simple as a postal address entails a latent poetic capacity:

Has one ever stood, for instance, in some little outlying town, on the edge of the wilderness, and watched a train go by? Has one perhaps suddenly felt that train, and its tracks, were a kind of arm of the city, reaching out across the continent, quite as though it were simply Broadway itself extended? It is in such a sense that New York City can be found all over the country—and I submit that one would miss very important meanings, meanings that have much to do with the conduct of our inhabitants, were he to proceed here by the either-or kind of test. (144)

And so, while the sentence “New York City is in Iowa” might seem false according to the semantic ideal, it remains “poetically” true’ (144).

We value the terms ‘interspatiality’ and ‘spatial hinge’ because they seem to us to provide a handy and succinct way to name what Burke is trying to say, and they highlight a key point that Burke misses: in all cases, the forms of meaning he distinguishes, and the spatial configurations he attempts to theorize, depend on their mediation through texts. Street signs, house numbers, phone books, and maps are all texts, after all, as are treatises like Burke’s and essays like this one. When we as readers move through places, we carry texts with us—both materially, by distributing documents through geographical space, and phenomenologically, by informing our knowledge of location and our sense of place through reading. We look at a map of the United States, and New York sits far apart from Iowa. We read Burke, and they collapse into a complex unity. The difference that distinguishes these two spatial structures is not really a difference of kinds – it’s not ‘semantic meaning’ in one case and ‘poetic meaning’ in the other. It’s just two different spatial topologies, two different frames of reference, expressed in *two different texts*. The toponym ‘New York’ doesn’t refer to a single real place. Go there, and you’ll find yourself in Iowa – at least under one possible conceptual frame. The *realness* of New York, the *thereness* of ‘there’ as used in the previous sentence, does not and cannot name by itself any actual thing or actual place.

Rather, toponyms mark points of commensurability across spatial orders that are manifest in and constructed by different texts. It cannot be specified and therefore can’t really matter where in the universe ‘New York City’ actually is. What matters is that the name, as used in one text, will correspond meaningfully to the same name as used in another. They might have totally different ways of defining that place, of drawing its boundaries, and of affixing its meanings, attitudes, and values. Some documents will describe New York most simply as a point of latitude and longitude. Others will draw polygonal shapes over two-dimensions. Train schedules and subway maps will arrange its places in ordered lists and topological networks. In a Frank Sinatra song, New York City is an abstract symbol of success and sophistication that gives shape to his small-town blues. In novels and films, it offers a site of self-transformation, of crime, of wealth, of untold possibility. On the screens of Wall Street’s trading floors, it is one among a number of central nodes in a network of global cities. To locals, it’s a bustling cluster of boroughs and neighborhoods, drawn on maps and written into the linguistic landscape. The complex conceptual structures of space subsist across and through such acts of textual mediation. All the documents and all the discourses involving New York are intertextually linked through their shared *topos*, their shared place of reference. The term ‘interspatiality’ provides a useful shorthand to describe these otherwise difficult to enumerate intertextual and interspatial relationships. The term ‘spatial hinge’ helps push beyond simple ‘georeferencing’ to account for the ways readers make spatial meaning and to describe how they use texts to craft their socially stipulated environments.

Kenneth Burke died in 1993. His papers – which, according to their catalog description, include 1,054 items, mostly of correspondence, typescripts, and manuscripts – are stored by the New York Public Library at the following location:

Henry W. and Albert A. Berg Collection of English and American Literature
 Stephen A. Schwarzman Building
 Fifth Avenue at 42nd Street, New York, NY 10018-2788
 Third Floor, Room 320

No doubt, one could navigate among signs to arrive at a location that calls itself Room 320, and no doubt one could find Burke's papers there. Considered in his variously poetic meanings, we might say that Burke exists in the universe through what Sheila Hones outlines as a 'spatial event' – a textually mediated experience of 'agents and situations scattered across time and space' (Hones 2008: 1302). Just as the long arm of New York extends through the fields of Iowa, so too through him the New York Public Library projects itself onto this page. The place that Burke *is* is real indeed, and here, and now. Burke writes,

A comprehensive vocabulary, for social purposes, will persistently outrage the norms of the semantic ideal. It will not be unweighted [by attitudes and morals]; rather, it will have a maximum complexity of weighting. It will strike and retreat, compliment and insult, challenge and grovel, sing, curse, and whimper, subside and recover. Repeatedly, it will throw forth observations that are as accurate, in the realistic charting of human situations, as an ideal semantic formula. Many proverbs are brilliantly so. It will 'neutralize' a meaning at any desired point. But such behavior must be merely taken in its stride. And its test of a 'true' meaning will be its ability to fit into a piece with all other meanings, which is something radically different from the sheer expectancy that comes with conditioned salivation at the sound of a bell. (159)

Geospatial semantics are premised on the insight that meaning has a spatial component – that words in their very essence are spatial events because they appear in texts that exist in the world and respond to actual things that mattered to actual people. Place leaves an imprint on the cultural record. In turn, meanings vary from place to place, from moment to moment, and from text to text, and therefore the very conceptual structure of space that organizes any group of places will vary as well. The true semantic ideal of location cannot be accounted for in any single geographical frame – every place is a point of intersection among incompatible but nonetheless commensurable spatial realities.

The peculiar dynamics that literary geographers find between actual places and their fictional representations are dynamics inherent to all texts and all places. What Thurgill has called 'the spatial hinge' is a point of connection – a suture or touch between textuality and actuality – with widespread implications for mapping the semantics of place throughout textual corpora. Computational approaches to language and place reveal innumerable points of connection that help describe the very fabric of human society in all its textual and geographical complexity.

Works Cited

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