

# Digital Literary Geographies: A Spatial Analysis of Lake District Landscape Writings, 1750-1900

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## 1. Introduction

The use of Geographic Information Systems (GIS) has become an increasingly prominent trope within the so-called ‘spatial turn’ across the arts and humanities, as evidenced in the (broadly-defined) field of cultural studies. The first wave of ‘cultural GIS’ was primarily characterised by the way in which digital technologies might be used to map out sites of cultural practice. Examples of this included the ‘Going to the Show’ project which geo-referenced movie-going practices in North Carolina up until the end of the silent film era in 1930; and ‘Mapping the Moment’ which offered map visualizations of the entertainment and performance culture of the city of Nottingham in the middle of the nineteenth-century. More recent projects, however, have also underscored the potentiality of the use of GIS to offer spatial interpretations of cultural ‘texts’. For instance, the ‘Mapping the City in Film’ project, based at the University of Liverpool, used GIS ‘to map the filmic representation of urban space and the social, material and lived spaces within which they are embedded.’ In this metacritical study, a rapprochement of the quantitative and the qualitative was attempted as GIS was used as a tool for the spatial analysis of geographically-situated ‘texts’ as well as the positivist geo-visualisation of historical cultural practices.

In the more narrowly-defined field of literary studies, GIS has also become an increasingly prominent, if not uncontroversial, strand within the development of what has been variously termed ‘critical literary geography’ (Thacker, 2005) and ‘geocriticism’ (Westphal, 2011): the theoretically informed study of the literature of space, place and landscape. Projects such as ‘The Literary Atlas of Europe’ and the ‘Digital Literary Atlas of Ireland, 1922-49’, have self-reflexively engaged with how GIS technology might be harnessed to produce reader-generated mappings of different types of literary geographies.

Drawing upon such critical and theoretical contexts, this paper presents work that is being carried out as part of the interdisciplinary European Research Council-funded project, ‘Spatial Humanities: Texts, GIS, Places’, based at Lancaster University. One of the cardinal ambitions of this multi-faceted project is the advancement of digital approaches to the spatial analysis of geo-specific literary texts. This paper will illustrate how such progress is being

made through the spatial analysis of a clearly-defined corpus of textual representations of the English Lake District.

## **2. Analysing Lake District literature with spatial technologies**

The ‘Mapping the Lakes’ pilot project, funded by the British Academy, demonstrated the critical potentiality (and, crucially, limitations) of literary GIS by mapping out two canonical prose accounts of travelling through the Lake District: Thomas Gray’s proto-Picturesque *Journal* of 1769; and Samuel Taylor Coleridge’s idiosyncratic ‘circumcursion’ of 1802. ‘Spatial Humanities: Texts, GIS, Places’ builds upon, and moves beyond, this earlier work by constructing a fully geo-referenced corpus of Lake District landscape writings composed between 1750 and 1900. Using methodologies developed in corpus linguistics, the project involves the automatic identification and extraction of place-names to be found in a pluralistic range of geo-specific landscape writings including guide books, first-person journals, topographic prose texts, poems, novels and plays. The result is the creation of a literary GIS database which facilitates the spatial analysis of these heterogeneous place-specific writings.

In this particular paper, we want to focus on two cardinal strands. Firstly, combining corpus linguistics analysis, and spatial statistical methods such as Getis-Ord  $G_i^*$  and the Besag-Newell approach (Besag and Newell, 1991), we aim to identify large-scale patterns such as those locations that became over-determined or marginalised in the literature during this period. Once these overarching patterns have been established, we will then explore the possible reasons underpinning these macro literary geographies. The paper will also demonstrate how the identification of large-scale patterns can be informed by specific critical enquiries. The literary history of the Lake District, for instance, has been partly shaped by a clear dichotomy between the depictions of space, place and landscape by writers living within the region and authors who have visited the area as cultural tourists. Secondly, then, the paper will draw upon space-syntax theory, and will use both visibility and network analyses, to address two interpenetrating questions:

1) Was there a tendency for writers who lived in the Lake District to concentrate their writings on the multi-layered documentation of their immediate locales: the individual towns, villages or valleys which provide the geographical setting for the repetitive practice of everyday life?

2) By contrast, did the restless gaze of the touristic outsider habitually flit from place to place as he – and occasionally she – moved from place to place across the landscape?

In this manner, the paper will test how spatial analysis opens up further thinking about the contrasting imaginative geographies created by landscape writers based both within and beyond the regional space of our study area. In other words, it will highlight how GIS can be used to visualise and analyse the dialectics of outsiders and insiders, to adapt a phrase famously used by Bachelard (1958) in *The Poetics of Space*.

## **3. Conclusion**

Clearly, the spatial analysis of literary texts is not unproblematic and poses a series of challenges. Nevertheless, it constitutes a substantially new approach to literary studies, and the innovative character of the results exemplifies the importance of interdisciplinary

collaboration. This paper will argue that spatial analysis generated by the ongoing development of literary GIS will facilitate the discovery of unknown patterns, the experimental articulation of novel ideas for the interpretation of landscape writing and, in the particular case of Lake District literature, the uncovering of new ways of thinking spatially about the multi-layered textual representations of a culturally over-determined landscape.

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#### **References**

Bachelard, G. (1994) *The Poetics of Space*. Massachusetts: Beacon Press.

Besag J. and Newell J. (1991) The detection of clusters of rare diseases *Journal of the Royal Statistical Society Series A*, 154 pp 143-155

Roberts, L. et al. (2006) *Mapping the City in Film: A Geohistorical Analysis* (<http://www.liv.ac.uk/lisa/cityinfilm/index.html>)

Thacker, A. (2005) The idea of a critical literary geography. *New Formations*, 57 pp. 56-73.

Westphal, B. (2011) *Geocriticism: Real and Fictional Spaces*. Trans. Robert T. Tally Jr. New York: Palgrave Macmillan.

#### **Biography**

*Patricia Murrieta-Flores holds a PhD in Archaeology and currently works as a Research Associate for the 'Spatial Humanities: Texts, GIS, Places' project. Her research is focused in the development of theories and methodologies of spatial analysis for Archaeology, History and Literature. She is also interested in theories of perception of place, space and time.*

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