

Miranda Anderson and James Loxley

The Digital Poetics of Place-Names in Literary Edinburgh¹

SHEPHERD. ... Just suppose yoursel speakin to some stranger or ither frae England, come to see Embro' – and astonish the weak native.

NORTH. Stranger! wilt thou take us for thy guide ... thou shalt have the history of many an ancient edifice—tradition after tradition, delightful or disastrous—unforgotten tales of tears and blood, wept and shed of old by lungs and princes and nobles of the land ? ... Or threading our way through the gloom of lanes and alleys shall we touch your soul with trivial fond records of humbler life, its lowliest joys and obscurest griefs? [sic] (Wilson 246)

In this invitation, Christopher North – the literary persona of the nineteenth-century writer and critic, John Wilson – conjures up some of the possible encounters with the Edinburgh into which visitors could find themselves drawn. North's invitation is echoed, to some extent, by the ambition of *Palimpsest* – a digital literary mapping project. *Palimpsest* seeks to model Edinburgh's literary cityscape on a much larger scale than has hitherto been accomplished, including both its 'unforgotten tales' and its 'lowliest joys and obscurest griefs'. In doing so, the project aims to make an innovative contribution to the geocritical exploration of the mutual implication of space, place, and literature.

The relationship between these terms has a long and various intellectual history. As Sten Pultz Moslund has put it, 'There are numerous approaches to the study of place in

¹ The *Palimpsest* project, including the research undertaken for this paper, has been generously funded by the Arts and Humanities Research Council, UK.

literature – place as mapped by discourses and power; place as a transplatial contact zone; place as a dynamic process or event; place as emotional, imagined, remembered, or experienced by the senses’ (30). The now canonical, and still productive, work of scholars including Edward Casey, Yi-Fu Tuan, and Franco Moretti has been highly influential; equal stimulus has been taken from the conceptualisation of space developed in different ways by Michel de Certeau, Gaston Bachelard, and Henri Lefebvre.² Such thinking has recently been undergoing redefinition and elaboration at what can sometimes seem like an accelerating rate. The last three years alone have seen important contributions from Robert T. Tally Jr., Eric Prieto and the translation into English of two monographs by Bertrand Westphal.³ As this collection amply demonstrates, the exploration of literary place is at the same time taking explicitly cartographic, and increasingly digital form: Ian Gregory and David Cooper’s *Mapping the Lakes*, Barbara Piatti’s *Literary Atlas of Europe*, Shelley Fisher Fishkin’s collaborative *Digital Palimpsest Mapping Project*, and the ‘z-axis’ work of the *Modernist Versions Project*, to name only four recent examples, have all generated distinctive forms of geocritical engagement.⁴

One of the most interesting features of some of the theoretical work on space and place has been the invocation of narrative as a key element in the conceptual matrix, suggesting that there is a structural kinship between place and fiction which geocritical work might seek to capture. As de Certeau, for example, famously argued:

² Casey; Tuan; Moretti, *Atlas*; de Certeau; Bachelard; and Lefebvre. For a succinct overview see Cresswell.

³ Tally, *Geocritical Explorations*; Prieto, *Literature, Geography, and the Postmodern Poetics of Place*; Westphal, *Geocriticism*; and Westphal, *The Plausible World*.

⁴ See <http://www.lancaster.ac.uk/mappingthelakes/>; <http://www.literaturatlas.eu/>; Fishkin; <http://web.uvic.ca/~mvp1922/>. Fishkin’s use of the term ‘palimpsest’ is an interesting, if coincidental, point of connection with our own project, though we are primarily interested in rather different implications of the term. In particular, we are less keen to describe the palimpsestic nature of our mapping solely in terms of depth. We are happier, like the *Modernist Versions Project*, to see our activities as the exploration of surfaces.

Stories ... carry out a labor that constantly transforms places into spaces or spaces into places. They also organize the play of changing relationships between places and spaces. The forms of this play are numberless, fanning out in a spectrum reaching from the putting in of an immobile and stone-like order (in it, nothing moves except discourse itself, which, like a camera panning over a scene, moves over the whole panorama), to the accelerated succession of actions that multiply spaces. (118)

The tracing out of narrative, that is, of the tour or the itinerary, allows us to grasp the practice of spatial inhabitation that other accounts of place would occlude. For Nicholas Entrikin, too, it is ‘the vast realm of narrative forms’ that allows the thinker of place to bridge its ‘existential and naturalistic conceptions’ – to give us, in other words, ‘a sense both of being “in a place” and “at a location,” of being at the center and being at a point in a centerless world’ (134). Such understandings of place, emphasising the implication in each other of story and locus, might usefully be described as diegetic: the tellable world, or the world as told.

Palimpsest’s Development

The prototype *Palimpsest*,⁵ undertaken in 2012, created a small, mobile-friendly website featuring extracts from literary texts set in Edinburgh, geolocated on a map of the city according to the setting evoked in each extract. This offered a very different experience of literary Edinburgh from traditional literary-historical surveys, existing walking tours, or

⁵ The prototype received minor funding awards from the English Literature department at the University of Edinburgh and also from a Knowledge Exchange impact grant, although it was mainly created through the voluntary efforts of staff and postgraduate students from English Literature, Informatics and Edinburgh College of Art. The prototype can be found at <http://palimpsest-eng.appspot.com/>.

indeed other online guides to the city's cultural heritage such as 'Our Town Stories'.⁶ For example, surveys and tours customarily offer only a single topographical organisation of, or a single linear route through, the city's literature;⁷ while 'Our Town Stories' includes the geolocation of narratives, it offers only very limited literary content. The *Palimpsest* prototype showed that website and app users could instead be furnished with the means to find their own way through a more densely populated and richly layered literary city. In this diegetic cityscape they could encounter works from different periods clustered at one site, or elements of one literary work spread across sites within the city. The coincidence of location could allow for surprising intertextual encounters. Filters allowed users to expand or narrow the range of available works according to external properties such as genre, period, author, or internal properties including grammatical and narratological features.

[Insert Figure 13.1 here - landscape]

Figure 13.1 Palimpsest prototype screenshot of satellite version of the map; each pink shape demarcates a text's range on the map.

Source: <http://palimpsest-eng.appspot.com/>, created by the original Palimpsest Team using Imagery ©2015 DigitalGlobe, Getmapping plc, Infoterra Ltd & Bluesky, Landsat, The GeoInformation Group

[Insert Figure13.2 here - landscape]

Figure 13.2 Palimpsest prototype screenshot with short text excerpt

⁶ See www.ourtownstories.co.uk; also, see the Edinburgh City of Literature website for information on the range of current guided and virtual literary tours: <http://www.cityofliterature.com/the-literary-city/visit/tours-trails/>

⁷ Campbell; Foster; and Lownie.

Source: <http://palimpsest-eng.appspot.com/>, created by the original Palimpsest Team using Imagery ©2015 DigitalGlobe, Getmapping plc, Infoterra Ltd & Bluesky, Landsat, The GeoInformation Group

Although the prototype offered proof of concept, it was nonetheless fairly limited in its scope and functionality. Its database was populated and curated manually, and this constraint meant that it contained only 200 excerpts from, for the most part, the better known literary works in the Edinburgh canon. These extracts manually gathered from poetry, prose and fiction, ranged in date from the early modern era to the present. The extracts were primarily focussed on locations around Edinburgh's Royal Mile and generally ranged between 50 to 450 words in length. Lists of short sample geolocated extracts were offered with the option for the reader to choose a longer version and also to choose to read a range of bibliographical information about the text. The choice of extracts and the associations of text and place were made only on a case by case, and somewhat extempore, basis.

The current AHRC-funded project promises a fuller and more systematic realisation of the prototype's promise, by combining a bottom-up gathering of large collections of digital texts with top-down filtering of these collections by literary and language technology scholars. *Palimpsest* is now an interdisciplinary research project involving literary critics and the Language Technology Group at the University of Edinburgh, the University of St Andrews Human-Computer Interaction research group, and the Edinburgh-based national data centre, EDINA. So while the project's purpose remains to explore the dimensions of literary Edinburgh, this is to be achieved through a radical change in methods: we are using natural language processing technology to text-mine literary works set in Edinburgh and

make possible interactive visualisations of the results. By uncovering works that have sunk into obscurity, and by tracing the narratives told through place-names in Edinburgh across time, we will be able to reflect on existing critical models of the nature of Edinburgh and its literature. *Palimpsest* will provide a new means to reflect on, excavate, and celebrate the sedimentary processes that have given our city its literary shape, within and beyond the conventional boundaries of the literary canon.

We are focusing on the literary use of place-names as an important dimension of a text's engagement with place within and across a dataset comprising thousands of extracts from Edinburgh texts, including genres such as novels, short stories, memoirs and travel narratives and dating between the sixteenth and the twenty-first century. *Palimpsest* will offer a richly multifaceted way to explore the literary cityscape of Edinburgh. The interface will display place-name usage in these works on contemporary and historic maps, along with other graphic representations of the frequency and density of such usage, either across space or time ranges. This will also permit the visualisation of the collocations of place-name mentions, and we hope also to include some basic element of sentiment analysis allowing users to view the kinds of associations that place-names have gathered around them. Furthermore, it will be possible for users to set either restrictive or expansive criteria for the exploration of our dataset through this interface. Some of these criteria will draw on the metadata associated with the digitised texts we are using, so it will be possible to view the data alongside such aspects as author, genre, and date of publication. Other criteria, though, will draw more fundamentally on grammatical properties and affective qualities extracted through text-mining, permitting users to explore the range of collocations associated with a selected set of Edinburgh toponyms. Combining both these approaches will give users a great number of entry points, and passages through, the data.

In order to facilitate this, we are working with a large corpus comprising thousands of digitised ‘Edinburgh-centric’ literary works, which has been extracted from the hundreds of thousands of OCR’d and out-of-copyright literary texts in the collections of the Hathi Trust, Project Gutenberg, the British Library, the Oxford Text Archive, and the National Library of Scotland, alongside a limited set of copyright texts which have been made available to us with the kind permission of authors and publishers. The initial stage involves determining which texts in the collections involve significant Edinburgh settings and which are of some kind of literary interest - considering the defining parameters of both these factors required a perhaps surprising amount of discussion. The minimum requirement for the former was the use of the word Edinburgh (or a synonym) and at least one place-name, and for the latter that the text belong to a recognizably literary genre, such as the novel or short story, or otherwise have strong narrative or locodescriptive components – both memoirs and travel journals, for example, might well merit inclusion on these terms. A tool that assists with this first stage is the ‘Edinburgh Geoparser’, which extracts location names and geo-references them, and which has been customised into a loco-specific gazetteer of 1,200 place-name queries through the aggregation and weighting of OpenStreetMap, OSLocator, RCAHMS, and Historic Scotland data in order to deal with geo-referencing fine-grained place-names in literary texts, including streets, buildings, or particular sites in the urban environment (such as the Scott Monument), local areas, or more general archaic, poetic, vernacular and dialect terms (such as Edenborough, Embra, Edina, ‘Auld Reekie’). Literary scholars then examine the texts that have been identified in order to check their relevance for inclusion, and also to feed back information that helps to refine the Edinburgh Geoparser. We further aim to identify continuities and divergences in frequencies of place-name usages and associations, through a combination of the strengths of machine and close reading, and thus to produce a detailed map of the development of Edinburgh as a city of the literary imagination.

The principal output of the project will be the interactive website that will allow users to curate their own maps of geolocated Edinburgh literature, and to explore locations in the city through geolocated extracts from those works, with a mobile-friendly version useable on handheld devices. Other outputs will include the new version of the Edinburgh Geoparser enhanced with fine-grained location geo-referencing including the Edinburgh place-name gazetteer, with text-mining components that extract literary properties around locations, the text-mined XML output for the *Palimpsest* corpus and the XML schema. The web resources are to be made freely available to all users; the software will also be released as an open access resource.

Taxonomies of Toponyms

Place-names are ubiquitous in fiction and non-fiction narratives, of course, but the choice of the toponym as our primary marker of geocritical interest might seem surprising because mention of a toponym is often passed by unmentioned in critical literary analyses in a way the referencing of a real character is not. However, as Nicholas Horsfall has suggested, ‘names are signposts in a child’s imagination and thereafter in an adult’s memory’:

my mental map of childhood London is not a visible map at all, but remains an elaborate tissue of homes, aunts, toyshops, dentists, friends’ homes, favourite walks, cinemas. These private gazetteers of ours are perforce idiosyncratic and disorderly; they interrupt unpredictably and inconveniently those slightly more disciplined maps-in-the-mind which we acquire at school, and, if we are very lucky, from parents who read or, better still, recite to us the poetry they love. For that poetry (and all I say is just as true of song) will prove to contain *names*: ‘silent on a peak in Darien,’ ‘down in Demerara,’ ‘at Flores in the Azores,’ ‘silently rowed to the Charlestown shore,’

which will, many of them, sink into the mire of the not-explained and not-understood, only to emerge, many years on, gleaming, and weighed down with some relevant information. For names are also an integral part of our social memory. (305)

There is a long, modern tradition of locative writing that seeks to mobilise the powers of the place-name, from the chorographical endeavours of seventeenth-century writers such as Michael Drayton, through the Wordsworthian interest in ‘Poems on the Naming of Places’ to Seamus Heaney’s reflections in ‘The Sense of Place’ on the way in which there is a tension between place as learned, literate, and conscious or as lived, illiterate, and unconscious, and now the contemporary topo-poetics outlined, for example, by Moslund.⁸ In this Heideggerian mould, which echoes to some extent the influential reading of Wordsworth developed by Jonathan Bate, toponyms evoke the understanding of language as naming, as a primordial calling forth:

Precisely because naming things brings things forth or close, as if standing them up before our senses, the word opens toward a prelinguistic sensation that compares with the sensation of the thing itself. This is not a mimetic copy or a true reflection of the object of the thing-world but a triggering of the sensations of that object. (32)

Yet names can conceal as well as unconceal, and the grounding relation to ‘earth’ that might be revealed in the poetry that most concerns Heidegger and his followers can also be obscured. As Moslund explains:

⁸ Alan Gillis has ably situated the use of the place-name in modern and contemporary Irish and Scottish poetry in the context of this longer tradition.

Our awareness of this ever-present and fundamental physical grounding or emplacement is lost on our daily communicative uses of language because of the silent workings of the senses, the taken-for-grantedness of place and the dominance of practical, discursive, or meaning-based uses of language. (34)

Since toponyms function in such practical, discursive, and meaning-based uses of language, and such registers are taken up by narrative fiction, the names evoked by writing might participate in the overlaying of any awareness of such ‘physical grounding’. Furthermore, although Moslund, for one, is happy to acknowledge the important role that names can play in topo poetic reading, he is far from conceding their primacy on other grounds, too. There is so much more, after all, to place in literature than the given names of localities. Indeed, as in Wordsworth’s ‘Poems on the Naming of Places’, the act of naming can be counterposed to names accreted or inherited. Stories can be ‘placed’ without any resort to toponyms: while diegesis binds locus and narration together, a name is far from being essential to such articulations. Place, in other words, can be nameless.⁹

Outwith the kinds of Heideggerian emplacement envisaged by Moslund, toponyms play a distinctive set of roles that can be elaborated in terms developed from narratology. As Teresa Bridgeman says, narrative has most commonly been understood as fundamentally temporal rather than spatial. However, narratologists have recently redefined narrative in more open terms consistent with our own stress on diegesis, with Monika Fludernik emphasising experientiality, David Herman seeing it both as an object of interpretation and as a means of making sense of experience, and Marie-Laure Ryan thinking in terms of

⁹ In the topographical poetics of Sean Borodale’s works *Walking to Paradise* and *Notes for an Atlas*, for example no place-names feature in his detailed, phenomenological presencing of the material world, although the texts are set in the Lake District and London respectively.

storyworlds and transmediality. Bridgeman describes changing notions of space: in realist nineteenth-century novels it appeared a stable and concrete phenomenon; in modernist works it became filtered through the perceptions of protagonists; and then in postmodernist fiction it became further destabilized, with different spaces multiplying and merging (56). Readers of literary texts require minimal spatio-temporal hooks to orient themselves: emotional engagement and associations are linked to spatial, as well as temporal parameters, with the dimensions of and movements in narrative worlds varying in scope, and with the proximity and distance between people often marked in topographical terms (60, 63). Bridgeman adds to Lakoff and Johnson's notions of the path and container, the portal (whether door or window), as a space through which the character and reader can be transported (55).

Marie-Laure Ryan's narratological categorisation of space evokes a rippling outward and inward of parameters, both into the world of the reader and into the counterfactual world of counterfactual characters. Ryan's overlapping categories stretch from the 'spatial frames' and 'the setting', which are the surroundings of events and the socio-historico-geographical environment in a narrative; to 'the story space', which is the space relevant to the plot via the actions and thoughts of the characters; to 'the narrative world', which is the coherent world fleshed out by the reader according to their knowledge and experience; and, in addition, to 'the narrative universe', which encompasses both the actual world of the text and 'all the counterfactual worlds constructed by characters as beliefs, wishes, fears, speculations, hypothetical thinking, dreams, and fantasies'. These categories can be usefully reapplied in thinking through how place-names are operating. They can also be supplemented by reapplying some of the categories that emerge in relation to definitions of character, as for instance in Alan Palmer's *Fictional Minds*, which defines character in terms of grammatical person, literary device, speech position, semes, actant, and non-actual individual (37-8). Such taxonomies of toponyms indicate the kinds of interrogations, both within a text and, more

significantly and unusually, across large corpora of literary texts, that will become possible through *Palimpsest*.

For instance, adapting Palmer's schema would give us the following, and far from exhaustive, range of toponymic possibilities. Firstly, a grammatical place-name is construed as an entity of discourse. So, for example, in the following description by John Gibson Lockhart, Edinburgh is the subject of the sentence, while London is allotted only a subordinate clause and a lesser dignity:

Edinburgh, even were its population as great as that of London, could never be merely a city. Here there must always be present the idea of the comparative littleness of all human works. Here the proudest of palaces must be content to catch the shadows of mountains; and the grandest of fortresses to appear like the dwellings of pigmies, perched on the very bulwarks of creation. (3-4)

Secondly, a structural place-name, unsurprisingly, plays a role or element in the story structure. In James Hogg's *Confessions of a Justified Sinner*, the Black Bull (now gone and only vaguely geolocatable), alongside the unusually clement weather, provides a vital orientation point for the narrative of a riot and the torrent of motion that follows:

The concourse of people that were assembled in Edinburgh at that time was prodigious; and as they were all actuated by political motives, they wanted only a ready-blown coal to set the mountain on fire. The evening being fine, and the streets thronged, the cry ran from mouth to mouth through the whole city. More than that, the mob that had of late been gathered to the door of the Black Bull, had, by degrees, dispersed; but, they being young men, and idle vagrants, they had only spread

themselves over the rest of the street to lounge in search of farther amusement: consequently, a word was sufficient to send them back to their late rendezvous, where they had previously witnessed something they did not much approve of. (23)

The movement of people and news flows out and back across the city, and the Black Bull is identified as a key organising locus for such movement – the crowds disperse from there, and then reform around it, precipitating the explosive intervention of a riot.

Thirdly, a place-name can also serve as a means of achieving an aesthetic, even a meta-aesthetic, effect. In Mary Shelley's *Frankenstein*, for example, Edinburgh locations appear in a brief flurry:

I visited Edinburgh with languid eyes and mind; and yet that city might have interested the most unfortunate being. Clerval did not like it so well as Oxford; for the antiquity of the latter city was pleasing to him. But the beauty and regularity of the new town of Edinburgh, its romantic castle and its environs, the most delightful in the world, Arthur's Seat, St. Bernards Well, and the Pentland Hills, compensated him for the change and filled him with cheerfulness and admiration. (162)

Though brief, this passage is a shorthand and spatialised reference to the Enlightenment and Romantic ideals organised by the city and its environs: with its natural beauty and orderly new town architecture, Edinburgh indirectly signals the extent to which the disenchanted Frankenstein has become lost to all such pleasures, values and ambitions.

Lastly, a place-name may also stand for a thematic element, a semantic complex or macrocosm composed of semes and unified by a proper name. In his *Picturesque Notes*,

Robert Louis Stevenson conjures the ways in which the Old Town of Edinburgh became imbued by its historical and literary past, as well as by its natural and architectural setting, with a sinister chill that fired dark tales in the imagination:

So, in the low dens and high-flying garrets of Edinburgh, people may go back upon dark passages in the town's adventures, and chill their marrow with winter's tales about the fire: tales that are singularly apposite and characteristic, not only of the old life, but of the very constitution of built nature in that part, and singularly well qualified to add horror to horror, when the wind pipes around the tall lands, and hoots adown arched passages, and the far-spread wilderness of city lamps keeps quavering and flaring in the gusts. (14)

Stevenson then goes on to conjure up chilling tales, some now more familiar than others, of Deacon Brodie, Begbie the Porter, and Burke and Hare; however he does not provide a more precise location within the 'lands' here invoked, the high-rise tenements of Edinburgh's Old Town.

So place-names fulfil a range of crucial diegetic functions. Their significance goes beyond this, though, as their real-world referentiality is asserted or assumed when place-names and the places they denote are taken from what Piatti and Hurni have called 'geospace' (219): that is, the extradiegetic or sometimes metadiegetic realm. Gabriel Zoran comments that 'despite the possibility of distinguishing between the space of the text and that of the world, one cannot point to any constant correlation between them', and yet place-names provide exactly such an explicit point of referential correlation (310). Such correlations, though, are inevitably intertextual as well as referential, mediated through precedent invocations of the same names. Thus, for example, Stevenson's passage down the

High Street in his *Picturesque Notes* cannot avoid also referencing Walter Scott's fictive use of this location. 'Here, for example,' says Stevenson, 'is the shape of a heart let into the causeway. This was the site of the Tolbooth, the Heart of Midlothian, a place old in story and namefather to a noble book' (10). The primarily Scots term 'namefather' here marks the intertextual processes through which names are bestowed and inherited. They accumulate down the generations: in the opening pages of her memoir, *Curriculum Vitae*, Muriel Spark declares how '[d]etails fascinate me. I love to pile up the details. They create an atmosphere. Names, too, have a magic, be they never so humble' (11). Spark describes a feeling of affinity with Stevenson arising from a sense of shared experience that comes from their both having lived in Edinburgh, whose place-names she recites in the incantatory mode evoked by Horsfall: 'The Braid Hills, the Blackford Hill and Pond, the Pentland Hills of Stevenson's poems, his "hills of home" were mine too' (35).

Diegetic Deformance

To focus on the place-name, then, is to attempt to isolate a distinctive set of forms that the creative investment in place can take. Such a move opens up the possibility of making the kinds of intervention best described by Jerome McGann and Lisa Samuels as acts of critical 'deformance': 'invasions or distortions of the documentary foundation of the artifact' (115). Deformance of this sort sets itself against the self-denying ordinance that McGann and Samuels associate with critical interpretation in its customary mode, which 'brackets off from attention crucial features of imaginative works, features wherein the elemental forms of meaning are built and elaborated,' features 'that readers tend to treat ... as preinterpretive and precritical' (115). To treat the isolation of place-name occurrences from other textual elements in a narrative as a way of activating critical possibilities is to invite a new and distinctive form of critical attention to place in literature. Within a particular text, it brings

attention to bear on the kind of toponyms deployed – what kind of place is thus named – as well as on their functions. It renders visible what might otherwise remain unnoticed, giving an at least preliminary critical pertinence to measures such as sequence, frequency, and density, which might well be thought, from most traditional standpoints, to be preinterpretive or precritical. Yet it is possible to envisage such considerations as offering a new way of mapping the diegetic cityscape of Edinburgh as it is forged both in individual texts and across the wider canon of narrative writing that takes the city for its setting. The place-name punctures the diegesis of a particular work, providing a nodal point at which any such diegesis is joined to any other in which the same place-name occurs. From this position outside the fictional city of any one text, considerations of sequence, frequency, or density embody a critical potentiality in a different mode: mapping the shape of the diegetic cityscape assumes a comparative, cumulative, and historical dimension.

The Edinburgh that might be evoked through this intertextual and referential toponymic play undoubtedly belongs among those sites classed by Eric Prieto as ‘the *hauts lieux* of the literary tradition: places that have a distinct cultural and topographical profile and that have given rise to a whole body of literature’ (‘Geocriticism, Geopoetics, Geophilosophy’ 22). In fact, this profile is very well established and often rehearsed, yet *Palimpsest* will allow for more systematic examinations of these features of the literary history of the city, and the tracing of their emergence and changing associations over time. As a recent and characteristic literary-critical portrayal puts it:

The poet Hugh MacDiarmid referred to Edinburgh as a ‘mad god’s dream’. It exemplified antiszygy, his preferred creative term, meaning a ‘zigzag of contradictions’... The Edinburgh I walk through each day is part Piranesi, part Peter Greenaway. I can’t tire of its soaring

bridges that never cross water, its Tetris blocks of Gothic tenements framed in classical Palladian arches, its tug-of-war between secret vennels and stately locked doors.

Edinburgh's centre is riven, bifurcated: on one hand, the vertiginous, overlapping, haphazard, medieval Old Town, and on the other, the geometric, unfolded, planned, neoclassical New Town. (Kelly 18)

There is a sense, then, in which the topography of literary Edinburgh is both literal and metaphorical, heavily freighted or overdetermined in a manner that both shapes and constrains the efforts of those contemporary writers who use its names to define the space of their fictions. Ian Rankin has jointly credited both Stevenson and the instantiation in Edinburgh of the 'Caledonian antiszygy' with inspiring his own tartan noir:

I owe a great debt to Robert Louis Stevenson and to the city of his birth. In a way they both changed my life. Without Edinburgh's split nature Stevenson might never have dreamed up *Dr Jekyll and Mr Hyde* and without *Dr Jekyll and Mr Hyde* I might never have come up with my own alter ego Detective Inspector John Rebus.

By contrast, Irvine Welsh has handled the familiar diegetic cityscape with more than a degree of disenchanting scepticism, memorably voiced by Begbie in *Trainspotting*:

These burds ur gaun oantay us about how fuckin beautiful Edinburgh is, and how lovely the fuckin castle is oan the hill ower the gairdins n aw that shite. That's aw they tourist cunts ken though, the castle n Princes Street, n the High Street. Like whin Monny's auntie came ower fae that wee village oan that Island oaf the west coast ay Ireland, wi aw her bairns. The wifey goes up tae the council fir a hoose. The council

sais tae her, whair's it ye want tae fuckin stey, like? The woman sais, ah want a hoose in Princes Street lookin oantay the castle... Perr cunt jist liked the look ay the street whin she came oaf the train, thoat the whole fuckin place wis like that. The cunts in the council jist laugh n stick the cunt n one ay they hoatline joabs in West Granton, thit nae cunt else wants. Instead ay a view ay the castle, she's goat a view ay the gasworks. That's how it fuckin works in real life, if ye urnae a rich cunt wi a big fuckin hoose n plenty poppy. (115-6)

Books not only replicate hegemonic structures, but also hold up the means to question them. Here, notably, the place-name 'West Granton' plays contrapuntally against Princes Street, the High Street, and Edinburgh castle, stretching and decentring the established topography. Yet later in the same text it only takes a trip away for a less belligerent insider to give voice to a partial re-enchantment with the city and its customary *haut lieu*. As Welsh's protagonist Renton puts it on his return: 'But when ye come back oot ay Waverley Station eftir bein away fir a bit, ye think: Hi, this isnae bad' (228).

Other writers have found differing ways to reflect on this sense of an abundantly and densely significant landscape. In her brief autobiographical note, 'Edinburgh-born', Spark describes her stay in the city of her birth in the spring of 1962, when she was attendant on her dying father. Resident, as she specifies, in the North British Hotel (now, in another mode of significance, the Balmoral) alongside Waverley station, she surveys exactly the standard – and expansively named and framed – panorama to which Welsh alludes:

From where I sat propped in the open window frame, I could look straight onto Arthur's Seat and the Salisbury Crags, its girdle. When I sat the other way round I could see part of the Old City, the east corner of Princes Street Gardens, and the black

Castle Rock. In those days I experienced an inpouring of love for the place of my birth, which I am aware was psychologically connected with my love for my father and with the exiled sensation of occupying a hotel room which was really meant for strangers. (Spark 'Edinburgh-born')

Later in the piece the topography of this landscape is fused with Edinburgh habits of mind and tongue, which Spark suggests are a crucial and distinctive part of the education furnished to the city's children. She focuses on 'nevertheless', 'this word of final justification', which comes to stand for an 'Edinburgh ethos' that has had a formative influence but that she can also hold at sufficient distance to make it the subject of her own enquiry. Such habits become, as the piece moves towards its conclusion, features of the landscape itself:

The Castle Rock is something, rising up as it does from pre-history between the formal grace of the New Town and the noble network of the Old. To have a great primitive black crag rising up in the middle of populated streets of commerce, stately squares and winding closes, is like the statement of an unmitigated fact preceded by 'nevertheless'. (Spark 'Edinburgh-born')

And the landscape's parental associations, its formative powers over the native, are made explicit in the final lines:

When the shrill telephone in my hotel room woke me at four in the morning, and a nurse told me that my father was dead, I noticed, with the particular concentration of the fuddled mind, that the rock and its castle loomed as usual in the early light. I noticed this, as if one might have expected otherwise. (Spark 'Edinburgh-born')

For all its evocation of an inextricable symbolism, however, this piece also manages to play with and through just such an assumption. The rock still stands even after the father has died, and in the surprise of this perception the assumption of symbolism is undone by the brute facticity of its own ‘nevertheless’. Yet this is to reinforce exactly the meaning that has been drawn from the rock hitherto: its facticity was not quite as brute as had been suggested. In standing for ‘unmitigated fact’, that is to say, it couldn’t simply be such a fact itself.

Elsewhere, Spark finds other ways to explore the scope and limits of Edinburgh’s ‘distinct cultural and topographical profile’. In a celebrated passage from *The Prime of Miss Jean Brodie*, Sandy and her schoolfellows are taken on a walk through the Old Town, where ‘The Canongate, The Grassmarket, The Lawnmarket, were names which betokened a misty region of crime and desperation: “Lawnmarket man jailed”’ (Spark *The Prime*, 32). This initial statement is followed by a passage of rich description of the scene in the Grassmarket, before one of the abrupt shifts of narratorial perspective for which the novel is rightly famous introduces a disruption of what had appeared to be secure associations:

And many times throughout her life Sandy knew with a shock, when speaking to people whose childhood had been in Edinburgh, that there were other Edinburghs quite different from hers, and with which she held only the names of districts and streets and monuments in common. (Spark *The Prime*, 33)

The very names that had ‘betokened ... crime and desperation’ only a few paragraphs earlier here thin to empty tokens: their intersubjective nature does little to undo Sandy’s adult perception of fundamental human separateness. This points to a narratorial play with names, with the fact that they are shared and recognised, but also that such sharing can sometimes

conceal profound differences of apprehension and understanding; or, from the other way round, that singular experiences are nonetheless brought together – not always comfortably – in the shared use of a name. Here, as elsewhere, we see how important the place-names of Edinburgh are to those writers wrestling with the city's densely significant topography, and how their reflective attention to such names generates critical, or at least metafictional, engagements with the referential and representative powers and functions of such names.

Topopoetic Prospects

Nevertheless, with a place as richly resonant as Edinburgh, our deformative emphasis on the place-name as a way of opening up topopoetic prospects might still be thought to face insuperable difficulties. As Robert J. Tally Jr. has argued of Westphal's ambitions for his geocritical method:

it invariably raises the question of the corpus. How does one determine exactly which texts could, in the aggregate, reasonably constitute a meaningful body of material with which to analyze the literary representations of a given geographical site? That is, if the Dublin of James Joyce is far too limited, since it relies on the perspective of a only single author or a few of his own writings, then how many authors and texts representing Dublin would constitute a feasible and credible starting point for a geocritical study of the Irish capital? With certain cities, such as Paris, London, Rome, or New York, the almost mythic status of these places and the seemingly innumerable textual references to them render any geocritical analysis, at least those laying claim to a kind of scientific value, impossible.

As Westphal admits, 'to attempt to undertake a full-scale geocritical analysis of those hotspots would be madness.' A geo-centered method, if it aims truly to avoid the perception of bias, seems somewhat doomed from the start. ('Foreword', xii)

There are several issues here, not least the relation between ‘scientific value’ and the ‘feasible and credible’. Of most relevance, however, is the claim of doom or impossibility, the madness in attempting to undertake ‘full-scale geocritical analysis of ... hotspots’: the suggestion is that the sheer profusion, variety and mobility of textual engagements with certain places will disable any attempt at worthwhile geocritical study. Yet one might wonder at the feasibility and credibility of a geocriticism that had to shy away from, rather than engage with, such profusion. For this is an ineliminable aspect of the literary experience of the modern city, especially - in his *Picturesque Notes*, for example, Stevenson ascends Calton Hill to obtain a luminous prospect over the city that is uncomfortably faithful to just such profusion, variety and mobility. ‘It is the character of such a prospect,’ he says, ‘to be full of change and things moving. The multiplicity embarrasses the eye; and the mind, among so much, suffers itself to grow absorbed with single points’ (31).

The problem, as Tally and Westphal see it, is simply that there is too much for any critic, and thus any criticism, to handle. The eye remains embarrassed: analysis – in the sense of the discernment of patterns, processes, similarities and contrasts, the creation of maps – will not be able to take place. Perhaps, though, such pessimism has not taken account of the ways that an encounter with such plenitude might be staged, and how criticism itself might develop in the process. In bringing text-mining and georeferencing technologies to bear on exceptionally large collections of digitised texts in the pursuit of its own deformative intervention, the *Palimpsest* project seeks to demonstrate that there are indeed ways of engaging feasibly, and fruitfully, with such profusion. This is the possibility that critics such as N. Katherine Hayles, Franco Moretti and Stephen Ramsay have been claiming for modes of digital textual analysis, whether we think of these as ‘hyper reading’, ‘distant reading’, or ‘algorithmic criticism’. In this connection, it is worth noting that Ramsay has himself drawn

on McGann's and Samuel's notion of deformance to argue for the continuity of computational and critical analysis against a prevalent view that would oppose them, and that McGann and Samuel were themselves seeking to register some of the critical possibilities opened up by the use of digital forms of enquiry (32-57). Yet this has other implications, especially for our sense of what might be the appropriate form for such criticism. Our multiversal map of literary Edinburgh will not just reproduce a single, and already familiar profile – there will be no simple, flat surface on which all our data can be arrayed at once, and the whole apprehended in a single, monocular vision. In allowing the apprehension of many patterns of toponym usage, within and across an unprecedented range of canonical and non-canonical sources, the critical possibility of our visualisations will not be exhausted in any one query or image. On the one hand, this will make our dataset and interface a resource for critics who wish to treat it precritically, as it were – as a kind of index, concordance or gazetteer. Yet beyond that the project seeks to explore the possibility that just this spatialized, mappable, diegetic cityscape, this mobile, retraceable, generative surface, might constitute a multiform and open act of critical fidelity to a place – in Stevenson's words – old in story.

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