Editorial
Cartographies of Fictional Worlds

CARTOGRAPHIES OF FICTIONAL WORLDS

The current issue of *The Cartographic Journal* features and showcases a field which might be more or less unknown to the cartographic community: literary geography.

It all starts with the supposedly simple questions: Where is literature set and why there? As we all know through our personal reading experience, there is an abundant wealth of real-world landscapes, regions and cities which have been transformed into settings in fiction: One has only to think of the footprints famous authors left literally on the ground – Thomas Mann's atmospheric description of Venice will be forever connected with the fairytale-like Italian lagoon city; the Brontë sisters have put their mark on a wild, windswept, marshy part of northern England – today almost officially called Brontë country, covering West Yorkshire and the East Lancashire Pennines; the geography of London, past and present, is inextricably linked to Dickens' colourful storytelling. John Steinbeck created a fictional California of great and lasting power. Many tourists with an interest in culture and literature still carry Homer's 'Odyssey' in their pockets when they intend to explore the Mediterranean Sea and the Greek islands. The list of examples could be endless…. The point is that there is a rich geographical layer hovering, so to speak, above the physically comprehensible world: we call it the geography of fiction.

The nascent research area of **literary geography/ literary cartography** aims at visibly rendering such complex overlays of real and fictional geographies. But how to adequately map fictional settings? And, even more importantly, which new insights can be gained from such an approach?

Situated at the interface of literary theory and mapping concepts, this research topic has to be seen, first and foremost, as a truly **interdisciplinary challenge**. The papers presented in this issue offer a whole range of inspiring, sometimes radical answers to the abovementioned questions.

LITERARY GEOGRAPHY AND LITERARY CARTOGRAPHY

Initially, some explanations concerning the distinction between the terms 'literary geography' and 'literary cartography' might be helpful. One starting point for literary geography – the term first appeared in a book by

William Sharp, published in 1904 (Sharp, 1904) – is the observation that fictional plots are set along a scale of localisations that range from the realistically rendered, highly recognisable to the completely imaginary. The geography of fiction follows its own distinct rules, since literature can create any space, without physical restrictions. The distinctive tools of literary writing include, to name just one option, the ability to destabilize taken-for-granted geographies. It belongs to the ambitious goals of literary geography to find out more about those rules and to demonstrate that the spatial dimension of fictional accounts can actually be one key to the understanding of the whole plot.

But literary criticism has been struggling with the question of how best to depict literary spaces on maps in an adequate and objectively accurate manner for more than 100 years (for a historical overview, see Piatti, 2008 and Döring, 2009, both with map samples – but a comprehensive history of this approach still needs to be written). Taking this as a background, the actual *literary cartography* can be looked upon as a subdiscipline or an ancillary science. Obviously, the two terms are linked in a logical, hierarchical way: while literary geography is the overall *topic*, literary cartography provides one possible approach by using a symbolic language; spatial elements of fictional texts are translated into cartographic symbols, which allows new ways in exploring and analysing the particular geography of literature (it has to be said that this is by far not the only promising method to deal with topics of space in literature and literary geography, since Moretti points out, and justifiably so, that some of the greatest studies ever written on space and narrative do not include a single map, see Moretti, 2005, p. 35).

When looking at two quotations from famous modernist writers, the area of tension in which literary cartography is situated becomes immediately evident. Virginia Woolf stated in her 1905 essay *Literary Geography*: 'A writer's country is a territory within his own brain; and we run the risk of disillusionment if we try to turn such phantom cities into tangible brick and mortar…. to insist that [a writer's city] has any counterpart in the cities of the earth is to rob it half of its charm […]' (Woolf, 1986, p. 35). On the contrary, James Joyce 'answers' Woolf's statement with the following words, during a conversation with Frank Budgen: 'I want to give a picture of Dublin so complete that if the city one day suddenly disappeared from the

earth it could be reconstructed out of my book' (Budgen, 1934, pp. 67–68).

It goes without saying that literary cartography follows the 'Joyce-line'. One of its traditional starting points is precisely the assumption that a large part of fiction indeed refers to the physical/real world, called geospace in the following paragraphs, by using an almost infinite variety of options to do so. Among them is, for instance, the use of identifiable toponyms or the dense description of existing spaces and places. As Malcolm Bradbury observes in his *Atlas of Literature*, '[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: Introduction, unpag.). As already stated above, literature is also able to create any other space, without any limitations – imaginary realms, invented cities, countries, continents, entire stellar systems…. Those are the chapters of literature featuring no reference towards geospace at all. In-between, one can find various degrees of transformed settings, spaces and places in fiction which are still linked to an existing geospatial section but are alienated by using literary means such as re-naming, re-modelling or overlaying. One example: in the counterfactual novel *Fatherland* (1992) by Robert Harris, the plot starts in 1964 and the reader faces from the first lines, a familiar, but at the same time, massively transformed space: Berlin as Hitler's 'Reichshauptstadt' with gigantomanic buildings and 'Victory' alleys has become reality, since the book evokes a fictitious world in which Hitler has won the Second World War. Such a partly real, partly invented world can be described and analysed in words or, of course, displayed as a cartographic product (see Piatti and Hurni, 2009).

Having said all this, literary geography along with literary cartography is still a wide and 'fugitive field' as Stableford noted a couple of years ago (Stableford, 2003, p. xxxv). In its dynamic development and expansion, it offers countless possibilities for experiments and scholarly freedom.

THE CURRENT SITUATION

From its beginnings (see, for example, Sharp, 1904; Nagel, 1907), literary cartography can be divided into two main branches, closely linked: the mapping of a single text and its spatial elements and the mapping of groups of texts or aspects related to the texts, leading ultimately to statistical and quantitative approaches.

Only lately, the fabulous possibilities of a digital, interactive, animated cartography with database support have been discovered. It is not without reason that for almost two decades now, for the latter issues (quantitative approaches) some literary scholars have detected the benefits of databases linked to mapping systems.

But if a literary critic wishes to explore such techniques, experts from the field of GISsciences are desperately needed. In short, for a long time, there were far more ideas regarding literary geography than mapping solutions available. This is due to the fact that – with some rare exceptions – the majority of literary critics tried and still try to design those maps by themselves and hence were tied to conventional, static, printed mapping products. From the cartographer's point of view, the problem is not the restrictions that accompany analogue maps, but the obvious (and understandable) lack of knowledge and know-how when it comes to cartographic visualisation modes.

Suddenly, the tables might be turned, and the formerly weaker position – cartographic solutions – could subsequently become dominant: if this is indeed the case, then the literary scholars have to revisit key issues of literary geography, such as: What elements of the literary space can be mapped and what might prove to be unmappable (and should consequently be accepted as such)? Do we need different cartographic representations for different epochs or genres, e.g. realistic fiction and modernist texts, for narrative texts and poetry? Clearly, the theory of a literary geography has to be balanced and adjusted regarding the overwhelming means of an advanced cartography.

AMBIGUITIES AND UNCERTAINTIES

There is also another side: it cannot be ignored that literary cartography is also a hotly debated and contested method, always confronted with a number of critical remarks.

Some literary scholars remain highly sceptical of the intellectual merits of geographic information systems (GIS) or other cartographical/geographical approaches. Mostly (and still) scholars from the humanities lack computer and programming skills and are inexperienced in the use of digital data – since this is *not* what critics usually do. Instead, they produce so-called secondary literature, interpretations and comments covering various aspects in works of fiction such as the symbolic meaning of objects, the psychology of characters, the political and historical background of a plot and so on, usually carefully balancing between several possible streams of interpretation. There, *ambiguity* of a reading is a sign of quality; here, in developing a system of signs and symbols for literary cartography, it becomes a problem.

Also, the fact that literary cartography (even when database-supported) relies on individual readings, needs to be problematized: one realizes that literary cartography – already in its preparatory stage – has to deal with more than one uncertainty factor, both in the primary material and on the methodological level. First, the texts themselves do not always provide distinct information concerning their topographical and geographical

dimensions; second, different interpreters can choose different viewpoints: '[…] the analysis of literature is traditionally seen as a subjective procedure. Objectivity, based on empirical evidence, does not seem to figure prominently in studies that elucidate meaning from literary texts' (Rommel, 2004, p. 88). Anne-Kathrin Reuschel and Lorenz Hurni's paper focuses exactly on how to deal with uncertainty already existing in the data collecting process and consequently in symbolising the literary settings. They identify not less than five sources of uncertainty when one tries to map fictional spaces: the artistic freedom of the author; the semantic and linguistic varieties in describing places and spaces; vague geographical concepts themselves; reading variations by different readers; and finally, the visualisations which need to make some things clearer than they actually are.

To a certain extent (which can be only partially controlled), every scholar might come to different conclusions and hence, to different resulting maps. Once the maps have been published, there are also various ways of reading and understanding them. The New York described in Franz Kafka's fragmentary novel *America* (published posthumously in 1927) features a whole collection of topographical mistakes. It can be mapped, but the questions the map would ask are: Was Kafka unable to get detailed and correct information? Or, on the contrary, did he describe a distorted New York on purpose? The latter would be the far more interesting assumption. In short, also a seemingly scientific approach such as database-supported mapping of literature in fact includes an unpredictable under-current of hermeneutic ambiguities and uncertainties.

MAIN CHALLENGES OF LITERARY CARTOGRAPHY

Some spatial aspects of literature will prove to be unmappable – Robert Stockhammer draws a convincing line between mappable and unmappable fiction (Stockhammer, 2007, pp. 67–88). But even with mappable fiction, a variety of problems occur. While some fictional plots are clearly anchored in existing regions, villages and cities, others are hard or even impossible to localize, whereby the settings are located 'somewhere', with no precise correspondences to a section of geospace. If the text works explicitly against a precise location, only reading experience along with detailed knowledge of a possible 'real-world counterpart' allows the researcher to point out a likely *position* or *zone* on the map.

Vanished places in geospace are another category which calls for expertise, especially when it comes to fast changing urban spaces: 'Dickens, as might be expected, posed a unique challenge to literary cartographers […]: the London he wrote about was fast disappearing' (Bulson, 2007, p. 32). According to the theory that

literary geography deals with the referentiality between geospace and fictional space, text experts have to decide whether an official building, street or city district has disappeared from the geospace or was never there, in which case it has to be seen as an invention of the author.

How to map paths and routes of fictional characters through fictional space? This tricky problem can be summarized as follows: Whatever is depicted on the map, it is *never* what the text tells us. Literature is full of journeys and movements through space. But in many cases, the journey itself is not part of the narrative and left out as a blank (it is not described how a character actually leaves point A and arrives at point B). Hence, the use of 'straight lines to connect two points on a map can lead to a misleading visualisation of the textual representation of spatial experience. That is to say, the straight line methodology fails to represent the particularized geo-specific movements recorded by writers in their textual accounts of place. How can a literary GIS, then, represent the ways in which a writer articulates his or her movements through a particular topography? How can GIS technology map out specific, non-linear routes through space?' (Lancaster University, 2009).

A WIDE RANGE OF TOPICS

The authors who contributed to this issue took up those and other challenges. Although one idea in literary geography is to unify parameters and symbols (if we aim at a comparative literary cartography, as Ungern-Sternberg claims for example, then we 'have to agree on criteria, scales and methods of how to transform the literary rhetoric of space into a pictorial system'; von Ungern-Sternberg, 2009, p. 248). Another thread became clearly evident in this collection of essays: the need for flexibility, the freedom of experimenting, imagination and even a certain degree of academic bravery. The range of maps presented in this special issue is already impressive, from hand-painted pieces of art with the poetic appeal of the collage (Jennifer Jenkins and Christoph Weber) to highly sophisticated automatically rendered statistical surfaces, based on density algorithms.

Jonathan Bollen follows the traces of Ibsen's famous play 'A Doll's House' within a unique social and theatrical realm. In this paper, a global network becomes visible which has been unseen before: How the material/theme becomes disseminated on a worldwide scale. Bollen and his co-author Julie Holledge prove how valuable cartographic renderings might be in telling such a story through time and space in cultural history.

Geo-Media is Annika Richterich's topic – a number of novels available online make use of online mapping systems, most of them connected in one way or the other to the services of Google Maps. The question is how effective, helpful, attractive are such maps

accompanying a story? Richterich points out the current limits, but sees also great potential in further technical developments. As for the literary plots, she clearly marks a problem: topographically organized online novels make exclusive use of *existing* places and locations, since Google Maps/Google Earth and other comparable services obviously do not include the realm of the imaginary. In this respect, the map is indeed the limit for the author's fantasies.

David Cooper discusses – via the example of a children's adventure novel – productive intersections of literary geography and critical cartography, offering a substantial reading of the multilayered mapping processes (producing maps/using maps) connected to this book. Finally, he opens up the very pleasant and promising perspective of an advanced literary cartography which might move 'from desktop GIS to technologies which can be used in-the-field'.

Anne-Kathrin Reuschel and Hans Rudolf Bär, both involved in the research project 'A Literary Atlas of Europe' at ETH Zurich (as are the authors of this editorial), show database-supported methods of mapping literature. While Reuschel deals with the mapping of single texts, Bär focuses on statistical surfaces. The same database along with its contents is used for both approaches and in both cases, the maps are generated automatically (which confronts the cartographers with many problems regarding symbology, scale, labelling – to name just a few points). And in both cases, a newly developed symbology, tailor-made for the needs of literary geography, is introduced. It has to be said that for the prototype of the literary atlas, it will be crucial to combine qualitative and quantitative evidence and to switch effortlessly back and forth between them.

Eva Erdmann presents the outline of a 'World Atlas of Crime Fiction' – a literary genre that is loaded with spatial elements: just think of concepts such as the *crime scene* and the *escape route*. Erdmann's promising atlas project aims at nothing less than a redefinition of the genre with the help of cartographic elements.

Ina Habermann and Nikolaus Kuhn join forces – as a literary scholar and a trained geographer – in order to have a closer look at Tolkien's famous invention 'Middle-earth'. What they discover, in terms of the construction of cultural landscapes *in fiction*, is astonishing. In a combination of close reading and analysis with GIS tools, they found significant mismatches between climate and vegetation in some parts of Middle-earth (compared to the conditions in real-world counterparts), particularly regarding the forests and woods. Those shifts could be brought productively back to their reading, in a circular process, resulting in novel findings about ecology in Middle-earth and Tolkien's ideas of sustainability inserted in his fictional writing.

All contributions share a common ground, which is always to regard maps as intermediate results, sources of inspiration, generators of ideas for further research. Literary geography and literary cartography are never one-way tracks which end with the mapping products as a final result: once maps have been produced, one has to return to the literary texts, again and again.

AN OUTLOOK

Literary cartography stands at the brink of a new era. It is more than apparent that many researchers are currently occupied with similar questions regarding literary geography and literary cartography – needless to say, this special issue presents only a small extract. What would we like to see in the future? A few examples: How a fictional space *gradually evolves*, step by step according to the plotline, by slowly building up a network of settings (this would call for a link between narrative/narrated time and the spatial dimension of a text which is a hugely complex matter)? Which settings bear *most meaning* in terms of the plot (maybe one could think of morphed or distorted maps, where in a fictional space, Paris as a major setting becomes inflated like a balloon and London as a minor setting shrinks to a point)? The *hits* on a setting – how often do characters (and which ones?) 'touch' or visit a certain setting (while frequent hits do not automatically mean that there is also major meaning attached to a particular setting)?

After not only studying various earlier stages and examples of literary geography but also experimenting with a prototype of 'A Literary Atlas of Europe', we came to the conclusion, that in the end, only GIS technologies, i.e. digital, interactive and animated mapping, are able to cope with the complexity of the literary space and hence might bring literary cartography one step further. GIS technologies offer options such as cartographic layering and comparison of maps side by side, the toggling between micro- and macro-cartographies (the perspective of story-telling can quickly change from an almost microscopic, at least local view to an international level), the calling up of additional information in the sense of texts, text lists, diagrams, information graphics and so on. On the other hand, especially the literary scholars have to act with caution while facing the seemingly unlimited and tempting possibilities of today's interactive cartographic systems: not everything that *could* be done through the power of cartography *should* be done and also makes sense in terms of literary studies. There, a fine balance has to be negotiated and established. But if both disciplines – literary studies and cartography – join forces successfully, then a bright new horizon opens in front of us: literary cartography might offer new possibilities in writing, explaining and the teaching of literature.

LITERARY GEOGRAPHY – WHAT IS IT ALL ABOUT?

For the cartographers, it means dealing with new challenges, with a number of uncertainties and even with the unmappable as described above. For the literary scholars, it means abandoning – at least to a certain extent – their autonomy. Due to the change of media, from written comments to maps, they enter a territory of rules made by others, rules which enable a spatial analysis of fiction. For both disciplines, it is a highly demanding task.

Last but not least, one has to ask about the actual meaning of literary geography and cartography. The answer we would like to provide is two-fold (and we are certain that there could be many more answers to this question!):

First and foremost, the mapping of fiction allows a better, deeper understanding of how fiction works – the mapping process supports the interpretation; it opens new horizons for literary scholarship, because some maps make aspects visible which have been invisible before.

The second part of the answer goes beyond the academic interest; we would dare to speak of a general benefit: A literary-geographical reading can change our understanding – not only of books, but of the world we live in. It creates knowledge. Through literary geography, we learn more about the production of places, their historical layers, their meanings, functions and symbolic values. If places emerge from a combination of real elements and fictional accounts, then literary geography and literary cartography can work as a very effective eye-opener. An organisation as influential as UNESCO may be taken as an example. Among the types of landscapes worthy of the World Heritage label are also so-called **associative cultural landscapes**: 'The inclusion of such landscapes on the World Heritage List is justifiable by virtue of the powerful religious, artistic or cultural associations of the natural element rather than material cultural evidence, which may be insignificant or even absent' (UNESCO, 2011). This definition – a layer of cultural associations without direct material evidence – is perfectly applicable to fictionalized cities, regions and landscapes which are subject to literary geography and literary cartography. Against this background, literary-geographical methods can provide powerful analytical tools for exploring the increasingly blurred boundaries between fiction and reality.

A PLEA FOR AN INTENSIFIED INTERDISCIPLINARY EXCHANGE

As guest editors, we would like to thank the authors and co-authors who have contributed to this special issue. Doubtless, it has been an intense experience for everyone involved, since every paper (written on invitation) first went through a pre-review and after that through the actual peer-review process (carried out in parallel by experts from the scene of literary scholarship and from the fields of cartography/geography/GIS). In some cases, the reviewer with a background in literary studies was excited, while the geographer/cartographer remained more than sceptical. In other cases, it was exactly the other way round….

We are truly grateful that the reviewers took the time to deal with the papers and provided such meaningful, extensive comments. In the following stages, it was a real pleasure to witness how the papers slowly got into even more precise shape by carefully following advice regarding improvements, additions, sharpening of definitions and so on. In fact, the whole editing process is a proof of how much results and presentations can benefit from an intense interdisciplinary discussion, where authors, co-authors, reviewers and editors first have to prepare a common ground and come to an understanding concerning their very use of terms and concepts (while a more or less empty map can be of particular interest for a literary scholar, because he or she realizes that geography does play a rather marginal role in these novels or that space bears such an indefinite character, the cartographer will not be happy with that blank space…).

The idea to compile a *Cartographic Journal* special issue dedicated to the Geography of Literature dates back to the end of the year 2009. During the whole project period, we were lucky to experience tremendous support from the editor-in-chief, Kenneth Field, and from the production editor, Nicholas Hunt.

We hope that our readers will enjoy the results of this collective effort!

Barbara Piatti and Lorenz Hurni
Institute of Cartography, ETH Zurich

BIOGRAPHICAL NOTES

Barbara Piatti has obtained her PhD in literary studies in 2006 and is currently working as a project leader at the Institute of Cartography, ETH Zurich. She is specialized in the theory of literary settings and their interactions with real places and spaces, and has published and lectured widely about methods of a new literary geography. As visiting researcher, she has worked at the universities in Stanford, Prague and Kiel. Since 2006, she and Lorenz Hurni have been leading a research project, dealing with a prototype version of an interactive 'Literary Atlas of Europe',

organized as an interdisciplinary network with teams at ETH Zurich, Charles University, Prague, and Georg August University, Goettingen, and other international partners. In 2008, she was elected co-chair of a newly-founded ICA-working group dedicated to 'Art and Cartography', which became a commission in 2011. The academic year 2010/2011 she spent as a fellow at the Wissenschaftskolleg zu Berlin, Institute for Advanced Study.

Lorenz Hurni is Professor of Cartography and director of the Institute of Cartography and Geoinformation at the ETH Zurich since November 1996. He is managing editor-in-chief of the Atlas of Switzerland, the Swiss national atlas. From 1983 to 1988, he studied Geodesy at ETH Zurich. As assistant at the Institute of Cartography and Geoinformation, he implemented a digital cartographic information system for teaching and research purposes. In his PhD, he developed methods enabling the entirely digital production of topographic and geological maps, and derived three dimensional visualisations. Thereby, he developed the first program for the automatic generation of cartographic cliff drawings. From 1994 to 1996, he was project leader for computer-assisted cartography at the Federal Office of Topography (swisstopo) in Wabern, Switzerland. His current research focus is on cartographic data models, tools for the production of printed and multimedia maps, as well as interactive, multidimensional multimedia map representations. He is a member of numerous national and international scientific and professional commissions and of the 'Leopoldina – German Academy of Sciences'.

REFERENCES

Bradbury, M. (ed.). (1996). **The Atlas of Literature**, De Agostini Editions, London.

Budgen, F. (1934, reprinted 1960). **James Joyce and the Making of 'Ulysses'**, Indiana University Press, Bloomington.

Bulson, E. (2007). **Novels, Maps, Modernity. The Spatial Imagination, 1850–2000**, Routledge, New York.

Döring, J. (2009). 'Zur Geschichte der Literaturkarte (1907–2008)', in **Mediengeographie. Theorie-Analyse-Diskussion**, ed. by Döring, J. and Thielmann, T., pp. 247–290, transcript Verlag, Bielefeld.

Harris, R. (1992). **Fatherland**, Hutchinson, London.

Lancaster University. (2009). Mapping the Lakes – A Literary GIS, http://www.lancs.ac.uk/mappingthelakes (accessed 3 October 2011).

Moretti, F. (1998). **Atlas of the European Novel 1800–1900**, Verso, London.

Moretti, F. (2005). **Graphs, Maps, Trees. Abstract Models for a Literary Theory**, Verso, London.

Nagel, S. R. (1907). **Deutscher Literaturatlas. Die geographische und politische Verteilung der deutschen Dichtung in ihrer Entwicklung nebst einem Anhang von Lebenskarten der bedeutendsten Dichter**, C. Fromme, Wien.

Piatti, B. (2008). **Die Geographie der Literatur. Schauplätze, Handlungsräume, Raumphantasien**, Wallstein, Göttingen.

Piatti, B. and Hurni, L. (2009). 'Mapping the ontologically unreal: counterfactual spaces in literature and cartography', **The Cartographic Journal**, 46, pp. 333–342.

Rommel, Th. (2004). 'Literary studies', in **A Companion to Digital Humanities**, ed. by Schreibman, S., Siemens, R. and Unsworth, J., pp. 88–96, Blackwell Publishing, Oxford.

Sharp, W. (1904). **Literary Geography**, Pall Mall, London.

Stableford, B. (2003). 'Introduction', in **Cyclopedia of Literary Places**, ed. by Rasmussen, K. R., Shurman, R. B. and Stableford, B., Vol. 1, pp. xxxv–xlii, Salem Press, Pasadena, CA.

Stockhammer, R. (2007). **Kartierung der Erde. Macht und Lust in Karten und Literatur**, Wilhelm Fink, München.

UNESCO. (2011). http://whc.unesco.org/en/activities/477/#2 (accessed 3 October 2011).

von Ungern-Sternberg, A. (2009). 'Dots, lines, areas and words: mapping literature and narration (with some remarks on Kate Chopin's "The Awakening")', in **Cartography and Art (Lecture Notes in Geoinformation and Cartography)**, ed. by Cartwright, W., Gartnerand, G. and Lehn, A., pp. 229–252, Springer, Heidelberg.

Woolf, V. (1986). 'Literary geography', in **The Essays of Virginia Woolf**, ed. by McNeillie, A., pp. 28–42.