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Performative and Embodied Mapping

C. Perkins, University of Manchester, Manchester, UK

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Glossary

- G0005 **Cartography** Practices, processes, and discipline concerned with transforming and representing a real world in a mapped form.
- G0010 **Corporeal** Appertaining to the body as against the mind.
- G0015 **Ethnography** Qualitative methodology based on in-depth field-based contextual research.
- G0020 **Performance** Doing action and work.
- G0025 **Performativity** A nonfoundational approach to the production of identity, grounded in action and practice.

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Introduction

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People have always made maps and employed them to make sense of their worlds. Their maps communicate information in symbolic forms, which we read and interpret. What we make of them varies. For Western society, the map mostly now stands as a mirror-like representation of the real, a factual tool to help us to navigate, plan, and control the world out there. Employed to chart explorations, administer cities, foster trade, bound nations, regulate property transfer, locate people, places or events, and to link us to the world, the map as artifact is a practical device – an outcome of a problem-solving technology. In our time the artifact carries with it an aura of authority: what else would one expect from a functional mechanism?

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The processes that wrap around the object have been regarded as being less significant than the map itself. Until recently, the history of cartography was the history of mapmaking, in which accuracy constantly improved, technologies advanced, innovation took place, and from which the discipline of cartography emerged after World War II. Cartographic research mostly focused on a very narrowly defined set of practices: the goal was a normative improvement of map design, in isolation of any social context. The scientific maps produced by cartographers were the maps that mattered, and these were taken for granted; all other mapping was ignored or demonized. Social processes underpinning this progressive narrative went largely unnoticed until the last decade of

the twentieth century, and the rich diversity of everyday mapping was marginalized.

Since the late 1980s, however, there has been a major shift toward considering mapping processes. Some are technical, within the ambit of traditional cartographic research. Maps are surveyed, derived, drafted, copied, and scanned; they may be a source for other mapmakers; digitized, and rescaled; information may be selected for inclusion, generalized, and symbolized. An artifact may be produced from these practices, and then a whole series of other things happen around it. The map might be folded, or rolled; converted to another file format; and embedded with other media. It might be packaged, marketed, sold, bought, used, stored, collected, reused, thrown away, or recycled. The cultural uses of mapping are particularly complex: it is read in different ways in different contexts, but the same map may mean different things. It might fire the imagination, inspire a revolution, plan a journey, make money, or teach moral values. Meaning is constituted in the actions that mapping processes call into being. So the performative and embodied mapping characterized in this article is both dynamic and enacted. The argument focuses upon the ways that people deploy mapping behavior and artifacts, and how these might be related to more abstract theoretical constructs such as Butler's notion of performativity. The cultural shift toward practice and performance forms its chief focus.

The Turn toward Practice

In the last decade of the twentieth century, there has been a shift in the humanities and social sciences from considering texts as the bearers of culture, toward performative ways of knowing the world, in which the dynamic aspects of culture matter. New ways of understanding the world have emerged from theater studies, anthropology, environmental psychology, the philosophy of language and linguistics, sociology, science studies, visual culture, and art history and these have increasingly been employed to interpret mapping. The philosophical shift away from representation, toward action, has been paralleled by a greater contextual concern. Relations and flows in a network are more important in this approach than entities and their properties.

2 Performative and Embodied Mapping

Contextual approaches to mapping have increasingly emphasized the interplay between history, geography, and social or literary studies. The changing ways in which mapping has 'worked' in different contexts have shifted the emphasis from a study of artifacts, to a much more ethnographic concern with practice and the relations of mapping performances to other actors and actants.

P0025 During this change, fields of study have been reshaped. Mapping is being rethought in interdisciplinary endeavors, which reject long-accepted binary distinctions. New concepts have emerged, with mapping theorized as performative, emergent, narrated, and affectual, or as networked flow. These changing ways of thinking about mapping focus around performance and embodied ways of understanding processes and a shift toward ethnographic ways of understanding.

P0030 Judith Butler's notion of performativity offers an important way of understanding mapping practices. Butler argued that identities are constituted through what people do, rather than who they are, and that bodily practice is central in this process. She recognized that unspoken psychoanalytical factors contribute to the formation of subjects, but argued social norms and historical contexts also strongly affect action, through the operation of discursive power and past performative utterances. We never quite ever conform to the ideal norms around which performativity acts, so individual agency and resistance are still possible. A performative approach sees mapping as not only taking place in time and space, but also capable of constituting both. New worlds are made every time a map is deployed. Del Casino and Hanna argue that the practices of mapping might be understood using this construct. They suggest that mapping is always being made and consumed, and that, following Butler, ethnographic work should move beyond the binaries author/reader, body/society, and subject/object. Instead, they argue, spaces and mapping co-constitute one another, produced by, and productive, of myriad corporeal practices. Tourists consume a map of historic Fredericksburg in conjunction with other texts, with other tourists and workers on the site, and through bodily practice as they move around. Meaning depends on action. They imagine the place before they go, or recall their visit after; their gaze not only deploys the map during the visit, but also produces new geographical imaginings. The map is never complete, like identity it may be temporarily fixed, but it is always fluid and contested, deployed in new ways. A hybrid mapping emerges from this process, at once produced and consumed, not only cultured but also natured.

P0035 Other theorists also argue that mapping practices call spaces into being, and that maps themselves are ontogenetic, rather than ontic. Instead of an emphasis upon the hybridity, practice is understood as always changing.

Maps are always being called into being, to perform particular tasks, only existing when they are deployed, of-the-moment, dependant on a local context. Focusing upon the transformational qualities of practice, Dodge and Kitchin draw on the concept of transduction to explain how we constantly solve relational problems during all phases of mapping behavior. Like Hanna and Del Casino they stress all mapping involves remapping: making and use can never be separated. They then deploy the notion of technicity, to explain mapping practice as an event involving people and technology, with processual outcomes, always emergent, in which representation is mutable.

For some, this relational and contextual turn has been theorized as Deleuzian. This kind of approach also reflects a philosophical shift toward mobility, and away from essence, in which mapping is imagined as a suite of cultural practices involving action and affects. James Corner recognizes that this bestows an agency on mapping, embodying it with creative power. Instead of a mere tracing of the world, mapping becomes rhizomatic. It becomes a powerful, open-ended, indeterminate process that unfolds and makes new places and actions.

Some researchers have used this kind of approach to focus on the significance of movement in the construction of identity, and used this to critique a representational approach to mapping and way finding. A more-than-representational approach to mapping becomes possible. For example, Tim Ingold repositions mapping as storytelling about journeys, in which the map becomes an inscription, that possibly emerges from a re-enactment of mobility, rather than reflecting the existence of any preexisting cognitive structure. Others have stressed the affectual qualities of mapping practices focusing on the power of practice to move, and on the emotional geographies that emerge from performing mapping and geovisualization.

Mapping is also mobile and networked, an outcome of a technology that allows cultural messages to be transformed and shared. The development of 'actor-network theory' (ANT) in science studies encouraged a consideration of the transformative potential of technologies, and also focused attention on empirical consideration of the performance of mapping. Flows between different actors and actants can be traced and a thick description of the context can lead to a relational understanding of mapping practice. Researchers not only must trace the inscriptions left behind by different actors, but also need to carry out ethnographic work in the field. Research can then chart the translations, through which mapping works, to reveal the ambiguities of mapping practice.

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S0015 **Performative Methods**

P0055 Scientific practice seeks to control empirical investigation, simplifying complexity and establishing carefully regulated experiments into narrowly defined aspects of mapping, with a predominantly quantitative methodological emphasis. Discursive approaches, in contrast, focus largely upon analysis of the map as a textual source, amenable to critical approaches, many of which draw inspiration from qualitative ways of knowing the world. In contrast, the turn toward performance implies a change in research strategies. Research is starting to employ ethnographic approaches to carry out empirical investigations of everyday mapping practices in the field. An ethnographic approach sees mapping as a social activity, rather than an individual response. By observing and participating in the performances around mapping we can explore its relations to identity, how different spaces are co-constructed, and the ways in which people behave when carrying out mapping tasks. Ethnomethodological work is beginning to yield rich descriptions of the actions preformed in, and around, the mapping process. Brown and Laurier, for example, chart the social use of mapping in everyday car and tourist navigation activities, in which the mapping process is cast as a complex negotiation of identity in a social context. Map reading depends upon the context of the task: ethnomethodological observation reveals much more at stake than individual cognitive map reading (Figure 1). The previously taken-for-granted social actions and interactions in the field are recorded, revealing complex everyday behavior. Film, video, or photo diaries can be coded, translated, and interpreted, and a rich empirical



Figure 1 Mapping as a social activity.

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exploration of actions becomes possible, if the researcher is deeply immersed in the mapping context. Situated and locally contingent ways of approaching mapping also depend on auto-ethnographic methods and a reflexive appreciation of the role of the researcher in practice. Mapping narratives are there to be told if mapping becomes a set of social actions.

The Performative Tradition

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P0060 In the multi-volume *History of Cartography* project, a catholic definition of mapping has been popularized, which goes well beyond the Western metrical tradition of the map as an object. Instead, Woodward and Lewis argue that mapping comprises three different, but interrelated traditions: one grounded in material culture leading to the creation of real maps, and which previously dominated research; a cognitive tradition in which mapping is imagined, deployed as a mental image to help make sense of the world; and a social tradition in which mapping is performed, by telling a story, recalling a dream, performing a dance, singing a song, or enacting a ritual. Spatial and social meaning in this tradition is communicated through movement, gesture, words, music, narrative, and action. Performative mapping may make ephemeral traces, such as chalked map on a wall, or a route mapped in soft mud, but is often strongly embedded in cultural practice. So the performative tradition reinforces a more symbolic role for mapping. Mapping comes to embody cultural values, and reinforces particular practices. It becomes a powerful agent, formulating social cohesion or difference, influential in how we live in the world and form a sense of place.

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This performative tradition is most obviously enacted in indigenous mapping, in recent Western technological interactivity, and in artistic practice.

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The Indigenous Tradition

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P0070 Most research in this performative tradition emphasizes cultures outside of existing Western orthodoxies. Mapping traditions either reside in evidence from the past, or are uncovered by anthropologists engaging with surviving marginalized practice. Evidence of nonmaterial mapping is less likely to have survived, or is harder to establish. It is the artifactual maps that have been preserved and institutionalized.

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P0075 Nevertheless, an impressive amount of evidence survives about the history of performative cartography. Important comparative studies have been carried out and we now appreciate the rich performative tradition from first peoples in the Americas, Africa, Asia, Australasia, the Arctic, and the Pacific. A holistic and unified worldview is often revealed in these performative indigenous mappings, which avoids the dualisms of modern material

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4 Performative and Embodied Mapping

maps. Art and science merge in practice; myth and ritual make the mapping, but are also made by it; landscape and the event are not separated; time and space become relative and culturally enacted; and religious and secular beliefs combine.

P0080 For example, aboriginal mapping in Australia operates with different conceptions of time and space to those that govern Western maps. Song lines, or the tracks made by the ancestors across the continent in the Dreaming, are celebrated and perpetuated in art, dance, and storytelling. They serve as a complex and practical oral tradition, not only facilitating way-finding, but also symbolizing an individual's obligation and reciprocal relationship to the land. Other performative traditions also serve practical and more abstract cultural roles, without recourse to direct representation of the world. For example, Melanesian navigators were able to travel vast distances across the Pacific, identifying and locating tiny atolls. In the Marshall Islands stick charts served as part of a performative and heuristic navigational tradition. The charts were at once indexical and egocentric: they served as a framework studied before a voyage, placing an individual in relation to an abstract grid, and allowing navigators to learn about swell patterns that might be encountered on a voyage. Way-finding on the journey depended upon an embodied experience, a combination of sensing the refraction of swells in response to changing bathymetry, and also celebrating memory.

P0085 Encounters between local performative traditions, and modernist colonial representational mapping, have also been well documented. In many cases it is only through these encounters, that evidence has survived of other traditions. Of course the performative, oral tradition may only be documented through a Western written heritage, so historians have had to be cautious in their interpretations. Contemporary ethnographic research into performative indigenous cartographies is increasingly considering non-navigational and metaphorical relations between maps as objects, and more performative traditions, such as the ways in which stories about the world might be related to embodied spatial practice.

S0030 P0090 **Everyday Western Mapping Performance**

Mapping in Western societies is nowadays a ubiquitous and everyday part of people's lives. Maps of the real world vie with imaginary worlds mapped in fantasy novels; media mapping grounds news narratives; journeys are planned; wars fought; and cities imagined. Space is described and knowable. Maps are everywhere in visual culture. The vast majority of mapping experiences in developed Western societies are, however, nowadays enacted through an electronic medium, distributed and shared over the web, viewed on a television, or on stand-

alone personal computers. Technology not only allows much greater control but also makes complex performance the norm. Mapping is now interacted with, and frequently changed, by readers, who are also producers. Printed maps are increasingly customized to meet particular desires, and the published hard copy is increasingly being replaced by the ephemeral display. Animated mapping is now commonplace. People zoom in, pan around a map, and perform simple GIS operations such as selecting a layer. Mass collaborative cartography is performed by a growing number of activists, creating mashups based on Google and other map portals, linking their own location-based data to web-served backdrops (Figure 1). People employ mapping in social situations where it would not have appeared even 10 years ago.

In the past maps largely supported work, rather than play. Specialist printed leisure mapping met particular market needs: a tourist map for holidays, a canal map, a distribution graphic for birders, etc. The printed map formed a backdrop for some board games, around which activities could take place. Or the map jigsaw might be reassembled. Only orienteering mapping was created by users. Playing with maps has, however, changed fundamentally, because of digital interactivity, networking, increasing real income, and new media with which to play. Computer gaming encourages new mapped worlds to be designed, and shared between players, and the design of mapping has itself become a game for many. New outdoor pastimes are emerging around this theme, such as geo-caching, a kind of GPS-based treasure hunt, and geo-graphing, collaborative web-served collecting of photographs of grid intersections.

These shifts toward mass availability, collaboration, interactivity, changing design and content, ephemerality, and play, have led to increases in the number of people mapping. These people are more likely to be part of the map, instead of being its subject. The technology allows greater control and surveillance, but the mapping performances it supports have also encouraged emancipation and individual agency.

Embodied Mapping

In the seventeenth-century heyday of decorative European cartography artists and mapmakers shared similar concerns. The subjective world of the artist employed the map as a scientific device to poke fun at reason: imaginary maps in seventeenth-century novels, the ubiquitous use of mapping metaphors in Shakespearean drama, and satirical images such as the Foolscap World Map critiqued the all-knowing myth of professional scientific mapping (see Figure 2). These critiques are clearly revealed in allegorical mapping, and especially in the genre of embodied mapping.

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F0010 **Figure 2** The Foolscap Map.

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P0110 Embodied maps draw analogies between corporeal form and cartographic depiction of geographic shapes. People came to represent and personify places. Rulers literally appear as the map of their nation, the coastlines recognizably morphing into familiar human forms. The political messages in these embodied maps depend on their context. Elizabethan personification of the Queen as the nation reinforces the power of monarchy; Victorian satirical embodied maps trade on derogatory national stereotypes, supporting imperial discursive constructions of nationality, that speak to Anderson's notion of imagined communities. The genre continues to be popular among modern artists employing mapping in their work. The forms of the body are sometimes represented in a map-like fashion, contoured or gridded, cartographic forms juxtaposed with the subject, in a corporeal contrast. Or else the body may be warped, transformed, and projected, as in the work of Lilla LoCurto and Bill Outcault, where it frames questions about visibility and representation.

P0115 Mapping is also deployed on the body: map tattoos move as muscles ripple, activating the apparently static landscape. Artists working with the visual form have also deployed mapping as clothing to drape around the body, and clothing itself depicts the cartographic form, T-shirts selling places through their outline.

P0120 The body also appears on decorative maps of the early modern period, often juxtaposed to landscapes laid bare for colonial or European conquest. Here the naked, native, female form is often presented as eroticized adornment in the cartouche, reinforcing the narrative and gendered power of the map as a male discourse, naturalized and juxtaposed to clothed male explorers, or symbols of European commercial power.

(E)motional Mapping

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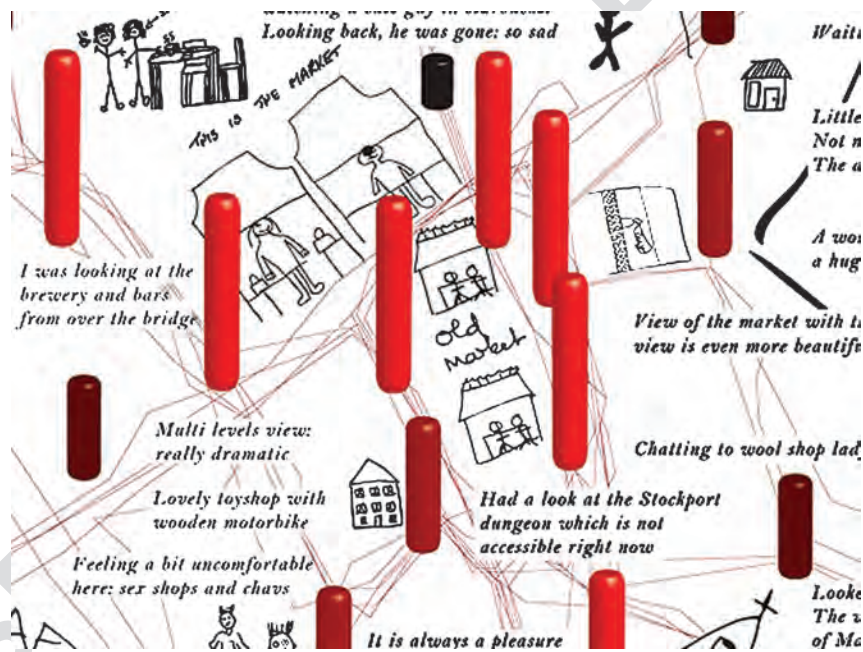
P0125 The increasing academic interest in affect has a parallel in the genre of emotional maps, which chart human feelings onto a cartographical landscape. These maps move their readers, transporting them across terrain, guiding them on an emotional journey through life. The landscape in these maps often serves a moral purpose, mapping out accepted or deviant behavior. The most-studied example of the genre, Madame de Scudéry's *Carte de Tendre* (Figure 3), for example, maps a landscape displaying relationships, and feelings, which acts as a metaphor not only for an imaginary novel, but also for experience. Artists continue to make emotional maps, which depict our lives but also question how we live. For example, Kathy Prendagast's work highlights questions of identity and its links to landscape, by engaging with the political significance of place names. Recently, technology has allowed an even more performative mapping to be enacted within this genre. The World of Experience web site allows users to devise and customize their own emotional landscape, choosing what kinds of thoughts or experiences, feelings or passions, to map, save, and perhaps purchase, through a simple Flash-based application. Corporate versions of this approach are also marketed from www.companymap.com, allowing the quest for profits, to be mapped and customized.

Performative Artistic Mapping

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P0130 Since the 1980s avant-garde artists have increasingly employed mapping in their works, as a device to draw attention to the ways in which we relate to the world. Mapping is now more socially ubiquitous than ever before. It is hardly surprising that artists have deployed

6 Performative and Embodied Mapping

F0015 **Figure 3** Carte de Tendre.F0020 **Figure 4** Emotion map of Stockport.

these images to say things about our society and its values. Surrealists, pop artists, situationists, land artists, conceptual artists, community artists, digital media artists, and live artists have all employed maps in their work, encouraging a performative encounter. Common techniques include: fragmenting known maps and rearranging them in novel ways; juxtaposing far with near; distorting space into a relative or egocentric form; emphasizing

networks and encounters; changing orientation; manipulating projection, scale, and generalization to infringe accepted mapping standards; drawing on standard cartographic tropes such as the border, or naming to question social norms; abstracting and overcoding a known form; employing recognizable country shapes in new ways; shifting novel conceptual frames onto familiar icons such as the globe or tube map; and mapping onto

different media so as to ask questions about the world or our identities.

P0135 Many of these artistic encounters with mapping explicitly focus on the performative potential of the medium. The Situationists in the 1950s and the 1960s enacted a strongly oppositional cartography, moving art from the galleries to the streets of Paris. Guy Debord proposed psychogeographic encounters with the city, and encouraged people to take part in *dérives*, or drifts, walking across urban space, enacting random but creative encounters, that subverted the controlled modernist dream of the city. Situationist maps were published as collages, fragmented, multimediated alternatives to the all-knowing pictorial image on which they were based. This performative cartography has continued to inspire urban opposition ever since. Artists enact and perform many different mapping encounters. For example, Jake Barton creates public installations, which employ mapping as a way of promoting social interaction and collaborative story-telling. His maps in digital archives, street kiosks, and in museum installations lure people and persuade them to tell each other about their own experiences, and in so doing destabilize accepted spatial and social categories. They serve as digital and collaborative memory maps. Live artists also enact mapping, for example, by layering and reenacting one set of alien events against a familiar mapped place. Others devise mapping puzzles to encourage urban exploration, casting the user as a player in an evolving work.

P0140 Locative art is emerging as particularly performative. Digital and satellite mapping technologies supporting networked, portable, location-aware computing devices allow user-led mapping, social networking, and artistic interventions, to be enacted on the canvas of the real world. People can track themselves, across a landscape. Traces can then be overlain in novel ways. In skywriting, for example, the old certainties of land art are subverted: participants walk the shape of letters, or the outlines of animals, and, instead of the landscape itself being shaped as art, unseen messages are overlain onto mapping. Others deploy technologies to chart changing feelings in space: Christian Nold, for example, has devised bio-mapping technologies, merging GPS and biosensors, to produce collaborative emotion mapping (Figure 4). The worlds of art and science are once again converging through mapping.

S0050 Conclusion

P0145 Performative and embodied mapping not only depends on local contexts, but also makes these places. It suggests an optimistic possibility for creating new futures, in which human agency is recovered. Technologies become empowering instead of controlling. The visual can be

deployed in new embodied ways. On the one hand, all mapping can be seen as performative, enacted, and creative: called into being to meet particular human needs, flowing from action, instead of being grounded in power; networked and relational, capable of moving us all. Dead representation becomes alive. On the other hand, some mapping is more likely to be performative. Indigenous traditions reveal a rich diversity of mapping practice, networked technology-led interactive mapping is facilitating newly performative mapping and artistic practices also reveal this performative potential, sometimes in explicitly performative actions, and sometimes in the creation of artifacts that encourage action or change.

Embodied and performative mapping opens possibilities for a coming together of action and theory in critical praxis. This kind of approach to mapping brings the academic world closer to those of the creative artist and activist. It shows how mapping can be at once social and empowering.

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Further Reading

- Corner, J. (1998). The agency of mapping: Speculation, critique, invention. In Cosgrove, D. (ed.) *Mappings*, pp 213–252. London: Reaktion Books.
- Cosgrove, D. (ed.) (1998). *Mappings*. London: Reaktion Books.
- Del Casino, V. and Hanna, S. P. (2006). Beyond the 'binaries': A methodological intervention for interrogating maps as representational practices. *ACME: An International E-Journal for Critical Geographies* 4(1), 34–56. 35. <http://www.acme-journal.org/vol4/VDCSPH.pdf> (accessed Jul. 2008).
- Dodge, M. and Kitchin, R. (2007). Rethinking maps. *Progress in Human Geography* 31(3), 331–344.
- Harmon, K. (2004). *Wish You Were Here: Personal Geographies and Other Maps of the Imagination*. New York: Princeton Architectural Press.
- Ingold, T. (2001). *The Perception of the Environment*. London: Routledge.
- Kwan, M. P. (2007). Affecting geospatial technologies: Toward a feminist politics of emotion. *The Professional Geographer* 59(1), 22–34.
- Perkins, C. (2004). Cultures of mapping: Power in practice. *Progress in Human Geography* 28, 381–391.
- Perkins, C. (2006). Mapping. In Douglas, I., Huggett, R. & Perkins, C. (eds.) *Companion Encyclopaedia of Geography* (2nd edn.) pp 555–571. London: Routledge.
- Pickles, J. (2004). *A History of Spaces: Mapping Cartographic Reason and the Over-Coded World*. London: Routledge.
- Wood, D. and Krygier, J. (eds.) (2006). *Special Issue: Art and Mapping Theme Issue. Cartographic Perspectives* 53.
- Woodward, D. and Lewis, G. M. (eds.) (1998). *The History of Cartography, Vol. 2, Book 3: Cartography in the Traditional African, American, Arctic, Australian, and Pacific Societies*. Chicago, IL: University of Chicago Press.

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- <http://www.acme-journal.org>
 ACME: An International E-Journal for Critical Geographies.
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