

Visual Culture, Photography and the Urban: An Interpretive Framework

Professor Gillian Rose[†]

Abstract

This paper offers a framework for understanding and reflecting upon the various ways that urban scholars have worked with visual representations of city spaces. It suggests that there are three main approaches: representing the urban, evoking the urban and performing the urban. The paper discusses the methodological implications of each of these.

Key words: photography, urban, visual culture, methodology

[†] Department of Geography, The Open University, Walton Hall, Milton Keynes, MK7 6AA, UK Email: gillian.rose@open.ac.uk

©2014 Rose. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/2.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

There is of course an extraordinarily long, rich and complex history of visual representations of the city. From high art, to popular culture, across urban-related professions to the mass media, urban places have been encountered and pictured by all sorts of visual practitioners. The material and affective qualities of urban environments have thus been mediated by many kinds of images, and in turn our engagement with the urban has been shaped by photographs, paintings, drawings, films, plans, maps, digital visualisations and videos of real and imagined cities, among many other visual forms (see for examples: Boyer, 1994; Gordon, 2010; Lindner, 2010; Marcus and Neumann, 2007; McQuire, 2008; Nilsen, 2013; Tormey, 2012).

This short essay takes just one possible route through this complex intersection between visual culture and the urban. It focusses on one visual medium: photography. Photography is a useful medium through which to explore ways of conceptualising relations between the urban and visual media, because it has from its inception been used to picture cities; it is also a very widely distributed technology, used in a vast range of contexts by diverse kinds of users. The essay also looks at one particular kind of 'visual practitioner': scholars, whether professional social scientists or not, who use or make images as ways of understanding what 'the urban' is. The essay offers a brief framework for approaching the range of ways in which urban scholars have engaged with photographic images as a means of interpreting, evoking and performing city spaces.

Representing the Urban

How cities are represented in various visual media, from film to architectural drawings to photography to paintings, has been considered by a large literature from a range of disciplines. This scholarship, broadly speaking, focuses on how discourses about 'the urban' are both reflected in, and re-articulated by, visual

images. Professional visual practitioners, such as architects, filmmakers, advertising or television companies, photographers or artists, generally create the images themselves that are studied in this body of work. A body of such work is taken and interpreted by the scholar to demonstrate how it represents a specific understanding of the urban.

Photography in particular has been used in many different ways in relation to the city. Some of the earliest photographic work showing city places appears highly descriptive: photography as a technology has very often been used as a means of objectively recording visual appearances. In the second half of the nineteenth century, for example, many urban development projects in Europe and its colonies were documented by photographers who recorded both the old areas of the cities being demolished and the process of building the modern infrastructure that took their place. And while many photographers from Europe travelled to photograph colonial cities, photographic technologies were rapidly taken up by equal enthusiasm by photographers in cities globally, who developed their own urban visions (Pinney and Peterson, 2003). The use of cameras to record a changing urban landscape continues into the twentieth century, of course.

However, most scholars of urban photography would not argue that the camera is ever objective. While it may faithfully record the patterns of light that fall onto its chemicals or photovoltaic cells, a photographer pointed the camera at a particular place, controlled the camera's sensitivity and exposure to that light, developed the print or uploaded the file to a computer, perhaps edited the photograph somehow, before sending it on to various audiences to make their own interpretations of it. Indeed, Elizabeth Edwards has recently dissected in detail the documentary impulse animating the widespread amateur photography movement in late-nineteenth and early-twentieth century England, arguing that their efforts to describe changing urban and rural landscapes were both driven by, and

constitutive of, nationalist discourses of nostalgic anti-urbanism (Edwards, 2012). Thus, their apparently descriptive work in fact also articulated a quite specific ideological position.

Hence, a recurrent theme in scholarly work on photographs as representations is the politics of that representation: how and what is pictured, by whom, and with what effects. There are many studies demonstrating that the work of representing urban spaces is by no means trivial. The work of re-presentation always represents both an urban scene but also a social scene, both in what is pictured but also in how it is pictured and what relation is established with specific viewers by the formal components of the image. Many scholarly studies have therefore taken photographs of different urban places and explored how their content and symbolic references affirm or contest other discourses defining the urban. Jane Tormey's recent book discusses this at some length (see, Tormey, 2012).

It is also important to note that this critical engagement with the politics of representation has taken visual form too. Many scholars of the urban have felt that, given the power of images in representing cities, they should respond in kind, with photographs. Allan Pred, for example, in his discussions of modernity's emergence in Sweden, uses collaged images to demonstrate the complex intersections of new and existing architectural and social forms (Pred, 1995). In a more contemporary vein, Yasser Elsheshtawy has written about Dubai and subtitled his book *Behind an Urban Spectacle* (Elsheshtawy, 2010); in it, he reproduces a few of the glossy marketing images through which Dubai visualises—and sells—itsself to investors and tourists as a dazzling urban spectacle of sun, starchitecture and sand. However, he also includes a chapter of his own photographs, black and white images of the migrant workers whose labour sustains Dubai's economy and whose residential and work spaces are invisible in the city's dominant imagery. Here, images confront images: equally embedded in their relations

with other forms of urban discourse, but suggesting very different versions of Dubai.

Thus, this approach to the visual representation of cities is valuable for its careful attention to images themselves, and for its critical capacity. In a world in which the urban—as well as the social and the economic—are increasingly represented visually, the interpretive tools offered by this approach are important and necessary.

However, this approach to visual materials is less effective in considering how specific images, or groups or genres of image, have specific effects with particular audiences in particular places and times. Its interpretation of what a photograph means tends to rely on a method drawn loosely from semiology and what I have elsewhere described as discourse analysis (Rose, 2011): it is a method that relies on a close reading of the photograph and other texts, figuring out what elements in the photograph relate to what other elements in, say, policy documents or the mass media or novels or some other discursive form. As an approach, it has little to say on what Appadurai calls the 'social life of objects' (Appadurai, 1986): how objects, let's say visual objects like a canvas, a photograph or a map, become embedded in circuits of social practice, and only have an effect in the context of that practice (Rose, 2012). It is not particularly interested in how images are understood by lively audiences. Hence efforts to counterpose critical visual work to oppressive forms of representation often seem to assume that their criticality is self-evident: that photographing workers, for example, is inherently to assert the value of labour. Paradoxically, this ends up not so distinct from arguments that claim that the photograph speaks for itself, and is therefore somehow objective.

Finally, before moving on to other bodies of work that assert different relations between photography and the urban, it is important to mention a specific tradition of photographing the built urban environment that exists within the social sciences. Some urban scholars also use photographs in order to document change

to the material urban landscape. Usually they are linked explicitly to a body of written urban scholarship, and their aim is to describe, visually and systematically, how a cityscape has changed over time.

An example of this kind of work is the project *Invincible Cities*, curated by Camile Jose Vergara and Howard Gillette. Vergara has been taking photographs of the New York neighbourhood of Harlem for years, and they are now all on the project's website, along with photos of Camden, New Jersey, and Richmond, California. The photographs are organised by location (and also by building type), and it is therefore possible to search the site and find a series of photographs stretching over two decades or more of a particular building or view. These scholars do not claim that their photographs are a neutral record of urban change, however. They concur that photographs—like any other form of image—are never windows onto a real world. Photos are created in a specific context: in this case, debates among urban studies scholars about the nature of change in urban environments. This is evident in a number of ways in Vergara's project. The *Invincible Cities* website has a long essay by Vergara on the changes visible in his Harlem photographs; he is clear that his photos construct an interpretation of that change, which is driven by globalisation and its persistent inequalities. While that particular project leaves the precise link between the photographs taken and that interpretive framework unclear, there are other projects that have addressed that link more directly. Charles Suchar, for example, in his study of gentrification in Chicago, has developed the notion of a 'shooting script' as the bridge between the social-scientific concept of 'gentrification' and the photographs he takes as a record of its material manifestations in the landscape (Suchar, 1997). Scholars using photographs of urban places in this way, then, are not doing so naively. They understand their form of photography to be representational, and its representationality is articulated through explicit relations to other texts. In this case, the texts are those works of social science

that offer concepts with which to understand change in urban built environments.

This body of social science work is perhaps not as exciting as some other forms of urban scholarship that engage with visual media. Its images are not often particularly visually exciting or even aesthetically attractive. That is not their point. Their point is to work as a form of evidence for material change, a fuller and more detailed form of evidence than verbal description can provide. In addition, as evidence, their epistemological status is subject to explicit discussion and clarification. This, I think, is very important for social scientists interested in using visual images. Simply saying 'our culture is visual now, so we need to take photographs' is not an adequate methodology, as this body of work demonstrates. The links between concepts, methodology, evidence and interpretation need just as much puzzling over when the evidence is visual as it does when the evidence is, say, an interview transcript or a policy document.

Evoking the Urban

The previous section discussed a large body of work that is particularly focused on the representation of urban spaces. Clearly, there are many genres of photography that have been taken by urban scholars to be representational: documentary photography, photojournalism, art photography, and so on. Interpreting photographs, or other visual media, as representational is a methodological stance towards the image, not one driven by the image itself. Hence, as theoretical shifts create new methodological problematics, existing photographs can be interpreted differently—and photographs of city spaces can be created in ways that assert a different relation between the city and its imaging.

In recent years, two such shifts are evident to me. The first, which the next section will discuss, is the embedding of image-making and sharing in a wide range of everyday urban practices. The second, to be discussed now, is an approach to creating images of the urban has become more and more popular among

scholars influenced by the move in urban theory towards a concern with the embodied experiencing of urban spaces. This is an interest in the experiential and the sensory aspects of the urban: urban spaces as felt through the skin, smelt through the nose, seen through the eyes. A number of shifts has driven it in contemporary social theory, including work on embodiment, the sensory and the affective. In this work, visual images are used as a means less to decode the *representation* of urban spaces by linking them to other discourses—whether visual or textual, popular or social-scientific—but rather to *evoke* their affective feel. The claim is made in this scholarship that images—usually photography and video—are especially effective ways to do this. Images are seen as a means to convey visual affects but also to hint at tactile, auditory and olfactory affects; and of course video can also carry sound effects. The work of Sarah Pink has been very influential here (please see, Pink, 2009; 2011; 2012).

This argument suggests that images are not always and only representational. For scholars using photographs and videos to evoke urban affect, indeed, images are more-than-representational. Photographs and videos can convey feelings, emotions, states of mind, affective states, sensual effects: and all these are important in understanding the lively and enchanted materialities of urban places. These feelings and responses are difficult to express in words, but, according to these scholars, a photograph can evoke them. Photos are thus important analytical tools for scholars of urban affect.

Alongside this theoretical move towards an interest in the experiencing of urban spaces, there has been another shift of a different kind: the emergence of digital forms of creating, editing and distributing visual images. At the same time as urban scholars began to start thinking about urban places as affective fields or sensory landscapes, so digital cameras and websites for sharing photography and video like YouTube, Vimeo and Flickr have become pervasive. For some scholars, these two shifts

are related. Mark Hansen, for example, argues that digital technologies necessarily entrain bodies—and are therefore affective—because bodies are the site through which digital data is processed (Hansen, 2004).

I prefer to keep the two shifts—the theoretical and the technological—analytically distinct. It is clearly the case that efforts to use photographs to evoke the sensory aspects of urban life continue to be made using 'analogue' technologies like disposable cameras and prints of photographs in journals. For example, Tim Edensor's writing in his book on derelict urban spaces is interspersed with his black and white photographs from those spaces: uncaptioned, they insert a powerful feeling of melancholy abandonment into his text as they show vacant buildings, the detritus of their past human occupation, and their slow succumbing to the plant life that is taking over these spaces (Edensor, 2005). The affective use of photographs depends more on theoretical orientation than ontological essence, it seems to me.

Nonetheless, it is also the case that digital technologies are enabling some urban scholars to experiment with new visual forms, and with new forms of distributing their work; and these new channels are allowing more scholars to use photographs for affective ends. The online distribution of photographs, for example (including online versions of print journals), allows urban scholars to work with colour photography in ways that has not until now been possible in an academic context. And the availability of cheap video editing software—as well as online distribution platforms—has made the making of videos much easier for social science scholars. Moreover, multimedia software and online platforms also allow for new forms of scholarly engagement with places. For example, Roderick Coover has discussed a number of examples of what he calls "digital panoramic environments" (Coover, 2011). Digital panoramic environments take a visual form that has historically been used to represent city landscapes—the panorama—and problematise its specific viewpoint by

layering in other images, text and sounds. Exposition—the traditional academic voice—can thus be supplemented, as Coover says, with poetry and narrative, music and games, ambient sound and graphics. Clearly, the multimodality enabled by such software technology allows the urban scholar to evoke more directly, perhaps, the colours and sounds and feel of urban spaces. Coover also argues that it dissolves the hegemony of the representational, as its explicit engagement with a range of forms of engaging with places makes the representational just one among several epistemological possibilities, possibilities which also include the evocation of the more-than-representational.

These are important arguments which are radically different from the body of work discussed in the previous section. There is no engagement with notions of representation in this work; there is little interest in discursive contexts, or the histories of visual genres. The assertion that photographs are necessarily more-than-representational is an ontological claim about the nature of the photograph as a specific medium. As Roland Barthes so famously did many years ago, these scholars ask: what is the essence of photography? (Barthes, 1982). And their answer is that "the visual has an explicitness and immediacy which delivers a multisensory impact" (Spencer, 2011, 32). This response suggests that looking at photos requires an aesthetic sensibility rather than a semiological/discourse-analytic one: a response that takes the form of a bodily and emotional stance rather than interpretive or hermeneutic work.

This essay is not the place to attempt to adjudicate between these very different approaches to photography. However, just as approaches to photographs as representational have their lacunae, so too do deployments of photographs as more-than-representational.

Of course, one issue for urban scholars turning to visual modes not only to create evidence but also, in effect, to convey their analysis, is that they require the sophisticated skills of a visual practitioner—and few have them, or have the

time to develop them. Hence the increasing interest in collaborating with artists and filmmakers to convey senses of urban place (and such collaborations are also welcomed by many visual artists seeking conceptual frameworks and indeed funded placements for their own work). To date, however, there has been little explicit reflection in the social sciences on this process of collaboration between two different fields of professional practice, and even less discussion about what might constitute a 'successful' collaboration. The criteria for such a 'success' are complex, and differ between urban studies and fine art: what may be a successful project in one field may be illegible in another. Indeed, the whole question of how different spectators encounter more-than-representational images is not addressed in this move towards the visual evocation of affective urban spaces.

There is also the difficult question of how such academic work—work that engages with the non-representational by experimenting with what for academics are unconventional media—is evaluated by academic peers as 'social science'. There are two issues here. One is simply getting such experiments out to social science audiences so that they can be discussed widely. At the moment, most such experimental projects seem to be hosted on individual project websites; as far as I am aware, there are no sites that offer to host a range of different social-science-related projects and thus act as an online 'journal' for various multimedia projects (though the site photomediationsmachine.net has begun to act as such a site for more digital humanities-related work). Equally pressing, there is very little debate in the social sciences so far about how these experiments might be evaluated as social science. What counts as a robust, significant online multimedia output? And how does that relate to the aesthetic response that images as evocations seem primarily to require?

A further question often addressed to scholars using more-than-representational images to evoke urban experience is how such work

might be understood as 'critical' in some way. While scholars such as Nigel Thrift and Gernot Böhme have been arguing for some time that contemporary capitalism is itself investing heavily in the creation of affective brands, commodities and environments (Böhme, 1993; 2003; Thrift, 2011; 2012), it is not clear that the visual evocation of such affects can in and of itself challenge that 'aesthetic economy', to use Böhme's phrase. Such a challenge, according to those persuaded by these arguments, is not simply a question of 'resisting' the affective in some way. Instead, it requires the twisting, refracting, mediating, multiplying of the affective. If the mission of social science is at least to question taken-for-granted forms of social organisation, however, more experimentation exploring effective forms of such multiplication are necessary.

Performing the Urban

One thing shared by all the scholarship this essay has briefly reviewed so far is an overwhelming focus on images produced by what might be described as 'expert' visual practitioners. Most of this scholarship works with visual materials created by highly skilled artists, cartographers, architects, visualisers, photographers and filmmakers; some has certainly addressed amateur practice but most has not.

However, certainly since the invention of relatively cheap cameras at the end of the nineteenth century, photography in particular has also been a field inhabited by vast numbers of relatively technically unskilled individuals, who have nonetheless created huge numbers of images. Amateurs organised into film or camera clubs have taken some of these images. Many other images taken in everyday situations are usually described as 'family photography', and many family photo collections also contain images of urban spaces taken on holidays and on family outings. In addition, with the advent of digital cameras and cameraphones, the numbers of photographs of urban spaces now being taken has increased enormously. The emergence of digital forms of making, editing, storing, displaying and circulating into popular

photographic practice in particular is the third area this essay addresses.

How might we think digital photography and the urban together? Again, this is not simply a question of new technologies driving a new relationship to the urban. For digital cameras participate in many different photographic practices, of course. They are used in photographic art practice as a means of documentation. The rise of 'citizen journalism' and the enthusiasm of the mass media for photographs taken not by professionals after events have unfolded, but by amateur witnesses of events as they happened, has not dimmed. They can even be used, with apps and hardware attachments, to take sophisticated photographs and to make and edit videos and films. Moreover, in terms of family photography, there has been little change between what was done with analogue cameras and what is now done with digital cameras: photographs are still taken by family members, of other family members, for circulation and display primarily among members of that same family.

In terms of sketching a third analytical frame for thinking about the relation between photography and the urban, though, I want to focus on a specifically digital form of photography, and suggest a specific way in which it is related to the urban: by performing it. In particular, I want to focus on the imbrication of photographs in many forms of social networking. Facebook, Instagram, Snapchat and Vine are all immensely popular sites and all are full of photos and videos, usually taken with cameraphones. Now, clearly the subject matter of these images is not often particularly 'urban'. However, their extensive use in urban spaces alongside other forms of online data—particularly various kinds of mapping apps—suggests that there may be an emerging imbrication of the photographic with the urban that deserves further scrutiny of a particular kind.

Geographers have paid attention for some time to the ways in which digital technologies are allowing popular and activist engagements with

urban maps. They are interested in the ways that online maps can be used as means of enabling and organising different forms of place representation, by allowing photographs to be added to specific locations, for example. This has spawned discussions of "neogeography", defined as map-making that does not depend on the distinction between professional and amateur cartographers (Wilson and Graham, 2013). It has been suggested that these particular practices tend to be about competing claims to know the truth of what a place is really like, and are probably best approached in terms of the first analytical frame presented in this essay: that of the politics of representing urban spaces (Elwood and Leszczynski, 2013).

However, there is another way in which popular photography—especially cameraphone photography—and urban spaces can be thought of together, which concerns the everyday social practices through which urban life is performed. This approach draws on a body of work interested in social practice: in the routine doings, sayings and feelings through which so much of social life happens. A theoretical interest on the practices of urban life focusses on the specific modes of talk, comportment, sensibility and gesture that sustain city life. In addition, it is clear that digital technologies that use images are increasingly integrated into those practices that perform the urban.

Digital technologies—especially smartphones—are becoming more and more central to the performance of urbanism, and particularly to ways of inhabiting urban spaces. These forms of inhabitation—of embodied practice, modes of comportment and sociability—are increasingly mediated by smartphones and specifically by the images that they carry. Here then we might think of cameraphones not as representing or even evoking the urban—though they can be seen to do these things too—but as enabling and mediating its performance. Given the frequent laments that online devices are diminishing public sociability, this may seem an unlikely possibility. Moreover, indeed, some uses of cameraphones may indeed contribute

to a lack of attention to and engagement with the actual location of the cameraphone and its user. Many other forms, though, are about locating places, discussing places, arranging to meet in specific places, reviewing places and of course looking at photographs of, and photographing places (Graham et al., 2013). In this situation, the locations and social relations that enact the urban are being constituted through a specifically digital medium, that of the social network, with its reliance on images, brief texts, comment boxes, 'likes' and reviews. This is a lively, networked urbanism, constantly refreshed, updated and renewed, its landscape configured by multiple users enacting a network, in large part by taking and distributing simple photos.

This is an emergent form of urban visual culture, and its parameters remain uncertain. It offers some significant challenges to social science methodologies, however, in its scale, its dynamism and its complex negotiation between material places and their mediation by the affordances of multiple digital networks. It suggests that the qualitative methods of semiology, discourse analysis and aesthetic sensibility required by approaching photographs either as representations or as evocations are inadequate: methods are needed that can deal with the sheer numbers of images involved in these online networks. Methods are also needed that can engage with the dynamics embedded in the software platforms that structure these sites, as Jean Burgess and Joshua Green point out in their study of YouTube (Burgess and Green, 2009). Methods are needed that can engage with the social practices through which such mapping occurs; thus far, various versions of ethnographic participant observation have been deployed, but there are limits to how this method can engage with people distributed over distances, communicating via small screens (Kitchin et al., 2013). Finally, methods are needed that can engage with the ways in which so many of these photos that perform the urban in this way are taken casually and looked at casually. They are the visual

equivalent of the phatic forms of communication that Vincent Miller argues are typical of the internet more generally: "communications which have purely social (networking) and not informational or dialogic intents" (Miller, 2008). That is, these are images that do not convey meaning or expect engagement from their viewers: they are made simply to be used on a social networking site as a means of maintaining that social network. Neither the attentive interpretation required if an image is seen as a representation, nor the affective stance called for by approaching images as affective, are necessarily part of how these casually-created images are used to perform social relations. All this poses challenges to social scientists interested in studying photographs and urban visual culture; it also suggests that there is more work to be done theorising the relation between the visual and the urban that is about neither representation nor evocation.

Conclusions

The relation between photography, or any other visual technology, and the urban, has never been a relation between two distinct and knowable entities, such that 'the camera' photographs 'the city'. The relation between these two is much messier than that. Photographs interpret the city for us, and as urban scholars we understand the work that they do through both theoretical and conceptual lenses. Clearly, there are many ways in which photography in particular intersects with urban spaces. This short essay has argued that photographs can be understood as having three main relations with the urban. They can represent urban places; they can evoke urban places; and they can perform urban places. Each of these relations invites a rather different methodological approach from social scientists interested in the mediation of urban spaces by visual technologies. Understood as representational devices, photographs require interpretation in order that their meaning be decoded; understood as evocative devices, photographs require an aesthetic sensibility in order that their affect can be experienced; and

understood as performative devices, photographs require an engagement with the dynamic network of social practices that their creation and distribution enact. What each approach shares, however, is a conviction that the photographic, the urban and the social-theoretical cannot be understood apart from one another.

References

- Appadurai, A. (1986). *The Social Life of Things: Commodities in Cultural Perspective*. Cambridge: Cambridge University Press.
- Barthes, R. (1982). *Camera Lucida*, trans. R. Howard, Jonathan Cape, London.
- Bennett, J. (1997). 'The Enchanted World of Modernity: Paracelsus, Kant, and Deleuze', *Cultural Values*, 1(1): 1–28.
- Böhme, G. (1993). 'Atmosphere as the Fundamental Concept of a New Aesthetics', *Thesis Eleven*, 36(1): 113–126.
- Böhme, G. (2003). 'Contribution to the Critique of the Aesthetic Economy', *Thesis Eleven*, 73(1): 71–82.
- Boyer, M.C. (1994). *The City of Collective Memory: Its Historical Imagery and Architectural Entertainments*. London: MIT Press.
- Burgess, J and J. Green. (2009). *YouTube: Online Video and Participatory Culture*, Polity, Cambridge.
- Coover, R. (2011). 'The Digital Panorama and Cinemasces', in *Switching Codes: Thinking Through Digital Technology in the Humanities and the Arts*, eds. T. Bartscherer and R. Coover. Chicago: Chicago University Press, pp.199–217.
- Edensor, T. (2005). *Industrial Ruins: Spaces, Aesthetics, and Materiality*. Berg, Oxford.
- Edwards, E. (2012). *The Camera as Historian: Amateur Photographers and Historical Imagination, 1885–1918*. Durham NC: Duke University Press.
- Elsheshtawy, Y. (2010). *Dubai: Behind an Urban Spectacle*. London: Routledge.

- Elwood, S. and A. Leszczynski (2013). 'New Spatial Media, New Knowledge Politics', *Transactions of the Institute of British Geographers* 38(4): 544–559.
- Gordon, E. (2010). *The Urban Spectator: American Concept Cities from Kodak to Google*. Hanover, NH: Dartmouth College Press.
- Graham, M., M. Zook, and A. Boulton. (2013). 'Augmented Reality in Urban Places: Contested Content and the Duplicity of Code', *Transactions of the Institute of British Geographers* 38(3): 464–479.
- Hansen, M.B.N (2004). *New Philosophy for a New Media*. Cambridge, MA: MIT Press.
- Invincible Cities, Rutgers Ford Foundation, available at: <http://invinciblecities.camden.rutgers.edu/intr-o.html> (accessed 20 January 2014).
- Kitchin, R., J. Gleeson, and M. Dodge (2013). 'Unfolding Mapping Practices: A New Epistemology for Cartography', *Transactions of the Institute of British Geographers*, 38(3): 480–496.
- Lindner, C. (2010). *Globalization, Violence, and the Visual Culture of Cities*. London: Routledge.
- Marcus, A and D. Neumann (eds), (2007). *Visualizing the City*. London: Routledge.
- McQuire, S. (2008). *The Media City: Media, Architecture and Urban Space*. London: SAGE.
- Miller, V. (2008). 'New Media, Networking and Phatic Culture', *Convergence: The International Journal of Research into New Media Technologies*, 14(4): 387–400.
- Nilsen, M. (ed.). (2013). *Nineteenth-Century Photographs and Architecture*. Ashgate, Farnham.
- Pinney, C. and N. Peterson. (ed.) (2003). *Photography's Other Histories*. Durham NC: Duke University Press,
- Pink, S. (2009). *Doing Sensory Ethnography*, 2nd edition. London: SAGE.
- Pink, S. (2011). 'Multimodality, Multisensoriality and Ethnographic Knowing: Social Semiotics and the Phenomenology of Perception', *Qualitative Research*, 11(3): 261–276.
- Pink, S. (ed.). (2012). *Advances in Visual Methodology*. London: SAGE.
- Pred, A. (1995). *Recognizing European Modernities: A Montage of the Present*. London: Routledge.
- Rose, G. (2012). 'The Question of Method: Practice, Reflexivity and Critique in Visual Culture Studies', in *The Handbook of Visual Culture*, eds. I. Heywood and B. Sandywell, Berg, Oxford, pp. 542–558.
- Rose, G. (2011). *Visual Methodologies: Interpreting Visual Materials*, 3rd edition. London: SAGE.
- Spencer, S. (2011). *Visual Research Methods in the Social Sciences: Awakening Visions*. London: Routledge.
- Suchar, C.S. (1997). 'Grounding Visual Sociology in Shooting Scripts', *Qualitative Sociology*, 20, 33–55.
- Thrift, N. (2011). 'Lifeworld Inc—and What To Do about It', *Environment and Planning D: Society and Space*, 29(1): 5–26.
- Thrift, N. (2012). 'The Insubstantial Pageant: Producing an Untoward Land', *Cultural Geographies*, 19(2): 141–168.
- Tormey, J. (2012). *Cities and Photography*. London: Routledge.
- Wilson, M.W. and M. Graham (2013). 'Neogeography and Volunteered Geographic Information: A Conversation with Michael Goodchild and Andrew Turner', *Environment and Planning A*, 45(1): 10–18.