



Introduction to geomedia histories

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Abstract

The maturation of mobile, convergent, and place-contingent technologies has inspired researchers from different fields to re-imagine the relationship between geography and media. Recently, the linking of site-specific media and mediated places culminated in the overarching concept that sits at the midpoint of this special issue: geomedia. While the majority of work within geomedia studies focuses on contemporary developments, thereby offering snapshots of geomeditization processes as these currently manifest themselves, this volume wants to address the nexus of geography and media from a decidedly historical perspective. Doing so, we hope to inspire a historical turn in geomedia studies as well as contribute to the ongoing discussion about how to define geomedia (studies) beyond (the study of) particular technologies or media genres. By boldly uprooting the geomedia concept from its contemporary, predominantly digital, framework, the contributions gathered here encourage us to map the trajectories of geomedia, to challenge “geomeditization realism,” to remedy epistemological biases, and to further articulate the postdigital.

Keywords

Geomedia, geomeditization, historical turn, history, place, postdigital, space

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Introduction: Time for a historical turn in geomedia studies?

For many years, researchers from various disciplines have been interested in the spatiality of media and in processes of place-making by means of technology. Noticeably around the last turn of the century, the notion of the “network society” (e.g. Castells, 1996) became a popular trope in media and communication research, and the impact of “new media” on the spatial logic of space and place was starting to become widely noticed. At first, it looked like there was, more so than ever before, enough proof for the space-overcoming—even space destroying—effects of networked media. The theoretical consensus concerning new media largely aligned with different versions of a historically grown narrative that encompasses, for example, both Marshall McLuhan’s (1964) notion of the “global village” and Paul Virilio’s (1977) “dromology.” Following a teleological, modern age trope of technological progress, the effects of media technologies on space seemed to culminate in an ever accelerating “time-space compression” (Harvey, 1989) or, as Döring and Thielmann (2008: 14; authors’ translation) frame it, a “media- and transport-induced compression of all our spatiotemporal horizons of perception.”

For some time now, however, this assumption has been progressively problematized in the social sciences and humanities. The so-called *spatial* turn in media and communication studies, especially, has served to challenge the idea that space is increasingly nullified by media (Jansson and Falkheimer, 2006). Unsurprisingly perhaps, the “rediscovery” of space and place in media and communication studies indicated by the spatial turn coincided with the relative loss of significance of mass media and the parallel popularization of convergent, mobile, and connected media. The maturation of “location-aware,” “place-based,” or “locative” technologies in particular (see e.g. Evans and Saker, 2017; Hjorth and Pink, 2014; Wilken and Goggin, 2015) has inspired researchers from different fields to re-accentuate the nexus between geography and media. In relation to this, prevailing ideas of spatial compression and annihilation have been further questioned, re-examined, and gradually supplemented by investigations into the increasingly complex interrelations between space, place, and media that contemporary media afford. Progressively recognized today are *both* the multifaceted extensions and superimpositions of geographical space through media *and* the place-bound nature of media technologies and practices.

Recently, the linking of site-specific media and mediatized places (Thielmann, 2010)—or the “spatialization of media” and the “mediatization of place” (Jansson and Falkheimer, 2006)—culminated in the overarching concept that sits at the center of this special issue: *geomedia* (e.g. Abend and Harvey, 2017; Döring and Thielmann, 2009; Fast et al., 2018, 2019; Frith and Wilken, 2019; Jansson, 2019, 2022; Lapenta, 2011; McQuire, 2016, 2019; Thielmann, 2010). To a great extent, the term *geomedia* has been applied to media that are predominantly visual or cartographic—optical media in Kittler’s (2009) sense—such as (digital) maps and globes. In this narrower meaning, the term points first and foremost to specific and distinctive media that communicate geographic knowledge and convey information about the earth. From such a viewpoint, consequently, the history

of geomeia would be closely linked (and restricted) to the history of the geographic image in maps and globes as well as their mass media descendants, like the panorama or the diorama of the 19th century. However, within and beyond media and communication studies, a wider definition of geomeia has developed in parallel to the narrower one. Symptomatically, a growing body of literature now engages “geomeia” as an *umbrella term* for assemblages of technologies, processes, operations, and practices that socio-technologically reorganize our encounter with space and place (see Döring and Thielmann, 2009). As such, geomeia may well connote cartographic and localizing technologies or services, such as maps, digital globes, or location-based “smart” media. Yet, used as a term to conceptualize all mediators between space, place, people, and things that lead to changed forms of spatial organization, perception, and appropriation, geomeia does not necessarily, or *only*, designate a delineable genre of technology. Rather, the kind of widened conceptualizations of geomeia that we now encounter call awareness to processes of *geomeiatization*; that is, to “the coming of a social regime where human subjectivity, media and space/place are co-constitutive of one another” (Fast et al., 2018: 8), or, alternatively phrased, the “transformation whereby people’s media practices become more closely woven into the production of space and place” (Lindell et al., 2021: 3). This shift, in turn, compels us to stay attentive not only to the representational qualities of media but also to media’s ongoing place-making powers. For, the continuous reorganization of space and place through (geo)meiatization does not happen through the circulation of references alone; it is also, and perhaps even more so, the result of “a complex and hybrid process that is simultaneously economic, social, cultural, psychological, and technical” (Kember and Zylinska, 2012: 15). Methodologically thus, geomeiatization entails the call to *de-center* the media by looking at the practices and operations surrounding geomeia rather than concentrating on the properties or functionalities of a set of discrete objects or technologies.

While the majority of work within geomeia studies focuses on contemporary developments, thereby offering snapshots of geomeiatization processes as these currently manifest themselves, this volume wants to address the nexus of geography and media from a decidedly *historical* perspective. What we aim to accomplish is an advancement of geomeia studies in much the same direction as “new media” studies more generally have come to develop over the last two decades or so. In relation to the 10th anniversary of *New Media & Society*, and apropos digital communication technologies which upon their arrival tended to be sorted under the label of “new media,” Peters (2009: 14) concluded that: “It is by now mundane to suggest that the human interest in new media is old—that in fact the history of new media is ancient.” True as this might be, it is our contention that geomeia studies has yet to write its *geomeia histories*. This volume represents an attempt to map and tell some of these histories. Doing so, we hope to inspire a *historical turn* in geomeia studies as well as contribute to the ongoing discussion about how to define (the field of) geomeia. Readers will find that the individual contributions—typically by boldly uprooting the geomeia concept from its contemporary, predominantly digital, context—inevitably compel us to look for geomeia in new places and to rethink what constitutes, as Thielmann has it, “the ontological core of geomeia” (this issue).

Geomedia histories as a mapping of trajectories and continuities

A historical turn in geomedia studies has many benefits. Most obviously perhaps, the articles collected in this special issue allow us to counterbalance dominant discourses—produced not least (but also not only) by profit-hungry tech industries and optimistic policy makers—about the “revolutionary” traits of geomedia; its novelty and disruptive powers. As others have also observed, such “revolution talk” oftentimes stem from economic and political actors with more or less explicit interests in technology hype and innovation (Kortti, 2019). In opposition to such discourse, we want to break the tendency toward a fixation of the present and trace back and disclose the trajectories of various technologies and practices that once promoted or continue to promote geome-diatization. The eight articles comprising this volume address, among other things, *mobile geomedia* (Tristan Thielmann; Didem Özkul and Lee Humphreys), *maritime geomedia* (Christoph Borbach), *aerial geomedia* (Rowan Wilken and Julian Thomas; Hendrik Bender and Max Kanderske), *social geomedia* (Jordan Frith), *cartographic geomedia* (Steffen Krämer), and *urban geomedia* (Scott McQuire). They do suggest that geomedia histories are less marked by radical breaks than by continuities and entangled developments that must be contextualized against greater social, economic, cultural, or political transformations.

For example, Scott McQuire unveils in his article the links between early urban computing and contemporary smart city imaginaries by connecting a series of developments taking place in New York City in the 1960s. More specifically, by revisiting the formation of the so-called New York-RAND Institute, McQuire shows us how urban computing was formed by its specific, “messy,” historical context, including elements such as U.S. military defense strategies, cybernetics, urban planning, business models, and race politics. Ultimately, the RAND case is productively engaged in a critical discussion about smart cities, platform urbanism, and power. “Drawing on this broader historical perspective,” McQuire argues,

we can better perceive the corporate formulation of “smart cityism” as one attempted settlement of the emergent sociotechnical disjunction that cuts across urban knowledge, experience and governance from the 1960s and further intensifies with the expansion of the internet and related technologies in the 1990s.

Events taking place in the United States in the 1960s are also at the center of Steffen Krämer’s detailed study of *overlying maps*; a geomedia practice with roots in 19th-century cartographic practices which has come to play an increasingly important role in the age of big data visualizations. Overlying maps afford the integration of data from different sources into a single-screen representation of their relationship. Krämer’s article presents a careful close-reading of the historical case of Computerized Mapping of Disease; a pioneering research project within the field of medical geography that was undertaken on behalf of the US Armed Forces Institute of Pathology from 1965 to 1968, at the time the GIS technology was introduced. The project testifies to significant transformations in the meaning of overlaying for correlation inference during processes of computerization and encourages, Krämer argues, an epistemologically reflexive take on the history of geomedia practices.

As these and other articles in this special issue make evident, a historical turn in geomeedia studies also enables a historical anchoring of the specific technological and/or ontological features that have been identified as integral to today's geomeedia—such as convergence, ubiquity, location awareness, and real-time feedback (McQuire, 2016) or representational, logistical, and communicational affordances (Jansson, 2019). Guided by an explicit aim “to look at different sociotechnical (Edwards, 2003) and cultural techniques (Siegert, 2015) that have created the foundations for geomeedia, which continue to have an effect, and are still an integral and vital part of geomeedia today,” Tristan Thielmann writes a history of navigational geomeedia that predates the digital era by far. Through a historical account encompassing, among other things, the first aerial image produced through Thomas Baldwin's balloon flight over the north-west of England in 1785 and the first mobile route guides produced by cycling club members in the late 19th century, Thielmann reveals how navigational practices were undertaken through what is framed as historical forms of geomeedia: the air balloon, the bicycle, and the canoe. Hendrik Bender and Max Kanderske, on their part, disclose in their joint contribution how what they label “co-operative aerial images” become geomeedia by organizing and making sense of activities and processes in space (cf. Fast et al., 2018). Through an analysis of historical documents, the authors trace the operationalization of “the view from above” through three significant periods of technological innovation, each driven by military inventiveness: the introduction of aerial photography in the late 19th century, the introduction of satellite imagery during the space age, and the advent of drones in the latter half of the 20th century. Ultimately, Bender and Kanderske display how the aerial images' capacity to act as geomeedia “both depends on and becomes part of specific spatio-temporal regimes that can be traced through history alongside the images themselves.”

Geomeedia histories as the contesting of geomeediatization realism

In continuation of outlining trajectories of geomeediatization across diverse contexts, historical perspectives may serve to defy what Jansson and Hartmann (2022) label *geomeediatization realism*. With cues taken from Draper and Turow's (2019) notion of digital resignation, Jansson and Hartmann engage the term to address “processes of acceptance and resignation not only in relation to media use but also the wider context of the expansion of geomeedia businesses and corporations” (n.p.). As such, geomeediatization realism engenders the idea that the world produced by geomeedia businesses, like Google, Apple, Uber, or Meta, is the only one imaginable; an idea which in turn might make even the most skeptic users inclined to simply surrender to the logics of “surveillance capitalism” (Zuboff, 2019), including, for example, the kind of exploitation of geospatial data that geomeedia technologies tend to afford (cf. Fisher's [2009] notion of “capitalist realism”). Intentionally or not, the articles collected in this volume serve to undermine geomeediatization realism by indicating, explicitly or implicitly, that alternative futures could have been produced, should (social, economic, political, cultural, environmental, etc.) circumstances have been different.

On this note, Christoph Borbach's case study about a “failed” navigational geomeedia bears witness to the claim, that in the processual understanding of geomeediatization,

media are only temporary fixations of technological potentials, which also always refer to what they have not become (Kember and Zylinska, 2012: 21). Relatedly, Jordan Frith's contribution wants to do away with presumptions of technological inevitability. In short, what Frith shows us is how what he calls "the LSBN moment" (ca 2004–2014) contributed to the early popularization of *social geomeia* by hyping the check-in function and location sharing features instead of promoting more meaningful social interactions. Applying a media genealogy approach that serves to reveal a "history of the present" (cf. Foucault, 1995 [1977]: 31), expose power struggles, and ultimately counterwork narratives of technological inevitability, Frith embarks on a critical discussion about the actual *and* potential development of social geomeia. Geomeia histories, he concludes, "can do more than preserve the collective memory of geomeia development; they can also identify moments in which futures were shaped and argue for alternative futures." Moreover, Rowan Wilken's and Julian Thomas' co-authored article provides insights into the history of photogrammetry; a place representational (and place-making) technology that continues to play an important role in contemporary digital media contexts, such as augmented reality gaming, 3D visualizations, and mapping software. Here, the authors frame photogrammetry as a form of *aerial geomeia* which exists in what they—with inspiration from Jon Agar's (2003) work on "the government machine"—identify as the "expanded geomeia infosphere." Writing the history of the technology from the First World War and onwards, Wilken and Thomas ultimately end up discussing photogrammetry in relation to digitization, automation, and platformization; developments which, they argue, reflect a gradual expansion of photogrammetry from governmental to commercial contexts as well as the increasing valorization of geocoded visual data in and beyond the platform industries.

As these and other contributions to this special issue also suggest then, geomeia histories also represent a way of mapping the historical formation of long-standing power-geometries and a means for detecting *whose* geomeia we have ended up with.

Geomeia histories as a remedy for epistemological biases

As much as the articles collected in this volume contribute to the establishing of essential links between yesterday's and today's geomeia and, in the process, succeed to deliver informative examples of historical equivalents to and/or analogue versions of constitutive geomeia features, they also call awareness to technological qualities that are typically *not* associated with geomeia, or at least to lesser degrees so. Doing this, they manage, in turn, to point our attention to epistemological biases in contemporary geomeia studies.

For example, the *temporality of geomeia* is a key concern in Didem Özkul's and Lee Humphrey's joint contribution. In a kind of countermovement to the spatial turn mentioned at the beginning of this introduction, the authors argue that "the temporal dimensions of mobile phones have been overlooked and taken for granted while spatiality has taken the central role in relevant scholarly works especially with the introduction of location-aware features to mobile phones." To remedy this flaw, they conduct oral history interviews with scholars whose contributions to research into mobile phones and everyday life are undeniable. As the authors argue, oral history interviews are useful for

gaining insights about milestones in the historical past. From their inquiry of early mobile phone use among the interviewed scholars, Özkul and Humphreys conclude that “mediation of time and temporality should be acknowledged as one of the key aspects and defining features of geomeia.” Relatedly, by taking a media archeologically influenced approach to an outdated navigational infrastructure—submarine signaling—Christoph Borbach writes a comprehensive history of a particular category of maritime geomeia that reached its commercial peak in the early 20th century, before being outrivaled by radio and becoming what it is today: “dead” geomeia (cf. Sterling, 2008). The case of submarine signaling, defined by its *audibility* and *analogousness*, is explicitly utilized by the author to serve as a contrast to present-day, digital, geomeia technology. Although, as Borbach points out, analogue navigational media such as underwater microphones and telephone receivers “are commonly not regarded as geomeia,” the case reveals how these technologies functioned as geomeia in their specific context of usage. Thus, purposefully applying the concept of geomeia outside of contemporary digital media and beyond the dominating “visual regime” (Verhoeff, 2012) of our times, Borbach achieves a broadened understanding of geomeia as well as an “oceanic turn” in geomeia studies which, he observes, hitherto have chiefly been concerned with “on shore” and “on screen” technologies and practices.

Geomeia histories as a window to the postdigital society

Aside from the themes identified so far, the contributions of this volume show that the location awareness and situatedness of geomeia can be seen both as an indicator for and a driver into the state that has been labelled *postdigital*. Therefore, we will use this last section of our introduction article to argue that geomeia histories may also function as a window into the postdigital society.

Indeed, the term “postdigital” seems fitting from at least three interrelated points of view. First, it connotes that we no longer necessarily look at the new networked geomeiatized world with admiration and enthusiasm. Cramer (2015) advances such an understanding of the postdigital when proposing that

“Post-digital” describes a perspective on digital information technology which no longer focuses on technical innovation or improvement, but instead rejects the kind of techno-positivist innovation narratives exemplified by media such as Wired magazine, Ray Kurzweil’s Google-sponsored “singularity” movement, and of course Silicon Valley. (p. 18)

In a postdigital world, instead of designating something exciting and unknown, “newness” is transformed into a commercial impetus to both stay up-to-date with *and* avoid (particular) technologies (see Kember and Zylinska, 2012). In this condition, there is no outside and even the wish to decouple, or “disconnect,” becomes a consumer choice. Linking geomeia studies with the expanding field of disconnection studies and with cues taken from Cramer’s articulation of the postdigital condition, Fast (2021) argues that in postdigital capitalism geomeia technologies are symptomatically sold as disconnection technologies that may help us *escape* digital entanglements, notably by affording exclusive “digital dead” territories in otherwise hyper-connected landscapes. In line with

similar conceptualizations of the postdigital, the contributions in this volume testify not only to the fact that all geomeia have historical roots, but also that “our *fascination* with these systems and gadgets has become historical” (Cramer, 2015: 12; emphasis added). Like other “Post-” phenomena, the postdigital does not simply supersede what preceded it but encourages a questioning of existing orders and critical examinations of the past. Arguably then, a historical turn in geomeia studies *enforces*, to continue speaking with Cramer (2015), a “disenchantment” of the digital by recognizing geomeia not as heroic individual inventions but as redesigns, advancements, and new combinations of the existing. Jordan Frith’s inquiry into a technology (location-based social networks) that was first hyped and then dropped but nonetheless continue to shape perceptions and practices of geomeia makes a case in point. Similarly, McQuire’s article reveals how the first data-driven approaches to urbanism and urban planning were adaptations of cybernetic solutions to nuclear war scenarios—a past that continues to impact US cities today.

Second and consequently, geomeia histories bear witness to the prerequisites of the “messy state of media, arts and design *after* their digitization” (Cramer, 2015: 17) that the postdigital implies. While the postdigital denotes the contemporary state in which computation is so embedded in the environment that it “becomes part of the texture of life itself” (Berry, 2015: 50), historical accounts of geomeiatization can shed light on some of the trajectories leading up to this state by accounting for the “vitality of media” (see Kember and Zylinska, 2012: 23) as the “potentiality to generate unprecedented connections and unexpected events” (Kember and Zylinska, 2012: xvii). The articles in this volume show the historical trajectories behind the postdigital “mess” while at the same time accounting for the “emergence of forms” (Kember and Zylinska, 2012: xvii) through processes of geomeiatization. For example, Hendrik Bender and Max Kanderske help us understand the aerial image as a genuinely “co-operative” affair involving a wide array of infrastructures, technologies, and practices to generate and stabilize geographical references. In a similar way, the term “geomeia infosphere” introduced by Rowan Wilken and Julian Thomas in this issue highlights the hybridity of geomeial arrangements. As an assemblage of different technologies and practices rather than a single media phenomenon, geomeia itself arguably qualifies as a *prototype* of postdigital media as it stands for a shift of focus away from single media ontologies toward “hybrid situations” that compromise various online and offline technologies and practices. Nevertheless, while not completely determined by it, the postdigital condition is supported by an increasingly embedded and embodied technology through micro-electronics, sensors, and allegedly “smart” location-aware media.

Third, relatedly and almost “by default” then, geomeia histories not only shed light on the blurring of boundaries between “old” and “new” but also between “analogue” (“non-digital”) and “digital” media (see Cramer, 2015: 18), as well as between the “real” and “virtual.” Geomeia is both opposed to the idea of a cyberspace decoupled from physical space (the *Metaverse*) and dismissive of the notion that unmediated bodies and places exist at all (see e.g. Leszczynski, 2015: 729, for the counter-argument that spatiality is in fact “always-already mediated”). Instead, geomeia as postdigital media reminds us to think of the un- and disconnected not as a longing for some unmediated state but as a very function of media (e.g. off-the-grid

apps). Moreover, attempting to reject technological determinism and teleological ideas of progress, geomeedia histories bear witness of the oftentimes implicit continuation of allegedly analogue technologies and practices. For example, as Tristan Thielmann recognizes in his contribution, all contemporary navigational geomeedia rely on historical forms which can be pinned down by means of praxeological reconstruction.

In sum then, geomeedia histories may serve to remind us that analogue and digital have never truly formed a contradiction in our everyday lives. Indeed, this is something that we may experience on a daily basis in the postdigital world: we may set up a meeting via social media, use an app to buy a public transport ticket, call a gig worker with the help of a ride sharing app, who then navigates to our final destination with the route laid out for him or her as a layer over a digital map on a mobile display. Meanwhile, the material infrastructure is in turmoil, busy transmitting, retrieving, looking up, calling, calculating, billing, locating, tracking, tracing, storing, and transacting, while perpetually consuming energy. In this mixed situation, it makes little sense to strictly separate the digital and the non-digital neither analytically nor theoretically (see Berry and Dieter, 2015: 2–3). We would like to think that the historical turn in geomeedia studies represented by this special issue serves to further prove this point.

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References

- Abend P and Harvey F (2017) Maps as geomedial action spaces: considering the shift from logocentric to egocentric engagements. *GeoJournal* 82(1): 171–184.
- Agar J (2003) *The Government Machine: A Revolutionary History of the Computer*. Cambridge, MA: MIT Press.
- Berry DM (2015) The postdigital constellation. In: Berry DM and Dieter M (eds) *Postdigital Aesthetics: Art, Computation and Design*. London: Palgrave Macmillan, pp. 44–57.
- Berry DM and Dieter M (2015) Thinking postdigital aesthetics: art, computation and design. In: Berry DM and Dieter M (eds) *Postdigital Aesthetics: Art, Computation and Design*. London: Palgrave Macmillan, pp. 1–11.
- Castells M (1996) *The Information Age: Economy, Society and Culture (Vol. 1)—The Rise of the Network Society*. Malden, MA: Blackwell.
- Cramer F (2015) What is “Post-digital”? In: Berry DM and Dieter M (eds) *Postdigital Aesthetics: Art, Computation and Design*. London: Palgrave Macmillan, pp. 12–26.
- Döring J and Thielmann T (eds) (2008) *Spatial Turn. Das Raumparadigma in den Kultur- und Sozialwissenschaften*. Bielefeld: Transcript.
- Döring J and Thielmann T (eds) (2009) *Mediengeographie: Theorie, Analyse, Diskussion*. Bielefeld: Transcript.
- Draper NA and Turow J (2019) The corporate cultivation of digital resignation. *New Media & Society* 21(8): 1824–1839.

- Edwards PN (2003) Infrastructure and modernity: Force, time, and social organization in the history of sociotechnical systems. In: Misa TJ, Brey P and Feenberg A (eds) *Modernity and Technology*. Cambridge, MA: MIT Press, pp. 185–225.
- Evans L and Saker M (2017) *Location-Based Social Media: Space, Time and Identity*. London: Palgrave Macmillan.
- Fast K (2021) The disconnection turn: Three facets of disconnective work in post-digital capitalism. *Convergence* 27(6): 1615–1630.
- Fast K, Jansson A, Lindell J, et al. (eds) (2018) *Geomedia Studies: Spaces and Mobilities in Mediatized Worlds*. New York: Routledge.
- Fast K, Ljungberg E and Braunerhielm L (2019) On the social construction of geomedia technologies. *Communication and the Public* 4(2): 89–99.
- Fisher M (2009) *Capitalist Realism: Is There No Alternative?* Lanham, MD: John Hunt Publishing.
- Foucault M (1995 [1977]) *Discipline and Punish: The Birth of the Prison*. New York: Vintage Books.
- Frith J and Wilken R (2019) Social shaping of mobile geomedia services: an analysis of Yelp and Foursquare. *Communication and the Public* 4(2): 133–149.
- Harvey D (1989) *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change*. Oxford: Blackwell.
- Hjorth L and Pink S (2014) New visualities and the digital wayfarer: reconceptualizing camera phone photography and locative media. *Mobile Media & Communication* 2(1): 40–57.
- Jansson A (2019) The mutual shaping of geomedia and gentrification: the case of alternative tourism apps. *Communication and the Public* 4(2): 166–181.
- Jansson A (2022) *Rethinking Communication Geographies: Geomedia, Digital Logistics and the Human Condition*. Cheltenham: Edward Elgar Publishing.
- Jansson A and Falkheimer J (eds) (2006) *Geographies of Communication: The Spatial Turn in Media Studies*. Göteborg: Nordicom.
- Jansson A and Hartmann M (2022) Introduction: Gentrification and the right to the geomedia city. *Space and Culture*. Epub ahead of print 2 May. DOI: 10.1177/12063312221090600.
- Kember S and Zylińska J (2012) *Life after New Media: Mediation as a Vital Process*. Cambridge, MA: MIT Press.
- Kittler FA (2009) *Optical Media: Berlin Lectures 1999*. Cambridge: Polity.
- Kortti J (2019) *Media in History: An Introduction to the Meanings and Transformations of Communication Over Time*. London: Red Globe Press.
- Lapenta F (2011) Geomedia: on location-based media, the changing status of collective image production and the emergence of social navigation systems. *Visual Studies* 26(1): 14–24.
- Leszczynski A (2015) Spatial media/tion. *Progress in Human Geography* 39(6): 729–751.
- Lindell J, Jansson A and Fast K (2021) I'm here! Conspicuous geomedia practices and the reproduction of social positions on social media. *Information, Communication & Society*. Epub ahead of print 16 May. DOI: 10.1080/1369118X.2021.1925322.
- McLuhan M (1964) *Understanding Media: The Extensions of Man*. New York: McGraw Hill.
- McQuire S (2016) *Geomedia: Networked Cities and the Politics of Urban Space*. Cambridge: Polity.
- McQuire S (2019) One map to rule them all? Google Maps as digital technical object. *Communication and the Public* 4(2): 150–165.
- Peters B (2009) And lead us not into thinking the new is new: a bibliographic case for new media history. *New Media & Society* 11(1–2): 13–30.
- Siegert B (2015) *Cultural Techniques: Grids, Filters, Doors, and Other Articulations of the Real*. New York: Fordham University Press.

- Sterling B (2008) The life and death of media. In: Miller PD (ed.) *Sound Unbound: Sampling Digital Music and Culture*. Cambridge, MA: MIT Press, pp. 73–81.
- Thielmann T (2010) Locative media and mediated localities. *Aether: The Journal of Media Geography* 5(1): 1–17.
- Verhoeff N (2012) *Mobile Screens: The Visual Regime of Navigation*. Amsterdam: Amsterdam University Press.
- Virilio P (1977) *Speed and Politics: An Essay on Dromology*. New York: Semiotext(e).
- Wilken R and Goggin G (eds) (2015) *Locative Media*. New York: Routledge.
- Zuboff S (2019) *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. London: Profile Books.

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