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EDITORIAL

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Bringing the Future to Geomedia Studies: Geomedia as Sociotechnical Regime and Imaginary

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Abstract

Geomedia, representing an epochal shift in spatial mediations and spatialized media, changes daily life. This future-directed thematic issue advocates for contextualized understandings of geomedia that transcend contemporary hegemonic representations of technology. It recognizes the transformative powers of geomediatization processes and asks what "geomedia futures" such processes might bring about. Bridging critical geomedia studies and critical future studies, it challenges dominant narratives about tomorrow's technological society and promotes the exploration of diverse, equitable, and sustainable futures with and under geomedia. Through numerous methodological approaches, the collected articles examine the role of geomedia in contexts such as urban planning, tourism, surveillance, governance, and policy. The thematic issue emphasizes the importance of envisioning alternative futures that resist technological rationalization and unethical exploitation of geospatial data, supporting more inclusive and human-centered mediatized places. This work contributes to ongoing debates in geomedia studies, highlighting the need for critical and interdisciplinary approaches to understand and shape our technological future.

Keywords

critical future studies; critical geomedia studies; geomedia; geomediatization; geomedia futures; sociotechnical imaginaries; spatialization

1. Introduction

Our lives are increasingly molded by a new sociotechnical regime called *geomedia* (see especially McQuire, 2016; Thielmann, 2010), implying an "epochal shift…in the area of spatial (re)mediations and spatialized

media" (Fast et al., 2018, p. 4). The processes leading up to this shift can be grouped under the heading *geomediatization* (Fast et al., 2018; Lindell et al., 2022). In one of the most recent, in-depth examinations of the geomedia regime, André Jansson (2022) underscores the societal impact of geomediatization when suggesting that geomedia affect our entire existence, or, as he phrases it, using Hannah Arendt's terminology, the *human condition*. Above all, Jansson argues that geomedia gain power in and over our lives as logistical media that coordinate and orchestrate even our most mundane activities. The e-scooter is used as an example of a geomedia object that intervenes in daily urban spaces and lives as much as it—like other data-driven objects—nurtures digital surveillance capitalism (Mejias & Couldry, 2024; Zuboff, 2019). The fact that geomedia are integral to today's global economy only underlines their influence (see also, e.g., Brantner et al., 2024; McQuire, 2019).

In geomedia studies, digital mobile, place-based, or locative media (e.g., de Souza e Silva & Sheller, 2015; Frith, 2018; Humphreys & Liao, 2011; Wilken & Goggin, 2014) are typically constructed as key drivers of geomediatization and, thus, as the nucleus of the geomedia regime. However, work in this area of study also advocates for an understanding of geomedia that—similar to A. Jansson's (2022)—moves beyond both technology centrism and presentism. An inclusive and relational geomedia concept decenters the technologies involved and opens up geomedia studies to contextualized inquiries across time. For example, in a recent special issue devoted to "geomedia histories" (Fast & Abend, 2022), geomedia came to include 18th-century air balloons (Thielmann, 2022), 19th-century aerial photography (Bender & Kanderske, 2022), and post-First World War photogrammetry (Wilken & Thomas, 2022). In similar ways, an inclusive geomedia concept can help us think about our technological *future*, which is our focus here. The contributions collected in this thematic issue serve as a prism into the diversity of objects of study that can "count" as geomedia as well as into the multiplicity of sociotechnical imaginaries that geomediatization processes involve—or could involve.

One important source of inspiration for our endeavor is Scott McQuire's (2016) book *Geomedia: Networked Cities and the Future of Public Space*. Throughout the book, and in parallel with a careful historical contextualization of geomediatized urbanism, McQuire encourages us to imagine alternative futures with geomedia and how geomedia can "remake" (p. 12) the city into a more human-friendly arena for social life. Combining critical analyses of data-driven and commodifying enterprises such as Google Street View with hopeful visions of tomorrow's version of the geomedia regime, McQuire ultimately casts the networked city as a "vital laboratory" (p. 16) where the potentials of new geomedia technology should be further explored. McQuire's plea for alternative imaginations of what the geomedia regime could be like, if it were not so dominated by technological rationalization, individual responsibilization, and escalating commodification, matches well with our ambitions here. Let us think of this thematic issue as another "laboratory" for "testing" alternative geomedia futures.

2. The Critical Potency of Geomedia Futures

Our thematic issue recognizes futuristic examinations of geomedia as a crucial component of critical geomedia studies, especially to the extent they can challenge "geomediatization realism" (Hartmann & Jansson, 2024, p. 5). Geomediatization realism encompasses both utopian and dystopian outlooks through which our future with geomedia appears in the singular as if there were no alternatives to the visions that surface in hegemonic representations (see, e.g., Rose, 2018). Hartmann and Jansson (2024) use the term to

refer to "processes of acceptance and resignation not only in relation to media use but also to the wider context of the expansion of geomedia businesses and corporations" (p. 8). As such, the term sits between Fisher's (2009) notion of "capitalist realism," which implies the difficulty of imagining alternative futures beyond today's neoliberal capitalism, and Draper and Turow's (2019) concept of "digital resignation," which refers to feelings of helplessness triggered by digital surveillance that ultimately "causes people to despair about their ability to guide their futures" (p. 1827).

For further cues about the critical potency of alternative imaginations, we may look to another young (at least label-wise) research area, namely critical future studies. This area of study has been most explicitly defined by Michael Godhe and Luke Goode in joint publications (but see also, e.g., Hideg, 2002; Inayatullah, 2007). A special issue devoted to the theme states that critical future studies deal with "the exploration and interrogation of ways in which society thinks, imagines and talks about the future—not the future singular, but possible *futures*" (Godhe & Goode, 2018, p. 152). Although critical future studies are biased toward popular culture representations of our technological future, its raison d'être can certainly be transferred beyond that particular source of technological imagination. As Goode and Godhe (2017) themselves argue, competing technology discourse exists in numerous contexts. We sympathize with critical future studies' attentiveness to matters of social stratification and inequality as well as its reluctance to tilt over into cultural determinism (Godhe & Goode, 2018, pp. 4–7). The latter implies a balanced understanding of the (limited) powers of discourse in the light of material conditions and forces. Such an outlook is well aligned with critical geomedia studies, where material circumstances—especially their spatial manifestations—are always key parameters.

In our exploration of geomedia futures, we also draw on the concept of "sociotechnical imaginaries" as elaborated by Sheila Jasanoff and Sang-Hyun Kim (2015) in their edited volume *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power*. Sociotechnical imaginaries are "collectively held, institutionally stabilized, and publicly performed visions of desirable futures, animated by shared understandings of forms of social life and social order attainable through, and supportive of, advances in science and technology" (Jasanoff, 2015, p. 4). The concept is crucial for understanding the diverse futures that geomediatization could generate, as it emphasizes the interplay between technological advancements and societal values, norms, and institutions. In geomedia studies, sociotechnical imaginaries help us frame how different societies envision and implement geomedia technologies, shaping policies, governance, and everyday practices. By interrogating these imaginaries, we can better understand the potential trajectories and implications of geomedia technologies, envisioning plural, inclusive, and equitable futures.

While cautious to avoid the trap of "chronocentrism" (Goode & Godhe, 2017, p. 114)—the idea that our era is always exceptional—we argue that the *urgency* of geomedia futures is already evident at this time. Escalating climate change, ecological collapse, and mass extinction force us to deal with future making, as do ongoing or anticipated wars, conflicts, and humanitarian crises. Geomedia play no small part in these developments: as commodities exhausting natural resources and human labor, as data-driven platforms demanding enormous quantities of electricity, as AI technologies fueling war and state surveillance, and so on. At the same time, critical stances and a sound dismissal of technological solutionism should not blind us to geomedia's capacity to contribute positively to social change. Emergency, after all, can serve as a fruitful ground for imagining another world with digital media, as argued by Elwood (2024a).

To extend our critical exploration of geomedia futures, we have included an insightful commentary by Sarah Elwood (2024b) in this thematic issue titled "Thinking Geomedia Futures: Indigenous Futurisms, Afrofuturisms, and Counter-Mediations of Temporality, Spatiality, and Digitality." Elwood emphasizes the significance of Indigenous futurisms, "Afrofuturisms," and counter-mediations of temporality, spatiality, and digitality as critical frameworks for understanding geomedia futures. She argues that these frameworks hold vital conceptual and analytic insights for imagining geomedia futures that are just and life-sustaining, by challenging the technocapitalist roots and present structures of geomedia. These perspectives are essential for unpacking how linear and singular notions of time enabled the dominance of socio-temporal frames such as "modernity" and "progress," and how these temporalities are bound to technology, justifying the structural arrangements and material practices of racial capitalism and colonialism. Elwood's work exemplifies how everyday digital life can function as a site and mode of futuring, highlighting existing digitally-mediated future making that transcends the confines of technocapitalist structures and imaginations.

A second commentary, "Geomediatization and the Messy Futuring of Geodata Commons" by Boris Michel (2024), further enriches our exploration of possible futures with and under geomedia. Michel's contribution challenges geomediatization realism by exploring the complex interrelation between space and technology, particularly in the context of geodatafication. The commentary highlights the political and economic implications of the increasing translation of the world into machine-readable geodata and emphasizes the importance of digital commons against this backdrop. Using OpenStreetMap as a case study, Michel underscores the resilience and challenges of open and participatory projects, stressing the importance of safeguarding digital commons against enclosure by big tech companies trying to "openwash" their commercial endeavors. Alternative futures, Michel argues, do not come about as revolutionary upheavals but rather flourish in small-scale and local practices that can be found in projects such as OpenStreetMap.

3. The Contributing Articles

André Jansson and Christian Ritter (2024) offer an overview of geomedia studies in their article "Mapping Geomedia Studies: Origins, Trajectories, and Future Directions." Using a bibliographic citation and keyword analysis of articles indexed in the Web of Science, the authors map out the theoretical frameworks and methodological approaches that have shaped this "quasi-field," providing a historical context for understanding current trends and future directions. The article emphasizes the interdisciplinary nature of geomedia studies, integrating insights from media and communication studies, human geography, and adjacent fields. It discusses how geomedia technologies have been studied in relation to their impact on space, place, and society, highlighting the dynamic interplay between media, technology, and the spatial environment. By providing a foundational understanding of the evolution and current state of geomedia studies, the article sets the stage for the thematic issue's exploration of future scenarios. It underscores the importance of a critical and interdisciplinary approach to studying geomedia, aligning with the thematic issue's aim to challenge existing paradigms and imaginaries.

In her article, "'AI Will Be the Beating Heart of the City': Connectivity and/as Care in The Line," Linda Kopitz (2024) delves into The Line, an ambitious, though not yet realized, urban development project in Saudi Arabia, where artificial intelligence is envisioned as the central element of urban life. It analyzes the promotional material of The Line to discuss how AI is depicted as the solution for creating a sustainable, livable city. The study draws on the concept of care, exploring how it is operationalized in the context of AI

and connectivity. The Line is presented as a project that integrates advanced technology with urban planning to create a futuristic city that promises seamless connectivity, sustainability, and improved quality of life. However, the article raises questions about the true implications of such connectivity, suggesting that it prioritizes efficiency over human and environmental care. The article engages directly with the thematic issue's focus on geomedia futures by examining a high-profile example of how geomedia technologies are being used to shape urban spaces. It challenges the optimistic narratives often associated with technological solutions in urban planning, urging a critical examination of the promises and realities of AI-driven urban futures.

"Surveillance Working Groups as Geomedia Governance" by Talia Berniker and Lee Humphreys (2024) investigates the role of community working groups in four US cities in governing the adoption of surveillance technologies. These groups, formed in response to concerns about privacy and civil liberties, are tasked with evaluating municipalities' use of surveillance tools. Through interviews with working group members and an analysis of public documents, the study examines the sociotechnical imaginaries these groups hold and how they influence decision-making regarding geomedia technologies. The article highlights the diversity in goals, composition, and review processes of the working groups, emphasizing their role in shaping the future use and governance of surveillance technologies in their communities. By focusing on the governance and societal implications of surveillance technologies in smart cities, the article addresses a critical aspect of geomedia futures. It contributes to the thematic issue by highlighting the role of community involvement and multi-stakeholder governance in challenging the dominant narratives of technological adoption.

In "Ideologies in Geospatial Futurism: A Computational and Critical Discourse Inquiry Into the ArcGIS and ESRI-Blogs," Helena Atteneder and Joan Ramon Rodriguez-Amat (2024) critically examine the ideological narratives embedded in geomedia technologies and their representations in futuristic urban projects. The study uses a combination of computational methods and critical discourse analysis to explore how these technologies are framed within broader socio-political contexts and the implications for future urban development. The analysis reveals that the representations of the future in ArcGIS and ESRI blogs are deeply embedded in ideological principles, suggesting that complex social, political, and economic issues can be solved primarily through technological means. The article identifies how the studied discourses effectively eliminate alternatives to the corporate visions of the future, shaping societal development and democratic well-being. By deconstructing the ideological underpinnings of geospatial technologies, the article aligns with the thematic issue's goal of challenging hegemonic visions of geomedia futures. It provides a critical lens to examine how these technologies shape and are shaped by socio-political forces, advocating for more nuanced understandings of their impact on future urban landscapes and for narratives that prioritize social justice and equity.

In the article, "Geomedia Perspectives for Multiple Futures in Tourism Development," Lotta Braunerhielm, Laila Gibson, and Linda Ryan Bengtsson (2024) explore how geomedia technologies could transform tourism by creating immersive and personalized experiences. The study uses a participatory action research approach involving five Swedish rural communities and local tourism entrepreneurs to discuss various scenarios where geomedia can enhance destination development. It also addresses ethical challenges posed by geomedia technologies, such as data privacy, environmental impact, and cultural preservation. The article proposes a framework for evaluating the potential benefits and drawbacks of geomedia technologies in tourism, emphasizing the need for a balanced and responsible approach to their implementation. The article

contributes to the thematic issue by illustrating the diverse possibilities and challenges of geomedia in tourism and community development, emphasizing the importance of the critical and empirical exploration of future-directed representations. Highlighting the need for sustainable and ethical practices in the development and use of geomedia technologies, the study aligns with the thematic issue's aim of envisioning responsible and equitable futures.

In "Planners Becoming Visualizers in the Mediatized World: Actor-Network Analysis of Cairo's Street Billboards," Mennatullah Hendawy (2024) focuses on the evolving role of urban planners as they increasingly utilize place-based media, particularly billboards, to visualize and communicate urban projects. Using Actor-Network Theory and a qualitative exploratory methodology, the study examines how billboards along Cairo's 6th October Bridge shape planning practices and professional roles. The findings reveal that billboards in Cairo significantly affect urban landscapes and the visual culture of urbanization, often promoting exclusive real estate projects to a socio-economic elite. By highlighting geomedia-induced transformations in urban planning practices, the article ties into the thematic issue's theme of mediatized places and place-based technologies. The research demonstrates the practical implications of geomedia on professional practices and urban conceptualization, aligning with the thematic issue's aim to investigate future geomedia representations. The article underscores the importance of integrating technological innovations with participatory and inclusive planning processes to create more equitable and sustainable urban futures.

The contributions to this thematic issue collectively underscore the importance of envisioning and critically examining alternative geomedia futures. They push the boundaries of current understandings and offer new insights into the role of technology in shaping our spatial and social environments. They span a range of methodologies—critical discourse analysis, computational methods, participatory action research, interviews, document analysis, and Actor-Network Theory—and diverse geographical contexts, including the US, Saudi Arabia, Egypt, and Sweden. As Sarah Elwood (2024b) also notes in her commentary on this thematic issue, future research could benefit from incorporating additional perspectives and experiences from different parts of the world, particularly underrepresented regions. This would ensure a more inclusive and comprehensive understanding of geomedia futures and challenge the singular narratives often associated with geomediatization realism.

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Conflict of Interests

The authors declare no conflict of interests.

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