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COMMENTARY

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Geomediatization and the Messy Futuring of Geodata Commons

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Abstract

The concept of geomediatization has proven to be productive for describing current processes of geodatafication and geospatial technologies. With its focus on their future, this thematic issue calls for research into geomediatization beyond a narrow geomediatization realism. In my commentary, I take up this call and present some reflections from my research on recent corporate involvement in OpenStreetMap and the messy politics of digital commons. I argue that OpenStreetMap can tell us something about geomedia futures that challenges geomediatization realism but is also a sort of geomediatization pragmatism. This is not disruptive futurism but a project of digital commons that is constantly negotiating power, access, and enclosure.

Keywords

digital commons; digital geography; geomedia; OpenStreetMap

Geomediatization is a productive term to understand the historical tendency of an increasing entanglement of space and technology. It points to "a social regime where human subjectivity, media and space/place are co-constitutive of one another" (Fast et al., 2018). While on the one hand, these entanglements are constitutive of the history of media and technology at large, a history that has always been a history of the social production of space, it is the recent process of digital transformation for which the concept of geomediatization is most fruitful. Geomediatization brings into view mobile, real-time, location-based geomedia that are closely linked to digital codes/spaces (Kitchin & Dodge, 2011) and helps us to think in new ways about processes of geodatafication, i.e., the progressive translation of the world into machine-readable geodata. Geomediatization is therefore linked to infrastructures and even becomes a tool of infrastructurization, inscribing itself in everyday social practices. This has immense political and economic implications since all of this affects the social production of space and how territories, places, scales, and

networks are organized, perceived, and acted upon. Furthermore, the concept of geomediatization not only provides a valuable lens through which to examine the "spatial architecture of digital capitalism" (Alvarez León, 2024), but it also offers insights into the role of spatial technologies and geodatafication as key drivers in the reproduction of digital capitalism.

The previous special issue on *Geomedia Histories* called for interrogating past, failed, and forgotten trajectories of geomediatization as starting points to make clear "that alternative futures could have been produced" (Fast & Abend, 2022, p. 2389) and discusses pre-digital moments of geomediatization (Borbach, 2022; Thielmann, 2022; Wilken & Thomas, 2022) in the early computer age (Bender & Kanderske, 2022; Krämer, 2022; McQuire, 2022) and the first wave of mobile and location-based geomedia (Frith, 2022; Özkul & Humphreys, 2022). The current thematic issue follows from this discussion and calls us to think about the future of geomedia in a way that is not exhausted by the dominant narratives of big tech, geospatial industries, state planning, and technocentric ideologies. It calls on us to understand geomediatization as an open process that holds other futures that lie beyond a resigned "geomediatization realism" (Hartmann & Jansson, 2024). In my brief commentary, I will point out two aspects that I perceive as gaps. Firstly, a future beyond geomediatization realism and secondly, the politics of geodata. To illustrate this, I will touch upon some considerations from my research on the participatory and open geodatabase OpenStreetMap.

Most of the contributions in this thematic issue work through narratives of the future that are closely linked to the hegemonic narratives about technology and progress. One could argue—and most articles in this issue do—that those offer little hope for a better world beyond neoliberal solutionism. Be it the corporate story-telling of the GIS behemoth ESRI, which bundles everything from animal welfare and sustainable urban planning to warfare into one software package (Atteneder & Rodriguez-Amat, 2024), the phantasms of megalomaniacal urban planning in the case of NEOM (Kopitz, 2024), the visual politics directed at urban elites (Hendawy, 2024), or the painstaking work of community working groups to defend civil rights and privacy over the surveillance technologies of the smart city (Berniker & Humphreys, 2024). On the other hand, there are indications that participatory methods can help generate visions of the future that go beyond these imaginaries of commercial platforms (Braunerhielm et al., 2024).

I would argue that the search for socio-technical imaginaries of a more just, democratic, and open future should be less about the outlandish futurism of tech bros and the glossy fantasies of starchitects and venture capitalists. Although it can be argued that the discourse of capital, planners, and opinion makers can be used to gain insights into shaping desirable futures, it remains within the limits of geomediatization realism. So I very much sympathize with Elwood's assertion that we should try to learn from Indigenous futurism, Afrofuturism, and queer approaches to think and envision new and different futures and presents (Elwood, 2024).

One field in which I am doing research is the politics of geodata using the example of OpenStreetMap (Bittner et al., 2016; Michel & Schröder-Bergen, 2022) and I believe that OpenStreetMap can tell us something about geomedia futures that challenges geomediatization realism but is also somewhat messy realpolitik–geomediatization pragmatism if you will. This is not disruptive futurism but a project of digital commons that is constantly negotiating power, access, and enclosure.

One of the pillars of all digital geomedia is digital geodata, and among the most fundamental geodata are those that form the basis for cartographic representations and geographical calculations. They are the foundation

for locating, tracking, and tracing things and people through digital technologies. Digital geodata is a central infrastructure for digital geomedia, and like many infrastructures, it receives relatively little attention. But these geodata are extremely relevant, influential, and political. Hardly any current geomedia functions without geodata and the question of who creates, controls, and maintains this data is important.

OpenStreetMap is a free and open geodatabase. Since its establishment in 2004, it has become a widely used map service and the world's largest open-source project for geospatial data. It serves as the foundation for numerous base maps, cartographic projects, digital services, tools for navigation, and geospatial applications. OpenStreetMap is frequently regarded as the epitome of open, participatory, cartographic knowledge production and volunteered geographic information and thus heralded the possibilities of free and democratic cartographic knowledge and geodata. While the dominant representation describes OpenStreetMap as communities of individual mapping enthusiasts, institutional actors have always played an important role. Be it in the form of the provision of satellite images in 2006 by Yahoo!, massive data dumps by government agencies, or the utilization and further development of the infrastructure by small and medium-sized enterprises in the geospatial industries. Nevertheless, the role of large players gained importance over the last years. This applies at the level of data production and use, the tools as well as the institutional framework. Corporations such as Meta, Grab, or Apple started to employ teams of mappers to contribute and edit data in the OpenStreetMap database and seemed to be trying to exert increasing influence on the project (Sarkar & Anderson, 2022; Schröder-Bergen et al., 2022). The scale of this involvement has consequences and generated a range of conflicts and resistances among the OpenStreetMap community. In a variety of ways, this growing role of institutional actors represents a challenge to the primacy of the local and the ethos of local ground truth.

Within this context, the Overture Maps Foundation was established in 2022. Developing reliable, easy-to-use, and interoperable open map data, the aim, it says, is to create a product that provides users with cartographic data and services that are flexible and can be customized to their needs. Technical and economic reasons, issues of data quality and consistency, cartographic conventions, and novel next-generation map products are cited as motives (Overture Maps Foundation, 2024). The founding and steering members of the Overture Maps Foundation were Amazon, Meta, Microsoft, and TomTom, and since then, further companies have joined as contributing members. A couple of months after its launch, previews for data schemes and datasets were published and in April 2024 the first beta version of a dataset was released.

From the perspective of critical research on geodata and geomedia, several points stand out. Firstly, an alliance of competing tech companies that are dependent on geodata has come together. The elephant in the room is undoubtedly Google with its dominance in the field of commercial map services. Secondly, it stands out that Overture is based to a considerable extent on data from OpenStreetMap. This means that a project that has long stood as a key example of open geodata and digital commons is now closely integrated into an endeavor led by three of the five Big Tech companies. Thirdly, Overture itself is advertised as an open project and, with it being affiliated to the Linux Foundation, it is linked to one of the central players in free and open software.

In a sense, Overture appears to be just another example of the enclosure of a digital commons and "openwashing." The founding of Overture could thus be described in resigned terms of geomediatization realism: Corporate takeover and expropriation are what happens in a world dominated by platform capitalism. Digital commons, as calimaq argues, increasingly become "capital commons" (calimaq, 2018).

They get incorporated into commercial ecosystems and are increasingly reliant on them to sustain their services. On the other hand, the story of Overture can also be described as the consequence of a failed takeover. The establishment of Overture shows the resilience of a digital commons that builds an open geodatabase but resists the universalizing tendencies of large commercial platforms. Big tech, one could argue, has been trying for years to infiltrate OpenStreetMap and adapt it to its needs. The story may therefore also be one of big tech's failure. This might be a different future for geodata and geomedia. It might teach about safeguarding geomedia commons against enclosure and a future that is less dependent on a rhetoric of disruption and revolutionary new socio-technologies. Instead, it points towards new modes of labor and care of moving slowly and fixing things.

Among the reasons for this failed takeover are cultural and ethical differences between the digital commons of OpenStreetMap and the resistance to seeing one's contribution as free labor for a company like Meta. The institutional and legal structure of OpenStreetMap provided necessary fences. On the other hand, the open and diverse structure in which geodata is created in OpenStreetMap also blocks adoption on a more technical level. While cartographic conventions generally aim for uniformity and unambiguity, the tagging scheme in which geoinformation is entered into OpenStreetMap is open, allowing polyphony and local differences. Although OpenStreetMap is a global database of geospatial data and provides the tools for global mapping and geospatial services, its practices are very local. This is true not only of local communities and the ethos of ground truth, but also of the way things are done. OpenStreetMap is full of local idiosyncrasies. While this might be an advantage for local users, it poses a challenge for applications scaled towards a uniform global scale. In a way, it is ironic, but not coincidental, that it is precisely a global geodata project that indicates the importance of spatial difference and situatedness of data and datafication, and thus opposes a discourse that continues to associate the digital with ideas of universality, frictionlessness, and placelessness. With this example, I would like to encourage the search for geomedia futures in current projects of digital commons and open data and software. This is less radical and disruptive than some calls to think radically differently and openly about the future. It is more a pragmatic reference to the painstaking and messy work on geomedia that operate at the blurred edges of commons and capital.

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Conflict of Interests

The author declares no conflict of interests.

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