

# Smart Enough or Too Smart?

## Territorial Platforms, Social Reproduction, and the Limits to Digital Circuits of Dispossession

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### ABSTRACT

As we embed ever more computing technology in urban space, when do cities cross the line from *smart enough* to *too smart*? How should we limit the computing we embed in urban space so that it serves the people and not vice versa? This paper provides a conceptual synthesis building on recent work from critical media studies, urban studies, and feminist thought to analyze the proliferation of spatially embedded digital intermediaries in cities, which I call *territorial platforms*. It suggests that we can understand the limits of extractive logics of territorial platforms and generate effective political responses to them by centering *social reproduction* in our analyses. Social reproduction refers to the often taken-for-granted work required to sustain human life and society. Often informal and unwaged, social reproductive labor is overwhelmingly carried out by women in the domestic sphere, in institutional settings like daycare centers, educational institutions and hospitals, or in voluntary community initiatives. Centering social reproduction means attending to what cannot be “solved” or innovated away by means of technology. Even so, territorial platforms interface with social reproduction in a variety of important ways. Critical urban studies has highlighted the ways in which territorial platforms reorganize social reproduction by integrating it into market relations and extending commodification into daily life. This includes Airbnb and other “sharing economy” platforms that turn previously “unproductive” (reproductive) areas of life into source of surplus, but also gig work platforms that often serve to commodify social reproduction (e.g., food delivery or carework platforms). Critical media studies has documented how social platforms and “smart” technologies extract value from the everyday lives of urban dwellers. From this perspective, territorial platforms effectively function as *digital circuits of dispossession* putting more and more of life in the service of accumulation. If allowed to continue unchecked, this dispossession would render the city “smart” but ultimately uninhabitable. For this reason, social reproduction is set to become a focal point for struggles over the role of computing in urban space. Feminist thought in general, and Social Reproduction Theory in particular, offers tools both to understand and to foment such struggles.

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### KEYWORDS

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### 1 INTRODUCTION

There is a growing consensus that digital technologies are not great levelers but rather sources of new inequalities [22, 64, 3, 83]. If we want to limit such new inequalities particularly in urban environments, how should we respond to digital technologies? When is smart “smart enough” [36], and when is it “too smart” [75]? Can digital technologies have *any* role to play in building more equitable communities [12]?

Scholars generally approach such questions through the lens of technology and policy under the heading of the *smart city*, through a political-economic lens under the heading of *platform urbanism*, or through a phenomenological lens under the heading of *digital placemaking*. Drawing on feminist theory to build on scholarship from urban, media and visual studies, this paper proposes to supplement these perspectives with one that centers *social reproduction*. This, I contend, can help us understand the limits of computing in urban space and inform struggles against new inequalities and for alternative urban digital infrastructures.

It can do so in two important ways. First, such a perspective can help lay bare the ways in which territorial platforms—by which I mean so-called location-based media [93] as well as other spatially embedded platforms [72]—form *digital circuits of dispossession*. If we understand where and how do they work in an extractive manner, we can begin to imagine ways of routing around them.

Second, a social reproduction centered approach can inform critical practices to overcome the *erasure* of social reproductive work. A variety of critical practices can help render such work visible, and can serve to connect struggles that may be dispersed and individualized, but share in common their connection to social reproduction. Such critical practices can be tools for those seeking to rework and resist the current configuration of the digital city.

In this paper, I perform some ground work to develop such a perspective without offering a definitive statement. I draw mostly on European examples to develop this perspective without wanting to imply, however, that the same logic applies elsewhere.

The paper proceeds as follows. First it introduces the central concept of social reproduction in section 2, focusing on its position in urban space. In section 3, it discusses how territorial platforms

can be understood as digital circuits of dispossession because of the ways they feed on and reorganize social reproduction. Section 4 focuses on another way in which territorial platforms interface with social reproduction, contributing to their erasure. It also discusses critical practices that can counteract such erasure. Section 5 discusses how these concepts can help frame efforts to rework or resist the extractive logics of computing in urban space. By way of conclusion, section 6 offers some questions for further discussion.

## 2 CITIES AND THE CRISIS OF REPRODUCTION

First, what do we mean by social reproduction? This concept, which is central to much contemporary feminist theory, refers to the often taken-for-granted work required to sustain human life and society. Often informal and unwaged, social reproductive labor is overwhelmingly carried out by women in the domestic sphere, in institutional settings like daycare centers, educational institutions and hospitals, or in voluntary community initiatives. Because it is taken for granted and naturalized [62], social reproductive labor tends to be invisible, lacking representation, adequate material reward or public support.

Social Reproduction Theory (SRT) seeks to challenge this state of affairs by rendering the importance of social reproduction visible. Without social reproduction, there is no production, which presupposes relations, affects, and activities that it cannot itself provide [4, 68]. In different historical epochs, the organization of social reproduction has taken different forms [51], and since the restructuring of welfare states and the rise of austerity politics across the western world, much of social reproduction has been re-privatized and offloaded onto households or poorly protected private-sector workers. Even before the added stress imposed on households and essential workers during the COVID-19 pandemic, feminist scholars diagnosed a crisis of social reproduction [11, 27]—a systemic crisis that pertains to politics and policies, but also bears directly on everyday life [9]. Think of a young parent unable to meet work requirements because no childcare is available, or an elderly person experiencing loneliness because their care facility is understaffed following budget cuts.

Cities are strategic foci with regarding this crisis. Crucial policies that reshuffle the burdens of social reproduction are often enacted at the urban scale [5, 17]. Further, cities disproportionately place the burdens of social reproduction on those who are most devoid of institutional support, such as migrants and the urban poor [23, 79], making cities crucial sites where social reproduction occurs *and* where struggles over its organization and recognition are concentrated. Finally, cities are particularly difficult territory for the collective representation and recognition of the value of social reproduction due to the complex nature of social interactions and the way they revolve around consumption and production [6]. The dominant aesthetic of urban life is thus at odds with recognition of social reproduction [61].

## 3 TERRITORIAL PLATFORMS AND DIGITAL CIRCUITS OF DISPOSSESSION

Urban space is not just a container for social relations, but a product of social relations [52, 59]. Increasingly, these relations are digitally augmented, as urban life becomes bound up with digital platforms and the image of the city becomes enmeshed with digital media [8, 54, 37]. As a result, territorial platforms become powerful new intermediaries in the digital city.

The digital city feeds on and reorganizes social reproduction. It *feeds on* it by making social reproductive activities productive of surplus value that is captured by platform companies, and it *reorganizes* it by integrating social reproduction into market relations, extending the commodification of daily life. Critical media scholars have studied the former way in which the digital city interfaces with social reproduction in studies of Web 2.0 and datafication more broadly, while recent urban studies scholarship has contributed to our understanding of the latter in studies of the so-called sharing and gig economies.

### 3.1 Feeding on Social Reproduction

Scholars in media studies stress how, even though they have become crucial intermediaries in public life, the interests of platform companies are frequently at odds with public values [88]. That is partially due to their ongoing exploitation of unwaged digital labor, which has been crucial for the success of the so-called Web 2.0 and the rise of platform capitalism [81]. “Digital housewives” [44] working an unwaged “digital shift” [50] create the content and weave the social graph that powers platforms like Facebook. Without these activities, which grow out of social reproduction [26], the enormous profits of Google, Meta and other tech giants could never have been realized [30].

The deployment of “smart” technologies in urban space is another way of directly extracting value from the everyday lives of urban dwellers [75]. The ecosystem of apps many urban dwellers now rely on in their daily lives is thus a digital “circuit of dispossession” [25, 19] putting more of life in the service of accumulation [13]. Critical voices therefore call for alternative, non-profit-driven social media [55, 31, 63, 49] as well as for limited use of smart technologies [36, 71].

### 3.2 Reorganizing Social Reproduction

Critical urbanists have been interested in what David Harvey termed “accumulation by dispossession” [38], for instance when accounting for the rapid privatization of social housing in many European cities in the latter half of the twentieth century. Digital platforms add an additional dimension to this process. The so-called sharing economy came into existence by extending market relations into areas of life not previously commodified [80]. By turning previously “unproductive” (reproductive) aspects of life into sources of surplus and, hence, profit, platform companies like Airbnb were able to gain a foothold in cities around the world [89, 34, 1], though they have done so unevenly [53, 82, 90].

The rise of gig work, accelerated by the COVID-19 pandemic, is similarly fueled by the privatization and commodification of social reproduction. This includes ride hailing, food delivery, dark stores, but also carework platforms [85]. At least in the west [70], gig work

frequently lead to greater precarity, which further aggravated the crisis of reproduction, resulting in a vicious cycle [41, 42].

#### 4 ERASURES AND CRITICAL PRACTICES

Although the problem of the crisis of social reproduction is entrenched and goes beyond a lack of recognition, feminist scholars have often emphasized the need to expose the hidden underbelly of society, which is *also* a question of representation. Feminist visual studies provides a strong conceptual basis to grasp such erasures and to devise ways of counteracting them [45, 40].

Historically, the spatial organization of cities has tended to separate spheres of consumption, production, and reproduction. Consumption is omnipresent, as urban landscapes are filled with objects to consume. Production was often hidden from view; Karl Marx stated that it took place in a “hidden abode,” behind doors bearing the sign “No admittance except on business” [58], but that has changed as “conspicuous production” has emerged as a status marker [14]. What remains largely hidden—just as it stays undervalued and underappreciated—is the work of social reproduction. In large part, that is because social reproduction is naturalized, fragmented, and privatized, and thus not on display in the urban landscape [47, 39]. It is also gendered and racialized, and thus symbolically degraded and pushed onto stigmatized bodies and relegated to the urban margins. It stands a poor chance of registering in the visual economy of the city.

Social reproduction is not entirely absent from images of the digital city. It appears, for instance, in social media posts about motherhood [87], food preparation [2], and public infrastructure like parks and libraries [7]. Such images, however, largely frame social reproduction in easily consumable, aestheticized ways, and bracket much of what makes it “fleshy” and “messy” [48, 32]. The screens and feeds of the digital city thus contain few traces of the social reproduction that necessarily is ongoing throughout the city, mirroring instead the sleek aesthetics of “smartness” [74, 15, 21]. Meanwhile, ostensibly automated systems frequently rely on human work taking place behind the scenes, which they go to great lengths to conceal [43, 35, 10, 33].

Feminist visual studies, including art history and curatorial studies, has developed concepts to account for, and challenge, such forms of erasure (which go hand in hand with a lack of social power). Half a century ago, artist Mierle Laderman Ukeles excoriated the invisibility of social reproduction in the art world through her coinage of “maintenance art” [92, 29]. Jenny Odell [66] has suggested that this practice of turning everyday activities of upkeep and caring into artworks could be a paradigm for resisting the pressures of the present-day attention economy. Echoing such critical practices, science and technology scholars have made an impassioned plea for celebrating “maintainers” rather than “innovators” for doing the work that really matters [91]. Movements seeking to counter erasure by conveying such critical messages about social reproduction are up against formidable odds in digital spaces [76, 65]. While everyone is (potentially) a media producer contributing to how the city is imagined [57, 18], in practice some groups are better positioned than others to shape the image of the city [73, 8]. However, artistic, curatorial and action research interventions are

examples of critical practices, often developed or adopted by feminists, to bring the margins closer to the center of attention [16, 60, 56].

#### 5 REWORKING AND RESISTING EXTRACTIVE LOGICS

When extractive, privately owned platforms take the place of public infrastructure [69], this can exacerbate the crisis of social reproduction, which becomes particularly acute when infrastructure is absent or inadequate [46]. If left unchecked, their extractive logics threaten to render cities uninhabitable [67].

Sensing that an over-reliance on profit-oriented systems can be detrimental to the public good, many European planners and policymakers have argued for a “co-creative” approach to shaping the materiality of the digital city that is citizen-led rather than corporate. Free and open source software (FOSS) development practices [20] informed this co-creative approach as well as some ostensible “best practices.” The results, however, have been mixed at best, and have done little to challenge technology-centric and profit-driven logics. At times, they have even reinforced them [94].

New regulations in Europe may also transform the landscape [86], and scholars see chances that this may tilt the odds in favor of more equitable arrangements. Examples include worker-owned cooperatives [77] and strengthened fair work standards [28]. Such arrangements would undoubtedly be an improvement over the status quo. A social reproduction centered perspective forces us to ask, however, whether they would end digital circuits of dispossession or at least route around them, or whether they may perpetuate them in another form.

Centering social reproduction means to center what cannot be “solved” or innovated away by means of technology [24]. It can thus provide a grounding for situated efforts to rework or resist the digitization of urban space. Digitization as a process is at once concrete and abstract. Concretely, it involves the material deployment of technologies, while abstractly it involves logics that span beyond any individual deployment. A social reproduction centered perspective as proposed here can help critical practitioners get a handle on both the concrete and the abstract aspects of the digitization of urban space. It can inform efforts to map where in local communities digital circuits of dispossession are deployed and operative, and at the same time it can help make connections between communities, making it possible to grasp logics that span beyond any individual location, forming what Douglas Schuler [78] has called an “antipattern.”

In making connections between locales and between the concrete and the abstract, the perspective proposed here has similarities to Cindi Katz’s topographies framework [48] devised to develop analyses of and solidarities in response to globalization. Topographies and countertopographies, as Katz conceives them, pay attention to local terrains while also—like contour lines on topographical maps—making it possible to see translocal connections between places. Katz writes,

In other words, the political, theoretical, and methodological project I want to advance is one that constructs countertopographies linking different places analytically in order to both develop the contours

of common struggles and imagine a different kind of practical response to problems confronting them. It is the geographical imagination of topographies and countertopographies that I find particularly compelling. If topography is predicated upon the inseparability between the description and the landscape itself, countertopography works by drawing analytic contours between places typically encountered as discrete. Together they offer a means of building a vigorous and geographically imaginative practical response to the contemporary processes of globalization, which not only take such distinctions for granted but are predatory because they succeed in keeping apart places with common problems and shared interests. [48, p. 722]

An example of reworking based on such an analysis may be the development of local-scale alternatives to major commercial platforms in an effort to route around circuits of dispossession and serve local needs. Members of a community may work together to build social applications, search engines, or geographic discovery systems to serve their own needs without having to rely on major platform companies. At the same time, the kind of analysis I am proposing here can trace connections that visualize how extractive logics operating at larger scales undercut such local-scale efforts. This is the case, for instance, when noncommercial alternative social media fail to gain traction due to “network effects.” Development efforts may opt to scale up local efforts by means of federated protocols (e.g., ActivityPub) in order to respond to such logics, while remaining mindful that this may enable new forms of predatory or extractive use that have to be guarded against through responsible custodianship.

This is just one example of how the vocabulary of SRT can inform analysis of the dynamic situation of the digitization of urban space and practical, critical responses to it. Its strength is that it sensitizes activists, designers, developers and others that may be involved in such efforts to the dangers of perpetuating circuits of dispossession that most affect the weakest members of a community. It sets out from the everyday needs of local communities while making it possible for dispersed local efforts to find a basis for solidarity.

## 6 CONCLUSION

The digitization of urban space frequently crosses the line from “smart enough” to “too smart.” That is because territorial platforms seeking to extract as much value from the everyday lives of urban dwellers as possible are dominant. A social reproduction centered perspective can uncover how such platforms interface with urban space, and particularly with class relations, placing an undue burden on those who already shoulder a high load. These platforms also frequently serve to further render invisible the very relations and labors that they depend on. Armed with an analysis of how digital circuits of dispossession work and how they perpetuate erasures, critical practitioners can intervene in ways that are sensitive to local requirements while also resisting logics and (anti) patterns that work translocally. A social reproduction centered approach

is particularly promising because it can point out lines of connection between communities and opportunities for them to engage in solidarity with one another in common struggle.

At the same time, SRT does not claim to provide a definitive analysis [84]. It has limits, and should be seen as a method that can be used alongside others in the arsenal of critical practitioners. I am mindful that the perspective developed here is abstract and needs to be translated for specific contexts and use cases in order to be a useful tool. For that, it is important to draw on a variety of case studies where the extractive logics of commercial platforms have been resisted or reworked.

In the context of this workshop, I want to explore further what such translation into specific contexts might entail. Further, I hope to explore whether SRT, with its focus on what is necessary for the reproduction of human society, is overly anthropocentric, and if so, whether this limits how we may conceive of the limits of computing from a social reproduction centered perspective. How can we think about social mechanisms alongside ecological rifts?

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