

# CITIES BETWEEN DIGITAL INNOVATION AND PLATFORM LABOUR

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In this final section we will consider the impact of digital technologies on urban spaces. On one side, this means how high tech giants and platform firms are establishing in urban spaces as infrastructures for data accumulation and services' development, influencing not only urban planning but also economic and social fabric. On the other side, several urban actors —from municipalities to dwellers— move towards entrepreneurialism often using platforms and data. These processes pose new challenges to local governance in terms of regulation and participation that we are going to explore in this paper.

In the first paragraph, we will frame the relationship between urban spaces and digital technologies referring to the concept of smart city. In the second, we will focus on a specific subjectivity emerging in such background, the so-called urban entrepreneur. In the third, we will sketch challenges and potentialities for local governance in regulating such phenomena.

## **Becoming a Smart City**

The increasing relevance of knowledge and ICT for urban economies raises questions about their spatial dimension and the specific processes of urbanization that infor-

mational technologies have undergone (Shaw and Graham, 2017). Located in between of “planetary urbanization” (Brenner, 2018) and the exponential spread of digital technologies, the concept of smart cities<sup>6</sup> has emerged regarding<sup>7</sup> the technological, social, political, economic and cultural dimensions of both phenomena. They connect “the physical infrastructure, the IT infrastructure, the social infrastructure, and the business infrastructure to leverage the collective intelligence of the city” (Harrison et al., 2010, p. 2), managing enormous amounts of data. Thus, the discourse about “smart city” is strictly related to the expansion of digital platforms in the private sector.

Historically, the term “smart city” was firstly used in the mid-1990s to define cities built from scratch in Australia and Malaysia. Such cities were “smart” in the sense that their ICT infrastructure was meant to “steer the functioning of the city” in its totality (Söderström et al., 2014, p. 310). A second and crucial moment in the diffusion of the concept of the smart city was after 2008, as private companies from the IT sector decided to invest in urban services as a way out of global recession. At the forefront of such developments was IBM, which started closing full-scale contracts with city governments across the world, promoting campaigns like “Smarter Cities Challenge”, in which experts were world-wide sent for free consultancy (McNeill, 2015). Finally, it is following 2007 global financial crisis that financial capital has increasingly flowed into the digitalization of the urban fabric, fueling the development of technological and informational infrastructures (McNeill, 2015).

From a spatial and geographic perspective, smart cities constitute a global phenomenon. However, while in the Global North this has mainly indicated infrastructural improvements in existing cities —mainly in the neoliberal sense— in the South it has been intended as a state-led urbanization aiming to formalize the vast informal sector (Morozov and Bria, 2018, p. 9). Large projects such as the Indian “Smart Cities Mission” (Datta, 2018) or the construction of Songdo city (Halpern et al., 2013), have spread across the Asian continent, highlighting their attempts to govern urbanization with flows of people moving into cities from the countryside.

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<sup>6</sup> “The chapter is the result of a common work, only for formal issues it is possible to attribute the drafting of the paragraph “Becoming a Smart City” to Maurilio Pirone.

While it has been critically defined as the bearer of a “techno-utopian fantasy” (Datta, 2018) and as the mirage of “technological solutionism” (Morozov, 2013), it has discursively superseded the concept of “sustainable” (Joss, 2019:1) and established itself as the dominant “floating signifier” able to subsume imaginaries of the “intelligent” (Komninos, 2002), or even “creative” (Florida, 2003) city.

<sup>7</sup> Discourse analyses of the literature on smart cities have highlighted that there is a “socio-technical bifurcation”, according to which smart cities are seen as either predominantly defined by their relationship to technology or as essentially “social endeavors” (Joss et al., 2019, p. 16).

Therefore, this introduces a political-economic perspective on the rise of smart cities. According to Srnicek (2019), there are three main reasons why companies started to invest in digital urban infrastructures: data extraction, geopolitical competition and new opportunities for profit and power. In this perspective, he underlines that “cities are being reimagined, quite literally, as an extension of the data extraction apparatus of the larger platforms”. Moreover, the rise of smart cities should be placed within the context of late neoliberalism, where cities must compete for international rankings on innovation and technology in order to attract investments, embracing an urban entrepreneurialism (Harvey, 1989; Morozov and Bria, 2018, p. 9).

In this scenario, a more specific discourse on the rise of digital platforms may be developed. Companies such as Uber and Airbnb have gained enormous relevance in cities across the globe. On one hand, they enable urban residents to obtain income differently from standard employment, either because they generate income via rent exploitation or because they lower the barriers for accessing the labour market. On the other hand, more and more citizens become users of these platforms to improve management of everyday life (Morozov and Bria, 2018). Furthermore, the generation, collection and commodification of data is their key business and they can use them to gain a privileged position in negotiations with municipalities and public institutions at both national and EU-level —see e.g. Haar (2018) for the case of Airbnb—.

## Urban Entrepreneur

The territorialization of digital technologies into urban spaces it is also matching with labour transformations. Self-employment in urban spaces has both spread and diversified, with people often mixing both dependent and independent employments in their income strategies (Welskop-Deffaa, 2018). Conversely, digital platforms not only offer the possibility of expanding access to income, but it provides a self-styled entrepreneur narrative leveraging on the assets they own or have access to. In platforms, people can make money using their assets, whether it be a bicycle, an apartment, or a skill, offering them on a variety of platforms. This process takes place both through waged relations (as in Helpling, Uber, or Deliveroo) or through rent valorization (as in the case of Airbnb). The concept of “urban entrepreneur” (Cohen and Muñoz, 2016), in fact, refers both to the ongoing and world-wide process of urbanization and to the role that self-employment and entrepreneurialism play in urban economies. According to Cohen

and Muñoz, who conducted a study of 24 platforms —including Airbnb and Uber— operating primarily in the USA and Europe, digitalization and “sharing economy” is the nexus between both trends.

However, it is also important to underline how food delivery, short term rentals or care work have not been invented by digital platforms, but they are traditionally part of the informal sector<sup>8</sup>. Digital platforms operating in cities promise to guarantee trust and reciprocity not through social networks as it was in informal economy, but rather via algorithms, resulting in de-personalizing economic transactions. However, far from de-habilitating social networks, platforms re-organize new ways of trust-building, such as rating and ranking, which are co-produced by both providers and consumers. More precisely, as Ursula Huws has recently argued, platforms displace ties and networks, bringing workers under the discipline - in terms of surveillance, time management, dictation of labour processes, dictation of pay rates etc. - of global capitalism while, by taking a fee (typically 20%-25% of the total customer expenditure), they effectively expropriate a large part of the value that would otherwise remain in local economies (Huws, 2019).

In digital capitalism, the urban informal economy represents a crucial field of accumulation, where digital means are used to absorb earlier forms of social networking in the supply and demand of labour (Huws, 2019). In this perspective, the concept of “urban entrepreneur” seems to be strictly related to platform companies deliberately seeking to disrupt urban economies in order to obtain new territories (especially informal economies) for capital accumulation. The concept of urban entrepreneur renders opaque<sup>9</sup> a huge internal variety of income, working conditions, diverse prospects, and degrees of precarity. Previous studies have often described informal economy as a way in which “people [take] back in their own hands some of the economic power that centralized agents sought to deny them” (Feige, 1990, p. 158). The resources available in urban spaces, in fact, allowed individuals to escape the effects of economic centralization produced by both companies and the state. This is not the case with digital platforms, which consolidate control over such resources. Thus, despite the formalization that they

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8. The concept of informal economy originated around the 1970s in scholarly literature on the so-called Third World and was developed by Western authors and institutions conducting studies on African cities (Hart, 1973). Here, the informal economy referred to an “urban way of doing things characterized by (1) low entry barriers in terms of skill, capital, and organization; (2) family ownership of enterprises; (3) small scale of operation; (4) labour-intensive production with outdated technology; and (5) unregulated and competitive markets” (Portes and Haller, 2010, p. 404).

9. Concepts such as “fake self-employment” have emerged in literature and practice to define those practices of freelancing which should be understood as constrained rather than as freely chosen (Mette, 2015). Generally speaking, the self-activation of workers is strictly connected with “demands for intensification, standardization and self-commodification” (Murgia et al., 2016, p. 3).

engender, digital platforms preserve the features of poverty and insecurity that characterize informal employment, particularly through freelancing positions, which disempower both workers and traditional economic urban actors. Thus, by organizing labour process, platforms not only deny workers the benefits of technological development and formalization, but also undermine the necessary collective action to redistribute these benefits.

## Local Governance

In few words, we may say that platforms represent a key factor in recent urban transformations because of their ability to combine labour transformations with digital innovations. Thus, platform companies are peculiar urban actors, as they directly activate citizens via digital technologies avoiding formal rules and, more in general, the intermediation of the State. Unsurprisingly, a topical debate on their impact on democracy and on the role of smart technologies in the broader issues of social inequality, has also developed. In this perspective, we may highlight three main tendencies in the analysis of local policies: citizens participations to urban governance, data management, platforms' regulation.

Firstly, several authors have analyzed smart city in the context of power distribution and democratization of urban governance. Recently, Paolo Cardullo and Rob Kitchin have used the concept of “participation ladder” (Arnstein, 1969) to describe a wide range of smart city programs in the city of Dublin where citizens assume roles at the bottom of the ladder, i.e. particularly when they are data-points (data generators), users of applications or consumers of smart technologies (Cardullo and Kitchin, 2018; Shelton and Lodato, 2019). This raises a fundamental issue regarding privacy rights, as well as the accountability of the process surveilling, quantifying and changing their behaviors. Furthermore, the higher citizens are in the ladder towards direct participation in decision-making processes, the higher are the skills required in using digital technologies, making them crucial for the process (Willis, 2019). This has implications for the distribution of the resources, information and power that platforms process and operate in the smart city, as the most vulnerable groups may be excluded from benefiting of smart technologies (Cardullo et al., 2019).

Secondly, the relationship between smart cities and democracy is intrinsically linked to the issue of ownership and valorization of the data produced by and extracted from

citizens. Firstly, in the rapidly changing field of urban mobility and transportation, data on individual movements collected in real time by multinational vehicle manufacturers can be critical to make self-driving vehicles safe. Secondly, data on use of the city by short-term visitors, collected by platforms such as Airbnb, are fundamental for the management of all issues related to tourism. The platforms and companies owning these data hold massive power against local authorities. Authors have suggested that until the algorithms used by ICT companies, as well the algorithms that they operate, remain their private property, the smart city can achieve any democratization of urban societies, neither its citizens achieve their “informational right to the city” (Shaw and Graham, 2017).

Finally, municipalities have been addressed by several urban actors —workers, local committees, associations— to intervene and regulate platform impact on labour and city life. This demand for public intervention testifies the lack of efficient industrial relations in platform capitalism and the need to counter-balance the economic power of platform towards workforce. At the same time, platforms seem to impact in a larger way on urban dimension in terms of space hierarchization, productive fabric and real estate growth; so, groups of citizens started to demand a more effective and fair urban planning including norms and platforms’ compliance with collective and institutional standards.

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