



# The 15-minute city as paranoid urbanism: Ten critical reflections

Federico Caprotti<sup>a,\*</sup>, Catalina Duarte<sup>b</sup>, Simon Joss<sup>c</sup>

<sup>a</sup> Department of Geography, University of Exeter, Mail Room, Old Library, Prince of Wales Road, Exeter EX4 4SB, UK

<sup>b</sup> LSE Cities, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, UK

<sup>c</sup> Department of Urban Studies, School of Social and Political Sciences, University of Glasgow, 25 - 29 Bute Gardens, Glasgow G12 8RS, UK

## ARTICLE INFO

### Keywords:

Paranoid urbanism  
Post-pandemic city  
Urban planning  
Smart city  
post-political planning  
15-minute city

## ABSTRACT

The 15-minute city has emerged as a key urban development theme in recent years, and especially since the Covid-19 pandemic. It has also become a focus point for tensions and debates over future urban trajectories, including over the role of automobility as the key technology that defines the experience of the urban. While the 15-minute city has become a widely-used concept by proponents and detractors alike, it remains vaguely defined and heavily contested. The paper makes two contributions: first, it reads plans for, and debates around, the 15-minute city as a form of post-political urbanism. Secondly, the paper introduces the concept of paranoid urbanism as a way of understanding urban tensions and conflicts linked to mistrust, fear and paranoia in the post-pandemic city. This novel concept goes to the heart of debates and tensions over the shape of the post-pandemic city, and over mechanisms of exclusion and inclusion that characterise it. The arguments presented in the paper aim to both chart areas for further research, and as provide critical pointers for policymakers and practitioners working in the area of urban development. To this end, the paper presents ten critical reflections aimed at both policy and practice, and at establishing new avenues of research on paranoid urbanism in the post-pandemic era.

## 1. Introduction

The 15-minute city (hereafter, 15-MC) has gained increasing traction as an urban development theme (Allam, Bibri, Chabaud, & Moreno, 2022). Given the growing interest in the 15-MC among city governments, and the frequently controversial reactions to its conceptual proposition and practical applications, this paper: a.) situates the 15-MC in the broader context of post-political urbanism; b.) analyzes the 15-MC conceptually as a manifestation of "paranoid urbanism" that has become (more) pronounced in the wake of the Covid-19 pandemic, and that is an evolution of the post-political city, and c.) offers conceptual and practical considerations to redress the present controversies surrounding the 15-MC. As such, the paper makes a novel conceptual contribution to the growing literature on the 15-MC by studying the phenomenon in *and beyond* the post-political context and, in particular, proposing paranoid urbanism as a useful theoretical and analytical lens through which tensions over the post-pandemic city can be understood. We deploy three concepts in order to understand the 15-MC. First, we use the notion of post-political urbanism to denote a context where cities are governed through approaches based in consensual management practices, which in turn replace democratic and political governance and participatory

dimensions in ways that exclude debate or dissent (Kapsali, 2024). Second, we introduce the concept of "paranoid urbanism" to denote the ways in which the post-political city has increasingly been linked to paranoia and societal mistrust. Third, we situate paranoid urbanism in the context of the post-pandemic city to describe the multiple and at times enduring effects that measures to combat Covid-19 have had on cities, urban public spaces, the planning process, urban governance and inclusion, and the lived experience of urban citizenship. The research is guided by two interrelated questions; namely how the 15-MC conceptually relates to post-political urban development, and how in practice public reactions to its (attempted) implementation may be characteristic of paranoid urbanism. Our grounded assumption is that, while the public reception of the 15-MC may exhibit paranoid tendencies, this should not be dismissed as necessarily irrational and aberrant; instead, it should be seriously engaged with as a reaction to perceived problematic urban practices if constructive resolutions to the surrounding controversies are to be found.

As a mainly conceptual inquiry into the topic, the paper is structured as follows: Section 2 introduces the 15-MC and its origins and close lineage with chrono-urbanism. Section 3 first presents evidence of the critical reception of the 15-MC with special reference to recent

\* Corresponding author at: Department of Geography, University of Exeter, Mail Room, Old Library, Prince of Wales Road, Exeter EX4 4SB, UK.

E-mail addresses: [f.caprotti@exeter.ac.uk](mailto:f.caprotti@exeter.ac.uk) (F. Caprotti), [C.Duarte-Sanchez@lse.ac.uk](mailto:C.Duarte-Sanchez@lse.ac.uk) (C. Duarte), [simon.joss@glasgow.ac.uk](mailto:simon.joss@glasgow.ac.uk) (S. Joss).

experiences in several cities in the United Kingdom, followed by the conceptual framing of the phenomenon in terms of paranoid urbanism. This is used, in Section 4, to offer ten critical reflections that delve into specific aspects of the 15-MC and discuss related implications for urban theory as well as urban policy and practice. The concluding section summarises the key contributions of the paper, discusses its limitations, and identifies avenues for future research.

## 2. Origins of the 15-minute city

The 15-MC has been defined in multiple ways, but broadly speaking, it is an urban narrative, vision and/or model that speaks of the relationship between space and time in the contemporary and future city. Although the concept first emerged in 2016 (Allam, Bibri, Jones, et al., 2022), it can be seen part of a broader post-pandemic rethinking of the city, and reflects a renewed focus on liveability and wellbeing, being predicated on a notion that not all is well with the urban ‘business as usual’. Carlos Moreno, a Colombian scholar at the Sorbonne, popularised the concept prior to the pandemic, and linked it to a hyper-localised aspiration of urban life aligned with a changed, post-pandemic way of living that promotes social dimensions, urban proximity, and diversity’ (Allam, Bibri, Jones, et al., 2022: 1369) and that does so by leveraging key technologies associated with smart cities, such as robotics, sensor systems, Artificial intelligence (AI), crowd-sourcing, cloud computing, 5G and eventually 6G, and urban analytics.

Added to the urban wellbeing-related character of 15-MC concepts, Moreno’s development of the 15-MC concept is also based on chrono-urbanism (Moreno, 2019), the integration of temporal dimensions into planning for urban spaces and places. Chrono-urbanism’s four key aspects are ubiquity, density, diversity and proximity (Allam, Bibri, Jones, et al., 2022), and its spatio-temporal focus enables a nodal view of the city. As noted by Osman et al. (2021: 269), chrono-urbanism is rooted in the recognition that:

“[U]rban planning is realised mainly through space tools such as the zoning plan, the regulation plan or the building permit, while most of the problems of contemporary city communities stem from temporal uncertainty, its transfer to the individual, the creation of individual strategies ‘just-in-time’, and the simultaneous management of multiple tasks.”

Indeed, Moreno (2019) argues that chrono-urbanism in the 15-MC is part of societal and urban transformations towards sustainability which focus on decarbonising energy systems as well as shifting towards mobility (active travel) in the context of an urbanising world.

In this light, plans for the 15-MC effectively link the temporal aspects of chrono-urbanism with the spatial and decentralising effects of temporal zone-based planning. More broadly, the 15-MC narrative fits within multiple contemporary policy and other strategic contexts, such as the climate emergency, various national and global 2030/2050 agendas, and debates over post-Covid-19 recovery and ways of organising the economy and livelihoods (Allam, Bibri, Jones, et al., 2022). At its core, the 15-MC aims for substantially reduced CO2 emissions, connecting this to the notion of liveable cities where people enjoy the benefits of working from home and appreciate neighbourhood and community life. It militates against long commutes and the loss of social and community life evident in many contemporary cities, linking concepts of sociability and personal well-being with sustainability. The 15-MC vision involves cities actively providing a mixture of services within 15 minutes of walking or cycling, creating local jobs whilst heavily disincentivising automobility. Thus, the 15-MC is not ‘a strict system of urban development and planning standards’ but can be seen as ‘a paradigmatic model for sustainably managing urban development and for thinking about cities’ (Pozoukidou & Angelidou, 2022: 1370).

The concept of the 15-MC can be related to debates, from the 1960s onwards, based in the recognition that the increasing speed of communication, circulation, and production in the city were reshaping and forging urban realities that could not be easily captured in the

masterplans and static blueprints that were central to urban planning at the time. Melvin Webber (1964) called this phenomenon the ‘nonplace urban realm’, arguing that telecommuting (now called ‘working from home’) would not only reduce the need to travel, but would also create communities that are not necessarily spatially defined, but defined by complex networks operating through technological infrastructures: underlining the emergence of the ‘nonplace’. At the same time, as noted by Hall (1996), the emergence of nonplace urban realms has a spatial consequence in the continuation and deepening of decentralisation and polycentrism (Hall & Pain, 2012; Scott, 2022). This is deeply linked to the 15-MC idea which, in its focus on localism, can actually end up promoting urban realms defined by multiple urban ‘centres’ (within a 15-minute radius), and decentering the importance of a unitary urban core or centre. In this sense, the 15-MC can be described as postmodern: a vision of and plan for a city constituted by a collage of urban centres, functioning as semi-autonomous units linked by city-wide infrastructural networks.

## 3. Conceptualising the 15-minute city as paranoid urbanism

As an urban development theme, the 15-MC has been promoted by city governments, city networks and non-governmental institutions (Allam, Bibri, Chabaud, & Moreno, 2022). Initially, it received traction after the re-election campaign of Paris Mayor Anne Hidalgo in 2020. Indeed, it was at the core of Hidalgo’s campaign and was soon adopted by other European cities as a key strategic urban development concept (de Valderrama et al., 2020). In Italy, Milan published an adaptation strategy in 2020 which made mention of the concept (Pinto & Akhavan, 2022). Also in 2020, several city mayors writing under the C40 urban network umbrella supported the 15-MC concept (UNFCCC, 2021). By 2022, C40 and NREP had partnered to provide proof of concept for 15-minute cities under the C40 Green and Lively Neighbourhoods Programme (C40, 2022).

### 3.1. Public controversy and resistance

In contrast to broad policy and mayoral support, the concept has attracted significant controversy and has become the centre of a social media storm, with questions raised about its authoritarian and control potential (Keidar et al., 2023; Limerick et al., 2023). At times, discussion of the concept has veered into conspiracy territory, with even high-ranking politicians underlining its allegedly totalitarian tendencies. In 2022 Mark Harper, the UK’s then transport minister, was reported to have stated (Harper, in Gilbert, 2023: np), in reference to the 15-MC, that:

‘I am calling time on the misuse of so-called 15-minute cities [...]. What is sinister, and what we shouldn’t tolerate, is the idea that local councils can decide how often you go to the shops, and that they can ration who uses the roads and when, and that they police it all with CCTV.’

The 15-MC idea has further been linked to conspiracy theories about a technological and socio-economic ‘Great Reset’, a World Economic Forum (WEF)-sponsored theorisation of post-pandemic opportunities for taking stock and pushing for change in socio-technical systems (Schwab & Malleret, 2020). Ironically for conspiracy theorists, the WEF has itself cautiously supported the 15-MC idea, but has also published critiques of the way it could deepen existing urban inequalities (Ratti & Florida, 2021). Indeed, there are challenges around the effects of 15-MC ideas in terms of thinking through how the social and economic structures of the distribution of labour would need to be rebalanced, opening further questions around governance structures and territorial distribution of power, matching skilled workers with local jobs whilst unsettling the ever-known benefits of agglomeration, such as knowledge production and sharing. This could create and maintain 15-minute ghettos, low-income urban areas, concentrating the most vulnerable and those with a lack of skills and lack of access to quality education, and whose jobs

would be limited to their specific location. Would, for instance, an informal settlement with high social cohesion, the existence of services available although informally provided, and low connectivity to transportation facilities be considered a 15-MC?

At other times, the 15-MC has been the focus of acts of urban resistance (or vandalism, depending on viewpoint) including the destruction of CCTV cameras and bollards. In some cases, the 15-MC (and resistance to it) has seemingly been conflated with other urban planning interventions such as Low-Traffic Neighbourhoods (LTNs) and low-emission zones (as illustrated by London's Ultra-Low Emission Zone, or ULEZ), with their associated spatial planning, restrictions, charging and use of camera systems for surveillance and enforcement. An example is the cutting, in 2023, of a 240 V cable to 'disable a data collection device' in the Jesmond neighbourhood of Newcastle upon Tyne, UK, in protest at LTN plans which some residents claimed would result in a 'kettling' of residents (Reid, 2023: np).

It is clear that the 15-MC concept is ill-defined, especially in the public sphere. Its translation from ideal to urban practice is proving far from straightforward. In some cities, such as Oxford, UK, city authority plans to limit automobility between different residential parts of the city have seen protests numbering thousands: in February 2023, over 2000 Oxford residents paraded through the city in protest at plans for 15-MC projects (Whittle, 2023). This, in a city where large-scale protest has not been a particularly prominent feature of city life, shows the concentrating power that the 15-MC concept has gained. It also shows the difficulties around the translation of broad concepts, such as the 15-MC, into urban realities like those of the UK cities, where traffic management is a key priority and the 15-MC is interlinked with plans to implement LTNs and other traffic measures (Edwards, 2023). Protests around plans to implement 15-MC ideals have also been prominent in Edmonton, Canada, where social media-fuelled conspiracies linking the 15-MC to Covid-19-style restrictions on movement have conflated the 15-MC concept with restrictive surveillance and control of urban residents (Anderssen, 2023).

### 3.2. Post-pandemic paranoid urbanism

The 15-MC, as both a (vague) concept and as a set of policy interventions, has been the subject of debate, tensions and conflict as well as definitional quandaries. This leads us to posit that the significant amount of tension and discussion around the 15-MC are an example of what we call 'paranoid urbanism.' To situate paranoid urbanism, it is useful here to link the experience of the urban to that of paranoia, and of conspiracies. Scholars working in psychology and cognate fields have noted a rise in paranoia in post-Covid-19 times, and Covid-19-related conspiracies also became prevalent and widespread since 2020 (Suthaharan et al., 2021). There is an important distinction to note here between paranoia (defined as a state of feeling individually threatened), and conspiracy beliefs, which 'conjure a more general, diffuse harm, typically involving a powerful minority covertly mistreating the rest of us. But paranoia and conspiracy beliefs are both varieties of mistrust' (Freeman, 2024a,b, np; see also Alsubhani et al., 2022; Martinez et al., 2022; Suthaharan & Corlett, 2023). Furthermore, it is also key to note that paranoia, which has been called the '21<sup>st</sup> century fear' (Freeman & Freeman, 2008), is at least in part linked to broader trends around exclusion, poverty, socioeconomic inequalities (Greenburgh & Raihani, 2022), all of which are deeply urban themes. The post-pandemic societal sphere, then, is one which has seen a significant emergence both of paranoia, and of Covid-related conspiracies. Furthermore, adherence to conspiracy theories about the pandemic was widespread: 50 % of the UK population showed at least some conspiracy thinking (Freeman et al., 2022), and conspiracy adherence was not confined to specific socioeconomic classes.

As well as noting the rise in paranoia and conspiracy adherence, we situate paranoid urbanism in a broader post-pandemic context. This is characterised by the fact that the city, as the focus of social life in the so-

called Urban Age (Derickson, 2015), is increasingly interpreted as a site for experimentation with increasingly intrusive surveillance and interdiction technologies (Apostolopoulou & Liodaki, 2021) aimed at eliminating from the urban all that does not 'fit' with progressive, (neo)liberal narratives of societal development. This focus was heightened during and after the Covid-19 pandemic, with its associated lockdowns (a form of epidemiological spatial control that heavily impacted on the experience, feel, and interactions within urban life), social distancing, and other measures such as mask mandates, Covid passports, and high-profile examples like the abuse of digital Covid-19 health codes to control urban protest in Chinese cities (Bloomberg, 2022; Chen, 2023). In turn, post-pandemic paranoid urbanism also draws on longer-term unease after the rapid end of post-Cold War notions of global stability and prosperity, disillusionment with global consensus politics after the 2008 financial crisis and its urban repercussions, austerity politics with its deep impact on urban services, and the rise of populist movements and projects in the 2010s (from Trump's presidency to the UK's Brexit) which were largely branded as anti-elite, anti-expert technocracies, and anti-political (in the sense of being against conventional politics). Thus, many populist movements can be seen as characterised by a focus on defensive action: defensive behaviours being one of the key characteristics of paranoid behaviour.

The 15-MC can be placed within this broad envelope: an anti-political atmosphere of deep suspicion, by citizens, of urban development paradigms and trajectories often associated with governmental, private sector, technical and scholarly elites (Beveridge & Featherstone, 2021; Clarke, 2012). This is paralleled by the fact that these self-same elites also have the agency to engage in reactive urban interventions that are, in themselves, a response to hastily constructed notions of crisis. Therefore, the 15-MC is both anti-political in its reliance on technocratic rationality and subsequent triggering of mistrust, and post-political in its consensual and crisis narrative-driven performance. An example of this is the continuing debate over access to basic public services in the context of austerity urbanism: while key public services have been negatively affected in national and urban contexts characterised by particularly severe austerity regimes (Davies & Blanco, 2017), at the same time delivering access to public services is a key principle at the heart of most definitions of the 15-MC. One of the triggers for the move from post-politics to paranoid urbanism was the issue of control, experienced and performed through mechanisms such as restrictions and lockdowns. This is because *defense against control* helped to catalyse a move from technocratic and consensual post-politics, to paranoid urbanism. Paranoid urbanism can thus be seen as a response to post-political urban practices, in two ways.

First, contestations of the 15-MC are also challenges to consensual urban politics emerging around issues such as climate change and public health (from Covid-19 measures, to immunisation, obesity, smoking, and other issues) (Blüdhorn & Deflorian, 2021). These are deeply urban forms of politics: for example, Covid-19 and associated aspects such as vaccinations, or infection and death rates, were mapped and rendered visible at a neighbourhood level, depicting specific neighbourhoods (and the populations living within them) as higher or lower risk areas in the city. Although much could be said about the use of these urban visualisations in a racialised way (Knox & Whyte, 2023), the point we wish to make here is that tensions focused on the 15-MC can be seen as a form of resistance against consensual urban politics, forming a basis for paranoid urbanism while not being wholly constitutive of it. It is in this sense that contestations of the 15-MC can be seen as a form of *repoliticisation* (Blüdhorn & Deflorian, 2021), an attempt to open up debates around what was previously presented as urban policy *faits accomplis*.

Second, the 15-MC has crystallized debates around policies and urban interventions that are often rooted in apocalyptic crisis narratives. These discourses (such as those around carapocalypse, urban safety, the climate crisis and climate emergency, and movements such as Extinction Rebellion and Just Stop Oil) leverage notions of impending catastrophe, with the associated need for responsive socio-technical measures, often

predicated (in Northern contexts at least) on new systems being implemented in the urban realm, as is the case with smart city technologies (such as smart traffic cameras). The recourse to apocalyptic justifications is part and parcel of the *politics of fear* that Tangheroni (2018) argues are central to the contemporary city. And yet, as Swyngedouw (2010: 228) points out:

‘[A] strictly populist politics emerges here: one that elevates the interest of an imaginary ‘the People’, ‘Nature’, or ‘the environment’ to the level of the universal, rather than opening spaces that permit the universalization of the claims of particular socio-natures, environments, or social groups or classes.’

Thus, apocalyptic crisis narratives are structured around the necessity of recapturing a phantasmic ‘Nature’, ‘Climate’, or ‘City’ constructed as harmonious, stable, governable; and in so doing, these narratives can be seen as constituting a thinly veiled attempt to reproduce neoliberal economies, with all their attendant inequalities, externalities, and discriminatory structures. Indeed, the key issue highlighted by Swyngedouw is the fact that in this new postpolitical landscape, the issues that need to be tackled are vaguely defined and socially disembodied, and thus function as an ‘empty signifier’ (Brown, 2016) that can be deployed by those who exert control over consensual politics, in order to drive specific agendas in the neoliberal city.

It is, therefore, key to unpack and excavate what dissent *means* in the context of the 15-MC and when placed in the light (shadow?) of a post-political, post-pandemic paranoid urbanism. Dissent and resistance to 15-MC projects have been vocal and widespread, as mentioned above. Dissent has been expressed on mainstream and social media, and through site-specific acts of resistance or vandalism, such as the cutting of 339 cables to the cameras monitoring London’s new Ultra Low-Emissions Zone (ULEZ) over a period of four months in 2023 (Rufo, 2023). Protests have been widespread: in the UK alone, in 2023 the 15-MC was the focus of street protests and campaigns in Oxford, Canterbury, Maidstone and Liverpool as well as in multiple boroughs in London (Esson, 2023; Loader, 2023). Protests have at times been linked to broader conspiracies around surveillance and the introduction of ‘global government’, among other themes (many of which rose to prominence during pandemic lockdowns).

While 15-MC protests may be troubling in terms of their links to conspiracy theories and resistance to change, it is striking that they effectively constitute a form of resistance to the current constellation of technical experts and urban elites that are the main proponents and designers of 15-MC ideals. This leads, then, to the notion that as well as being paranoid, post-pandemic dissent around the 15-MC should not be viewed as a set of discourses to be stymied via demonisation, but as part and parcel of the democratic process of contestation and debate which valorises difference and the naming of, and discussion over, alternative socio-environmental and urban futures. Drawing on Foucault’s notion of counter-conduct as the diffuse set of practices that challenge governmentality, Rosol (2014) shows that acts of urban dissent, however fleeting, constitute an element of resistance to the post-political urban order, or as Foucault (in Rosol, 2014: 71) put it, a pushback against ‘the processes implemented for conducting others’. If dissent and contestation within a democratic urban space not possible, then the very real risk is that the 15-MC (and associated strategies to improve urban liveability and reduce the city’s environmental impacts) becomes yet another example of what Žižek (2004) indicates is a post-Oedipal form of capitalism, constituted by a desire for the new while being bound by the constraints of existing (post-political) neoliberal approaches.

#### 4. Ten critical reflections on the 15-minute city

It can be seen, based on the discussion above, that the 15-MC is both a vague concept in terms of its definition, a contested idea in practice, and a theme that has given rise to multiple highly spatio-temporally specific urban strategies, policies and interventions at the scale of individual cities and/or neighbourhoods. In this sense, plans for

contemporary 15-MCs are situated within a context that moves from vague definitions, to attempts to enshrine sometimes quite specific interpretations of 15-MC principles into urban planning, understood here as the formalised and governance-based process of designing urban spaces. Building on this, the remainder of the paper offers ten avenues for much-needed critical reflection on the 15-MC in the context of post-pandemic paranoid urbanism.

First, and given both the definitional debates and tensions over the concept at the time of writing, it is key to note that the 15-MC concept is nothing new (Alberti & Radicchi, 2023). With regards to themes in urban futures, the 15-MC can be seen as yet another iteration of the long succession of (sometimes short-lived) urban development ‘paradigms’ that characterise urban studies and practice (Caprotti et al., 2022; de Jong et al., 2015). Historically, Ebenezer Howard’s late 19th century proposal for ‘garden cities’ was a key inspiration for a new type of urban development aimed at creating liveable mixed-use communities as satellite towns radiating around metropolitan city centres (Vernet & Coste, 2017). In the second half of the 20th century, in response to excessive car-oriented urban development leading to urban sprawl and air pollution, urban planners turned to the ‘compact city’ (Stevenson et al., 2016) and ‘transit-oriented development’ (TOD) (Ibraeva et al., 2020) as a means of enabling high-density urban development where different services and facilities (hospitals, schools, parks, cultural institutions) are within easy reach for residents along key transit routes served by public transport (Gordon & Richardson, 1997). A focus on urban health (both for residents and the environment) and the shift to more active travel found expression in the ‘walkable city’ (Speck, 2018) and eco-neighbourhoods (Joss et al., 2022). Similarly, and most closely related to the 15-MC, the ‘20-minute neighbourhood’ was first adopted in the late 2000s by the city of Portland (OR, USA), often seen as a pioneer in sustainable urban development in North America (Joss, 2015; Mackness et al., 2021).

There is, therefore, a history of conceptual development in thinking about the future city. This goes hand in hand with successive urban branding exercises involving city governments and private sector firms such as consultancies (Wood, 2002). It is key, then, to both contextualise the 15-MC as a concept, and to ‘ground’ it in place, in cities and neighbourhoods where it is being operationalised. The 15-MC often seems to be treated as a concept that is recent and emergent, given that it was first mentioned in scholarly literature in 2016. However, as outlined above, the concept has a history and decadal historical roots. It, therefore, needs to be situated within a broader evolution of paradigms for urban development.

Second, the 15-MC deliberately shifts emphasis onto the neighbourhood as appropriate scale for urban innovation and community engagement. This is done by identifying 15 minutes as a yardstick for ideal proximity for non-car-dependent, mixed-use urban living. Interestingly, within the UK, while several towns and cities in England have adopted the 15-MC concept, in Scotland the government adopted the 20-minute neighbourhood idea, leading to similarly critical reactions (Reuters, 2023). The UK’s LTNs are a UK-specific road use scheme aimed at reducing motorised through-traffic in residential areas with various traffic calming and filtering measures (Dudley et al., 2022). The conflation (both in policy and wider public discourse) of LTNs with 15-MC has been a contributing factor to the latter’s hostile reception among some urban residents, activists and the media, as seen above. Overall, the 15-MC follows in the footsteps of several distinct, yet related urban design visions and planning principles of what Alberti and Radicchi (2023) collectively term the ‘proximity city’ on account of their focus on mixed-use urban development at small urban scale, such as the neighbourhood. In a broader context, it is important to consider the ways in which different 15-MC projects vary in cities of different scales, densities and exhibiting variegated socio-economic and temporal patterns. These scalar factors can be investigated in terms of their overall effect on 15-MC strategies in different urban locales.

Third, the 15-MC is rooted in clearly justified imperatives for



transformational change in the contemporary city. Some of these imperatives include, for example, the need to transition away from automobility-centred cities, in order to bring about improvements in urban life such as lower emissions, congestion and liveability. Policy interventions focused on increasing regulation of cars in the city have led to significant improvements in air quality. London's ULEZ, designed under the mayoralty of Boris Johnson in 2015 and inaugurated in Vesalon, 2019 during Sadiq Khan's mayoral tenure, has been expanded several times and, at the time of writing, covers Greater London. Air quality has improved considerably since the ULEZ's introduction, although there are questions about whether a significant part of the increase is attributable not to the ULEZ but to a longer-term air quality improvement trend in which any single policy intervention cannot be identified as the main cause of improvements (Ma et al., 2021).

While focusing on improvements in urban air quality and liveability, it is key to understand the nuances of the ways in which 15-MCs can and should work: for example, in the case of London there are clear arguments to be made for reducing car use while improving the availability of bus transport, due to the fact that 'London's bus network is disproportionately relied on by women, ethnic minority groups and low-income groups who may not feel as comfortable or safe walking or cycling' (Nellis, 2022: np). What is key here is, therefore, not the need to challenge the imperatives that are identified as justifying 15-MC concepts and plans: after all, the contemporary city is replete with socio-environmental and other challenges. Rather, in the broader landscape of post-pandemic paranoid urbanism it is crucial to focus these imperatives in a socialised and geographically grounded contexts, in other words to render them both visible and political.

Fourth, it is important not to simply recirculate the critique, often found in analyses of urban development themes, that 15-MC priorities are defined by policy and other elites and parachuted onto cities worldwide. As Dragan et al. (2024) have shown in relation to the uneven territorial distribution of smart city projects in Romania, it is key to understand how new urban development priorities are both developed and then implemented, in often socially unequal and spatially and uneven ways. Indeed, elite visions are often based on top-down, master planned viewpoints, seeing the city as a static grid onto which planning regulations can be enacted. When considering the 15-MC, it is key to think about its meaning from the ground up: from the mother with a pram struggling to get onto a bus, to an Uber driver having to navigate traffic filtering zones, to the informal settlement resident who already lives in a splintered urban reality (Graham & Marvin, 2001) defined by infrastructural and service Othering, which the 15-MC could end up deepening. Additionally, new urban development paradigms and "brands" can be used in a circular way to link specific themes to urban development strategies and projects (Vesalon, 2019), and as Vanolo (2014) has shown with regards to smart cities, can be used to produce new notions of urban citizenship that depend on the new paradigm, based on the construction and conflation of the new paradigm itself as synonymous with the "good city." This is a tendency that is also clearly in operation around 15-MC debates and policy pronouncements.

Fifth, and given the concept's genealogy and antecedents, it is important to highlight the 15-MC's essentially Northern bias. This is because it is largely based in attempts to rethink cities in the Global North, as seen by its inception and operationalisation beginning with Paris, Milan, and other cities especially in France, Italy, Spain, Canada and the UK. As seen above, the concept is based on broadly progressive notions of the betterment of the urban, linking the 15-MC with agendas and themes such as New Urbanism, the sustainable, compact and walkable city, and TOD. However, at the same time and in different ways, the 15-MC has in fact largely already been operationalised (if not in name) in non-Northern settings, long before Moreno's popularisation of the concept. For example, TOD-focused cities in East Asia are examples of urban areas where 15-minute living is already at least partially a reality. In Hong Kong, Taipei, Singapore, and many other cities in China, South Korea, Japan and other countries, densification and high-rise

urban living are long-standing development imperatives. The 15-MC also exists in the large reality of urban informality in the Global South, but in very different configurations and with different realities around public services. In those settings, it is both a vibrant urban reality and a determinant of continued inequalities. This raises the question of how the 15-MC actually 'works' in the growing context of peri-urbanity in African and other cities.

Sixth, it is key to note the fracture points between 15-MC ideals and the reality of highly socio-economically unequal urban life in both the Global South and North. For example, the 15-MC is predicated on the delivery of fast, efficient transport services that cannot always be afforded in non-Northern global cities with high densities but low infrastructural investment (Guma, 2022). Added to this is the fact that less wealthy areas in Northern cities are often characterised by high levels of sprawl, suburbanization, food deserts, and lack of key services such as health care. The 15-MC thus risks being a superficial veneer overlaid on a complex constellation of existing urban issues that have deep structural roots and which cannot be erased by limiting automobility in select neighbourhoods. Debates about 15-MCs also originate largely in Northern contexts, and it is important to develop an understanding of where these may (or may not) be applicable in other contexts, or indeed to ask the question of whether 15-MC projects, ideals and principles are applicable or even desirable in specific Southern or Eastern urban contexts.

Our seventh reflection is that there is a need for a more spatialised and detailed linking of the 15-MC concept to urban policy and practice. The concept is currently (too) often discussed as an idealised notion, which treats the '15 minute' bracket as applicable to every urban space, and to every citizen, in the same way: in so doing, it produces abstract notions of both urban space and urban citizens. The 15-MC needs to be unpacked in light of its potentially quite divergent, granular applications (Casarin et al., 2023). What is needed is a drawing down of the concept from the abstract and idealistic scale at which it circulates, and its grounding in a spatialised working out of, for example, how '15 minutes' work in different cities, and for different citizens. As an example, unpacking the '15 minute' bracket could start by considering multiple intertwined perspectives:

- a) the geographical understanding that a 15-minute radius may map poorly onto the spatial contours of specific cities and neighbourhoods (the notion of a geometric radius is also more linked to blueprint-based notions of the city than to everyday city life);
- b) teasing apart the tensions between the 15-minute temporal bracket and current, established spatio-temporal planning principles;
- c) a critical socio-economic perspective that takes into account how the implementation of 15-MC may lead to gentrification and to dis-advantaging specific socio-economic groups, or to a deepening of existing inequalities;
- d) airing the question of how the 15-MC ideal connects (or not) to the principles of participatory governance, especially in cases where perceived imposition of 15-minute policies and plans negates the principles and practices of participatory planning and democratic decision-making in the city.

Eighth, unpacking the 15-minute bracket will benefit from a growing body of research published in the urban science and urban analytics literature (e.g. Da Silva et al., 2020; Graells-Garrido et al., 2021; Murgante et al., 2024; Zhang et al., 2023). This research uses the umbrella term 'N-city', or 'X-minute city', to encapsulate the 15-Minute, 20-Minute and 30-Minute City variants of the 'proximity city' paradigm and interrogate how it should be measured and evaluated. For example, Zhang et al. (2022) argue in favour of analysing the 15-MC in terms of spatiotemporal human behaviour, such as captured by human mobility data, as opposed to conventional static assessments of population size distributions and distances of amenities and services. Among other benefits, this helps to differentiate between resident and transient

populations and their respective public service access uses and needs. Their case study of Nanjing (China) also revealed significantly different urban transformation patterns between the core city centre and suburban districts with direct implications for how the 15-MC should be conceptualised and measured; a finding echoed by Murgante et al. (2024)'s case study of two Italian cities. Moreover, the Nanjing case study highlighted the discrepancy between intended spatial mix (as expressed in masterplans, on which 15-MC planning would normally be based) and actual socio-spatial outcomes resulting from rapid urban transformation. Consequently, this calls for a continuous assessment and related dynamic planning for 15-MC. In their analysis of the city of Tempe (Arizona, USA)'s plans to implement the 20-MC, Da Silva et al. (2020: 19) highlight the methodological intricacies and challenges of measuring and evaluating the 20-MC: 'creating baseline measures of a 20-min city requires many decisions about seemingly minor details, but the decisions must be made deliberately for legitimacy, replication, and to ensure that city priorities are considered.'

Significantly, ninth, building upon exponentially increasing data generation and data analytical capabilities, a group of scholars which includes Moreno called for the conceptual and practical extension of the 15-MC by adopting 'Smart Cities network technologies', including Digital Twins, the Internet of Things, and 6G (Allam, Bibri, Jones, et al., 2022: 1). They contextualise this proposition with, on one hand, 'the new realities (new normal) prompted by COVID-19' (ibid: 2) and, on the other, the emergence of new technologies and ICT infrastructure that 'enables a 15-minute city to move to a data-driven form of urbanism by leveraging advanced data and information technologies to entirely transform its processes and practices—evaluating, analysing, re-engineering, and envisioning the way urban infrastructures and services can be designed, developed, managed, and planned in line with the vision of sustainability' (ibid: 5). Advancing this comprehensive 'tech-centric approach', the authors acknowledge public concerns about the smart city but argue that 'with the assurance of data safety, it would be possible to convince urban residents to embrace the [15-MC] concept, enabling wider opportunities for urban managers to pursue the project, including adopting the smart urban technologies' (ibid: 13). However, such assurance may be difficult to achieve given significant public mistrust (especially in the post-pandemic era) in urban control measures and ubiquitous data harvesting and monitoring practices. Indeed, positing the 15-MC as a natural evolution of the smart city (Allam, Bibri, Jones, et al., 2022: 14) may well stoke public paranoia and resistance.

Our tenth and final reflection is that while the 15-MC concept works well as a brand, a banner, a clarion call for reshaping the city towards urban experience focused on improved liveability, community and wellbeing, it also clearly functions as a gimmick, a branding exercise of the sort that has been produced again and again over the past few decades in the realms of urban management by an urban 'global intelligence corps' (Rapoport & Hult, 2017) constituted by consultants, global engineering firms, and other actors. This gimmick is, however, not only operational at the narrative level, but also works through planning regulations and mechanisms of political influence, thus generating support while also creating controversy and meeting with resistance. It is difficult, therefore, to dismiss the 15-MC ideal as vague and vacuous, just as it is difficult to dismiss resistance to the ideal as simply based in conspiracy and incorrect readings of urban socio-environmental realities. This leads to the question of whether the 15-MC effectively functions as yet another example of a broader 'urban fix' (Smith, 1982), currently focused on sustainability (While et al., 2004) and enabled by digitally-mediated cognisance of the urban (Martin et al., 2019), that is part and parcel of the process of economic and urban restructuring and uneven development.

While the main contribution of this paper is to undergird the 15-MC concept with a novel theoretical perspective (paranoid urbanism), taken together the ten critical reflections also have obvious practical relevance. For example, we highlight the need to socialise and geographically ground the 15-MC, rather than treating it as a blueprint to be

applied generically and in a top-down manner to local policy and practice. The reflections also highlight the need to be mindful of the risk of exacerbating socio-economic inequalities if the 15-MC acts as a superficial veneer overlaid on complex existing urban realities. Furthermore, we emphasise the benefits of mobilising urban science to develop a fine-grained socio-spatial understanding of the application of the 15-MC in specific urban contexts. At the same time, we point to the risks of exacerbating local resistance to the 15-MC if it is too uncritically cast as 'tech-centric' smart city. These practical considerations, thus, go towards recognising and addressing the risk of paranoid responses to the 15-MC and offering possible resolutions to the controversies surrounding its applications on the ground.

## 5. Conclusion

As a concept and rallying point for debates and practice propositions around the future of the post-pandemic city, the 15-MC has garnered strong support from some quarters, and equally strong opposition from others. We have situated the 15-MC in a post-political context that is characterised by an increasing slide towards what we term paranoid urbanism. This is underpinned by the emergence of paranoia, conspiracies, and suspicion as key lenses through which urban development is increasingly being filtered, and through which the practice and politics of urban planning and design are increasingly seen as dominated by faceless, technocratic, managerial elites. Paranoid urbanism is, therefore, both rooted in, and a challenge to, the post-political city. The emergence of paranoid urbanism is a development of the post-pandemic, post-political city, and presents a key challenge for policymakers and practitioners alike. In this paper, we have provided a conceptual elaboration of paranoid urbanism linked to 15-MCs and reflections for further research. Furthermore, our ten reflections aim to contribute to deepening the critical engagement that practitioners (in city administrations, urban development authorities, planning and design studios and consultancies, think tanks, NGOs and other organisations) can use to inform their continuing work on the shape of future cities.

Building on our understanding of the 15-MC within the context of urban paranoia and mistrust, we offer here a perspective that suggests a way past the quagmire of paranoid urbanism. To do so, we must recognise the psychological roots of paranoid urbanism in a blend of notions of feeling personally threatened, and of conspiracy-tied belief of existing in a context where powerful and non-representative elite groups are redesigning cities and society in order to control and corral the (unheard, unseen, uncared-for) majority. Therefore, what needs to be highlighted, over and above paranoid urbanism per se, is the fact that the post-political city is both an urban polity based on consensus, and at the same time a city that is characterised by deep mistrust. What is to be done? As Freeman (2024b) argues, in relation to paranoia and conspiracy, the choice of a different narrative - one based on trust rather than paranoia - is a difficult but wellbeing-enhancing antidote to the despair of mistrust. Similarly, Liu (2021: 608), based on an analysis of 'collective paranoia' during the Covid-19 crisis, argues in favour of a 'reparative practice of relationship-building and collective action' to help 'turn paranoia away from its destructive tendency'. Translated into the urban realm, this insight might mean two things: first, the need not just to challenge urban and other conspiracies, but to build an urban culture of mutual trust. This culture needs to be horizontal in nature, rather than yet another top-down governance exercise. Second, the rise in paranoid urbanism speaks to the need to re-engage citizens with the politics and governance of the city: it is not surprising that, in the post-political city, it is specific groups of citizens who feel the most excluded and sidelined from the changing urban environment around them.

We have underlined the fact that the 15-MC needs to be seen not in isolation from urban planning and design practice, but as an urban development theme and set of priorities that is rooted in broader historical lines of thought for thinking about cities beyond dependency on the automobile and its spatial and socio-environmental externalities.

Additionally, it is clear that the 15-MC is also linked, as an ideal, to increasing interest in the spatio-temporal ways in which cities can be planned so as to enhance wellbeing. At the same time, in our ten critical reflections we have shown how the 15-MC needs to be engaged with on multiple levels, from the focus on neighbourhoods as the key planning scale, to the need to integrate chrono-urbanism in planning and design, and the role of grassroots, bottom-up views of the 15-MC as helpful inroads into a concept that is all too easily tarnished by notions of elite, technocratic urban normativity. Underlying all of this, however, is the need to also engage with the (currently) problematic Northern focus of much 15-MC debate, ignoring urban development realities, priorities and lessons from both the urban Global South and East; at the same time, there are key questions to be asked about how the 15-MC as an urban ideal intersects and speaks to the realities of spatialised socio-economic deprivation in deprived areas in Northern cities.

In conclusion, it is important to highlight three limitations of this paper which ought to be addressed through follow-up research: first, the novel theoretical perspective of paranoid urbanism offered here requires further elaboration, especially by linking it to theoretical perspectives on fear, mistrust, conspiracy and resistance and their relationship with urban planning and development. Second, this theoretical work should be used to develop an analytical framework with particular focus on the causes, mechanisms and effects of paranoid urbanism. Third, the resulting analytical framework could then be used to investigate the 15 empirically by analysing specific practice applications on the ground; that is, carefully charting how 15-MC initiative come about locally, how they are implemented, what public reactions they cause, and how possible controversies might be resolved.

#### CRediT authorship contribution statement

**Federico Caprotti:** Writing – review & editing, Writing – original draft, Validation, Project administration, Investigation, Formal analysis, Conceptualization. **Catalina Duarte:** Writing – review & editing, Writing – original draft, Conceptualization. **Simon Joss:** Writing – review & editing, Writing – original draft, Validation, Formal analysis, Conceptualization.

#### Declaration of competing interest

Federico Caprotti reports financial support was provided by UK Research and Innovation Economic and Social Research Council. Simon Joss reports financial support was provided by UK Research and Innovation Economic and Social Research Council. Associate Editor for Cities: Joss, S. If there are other authors, they declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

#### Acknowledgment

Federico Caprotti acknowledges the support of Exeter Urban in hosting a symposium that contributed to the development of ideas for this publication. Federico Caprotti and Simon Joss' work was supported by the UK's Economic and Social Research Council (ESRC) (grant number ES/L015978/2). Simon Joss contributed to this study as part of the urban governance workstream of the Urban Big Data Centre, University of Glasgow, with funding support from the ESRC (grant no. ES/S007105/1).

#### Data availability

No data was used for the research described in the article.

#### References

- Alberti, F. and Radicchi, A. (2023). From the neighbourhood unit to the 15-Minute City. Past and recent urban models for post-COVID cities. In Alberti, F., Matamanda, A.R., he, B.-J., Galderisi, a., Smol, M. And Gallo, P. (2023). *Urban and transit planning. City planning: Urbanization and circular development*. Berlin, SpringerLink: 159–170.
- Allam, Z., Bibri, S. E., Chabaud, D., & Moreno, C. (2022). The '15-Minute City' concept can shape a net-zero urban future. *Humanities & Social Science. Communications*, 9 (126), np. <https://doi.org/10.1057/s41599-022-01145-0>
- Allam, Z., Bibri, S. E., Jones, D. S., Chabaud, D., & Moreno, C. (2022). Unpacking the '15-Minute City' via 6G, IoT, and digital twins: Towards a new narrative for increasing urban efficiency, resilience, and sustainability. *Sensors*, 22, 1369. <https://doi.org/10.3390/s22041369>
- Alshuhibi, A., Shevlin, M., Freeman, D., Sheaves, B., & Bentall, R. P. (2022). Why conspiracy theorists are not always paranoid: Conspiracy theories and paranoia form separate factors with distinct psychological predictors. *PLoS One*, 17(4). <https://doi.org/10.1371/journal.pone.0259053>
- Anderssen, E. (2023). Edmonton is the latest '15-minute city' to be caught in a global conspiracy theory. *The Globe and Mail*, (17 February 2023). <https://www.theglobeandmail.com/canada/article-edmonton-15-minute-city-protests/>.
- Apostolopoulou, E., & Liodaki, D. (2021). The right to public space during the COVID-19 pandemic. *City: Analysis of Urban Change, Theory, Action*, 25(5–6), 764–784. <https://doi.org/10.1080/13604813.2021.1989157>
- Beveridge, R., & Featherstone, D. (2021). Introduction: Anti-politics, austerity and spaces of politicisation. *Environment and Planning C: Politics and Spaces*, 39(3), 437–450. <https://doi.org/10.1177/23996544211004188>
- Bloomberg News (2022). China city accused of using Covid health codes to stop protests. *Bloomberg News*, 14 June 2022. Available at: [https://www.bloomberg.com/news/articles/2022-06-14/china-s-iphone-city-may-be-using-covid-controls-on-protesters?in\\_source=embedded-checkout-banner](https://www.bloomberg.com/news/articles/2022-06-14/china-s-iphone-city-may-be-using-covid-controls-on-protesters?in_source=embedded-checkout-banner).
- Blüdhorn, I., & Deflorian, M. (2021). Politicisation beyond post-politics: New social activism and the reconfiguration of political discourse. *Social Movement Studies*, 20 (3), 259–275. <https://doi.org/10.1080/14742837.2021.1872375>
- Brown, T. (2016). Sustainability as empty signifier: Its rise, fall, and radical potential. *Antipode*, 48(1), 115–133. <https://doi.org/10.1111/anti.12164>
- C40 (2022). C40, NREP to collaborate on 15-minute city pilots. *C40 website*, 21 September 2022. <https://www.c40.org/news/c40-nrep-collaborate-15-minute-city/>.
- Caprotti, F., Chang, I.-C. C., & Joss, S. (2022). Beyond the smart city: A typology of platform urbanism. *Urban Transformations*, 4(4). <https://doi.org/10.1186/s42854-022-00033-9>
- Casarin, G., MacLeavy, J., & Manley, D. (2023). Rethinking urban utopianism: The fallacy of social mix in the 15-minute city. *Urban Studies*, 60(16), 3167–3186. <https://doi.org/10.1177/004209802311691>
- Chen, X. (2023). The venue code: Digital surveillance, spatial (re)organization, and infrastructural power during the Covid pandemic in China. In Goodspeed, R., Sengupta, R., Kytta, M. And C. Pettit (eds) intelligence for future cities: Planning through big data and urban analytics. Cham, springer: 47–69. [https://doi.org/10.1007/978-3-031-31746-0\\_4](https://doi.org/10.1007/978-3-031-31746-0_4).
- Clarke, N. (2012). Urban policy mobility, anti-politics, and histories of the transnational municipal movement. *Progress in Human Geography*, 36(1), 25–43. <https://doi.org/10.1177/0309132511407952>
- Da Silva, D. C., King, D. A., & Lemar, S. (2020). Accessibility in practice: 20-Minute City as a sustainability planning goal. *Sustainability*, 12, 129. <https://doi.org/10.3390/su12010129>
- Davies, J. S., & Blanco, I. (2017). Austerity urbanism: Patterns of neo-liberalisation and resistance in six cities of Spain and the UK. *Environment and Planning A: Economy and Space*, 49, 1517–1536. <https://doi.org/10.1177/0308518X17701729>
- de Jong, M., Joss, S., Schraven, D., Zhan, C., & Weijnen, M. (2015). Sustainable-smart-resilient-low carbon-eco-knowledge cities; making sense of a multitude of concepts promoting sustainable urbanization. *Journal of Cleaner Production*, 109, 25–38. <https://doi.org/10.1016/j.jclepro.2015.02.004>
- de Valderrama, N. M. F., Luque-Valdivia, J., & Aseguinolaza-Braga, I. (2020). The 15 minutes-city, a sustainable solution for postCOVID19 cities? *Ciudad y Territorio Estudios Territoriales*, 52(205), 653–664.
- Derickson, K. D. (2015). Urban geography I: Locating urban theory in the 'urban age'. *Progress in Human Geography*, 39(5), 647–657. <https://doi.org/10.1177/0309132514560961>
- Dragan, A., Crețan, R., & Bulzan, R. D. (2024). The spatial development of peripheralisation: The case of smart city projects in Romania. *Area*, 56(1), Article e12902. <https://doi.org/10.1111/area.12902>
- Dudley, G., Banister, D., & Schwanen, T. (2022). Low traffic Neighbourhoods and the paradox of UK government control of the active travel agenda. *The Political Quarterly*, 93(4), 585–593. <https://doi.org/10.1111/1467-923X.13198>
- Edwards, D. (2023). What is the 15-minute city (and what is it not)? *PBC today*, 26 April 2023. <https://www.pbctoday.co.uk/news/planning-construction-news/what-is-the-15-minute-city-and-what-is-it-not/125333/>.
- Esson, D. (2023). We meet the rebels on roundabouts spreading conspiracy theories in Kent. *Kent Online*, (19 July 2023). <https://www.kentonline.co.uk/kent/news/we-meet-the-rebels-on-roundabouts-spreading-conspiracy-the-290261/>.
- Freeman, D. (2024a). *Paranoia: A journey into extreme mistrust and anxiety*. William Collins: Glasgow.
- Freeman, D. (2024b). Are your friends talking about you? *The truth about paranoia – and why it's higher than ever*. *The Guardian*, (20 January 2024). <https://www.theguardian.com/society/2024/jan/20/are-your-friends-talking-about-you-the-truth-about-paranoia-and-why-its-higher-than-ever>.



- Freeman, D., & Freeman, J. (2008). *Paranoia: The 21<sup>st</sup> century fear*. Oxford: Oxford University Press.
- Freeman, D., Waite, F., Rosebrock, L., Petit, A., Casurier, C., East, A., Jenner, L., Teale, A., Carr, L., Mulhall, S., Bold, E., & Lambe, S. (2022). Coronavirus conspiracy beliefs, mistrust, and compliance with government guidelines in England. *Psychological Medicine*, 52(2), 251–263. <https://doi.org/10.1017/S0033291720001890>
- Gilbert, D. (2023). The 15-Minute City conspiracy theory goes mainstream. *WIRED*, (2 October 2023). <https://www.wired.com/story/15-minute-city-conspiracy-uk-politics/>.
- Gordon, P., & Richardson, H. W. (1997). Are compact cities a desirable planning goal? *Journal of the American Planning Association*, 63(1), 95–106. <https://doi.org/10.1080/01944369708975727>
- Graells-Garrido, E., Serra-Burriel, F., Rowe, F., Cucchiatti, F., & Reyes, P. (2021). A city of cities: Measuring how 15-minutes urban accessibility shapes human mobility in Barcelona. *PLoS One*, 16(5), Article e0250080. <https://doi.org/10.1371/journal.pone.0250080>
- Graham, S., & Marvin, S. (2001). *Splintering urbanism: Networked infrastructures*. Technological Mobilities and the Urban Condition: London, Routledge. <https://doi.org/10.4324/9780203452202>
- Greenburgh, A., & Raihani, N. J. (2022). Paranoia and conspiracy thinking. *Current opinion. Psychology*, 47(October 2022), Article 101362. <https://doi.org/10.1016/j.copsyc.2022.101362>
- Guma, P. (2022). On tackling infrastructure: The need to learn from marginal cities and populations in the global south. *Journal of the British Academy*, 10, 29–37. <https://doi.org/10.5871/jba/010.029>
- Hall, P. (1996). Revisiting the nonplace urban realm: Have we come full circle? *International Planning Studies*, 1(1), 7–15.
- Hall, P., & Pain, K. (2012). *The polycentric Metropolis: Learning from Mega-City regions in Europe*. London: Routledge.
- Ibraeva, A., Correia, G. H. A., Silva, C., & Antunes, A. P. (2020). Transit-oriented development: A review of research achievements and challenges. *Transportation Research Part A: Policy and Practice*, 132(February 2020), 110–130. <https://doi.org/10.1016/j.tra.2019.10.018>
- Joss, S. (2015). *Sustainable cities: Governing for urban innovation*. London: Palgrave.
- Joss, S., D'Assenza-David, H., & Serra, L. (2022). Eco-neighborhoods and the question of locational advantage: A socio-spatial analysis of French 'ÉcoQuartiers'. *Cities*, 126 (July 2022), Article 103643. <https://doi.org/10.1016/j.cities.2022.103643>
- Kapsali, M. (2024). 'Adopt your city': Post-political geographies and politics of urban philanthropy during austerity. *Urban Studies*, 0(0). doi:<https://doi.org/10.1177/00420980241235374>.
- Keidar, N., Fox, M., Friedman, O., Grinberger, Y., Kirresh, T., Li, Y., Rosner Manor, Y., Rotman, D., Silverman, E., & Brail, S. (2023). Progress in placemaking. *Planning Theory and Practice*. <https://doi.org/10.1080/14649357.2023.2286131>
- Knox, R., & Whyte, D. (2023). Vaccinating capitalism: Racialised value in the COVID-19 economy. *Mortality*, 28(2), 329–345. <https://doi.org/10.1080/13576275.2023.2169116>
- Limerick, S., Hawes, J. K., Gounaridis, D., Cohen, N., & Newell, J. P. (2023). Community gardens and the 15-minute city: Scenario analysis of garden access in New York City. *Urban Forestry & Urban Greening*, 89(November 2023), Article 128107. <https://doi.org/10.1016/j.ufug.2023.128107>
- Liu, W. (2021). Pandemic paranoia: Toward a reparative practice of the global psyche. *Psychoanalysis, Culture and Society*, 26, 608–622. <https://doi.org/10.1057/s41282-021-00236-2>
- Loader, I. (2023). 15-minute cities and the denial(s) of auto freedom. *IPPR: Progressive Review*, 30(1), 56–60. <https://doi.org/10.1111/newe.12330>
- Ma, L., Graham, D. J., & Stettler, M. J. (2021). Has the ultra low emission zone in London improved air quality? *Environmental Research Letters*, 16(12), Article 124001. <https://doi.org/10.1088/1748-9326/ac30c1>
- Mackness, K., White, I., & Barrett, P. (2021). Towards the 20-minute city. *Build*, 183, 71–72. <https://hdl.handle.net/10289/14284>.
- Martin, C., Evans, J., Karvonen, A., Paskaleva, K., Yang, D., & Linjordet, T. (2019). Smart-sustainability: A new urban fix? *Sustainable Cities and Society*, 45, 640–648. <https://doi.org/10.1016/j.scs.2018.11.028>
- Martinez, A. P., Shevlin, M., Valiente, C., Hyland, P., & Bentall, R. P. (2022). Paranoid beliefs and conspiracy mentality are associated with different forms of mistrust: A three-nation study. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1023366>
- Moreno, C. (2019). The 15 min-city: For a new chrono-urbanism! *Moreno web*, 30 June 2019 <http://www.moreno-web.net/the-15-minutes-city-for-a-new-chrono-urbanism-pr-carlos-moreno/>.
- Murgante, B., Valluzzi, R., & Annunziata, A. (2024). Developing a 15-minute city: Evaluating urban quality using configurational analysis. *The case study of Terni and Matera, Italy*, *Applied Geography*, 162, Article 103171. <https://doi.org/10.1016/j.apgeog.2023.103171>
- Nellis, S. (2022). Spotlight: Is London already a 15-minute city? *Future of London*, 20 September 2022. <https://www.futureoflondon.org.uk/2022/09/20/spotlight-london-15-minute-city/>.
- Osman, R., Ira, V., & Trojan, J. (2021). A tale of two cities: The comparative chrono-urbanism of Brno and Bratislava public transport systems. *Moravian Geographical Reports*, 28(4), 269–282. <https://doi.org/10.2478/mgr-2020-0020>
- Pinto, F., & Akhavan, M. (2022). Scenarios for a post-pandemic city: Urban planning strategies and challenges of making "Milan 15-minutes city". *Transportation Research Procedia*, 60(2022), 370–377. <https://doi.org/10.1016/j.trpro.2021.12.048>
- Pozoukidou, G., & Angelidou, M. (2022). Urban planning in the 15-Minute City: Revisited under sustainable and smart city developments until 2030. *Smart Cities*, 5(4), 1356–1375. <https://doi.org/10.3390/smartcities5040069>
- Rapoport, E., & Hult, A. (2017). The travelling business of sustainable urbanism: International consultants as norm-setters. *Environment and Planning A: Society and Space*, 49(8), 1779–1796. <https://doi.org/10.1177/0308518X1668606>
- Ratti, C., & Florida, R. (2021). The 15-minute city meets human needs but leaves desires wanting. *Here's why*. *World Economic Forum Agenda*, (11 November 2021). <https://www.weforum.org/agenda/2021/11/15minute-city-falls-short/>.
- Reid, C. (2023). By railing against 15-minute cities rishi Sunak aligns U.K. government with conspiracy theory believers. *Forbes*, 30 September 2023. <https://www.forbes.com/sites/carltonreid/2023/09/30/by-railing-against-15-minute-cities-rishi-sunak-aligns-uk-government-with-conspiracy-theory-believers/>.
- Reuters. (2023). Scotland's '20-minute neighbourhoods' policy addresses climate change and infrastructure; there are no plans to imprison people or limit freedom of movement. <https://www.reuters.com/article/idUSL1N34F1T1/>.
- Rosol, M. (2014). On resistance in the post-political city: Conduct and counter-conduct in Vancouver. *Space and Polity*, 18(1), 70–84. <https://doi.org/10.1080/13562576.2013.879785>
- Rufo, Y. (2023). Ulez: More than 300 cameras damaged or stolen in four months. *BBC*, 18 August 2023. <https://www.bbc.co.uk/news/uk-england-london-66535086>.
- Schwab, K., & Malleret, T. (2020). *Covid-19: The great reset*. Geneva: Forum Economic Publishing.
- Scott, A. J. (2022). City-regions reconsidered. In P. Baisotti (Ed.), *Cities in Latin America and Asia: Welcome to the twenty-first century* (pp. 114–152). Ann Arbor: University of Michigan Press.
- Smith, N. (1982). Gentrification and uneven development. *Economic Geography*, 58(2), 139–155.
- Speck, J. (2018). *Walkable City rules: 101 steps to making better places*. Washington, DC: Island Press.
- Stevenson, M., Thompson, J., Hérice de Sá, T., Ewing, R., Mohan, D., McClure, R., ... Woodcock, J. (2016). Land use, transport, and population health: Estimating the health benefits of compact cities. *The Lancet*, 388(10062), 2925–2935. [https://doi.org/10.1016/S0140-6736\(16\)30067-8](https://doi.org/10.1016/S0140-6736(16)30067-8)
- Suthaharan, P., & Corlett, P. R. (2023). Assumed shared belief about conspiracy theories in social networks protects paranoid individuals against distress. *Scientific Reports*, 13. <https://doi.org/10.1038/s41598-023-33305-w>, 6084(2023).
- Suthaharan, P., Reed, E. J., Leptourgos, P., Kenney, J. G., Uddenberg, S., Mathys, C. D., Litman, R., Robinson, J., Moss, A. J., & Taylor, J. R. (2021). Groman, S.M. and Corlett, P.R. (2021). Paranoia and belief updating during the COVID-19 crisis. *Nature Human Behaviour*, 5, 1190–1202. <https://doi.org/10.1038/s41562-021-01176-8>
- Swyngedouw, E. (2010). Apocalypse forever? *Theory, Culture and Society* 27(2–3): 213–232. doi:<https://doi.org/10.1177/0263276409358728>.
- Tangheroni, E. (2018). Contemporary urban paranoia: Why we should look into the surveillance camera. *Amateur Cities*, (15 August 2018). <https://amateurcities.com/contemporary-urban-paranoia/>.
- UNFCCC. (2021). The 15 Minute City. *1.5 Degrees: A Climate Action Blog*, (24 February 2021). <https://unfccc.int/blog/the-15-minute-city>.
- Vanolo, A. (2014). Smartmentality: The smart city as disciplinary strategy. *Urban Studies*, 51(5), 883–898. <https://doi.org/10.1177/0042098013494427>
- Vernet, C., & Coste, A. (2017). Garden cities of the 21<sup>st</sup> century: A sustainable path to suburban reform. *Urban Planning*, 2(4), 181–196. <https://doi.org/10.17645/up.v2i4.1104>
- Vesalon. (2019). "little Vienna" or "European avant-Garde city"? Branding narratives in a Romanian city. *Journal of Urban and Regional Analysis*, 11(1), 19–34.
- Webber, M. M. (1964). The urban place and the nonplace urban realm. In M. M. Webber, et al. (Eds.), *Explorations into urban structure*. Philadelphia: University of Pennsylvania Press.
- While, A., Jonas, A. E. G., & Gibbs, D. (2004). The environment and the entrepreneurial city: Searching for the urban 'sustainability fix' in Manchester and Leeds. *International Journal of Urban and Regional Research*, 28(3), 549–569. <https://doi.org/10.1111/j.0309-1317.2004.00535.x>
- Whittle, N. (2023). Fifteen-minute cities are suffering their 15 minutes of fame. *Financial Times*, (24 February 2023). <https://www.ft.com/content/abe2314b-d65c-40f4-a148-765de193cd8a>.
- Wood, P. (2002). Knowledge-intensive services and urban innovativeness. *Urban Studies*, 39(5–6), 993–1002. <https://doi.org/10.1080/0042098022012841>
- Zhang, S., Zhen, F., & Kong, Y. (2023). Towards a 15-minute city: A network-based evaluation framework. *Urban Analytics and City Science*, 50(2), 500–514. <https://doi.org/10.1177/2399808322118570>
- Žižek, S. (2004). *Organs without bodies: On Deleuze and consequences*. New York, NY: Routledge.