



This is a repository copy of *Smart cities and their settings in the Global South: informality as a marker*.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/205844/>

Version: Published Version

Article:

Guma, P.K. orcid.org/0000-0001-8511-5664 (2024) Smart cities and their settings in the Global South: informality as a marker. *Dialogues in Human Geography*, 14 (3). pp. 411-414. ISSN 2043-8206

<https://doi.org/10.1177/20438206231206751>

Reuse

This article is distributed under the terms of the Creative Commons Attribution (CC BY) licence. This licence allows you to distribute, remix, tweak, and build upon the work, even commercially, as long as you credit the authors for the original work. More information and the full terms of the licence here:

<https://creativecommons.org/licenses/>

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



eprints@whiterose.ac.uk
<https://eprints.whiterose.ac.uk/>

Smart cities and their settings in the Global South: Informality as a marker

Prince K Guma 
University of Sheffield, UK

Dialogues in Human Geography
1–4

© The Author(s) 2023



Article reuse guidelines:

sagepub.com/journals-permissions

DOI: 10.1177/20438206231206751

journals.sagepub.com/home/dhg



Abstract

Smart cities have gained increased traction worldwide. This commentary situates smart cities in the context of Southern urban settings. I demystify urban informality and recast informality as a valuable marker in the study of smart cities. Reiterating Prasad et al.'s appeal to explore the centrality of informality for smart city planning and development in the Global South, I contend that informality holds epistemic value, particularly in highlighting smart city diversity, heterogeneity, and incompleteness. Accordingly, I advocate for a critical lens and analysis that fosters a more open and inclusive understanding of the intersection of informality and smart urbanism.

Keywords

Global South, smart cities, Southern theory, urban informality, urban planning

Introduction

Smart cities have gained increased traction worldwide. In the Global South, urban studies have examined smart cities highlighting how visions, plans, and projects in different settings exhibit the ‘rhetoric of urgency’ to the problems of urbanization (Datta and Odendaal, 2019: 5) and the phenomenon of ‘urban fantasies’ (Watson, 2014). Much of the critique of smart cities has focused on the fact that they often materialize as tailored technocratic solutions, marked by conventional and codified notions of formal planning and marketed as fixed, linear, and predetermined tech-optimized urban spaces. Yet, as has been shown, smart cities are not entirely ceaseless undertakings of universal sensor-actuated programs but are characterized by situated contingencies, nonlinear progressions, and transient temporalities that evolve across human

and more-than-human registers (Guma, 2021; McFarlane and Söderström, 2017; Odendaal, 2023). Prasad et al. (2023) focus particularly on the centrality of informality in smart city planning and its challenge to smart city discourses in the Global South.

This commentary demystifies and recasts informality as a marker, foregrounding its epistemic value for exploring smart cities and their settings in the Global South. I reiterate Prasad et al.'s appeal to recentre informality for smart city development in the Global South and draw further attention to the value of informality for highlighting

Corresponding author:

Prince K Guma, Urban Institute, University of Sheffield, Sheffield, UK.

Email: p.guma@sheffield.ac.uk

questions and challenges of ‘inequity and inequality’ in smart cities. Granted, the language of informality does not fit Northern descriptions and articulations of smart urbanism. However, it is important to transcend tacit and explicit assumptions about informality, including the views that ‘informal’ urban settings cannot be smart and that smart urban settings are always simultaneously supposed to be ‘formal’.

Accordingly, I argue that informality draws us to questions related to the diversity, heterogeneity, and incompleteness of smart cities in Southern urban contexts. In addition to studies that encourage us to understand local realities, politics, socio-spatial inequalities, and conditions of urban splintering and fragmentation (e.g., Guma, 2021; Odendaal, 2023), I advance a critical theoretical dialogue that exceeds dominant and hyper-modern standards, conceptualizations, and notions of the smart city. Placing smart cities within their urban settings is imperative for decentring homogeneous, top-down, and decontextualized readings of the smart city and for further enriching our studies beyond technological determinism or the idea that technology develops independently of specific societal conditions. Thus, I advocate for a critical lens of analysis that offers a more open and inclusive reading of informality and a comparative, empirical, and real-world account of smart city development in the Global South.

Demystifying informality as a marker

The intersection of informality and smart cities requires critical analysis within the context of the Global South. Yet, according to Prasad et al., in the case of India, ‘smart city development’ tends to espouse ‘the disregard of informality’. This disregard is true not only for India but also Africa and the wider Global South. And, as Prasad et al. highlight, it poses significant challenges.

Despite claims of equity, inclusion, and justice, large-scale smart city attempts to reorganize and restructure urban places and infrastructure tend to evolve as exclusive and discriminatory processes. Often, they espouse a disregard for urban informality in its varied forms as a political, economic, aesthetic,

and spatial phenomenon while sometimes leading to or prompting its substitution and eradication. More broadly, informality is misconstrued as a binary through a paradoxical view marked by a prefigured lens of the ideal standard, where it is construed as something that exists outside totalizing analytics, hegemonic capitalism, neoliberalism, and official legislation. Here, urban informality becomes a catch-all label for everything that is wrong, un-urban, and mystifying; all that must be formalized, rearranged, or evacuated. It is a marker of dysfunctionality, state impotence, economic backwardness, and a lack of formality and development.

A common predisposition is to view urban informality as subaltern, sometimes in the sense of what Bayat (1997) would call a quiet ‘encroachment of the ordinary’. Such encroachment is always expected to exist only as liminal, transient, and provisional, wilfully or forcefully suspended through authorities’ enforcement of formal rules and regulations. As encroachment, informality is not expected to linger long enough to become a banal form of the urban because it is an unwanted, unwelcome, uninvited, and counter-hegemonic form that threatens modern planning ideals and frameworks of city-making. In the era of striking fascination and enchantment with formal and networked smart city projects, the informal is expected to remain a metonymy, an offshoot, a void, an interstice, and a gap that must be filled, closed, or plugged (Guma et al., 2023).

These views, in general, justify why we see informal settlements, informal economies, and informalized modalities of access as abject. They epitomize the pathologization and ‘othering’ of informality as a phenomenon located primarily in the Global South, therefore concerned with specific settings of a Southern urban-ness (Roy, 2011). This speaks more to the pernicious tendency to commonly analyze the Southern urban condition as one that attracts empathetic assessments of urban poverty synonymous with views that cast informal urban settings as unbounded and errant environments synonymous with deficit and dysfunctionality, and obduracy, disorder, and unruliness, encompassing default catch-all labels such as ‘slum’ and ‘squatter’, which predetermine how informality is read or

imagined. This calls for a critical lens and analysis that fosters a more open and inclusive understanding of the intersection of informality and smart urbanism.

Recasting informality

This commentary calls for a recasting of informality beyond completist and reductive conceptualizations. As a marker, informality represents epistemic and empirical value as a substantive category in the theorization of smart city development. Informality brings informal urban settings from the backdrops to the foreground of smart city theorizing. It is important to recast informality beyond conceptions that reproduce structural systems of oppression, enact class and racial stratification, and designate the urban poor to unplanned and fringe spaces. In fact, informal urban settings are often key players in smart city development. They are spaces as laboratories for testing and refining smart city plans and programs and draw us to ‘ordinary urban places, knowledges, and needs’ (McFarlane and Söderström, 2017) as well as how cities and people produce novel forms of smart urbanism beyond conventional representations and manifestations of hegemonic designs. As such, they call our attention to the local practices of smart improvisation and ingenuity through performance-as-practice, frugal and mundane usages, and flexible and disaggregated modes of practice designed to bypass the risks and dangers of reductive state policies, all of which constitutes opportunities for novel forms of smartness to emerge.

Informal urban settings offer sites of urban experimentation where populations have been shown to reimagine smart city initiatives. Sometimes they self-organize and restructure themselves in light of new projects through precarious networks of activism and participation and other times through devising formulas, applications, and tactics for adapting to and navigating new technologies. In other cases, residents translate foreign smart city concepts and projects through bottom-up participation, grassroots movements, community activism, and informal economies in general. They organize through interest groups and socio-political institutions, regulatory authorities, political parties, agencies, and lobbyists,

to play integral roles in controlling, renegotiating, and sometimes influencing the development of smart city projects (Guma, 2021, 2022; Guma and Monstadt, 2021; Guma and Wiig, 2022). With this, informality becomes a marker of appropriation, hybridization, translation, and innovation, with residents being proactive participants in coproducing smart city development beyond original designs and linear and hegemonic trajectories. It draws us to how residents modify, rework, and reengineer new, emergent, and foreign projects and designs to fit their own situated and ordinary ways of life.

As a lens of critical analysis, informality ‘offers a new perspective on the “Southern theory” of smart cities’ (Prasad et al., 2023). This reminds us of the need to revisit qualifiers toward a more nuanced and critical understanding of contemporary developments of urbanism in order to bring urban spaces into a more exhaustive discussion that considers the context-dependent nature of urbanism within diverse settings. Such an understanding is even more critical today with newer and more apparent socio-technical challenges and encounters affecting the world, including Covid-19 and climate and urban change, increasing the demand for ‘smarter’ solutions to urban problems. As a marker, informality makes possible smart city readings beyond top-down technocratic and deterministic views that underlie narratives of smart urbanism. Informality invites us to revisit mainstream perspectives of what we think we know or view as familiar or unsettling about smart urban development. It invites us to further widen theoretical pluralism in urban studies beyond views that further entrench or invert stereotypes rather than disrupting them.

Conclusion

The significance of informality as a valuable marker in the study of smart city development lies in highlighting not only challenges of ‘inequity and inequality’ in smart cities but also questions of diversity, heterogeneity, and incompleteness with respect to smart cities in the Global South. Conceptually, this calls for unlearning existing theory, challenging conventional and codified notions, attending to idiosyncrasies and context-specificities, and producing located knowledge.

As Prasad et al. argue, informality is central to smart city development and planning, and it is a perpetual and inevitable core of many aspects of the urban. Therefore, informality has critical implications for smart cities both in informal settings, where informality might be more vivid and elaborate, and in the more formal settings, where informality and its effects might not be as distinct and clear-cut but are still apparent.

It is important, then, to read smart cities beyond the limits of the status quo and the conventional and codified notions of formal planning; and to open up to optics and language that allow broader understandings of smart cities and their settings. This commentary reiterates calls for the need to cast smart cities beyond strictly linear and demarcative frames. Equally, it calls for a reading of informality as something that is not always structurally produced. Informality is not always unstructured and chaotic; it does not apply only to the urban poor and the margins of urban development and practice. As a marker, informality draws us to different articulations informed by their locatedness and situatedness within their settings. It adds to categories for capturing intricate, complex, and diverse realities of the urban. Most importantly, informality stimulates a reappraisal of how we should read processes of smart urbanization in the Global South. There is a need for a broader repertoire of empirical studies that better explicate the convergence of informality and smart cities in a theoretically motivated and informed way intended to engage with the Southern urban critique and inspire new theories. The challenge for scholarship lies not just in understanding context-specific livelihoods and development strategies and prospects but also in dealing with the apparent ambivalence of this problematique at conceptual, analytical, and empirical levels.

Declaration of conflicting interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Prince K Guma  <https://orcid.org/0000-0001-8511-5664>

References

- Bayat A (1997) Un-civil society: the politics of the 'informal people'. *Third World Quarterly* 18(1): 53–72.
- Datta A and Odendaal N (2019) Smart cities and the banality of power. *Environment and Planning D: Society and Space* 37(3): 387–392.
- Guma PK (2021) *Rethinking Smart Urbanism: City-making and the Spread of Digital Infrastructures in Nairobi*. Eburon Uitgeverij BV.
- Guma PK (2022) The temporal incompleteness of infrastructure and the urban. *Journal of Urban Technology* 29(1): 59–67.
- Guma PK, Akallah JA and Odeo JOI (2023) Plug-in urbanism: city building and the parodic guise of new infrastructure in Africa. *Urban Studies* 60(13): 2550–2563.
- Guma PK and Monstadt J (2021) Smart city making? The spread of ICT-driven plans and infrastructures in Nairobi. *Urban Geography* 42(3): 360–381.
- Guma PK and Wiig A (2022) Smartness beyond the network: water ATMs and disruptions from below in Mathare Valley, Nairobi. *Journal of Urban Technology* 29(4): 41–61.
- McFarlane C and Söderström O (2017) On alternative smart cities: from a technology-intensive to a knowledge-intensive smart urbanism. *City* 21(3–4): 312–328.
- Odendaal N (2023) *Disrupted Urbanism*. Bristol: Bristol University Press.
- Prasad D, Alizadeh T and Dowling R (2023) Smart city planning and the challenges of informality in India. *Dialogues in Human Geography*, this issue. <https://doi.org/10.1177/20438206231156655>
- Roy A (2011) Slumdog cities: rethinking subaltern urbanism. *International Journal of Urban and Regional Research* 35(2): 223–238.
- Watson V (2014) African urban fantasies: dreams or nightmares? *Environment and Urbanization* 26(1): 215–231.