

The Conception and Discourse of Smart City

Deepak Kumar,

PhD Candidate in Law and Governance at Jawaharlal Nehru University, New Delhi, India

E-mail address: soarhigh6028@gmail.com

Abstract

The article traces the emergence of the smart city concept, and how it has developed in the global North and the global South. The article further explores the discourses around smart cities as found mentioned in the scholarship, and in several attempts to define a rather ambiguous term smart city, exploring different aspects/dimensions/components of a smart city in general, and in relation to citizenship and rights, in particular. The discourses are broadly categorized under the themes of urban governance, citizenship rights and technology-society nexus. An understanding of the genealogy of the smart city concept and discourse would be helpful in understanding how the idea has taken space in urban governance with implications including on citizenship rights.

Keywords: cities, urban governance, citizenship rights.

1. Introduction

In his work *Planet of Slums*, Mike Davis [1] has given an account of the proliferating number of urban slums in the world. He has discussed the after effects, challenges, and solutions identified by world leaders, governments to the growing urban challenge in addressing the need of providing an adequate and affordable place of habitat to vulnerable sections. He has described how urban poverty and the lack of affordable housing have resulted in the proliferation of substandard housing and uninhabitable spaces across the world. Davis's exploration of the slum challenge and related civic problems globally has resonance in the policy action taken to address urban problems through technological integration. This can be seen in the development of smart cities using niche technology to govern cities and addressing issues including the slums and for sustainable habitats.

It seems the wave of developing smart cities has swept all the nations of the world and they have been responding with great intent and speed. Inherent in the speed of developing tech-led smart cities are multiple narratives intertwined around smart cities and smart citizenry; the way city spaces as engines of growth is governed; contested spaces of conflict and opportunities; neo-liberal urbanism; neo-liberal citizenship, and the aspect of citizenship; and how different disciplines have looked at the notion and identified normative, rhetorical and empirical aspects of the concept. In this article, I am invested in exploring the concept and discourse of smart cities.

Taking a cue from the work of Davis [2], an attempt has been made here to understand how the conception of the smart city has been developed (moved from IT sector to technocratic solutions for managing urban challenge and city governance) and proliferated in different parts of the world. As globally smart solutions are seen as panacea to ills of urbanization, providing tech-led solutions for urban habitat for ostensible sustainable urban development and quality life.

2. Smart Cities in different geographies

Before moving to the next section, it is useful to see the development pertaining to smart cities in different parts of the world.

In the United Kingdom, smart city projects funded by the Department of Business, Innovation and Skills aim to position the nation as a major exporter of smart city technologies and consultancy [3].

Smart city initiatives funded by the European Innovation Partnership for Smart Cities and Communities (EIPSCC) launched in 2011 majorly focus on attracting investment from private bodies to deliver public services by providing lower financial and technical risks to gain investors' confidence [4]. Led by the European Commission, the EIPSCC aims to develop smart technologies by bringing together industry, banks, SMEs, and research and other key smart city stakeholders [5]. Improving quality of life of citizens with intersection of ICT, energy and transport sectors is the ultimate goal of the EIPSCC.

In 2015, the US Department of Transportation launched the Smart City Challenge to improve the transport system in the country with data-based smart solutions, keeping in mind the interests of all age groups [6]. It claims that the services to be designed in a manner that all people not digitally sound can even access [7]. As per the website of the US Department of Transportation: "...The Smart City Challenge aimed to spread innovation through a mixture of competition, collaboration, and experimentation. But the Smart City Challenge was about more than just technology. We called on mayors to define their most pressing transportation problems and envision bold new solutions that could change the face of transportation in our cities by meeting the needs of residents of all ages and abilities; and bridging the digital divide so that everyone, not just the tech-savvy, can be connected to everything their city has to offer" [8].

In Brazil, the federal government launched My Smart City project as a part of its Brazil Intelligent Program for the deployment ICT resources by municipalities to transform cities [9].

With an aim to creating citizen-driven digital society, the government of Japan in 2015 launched i-Japan Strategy [10]. In Singapore for building future smart cities, the national government announced Intelligent Nation 2015 (iN2015) initiative, a 10-year plan to become "an intelligent island" by harnessing ICT [11]. To address its growing urban population, the Chinese government announced a list of 200 pilot smart cities investing over 2 trillion yuan [12].

In 2017, the Indonesian government launched the initiative of 'Movement Toward 100 Smart Cities' as part of its Smart City Master Plan in a bid to address the growing urban population, with 70 per cent of Indonesian citizens living in urban centres by 2045 [13].

Table 1. Smart Cities: Major initiatives worldwide

Year	Initiative taken towards smart city development
1974	A report ‘The State of the City: A Cluster Analysis of Los Angeles’ by Community Analysis Bureau of Los Angeles to identify city problems using cluster analysis, computer databases, and aerial photography
1994	The Digital City initiative, De Digital Stad (DDS), launched by Amsterdam for promoting the use of Internet by everyone
2005	USD 25 million investment by CISCO for conducting smart cities research
2008	Smart Planet strategy by IBM for application of network, sensors and big data analytic to address urban issues
2009	IBM’s Smarter Cities vision entailing an investment of USD 50 million to modernize cities using better information sharing
2009	Smart Grid Projects across the United States funded under the American Recovery and Reinvestment Act
2010	The government of Japan launched the Yokohama Smart City Project
2011	Smart City Expo World Congress in Barcelona saw the participation of over 6000 participants from more than 50 nations
2013	The People’s Republic of China launched the first lot of 90 smart cities
2013	Launch of Smart London Board to transform London into a smart city
2014	China launched the second lot of 103 smart cities
2014	Smart City Wien Framework Strategy by Vienna to chart its path to become a smart city
2015	The government of India launched the Smart Cities Mission to develop 100 smart cities by 2020
2017	The government of Indonesia launched the initiative of ‘Movement Toward 100 Smart Cities’

Source: Compiled by researcher from <https://www.verdict.co.uk/smart-cities-timeline>, and [14]

3. The smart city concept

A review of literature on various research studies undertaken between 1970 and 2018 illustrates that the smart city concept has been on the research agenda for over the past four decades [15]. The review shows there have been different components of smart cities studied all these years and of them the most studied/cited components include ‘smart IT infrastructure’ followed by ‘smart government’, ‘smart environment’, ‘smart mobility’, ‘smart energy’, ‘smart economy’, and ‘smart citizen’ [16]. It has been argued that IT infrastructure and technology has been the dominant narrative over the past several decades and less attention has been paid to the component of ‘smart citizen’ [17]. The work of Moradi [18] traces the databases on smart city studies since 1970, and found that there had been not many studies until 2000, and a spurt in smart cities research study seen between 2012 and 2016, which reached its peak in the year 2016 [19].

The origin of the term ‘smart city’ is seen in the adoption of several initiatives for implementing technologies in urban spaces towards the end of 1990s in having the potential to deliver public services efficiently and supporting local democracy [20]. The new trend in the interpretation and conception of ‘smart city’ has been marked in terms of the ubiquitous nature of the implementation of ICT and the emerging public value [21]. The smart city concept was introduced in the year 1994 [22] and a considerable increase in number in research publications related to smart cities has been seen since 2010 upon European Union supported projects for smart cities [23].

Globally, the conception of smart city started receiving increased attention since the year 2013 with use of 'smart' as the most suitable prefix and adjective to cities as compared to other prefixes like green, healthy, livable, resilient and sustainable [24]. The concept has seen an increased transformation since its reference and usage deployed during mid half of 21st century's first decade intersecting digital usages, ICT, citizen engagement, and navigating through complex governance system which is a mix of different agencies, local administrations, companies, communities and citizens [25]. The concept of smart city has been evolving and subjected to more debate and discussions. The smart cities paradigm is stated to have been used as a brand, a tool and a vehicle for corporate imagery, capturing market, and seen as technology solutionist approach [26].

Smart cities are the next in the evolution of the 'New Public Management' [27] principle seeing urban issues and challenges as opportunities for corporate as investment option and making profit. A shift has been marked with the evolution of smart cities in spaces earlier occupied by local institution of governance replaced by corporate actors and other entities. The smart cities conception is seen to have the most dominant technology dimension led initially by technology groups like IBM, Intel, Cisco, Microsoft, GE, Amazon and Oracle focusing on creation of Cloud platforms and identifying project solutions for smart city [28]. In 2016, the estimated market size for smart cities globally was about USD 550 billion and is expected to reach USD 2.57 trillion-mark by the year 2025, indicating smart cities are seen as investment destinations and opportunities for ICT firms [29].

In the literature, the role of IBM has been referred as the lead player in first giving concrete push for promoting 'smart planet' which ultimately resulted in the creation of industry for smart technologies [30]. After the 2008 financial crisis, IBM started pushing for exploring the smart city opportunity, and encouraged its staff to come up with innovative ideas; what resulted in, thus, is the conception of smart city creating an increased market potential for technologies in urban development [31].

As compared to the global North, in the global South the creation of smart cities has seen a marked increase with countries like China, India, Saudi Arabia, Korea and other developing nations emerging as the biggest consumers [32] of the smart city technologies market.

In India, the genealogy of the concept of smart city can be traced to the Jawaharlal Nehru National Urban Renewal Mission (JNNURM), a project for urban regeneration, which was introduced by the central government in 2005 [33, 34]. It was also found mentioned in the poll manifesto of the Bharatiya Janata Party, which when it came to power in 2014 launched a slew of urban reform measures including the Smart Cities Mission [35, 36]. The development of Dholera and Gujarat International Finance Tec-City (GIFT) city as Greenfield projects in Gujarat, as financial hubs with technological advancement have been seen as the precursor of the launch of the Smart Cities Mission in India [37].

In India, the smart city conception has gained traction taking a cue from the global discourse for urban development [38]. In the last decade or so globally the literature on smart cities has seen an immense rise. In India too, scholarly interest has been steadily on

the rise since the launch of the Smart Cities Mission in 2015. The debates globally have emphasized on the ways of defining what is a smart city, citizen of a smart city, what are the varying criteria constituting a smart city, corporatisation of urban governance, role of ICT and private entities in designing smart cities [39].

It has been stated that a city is labelled ‘smart’ when it introduces ICT, e-governance, and technology-led components in a city to attain efficiency and growth [40]. The discourse of smart city, it has been argued, stands hijacked by tech giants such as IBM and others in their bids to promote technology-led solutions in urban governance with an eye to capture smart technologies market to maximize profit; and, therefore, a counter narrative is needed for broadening of the discourse on smart city to include empowerment of community network, inclusive development of urban infrastructure and scaling up sustainable living for all [41]. What are the emerging discourses on smart city is the subject of next section.

4. Discourses on Smart City

Let me start with a few definitions as found mentioned in the scholarship and the policy documents which will set a backdrop to look at the emergence of the concept and discourses around smart city. I am reproducing the definitions as identified in the literature.

“...Smart cities are all urban settlements that make a conscious effort to capitalize on the new Information and Communication Technology (ICT) landscape in a strategic way, seeking to achieve prosperity, effectiveness and competitiveness on multiple socio-economic levels.” [42].

“...a place where traditional networks and services are made more efficient with the use of digital and telecommunication technologies, for the benefit of its inhabitants and businesses.” [43]

“...the effective integration of physical, digital and human systems in the built environment to deliver a sustainable, prosperous and inclusive future for its citizens.” [44]

“...a smart sustainable city as an innovative city that uses information and communication technologies (ICTs) and other means to improve quality of life, efficiency of urban operation and services, and competitiveness, while ensuring that it meets the needs of present and future generations with respect to economic, social and environmental aspects.” [45]

In case of India, it has been stated that there is no single way to define a smart city, and it has different meanings and conceptions as one looks at smart city. However, the common thread in all the definitions takes a cue from the global North, and places technology and data-centric city is at the core of the smart city; using technology in efficient governance of city and providing quality services to urban dwellers.

There has been a growing scholarly interest in studying smart city projects and its implication for urban governance and citizenship. The studies involve interrogation into the relationship between smart city and technocratic governance [46]; impact of data-led

governance and surveillance [47]; examining the sustainable development claim of the smart city mode of governance [48]; hype created for smart technology solutions and marketing campaigns [49]; and evolving citizenship regime [50].

There has been several discourses, therefore, identified in the literature. These discourses can be broadly categorized under the themes of data-led urban governance, citizenship rights, and technology-society nexus.

4.1. Data-led Urban Governance

Efficient and effective urban governance with the integration of ICT is one of the central planks of the smart cities discourse. The excessive reliance on algorithm and data analytics into the development of smart technologies stated to be the hallmark of smart city governance. It marks a shift from people using technologies to a scenario where they are made to live and interact with technologies [51].

The smart cities led governance is linked to the emerging potential for smart city as a city promoting entrepreneurship, as it seeks to establish a two-way relationship between the development of smart cities and entrepreneurship [52]. Smart city has been termed as an “entrepreneurial city” [53], and it is stated to have a “bidirectional relationship between entrepreneurship and smart cities” [54] where tech interventions led by entrepreneurs help push socio-technical transformation in cities and in becoming smart cities and tech-led smart cities aid in new opportunities for entrepreneurs by exploiting data generated by cities. It has been argued that this potential of entrepreneurship in smart cities has been largely remain unexplored as it has been understood that the push for entrepreneurial notion seeks to promote a neo-liberal city [55]. Moreover, the argument for entrepreneurial city rely on exploration of the smart city in literature mostly by urban planners, geographers, and sociologists, laying focus on the neo-liberal approach of smart cities and the manner in which big tech companies sell their technologies by lobbying with political establishment [56].

In *The Smart Enough City and Cities and the Digital Revolution* [57] positive and negative impacts of the technological push in developing smart cities have been explored; how technology has “disrupted the construction of the city in its components such as privacy, policing, democracy”. A very optimistic projection has been made on the use of technology, changed livability and the role of private entities (PPP mode) in the development of cities [58]. It has been stated that better use of data can yield better governance and planning despite other fallout [59]. Data and digital technology can also boost culture and tourism. On the other hand, what remains a concern area is the aspect of social justice and issue of equality in the tech-induced smart city development. The nomenclature of “Technological (or ‘tech’) Goggles” has been used to showcase how the use of technology is being blindly followed in the technology-led development of cities [60]. It has been stated that technology is not just a means to achieve optimization and a panacea of social problems but make a case of moving away from the notion of “smart cities” to developing “Smart Enough City” to address the needs of urban residents, and address complex issues, to achieve equity and justice [61].

The notion of smart city has been also explored from the framework of power and control [62]. It has been argued that inherent in smart cities conception is the notion of governmentality and power metrics [63]. It has been contended that India's Smart Cities Mission challenges the decentralized urban governance and allows states to concentrate power away from municipal bodies and deprive them of autonomy [64].

Authors have also explored the legal aspect of the smart city. How smart city as a site of 'contestation and dissensus' [65] unfolds and how one sees such events from the vantage point of law is something not 'smartly' explored [66]. It has been argued in the wake of the data regulation mechanism developed by the European Union, General Data Protection Regulation, it is high time smart city is subjected to a critical site of legal enquiry [67]. Rather than accepting the smart technology-led 'authority' on its face value that the present scenario entails, the need is to figure ways in which 'smart authority' can be challenged. This is something not very well explored and articulated in the smart city discourse by the legal scholarship [68]. This provides a crucial point of entry for interrogating the link between law and smart city and examining what 'smart' laws are developed in the age of smart city throwing multiple challenges in cities as sites of conflict and contestation.

Sadowski and Pasquale [69] postulate a social theory of the smart city in the form of the concept of 'spectrum of control', where there is no escape from seamless network of power and surveillance. An escape from such a spectrum of control that the elite captured smart technologies produce lies in the principle of 'the right to the city' [70] which challenges the dominance of capital and reimagines the rights and duties of citizenship. This right-based access to city spaces challenges the technocratic and neo-liberal ideologies [71].

The discourse on smart cities has been seen as an elite discourse. In this context, Basu [72] has identified three discourses of technocratic nationalism, technological utopia, and the urban citizenship. Taken together, he argues, these discourses have argued for a shift to privatized governance, to exclusive privilege from inclusive rights, and to digital technocracy as a solution to the problem of urban inequality [73].

Based on a survey of 23 cities in India, in a report, 'Annual Survey of India's City-Systems 2017', it has been highlighted that there is a lack of transparency and citizen participation in cities in India [74]. The engagement between government and citizens is weak owing to lack of 'structured platforms for citizen participation', 'no coherent participatory processes', 'weak citizen grievance redressal mechanisms', and 'very low levels of transparency in finances and operations' [75]. The survey points to lack of adequate mechanism to engage with citizens and ensuring their active participation in urban governance; and what is currently happening is mere an exercise in generating consensus and not consent. This scenario reflects the weak citizenship agency in the urban governance process and the integration of high-end technology is slated to create a wider gap.

The literature dwelling on the themes of citizenship, justice and the right to the smart cities has highlighted the emerging notion of 'smartmentality', moving away from governmentality, which is getting enacted through the tech-based control rooms, smart grids, dashboards, and smartphones that modulate behaviour and create neo-liberal subjects

[76]. A case for alternative rights-based discourse within smart cities has been made by pushing for a demand for ‘technological sovereignty’ [77] that serve local people and owned in the form of a commons, and not market-oriented; one which is grounded in the agenda of the right to the city [78].

The technology led smart governance as several discourses on smart city point out shift in citizenship regime from what is characterised as mere passively accessing entitlements and privileges, to a duty to perform active citizenship, and hence has implications on citizenship rights.

4.2. *Citizenship rights*

The technocratic governance that the smart cities discourse calls for a smart citizenry. It has been common assumption that the governance of smart city is based on data that the citizens share by way of their supposed active participation in their daily interaction with tech-enabled services; hence the smart city calls for an active citizenry as the literature shows.

In an article titled, “The citizen in the smart city. How the smart city could transform Citizenship”, the authors have attempted to explore the relationship between smart cities and citizenship [79]. Set in the context of the emerging debate on ‘how citizens are envisaged as actors in smart cities’, the article maps three sets of smart city discourses— ‘The Control Room’, ‘The Creative City’, and ‘The Smart Citizens’ [80]—against the republican and libertarian perspectives of thick with more active involvement of citizens, and thin citizenship implying citizens as mere individual consumers and target of market-led solutions [81], respectively. These two philosophical underpinnings of citizenship allow for understanding different nature of relationships between citizen, market and state. These perspectives on citizenship owing to their links to democratic polity, the article argues, are crucial to analyse the vision of smart city in democratic nations. The article further argues that in the three types of smart city discourses of control room, creative city and smart citizens implying ‘city as a collection of infrastructures and services; as local and regional systems of innovation; and, as a political and civic community’, respectively, open up windows to understand the re-enactment of republican and libertarian notions of citizenship. Of the several pitfalls of the normative views on citizenship in smart cities, one, more particularly under the republican notions runs into the trap of ‘responsibilisation’ [82], in other words, making citizens responsible for provisions in society. The contested notion of citizenship, as the article reflects upon, provides further ground to explore the discourses on smart city and its materialisation in the process of development of/in cities.

Another work utilising a similar line of argument, that is, two citizenship traditions of ‘civic-republican’ and ‘individual-liberal’, puts under scrutiny the claim of ‘citizen-centric approach’ [83] to smart cities in the standards issued in 2014-15 by the British Standards Institution (BSI). A quantitative and qualitative analysis of the contents of the smart city standards of BSI along three analytical dimensions of citizenship regime of ‘how the citizen is related to the community (and vice versa); which domains and issues fall within the purview of citizenship; what importance is ascribed to public deliberation and political participation’, reflects a citizenship regime which acts on behalf of citizens in smart city

[84]. However, the prevalent tensions and contradictions Joss et al., [85] argue, stems from the emergence of ‘a new kind of citizen agency’ that a citizen-centric approach of the smart city standard forges. According to them, the new citizen agency though reflects active citizen involvement in the governance of smart cities, and not just techno-centric approach benefitting businesses, the invocation of a more citizen-centric approach in the BSI standard is merely tokenistic at best with no clarity on the rights and obligations of citizens, among several others contradictions. They further highlight a need for further interrogation in the undergoing shift in the citizenship regime in the age of smart governance based on data which is not getting captured by conventional citizenship paradigms.

The critique of smart cities in India has identified a lack of impetus on ensuring citizenship rights in the development of smart cities, creating grounds for the exploitation and denial of membership as a right to the city of such developed cities to the vulnerable groups, including those living in informal settlements for want of adequate living spaces as a result of gentrification. In *Demystifying the smart city in India*, Taraporevala [86] explores the question of what constitutes a smart city based on the analysis of 99 (the 100th smart city, Shillong, was not officially selected when the study was conducted) cities proposals on the parameters of financial aspect, special purpose vehicle-led governance, smart cities projects and citizen participation. She critiques invocation of the idea of ‘lighthouse’ effect which claimed that some of the initial set of selected cities would lead to the selection of other potential smart cities. Further, the aspect of citizen engagement during the preparation of the proposals have not found support from civil society groups owing to the narrow approach for the development and fund allocation for mere 3 per cent of the area of selected cities. Mostly drawing from the earlier Jawaharlal Nehru National Urban Renewal Mission, the SCM as an urban regeneration programme lays focus on material production with emphasis on private players having wider say in governance, benefitting the privileged. According to her, the mission ignores the rights and justice aspect, undermine the role of local municipal bodies and an endeavour in capital accumulation in cities.

According to another study conducted by civil society group Housing and Land Rights Network [87] of some of the selected cities in India to be developed as smart cities, there is a serious lack of human rights-based approach which results in the denial of human rights to wider poor and vulnerable segments who do not only constitute the city but have been playing crucial role in the development of critical infrastructure of such cities. The study, *Smart Cities in India: Smart for Whom? City for Whom?* puts under scrutiny the claim made of a more citizen-centric approach adopted in the framing of the proposals of the selected cities based on the parameter of citizen engagement. The study, doing a qualitative analysis from a human rights framework of the text of the 99 smart cities proposals, highlights proposals lacking a human rights approach and further creating grounds of discrimination, displacement and segregation of spaces in cities. The model of governance based on special purpose vehicle has been criticized by experts and civil society groups to have further undermined the role of constitutional framework of local municipal bodies by taking away their wider role in the decentralized governance mechanism established after the Constitution (74th Amendment) Act, 1992. The claim of reaching out to all sections of society in the framing of the proposals in an effort of taking voices of all people on board

the study points to lack of a substantive approach rendering it an exercise in merely filling a gap in the bureaucratic procedure of ensuring citizen participation in urban governance.

The data-led governance and citizenship rights within smart city are commonly seen as a linear function operating in a society. It is generally assumed that technology plays a neutral role and configures societal relationship. The next broad category of smart city discourse points differently.

4.3. Technology-society nexus

It has been advocated by the proponents of smart city that technology has a deterministic role and can provide solution to all the ills of urban governance. Seen as an ultimate solution to urban challenge and to governance cities, technology occupies a determinist role. However, it is not a one-way relationship as it appears.

Verbeek [88] develops a theory of technology relying on post-phenomenological approach to understand human-technology relations. He asserts that this approach allows one to understand the relationship between technological artifacts and humans and the ways in which relationship between humans and the world are shaped by technologies. At another level, according to Verbeek, the post-phenomenological approach turns the table by considering actual technologies as a starting point for philosophical understanding and allows for an exploration of how our lifeworld is getting shaped and reshaped with the evolution of technology.

Kamath [89] pushes to look beyond “technological determinism” and “technological solutionism” mindset in the technology-society relation, and the so-called technology-led development. He argues in his book, *The Social Context of Technological Experiences: Three Studies from India*, it is not a linear relationship between technology and society but has multiple variants and expositions as has been already established in literature which Kamath further contributes to. He pushes to include the notion of “what people do technologies encounter” to the long-held view of “what technologies do people encounter” [90]. There are political and social aspects of technology, and has multiple meanings and contexts. Drawing from the Arnold’s [91] view of “technology has local usage and vernacular meanings”, Kamath picks three case studies from urban India of a small town, namely a weaver caste community in Kerala, a peri-urban Dalit settlement in Bengaluru, and a metropolitan centre of female pourkramikas in Bengaluru, to showcase that technology is social and gendered, and stands out differently in local context as opposed to the general (global) perception of technology. Technology is just a mediator and an end in itself. This is what Kamath has been arguing in his book while taking a close shot at policies since independence, planned documents and science and technology policies seeing technology as the ultimate juggernaut of development.

So, how a tech-led smart city configures and reconfigures societal relationship has to be keenly watched as showed by Kamath [92] within several spatial and temporal situations.

Analysing the 100 smart city proposals in India, Datta [93] has illustrated the possible existence of a politically engaged “chatur citizen” as a vernacular translation of globally

created imaginary of smart citizenship. The subaltern version of citizenship takes place through the processes of ‘enumerations, performances and breaches’ [94]. Datta provides a good vantage point to understand how the attempt to use technology in making invisible visible may not be equally situated from the point of view of positionality in the access to technology and making use of it, pointing to a gulf between access to technology by elite and the subaltern class; however, there are ways in which, the subaltern class make themselves heard by challenging the norms/conduct pushed by ‘smart’ people.

5. Conclusion

The concept of smart city has been mediating in the spheres of governance and citizenship, and altering the technology-society relationship. The scholarship on smart cities has allowed exploring and understanding several discourses providing legitimacy to the concept and pushing for its adoption. This critique has multiple narratives and counter-narratives. As a site of study the notion of smart city provides a good vantage point to look beyond its technological underpinnings, at the social construct of cities, urban governance and the notion of citizenship.

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