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The Political Premises of Contemporary Urban Concepts: The Global City, the Sustainable City, the Resilient City, the Creative City, and the Smart City

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ABSTRACT

Numerous studies have focused on the global city, the sustainable city, the resilient city, the creative city, and the smart city, analyzing their politics, ideologies, and social implications. However, the literature lacks synthetic analysis that addresses these concepts by juxtaposing them and exploring their similarities and differences. This paper provides synthetic analysis, followed by a discussion of the concepts' competing and complementary logics of governance and citizenship. The concluding section addresses the importance of taking into account these diverse concepts as political ideas and discusses how these concepts become a prescriptive mix promoted by public officials and private developers.

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Introduction

Across the world, cities are constantly competing for human and financial resources that they consider necessary to better position themselves in global and national economies. Some cities seek to improve their position in this competitive environment by framing their municipal management within emerging urban concepts and by implementing visions associated with vigor, innovation, success, and prosperity in the public's imagination. Among the various concepts, some have received more attention than others and have been used in strategic city planning; they include the global city, the sustainable city, the resilient city, the creative city, and the smart city.

Generally, the conceptual framework of the *global city* appears in academic literature as an analytical tool. It purports to capture a new global economic form that is situated in cities and inter-city relations that transcend those of nation-states. The concept of the *sustainable city* focuses on the search for balance between human activity and the environment in order to establish a more ecologically responsible form of human existence (Jabareen, 2006; Wheeler & Beatley, 2008). This concept addresses cities as urban ecosystems within wider economic, social, and spatial systems (Haughton, 1999; Newman, 2008) and emphasizes that the environmental quality of cities is inextricably linked to social equality (Agyeman, Bullard, & Evans, 2002; Haughton, 1999). The concept of the *resilient city*,

a framework developed by supra-national bodies such as the United Nations Office for Disaster Risk Reduction (UNISDR) in the early twenty-first century, is based on the idea of a *risk society* (Beck, 1992). It imagines the city as an entity capable of withstanding and rebounding from disruptive natural and human threats and challenges, such as economic crises, disease pandemics, or terror attacks (Coaffee, 2013). The concept of the *creative city* is based on the idea that economic competitiveness no longer lies in large endowments of raw materials or natural resources, but rather in the ability to attract, cultivate, and mobilize creative assets. Thus, 'creative capital' (Florida, 2002a) has gained considerable influence in urban policy and development strategies (Brown, 2010; Lewis & Donald, 2010). Finally, the concept of the *smart city* suggests that technology is a central feature in cities that can spark urban regeneration and increase urban efficiency. The smart city – also known as the intelligent, information, or virtual city (Batty, 2013) – is generally understood as a city that uses cutting-edge information and communication technologies (ICTs), big data analyses, and cyber systems to digitally connect its residents to urban infrastructures and city services.

Though these concepts are rather abstract in the literature, in practice, they are often presented as concrete frameworks for action. **In this transformative process, from theory to practice, which of the concepts' qualities gain more attention? Which qualities are left out?** In addressing these questions, the key argument of this paper is threefold. First, regardless of the crucial differences among these concepts, *cities often embrace several concepts simultaneously* when devising social policies, designing municipal services, and initiating thematic projects. Second, although policy professionals, politicians, and business people use these terms repeatedly, their use *tends to be an idealization* of how one might like to think of a city or to brand a city. Cities throughout the world use these concepts as promotional vehicles in their quest to gain material and symbolic power vis-à-vis their national governments and other competing cities, and as a means to sway private businesses and those whom they regard as desirable residents. Third, the *use of these concepts by planners and policymakers in cities is often adjusted to fit the neo-liberal economy* and politics of cities. This adjustment is often accomplished by focusing on the prescriptive dimensions of the concept. As a result, the uses of the concepts in practice do not always carry their original meaning or their normative ideas, but are adapted to the economic and political climate of a city. This dynamic explains, in part, the success of these concepts and the perceived lack of success of the just city concept, for example, as the implementation of its normative ideas are a condition to its fulfillment. Hence, the use or implementation of the concept requires a structural transformation such that "a change in the rhetoric around urban policy from a focus on competitiveness to a discourse about justice can improve the quality of life for urban residents" (Fainstein, 2014, p. 1).

In exploring these arguments, this paper does *not* aim to provide an historical overview of the emergence and development of these concepts, nor to assess their implantation in practice, but rather to identify their divergent assumptions and sets of values as defined in theory. In doing so, three aspects should be emphasized. First, these five concepts are generally not comparable in terms of the ends for which each was formulated and/or to which they have been applied in the urban studies literature. For example, the resilient, creative, and smart city concepts tend to be more prescriptive, while that of the sustainable city is based on normative ideas, and the global city concept is an explanatory theory. Second, the appearance of these concepts in the literature and their use by professionals is not unified throughout the world; some are more popular in Europe, while others have been utilized more in North America or Asia. Third, this list is not exclusive, and one can also find other concepts, such as the multicultural city, the equitable city, and recently, the just city. The latter are more critical concepts that suggest alternatives to the social and economic dynamics in cities.

The above analytical and methodological reservations explain, in part, the gap between theory and practice and between the idealization of these concepts and their implementation on the ground, as well as the fact that despite the mix of these concepts in practice and their paramount influence on the development of contemporary cities, the scholarly literature has tended to focus on one concept at a time or on comparisons among some of the concepts (Ahvenniemi, Huovila, Pinto-Seppä, & Airaksinen, 2017; Marsal-Llacuna, Colomer-Llinàs, & Meléndez-Frigola, 2015) based on a particular place or context. Yet, the drawback of fragmenting the issue into small, separate components is that we know more and more about less and less (Campbell, 2012, p. 140). If analysis implies reduction, particularity, and conclusiveness, then synthesis is the opposite; it is simultaneously holistic, clear, universal, and particular. As such, it is less dependent on robust qualities of reasonableness (Campbell, 2012, p. 144). Thus, in responding to the juxtapositions and adaptations of the varied concepts in practice, there is a need for synthetic analysis, a broader perspective on the various urban concepts.

Using this as a point of departure to explore urban concepts, this paper includes three parts. The first section presents the key ideas of the five concepts. In illustrating the theoretical analysis, each concept description begins with quotes from contemporary strategic plans. Twelve cities around the globe were examined, including New York, San Francisco, Seattle, Chicago, Rio de Janeiro, London, Barcelona, Melbourne, Vancouver, Tel Aviv, Dholera, and Dubai. All of these cities function as financial and touristic centers in their national arena; some of them play a major role in the global economy, and all of these cities developed multiple strategic plans and policies addressing at least four out of the five concepts examined. The second section addresses the city, government and resident dynamics internal to each concept. This section shows: (1) The differences between the concepts are far from minor or technical in nature. They are based on different suppositions and distinct sets of values and visions; thus, they should be understood as normative and political, i.e. influencing the power relations within a city. (2) The concept(s) that a city adopts influences the complex dynamics between the national government, the city and its residents. The third and concluding section addresses the importance of taking into account these diverse concepts as political and economic ideas that shape the urban environment and the lives of inhabitants throughout the world. It suggests viewing all these ideas as *one concept* providing an eclectic set of tools in the process of developing the neo-liberal city.

From Global to Smart: Presenting the Five Urban Concepts

Numerous theoretical studies have been dedicated to the conceptualization of the global city, the sustainable city, the resilient city, the creative city, and the smart city, analyzing their economic, social, spatial, environmental, and political implications. Similarly, in practice, numerous strategic plans have attempted to implement these concepts on the ground, with cities simultaneously using different concepts. Are these concepts compatible? If not, where are the gaps? What should planners consider when using these concepts? To address these questions, a synchronic framework (Campbell, 2012) that focuses on analyzing the relationships or juxtapositions among the concepts is needed, with particular attention paid to the following three questions: *What are the key political ideas behind each concept? What is the spatial configuration (real or imagined) of each concept? What are the social implications of each concept?* Based on these questions, this section maps the concepts and concludes with a comparative table that lists their major similarities and differences (see Table 1).

Table 1. Urban concepts – key themes.

Themes	Global	Sustainable	Resilient	Creative	Smart
Normative-Ideological					
Main Focus	Economic	Environmental-Social-Economic The city as an ecosystem: human, non-human, and the environment	Resilience The city as adaptive to threats and risks	Economic The city as a hub of innovation and growth	Information The city as a complex network of information and data flows
Underlying (Political) Values	Neo-liberal, economic growth, open flow of capital	Environmental, responding to ecological crises	Cities in defense, risk society, adjustment, resilience	Neo-liberal, economic growth, competitiveness	Techno-utopian, neo-liberal, notion of risk
Advocates	Private sector, corporations, municipalities	UN, environmentalists, grassroots organizations, NGOs, professionals	UN, World Bank, governments, NGOs	Policymakers, municipalities, members of the creative class	Private sector, multinational entrepreneurs, governments, municipalities, media, UN
Spatial Characteristics					
Urban Form	Metropolitan	Anti-sprawl, pro-urban	Anti-sprawl, pro-urban	Pro-urban	Efficient, ICT-based infrastructure
Physical Manifestation	Integrated, large-scale core city; command centers for international banking; amenity-enriched entertainment centers; international embarkation hubs (seaport and/or airport); severe roadway congestion; integrated rail transit system	Compactness, density, mixed land use, diversity, passive solar design, and greening	Physical systems (i.e. roads, buildings, infrastructure, communications facilities based on soil, topography, geology, and waterways), with sensitivity to natural environmental components and hazards	Downtown development districts, postindustrial areas within the city, dense networks of specialized and complementary firms, urban-design development geared around aesthetic production	Connectedness, smart grid, technological services and infrastructures
Social Configuration					
Social Capital	Attracting high levels of socio-economic labor, including high-income professionals in the financial sector, as well as low-income workers in the service sector	Focusing on the preservation of community relations, economic well-being, and social justice as essential to environmental issues	Improving the prospects of disadvantaged groups at risk and the community as a whole	Attracting the creative class as a source for development and economic growth	Developing social capital as a means of engaging all stakeholders to participate in the smart city
Vulnerabilities	Socio-economic polarization, prevalence of poverty, gentrification	Depends on government investment and development	Depends on government investment and development	Socio-economic inequality, social elitism, 'cleansed' public spaces, exclusionary spaces, gentrification, displacement of middle- or lower-class residents	Hyper-surveillance, less privacy, increasing digital divides, i.e. those who are not technologically connected receive none of the benefits but are subject to the associated vulnerabilities and surveillance

The Global City

*“[B]ecause **San Francisco is truly a global city**, we will build on the success of ChinaSF and expand our outreach to Latin American and Asian markets – not just attract businesses to locate here but introduce ‘Made in San Francisco’ products to these growing markets” (Mayor’s Office of Publication Policy and Finance’s, 2013); “I am proud that **Rio de Janeiro is the first global city** to become fully compliant with the Compact of Mayors, and I call on all cities to join this critical initiative on the Road to Paris and beyond” (Compact of Mayors, 2015); “In 2010, the Tel Aviv-Yafo Municipality undertook a municipal-national initiative designed to **position Tel Aviv as a global city** – a leading international business center that specializes in innovation” (Tel Aviv-Yafo, 2017a); “**Dubai has become a key player in the global economy**, and it aims to reinforce its position by enhancing its standing as a global business center to be among the top 5 centers for trade, logistics, finance, and tourism” (Government of Dubai, 2014).¹*

The statements above reflect the use of the idea of the global city by politicians and policymakers alike. The global city concept, which has evolved and expanded to other terms such as “world city”, “global city”, and “global city-region”, illustrates the increasing integration of the global economy in major cities and the new roles that cities play in national economies (Friedmann, 1986; King, 2015; Pain, Van Hamme, Vinciguerra, & David, 2016; Sassen, 1991). The ascendance of cities to a position of economic dominance is a consequence of deep structural transformations that occurred in all developed economies that affected cities and states on multiple levels. The rise of transnational corporations created a demand for new types of intermediate services (e.g. financial services, such as banking, insurance and accounting; legal services; public relations; consulting; and software programming), which tend to be provided within cities (Sassen, 2009). As a result, some cities have become major financial centers in which strategic cross-border networks, transactions, and functions are concentrated (Sassen, 1991; Taylor & Derudder, 2015; Xuefei & Keil, 2018). These cities possess the required material and human resources to bridge the gap between multinational firms and national specificities. From an economic perspective, the global city advocates the uninterrupted flow of capital, economic liberalization, and reduced national governmental regulation, which enhance the role of the private sector in the economy and strengthen the global city vis-à-vis the central government. Tokyo, New York, and London are perceived as leading examples of the global city (Sassen, 1991).

Despite the academic origins of the concept of the global city as a theoretical-analytical tool designed to help better understand the new roles that cities play in the new economic order (Sassen, 1991), the multiple benefits accrued to cities from being referred to as “global” explain the efforts that cities throughout the world make to be recognized as such. Moreover, the concept of the global city forms a hierarchy of cities based on their linkages to the world economy and can be regarded as a contested political project advanced by powerful social forces (Smith, 1998).

Spatially, the global city is an “extremely intense and dense information loop” (Sassen, 1991, p. xx). Cities that are central to globalization must have a critical mass of functions, spatial density, and infrastructures that specialize in providing and supporting an assemblage of parts engaged in knowledge production, policy coordination, and transaction control, which together constitute a whole that is greater than the sum of its parts. Furthermore, the global city’s developmental agenda is committed to a comprehensive modernization plan created through public-private partnerships to provide an urban habitat focused on “global connectedness” (Boschken, 2003, p. 809). However, the global city exhibits a complex spatiality that alongside the upscaling of the city, increases poverty, homelessness, and the spatial concentration of poverty (Robinson, 2009). This socio-spatial geography of the global city produces a dichotomy between “glamorous” and impoverished areas, creating what Robinson calls “spatial and class apartheid” (Robinson, 2009, p. 17).

Socially, the organization of labor, the distribution of wealth, class relations, and levels of consumption result in new social hierarchies, polarization, and class divisions (Knox & Taylor, 1995; Robinson, 2009). Inequality certainly also applies to cities that are not global or world cities, and this dynamic is associated with globalization processes as a whole. However, scholars agree that the *social capital* of the global city is characterized by the highly skilled professional, managerial, and entrepreneurial elites who are drawn there (Yeoh, 1999), making it a disproportionately upper-middle-class city (Zukin, 2010). In addition, the “global lifestyle” also demands growing numbers of unskilled and semi-skilled workers in the urban service economy (Yeoh, 1999), which potentially increases spatial and socio-economic inequality and wage polarization (King, 2015; Xuefei & Keil, 2018). These dynamics impact the services and amenities in the city (e.g. schools, security, shopping malls, private parking garages, and condominium and townhouse developments), which are increasingly privately operated, thus deepening the socio-spatial division between the haves and have-nots (Boschken, 2003; Fainstein, 2001).

Unsurprisingly, the main champions of the global city come from the private sector and powerful cities. Private sector advocates include large corporations, financial companies, and IT companies, all of which greatly benefit from – and are thus interested in – advancing their capabilities with regard to global operations and transactions (Sassen, 2009). However, these ideas are also promoted by major cities that want to extend their power and centrality in the global economy and to catalyze extensive tourism by attracting travelers who find the cosmopolitan ambience in their cities appealing (Yeoh, 1999).

The Sustainable City

“A sustainable Chicago is a city that spends less on energy use with each passing year, creates good-paying jobs in up-and-coming industries, responsibly maintains and upgrades its infrastructure, and ensures every Chicagoan has the opportunity to live a healthy and active lifestyle” (Office of the Mayor, 2015); “Moving toward 100% renewable energy is another way that Vancouver is working to become the greenest city in the world” (City of Vancouver, 2015); “We want Dholera to be the role model and set new standards for sustainable city living, not just for India, but for the world” (Sweet, 2016).

As the statements above reveal, the use of the concept of the sustainable city in strategic planning involves the stakes and rights of current and future generations, emphasizing the high costs of the developed world’s way of life and humankind’s obligation to act to reduce environmental degradation, particularly the threat of global climate change (Haughton, 1999; Jabareen, 2006). Ultimately, the notion of sustainable development concerns the long-term survival and the dynamic and healthy evolution of the planet (Haughton, 1999). Under this concept, cities are at the forefront of a whole host of global environmental challenges; as such, urban centers should develop capabilities to address these challenges, irrespective of what the international community or their respective national governments do. Los Angeles and Tokyo are examples of municipalities that have taken action in the face of environmental threats such as air pollution long before the passage of national laws or the signing of international treaties to address these issues (Sassen, 2010).

Spatially, the sustainable city is concerned with the transformation and restructuring of major infrastructures (e.g. transportation systems, water use management, waste disposal, energy efficiency, and green construction) and the management of urban resources, parks, and green areas. The sustainable city concept also emphasizes issues such as enhanced walkability and accessibility in the city and the preservation of urban ecosystems (Brebba, 2000; Wheeler & Beatley, 2008) as well as the growth and regeneration of built and populated urban areas (Jenks & Jones, 2010). Thus, the implementation of this

approach implies interventions on multiple levels, including the neighborhood, district, and municipal levels. *Physically*, the sustainable approach advocates ideas such as compactness, density, mixed land use, diversity, passive solar design, greening (Burton, Jenks, & Williams, 2003), and the protection of the city's natural areas and food-producing capacity (Kenworthy, 2006). The social good is viewed as embedded within the physical structure, which implies encouraging the development of public spaces as legible, permeable, robust, varied, rich, and appropriate for human needs (Jenks & Dempsey, 2005; Kenworthy, 2006; Newman, 2008).

Socially, the central tenets of sustainability include not only environmental soundness but also economic well-being and social justice, with explicit attention paid to the rights of future generations and of present-day socially marginalized groups (Haughton, 1999). The sustainability discourse combines the environmental with the social (Bramley, Brown, Dempsey, Power, & Watkins, 2010; Newman, 2008) by claiming that an unjust society is unlikely to be sustainable in environmental and economic terms (Haughton, 1999). Thus, at least in theory, the sustainable city strives to establish a high-quality public sphere and promote public culture, community, equity, employment, and good governance (Beatley, 1999, 2014; Wheeler, 2013). The prospect of achieving sustainability depends on the collective efforts of the city, the national government – with its various institutions and apparatuses – and private corporations, which should act together to effect change (Low, 2005).

The sustainable city is embedded in public values, such as democratic participation, environmental sustainability, and social justice; thus, its main *advocates* are transnational organizations such as the United Nations (Rio 1992, Kyoto 1997, Paris 2015), environmental NGOs, international NGOs, social movements, and professional groups, such as urban planners, architects, and designers.

The Resilient City

*"In our vision of a stronger, **more resilient city**, many vulnerable neighborhoods will sit behind an array of coastal defenses" (The City of New York, 2013); "... **using disaster recovery efforts to make Seattle more resilient**, more sustainable, and more aligned with community ideals and aspirations. This will be done by fully engaging and leveraging our whole community and coordinating across all sectors" (Seattle Office of Emergency Management, 2015); "Our mission is **to ensure London is prepared to respond to and recover from emergencies**, reinforcing London's position as a resilient city. We will achieve this by assessing risks to London's resilience, building resilience through prevention and mitigation, working together to prepare, respond & recover, helping Londoners to be prepared" (Mayor of London, 2013).*

As the statements by policymakers in municipalities show, the concept of the resilient city is embedded in the defensive concept of the "risk society" (Beck, 1992) and urban environmental resilience (Davoudi et al., 2012; Wilkinson, 2012). Resilience should be understood in both theoretical and practical terms (Davoudi et al., 2012). This concept elucidates the vulnerability of certain communities to large-scale global challenges, such as climate change, terrorism, and the globalized economy, and stresses that these challenges impact not only the global but also (and even more so) the local, especially certain underprivileged communities in specific cities (Jabareen, 2013; Pelling, 2003; UN-HABITAT, 2011; Vale, 2014). These ideas emerged after the terrorist attacks of September 11, 2001, which influenced policy-making (both local and national) by expanding the institutional framework of national security and emergency preparedness (Coaffee, 2013; Godschalk, 2002). Economic crises (Chernick, 2005) and natural disasters associated with climate change (Adger, 2000; Godschalk, 2002; Martin-Breen & Anderies, 2011; Pitrenaitė-Zlenienė & Torresi, 2014) have also influenced the notion of risk and the ability of a system – a city – to adapt to changing internal or external processes (Martin-Breen & Anderies,

2011). As such, this concept encourages the development of tools to address increased economic insecurity, the growing wariness of terrorist threats, and the escalating impact of climate change. New York, Seattle, and Rio de Janeiro are examples of cities that have developed plans to become resilient.

Spatially, urban planning plays a central role in making cities more resilient by shaping the built environment through land use management and the prediction and anticipation of risks, uncertainties and ways of coping (Jabareen, 2013; Zhang, 2010). The concept requires addressing threats and helping cities recover from natural disasters or heinous human acts by creating networked social communities and lifeline systems through which it is possible to adapt and rebound to new levels of sustainability (Grove, 2014; Pelling, 2003; Vale & Campanella, 2005). This approach can be applied on multiple levels, including the neighborhood, district, and municipal levels of governance (Godschalk, 2002; Pickett, Cadenasso, & Grove, 2004; Vale, 2014). Similar to the sustainable city concept, the resilient city also promotes smart growth, compactness, and high density as a means to combat urban sprawl (Duany, 2000). *Physically*, resilient cities are regarded as heterogeneous ecosystems that promote flexibility and adaptability (Pickett et al., 2004). As such, natural and human-made hazards must be considered when developing physical systems and infrastructures such as roads, buildings, and communications facilities (Godschalk, 2002).

Socially, the resilience concept represents a shift in those responsible for crisis management from the government to the community, and even individuals. Although central and local governments are still perceived as major actors in planning projects that aim to mitigate possible hazards and build resilient communities (Godschalk, 2002), this approach supports the decentralization of responsibility and demands self-reliance. As a result, social vulnerability is central to this concept (Pickett et al., 2004), with scholars arguing that the ability to cope with risks and disasters through self-reliance is an unequally distributed resource, with some socio-economic groups exposed to greater risk due to their lower economic status and inferior geographic locations, which are often intertwined (Vale, 2014).

The advocates of this concept are both international organizations and governmental institutions (UN-HABITAT, 2011; UNISDR, 2012), as evidenced by the numerous publications, conferences, and initiatives of major foundations (e.g. the United Nations and the World Bank) dedicated to the resilience concept (Vale, 2014). Academics and researchers from multiple disciplines have joined this discussion to promote the concept of resilience, and they are often supported by national bodies responsible for homeland security and emergency disaster preparedness (e.g. FEMA in the United States), as well as other similar entities (Godschalk, 2002).

The Creative City

“Shanghai established the UNESCO Creative City (Shanghai) Promotion Office within the framework of the Municipal Commission of Economy and Technology, [...] responsible for promoting the subnetwork of Cities of Design [and] upgrading industries through mobilizing all related sectors” (Unesco, 2010); “Houston is one of the best places in the world for arts and culture, and you won’t find a better place to ignite the power of the arts across sectors than right here in Houston” (City of Houston, 2016); “Council received the preliminary working document – The Creative City: A Workprint – as a discussion framework. It called for Toronto to use its arts, culture and heritage assets to position itself as a Creative City, a global cultural capital” (City of Toronto, 2003).

The above statements, taken from various strategic plans, focus on the concept of the creative city, which is used as a tool to attract investment and the mobile talent of the “creative class”, which is perceived as playing a significant role in promoting a city’s economic growth at the international

level (Bayliss, 2007; Florida, 2002a). Creative cities in the modern world are typically organized around production systems marked by shifting interfirm networks and flexible labor markets (Scott, 2006). The cultural industries or creative sectors include the fashion, design, gaming, and film industries, as well as microelectronics, biotechnology, and business services, all of which act as significant networks for attracting the young, highly talented ‘creative workers’ that tend to work in these sectors (Lewis & Donald, 2010; Scott, 2006). The creative class not only generates income but also contributes to urban regeneration, cultural amenities, entertainment, and a city’s lifestyle, which attract tourism, investment, and a mobile skilled labor force. Focusing on a basic “formula for economic development” that revolves around three T’s, “technology, talent, and tolerance” (Bayliss, 2007), policymakers often use this model as a key feature of an urban policy agenda (Brown, 2010; Peck, 2005; Scott, 2006). This focus creates a paradox by attempting to generate “urban viable creativity”, which is perceived as an organic process, from above through policy. Scholars doubt the ability of policy to nurture the creative city: “Public policy may not be able to directly organize creative environments, but it is at least conceivable then that planning can hope to provide favorable framework conditions for creativity” (Bayliss, 2007, p. 894).

In *spatial* terms, the focus is on the development of downtown areas that often represent ethno-cultural diversity. The term downtown often refers to a few urban blocks of postindustrial ‘bourgeois bohemian-ness’ (Lewis & Donald, 2010) with a focus on consumption. Strategies to catalyze “urban creativity” are achieved by developing “lifestyle amenities” – such as street-culture events, trendy shopping spots, bike paths, and industrial-chic gentrification (Peck, 2005). Indeed, the tendency of the creative class to favor clusters of development within rundown inner-city districts often provides the catalyst for the area’s revitalization and regeneration. The spatiality of the creative city has been heavily criticized, in part because of its adoption by policymakers and influence on the ground. Postindustrial cities are eager to “join the new market for hipsterization strategies” (Peck, 2005, p. 747) to achieve a “creativity makeover”. Local actors are seduced by the false promise of a “creativity fix” in which any and every city can win the battle for talent (Peck, 2007, p. 45).

Socially, the creative city strives to attract high-profile, talented, highly educated, socially liberal, and cosmopolitan young professionals. As Florida describes them, “they share a common ethos that values creativity, individuality, difference, and merit” (Florida, 2002b, p. 17). Indeed, the creative class is not new. It has been previously called “the new class” or the upper employment stratum, meaning the intelligentsia-cum-technocracy composed of individuals whose interactions are based on a sort of critical rationality governing their practical engagements in work and life (Scott, 2006). However, the creativity model also re-legitimizes regressive social redistributions within the city: the designated overclass of creatives is held to have earned its superior position in the creative city (Peck, 2007). This model has been embraced by North American cities such as Austin (Texas), Ann Arbor (Michigan), and Toronto (Ontario) but has been heavily criticized for promoting inequality, social elitism, poor investment decisions, exclusionary spaces, gentrification, and the displacement of middle- or lower-class residents (Peck, 2005, 2007; Sands & Reese, 2008; Scott, 2006). This approach can increase social vulnerability in a city by re-organizing the distribution of power. That is, members of the creative class gain access to benefits not available to middle- or lower-class residents. In making the creative city, social groups in the latter categories are often displaced (Lewis & Donald, 2010).

Set up in the “economic imaginary” (Peck, 2007) and based on a set of principles that combine cultural libertarianism and contemporary urban-design motifs with neo-liberal economic imperatives, this concept’s key advocates are policymakers, professionals, and municipalities that trust the creative city’s premises. Advocates sometimes come from the “creative class” itself, cultivated to believe in their supremacy.

The Smart City

*"The City must respond to these changes and use **new digital tools to improve services and create more opportunities for all New Yorkers**" (Mayor's Office of Technology and Innovation's, 2015); "One of the most iconic examples of **a Smart City along these lines is the city of Rio de Janeiro, Brazil, with its Rio Operations Center**" (Schreiner, 2016); "**Our vision for Melbourne as a smart city is simple: to enhance the aspects of our city that make us uniquely Melbourne and intelligently prepare for the changing needs of the community, the environment and the economy**" (City of Melbourne, 2017); "Tel Aviv-Yafo's goal is to constantly be a smarter city – or more simply, a better city" (Tel Aviv-Yafo, 2017b); "**Smart Dubai Government Establishment** is the technology arm of Smart Dubai, a city-wide initiative to transform Dubai into the world's smartest and happiest city" (Government of Dubai, 2017).*

City authorities, as evident in the above statements, are fascinated by the concept of the smart city, an idea based on a techno-utopian belief that the use of IT is imperative in confronting the challenges of urbanization and sustainable development (Buck & While, 2015; Gabrys, 2014; Townsend, 2014; Watson, 2015). At the heart of the smart city are new cyber systems that collect ever-increasing amounts of data from various sources and use them to improve planning, upgrade infrastructures, and track and enhance their operations to offer better services at lower costs (Asensio, Blanco, Blasco, Marco, & Casas, 2015; Bakıcı, Almirall, & Wareham, 2013; Luque-Ayala & Marvin, 2015; Shelton, Zook, & Wiig, 2015; Vanolo, 2013). The smart city is also viewed as a means to engage residents in city life and decision-making through bi-directional communication channels. Rio de Janeiro, Santander (Spain), Singapore, Songdo (South Korea), and Tel Aviv (Israel) (for all case studies, see Bouskela, Casseb, Bassi, De Luca, & Facchina, 2016) are examples of cities that have adopted the idea of the smart city and have developed relevant technologies and management strategies. Although much of the literature on the smart city frames the concept as *managerial and pragmatic* and as "seek[ing] to appear non-ideological" (Kitchin, 2014), the smart city is deeply embedded in neo-liberal ideology and a pro-business stance. Cities adopt so-called smart policies and assume that smartness attracts businesses (Wiig, 2015), enhances efficiency, and leads to more informed and, in turn, more "useful" residents – at least in economic terms (McFarlane, 2011, p. 140 in Wiig, 2015).

The smart city concept does not offer a clear *spatial* vision. It addresses the city thematically rather than spatially. It encompasses diverse issues such as administration, citizen engagement, economic development, education, the workforce, the environment, public safety, social services, transportation, and urban planning (Mitchell, Villa, Stewart-Weeks, & Lange, 2013). As such, the *physical manifestations* and *spatial characteristics* of the smart city are also quite vague (Wiig, 2015). The emblematic smart cities – such as Masdar in the United Arab Emirates; Singapore and Songdo (South Korea), which have both also branded themselves as sustainable cities; and Living PlanIT Valley in Portugal (Carvalho, 2014) – were built from scratch with all-encompassing smart infrastructure embedded internally. They are also quite limited in size. In large cities and metropolitan areas, "smart city initiatives as an overarching, citywide urban policy concern often narrows its focus onto much smaller deliverables that may have minimal effect" (Shelton et al., 2015, p. 21).

Socially, although smart cities focus on technological innovation and economic growth, scholars emphasize the development of smart communities, smart citizens, and social capital, which enhance the cities' ability to learn, adapt, and innovate (Caragliu, Del Bo, & Nijkamp, 2011). Smart communities are considered necessary to engage all stakeholders in the smart city, as the community must be able to use and understand the technology and have the skills required to use ICTs (Evans, 2002 in Hollands, 2008). Thus, although many urban projects claim to address social, economic, and environmental issues, growing criticism has taken aim at smart city rhetoric by arguing that it masks inequality and primarily

“serves as a platform for a city to sell itself, where ‘business-driven technology and gentrification could be interpreted to imply that this urban form is relatively unconcerned with class inequality’” (Hollands, 2008, p. 303). In other words, the smart city “prioritizes urbanization as a business model rather than a model of social justice” (Datta, 2015). The smart city also introduces new vulnerabilities by utilizing cyber systems, which attract hackers (Kitchin, 2014), terrorists, and other adversaries. The so-called smart systems also enable extensive control of public activities; the local government can track residents’ and other visitors’ movements and prevent actions and civil participation. Thus, the smart city gives the city far more control over its residents’ privacy by allowing surveillance and political control (Martinez-Balleste, Perez-Martinez, & Solanas, 2013; Seto, 2015).

Smart city advocates include the private sector and multinational IT companies, such as IBM, CISCO, and Siemens, which not only as service providers but also as consultants on city policy (Buck & While, 2015; Hollands, 2008; Luque-Ayala & Marvin, 2015; Viitanen & Kingston, 2014). Other advocates are central governments (Datta, 2015), city authorities, civil society, supra-national entities, and international organizations (e.g. the United Nations): “Municipal and national governments, along with supra-national states, such as the European Union, positively endorse the smart city concept [...] Advocates imagine themselves as creating technologies, techniques and visions that are scientific, objective, commonsensical and apolitical” (Kitchin, 2014).

These concepts undoubtedly share some commonalities regarding the development of cities (see Table 1) and are associated with livability, competitiveness, economic growth, the drive to promote business, and the quality of human capital. These concepts also share some common spatial principles, such as: density, compactness, mixed use, and infrastructure development. Indeed, these spatial principles being addressed differently in each concept, both in terms of the scope of urban development (i.e. at the regional, city, or neighborhood level) and the actors that are responsible for spatial development (i.e. the state, the market, and residents). The sustainable and resilient concepts address environmental changes and social dynamics, while the global, creative, and smart concepts focus on development that enhances efficiency and capital growth. The next section further discusses the similarities and differences among concepts, with a focus on the ways they influence power relations in the city and the power relations between the city and the national government.

City, Government and Resident Dynamics: Competing or Complementary Political Concepts?

All the concepts presented have emerged in the context of neoliberalism, as cities are central to neoliberalism’s production and reconstitution (Brenner & Theodore, 2002, p. 375). However, and as noted by Neil Brenner and Nik Theodor, “while neoliberalism aspires to create a ‘utopia’ of free markets liberated from all forms of state interference, it has in practice entailed a dramatic intensification of coercive, disciplinary forms of state intervention in order to impose market rule upon all aspects of social life” (Ibid, p. 352). The following discussion will focus on the political premises of the five concepts and addresses their orientation toward the government, residents, and the political order (Table 2).

- *Orientation toward the government and the locality.* In terms of orientation, although the five concepts are grounded and operate in the neo-liberal economic context, they differ in how the powers of government and the locality operate. The global city draws power and importance from transnational networks, and it therefore becomes increasingly disconnected from the national economy; it uses this shift to garner more political and legal power, and it (sometimes) acts independently of the state. Global cities often adopt policies and implement programs on diverse issues, such

Table 2. Dynamics between the city, governments and its citizens.

	Global City				Sustainable City		Resilient City	Creative City	Smart City
<i>Orientation toward the government and locality</i>	The city as an independent economic entity that competes with the nation-state; facing outward, beyond the nation-state				The city as a significant unit that faces particular local challenges; facing inward, addressing specific environmental needs		The city as a vulnerable unit that confronts local-national challenges; facing inward, strengthening the community and city systems	The city as an economic entity that competes with other cities for creative industries and economic capital	The city as a significant governmental entity within the state that promotes informational and institutional synchronization; facing inward, toward city residents and the supply of services
<i>Orientation toward residents</i>	Neo-liberal attitude and reconfiguration of the idea of citizenship (cosmopolitanism)				Community-oriented focus on human needs and values; authority is responsible for improving the city with the participation of citizens and the community		Community-oriented focus; authority is responsible for improving the city's resilience and stability with the participation of citizens and the community	Neo-liberal attitude that focuses on a small group of residents associated with a segment of urban businesses and spaces	Focus on direct communication (e-governance) between the authority and citizens; enhancement of citizens' control; focus on the efficient provision of city services; privatization of city services; surveillance and data collection

as immigration, environmental protection, energy consumption, transportation, and economic development, irrespective of – and at times contrary to – the policies and programs adopted by the central government. The creative city relates to the logic of the global city by perceiving the city as a competitive economic unit in a global context. The smart city, on the other hand, is oriented inward and bounded by the government's power and its political apparatus. Moreover, the innovative IT that undergirds all the networks that lie at the core of the smart city is a collaborative city-government project that enables the state to tap into the city's databases and use these data for its own purposes. Overall, the smart city promotes informational and institutional synchronization. Between these two conceptual poles, the sustainable and resilient cities are embedded in the political and economic context of the nation-state, with a shared (yet somewhat different) focus on the role of the locality and the community. The sustainable city is a concept that calls for sustainable development in tandem with the nation-state. As argued by Haughton, "it is futile and indeed virtually meaningless to attempt to create a sustainable city in isolation from its broader hinterland area" (Haughton, 1999, p. 234). Similarly, the conceptualization of the resilient city is also contextual but more politically driven, as it prioritizes investment according to a collaborative city-government agenda: "These priorities reveal which portions of a city (and therefore which residents) the leadership views as needing the most attention at a time of crisis" (Vale, 2014, p. 194). However, resilience also concerns the establishment of socio-spatial objectives and the centralization of power in which a constant stream of nationally derived guidance shapes the agenda (Godschalk, 2002). Although very different, the smart, sustainable, and resilient city concepts are embedded in the existing structure of the government and rely on its cooperation – economically, spatially, institutionally, and politically.

- *Orientation toward residents.* This aspect reveals major differences among the concepts. The global city and the creative city, both of which cultivate and are committed to profit, progress, economic power, and capital, perceive residents in terms of their socio-economic status, with an inclination toward the upper- and upper-middle classes in the global city (and sometimes also to non-elites in the creative city), but negatively affecting the lower classes (Robinson, 2009). By contrast, sustainable and resilient cities perceive residents as important agents in the development of the city and its public realm. The sustainable city, at least in theory, is a normative concept that focuses on ecological and community values. City authorities are responsible for improving the city for all its inhabitants through their participation. Moreover, the sustainable city concept simultaneously gives responsibility to individuals in an effort to change their behavior (Low, 2005). Similarly, the resilient city emphasizes the shared responsibility of the government and the city for its residents. It adapts a proactive and preventive approach to various threats in order to protect and prepare the built environment and the community (Vale, 2014). It highlights the city's obligation to care for its most vulnerable communities, with city authorities responsible for improving resilience and stability with the participation of citizens and the community. However, it can be argued that the smart city is caught between these two polarized orientations as both a class-oriented and an all-residents city that operates in opposite directions simultaneously. On the one hand, the ICTs that are the backbone of the cyber city have transformative potential for democratic governance (Shkabatur, 2011), with citizens engaging one another or the public using crowd-sourcing platforms, feedback-reliant applications, and online public forums (e.g. Twitter, Facebook, and VKontakte). On the other hand, the neo-liberal ideology that underlies the smart city and the privatized, consumerist-driven vision of the city mean that the existence of ICTs does not always

translate into meaningful civic engagement and participation in the local democratic system (Shkabatur, 2011).

- *Orientation toward political order and participation.* All the concepts operate within the existing social, economic, and political forces. The idea that cities eschew nationalism (Brenner, 1998; Isin, 2013) (a popular trend in the 1990s with the emergence of the global city concept) is now challenged by these concepts, which are based on establishing strong alliances between the city and the central government. Moreover, the private sector's role in shaping the city-government dynamic is increasing in all the concepts, with private firms cooperating with cities to gain access to residents and (sometimes) their private information. Participation is promoted and used as a means to maintain the existing order and has become a flexible political tool that manifests itself differently in each concept. The global city focuses on economic participation while the smart city celebrates the infrastructure that enables participation. In the sustainable and resilient concepts, individuals' participation is regarded as part of their responsibility to contribute to the place-making and well-being of the city. Regardless of these differences, scholars have argued that in all the concepts, participation can be abused by the national or local government to assert greater control over the residents (Datta, 2015; Isin, 2013; Kitchin, 2013, 2014).

Based on the above discussion, it appears that these concepts can be perceived as economically and politically complementary rather than competing. Economically, competitiveness forms the foundation of most of the concepts either bluntly or subtly and thus represents an overarching principle through which cities are developing to better position themselves in the global competition, which is why cities simultaneously employ ideas associated with diverse concepts to enhance their image and economic growth (Lombardi & Vanolo, 2015). Politically, the majority of the concepts further entwine relations between the city and the government through the development of space, capital, and technology. Many of the strategies related to the urban concepts presented herein are developed in conjunction with the national government and depend on its institutions and resources. Furthermore, the political needs of the national government are often accommodated within the existing economic framework, which also explains the focus they receive in practice. In other words, these concepts are ideologies that not only influence urban spatiality, but also support the current political economy and the distribution of resources.

Between the Prescriptive and the Normative: The Political Premises of Contemporary Urban Concepts

Cities worldwide use and develop strategic plans based on the concepts of the global, resilient, sustainable, creative, and smart city. How do all these parallel initiatives shape the city? What is taken into consideration, and what is left out? These questions are not easy to answer, and responses may differ from one context to another, but given the analysis in this study, a few points should be emphasized.

- *The gap between theory and practice.* While major efforts have been dedicated to the study of the uniqueness of the different concepts in theory, many cities tend to ignore differences and view the concepts as a set of tools or prescriptive ideas for shaping cities. It is not that the "smart" concept operates independently from "resilient" initiatives; instead, they constitute one another and both contribute to the urbanization of neoliberalism. However, regrettably, theoretical works still maintain and study the differences among the concepts or focus on examining one plan at a time, or even a fragment of a particular concept in a specific place, while losing the big picture. In practice,

the purity of the concepts has not been maintained. These concepts should be explored and assessed in cities in terms of multiplicity rather than singularity, and synthetic rather than analytic.

- *Morphisms are not always evil.* All of these concepts have morphed over time and have been adjusted to fit the political economies of cities. For example, the concept of 'global' has shifted from a theory that explains the way cities are economically integrated on a global scale to global competitiveness. The idea of 'sustainable' has been deprived of much of its ecological and social substance. 'Resilience' has shifted from mitigating hazards to self-reliance programs. 'Creative' has transformed from implying opportunity for self-actualization to economic growth through innovation. The notion of 'smart' has shifted from focusing on people's digital capabilities to monitoring and managing people, using technologies. These dynamics are changing the theoretical conceptualizations on the ground. To be sure, this nature of practice represents a distortion of the ideal – a morphed version of the vision. Thus, the role of theory is to respond to these morphisms (in plural) critically but also constructively, suggesting "revisions" to practices and visions.
- *All-in-one concepts in the service of neoliberalism.* Cities have become "the incubators for many of the major political and ideological strategies through which the dominance of neoliberalism is being maintained" (Brenner & Theodore, 2002, p. 376). Urban concepts that can be adjusted to this logic and that can be implemented in the urban realm gain attention. The global, sustainable, resilient, creative, and smart cities have become place-marketing policies and are thus extremely limited in their ability to fight inequality, even when claiming to do so. A possible and constructive way to address critically these trends is by perceiving all five concepts as *one* – as an eclectic toolbox that offers a range of neo-liberal policy experiments, institutional initiatives, and political projects. The value of viewing all these ideas as *one prescriptive concept* is twofold. First, it helps address the development of contemporary cities, not thematically (by concepts), but by critically assessing the tension between the prescriptive (what is being done?) and the normative (what ought to be done?) (Campbell, 2012). Second, it will help develop a critical framework in which the normative component will be reassessed and reevaluated in the context of a neo-liberal economy.

A better consideration of the tension between the prescriptive and the normative in practice might explain, at least partially, the lack of use of other urban concepts such as the just city, which seeks to develop "progressive utopian visions" and to "expand the scope of the urban imagination and to help reinvigorate, unify, and empower shared desires for just urban outcomes" (Marcuse et al., 2009, p. 11). Ideas about justice have gained recognition among organizations (i.e. Right to the City Alliance, the European Urban Charter) and thinkers such as Marcuse et al. (2009), Soja (2010), Fainstein (2010), Harvey (2010), and Campbell (2006). However, the just city's vision cannot be reduced to a set of tools or prescriptive ideas; instead, it requires a structural transformation that cannot be achieved at the municipal level, but rather requires both (1) "a change in the rhetoric around urban policy from a focus on competitiveness to a discourse about justice" (Fainstein, 2014); and (2) a committed public, i.e. people who have a vision of what should be done (Fainstein, 2009) and a social movement that might bring us a few steps closer to the vision they embody (Marcuse et al., 2009).

A key question remains: what now? If it can be agreed that the different concepts are prescriptive ideas, an eclectic toolbox used and supported by governmental institutions, then the first step is to enhance a critical approach in practice by encouraging cities and planners to develop one strategic synthetic plan that describes and assesses the dimensions implemented in association with the urban concepts described in this paper. This single document will assist both planners and theorists in assessing the links among ideas and initiatives, as well as their influence on people. Such a synthetic strategic plan will also help determine what has been done and what needs to be done.

In an era when a new concept emerges every decade and multiple actors have an interest in engaging the city's resources and capital, planners become critical players and gatekeepers. Using particular ideas associated with an urban concept is a conscious, normative decision rather than a natural process. Attaching a dimension of power and political ideology to urban concepts is a significant part of making more informed, normative decisions in the development of cities. Therefore, every planner and professional must ask himself how the adoption of an urban concept influences people's lives. What is the cost of urban concept adoption, and who in the city benefits from it? Thus, if a planning praxis wishes to be less "modest", as Fainstein (2009, p. 19) states, or less opportunistic, then both researchers and professionals will be responsible for exposing urban concepts' normative and ideological aims. Only then will they fulfill their critical role as mediators among the national government, the city, and its residents.

Note

1. The use of the term "global city" is quite vague. Some cities are clearly top-ranked global cities, but others claim this status because they would like to be viewed as such, even though they have not yet 'made it'. For a detailed categorization by the Global and World Cities Research Network, see: <http://www.lboro.ac.uk/gawc/>.

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