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URBAN SCIENCE BETWEEN TRANSPARENT MANAGEMENT AND CORPORATE APPROPRIATION: A study concerning systems of urban assessment

CIÊNCIA URBANA ENTRE A GESTÃO TRANSPARENTE E APROPRIAÇÃO CORPORATIVA: Um estudo sobre sistemas de avaliação urbana

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ABSTRACT

Urban science is the planning branch that uses large scale data to establish new ways to govern cities, being systems of urban assessment an example of its contemporary manifestation. What Works Cities (WWC) from Bloomberg Philanthropies and Leadership in Energy and Environmental Design for Cities and Communities (LEED© CC) from US Green Building Council are examples of such systems, the first dealing with data management and the latter with environmental sustainability. This paper aims to assess how these systems affect urban policy by means of their evaluation methods. Both systems are presented and their certifications geolocated. It is argued that these systems focus on process, and not results, leading to an ambivalent set of certifications. At last, it is suggested that the same transparency promoted by these systems in their candidates' assessment should be applied to themselves, in order to guarantee the adequacy of their certifications.

Keywords: smart cities, urban planning, LEED© for cities and communities, what works cities.
Thematic clusters: 1. City and project.
Topic: Planning, policies and governance.

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Introduction

This ongoing research deals with spatial phenomena promoted by organizations, rather than more traditionally studied agents linked to the market or the state. These organizations are deeply related to both of these agents and can share with the market and the state activities as well as ideologies, even if they hold sociological specificities.

Organizations are social practices determined by private means and goals. As such, they are conducted by ideas of management, planning, prevision, control, and success, and do not question their own social role, as an institution would do. An organization works to achieve an outcome, instead of the institutional insertion in the social fabric (Chauí, 2003). The relevance of organizations in the social practices is not new: since the beginning of the 1990s, they are central agents in the political arena and in academic research (Beck, 2005, ch. 6; Boli & Thomas, 1999; Castells, 2010). However, there are few studies about their involvement in the production of space.

The paper will analyze two systems of urban assessment promoted by organizations. Both rely deeply in large scale data collection as a way to better manage cities. On the one hand, the certification What Works Cities (WWC), created by Bloomberg Philanthropies to subsidize plans for better management in North American mid-sized cities. On the other, Leadership in Energy and Environmental Design for Cities and Communities (LEED© CC), a system of urban assessment created by the NGO United States Green Building Council (USGBC©), dedicated to the environmental sustainability in the building sector.

As such, this paper develops a research previously carried out about the history of USGBC© and the impact of LEED© in the design of buildings (Grazziano, 2019). This is done by expanding the scope of LEED© systems: while the previous research was dedicated to LEED© Core & Shell (for speculative buildings) and Neighborhood Development, this work studies LEED© CC, a distinct certification system. Also, the paper analyzes WWC, as it was the only other urban assessment tool found in the literature survey. In this sense, there are two categories of organizations in this paper: USGBC©, a NGO whose network of supporters is mostly related to the market, instead of public or academic agents (see Grazziano, 2019), and Bloomberg Philanthropies, a foundation with close ties to the public sector. Furthermore, the first deals mainly with environmental sustainability, while the latter does it in relation to better public administration performance.

No other systems were found dealing with the urban scale during the preliminary survey. LEED© competitors as BREEAM© – a British environmental sustainability system –, DGNB© – a German one –, and CASBEE© – a Japanese initiative – have systems for neighborhoods but not cities. There was a North American system to assess cities, STAR©, but it was acquired by USGBC© and merged with its own product, LEED© CC (Varnadore, 2018).

To analyze these systems, the paper uses geolocated data to understand how they are distributed in space. Also, it studies both the systems structure and a few case studies. It is also done a literature survey, both in scholar databases and grey literature. Scholar literature is conspicuously scarce, as these systems were recently launched (Dang et al., 2020; Rasca & Waeben, 2019; Sharifi et al., 2020).

After this introduction, we present a discussion about urban science, as it is the theoretical framework in which these systems of urban assessment are grounded. The second section exposes a brief description of LEED© CC and WWC. The third section discusses consequences of the systems' inclinations. At last, conclusions and the unfolding of this research are pointed out. Full data for the maps is attached to this paper.

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1. The urban science

The urban science can be defined as “an interdisciplinary approach that practices and promotes a scientific and computational explanation of city systems and the processes of urbanization. It uses statistical analysis and data analytics – including machine learning, data mining, visual analytics, modelling and simulation – to identify casual relationships and predict how city systems work. In contrast to urban studies more generally, which views cities as constellations of places with analysis usually based upon fairly static empirical data (small samples, generated at specific places and times), urban science views cities as systems (or a system of systems) with analysis utilising urban big data (massive samples generated on a continuous basis)” (Kitchin, 2017, p. 2). In this sense, urban science presents an understanding of the city in real-time and highly detailed. It does not rely on suppositions and statistics, but in the de facto urban dynamic.

This can be a powerful tool in cities’ management. Local managers would not need to respond to tendencies potentially outdated or fully established: they could perceive the city in real-time and provide solutions to problems that are still emerging. This could lead, then, to a more transparent and efficient administration of cities.

However, the assumption that the collected data rightfully describes an urban dynamic is debatable in its positivistic approach (Kitchin, 2017). The large sets of data available might induce managers to perceive this information as an accurate and non-biased portrait of a city, ignoring not only that data gathering itself may be biased, but also the non-quantitative aspects, as politics and culture (Morozov, 2018).

If the urban science is this new knowledge area employing big data, the “smart cities” are the spatial phenomena in which this epistemological approach takes place. The smart cities are the setting in which new technologies are applied in the everyday urban life. As such, these cities are conceived “as experimental locations in which to trial new technologies, architectures, and environmental-economic reforms is in large part linked to a quasi-utopian approach to the city as laboratory, as an empty and bounded container. This approach renders the physical environment of the city as a single site of intervention, and conceptualises the urban as a vessel of constrained socio-economic, environmental, and technological relations. When viewed as an experiment, the city can thus be reduced to a tabula rasa on which new technologies, transitional strategies, and other approaches can be tried and tested, and subsequently rolled out across wider scales.” (Caprotti, 2014, p. 1286) Smart cities are then laboratories isolated in the urban network, in order to develop the technologies that will spread across the urban centers, as if these were “R&D centres” (Joss et al., 2013, p. 72). They presuppose the idea that a “technological fix” is sufficient to solve the contemporary urban issues.

If the smart city is conceived as a laboratory, then it is inherently designed as an enclave. It is only in isolation that these innovations can be tested in practice, at the same time that they become showcases of the “smooth, unobstructed spaces” created (Bach, 2011; Caprotti, 2014, p. 1293). To do so, they are spatial enclaves, but also unequal settlements, as they require a highly controlled society to trial their technologies. Therefore, smart cities are conceived in agglomerations with higher income, instead of the impoverished areas more vulnerable to climate change and social inequality (Caprotti, 2014; Hodson & Marvin, 2010).

The possibility of the smart city as a laboratory for technological products explains also the high influx of capital invested. Many smart cities are even directly designed by the private sector: Cisco, General Electric, Hitachi, IBM, and Panasonic are corporations that planned smart cities and eco-cities projects. There is only a restricted number of professionals able to develop these high complexity projects, which explains why there is

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always the same network of international consultants and organizations working on them (Joss et al., 2013). The smart cities are, then, a new step in a long process producing capital-intensive urban spaces, the so-called “global cities”, that share a restrict group of clients and designers (Arantes, 2000; Sassen, 1991).

The smart cities could then be read as a “corporate storytelling”, a new corporate orientation toward data that should not be taken by its face value, as it promotes access to data and software, but indicates neither an interpretation nor a plan of action (Söderström et al., 2014). Hence, the smart city would be a new stage of the “entrepreneurial city” (Hollands, 2018) or of the “technoscientific urbanism” (Brenner & Schmid, 2015; Greenfield, 2013; Townsend, 2013). Also, the smart city would be a neoliberal urban technology, as it reinforces the idea of the “audit culture” (Kipnis, 2008; Power, 1997), in which every aspect of the city can be synthetized in quantitative data. The level of access to data gets, then, a value of management transparency wherewith cities can be ranked, being at the same time a new market imperative for urban planners and administrators to pursue credit (Morozov & Bria, 2018, p. 10) and an instrument of control (Shwayri, 2013; Vanolo, 2014).

2. The systems of urban assessment

Considering this debate regarding the urban science and its spatial manifestation in the smart cities, it is focused here a specific group of phenomena: the systems of assessment, specifically in the urban scale. These systems stand out as they not only evaluate the performance both of new and existing cities, but also award certifications to the better performing projects. Hence, these systems become disputed distinctions by cities that seek promotion for their policies in a global arena, being useful ways to attract further financial resources. The systems of assessment also become new products, as they promote themselves as useful tools to urban administration and look for increasing market share.

We will work on the two systems of assessment available for urban settings: What Works Cities (WWC) and LEED© for Cities and Communities. Both systems were created by organizations that do not relate directly neither to the state nor to the market, configuring a distinctive feature of agents related to systems of assessment: the alignment to “the emerging urban-philanthrocapitalist complex of think-thanks, foundations, and allegedly neutral NGOs, determining the broader constraints and parameters within which cities now compete.” (Morozov & Bria, 2018, p. 9). Our argument is then that even if these systems have a technoscientific base, they hold specific standpoints regarding urban policy and design.

2.1. What Works Cities (WWC)

What Works Cities (WWC) is a program launched in April 2015 by Bloomberg Philanthropies, the foundation that gathers the charitable giving of the billionaire Michael R. Bloomberg. Its creation and management are shared with other organizations: the Behavioural Insights Team (BIT), the Center for Government Excellence (GovEx) at John Hopkins University, the Government Performance Lab at Harvard Kennedy School, Results for America, and the Sunlight Foundation. The program is devoted to help mid-sized cities, from 100,000 to one million citizens, using data to manage their issues and to make their decisions. Since its start, 103 cities are registered in the program, which represented an important vector of political support for Michael Bloomberg in his brief dispute for the Democrat nomination in the 2020 United States presidential election (Burns & Kulish, 2020; Capps & Holder, 2020).

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The participation in the program starts with applications made by eligible cities, then considered by a committee, which evaluates the local leaders' commitment and awareness of plausible results. The diversity of cities is also a criterion, and cities are encouraged to share their issues and practices with each other (Wilson & Lilly, 2016).

There are four stages in this program: "Commit" (the goals that have been set), "Measure" (goals monitoring), "Take stock" (analysis of monitoring), and "Act" (municipal actions proposed). Each stage has a set of questions (i.e. "Does your local government have a codified open data policy?", "Does your local government use (where they exist) civic data standards when publishing open data?", "Does your local government convene a performance management program (i.e. Stat meetings)?" etc.), a total of fifty, which must be answered by the registered cities.

Each founding organization works in a different way inside WWC: BIT is a consultant on cities performing their own evaluations, the Center for Government Excellence suggests best practice in open data and management, the Government Performance Lab indicates alternatives in case of financial resources shortage, Results for America organizes debates between cities, and the Sunlight Foundation assists open data policies writing (Wilson & Lilly, 2016).

The stimulated programs are quite different from one another: Anti-eviction actions in Newark; cash assistance in Rochester and Stockton; job training for unemployed in Tulsa; adult education in Racine and early childhood one in Dayton (Holder, 2019).

The WWC certification system draws from the WWC program. The certification system has eight sections (Data Governance, Evaluations, General Management, Open Data, Performance & Analytics, Repurposing, Results-Driven Contracting, Stakeholder Engagement), each containing four to nine statements in a total of 45. The cities must inform fulfillment or not and justify it by means of indicated documentation. The assessment is conducted by Results for America and the Certification Standard Committee.1 Differently from WWC program, the certification system can be applied by cities with a population starting at 30,000.

After receiving the points, a city can be awarded a certification in different levels: Silver (23-31 criteria fulfilled), Gold (31-37), and Platinum (38-45).

Both WWC program and certification system are restricted to the United States territory (Fig. 01).

[1] The committee is formed by Beth Blauer (Executive Director of GovEx), Simone Brody (Executive Director of WWC), Bill Eggers (Executive Director of Deloitte's Center for Government Insights), Stephen Goldsmith (Profesor at Harvard's Kennedy School of Government), Michael Hallsworth (Managing Director of BIT North America), Mark Headd (Chief Data Officer for the City of Philadelphia), Neil Kleiman (Director of the New York University Wagner Innovation Labs), Myung J. Lee (Executive Director of Cites of Service), Jeffrey B. Liebman (Director of the Government Performance Lab), Christiana McFarland (Research Director of National League of Cities), Tara McGuinness (Senior Fellow for Cities and Innovation at New America), Michael Nutter (former mayor of Philadelphia), Stephanie Sykes (Executive Director of the African American Mayors Association), John Wonderlich (Executive Director of the Sunlight Foundation) (What Works Cities, 2018).

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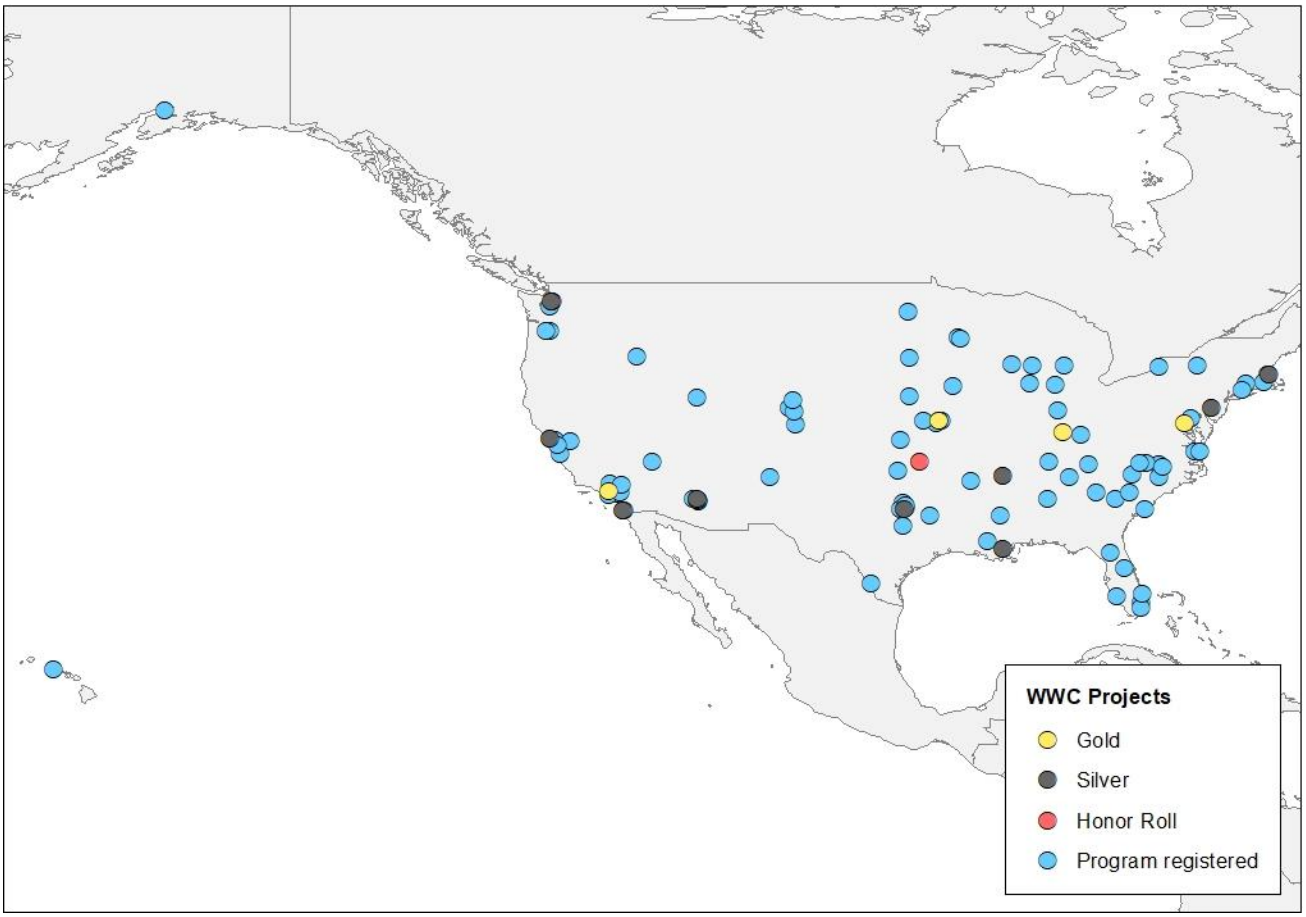

Fig. 01 What Works Cities projects. Own creation based on data from What Works Cities website, Feb 19th, 2020. Basemap: Natural Earth.

2.2. LEED© for Cities and Communities (LEED© CC)

If WWC system is based on the previous urban governance program by Bloomberg Philanthropies, LEED© for Cities and Communities (LEED© CC) has closer ties to the built environment.

LEED©'s first version was launched in 1998 by US Green Building Council©, whose foundation was in 1993. It was dedicated exclusively to new construction, but the system has gradually expanded its scope of certification. LEED© CC was launched in 2016 as part of a long-time USGBC©'s struggle to not be limited to the building and to respond to critics that viewed a lack of urban context in the system – a criticism that USGBC©'s CEO implicitly replies in a text (Ramanujam, 2019).

The total LEED© CC's points is 110, distributed in six main categories of assessment: Natural Systems & Ecology (13 points), Transportation & Land Use (18), Water Efficiency (12), Energy & Greenhouse Gas Emissions (31), Materials & Resources (11), and Quality of Life (10), as well as minor categories as Innovation (6) and Regional Priority (4), and two credits outside all categories (5). Each category has its own

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prerequisites and credits, with variable points allocation. LEED© CC continues the pattern found in LEED© for buildings, in which the assessment gives more importance to energy related strategies.

WWC replicates LEED©'s certification levels, so they have similar designations. A city can be only certified (40-49 points) or receive distinctions: Silver (50-59 points), Gold (60-79) and Platinum (more than 80).

LEED© CC took profit from the previous network of green building councils established by the other LEED© systems, which means that it already has a significant geographical spread (Fig. 02), even if its use highly concentrated in the United States (Fig. 03). LEED© CC's registered projects includes Cidade dos Lagos, in the Brazilian state of Paraná, as well as projects in the Philippines, China, Mexico, Panama, India, Italy, Colombia, and South Korea – the last one notably with Songdo, a smart city that is announced to maintain the largest number of LEED© projects in the world. The data announced in USGBC©'s blog suggest there are 160 cities registered and more than ninety certified (Holmes, 2019; Ramanujam, 2019). However, this data does not correspond to the available open data, where one can find 120 registered projects, from which 48 are confidential and seven certified (as of Mar 5th, 2020). The disclosed numbers probably are leveraged by the incorporation of STAR© certified projects, a system acquired by USGBC©, but that do not use the same categories of assessment. The marketing numbers are then not coincident with the de facto ones. Further adjustments in this subject may be needed as USGBC© discloses more information about the projects.

Also, it is relevant to mention that the Green Business Certification Inc. (GBCI©), founded as a branch of USGBC©, is developing Arc©, a platform that will concentrate live data about all LEED©-certified projects in relation to resources consumption. In consequence, USGBC© (by means of GBCI©) aims to control a vast repository of information, understanding the performance of real estate in a great diversity of contexts and clients. If this plan is achieved, USGBC© will become a new "big tech", controlling valuable data about buildings and cities.

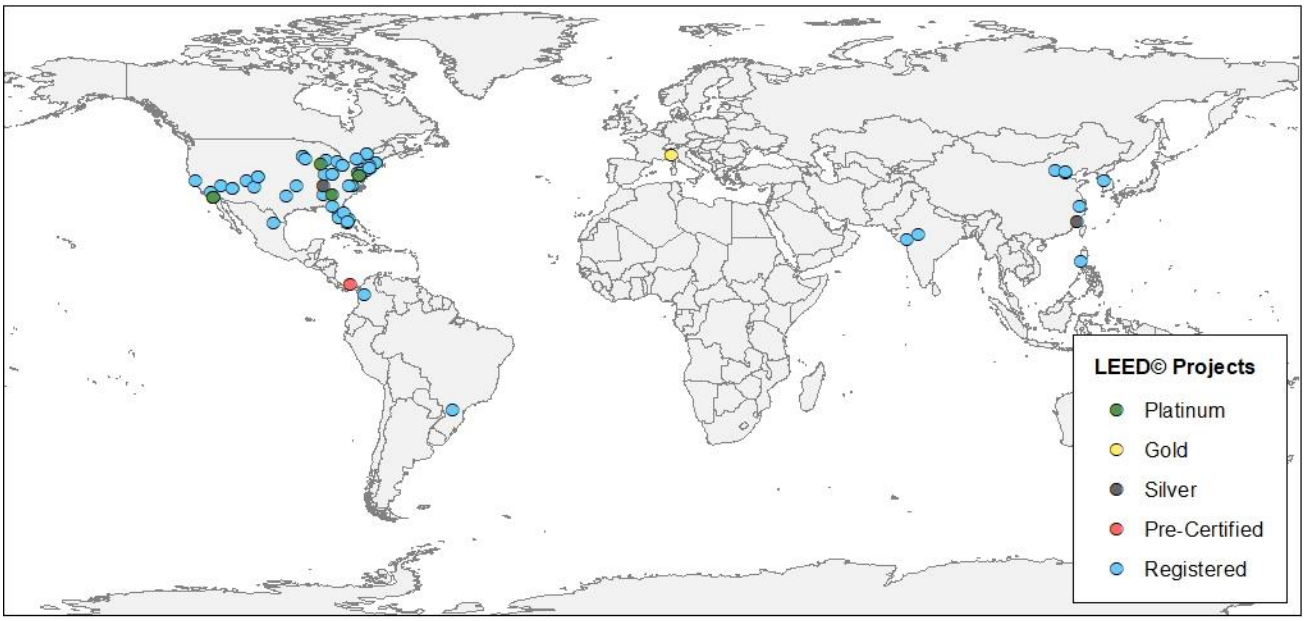

Fig. 02 LEED© for Cities and Communities projects. Own creation based on data from LEED Project Directory, Mar 5th, 2020. Basemap: Natural Earth.

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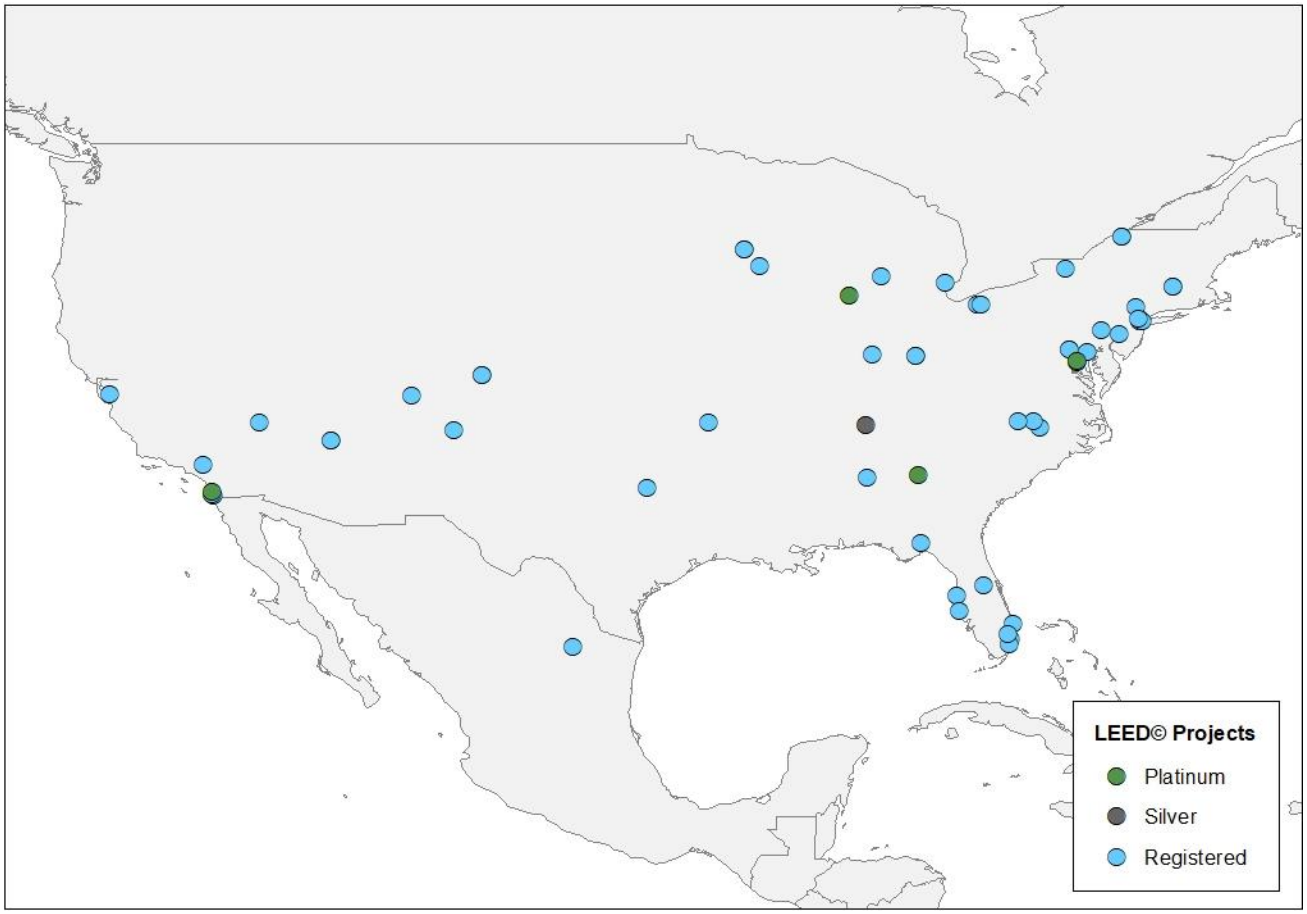

Fig. 03 LEED© for Cities and Communities projects, emphasis in United States. Own creation based on data from LEED Project Directory, Mar 5th, 2020. Basemap: Natural Earth.

3. Discussion

The diverse emphasis of each system is marked, as WWC assesses mostly the gathering and management of urban data in order to carry out policies, while LEED© uses metrics for environmental sustainability and well-being. Some cities are registered in both systems, reflecting an effort to apply to multiple certifications and supports: Arlington, TX; Baltimore, MD; Birmingham, AL; Cary, NC; Chula Vista, CA; Fayetteville, AR; Lewisville, TX; Louisville, KY; Miami, FL; Orlando, FL; Rancho Cucamonga, CA; Saint Paul, MN; San Diego, CA; San Jose, CA; Washington, DC; and West Palm Beach, FL.

Both systems rely heavily on process and management instead of clear results and morphological impact on cities. This is relevant, as they can be applied to reasonably different urban forms and geographical contexts. LEED© CC has some impact on urban design by indicating a few parameters, as street width (“TR: Walkability and Bikeability”) and mass transit shelters (“TR: Access to Quality Transit”), but it is minimal if one compares to other LEED© systems (Grazziano, 2019).

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However, this emphasis on process and diversity of applications may conceal contradictory results. The scorecards of each project are not yet available, which means that this interpretation might change. But it must be noted that rational management process may lead to irrational or inefficient results (Drori et al., 2006). There is a large set of credits available to the candidates' judgement, leading to a choice based on easiness rather than palpable sustainability or efficiency. Also, some credits have excessively modest requirements: One example is LEED© CC's pre-requisite "QL: Social Infrastructure", which demands meeting only the already existing codes and regulations. Both situations – abundance of options and low requirements – were noted in analysis made by the literature about LEED© (Brown, 2010; Yudelson, 2016), whose alerts continue valid to the systems of urban assessment studied here.

Some examples of LEED© registered projects can elucidated these problems. The Brazilian Cidade dos Lagos may have an efficient employment of infrastructure, but it replicates the Brazilian morphological pattern of real-estate products in mid-sized cities. It is a suburban enclave, formed by a middle class low-density residential settlement and a shopping mall, in an area that until very recently had fertile soil and was assigned for soybean and eucalyptus crops (Abdalla, 2017). Another example is Songdo, promoted as a smart global city, but that lacks everyday urban life and density, albeit the high investments being made (Poon, 2018). Despite their different contexts, both expect to receive high influx of capital and investors, which the model of certifications help to assure (Faulconbridge & Yalciner, 2015).

While focusing on the urban, these systems have few impacts on urban form, preferring to engage in urban administration. At the same time, WWC© and LEED© CC have liberal foundations, opting to not determine how governance should be done, but to establish guidelines for the managing process. – a position that can be traced to other systems, as ISO (Easterling, 2014). These guidelines can be rather vague, as the diversity of credits may be only partially accomplished, following the candidate's preference.

4. Conclusions

Data so far gathered points out that cities using systems of urban assessment may need access to financial resources since the beginning of their plans (Brody et al., 2016), and that the systems fail to restrict the certified cities to really prominent solutions. Somewhat typical projects are certified, leading to higher financial and advertising appeal, even though the certifications concern process more than results.

It should be noted though that the same transparency expected from public agents and evaluated in these systems should be applied to the systems themselves. There is not open and large-scale data about the registered and certified cities; there is no open scorecards or evaluation reports disclosed. In this sense, the certifications cannot be accurately assessed, as it is not possible to know for which credits each project applied, which ones were granted, and how the projects performed and demonstrated performance on them. Transparency should be pursued by all agents in urban management: by public institutions that decide plans that impact far-reaching areas and citizens, but also by the systems that assess those plans – otherwise we might create new "big techs" privately controlling our urban data and knowledge.

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Appendix I – WWC Projects

#	City	State	Certification Level	Year
1	Albuquerque	NM	Program registered	
2	Anchorage	AK	Program registered	
3	Arlington	TX	Silver	2019
4	Athens	GA	Program registered	
5	Augusta	GA	Program registered	
6	Baltimore	MD	Program registered	
7	Baton Rouge	LA	Program registered	
8	Bellevue	WA	Honor Roll	
9	Birmingham	AL	Program registered	
10	Boise	ID	Program registered	
11	Boston	MA	Silver	2018
12	Boulder	CO	Program registered	
13	Buffalo	NY	Program registered	
14	Cambridge	MA	Program registered	
15	Cape Coral	FL	Program registered	
16	Cary	NC	Program registered	
17	Charleston	SC	Program registered	
18	Charlotte	NC	Program registered	
19	Chattanooga	TN	Program registered	
20	Chula Vista	CA	Program registered	
21	Colorado Springs	CO	Program registered	
22	Columbia	SC	Program registered	
23	Corona	CA	Program registered	
24	Denton	TX	Program registered	
25	Denver	CO	Program registered	
26	Des Moines	IA	Program registered	
27	Downey	CA	Program registered	
28	Durham	NC	Program registered	
29	Fargo	ND	Program registered	
30	Fayetteville	NC	Program registered	
31	Fort Collins	CO	Program registered	
32	Fort Lauderdale	FL	Program registered	
33	Fort Worth	TX	Program registered	
34	Gainesville	FL	Program registered	
35	Gilbert	AZ	Program registered	
36	Glendale	AZ	Program registered	
37	Grand Rapids	MI	Program registered	
38	Greensboro	NC	Program registered	
39	Gresham	OR	Program registered	
40	Hartford	CT	Program registered	
41	Hayward	CA	Program registered	
42	Honolulu	HI	Program registered	
43	Independence	MO	Program registered	
44	Indianapolis	IN	Program registered	
45	Irving	TX	Program registered	
46	Jackson	MS	Program registered	
47	Kansas City	KS	Program registered	
48	Kansas City	MO	Gold	2019
49	Knoxville	TN	Program registered	
50	Laredo	TX	Program registered	
51	Las Vegas	NV	Program registered	
52	Lewisville	TX	Program registered	
53	Lexington	KY	Program registered	
54	Lincoln	NE	Program registered	
55	Little Rock	AR	Program registered	
56	Long Beach	CA	Program registered	
57	Louisville	KY	Gold	2019
58	Madison	WI	Program registered	
59	Memphis	TN	Silver	2019
60	Mesa	AZ	Program registered	
61	Miami	FL	Program registered	
62	Milwaukee	WI	Program registered	
63	Minneapolis	MN	Program registered	
64	Modesto	CA	Program registered	
65	Naperville	IL	Program registered	
66	Nashville	TN	Program registered	
67	New Haven	CT	Program registered	
68	New Orleans	LA	Silver	2018
69	Norfolk	VA	Program registered	
70	Oklahoma City	OK	Program registered	
71	Olathe	KS	Program registered	
72	Orlando	FL	Program registered	
73	Palmdale	CA	Program registered	
74	Portland	OR	Program registered	

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#	City	State	Certification Level	Year
75	Providence	RI	Program registered	
76	Raleigh	NC	Program registered	
77	Rancho Cucamonga	CA	Program registered	
78	Riverside	CA	Program registered	
79	Saint Paul	MN	Program registered	
80	Salinas	CA	Program registered	
81	Salt Lake City	UT	Program registered	
82	San Francisco	CA	Silver	2018
83	San Jose	CA	Program registered	
84	Scottsdale	AZ	Silver	2019
85	Seattle	WA	Silver	2018
86	Sioux Falls	SD	Program registered	
87	South Bend	IN	Program registered	
88	Syracuse	NY	Program registered	
89	Tacoma	WA	Program registered	
90	Tempe	AZ	Program registered	
91	Topeka	KS	Program registered	
92	Tulsa	OK	Honor Roll	
93	Tyler	TX	Program registered	
94	Victorville	CA	Program registered	
95	Virginia Beach	VA	Program registered	
96	Waco	TX	Program registered	
97	Washington	DC	Gold	2019
98	West Palm Beach	FL	Program registered	
99	Wichita	KS	Program registered	
100	Winston-Salem	NC	Program registered	
101	Los Angeles	CA	Gold	2018
102	Philadelphia	PA	Silver	2019
103	San Diego	CA	Silver	2018

Appendix II – LEED© CC Projects

#	Project	Country	Level	Date
1	Newark, NJ	USA	Registered	
2	Newark, NJ	USA	Registered	
3	Songdo International Business District	South Korea	Registered	
4	Schenectady	USA	Registered	
5	Savonna	Italy	Gold	2018
6	Rochester, MN	USA	Registered	
7	Destination Medical Center	USA	Registered	
8	HJAIA Airport	USA	Platinum	2019
9	Beijing Daxing International Airport Eco	China	Registered	
10	Surat	India	Registered	
11	Arlington County, VA	USA	Platinum	2017
12	Chicago	USA	Platinum	2018
13	Hoboken	USA	Registered	
14	San Diego	USA	Platinum	2018
15	Indore Smart City	India	Registered	
16	Ciudad del Saber	Panama	Pre-Certified	2018
17	Franklin, TN	USA	Silver	2018
18	The Sky Castle In Kuliang	China	Silver	2019
19	The New York Olympic Region	USA	Registered	
20	San Jose	USA	Registered	
21	Bloomington	USA	Registered	
22	Testskoru - Sinziana Rasca	USA	Registered	
23	Durango	USA	Registered	
24	Oldsmar	USA	Registered	
25	Reading	USA	Registered	
26	Cleveland	USA	Registered	
27	Cary	USA	Registered	
28	Hollywood	USA	Registered	
29	Birmingham	USA	Registered	
30	Holland	USA	Registered	
31	Orange County	USA	Registered	
32	Fayetteville	USA	Registered	
33	Northampton	USA	Registered	
34	Louisville	USA	Registered	
35	Lewisville, TX	USA	Registered	

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#	Project	Country	Level	Date
36	Decorah	USA	Registered	
37	Sarasota County, FL	USA	Registered	
38	West Palm Beach	USA	Registered	
39	Flagstaff	USA	Registered	
40	Frederick County, MD	USA	Registered	
41	Henderson	USA	Registered	
42	Frederick	USA	Registered	
43	Orlando, FL	USA	Registered	
44	Coconino County	USA	Registered	
45	Abington Township	USA	Registered	
46	Datong INTL Energy Revolution S&T Park	China	Registered	
47	Monroe	USA	Registered	
48	Pueblo	USA	Registered	
49	Hangzhou Metro & Vanke Wonderland	China	Registered	
50	Royal Oak, MI	USA	Registered	
51	Baltimore, MD	USA	Registered	
52	Santa Fe, NM	USA	Registered	
53	Miami, FL	USA	Registered	
54	San Pedro Garza Garcia	Mexico	Registered	
55	Rancho Cucamonga, CA	USA	Registered	
56	Shaker Heights, OH	USA	Registered	
57	Pueblo County, CO	USA	Registered	
58	Greensboro, NC	USA	Registered	
59	Cincinnati, OH	USA	Registered	
60	Orange County, NY	USA	Registered	
61	Cincinnati	USA	Registered	
62	Montclair State University	USA	Registered	
63	Cidade dos Lagos	Brazil	Registered	
64	New Clark City	Philippines	Registered	
65	Distrito Vera	Colombia	Registered	
66	COT LEED Certification	USA	Registered	
67	Balboa Park	USA	Registered	
68	Coral Springs	USA	Registered	
69	Alexandria	USA	Registered	
70	Modern Times	China	Registered	
71	Chula Vista	USA	Registered	
72	Hillcrest	USA	Registered	