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#### Research Article

# Complexity, Alliances and Circuits in Research across Cultures: The Case of Transdisciplinary Global Urbanism

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Abstract: Globalization has brought about an increased exposure to the inherently complex nature of urbanism. Researchers, also, see how their professional practices include in an increasing degree of exposure to researchers and practices from other cultural contexts and disciplines. Intercultural research is essentially complex, open-ended, encompassing a variable geometry of webs of transactions and interactions, and subject to self-organizing adaptive evolutionary patterns. In the field of urbanism, the manifestation of such complexity happens via several processes that we will analyze in this research, which is presented in two papers. In this first paper, we will discuss, first, processes of participatory learning and research in networks formed by alliances of researchers, or researchers and citizens, in the intercultural city; second, transnational circuits of research ideas (a process of intercultural symbiosis); and third, the formation of assemblages as transdisciplinary (and therefore complex and intercultural) clusters for knowledge formation. We analyze processes of intercultural research as alliances, circuits and assemblages (participatory, transnational and transdisciplinary urbanism), as means to highlight the complex nature of intercultural practices in urban research and their implications. In the second paper, we focus on the controversies raised by complexity and intercultural research in global urbanism and offer some recommendations to overcome them.

**Keywords:** Complexity Research, Urbanism, Alliances, Circuits, Assemblages, Social Learning, Collective Intelligence, Epistemic Cultures, Urban Policy Travels.

#### 1. Introduction

Urban complexity can be said to emerge from the decentralized and self-organizing webs, assemblages and networks of transactions and interactions among a wide range of heterogeneous actors, agents and stakeholders that typically occur at multiple scales in dynamic, fuzzy, changing and uncertain urban settings. These transactions and interactions of cooperation and competition, informed by serendipity and randomness, highlight agents' perceptions, choices, decisions and preferences [1].

Agents, actors, actants and stakeholders can be individual, community, city and regional, involving social, economic and political institutions. Their mutual interactions produce feedback loops that allow the adaptation of individual and group actors and the emergence of phenomena, patterns and outcomes (physical, behavioral, social, economic, ecological, environmental) that cannot be predicted by analyzing the particular webs, assemblages, networks and their constituents and components [2].

Complexity systems are seen as structured from the bottom up. Urban systems are more likely to be in disequilibrium or even far-from-equilibrium all the time, consistent with the speed of change and volatility in cities observed during the last fifty years. Historical change is important in that historical accidents often force the system onto a less than optimal path with such path dependence being crucial to an understanding of any current equilibrium and the dynamic that is evolving [3].

New structures and behaviors that emerge are often unanticipated and surprising. Relationships between the system elements in terms of their interactions can be explained using new ideas from networks and their dynamics [4]. How the elements of systems scale relative to one another and relative to their system hierarchies are useful in showing how local actions and interactions lead to the emergence of "something qualitatively new" [5]: global patterns which none of the elements and precursors show and can only be predicted, if at all, from the bottom up [6].

As a result, urbanism aims at explaining the complex mixture of nodes and networks, places and flows, in which multiple relations, activities and values co-exist, interact, combine, conflict, oppress and generate creative synergy. Urbanism struggles to grasp the dynamic diversity of the complex co-location of multiple webs of relations that transect and intersect across an urban area. Each of those webs shows their own driving dynamics, history and geography, and each also shows highly diverse concerns about, and attachments to, the places and connectivities of an urban area. Strategy and governance operate through all kinds of webs of relations that connect the organizations and procedures of formal government with informal governance arenas and networks, and the wider society [7].

Cities are thus understood as SETS (socio-ecological-technological systems), and beg the question-how do humans in hybrid urban ecosystems interact to generate emergent phenomena, and how do these patterns selectively amplify or dampen human, ecological and socio-technical process? Attention is directed towards framing, boundaries, spatial scale, time horizon, components, connections, drivers, what is controllable, where are the control points, what is known, what is uncertain, what might change, what information we need to assess alternative strategies, what outcomes emerge from process [8].

This paper presents some processes that shape urban settings in complex ways: social learning, collective intelligence, epistemic cultures, alliances, circuits, assemblages, and hybridization. We suggest that a transdisciplinary approach to urban research is necessary in order to account for the inherent complexity of cities and the analytical challenges of urban complexity: interactions, adaptation and governance.

We examine urban complexity's "intersecting processes" [9] and the "discovery of rugged landscapes" [10] from the perspective of urban intercultural research. Intercultural research highlights the inherently complex nature of urbanism. Intercultural research is essentially complex, open-ended, encompassing a variable geometry of webs of transactions and interactions, and subject to self-organizing adaptive evolutionary patterns.

Intercultural research refers to research across cultures. As Dahl argues, "the idea of a shared, yet distinctive, set of values held by one society with resulting behavior and artifacts is fundamental to the basic idea of 'culture' within the realm of intercultural research" [11]. Hofstede defines culture as "the collective programming of the mind which distinguishes the member of one group or category of people from another" [12].

Hofstede expands the concept of 'collective programming' by suggesting that culture could therefore "be situated between human nature, which is not programmed, nor programmable on the one side – and the individual's personality on the other side" [13]. On the other hand, Spencer-Oatley defines culture as "a fuzzy set of attitudes, beliefs, behavioral norms, and basic assumptions and values that are shared by a group of people, and that influence each member's behavior and his/her interpretation of the 'meaning' of other peoples' behavior" [14].

Thus, both Hofstede and Spencer-Oatley highlight the collective dimension of culture. We adopt this approach and, in this paper, we use a pragmatic working definition of culture within the field of urbanism as a set of research practices that identify the field's practitioners from outsiders.

Intercultural research here is close to the notion of "epistemic culture" [15]. We contend that intercultural research in urbanism would be represented by a sustained traffic of ideas and practices that further redefine research cultures as rhizomes or assemblages.

We thus adopt a dynamic conception of culture and research, and we see intercultural research as necessarily transcending conventional disciplinary boundaries. Rather than exploring the most appropriate methodologies for intercultural research and cross-cultural comparisons, this paper presents examples of intercultural research in urbanism, their possibilities and drawbacks, and suggests possible ways to advance intercultural research in urbanism by proposing assemblages as an ontology for urbanism and transdisciplinarity as an epistemic or research strategy.

Thus, this paper asks: how is intercultural and complexity research made possible in the field of urbanism? We will see that some of the existing examples of intercultural research in urbanism resemble participatory action research, an approach that relies on community member participation to examine social reality and the creation of local skill capacity for the purpose of creating community autonomy through the process of praxis [16].

The paper identifies alliances, circuits and assemblages as forms of collective research, learning and knowledge, and as the conditions of possibility for intercultural research in urbanism. We discuss the city as an intercultural milieu, where participatory urbanism and alliance formation, between researchers and citizens, take place. Then we discuss urban policy travel, a form of transnational urbanism (where intercultural means international) that is based on circuits, flows and networks between creators of knowledge, ideas and policy and receptors and adopters. We end with a discussion of planning cultures and the complex traffic of ideas that planning cultures generate.

## 2. Research as a Collective Enterprise

## 2.1. Social Learning

One factor that enhances the potential for intercultural research and complexity is the idea that learning is essentially a social, collective process. Learning and research are cultural practices bounded by values reflected in practices. They are fundamentally collective practices. According to Vygotsky [17], we learn through our interactions and communications with others. Webs of sometimes complex interactions of students and learners with peers, teachers and other experts are conducive to enhanced learning. It is therefore possible to create appropriate learning environments that maximize the chances of participants to benefit through discussion, collaboration and feedback. We also learn and construct knowledge, according to Vygotsky, within the boundaries of our own cultural frameworks, rules, skills and abilities. Culture thus becomes the single most significant factor for learning, research and knowledge creation [18]. For Vygotsky, "language is the main tool that promotes thinking, develops reasoning, and supports cultural activities like reading and writing" [19].

In part as an application of Vygotsky's ideas, I conducted a study of communication modes and content used by engineering students in a special project-course, Robotics for Theater, focused on the planning and construction of a robot from scratch, to support theatric production as actor and prop [20]. The student projects studied in the pilot program assumed the format of client-based product development and delivery. A preferred scenario would involve industrial partners who sponsor and participate in specific product prototyping projects. In this ideal case, a technical representative of each industrial partner would be the *client* to the student team working on the industrial partner's project. This model was successfully implemented by Prof. Leifer at Stanford University, through a graduate-level project course [21]. Analysis of the case study of the Robotics for Theater project revealed a complex learning process where the social aspects of team dynamics had a significant positive impact on students' knowledge acquisition: 1. Resource mobilization was fostered by the

role of the advisor as information facilitator and "weak tie" in the network, and also by the frequent informal contacts among the students in the team. 2. Innovation was fostered by intra-team trust. The strong friendship and teaming experience of the group were critical for effective team dynamics. 3. Probably due to time constraints, the field of theater did not become a fundamental reference of the project, contrary to plans. 4. Time constraints and technical difficulties in implementation inhibited progress. 5. Informal meetings were crucial in the progression of design and implementation.

# 2.2. Collective Intelligence and Complexity

From the concept of "social learning" we can logically move towards the idea of "collective intelligence." The Massachusetts Institute of Technology's Center for Collective Intelligence is fully devoted to advancing knowledge on this matter. Collective intelligence has been the goal of visionaries throughout the history of the Internet. As Gruber reports:

"Douglas Engelbart, who invented groupware, the mouse, and a form of hypertext designed for collective knowledge, wrote in 1963 of his career and project objective: 'The grand challenge is to boost the collective IQ of organizations and of society.' His Bootstrap Principle was about a human-machine system for simultaneously harvesting the collected knowledge for learning and evolving our technology for collective learning. In human-machine systems, both the human and machine contribute actively to the resulting intelligence, each doing what they do best. Other early pioneers of the human-machine model of collective intelligence include Norbert Wiener, the father of cybernetics, Buckminster Fuller, the consummate inventor and system thinker, and Stewart Brand, creator of the first large virtual community on the Internet. Tim Berners-Lee, the inventor of the World Wide Web, describes his vision of the Semantic Web in these terms: 'The Semantic Web is not a separate Web but an extension of the current one, in which information is given well-defined meaning, better enabling computers and people to work in cooperation' [emphasis added]" [22].

Most discussions on collective intelligence or "wisdom of crowds" refer to the Social Web. Here the idea is that the individual contributions by web participants create value for anyone just by being available for reading and usage. To what extent new knowledge emerges by the juxtaposition of high number of data and information sources is clearly a complexity issue. As Gruber argues, emergent knowledge (inherent to complex situations) takes place when "the system enables computation and inference over the collected information, leading to answers, discoveries, or other results that are not found in the human contributions" [23].

In fact, "emergent knowledge" (that is, complexity) is one of the potential outcomes of intercultural research. Knowledge emergence in intercultural research would materialize if research participants are able to "bootstrap" their collective intelligence. Intercultural research can be conceived as a complex information repository. It can also be conceived as an active framework where participants actively interact to express their knowledge interests and needs, to request specific knowledge and to apply intercultural knowledge to problem-solving and in general to address their collective needs. Some of the examples in this paper show these possibilities and also some current limitations.

## 2.3. Converging Epistemic Cultures

Another factor or pre-condition that fosters both complexity and the possibility of intercultural research is the idea of converging epistemic cultures. Scholars in the field of social studies of science and technology are providing examples indicating a certain degree of convergence of research fields under a new techno-scientific paradigm. Mostly, these discussions refer to the macro-scale and adopt a broad understanding of convergence. Kastenhofer introduces a focus on epistemic cultures and raises the question of what convergence might imply on the micro-level of everyday research

practices [24]. She distinguishes three forms of scientific change over time (convergence, divergence and emergence) and three modes of convergence (cooperation, integration and assimilation). Further, as Knorr Cetina has argued, "the concepts of knowledge culture and epistemic culture are used here against the background of contemporary transformations in global financial architecture" [25]. The focus is in this paper on the construction, within the field of urbanism, of the machineries of knowledge construction, relocating culture in the micropractices of city life as a bounded habitat of intercultural research practice through processes of alliance formation. Not all places of intercultural research in urbanism, however, are bounded spaces, and there is a case to be made for including in the empirical agenda more distributed locations, a typical scenario of complexity. We describe here wider networks and circuits of knowledge generation as intercultural research in what is often known as transnational urban space.

### 3. Alliances and Circuits in Transdisciplinary Urbanism

## 3.1. Alliances: Participatory Urbanism

#### 3.1.1. Cities as Intercultural Milieux

Cities are contexts in which cultures and societies are produced and transformed; cities themselves are produced and transformed by those cultures and societies. If the global scale is constructed and transformed in specific territories, the local scale also contributes to the intersection of multiple social relations, processes, structures, and representations. Although not every metropolis can be said to be "global" (a main node in the international financial network), most of them participate in transnational cultural flows, and produce and experience the specific consequences of such flows, visible at the local level in the presence and influence of companies, workers, tourists and foreign products. Thus, globalization brings us to the experience of cultural diversity in spatially-bounded milieux such as cities [26].

Intercultural research needs a cosmopolitan attitude and such an attitude can be found in cities. Contemporary transnationalism has transformed the idea of cosmopolitanism in two ways: (1) it is no longer an elite attitude exclusively (although class distinction mechanisms continue to operate at all levels), and (2) it is possible to develop a cosmopolitan attitude within a certain place, in a sufficiently diverse city. Cities are also *civitas*, places of personal cultivation and intellectual and cultural openness where "complete strangers observe and appreciate each other" [27].

Scattered throughout the city there are oasis of cosmopolitanism, places characterized by "the acceptance of space as belonging to all kinds of people" [28]. In such places, cosmopolitanism is part of what attracts a crowd: people enjoy meeting and observing other people who are different from themselves. It is a relaxation of the emotionally taxing social protection that one must maintain the rest of the time. They are safe, warm and intimate spaces thanks to a shared experience: food, shopping, travel, a sports show.

There is also an intangible ingredient: a mood, writes Anderson, of "civility" that allows people to "strive mentally, emotionally and socially" and develop "social sophistication that allows various urban people to get along" [29]. Because they are so difficult to replicate, Anderson argues, all these places should be treasured and protected, and those of us who enjoy them should treat them not as moments outside of normal life, but as a model for social relations in increasingly diverse cities. The civic urbanism to be fostered today is one that nurtures, explores and learns in such zones of *civic friction* in external environments: spaces that widen the scope of action and, therefore, of thought. They are spaces in which a cosmopolitan attitude can be cultivated. The urban ethic that we can build is the ability of a city to normalize meetings with the other [30]. The many small signs of banal, everyday, vernacular or low intensity cosmopolitanism in our daily lives are a civic manifestation of an attitude shaping the preconditions for participatory urbanism, a form of intercultural research.

#### 3.1.2. Participatory Urbanism

In recent years, citizen participation in urban planning processes has become both a demand and a reality [31]. Collaborations among city planners, architects, social scientists, urban activists and citizens to analyze and try to solve city problems constitute a form of intercultural research given the different worldviews and epistemic cultures of each group involved [32].

This mode of intercultural action research involves issues of decentralization and devolution of powers, building trust, achieving fair representation, enabling resources and support systems, or building transparency through platforms of engagement.

Enabling true and effective citizen participation in an existing administrative set up is a complex process with challenges such as finding an amicable power and responsibility distribution framework, a building of additional capacity amongst both, government officials and citizens alike, "ensuring fair civil society representation and enabling resources to support it. In many countries, decentralization of power requires institutional, legislative and political support at different levels of governance" [33].

In parallel is the perceived threat of erosion of powers leading to cases where the effectiveness of decision-making and impact of local committees "are significantly hampered by red tape, bureaucracy, and required approval from government agencies. In addition, approaches may lead to prioritization of only those projects that will contribute to increasing revenue of the area, over socially benefitting projects" [34].

City governments sometimes look at citizen engagement both through institutionalized structures and others such as citizen-led groups to act as active partners in the co-creation of the policy and planning process. Enabling multiple platforms of engagement enabling active participation helps build transparency by making information readily available. "While e-governance platforms have proven to be very effective in cities across the world there have been many other technological platforms that have been developed and are being used in the areas of collecting empirical data and allowing participation from different stakeholders" [35].

Collaborations among different epistemic cultures in participatory urbanism, a form of intercultural research, requires city governments to make available different channels of engagement and participation. These engagements will also essentially need to tie together into a comprehensive local area development plan and ensure optimal utilization of all available resources.

## 3.2. Circuits: Urban Policy Travels

Researchers on transnational urban policy seek to analyze the factors enabling and constraining the formation of transnational circuits of policy adoption and adaptation as well as the social organization and consequences of the complex interconnectivity of cross-border networks in urban policy. Urban policy and ideas, framed or not as "best practices," travel around the world [36]. This process lies at the foundation of a mode of intercultural research whereby transnational policy circuits foster spatially unbounded collaborations and implicit partnerships, from policy creators to receptors and adopters.

Urban policy travels can thus be said to underline "the socio-spatial processes by which social actors and their networks forge the *translocal* connections and create the translocalities that increasingly sustain new modes of being-in-the-world" [37]. This complex interconnectivity working at a distance is multidimensional, encompassing social, economic, and political relations as well as cultural and interpersonal networks and technological linkages. It is also a complex process subject to misplaced expectations and failure. We shall briefly illustrate urban policy travels with two examples: the

Bilbao Effect and Dubaization. Both take place in contexts of local-regional distinctive planning cultures which are nevertheless translocally bounded in complex ways.

## 3.2.1. The Bilbao Effect

The Bilbao Effect can be succinctly defined as the attempts by a share of urban elites worldwide to implement a policy of building icons in their cities, largely based on a superficial and media-based understanding of the Bilbao case, which led many to firmly believe that a city in economic difficulties could be turned around just by iconic architecture [38]. Those leaders overlooked the fact that institutional contexts, specific policy instruments and territorially grounded social dynamics give rise to distinct patterns of iconic megaproject development and help explain the degree to which such megaprojects succeed or fail in different places.

Denver, Helsinki and Abu Dhabi, three of the many cities that adopted icon building as urban policy, show the complexities of this mode of intercultural research and the challenges it faces in order to be successful. The Helsinki Project was cancelled and will not materialize, due to government and citizen opposition. In the case of Denver, urban planning developments in the years since the opening of the Bilbao-inspired museum addition have displaced the Denver Art Museum to the sidelines in local efforts at urban improvement. In Abu Dhabi, the new Guggenheim will play in a complex environment within the context of an increasing diversification of the local economy and, if its fate is similar to Masdar City's eco-experiment in the outskirts of Abu Dhabi, the success of the new museum is far from guaranteed [39].

There has been a fading away of the "Bilbao Effect," which owes to the limitations of existing political rationality and decision-making processes at times when globalization puts pressure on urban leaders to redevelop and become globally visible. It also owes to a poor understanding by outsiders of the context and true reasons behind Bilbao's urban revitalization success, which have little to do with iconic architecture: they owe to a sound economic policy by the financially autonomous Basque government and a well-crafted and comprehensive revitalization plan of which the Guggenheim was just a very small and ad-hoc component [40].

Thus, urban policy travel and circuit formation as conditions of possibility for intercultural research face severe obstacles, mainly having to do with the existence of a distinct cultural contexts in different places. This is why cities should not expect to be able to replicate the success of Bilbao just by implementing fashionable urban policy marketed via appropriate global media discourses. Each city has a local history, a region within which it develops, and a specific political make-up that influences local decision-making processes. Cities and regions around the world partially adhere to their own specific logic of development.

Each city shows particular features that contribute to explaining decline, and each may need localized strategies for redevelopment. Applying the standard elements in the revitalization mix, including iconic megaprojects, to cities around the world may be unavoidable due to rapid and acritical adoption of policy discourses from center to periphery. However, expecting to replicate a city's success by merely adopting such strategy is often a recipe for disappointment [41].

#### 3.2.2. Dubaization

Most Arab world cities are competing to imitate Dubai in its unprecedented effort to build the tallest, the biggest and the largest ever built architectural and urban icons. This phenomenon can be best described as "Dubaization," the process of urbanizing a city with futuristic, pioneering architecture. Dubaization is qualitatively similar to the "Bilbao effect," and it has spread to other cities, even outside of the Gulf area, such as Istanbul and Vancouver.

The *Dubaization* of Abu Dhabi includes a new Guggenheim Museum, designed by Frank Gehry, originally set to open in 2012, then in 2017, and still not completed as of March 2019. The Guggenheim in Abu Dhabi is twice the size of the museum in Bilbao, twelve times the size of the Frank Lloyd Wright Guggenheim in New York. Carol Vogel in The New York Times refers to this Gehry design as "a graceful tumble of giant plaster building blocks and translucent blue cones" [42]. Dubaization triggers crucial questions: What are the consequences of this urbanization strategy on the future of Arab cities? What kind of social life will emerge out of this development? Is this just an elite-driven process of constructing, reconstructing and deconstructing identities and the territorial outlook of Arab cities? And also, is there any future for sustainability in the developmental strategies of Arab and Middle Eastern cities?

Dubai, as a model of urban development, is based primarily on images and icons rather than sustainable concepts and processes. Major conflicts are resulting from this, including failing to adopt sustainability, limited interpretation of globalization and degradation of locality. Arguably, Arab cities need to consider a more holistic approach for its sustainable strategic development. Architecture as a domain and creative reflection of local culture can be used as a vehicle to maintain local culture and interact with the global appetite for knowing "the other" [43].

The main condition for these architectural products to be exposed to the other is that they should be coming from a deep and original local vision rather than being exemplars of a globally crafted strategy. The multiple controversies and disruptions associated with the Guggenheim Abu Dhabi indicate errors and failures in planning, policy and implementation, due to the complexities of adoption and adaptation as strategies of intercultural research, analysis and practice.

# 3.2.3. Urban Planning Cultures

Planning culture refers to conceptions, institutions, ethos, attitudes and practices, and has a direct effect on the prospects for intercultural research [44]. Urban planning practices and cultures are perceived to have converged due to the rapid expansion of information and communication technologies since the mid-1990s. However, empirical research on planning cultures shows that the strategies developers by planners to adapt to change vary widely, and the variation depends on multiple factors. For example, there is a significant degree of variation in the adoption of neoliberal policies and rhetoric and the translation of these to planning practice among nations [45].

Transnational interconnectivity has changed local planning cultures, but we cannot speak of a significant move towards homogenization or convergence of urban planning practices at a global scale. In fact, the collective ethos and dominant attitude of professional planners in different nations varies toward the appropriate roles of the state, market forces, and civil society in urban, regional, and national development. "The reality of changing urban planning cultures over time leads to characterize urban planning cultures as not indigenous and immutable, but rather evolving with social, political, and economic changes both within and outside the national territory" [46].

The claim by neoclassical economists that cultural differences among peoples of the world are not relevant cannot be defended. If economists were right, intercultural research in urban planning would simply focus on creating institutions that would facilitate, not hinder, the universal urge among people to maximize their self-interests. Such is not the case. As a result, we face a complex phenomenon. As Sanyal states:

"International flow of planning ideas also affects planning styles, although not to the extent claimed by either its critics or its proponents. How does one develop new insights about such a complex social process with multiple and interconnected causes and effects?" [47].

As cultural anthropologist Richard Shweder recently noted,

"Cultural elements are too hard to define, too easily copied and too long detached from their points of original creation. Contact between cultures and processes such as borrowing, appropriation, migration, and diffusion have been ubiquitous for so long that little remains of the authentically indigenous" [48].

All of this has direct consequences for the realization of intercultural research in urban planning because the existence of a diversity of cultures resembling "a complex traffic of ideas" challenges and complicates both alliance formation and the processes of adoption and adaptation of urban policies and practices, as we have seen in our examples [49, 50].

#### 4. Conclusions

This research work (presented in two papers) asked how is intercultural and complexity research made possible in the field of urbanism? The research has identified (in this first paper) alliances, circuits and assemblages as the forms of collective research, learning and knowledge, and as the conditions of possibility for intercultural and complexity research in urbanism. We discussed the city as an intercultural milieu, where participatory urbanism and alliance formation, between researchers and citizens, take place. Then we discussed urban policy travel, a form of transnational urbanism (where intercultural means international) that is based on circuits, flows and networks between creators of knowledge, ideas and policy and receptors and adopters.

In the second paper we shall discuss controversies, problems and recommendations and described challenges that constrain, sometimes in significant ways, the processes of alliance and circuit formation that were identified in the first paper as the pre-conditions for intercultural research in urbanism. We shall also suggest as potential solutions (1) practicing places as a strategy to overcome borders and boundaries, (2) assemblages as hybridization and (3) transdisciplinary urbanism, where intercultural ties happen through translation, in the trade zones across research cultures and disciplines.

We proposed disciplines to be understood as conceptual hubs based on history and path-dependence, not as self-contained, closed systems of knowledge and research. As possible research directions in the near future we identified (1) socio-materiality, (2) urban governance as complex and holistic. In this first paper we found that, even if the city as an intercultural milieu is conducive to the necessary cosmopolitan attitude that fosters intercultural linkages, the challenges are formidable. The structuring of cities around borders and citadels, virtual and symbolic or cultural walls and ghettos, as well as the challenges to translation, adoption and adaptation of urban policies across distinct local planning cultures, are obstacles for the transferring of urban knowledge around the world and thus for the expansion of intercultural research.

Participatory urbanism shows the way forward as an intercultural practice for researching and analyzing urban problems. However, issues of decentralization and devolution of powers, building trust, achieving fair representation, enabling resources and support systems, or building transparency through platforms of engagement represent potential limitations to this approach. The fading away of the Bilbao Effect and the limited impact of Dubaization are illustrations of drawbacks in so-called best practices. In addition, the sheer complexity of alliance formation and circuit efficacy, as well as the predominance of different epistemic cultures (with distinct conceptual sets) among participants in intercultural research, analysis and practice present substantial challenges to effective intercultural communication. The existence of different values and cultural contexts complicates efforts at interpretation and fair judgment among parties involved in practices of intercultural research. The second paper will discuss these controversies and provide recommendations to overcome them.

#### **Conflicts of interest**

Author declares that there is no conflict of interest.

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