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# 'Glocal' Discussion as Leverage. Debating Urban Sustainability in Bogotá

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Abstract — Based on a joint project of IASS and the Botanical Garden of Bogotá, the research note discusses the outlook for global sustainability norms, objectives or standards, to become meaningful at city level. The action research project comprised four conference and dialogue events, ex-ante expert interviews, and questionnaires to the general public of the events, which were evaluated mainly qualitatively with quantitative elements. The paper presents a few very first results of the case study. References to the global level, in Bogotá, can fulfill a legitimating function for certain actors and programs and can work as a dialogue enabler; their applicability depends on the specific cultural contexts for sustainability topics; political polarization regarding these topics is risky, but also promising for transformational ambitions. The thesis that "thinklocally-act locally" might be the better recipe for integrating global considerations into local action, is therefore refuted. In the case of Bogotá, a city politically at odds with the nation it heads, sustainability transformations will definitely benefit from transdisciplinary contributions which involve international expertise.

Keywords — Urban studies; Sustainable Development Goals (SDGs); Transdisciplinarity; Bogotá; Transformation

# I. INTRODUCTION: BACKGROUND AND RESEARCH QUESTIONS

Colombia's socioeconomic and political panorama is full of tensions. On one hand, the country's economic dynamism is among the Top 10 of the world, with an average growth rate of 4.2 percent over the last 12 years which include the severe crisis low of 2007/8 (see data on Trading Economics Website). The biggest contribution to this growth and to overall GDP comes from services, which obviously concentrate in cities. Bogotá, the capital,

is leading those cities with a GDP of 70.3 billion US-Dollar and 24 billion foreign direct investment over the past ten years, i.e. 19% and 79% of the country's total respectively when not counting FDI in oil (CCB, 2012). On the other hand, this success of an 'urbanized country' depends on ever accelerating trade with commodities from mining, agriculture, etc., which occurs in an underestimated countryside (UNDP Colombia, 2011) troubled by decennia of civil war.

This commodity trade itself, of course, relies on the country's natural resources which are cross-linked with a biodiversity (the second richest in the world) and hydrology highly susceptible to climate change, a fact not sufficiently recognized in official prosperity discourse (Rodríguez Becerra and García Portilla, 2013). At the same time, Bogotá's current mayor Gustavo Petro got elected in 2011 with a campaign which, apart from the fight against segregation—Bogotá's good prosperity index drops quickly when including equity considerations (UN-Habitat, 2013)—, built heavily on these ecosystemic issues, identified Bogotá as a "Hot Spot" of vulnerability (Prasad et al., 2009) and led to an urban development plan that made "a territory which confronts climate change and is aligned around its water bodies" its second pillar (Alcaldía Mayor, 2012).

This programmatic linkage between social equity and environmental sustainability has led to quite 'explosive' frictions between the local and national levels and is closely linked to mayor Petro's political destiny (Rivera, 2014), i.e., to the career of a potential future candidate to the Colombia's presidency. From the current national government's side, so far, economic aspects (like the success of being admitted to an OECD accession process in 2013) are communicated emphatically, while sustainability policies like the chancellery's initiative for "Sustainable Development Goals" (SDGs) at UN level (Ministerio de Relaciones Exteriores, 2011) have long remained a topic for environmentalists and experts only.

In this scenario of tensions between social, economic and ecological problems, between cities and countryside, left and right, etc., the sustainable development (SD) formula was employed by the Institute for Advanced Sustainability Studies (IASS) and the Botanical Garden of Bogotá "José Celestino Mutis" (JBJCM) for a transdisciplinary research project called "Conversatorios para construir sostenibilidad" ("Building Sustainability: Dialogue Tables"), in the Colombian capital. As is the case in most transdisciplinary research on sustainability (Hirsch Hadorn et al., 2006; in't Veld, 2011), transformation in the field was a primary objective, in this case above all for the local partner, a cultural and scientific entity closely linked to the administration and its urban development plan. We therefore chose a design of "action research", a tradition that since its beginnings has been associated with knowledge diffusion and with the integration of people in social change (Gunz, 1996). In this case, we hosted expert discussions with a strong public component and accompanying field research (see Section II).

The transformative objective, in the common research plan, was spelled out as follows:

- a. to promote a 'critical mass' of better informed people which contribute to mobilize strategic actors;
- to contribute to better dialogue between policy levels and between politics and society on the work for the common good and
- c. to generate impact on public sustainable development policies.

For this purpose, four thematic priority areas with high importance both at the local and at the global level were identified: Water Governance; Energy; Soils and Nutrition [i.e., the 'nexus' areas (Hoff, 2011)]; and Urban Development Model/SDGs. (A fifth area, resources and waste, had to be discarded due to time constraints.) Regarding these specific areas and the dialogue project as a whole, IASS wanted to identify

- d. whether there existed, within the specific local discourse and related to the four thematic areas, references and resonances to the international/global level (e.g. standards, norms, goals, examples) and
- e. whether they would contribute momentum to a sustainable transformation.

Objective [e] was additionally related to the comparison of the local "system" and "target" knowledge in the selected thematic fields (Pohl and Hirsch Hadorn, 2008)

with the respective "post-2015" development discussions at international level and how it contributed to the idea of an "urban SDG" in particular. This strand of the research interest was then brought together in a fifth event, an international workshop held at IASS in Potsdam, Germany, and led to specific policy recommendations (Rivera and Lagos, 2013); it will, however, not be discussed in the present research note. The article's focus, instead, lies on the importance a dialogue on global goals might have had in the city of Bogotá itself, esp. regarding the abovementioned target questions [a] and [d]. In Section II, I will briefly outline what was done in terms of methodology. In Section III, I will present some first casespecific results, and in Section IV, discuss them with regard to their possible generalization and further open questions.

#### II. METHODOLOGY

The normative aims of the project ([a]-[c]) led to the use of formats that would be at the same time informative, dialogic and of high visibility within the city. Therefore, "research which produces nothing but books would not suffice" (Lewin, 1946: 35), and transformative communication had to be combined with systematic reflection on both the existing knowledge and the one it produced (Townsend, 2013). The "practice" phase of action research, in this regard, would very much overlap with its "discourse" phases, two components kept rather distinct in traditional action research (Kemmis and McTaggart, 1982: 10). Putting knowledge producing and integrating functions being at the forefront of problem solving (more than, let's say, those of empowerment), it is safe to characterize the endeavor as "transdisciplinary" (Thompson Klein, 2004). Transdisciplinarity, in general, might be considered the true heir of action research movements. As transdisciplinary case studies need to build heavily on field-immanent, often implicit knowledge and cannot avoid normative choices (Scholz et al., 2006: 236-238), the Botanical Garden of Bogotá was the ideal project partner: an established communicator and actor in defense of socio-ecological purposes.

Together, we set up four double events every two months (February-August 2013), each consisting of

- a "conference"/lecture for a greater live audience (around 350 people per event) and
- the proper "dialogue table" of (10-15) experts, streamed via local TV (30.000 spectators in total).

These events were held back-to-back, first on the same day, later changed toward two separate days in order to

permit more structured input from the lecture into the dialogue table. For outreach and documentation, a website was established (JBJCM Website) on which presentations from the lecture were made available on time, and minutes of the discussions later on. The events were advertised in the numerous online and offline networks of JBJCM—an institution that works both with academia, politics, and on the ground with neighborhoods e.g. regarding the planting of trees and renaturalization of wetlands.

As for the dialogue table experts, a mixture between different policy levels and sectors was strived for (see objective [b]), as well as between technical experts and conceptual communicators. Availability and short lead times imposed limitations on actual participation, in particular regarding the business sector representatives, and of course there was a certain selectivity bias given that the JBJCM has primarily an academic and public network with environmental interests. However, as shown in Figure 1, the sectorial composition of the 57 experts actually present, was fairly balanced.

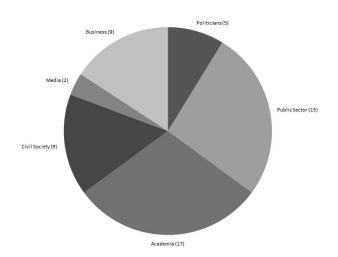


Figure 1. Composition of dialogue tables by sector

The diversity of involved actors indicates very different *sources* of scientific and practical knowledge at the table—a prerequisite for transdisciplinarity in terms of both "joint fact finding" (Andrews, 2002) and "joint solution finding" in the public sphere (Gibbons and Nowotny, 2001). Still, in order to achieve the project's local objectives, the *use* the experts could make of their knowledge also had to be diversified and maximized (Clark et al., 2010). We did so by making sure that institutional leaders, influential public figures and 'normal' working-level experts were present, and that they would come from the local, national and international level (see Figure 2). The latter was emphasized by making sure that the invited guests from abroad (European and Latin American countries) would

not only participate in the dialogue but give a proper presentation at the "conference" as well.

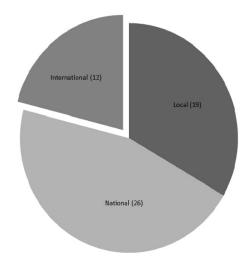


Figure 2. Regional level of experts at the dialogue tables

The latter was of particular importance to 'test' the local resonance to the global level (question [d]). This question was then addressed by tracing references to international examples and initiatives (with special emphasis, but not exclusively, on the SDGs and their 'predecessor', the so-called Millenium Development Goals [MDGs]) in the discussion protocols, and by addressing them through direct questions in the guided ex-ante interviews that were conducted personally with available experts (16 in total). This allowed for checking in depth how relevant the international dimension and the global level were for them in their framing of problems and solutions, and how far these points of view would be reflected in the dynamics of the public discussion, and by whom.

To give an example: For the ex-ante interviews for the Water Dialogue Table, I tried to arrange interviews with 11 participants (out of 17) from all regional levels and sectors, and at the end, seven of them actually took place. One of the interviewees was primarily asked as academic, one in its function within an environmental NGO, another came from the business/consultancy world, and three pertained to the public sector (ministry; government agency; city secretariat). Two had mostly local, two had national, and three mostly international expertise. The interview guideline was designed to catch (a) general expectations toward the process and other participants, (b) 'worldviews' on "development and nature" or policies and water resources, respectively, and (c) opinions on spatial responsibility levels regarding water governance and the possible influence and limitations of international agenda setting, giving attention not only to SDGs but to drinking-water-related MDG 7.C or the recently established "human right to water", as well. The outcome of these interviews was interesting insofar as it showed, inter alia, (a) high hopes

in contributing to the further (!) success of current Bogotan water governance (with the notable exception of the national ministry representative), (b) an almost general feeling that a shift to more resource stability orientation in water governance was needed (with the partial exception of the business representative), and (c) an appreciation of international help on some technical levels, but rather low expectations regarding impulse toward more ecological sustainability from 'above'. For the dialogue itself, this outcome made clear the 'danger' of too consensual a dialogue, and the need for stimulating controversy (regarding project objective [b]; an aim we did not really achieve in this case), but it also anticipated and validated results we got from the event itself (see Section III below).

In addition to the ex-ante interviews, we addressed these issues through specific questions in the questionnaires directed to the conference and dialogue table audiences, a target group whose level of information and opinion was important for our project (objective [b]). These questionnaires, in the case of the conferences, consisted of personal statistics and mostly close-ended questions, in order to obtain a reliable idea (the return rate allowed for an overall margin of error of 4.1%) of the audience's opinion on the quality of information they got from the event and on the ideas that were presented to them. In the case of the dialogue tables (with a much smaller and more selected live audience gathered by personal invitations) they contained more open-ended questions in order to deepen the exploration of the thematic spectrum.

In addition to the questions which checked for perceived relevance of international initiatives, standards and development examples (namely the ones evoked by the international speakers), we built general profiles of the attendants' thematic perception by clustering the answers to the open-ended questions into thematic blocks and comparing them to the expert discussion. Further input came from Twitter responses and from questions to the keynote speakers at the conferences. All this allowed us for assessing the context and impact of the action research and how we would perform regarding the aforementioned objectives [a] and [b], but it also provided us (partial) answers to our questions [c] and [d] on 'glocal leverage'.

## III. SELECTED RESULTS

Concerning the *experts* present at the tables and their discussions, we found that

 several internationally prominent concepts (e.g. the "right to water", "food sovereignty") played

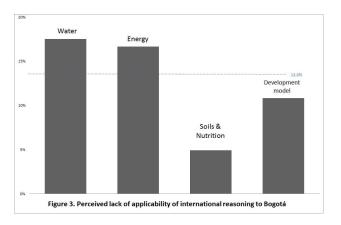
- an eminent role in the discussion without being explicitly framed as international;
- most of the explicit references to global development, be it through data or concepts or by referring to the international speakers, came from academia and the public sector (both overlapping), with
- considerable skepticism regarding (but not rejection of) the *usefulness of MDGs/SDGs* at the local level.

In contrast, a clear majority of the audience

- found the international presentations "useful" and the way the specific topic was treated "adequate" [and not all the dissenters from the former (5.7%) were contained in the considerable minority of deviators from the latter (27%)] and
- during individual events welcomed the international dimension, e.g. by considering an urban SDG useful for Bogotá and/or Colombia (SDG Conference; 74,3%) or by regarding the tension between energy security and sustainability a "mostly international" topic (Energy Dialogue Table; 56%).

We have to assume that the general audience were people 'somehow close' to socioecological discourses, as they were recruited via the Botanical Garden's networks (including universities) and rather alternative media like the Bogotan TV channel "Canal Capital". This assumption is reinforced by certain attitudes we encountered among the respondents, as for example considering water governance preferentially an ecosystemic issue (25% of the Water Conference's audience, only surpassed by the complex of 'cleanliness') or attributing an even higher priority to energy efficiency than the discussing experts (24% considered that a top priority during the Energy Conference). For some further details on this, see Section IV, although the main focus of this research note lies on the questions of global framing. These spectators which were apparently 'open' to transformative suggestions of the kind made by the current Bogotan administration showed – as seen above – a rather enthusiastic attitude toward the international dimension – but itvaried considerably according to the topic. This is indicated by a report of dissatisfaction which said that the international examples and arguments given during the conferences were not sufficiently "grounded" in Bogotá or applied to the city's specificities (see Figure 3; the open-ended question to which this report responded, was "If the way problems were

addressed during the conference, was not adequate: why not?").



### This variation corresponded with

- high unanimity among experts and a public admission that bordered overcrowding, at the Water Events;
- weaker live admission (of people younger than average with a high questionnaire response rate) but peaking TV rate, along with an almost complete lack of expert consensus but high impact of international concepts, at the Energy Events;
- a lively attendance (of older people), almost zero TV audience, heated discussions on principles and lack of argumentative detail and coherence, at the Nutrition Events and
- a neither polarized nor consensual, diversified and sometimes discussion, along with a public attendance weak in numbers and strong in opinions, in general more locally concrete than those of the experts.

Before discussing these data in more detail, it needs to be mentioned that the Soils & Nutrition Event had the wording "Food Sovereignty" in its teaser title, was embedded in a whole "Week of Seeds" at the Botanical Garden; and while it was attended by experts of, on average, a somewhat lower profile, and by a public somewhat less academic (indicated e.g. by the lower response rate and the ways of formulating sentences), it was by far the most emotional and had an unwilling sort of 'epilogue' two months later, when street blocks and manifestations related to the "paro agrario", a very tense time of nation-wide protests from the agricultural, transport and mining sector (mainly against free trade agreements), together with students solidarity activities, 'invaded' the city of Bogotá. This is of course not a 'result' of the research strictu sensu, but needs to be

taken into account as a context finding of the action research.

Last not least, the methodologically and thematically interested reader might want to know what was considered "glocal" or merely "local" in these dialogues, interviews and questionnaires; Table I provides some exemplary (not exhaustive) illustrations on this.

TABLE I EXAMPLES FOR 'GLOCAL' ELEMENTS IN DISCOURSE

Reference/Stimulus	"Local"	"Glocal"
I. Direct Questions	Responses	Responses
"In your	Local	International
understanding, the	National	Local and
topic of the dialogue	Local and	international
table is a more local,	national	
national or		
international one?"		
"Do you think the	Yes	No
presentation of		
international		
experiences has		
been helpful?"		
"Do you think	No	Yes
establishing an		
Urban SDG at the		
global level could		
serve Bogotá or		
Colombia?"		
II. Thematic		
Elements		
Water	Watershed	UN "right to
	management as	water" of
	an issue of local	symbolic
	economic-	importance for
	political	Bogotan
	struggles	gratuitous "vital
		minimum" of
	European water	drinking water
	governance	
	traditions	Bogotá's water
	admirable but	reserves will be
	culturally too	particularly
	different	affected by
F	T., (	climate change
Energy	International	Berlin's
	focus on	tendencies
	renewables may	toward car
	lead to new	sharing
	technological	interesting for
	dependency in Latin America	Bogotá to consider
	Lauli Allienca	Consider
	CO <sub>2</sub> reduction	Popularity of
	goals irrelevant	"clean energies"
	for Colombia	among
	101 Colollibia	spectators (?)
	No interest for	specimors (:)
	EU energy	International
	efficiency	city networks
	regulations	against climate
		change
	<u> </u>	

Soils and Nutrition	UNCCD Land Degradation Neutrality proposal not known	Urban agriculture successes in Havana inspiring
	Free Trade Agreements pernicious for local seeds	Popularity of resilience metaphor
	Political struggle of small-scale farmers not seen as a global topic	Presentation of SDGs and Global Soil Forum positively referred to

### IV. DISCUSSION AND OUTLOOK

Colombia faces several tensions surrounding the 'way of development': between the leadership of nation and cities, between economic progress in terms of overall GDP and redistribution matters, between business turnover and nature protection. These tensions surface in expert discourse throughout Latin America when employing the SD concept (von Barloewen and Rivera, 2013), showing that in the region, while it has the force to assemble, it is then immediately crossed by materially powerful contradictions. In Bogotá and at the time of point we intervened with our action research, these contradictions had been discursively pacified with regard to the need of securing the precarious long-term availability of the water resource (Ardila 2013), restoring the Ecological Main Structure (Andrade et al., 2013), preserving wetlands and Andean moors, combating urban sprawl, densifying the inner city, etc. The unanimity among experts and the public in this field was overwhelming (with some minor differences in the field of waste water treatment). At the same time, both global target setting and international examples on local water governance were, although not rejected, not considered very helpful either.

So, the first discussion event reaffirmed a discursive and political shift that had already taken place (around 2011), and somewhat surprisingly so when one sees how difficult such a shift had seemed only a few years before (Lampis, 2013). Given this, neither the narrow poverty focus of former MDGs on short-term drinking water supply and sanitation, nor the always locally specific cultural traditions of water governance from European countries which were presented at the February conference, would really make a difference regarding that socioecological approach – apart from consolidating it and reassuring the crowd which had assembled around the government of "Bogotá Humana", represented at the occasion by not only one but three secretaries. This crowd was nevertheless the nucleus of a "critical mass"

in the truest sense, as showed the events nine months later which, in a legal-political battle between nation and city and right and left, led to the removal of mayor Petro from office and derived from administrative changes in socio-environmental legislation.

While the 'glocal' approach strengthened an ongoing transformative endeavor in that case, the energy topic showed a more differentiated pattern. The mayor, whose personal presence at the dialogue table without doubt had contributed to the large TV audience, thanked the organizers for an opportunity to discuss the energy future in public, an opportunity which he and most experts considered "rare". Colombia's comfortable and 'clean' hydro electricity situation, with some diversification toward a goal that was initiated after a drought crisis in the late 1990s, has rendered the search for alternatives obsolete in public and many experts' opinion, also at our dialogue event. The international push for non-water renewables and for energy efficiency provoked opposition or avoidance; the region's concerns about new transmission lines met a dead end in the discussion; solar innovation was fervidly advocated by some and easily dismissed by others. It was the collegiate audience who, along with the minority of experts, insisted that decentralized renewables and efficiency were of high priority and who welcomed the international example of carsharing as a promising innovation in transport. Their claim that Bogotá's reality was not well represented at the conference can be read not as a rejection of the international dimension, but as an exigent call for more action at the local level. This of course also related to transport, were Petro's push for electrification (metro) and a more equitative residential structure were supported. The event, thus, while exhibiting some elements of partisan advocacy like the Water Dialogue, clearly showed that energy was a marginalized and controversial topic in need of transformative stimuli. (A 'decarbonization' rhetoric alone, however, would not suffice in this case.)

The most remarkable momentum was nevertheless provided by the highly politicized Soils & Nutrition Event, to which small-scale farmers surged from the adjacent communities and forcefully claimed more "food sovereignty". Whether this claim was fully compatible with food security, how it could be measured, what the institutional role of food processors and consumers should have in the matter, and many other technical questions were not debated in depth, due to the political heat and anger. But here international examples, namely massive big-scale urban agriculture from Cuba and the governance ideas of the Global Soil Forum (GSW Website) fell on most fertile ground; very few complained about a lack of applicability. The city-region

as guiding idea for SD and the political sensitivity for food and land issues, particularly in Colombia (Palacios and Safford, 2002), converged in a way that made the interference of global SD standards seem difficult, but at the same time most meaningful.

Stimulating the local SD debate with global references has proven to be fruitful in the case of Bogotá. More detailed analysis of the data will show at which points exactly this potential collided with thematic and procedural stumbling blocks and how this is related to transdisciplinarity challenges in general. (An example is the 'loss' of the energy efficiency topic over the course of the Energy Dialogue Table, which might have had a source in a lack of integration both of business representatives and technical experts into the overall discussion; the latter being dominated by the more politicized topics of urban mobility.)

In comparative urban SD research, it has been argued that for the majority of cases, the consideration of global issues such as climate change mitigation at city level might work best when transforming the global into the local, i.e., "think locally-act locally" (Bai, 2007). Our transdisciplinary case study experience in Bogotá does show quite the contrary. 'Glocal' elements in perception and framing where found and/or provoked by the intravention all over the place. Although local interests and considerations were of course predominant, many actors and spectators felt that linking them to global initiatives (such as an urban SDG) was a logical and helpful step forward. This certainly had something to do with the fact, as well, that national politics did not satisfy certain important actors (renewable energy agents or small-scale peri-urban farmers, for example, but also the strong academic component of local government),

Overall, it has become clear that local transformation, as it per definitionem transcends the status quo, will benefit from external experiences, as long as they are chosen with contextual sensitivity, and that the SD normativity, in the process, will become 'loaded' with political context factors that make the endeavor at the same time risky and promising. These factors will be different in different places: Cities and countries historically more familiar with aridity than Colombia, for instance, might develop closer links with international water governance experiences and initiatives, but also exhibit less unanimity regarding solutions. On the other hand, regions traditionally more dependent on international food trading might not exhibit the strong identity features regarding soil and nutrition we had encountered in Bogotá. The exchange rates of global discourse into local political currency will vary accordingly.

For governments, international bodies, civil society initiatives or public private partnerships who want to derive legitimacy or better visibility from international SD targets or experiences, this means that they ought to check the related thematic discourse at local level very carefully in order to identify leverage points. For academic reasoning on local SD, e.g. urban-regional integration, this implies that international comparisons on governance etc. are fruitful but would have to take into account local political cultures in a more systematic manner.

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