Conversation About the City: Urban Commons and Connected Citizenship

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Abstract. The analysis of conversations between Italian and Brazilian groups allows to understand meanings that inspire and motivate political demonstrations and different performances in favor of a desired city. The research takes a descriptive perspective, based on categories of analysis informed by theories, but made by the exploration of terms used in conversations caught by members of four Facebook groups. The expectation is to highlight concepts, revealed by the set of statements made by people interested in trends that city growth takes or just in the given uses of urban spaces. To provide clues for the interpretation of the talks, we use centrality indices of Social Network Analysis (SNA) in a semantic network of concepts. Thus, it is possible to establish similarities and differences between current forms of civic participation and politics on urban commons largely supported by online social networks.

Keywords: Public participation · Urban commons · Social network analysis

1 Introduction

"Public sphere" refers to the scope, area or space, socially recognized, but not institutionalized, formed by spontaneous discussion, the free movement of questions, contributions, information, views and arguments from everyday experiences of a subject. It is a network for communication content and views. Communication flows are filtered and synthesized through it, and then condensed in the public opinion [1]. Very often, the articulation of socially relevant issues is processed by sharing experiences and opinions through social media. The increase of connected people in various parts of the world, coupled with the reduction of the cost of dealing with the public allows to citizens to produce small valuable contributions [2].

These technologies make practices of social production, that alter the relationship between people and the events that surround them, possible [3]. They can give input to

CAPES (proc. n. 11527/13-7).

O. Gervasi et al. (Eds.): ICCSA 2016, Part V, LNCS 9790, pp. 608–623, 2016.

DOI: 10.1007/978-3-319-42092-9_46

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a public debate. Networks linking human and non-human, physically present or not [4], bring together people of different cultures, diminish territories and go beyond old boundaries and scales.

Ito and Okabe [5] suggested the emergence of a visual sharing mode via portable devices characterized by a personal, penetrating and intimate nature. This movement may indicate a change in perception of context beyond rational argument, capable of bringing together different points of view. Tursi [6] recognized that current practices in social media play some functions performed by the literary public sphere [7] that has built self-awareness, critical thinkers, reputations and synergies. According to this author, the social dynamic based on sharing experiences in everyday life manifests a kind of social bond based on sharing emotions. Therefore, we can assume that digital technologies give opportunities for the development of new practices and the creation of new social actors, that come to occupy the public sphere. Through the visibility they get, social actors can expose demands accepted as a common good and of interest for everybody.

For this study, we take the public sphere as the exercise of social practices connected to various contexts and multiple scales of social action. As a sensor of public opinion [7], the public sphere, as it is here understood, does not include principles or practices necessarily anchored in rational exchange of arguments to reach consensus. Communicative relations can contribute to increase the participation and disseminate visions of democracy, and thus to support the exercise of sovereignty by a variety of local political actors, even those "geographically immobile". Therefore, individuals and communities could acquire visibility in international fora or in global politics previously exclusive space of national organizations [8].

Digital spaces where current problems in cities are discussed may open new possibilities for the development of new social practices and give opportunity for participation, although one can not ignore aspects that simultaneously curtail and augment that potential [9]. They allow the articulation of ideas but also of collective experiences that can enrich/challenge previously given meanings to the urban space. In this way, they put in evidence perspectives of various social actors that desire "to make the city".

Online social networks seem to act in the public sphere. As they spread values, habits and ideals, they provide support for culture and act on implicit substratum of shared opinions that underlie the action of groups [10]. Thus, we can assume that there is an ongoing renewal of the public sphere, either through the struggle for political participation in the city, either by proper civic actions in defense of the quality of urban space.

This article is part of a broader research project, which aims to reveal visions of urban commons of groups present in digital social networks. They run some of the public participation trajectories outlined by [11]: civic and political participation. It analyzes the conversations of four Facebook groups – two from an Italian city (Potenza, southern Italy) and two from a Brazilian city (Salvador of Bahia, northeastern Brazil) to answer the following research questions: what visions of participation, citizenship and the urban commons emerge? And how do they face visions of municipal representatives?

2 The Culture of the Commons

Appealing to fundamental rights becomes very strong [12] in the twenty-first century, with the growing of inequality all over the world. The struggle for rights extends throughout the globalized world, builds new modes of action. According to this author, the fundamental principle of equality should, first, be rethought and placed at the center of attention.

In this perspective, commons are defined as an immediate and concrete guarantee of fundamental human rights, beyond the commodification logic. They are those goods that can not be subjected to pure economic logic, such as water, clean air, healthy environment, knowledge, food, health. These assets are fundamental to human existence. The Internet, for example, would be a key resource to know what happens near or far, to dialogue with others, to participate. The common good, in this case, is a good generated by the participation of everybody and, consequently, should continue to be common [13].

Commons would have a dimension in the future: they speak of social connections, because when a good is common and we use it together with others, we must defend it together. They are characterized by a shared use; every person can enjoy them that way without needing redistributive policies or implementation of a participatory model. The non-discrimination of access to the common good, leads to the issue of equality, and therefore democracy [12].

Rodotà [12, 13] proposes the resumption of the struggle for old and new commons, such as the Internet, unifying it under the banner of struggle for the rights. However, it is certainly necessary to confront issues such as those related to the concentration of resources that promote new geographies as it is demonstrated by concentration of network infrastructures that can be measured by access to the signal of WiFi networks [14]. And so all those who think of public spaces as common goods are challenged to answer questions posed by inequalities expressed in new discontinuities established in the territory. Such inequalities are reinforced by urban policies, at least in large Brazilian and Latin American cities, which tend to favor real estate investments aimed at groups of high and middle income and increase abandon and deterioration of old central areas [15].

In the context of collective movements using social network platforms, groups seek to get public attention for the reappropriation of city areas with a focus on the enjoyment of all stakeholders; further, they oppose governance conducted by public authorities and seek to take part in choices about the allocation to be given to such areas. To a greater or lesser extent, this is the case of groups here studied.

Movements shaking the Brazilian political scene in 2013, on the eve of the World Cup, have raised social justice issues, because they asked for investments in what can be considered to be a common good to all – the right of transport, health, education. The right to urban transport is clearly connected with the access to the city and therefore with the access to diverse environments where one can exercise public personas and develop skills involved in civilization [16].

In Brazil, the right to participate in urban policy decisions is legally provided since 2001. But the inability of stakeholders acting as decision-makers ultimately nullifies the use of full conditions of that right at the time that we see a degradation of the common

urban space. In Italy, the involvement of citizens in local urban policy through district contracts was strengthened in 2008 [17]. In the country, the issue of common goods (particularly water and the use of nuclear energy) mobilized 26 million people in the referendums of June 2011. At the time, Italian citizens have shown their willingness and ability to largely mobilize, independently of the media activation [18]. Today, forms of collaboration between citizens and local authorities for care, management and regeneration of urban commons have been tried in Bologna [19] and Turin [20]. Such forms promote active citizenship [21] which may turn out to be the subject of policy [22].

Our reflection leads us to assume that the informal participation practices are fundamental in urban policies, while formal instruments of participation do not collect all social instances. We must take the point of view of the expanded participation to contemplate groups who use the network communication as a mean to share visions and values to generate a knowledge of the contemporary city – the real and the desired one. And so they begin to pursue goals and to think how to achieve them. We take here the broad concept of culture that includes attitudes, mentalities and values, to study groups that constitute initiatives related to what could be called the culture of the commons. The conceptual scheme that guided the research is illustrated in Fig. 1.

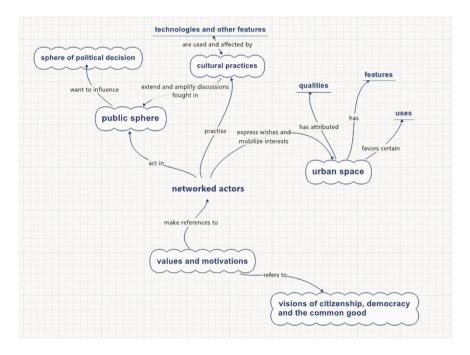


Fig. 1. The research conceptual map

3 Networked Concepts: Exploring Meanings

Conversations on Facebook pages of two Italian groups and two Brazilian groups constitute the source of the data analyzed in this paper. These groups moved ahead movements for regeneration of degraded urban areas of the city of Potenza (Italy) and Salvador (Brazil), mainly in the years 2012 and 2013.

Though the cities have very different sizes – Potenza has about 70,000 inhabitants and Salvador has 2, 7 million inhabitants – there is some mirroring between Brazilian and Italian groups. Two of them directly confront the government: the Parco del Basento (Basento's Park) [54] group in Italy and the Movimento Desocupa (Vacate Movement) in Brazil. The others two groups never directly address the power. The Italian group Il Giardino in Movimento [53] (Garden in Motion) and the Brazilian group Canteiros Coletivos (Collective Yards) take care of some urban areas while trying to develop specific kinds of sociality. We verified peculiarities in the way those four groups acted in unconventional arenas of politics in their desire to reintegrate areas to collective urban life.

To analyze their performances, we used the Network Text Analysis (NTA), a method that encodes semantic links among words and constructs networks of linked concepts [23]. A concept is a single idea; a statement is two concepts and the relation between them [24]. Based on the assumption that language and knowledge can be modeled as networks of words, NTA aims to reveal meanings of terms and themes by analyzing the relations between them (existence, frequencies, and covariance) [24]. More then linkage between concepts in each block of text, concepts and linkages can be characterized by their position within the network [23]. Since we did not start from preconceived categories, this quantitative approach is first used to an inductive category development. Moreover, the quali-quantitative analysis was supported by means of the Social Network Analysis (SNA) centrality measures to identify the main terms and visions of urban commons and the desired type of citizenship.

The process of data acquisition involves two major stages, each one iteratively developed: preparation of semantic networks and identification of the main concepts. In the first stage, after reading Facebook group messages to know the most important events and phases, the work entailed the following steps:

- 1. Preparing texts: tag preselected posts according to the main themes: urban space, conflict with representatives, what means to be political?
- 2. Getting semantic networks from posts:
 - identifying concepts;
 - extracting statements (words that do not transmit content were excluded, the other ones have been generalized [24]);
 - defining coding choices: text unit = sentence (string of words limited by full stops period, colon, question mark, exclamation point, ellipses); window size = 2 (i.e., how distant concepts can be from each other and still have a relationship) and directionality = bi-directional;
 - representing statements as a network of shared concepts.

The semantic networks were generated with AutoMap v3.0.10.36 and first visualized using ORA NetScenes version 3.0.9.9j and later using Gephi 0.8.2. Thus comments to group posts (case of Parco del Basento and Movimento Desocupa groups) and messages (case of II Giardino in Movimento e Canteiros Coletivos groups) were modeled as networks of connected concepts that coded in its structure a semantic field represented by the proximity of nodes [25] and communities that bring together concepts strongly connected in clusters [26].

The detection of communities was carried out equally towards all networks: randomly, without knowing the structure of communities, considering edges weight, which represents the number of occurrences of a particular relationship, and fixing in 1 the resolution, a measure of stability that considers the network partition time [27].

The second stage encompassed three steps:

- 3. Characterizing networks: nodes were organized according to their local connections and are contextually related to their surroundings and connection paths. The following basic statistics were used [28, 29]:
 - diameter, to know the greatest distance between any two nodes of the network;
 - density for a network cohesion index, to identify how close it is to contain all possible links;
 - average degree, to know the average number of existing links to each node;
 - average path length, to know the average distance between nodes;
 - number of communities, to know how many agglomerations are there.
- 4. Identifying main concepts: the prominent terms (here called concepts) were identified according to the value obtained by the concepts for each of the following centrality indices [30, 31]:
 - Degree shows the number of concepts directly connected to a given concept. It focuses on the importance of a concept (node) through the connections that it establishes with its neighbors [32].
 - Closeness centrality describes how close a concept is to all other concepts. It shows, therefore, its proximity to all other concepts of the network.
 - Eigenvector centrality tells how closely a concept is to other concepts that are important in respect to Degree. The importance of a vertex (node) increases as its neighbors are important themselves. A score is assigned for each vertex, that is proportional to the sum of the scores of its neighbors [33].
 - Betweenness centrality shows how often a concept is positioned on the shortest path (geodesic) between any other pairs of concepts. Nodes located in many geodesic lines are central in a network: they allow the flow of information through the network [33].
- 5. Ranking of concepts: it was obtained for each index, an ordered list of the most prominent concepts for each of the networks, particularly those that occupy the top five positions in at least three of the four indexes of centrality.

Then neighborhoods and communities of the most prominent terms have been explored, since communities represent semantic contexts. The exploration of context started from a node of interest towards its neighbors [26].

The categorization of concepts occurred throughout the process of creation of networks. It helped to appoint actions, resources and qualities mentioned for the initiatives and activities of the groups, for the city and the urban elements, the existing and desired space. Categories were: "Actor", "Action", "Event, Institution, Initiative or Resource" and "Value, Quality and Motivation" [34]. The latter was used particularly to grasp ideas about how to exercise citizenship and the ideals of democracy and commons that support the actions and activities of the groups. These ideals were found not only in the network specifically obtained for the Policy theme, but it is also found in the following thematic networks: Urban Space, Conflict with public officials. Actors category – each individual, group, professional category or role played by individuals, entity or institution – helped to identify the agents most evidenced by the groups for their political activity.

4 City and Citizenship

Each group was involved in conversations about urban areas as a commons, therefore accessible to all. The Italian group Parco del Basento and the Brazilian group Movimento Desocupa addressed to society, representatives and public officials to express their dissatisfaction with the treatment given to urban spaces and how their occupation and use were being managed. They promoted political demonstrations and directly directed issues to the political decision sphere.

Members of the Parco del Basento group aimed to exercise their civil and political citizenship. The group advocated active, participatory citizenship ("cittadinanza attiva") in particular with regard to decisions on the allocation of areas of the city of Potenza. Their political vision of citizenship had an abstract character, formal and centered on the state – the "received" citizenship [35] (Fig. 2).

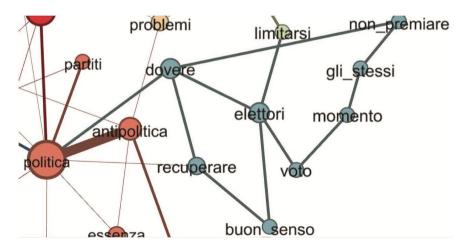


Fig. 2. Parco del Basento group – Satate-centered citizenship

However, when their members discussed the desired urban space, they assumed other perspectives. In this case, they were affiliated to an active citizenship perspective, where people propose, design and evaluate the urban space (Fig. 3). This perspective is associated to what [35] calls "acquired" citizenship, therefore it results from political struggle.

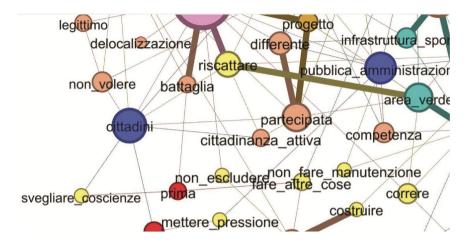


Fig. 3. Parco del Basento group – Active citizenship

In Brazil, after a period of intense protests in 2012, the growth of Movimento Desocupa faltered. Even when membership was grown, comments on the group's Facebook page mainly focused on organizing public demonstrations. Complaints brought by group members almost never gave rise to the discussion and the search for alternative solutions to the problems of Salvador City.

In a gentrification process of a traditional central area, the group called for investments and proposed the development of a plan for the neighborhood by the residents themselves.

In general the debate was poor, an atmosphere of polarization prevailed, without any opinion becoming hegemonic. The common thread was that the movement should remain nonpartisan ("política" "não partidária") (Fig. 4).

On the other hand, the Italian group Il Giardino in Movimento and the Brazilian group Canteiros Coletivos did not address the public authorities but other groups and civil society organizations to invite them to recover residual spaces forgotten by the public administration. They promoted civic participation aimed at upgrading these areas and used social media to share views and meanings about the city as commons.

Il Giardino in Movimento group valued a civic culture based on the ideal of the shared commons and the "do good" for others [35, 36]. At each meeting, it reiterated the pact about the value to be given to public spaces [37], made by Parco del Basento group. Figure 5 shows how participation ("partecipazione") is directly related to the management of the space ("gestione", "spazio").

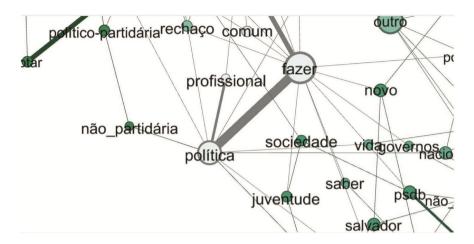


Fig. 4. Movimento Desocupa – nonpartisan

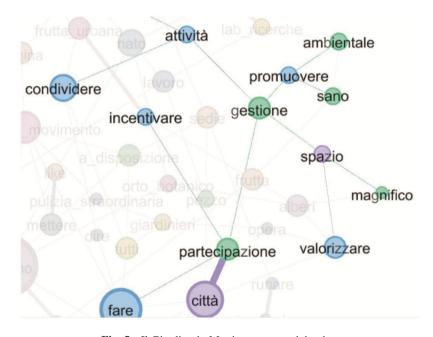


Fig. 5. Il Giardino in Movimento – participation

Regarding Canteiros Coletivos group, its participation in social projects in partnership with neighborhood communities and NGOs seems to have ensured its continuity. It aims to improve community bonds and care of urban areas by residents. While not taking a professedly political vision, the group stood against "pro-violence policy" in solidarity with the residents of a neighborhood in which they operated, after the death of some young residents. It expanded at that time its practice beyond the idea of participation and management of urban space, without directly addressing some kind of government interference.

Figure 6 shows how participation ("participação") means attending meetings, festivals ("festg") and workshops ("oficinas") for the Canteiros Coletivos group.

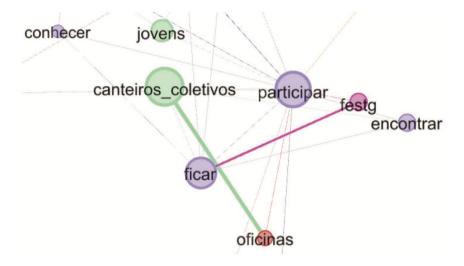


Fig. 6. Canteiros Coletivos – participation

The views of all groups on citizenship, politics and participation are summarized in Table 1.

Group	Vision
Parco del Basento	Policy is the polis (the assembled citizens)
	Participation is active citizenship
Movimento Desocupa	The space for citizen political action is not the same of professional politicians
	Nonpartisan participation
Il Giardino in Movimento	Participation is care and management of urban space
Canteiros Coletivos	Participation is community actions to improve the quality of public space by planting and cultural interventions

Table 1. Citizenship, politics and participation

5 City as Commons

Groups did actions of participation, as reported by [11], and forced the expansion of the scope of such participation, as mentioned by [38]. The defense of citizenship as a shared activity, oriented the Parco del Basento group to the realization of the common good referred to a republican tradition [39]. The Parco del Basento movement allowed a rich

political experience, not only through confrontation with the public administration. Within the group itself, there was exchange of ideas about the project itself and political action strategies. This allowed its members to experience a participatory process that persists in current initiatives aiming to rescue urban areas abandoned by the public authorities of Potenza.

On the other hand, the Movimento Desocupa group since not advocated any idea of democracy, direct or representative, remained calling for legalizing each issue of conflict in a judicial dispute. This attitude leads to a deadlock. It has origins in the weakening of representation of social conflicts currently staged by parties in traditional arenas of politics, far removed from real citizenship [22]. However the movement has played an important role in strengthening the claims of civil society for holding of public hearings to approve changes in urban land use. However audiences per se certainly fail to address issues in a city that in 2010 had more then 2.5 million inhabitants [40], with a complexity of problems that need to be addressed at a metropolitan scale.

The II Giardino in Movimento e Canteiros Coletivos groups performances are strongly linked to the recovery of symbolic values, the strengthening of social liaisons and therefore the possibility to ensure continuity of commons [12]. However, achievements for the Canteiros Coletivos group seem to depend on self-consciousness of individuals possessing a community identity. In a world without "them" the group's identity remains grounded in action, so to speak, "therapeutic". Its social practice resembles those of the Il Giardino in Movimento group, but unlike this, the meaning of participation is different.

The affiliations of the studied groups to ideals of democracy can be summarized as follows:

- The Parco del Basento group stands against real estate speculation, assumes a Republican vision: links politics to a common *praxis*, preserves the quality of urban space and its use for citizens. It mobilizes citizens of Potenza City and directs its proposal to representatives, without seeking for the mediation of politicians and parties. Still, it reinforces representative democracy and, through participatory design practices of dialogic and procedural nature, it takes part in a participatory democracy framework [41]. Its keyword is "active citizenship".
- The Movimento Desocupa comes into open conflict with the government when it repudiates political parties and politicians. It demonstrates the great dissatisfaction with the city government, but it can not draw up alternative proposals for the development of Salvador. Proposals, if any, do not become hegemonic in the movement. Without a channel of dialogue with the Executive and considering the Legislative strongly distrustful, the movement calls for the intermediation of their demands by the judiciary. Its keyword is "non-partisanship".
- Il Giardino in Movimento group strengthens the movement for the Basento Park, and assumes participatory design practices. Their idealizations for the area are collectively selected and executed. Although not exactly inserted in politics, it strengthens and educates towards active citizenship vaunted by the Parco del Basento group. Through practices of civic culture, it constitutes resources of collective life important to the exercise of citizenship in its political dimension [42]. Its keyword is "laboratory".

• The Canteiros Coletivos group has a vision of citizenship that approaches the communitarian one: it advocates the rescue of the cultural dimension of citizenship [43]. It acts against the degradation of areas of the city, while educating and propagating harmonized coexistence ties, believing that those lead people to attribute a common value to living in public space. Unlike the political clarity of prescriptions advocated by [44], it does not make clear what are the interests and values involved in the relationship "we/they". When faced with issues such as urban violence, it proposes peace without bringing out the name of the actors of urban warfare. Its keyword is "community".

In the conversations analysis of the four groups, the urban space is taken as a common good. Almost everyone joins desire and action: the meaning of what is common is produced by collective action, while space, itself, is being designed and/or produced. But this is done in different ways: while the Parco del Basento and Movimento Desocupa groups address public authorities and demonstrate clear desire to access urban areas and participate in choices about their destination, the Il Giardino in Movimento e Canteiros Coletivos groups dialogue only with their peers and sympathizers and propose to establish links between people and space by acting on it. The emphasis they place on each type of action to defend the urban commons is shown in the chart below Fig. 7.

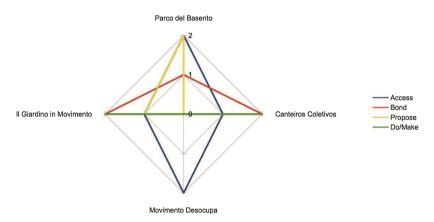


Fig. 7. Urban commons: types of action (Color figure online)

Although these groups aren't "union of people who build a project" for the whole of society, even without a comprehensive idea of the future, yet they demand things to it, and draw attention to the shared management of common space. Even if incipiently, they introduce issues as governance of commons, an institution through which the individual can be an active agent and exercises his rights of citizenship [45].

6 Conclusions

This work aimed to understand ideals and values associated to urban commons observing conversations of two Italian and two Brazilians groups Facebook pages. The central concepts were represented in semantic networks and were highlighted by centrality indices of Social Network Analysis.

The so-called "symbolic" networks [46] enabled a contextualized view of the use of terms and expressions by group members to describe their actions and thus gain insight into their views of citizenship, democracy and urban commons. If they suggest meanings attributed by the groups, certainly they can not express and communicate all meanings of speech and behavior of agents, but still they allow generalizations that reveal what motivates them.

Obtaining statements through the relationship between concepts according to a fixed distance (windows method), taking as limits the sentence, is a simplified feature. It is known that sentences combine themselves beyond these limits, in different ways, and thus guide the discourse [47]. However, we believe that the various paths of interpretation presented by semantic network, although simplistic, amplify capabilities enabled by traditional content analysis, which focuses on the co-occurrence of words [23].

If the different centrality indices contributed to highlight the most prominent concepts by the amount of times they held more central positions in each of these indices, the analysis of the particular functions of the concepts in the discourse, revealed by the indexes was left in the background. This is the case of concepts with high betweenness centrality, that can connect communities with several topics of interest and can assist in the underlying information retrieval [48].

The method used – ranking of concepts according to their position in various centrality indices – must be deepened through the analysis of each index and, then, the comparison of results. However, it was found that often the same concepts occupied the most central locations for many of the centrality indices. This may indicate that the size of networks (the largest of which had 110 nodes and 230 links) matters.

Both text encoding choices – text unit, directionality and window size – for the purpose of generation of semantic networks, as the method of selection of core concepts based on centrality indices, were adequate in relation to the level of detail needed to obtain insights to answer the research questions. Indeed, the results for the Italian groups were validated by their members. Therefore the method was effective to explore the emerging meanings of speeches, many of which remain hidden or undervalued in a traditional content analysis that "tell us about text's fundamental building blocks, but not the structure in which those blocks are arranged" [49]. Our focus on networks of linked concepts rather than on counted concepts [50] proved its importance to give answers and close the conceptual schema that guided the research illustrated in Fig. 1.

Through analysis of Facebook conversations we have reached a issue almost never pointed by the groups, except in the case of Movimento Desocupa during the struggle against the gentrification of a neighborhood in Salvador: after all, "who does the city?". The not raised question would have the power to relate the urban space to other actors certainly present in the public sphere, made in this case for those who treat the city as a

business and are more interested in the discourse in favor of "city as a growth machine" [51].

Surely if they had unveiled the role that real estate capital currently plays in urban dynamics, groups could perform more effective ways of opposing to the transfer of control of land use and occupation and urban policy-making from the public to the private sphere [52].

The question that the groups have not formulated would lead to an answer that could finally confront ideas of possible futures for the cities of Potenza and Salvador – the future that some groups point to and the one that other city actors prepare in other forums and other ways.

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