Urban design opportunities in the post-industrial city: New considerations for urban living in the articulation of public space

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Abstract

Urban living, as it becomes the reality of the majority of the world's population, has taken a role that goes beyond the functional aspects and economic performance to also respond to the needs for more socially and spatially just and sustainable environments, and to enhance the quality of life and experience of the city. In the post-industrial city, there is great opportunity to align stagnated conditions, residual/fallow spaces and degraded elements of the urban landscape with the need for places that support human development, contributing to a safe, interesting, democratic, green and sustainable city. Urban design has a key role in effecting change in the city, in making good public space through the transformation of 'lost spaces' of the city, and in articulating different needs, identities, perceptions, etc, as well as disciplines and scales. This study develops a framework for a discussion of urban design in light of city transformation processes, addressing contemporary aspirations for city living, such as sustainable development, strategic planning, public space, etc. We bring the discussion to context of Montréal and São Paulo as we investigate three spatial conditions that are significantly present in the post-industrial city and represent opportunities that can transform the environment through the articulation of public space.

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Introduction

In the 1970s, only a third of the world's population lived in urban areas. Today's urban population represents over 50% of the global population[1] (in Brazil this number is 86% and in Canada 80%[2]). With anticipated further urbanization (expected to rise from 54% in 2011 to 67% in 2050, with 8% of the overall world population living in megacities[3]) and concerns over rates of resource consumption (and distribution), it is imperative to address the environmental, economic and social sustainability of our cities.

Changes in the last three or four decades with regards to technological advancements and globalization, along with a process of deindustrialization in many major cities, have transformed the dynamics of social relations and urban living. As pointed out by Manuel Castells, "city and regional planning is more than ever a necessary tool to tackle the explosive spatial, economic, and social problems emerging in cities and regions around the world under the shock waves of the Information Age" (Castells1998:28).

Along with a worldwide increase in urban population, there has also been a demographic shift in many countries to a society characterized by the aging of the population, as well as increasing migration and multiculturalism, requiring new ways of strengthening social cohesion. Moreover, in many cities, the economic gap between social groups is still very pronounced, which can be spatially defined by inequities in accessibility to services and opportunities at all levels. The continuous changes of the urban fabric overtime are a reflection of the different primary roles of cities throughout history, interconnected with aspects of social and cultural identity. These conditions reflect some of the challenges and improvements needed to fulfill the contemporary idea of urban living and represent an overdue shift in the model of development regarding, among other things, social engagement, equity, sustainability, etc.

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1 United Nations Department of Economic and Social Affairs/Population Division. World Urbanization Prospects: The 2011 Revision.

2 The percentage of urban population for the major geographical areas in 2010 was: Africa 40%; Asia 42.2%; Oceania 70.2%, Europe 72.8%; Latin America, Caribbean 70.6%; Northern America 82.1%.
Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: the 2008 Revision.*

3 Megacities of at least 10 million inhabitants (idem).

This is a particularly important moment for many post-industrial cities, in Europe and the Americas, with reurbanization projects addressing dysfunctional or depurposed spaces, buildings and infrastructure distributed throughout the urban fabric, as many of these have embedded cultural meanings, but they also produce significant ruptures in the city. It is an opportune occasion to identify possibilities, explore different responses and to align priorities, based on a civic vision where cities are built for people. In the context of a new urban reality, the approach to urban transformation requires that the concept of reurbanization include the dimensions of *repopulation* (as a reversal of past declines), *intensification, replacement* (of unused spaces and buildings), *conversion and adaptive reuse* (and retrofitting), *economic renewal and restructuring* (of the local context), and *revitalization* (in the quality of the built environment) (Bourne 1996:697-698).

Processes of urban transformation now also entail societal aspirations, for a city that provides, in adition to its primary functions, quality urban spaces that support sociability, leisure, culture and human development, in order to enhance quality of life and the experience of the city. Urban design, as a multidisciplinary practice, has a role to play in supporting the articulation of these transformations, as it addresses the complexity that these interventions encompass: functional and technical aspects of urban systems, but also focusing on people and the environment, the dimensions of morphological nature and scale, of sociability, agency, design and management, etc. In essence, it "has evolved less as a technical discipline than as a frame of mind shared by those of several disciplinary foundations committed to cities and to improving urban ways of life"(Krieger 2009: vii).

This study addresses strategies and processes of urban transformations through urban design (Lang 2009, Busquets 2009) that deal with conditions of degradation or disuse as opportunities to set in motion a catalyst process of valorisation of the public realm (often structured by an infrastructure of public spaces), embracing the pillars of sustainable development towards a more equitable, interesting and environmentally sustainable city (Luka 2005,Gehl 1996, 2006, Landry 2008).

In this perspective, the notion of 'public', which is present in all the dimensions of space and social relations that this study addresses, is essential in our discussion: public space (essentially as the urban physical space that is publicly owned), public domain (as the sphere characterized by public character –

although not necessarily public in ownership), public realm (as the open and accessible sphere to individuals and communities), and place (as spaces with values and meanings specific dimensions of time and space, of the local identity and memory, at the individual and collective levels).

The main objectives of the study are:
1. To discuss the opportunities for creating lively public spaces in lost/residual spaces that characterize many post-industrial lanscapes;
2. To explore the roles that urban design can play in effecting change;
3. To present a framework for how urban design can make public space and public domain through the transformation of residual/fallow/lost spaces (Trancik1986, Alexander 1987).
4. To illustrate the discussion with examples, classified into a typology of spacial conditions, found in Montréal and São Paulo.

The study is based on a critical conceptual framework that addresses issues of city transformation in light of environmental sustainability, socio-spatial justice and quality of life. A key premise is that small changes in the interest of public space can produce significant catalytic transformations, especially if approached as part of a city-wide urban project (Barnett 1982, Mangin & Panerai (1999)focused on people. Interventions of this nature today demand both a structure (of public power and citizens) which supports sustainable urban environments in all their complexity, as well as flexibility, which allows for creativity and novelty, crucial for human development. In this perspective, urban design has the ability to articulate visions, processes and responses in this transformative process.

The first chapter focuses on the contextualization of the conditions and the role of the city today: Issues that permeate the discussion of city transformation but which are also essential in order to respond to today's aspirations of city living, especially in light of post-industrial realities, such as quality of life, sustainable development, and the new meanings in city living. We also discuss the meanings attached to the discourse of interventions, including a cultural dimension, which can produce not only a homogenization and spectacularization of public spaces (Shmid et al :2010,Debord 1992), but also gentrification and further social inequalities (Arantes 2000, Salgueiro 1998).

Chapter two addresses the issues related to the scope of urban design practice through typologies and procedures, as well as the meanings and affordances of public spaces. We also look into the opportunity of articulating an infrastructure

of public spaces and "lost spaces" (Trancik, 1986), based on a vision supported by idea of wholeness, in light of the theory of the "growing whole" by Christopher Alexander (1987) and contemporary theoretical approaches to landscape urbanism (and infrastructural landscapes).

Chapter three illustrates the opportunities in identifying three typologies of spaces characterized by stagnated, residual/fallow spaces and degraded elements of the urban landscape of the post-industrial fabric in Montréal and São Paulo. We will highlight spaces, interventions and ideas that correspond to those conditions through a comprehensive understanding of the local scale within the larger city scale.The scope of preoccupations have interesting common and distinctive specialties, and the different natures of scale, culture, process, etc, which can enrich the dialogue as well as illustrate the value and need of place specific responses.

Chapter 1: New considerations for urban life

In the context of rapid change, urban transformations need to address environmental, economic and social sustainability in order for cities to progress and respond to today's aspirations of city living. In the last decades, some of the transformations that have changed the 'face' (and the vocation) of an area of the city derived considerably from the ideals and possibilities set forth by changes in the processes of capital production and globalization, often related to deindustrialization in developed countries and the opposite phenomenon in the developing ones, altering the functions and dynamics of social relations and urban living. Also, the balance of dualities that cities intrinsically have in their plural and dynamic nature (time and space, of individuality and commonality, of private and public, etc) produces effects that are as systematic as its organic character, as technological advancements especially in communications and transportation have been transforming the ways of life, social relations and the meanings and functions of place and public space.

Contemporary urban planning deals with an array of intertwined issues of functional nature, but with a growing concern for the environment, social justice, cultural identity, etc, as well as a stronger preoccupation with the quality of life and how the city works for people. In this first chapter we will explore these issues in the context of contemporary's expectations of city living, and address the meanings and logic of interventions that have characterized the practice, especially in the post-industrial city.

1.1 Sustainable development and quality of life

> With a population share of just above 50%, but occupying less than 2% of the earth's surface, urban areas concentrate 80% of economic output, between 60% and 80% of global energy consumption, and approximately 75% of CO2 emissions. 75% of world's population is expected to be concentrated in cities by 2050. (Burdett 2011:10)

Reports by the United Nations Environment Programme in the past years have produced different analysis of the state of the planet's environment in relation to population, trade, etc. The analysis of the economic impacts of climate change reveal that not are only the costs of mediating the problems caused by climate change higher than the cost of implementing new policies that prevent damage, but that the damage to the environment will make global economy decline by 7% in the next decades. However, according to Sukhedev, leader of UNEP's *The Economics of Ecosystems and Biodiversity (TEEB)* study released in 2010, investment in sustainable development makes in fact more sense in comparison to the unsustainable model, as it generates new jobs and reactivates the economy. It does take, however, all levels of the social and governmental structure to promote an effective move towards a sustainable socio-economic and environmental practice in order to balance the scale of resources consumption and the impact in the planet.

The reality of a growing urban population, combined with a growing concern for a human development and the quality in urban living require an approach to city making that considers the awareness of sustainable development, challenging among other things, resources consumption and distribution directly related to environmental transformations[4] and the implications the urban landscape. The process of making cities more sustainable requires a shift in the development model as a whole, involves deeply changing political and economic practices to urgently address environmental issues that threat the stability (or survival) of cities and the planet, and would involve global articulation, local-based responses, and active transformation of all scales in between. The disequilibrium produced by the model that has structured the world's development since the colonization of the new world, and the rise of the

4 The indiscriminate resource consumption and environmental degradation caused by growing urbanization have direct effects in the city itself: from the most basic supply of food and water, to adversities related to the environmental unbalance such as flooding, landslides, pollution by green-house gasses, etc.

industrial society in the 19th century, which are essentially based on practices that disregard the limitations of resources and generate social-economic strains, which themselves reproduce and potentiate a chain of unsustainable development. In spatial terms in the city, this model is reflected in a range of conditions, from the indiscriminate occupation of land (that increasingly affect populations in events of large proportions such as flooding, landslides, drought, etc[5]), to problems of mobility and transportation, of accessibility at all levels (of places and spaces, but also of services, education, housing, health, opportunities, etc), and socio-economic tension, insecurity, etc.

Sustainable development, in all its facets – environmental sustainability, socio-economic and spatial equity and justice, etc – uphold strong arguments towards transformations that affect all that is related to modes of production (and consumption), and certainly the configuration of urban environments. The dimensions, or pillars of sustainable development – social, environmental, economic – allied to the cultural dimension, call for an integrated (and creative) understanding and vision based on local context and resources. This question refers directly to the large-scale implications of human action in the planet and the ability to sustain life, as well as to a more personal and social level, which is directly related to how we live, that is, to our quality of life, through the understanding of what it really means and is achieved. Aspects related to human development have been increasingly more expressive to societal aspirations and needs:

> Throughout many years, the variations of the GDP (gross domestic product) have been used to measure the progress in countries and communities. We know that nowadays this indicator is utterly unsatisfactory to evaluate quality of life, and that economic growth, the way is has been produced by draining the natural resources and heating the planet, may inhibit the survival of the human kind. Other indicators have been created, such as the HDI (human development index) and, more recently, several countries have tried to establish indexes to measure people's happiness, well-being or quality of life. The establishment of these indexes has become fundamental to any community and government that tries to improve the life of people. (Grajew 2011:A3)

5 Different scientific work has addressed the issue of cities and climate change, such as Grimm (2008), Pelling (2003).

Sustainable development and quality of life can be seen as going hand in hand. The perception of quality of life is embedded with local specificities of culture, space and time. They are, together, essential in the city-building process. The assessment of quality of life through surveys[6] are very elucidative in terms of identifying particular issues that influence people's lives, especially when they are place-specific, or refer to distinct urban areas. They can inform civil society and the administration about particular conditions that require attention, especially when the indicators are analysed as a system, based on the approach of the city as a living organism. Administrations[7] are in fact becoming increasingly more preoccupied in assessing the perception of the citizens regarding their cities, and different information is compiled and become important resources for municipal plans and references for citizen awareness and participation. This type of perception (and image of the city) when supported by data, is an essential instrument to efficiently address the real needs at a specific local reality.

In addition, these types of studies also permit monitoring and comparisons over time and with other areas of the city, which in turn help to identify weaknesses and strengths as well as to interesting practices, gauging the potentials of effective transformations of local and regional scale. Not only that, these surveys may also help to activate awareness of the issues that permeate the discussion of the structuring elements of city-building processes. However, as they are so specific to the experience of the individual, perceptions are relative to the criteria itself and to cultural foundations, they can be limited to the very processes that produce the conditions evaluated. In this perspective, they must be supported not only by the analysis of the objective criteria of environmental qualities, by planning and design directives supported by processes of participation.

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6 In São Paulo, the network of over 600 civil-society organizations comprised by the movement *Rede Nossa São Paulo* has articulated some of the preoccupations and produced significant materials regarding the different dimensions of the urban planning and design. Among these initiatives is the *IRBEM* (indicadores de referência de bem-estar no Município), or indicators of reference of well-being in the city, that is, a comprehensive research and analysis of quality of life in São Paulo. This is an analysis based on an annual research, which began in 2008. It is in fact innovative as it addresses, along with statistical data, spatial distribution analysis and accessibility, the subjective aspects of the conditions of life in São Paulo, specific to the perception of city and place, community, inclusion (sense of belonging) and citizenship, image, expectations, environmental qualities, among others.

7 New Zealand: CABE (2002) Streets of Shame. From 'Public Attitudes to Architecture and the Built Environment'.

Different factors influence the quality of urban environments, such as diversity, socio-economic justice, accessibility to essential infrastructure, services, public space, etc. However, the perception of quality of life in the city depends not only on the objective qualities of urban structures (or the criteria used in rankings such as Mercer's quality of living survey), but also on the delicate relationship among all these aspects, which in turn are influenced by opinions, attitudes, conditions and experiences of the citizen.

Spatial justice is fundamental in this discussion, as the relationship between quality of life and well being has a lot to do with social interactions and a narrow income gap in society. Socio-economic inequalities in the city are configured in the form of socio-spatial segregation: "Physical barriers enclose public and private spaces: houses, buildings, parks, plazas, offices, shopping centres and schools. As the elite retrieve to their enclaves and abandon the public spaces for the homeless and the poor, the number of spaces for public gathering of people of different groups decreases significantly"(Caldeira 2000:301). However, the consequences of segratation can hinder significantly social interaction and spatial dynamics: "People of different social groups argue that they build walls and change their habits in order to protect from crime. However, the effects of these strategies of safety go far beyond the guarantee of protection. In transforming the urban landscape, the strategies of security by the citizens also effect the patterns of circulation, daily trajectories, habits and gestures related to the use of the street, of public transportation, of parks and of all public space" (idem).

Housing has a primary role in the dynamics of use of space through time, in maintaining diversity in functions and activities. It is also a good 'thermometer' in assessing the basic infrastructural needs, including accessibility, affordability, safety, etc. When looking at how people move through the city (Origin-Destination studies, for instance), we typically see that trips realized by active modes, such as by food or bicycle, refer mostly to uses such as education, errands and leisure, which illustrate the strong connection with activities that support the functions of the people who live in the city. The significance of everyday [transitional] spaces, essential to a lively and safe urban environment, is primarily recognized at the neighbourhood scale, by the quality of public spaces, streets and sidewalks, indicating the importance of experiential qualities at the pedestrian level and at the communal sphere. Conversely, specialized sectors that do not encompass housing, as well as certain 'scars' of the urban

'tissue' expose the fragility of fundamental qualities of public spaces, as they are essentially characterised by a physical or temporal rupture in movement.

There is in fact, another important dimension to the housing in regards to sustainable development, in contrast to the antagonist notion of city versus nature, as articulated by Luka: "promoting the notion of nature as 'home' means that housing and community must heighten awareness of the natural processes that sustain life. In this way, we ensure that redesign fits into the local context, both culturally and naturally. A fundamental component of the move toward sustainability is to re-establish the connection between our primary living environments, which tend to be urban and suburban, and the natural processes that sustain life" (Luka 2005:86).

Among the primary purposes of public space in the city, we can highlight the provision affordances for exchanges (and encounters), leisure, and the structure of movement (by foot, bicycle, car, public transport, etc). Movement through space is therefore fundamental to the notion of place. In fact, benefits go far beyond, encompassing dimensions such as of economic development, social-spatial justice[8], sustainability and impacts in the environment, sociability and leisure, safety, physical and mental health, etc. Zukin (2009), Hajer & Reindorp (2001) discuss in their work the meaning of spaces of transition and liminality, which usually imply the presence of frictions that are considered threats as well as opportunities existent in the urban dynamics. There are great opportunities in using movement – at the pedestrian scale – to articulate spaces and support interesting, green and lively environments. This can be linked with the needs to fulfill some basic gaps in the way the city works (regarding infrastructure, accessibility, efficiency, etc), but also in regards to the opportunities of leisure, creativity, and sociability (to name a few) in urban space. These can be connected to some of the meanings of urbanity and new dimensions and the functions of the city today, which we will address in the next section.

8 Questioning the changes in the urban landscape and the environment promoted by the laws of the production process that disregard the people, with results that in many ways insult, expel and cut the roots of the people from their surroundings and the city, Milton Santos, in his book *O espaço do cidadão* (*The space of the citizen*), pointed to a reality in 1926 that seems to still be operative in most Brazilian cities. Spatial justice, in fact, is still one of the biggest challenges in most metropolises, and one of its facets is integrating the periphery to the consolidated neighbourhoods that receive attention and investments, making spaces (and opportunities) accessible to the entire population.

1.2 Urbanity and the role of the city

> "The city, as one finds it in history, is the point of maximum concentration for the power and culture of a community. It is the place where the diffused rays of many separate beams of life fall into focus, with gains in both social effectiveness and significance. The city is the form and symbol of an integrated social relationship: it is the seat of the temple, the market, the hall of justice, the academy of learning. Here in the city the goods of civilization are multiplied and manifold; here is where human experience is transformed into viable signs, symbols, patterns of conduct, systems of order. Here is where the issues of civilization are focused: here, too, ritual passes on occasion into the active drama of a fully differentiated and self-conscious society" (Mumford 1970:3).

The everyday use of the city encompasses a complex dynamic between scales, functions, relationships, processes, etc. Some concepts, present in our common imaginary, may be used to describe aspects that are inherent to the city, such as density, diversity, vitality, anonymity, the sense of belonging, the public and the plural, the man-made, the built environment, etc. Urbanity[9] is the aspect of city living that refers directly to the characteristics of sociability and behaviour, tightly connected to social relations, lifestyle, different cultural identities, as well as processes and structures in time and space. Today, the meanings and values of urbanity (and qualities associated with people in space) in the complexity of the city's systems and structures are potentialized by the processes of economic and functional metropolization, which according to Beckouche and Damette, 1990 (in Di Ciommo 2001:4), are characterised by an evolution and concentration of the activities of social reproduction (universities, research centres, leisure, advanced services). This may indicate that, at the same time that technological development allows for more personalization and independence, there is a rising need for spaces where socialization of different natures can happen (programmed or spontaneously).

The idea of 'the city' has always been structured around the necessities for the coming together of people for reasons of production, storage, and exchange

9 Oxford English Dictionary: "urbanity, n. a. the character or quality of being urbane; courtesy, refinement, or elegance of manner; refined or bland politeness or civility; b. Const. of (manners, etc.); c. pl. Civilities, courtesies; †2. Conversation characteristic of well-bred townspeople; cheerful, witty, or pleasant talk; polished wit or humour; 3. The state, condition, or character of a town or city; life in a city; town-life.

of goods, services and experiences, of organization, control and security, of concentration of knowledge, resources, culture, technological improvements, etc. In this perspective, although the different historical moments require and project distinct morphological representations of these 'fundaments', urbanity has developed as a concept that changes itself with the evolution of the culture of the place – in the local, regional and global scales. It is important to regonize the basic/primary functional aspects of the city as well as the aspirations and needs that promote human and societal development.

> "In the first [historical era] they [cities] were primarily market places; in the second, primarily centres of industrial production; and in the third, they are primarily centres of service provision and consumption. The original basis for cities was people's need to come together, for purposes including security and defence; trade and the exchange of goods and services; access to information, other people and place-specific resources; to engage in activities requiring communal effort or organisation; and to use particular equipment, machines, etc. The essential factor was that activities required people to communicate, which at least initially, meant being in the same place at the same time. The coming together of people in space and time facilitates an important social dimension which has subsequently been taken as the essence of the 'urban' in a cultural sense" (Carmona 2003: 24).

The goodness of cities can be understood in terms of Maslow's hierarchy of needs. City life in the 21st century must enable its users to meet basic needs such as access to food, clean water, housing, transportation, etc, but go beyond them, to a progressive specialization of conditions, such as safe and healthy environments, social inclusion and sense of belonging, esteem and self actualization as individual and within the social group, where creativity is reproduced in urban space. When the basics of socio-economic equity is not achieved, in the dynamics of the city, it is most likely that the transformations at the level of planning and design will respond to its relative position on that scale of needs depending on the ' area' of the city they undertake. We can draw a parallel between these needs and the different expectations we have today of our cities, and of quality of life.

As the city takes on a role that goes beyond the functional aspects and needs (until recently primarily based on its necessary activities and uses such as commerce and workplace), different necessities as well as opportunities

come into the urbanism debate. There is a demand to improve the conditions related to all aspects of urban living, including social and spatial equity (such as accessibility, health, safety, etc), and to enhance the experience of the city for its inhabitants, which lie especially on the spaces where the public realm can be explored and celebrated, with possibilities of interaction and exchange, not only as punctual elements in the urban fabric, but structuring it. Life within public spaces of a city, to a much higher degree, (is being) regarded as an important measure of quality for that city (Gehl 2006: 74).

Jan Gehl's approach to the "city as a modern meeting place" as a response to conditions of degradation and lifelessness of certain areas, entails an active articulation (including planning measures) of public life through transformations at the pedestrian scale – through walking and experiencing public spaces characterized by attending to life and vitality (Gehl 2006:72-73). "It is difficult to argue against the desire for cities to become invitation places – places that encourage foot and bicycle traffic and invite people to use pedestrian-friendly paths and plazas in pivotal areas of the city. The question is how to ensure that the live in the city is given the required attention and care in city planning"(idem:74).

As Yasigi points out in his comprehensive study of sidewalks of São Paulo, spaces of public domain (strictly referred as non-private in this context) accounts for approximately 40% of the city, supporting different uses, far beyond the elementary characteristics of circulation, with functions that change in space and time, and that entertain and sustain millions of people (Yasigy 2000, p. 21). However, in terms of actually bearing the character of 'public', this proportion can be very different. The state of the relation between the public and private spheres plays an essential role in our use and the perception of the city, closely related to spatial segregation and fragmentation (which we will address in the next section).

A city's morphological configuration has a close relation to its socio-economic dynamics, to equity and accessibility, and to the state of quality of its environment and of life. "Cities are shaped by power, capital, and agency"[10] They materialize the intentionality of society, the ways capital is produced and accumulated influence urban morphology and identity, shaped by dualities of public and private spheres. In fact, the issue of the nature of public places

10 From Nik Luka's ARCH 521 Structure of Cities Lecture (11 September 2008),McGill University.

is strongly influenced by the meanings and power of private property: "in a society where property rights are sacrosanct and where individuals have the right and freedom to build what they desire, the public realm and public open space – spaces to which the public has right of entry – may refer to the same thing"(Lang 2009, p.7).

The modern urban landscapes are defined by the processes and "values which they enfold and express" (Relph 1987:2). In this perspective, theories and practices urbanism and urban planning represent different interests and reflect not only certain socio-political and economic conditions, but also cultural identities and realities. Urbanity is reflected in spaces where interaction happens in the everyday life, through the exchanges between people in their space of living. As space becomes increasingly more valuable, the role of public space gains importance, and the private realm extends into the public environment. According to Webber (1963), the significance of open space is not its quantity, but how it is arranged in relation to development. In this perspective, the potentials within the city fabric are significant, considering that lots of under-used, unused, run-down or abandoned sites can be found throughout most cities today.

Roger Trancik, in his book *Finding lost space*, addresses this condition of the modern city, characterized by a "predominant spatial typology" of 'lost spaces', or 'antispaces' (1986:1). The author explains that the process, which has determined the development of this type of spatial structure, is mainly related to "the automobile, the Modern Movement in architectural design, urban renewal and zoning policies, the dominance of private over public interests, and changes in land use in the inner city"(idem:vii). Trancik, in fact, talks about very significant component to the condition of the post-modern city, which relates to the "unwillingness or inability of public institutions to control the appearance and physical structure of the city. This has resulted in the erosion of a collective framework and visual illiteracy among the public. The government must institute strong policies for spatial design, the public must take part in shaping its surroundings, and designers must understand the principles underlying successful urban space"(1986:18).

In the next section we will address some of the issues that permeate the discussion of urban processes of reurbanization e requalification, including certain embed values and meanings, most specifically related to interventions in the post-industrial fabric.

1.3 The scope of urban interventions in the post- industrial reality

As the city's role expands from being primarily functional (regarding production and supply of manufactured goods and services), and becomes a place for leisure and cultural activities, interventions in space will embrace this character. From the large-scale projects to small interventions with catalytic effects, transformations of areas that have either been 'forgotten' or experienced a certain level deterioration especially in the core of the urban fabric, were implemented in cities throughout the world, and the changes in economic vocation usually provide ample spatial opportunities for this process. We have seen areas transformed by the spirit of arts and cultural events, inspired by the history of place and activities that today are considered as elements of 'cultural' identity. The "cultural" prospect makes sense from the political, economic and social perspective, but also from the design standpoint: it provides anchors, inspiration and meaning (or justification) to the transformations.

There are many different approaches to urban dynamics of change. The causes and aims of these types of transformations we have seen in the last decades seem to revolve around a globalized capitalist economy, which is competitive and most aspects of the city's embedded value, including culture. "Restructuring processes are mediated by socio-cultural choice, by institutional structures and by existing urban forms [...]. Most cities, particularly European ones, have extensive physical and socio-economic legacies of earlier urbanization, but not the level of disinvestment that have plagued North American cities" (Carmona 2010:31), a parallel with the lack of investment in anything related to urbanism in the majority of Latin American cities.

The process of city building that structured a significant growth of cities related to industrialization, especially in the mid 20th century, followed a logic based on technocracy and sectorization in the development of the urban space. It was a response to rapid growth, influenced by modernist planning principles, and which have influenced until today the conception and configuration of urban space.

The rapid process of industrialization resulted often in unstructured urban growth, especially (and more profoundly) in the developing countries. The government's response usually focused in resolving specific conditions

through a technical approach, and the transformations to accommodate industrialization and rapid growth were segmented. An emphasis was given to regional infrastructure (road, energy, communications, etc) in detriment of the social and urban sphere. In the city, the investments also tended to respond to the needs of development of the "productive units" – more specifically the industry and related services (administrative, financial, educational, health, leisure and commerce) that were in urban space: it was important to maintain communication and to provide the means for the flux of people and products, through investments in road infrastructure (Malta Campos 1992, p.35, 46). However, the way infrastructure was introduced in the urban fabric often produced or determined significant ruptures. They divided neighbouhoods, created barriers, and become spaces of liminality and marginality in all senses.

Another typical result of fast urbanization was a significant occupation of the peripheral areas of the city (given the high cost of housing in the central areas), where basic infrastructure was not always available. This type of configuration generated socio-economic segregation, as accessibility to basic services was compromised. The uneven urban growth also resulted in a large amount of land that is not occupied within the urban fabric. These voids come at a great cost for the population, as they are pushed to the peripheral area and have to move further to reach services and the workplace, and also to the administration, which has to provide infrastructure to a much larger area (Malta Campos 1992, p.49-56). Urban voids can have also a negative effect regarding the sense of security, thus enforcing spatial segregation and weakening the public realm. They also promote further socio-economic inequalities through speculative land development.

With globalization and advances in technologies in the last decades of the 20th century, major cities experienced a process of industrialization which affected significantly the functions and uses of the city. As industries transferred to peripheral areas and abroad (and economy transitioned into services, commerce, communications and technology), several large industrial sites such as factories, warehouses, ports and railways were abandoned, which reflected in the deterioration of many central areas. This transition has also furthered many aspects of socio-spatial inequalities. According to Salgueiro, while the industrial cities were characterised by "significant socio-economic and spatial inequalities, social and economic activities tended to cluster in space, giving rise to internally-homogeneous areas. In the post-industrial city, however, organization of space is more complex and characterized by fragmentation. As a result, cities are

increasingly subdivided in to a series of territorial enclaves, which have weak or no relationship with the surrounding areas"(Salgueiro1998:40).

Many cities addressed the conditions of the post-industrial process, especially in the 1980s and 1990s, through projects of revitalization and regeneration. This became preferred strategy for areas of the city that lost their main economic resources (such industrial sectors, ports, downtowns, etc) and invested in 'culture' as an important generator of resources, to the need to remain attractive to the more specialized knowledge-based economic sector. The meanings attached to the cultural dimension in many cases is directly related to the 'consumption' of the city (Zukin 2000, Cupers 2002), and although reurbanization and retrofit projects have become quite popular in many large cities throughout the world, they often produced gentrification, as accessibility to programs, services and to space itself starts to abide by a dynamic of market value.

Schmid contextualizes what he calls the 'contemporary urban spectacle[11]'. According to him, the 'urban question', from the perspective of transition between modernity and postmodernity, has acquired different meanings and approaches since the second half of the twentieth century. In his analysis, postmodernism has "altered the epistemological and ontological bases of knowing"(...): At its most basic level, postmodernism drew attention to a set of distinctive cultural and stylistic practices that were initially emerged from literature, art and architecture. Fredric Jameson's characterization of postmodernism as the cultural logic of late capitalism sent an important precedent, recognizing in the landscape a radical 'flattening', or homogenization, of human experience, as well as a proliferation of aesthetic 'pastiche' in architecture and urban design"(Jameson 1991, in Shmid et al 2010:20). The author also states that there is a tendency to consider downtowns obsolete in many cities, "externalities in this urban development process; they are no longer constitutive of the city, but merely spectacles or sideshows"(idem:26).

In this postmodern scenario, many cities grow without control, fragmented by the multiplicity of centralities. According to Salgueiro (1998), a process of organization resulting from urban renewal and rehabilitation of old and degraded areas, tends to promote the mix of uses, creating new centres (with a consequent

11 Based on Guy Debord's first thesis in *The society of the spectacle*: "The whole life of those societies in which the modern conditions of production prevail presents itself as an immense accumulation of spectacles. All that was once directly lived has become mere representation"(1992).

loss of importance of the downtown) and "represent the reappropriation of the centrality through activities and social groups (with more economic power) that have been juxtaposed to the pre-existing tissue and introduce sudden ruptures between the territories occupied by various groups and organizations that are contiguous, but have no continuity (...) we could say that it tends to a punctual, or intensive, appropriation of the territory[12]"(Salgueiro 1998: 42). This type of intervention, which seeks to enhance the economic value of space, is usually based on the modification of local socio-economic dynamics and produces spatial ruptures and gentrification.

Moreover, as noted by Trancik, "as government has become more departmentalized and private interest more segregated from public, the feeling that there is a framework of common concern has been lost. Competition between a fragmented system of government decision making, bureaucratic regulations, community participation, and the sacred cow of private money, together with a mayoral scramble for limited federal tax dollars, has made a shambles of the orderly interrelationship of a city's buildings, open spaces, and circulation. Further, the institutional neglect of the public realm is a monumental problem both because of minimal investment in maintaining public space and a general lack of interest in controlling the physical form and appearance of the city. In any redesign of urban space the conflict between public good and private gain must be resolved. "(Trancik 1986: 17).

As highlighted by Hajer and Reijndorp, since the late 1980s, "public space has been a subject of intense interest. It is the key to urban renewal strategies around the world"(2001:7). Based on this framework, several political strategic projects are based on cultural assets, in many cases with the main goal to attract global investments. In this frame of mind, strategic planning can generate competitive responses to the challenges of globalization, attracting investments based on cultural values, focusing less in zoning, rationality, functionality etc, and more in 'requalification' (Arantes 2000, p.15). However, the author argues that this approach is frequently applied in a generalized manner, as managing the city as a cultural enterprise, and using/manipulating cultural assets and values to configure the transformations. Carmona also points at certain underlined problems related to the reinvestment in run-down areas: "the many design compromises necessary to accommodate an overheating housing market; the absence of local leadership; lack of adequate local planning to guide the renaissance; the poor quality of much new housing, in particular ubiquitous

12 Author's translation.

gentrification; the absence of community facilities and infrastructure; over-development in central areas; and an obsession with 'iconic (meaning tall) buildings (Carmona 2010: 35).

Arantes discusses several examples of cities that have been transformed based on 'cultural character', and have become references to other projects around the world, from governmental initiatives that insert "cultural" monuments and equipment, to mega projects that target the "regeneration" of large urban areas. She argues, however, that these globalized trends tended to respond to the economic structure in which planners take on the role of developers, managers, and promoting segregation through the commercialization of the city and its 'culture'. In this reality, "culture and economy seem to be running one towards another, giving the impression that the new centrality of culture is economic, and the old centrality of economy became cultural, with capitalism as a cultural structure among other rivals. This cause them to converge: active participation of the cities in the global networks via economic competitiveness, therefore obeying by all the requisites of a business managed according to principles of maximum efficiency, and provision of services capable of giving back to their inhabitants something like a sensation of citizenship, cleverly induced through cultural activities that stimulate creativity, improve their self-esteem, or that provide scientific or technical upgrading.[13]" (Arantes 2000:47).

As we will see in the next chapter, the aspect of culture and identity is essential to the understanding of the relationship between the public and private spheres (Zukin1991, Relph1987).The city reflects people's desires as it evolves, as well as influences them: a nieghbourhood might have houses with walls that block the view to the private grounds, or gardens without sidewalks, which may detach from the public area just as well; or it might have several connected public places that stimulate social and develop a character – and image – of socialization. The issue of use of sidewalks and public walking paths is connected to the relation of the person with his/her city, the place where this member of society develops, with both individual and social interests. This is where the public and private relationship is reflected, shaping character and being shaped by this character in this dynamics. Urban culture, in its multiple meanings, has an important role in the process of giving new significance and use to a space, which entails not only the dynamics of social interaction but also the political vision of the city.

As we are interested in addressing spatial tranformations that support humand

13 Author's translation

and social development, these relationships of public and private nature are significantly determining, but are also very much affected by a configuration that supports the public space. The opportunities in creating public spaces in the lost/residual spaces that are present throughout the post-industrial landscape have, therefore, a pivotal importance in the process of creating and supporting sustainable envrionments. In the next chapter we will look into the roles and processes of urban design which address the complexity of interventions in the public realm, and which are capable of encompassing the pillars of sustainable urban development.

Chapter 2: Urban Design interventions and the public realm

City life and the "project of the city" are concepts which are continuously changing, revolving around the city's intertwined nature in time and space, culture and technology, physical infrastructure and functionality etc. In this dynamic, there are different driving forces and approaches to city making. Great opportunities of improving the environmental qualities of urban space lie in the cycles of urban dynamics, on both the needs of material renovation and of transformations of socio-economic nature: infrastructural pieces (built in the mid 1900s) as well as idle but valuable space within the urban fabric (derivative of processes of morphological transformations, economic decline, abandonment, disuse), such as in industrial neighbourhoods that once thrived and have become degraded, improvements in poorer areas that lack basic infrastructure and public spaces, etc.

Supporting the new meanings and functions that urban living entails, the idea and experience of place is connected to values of culture, sustainability, sociability and quality of life. In this perspective, the multidiscplinary theoretical and methodological approaches of urban design are becoming essential in addressing environmental characteristics throughout the different dimensions of the city, from the residential level to the larger circulatory system, from the neighbourhood to the regional scale, accommodating a complexity of physical, social, and economic conditions. According to Luka "urban design revolves around making connections between nature and culture: linking the built environment, users, their activity patterns, and the values, beliefs, and meanings that they associate with different settings. It involves an ecological approach to dealing with the complexity, diversity, and uncertainty that are inherent in landscape and urban form"(2005:75). It has the ability to respond to specificities of place and accommodate new meanings and creativity, integrated functions, sustainable principles, multi-disciplinary and non-linear processes.

In this chapter we intend to construct a critical framework for discussion about interventions in urban space, based on the qualities of place and public space and the dimensions of the practice of urban design. We look into typologies and urban design approaches that address lost/residual spaces and degraded conditions, and further explore the possibility of articulating public spaces as infrastructure, based on the idea of wholeness and through integrated functions and processes.

> "The space once defined, only remains thus defined for as long as the individual defining the space remains there. The definitions are fleeting, one replaced by the next as a second pedestrian assumes the position of the first. De Certeau defines the verb "to walk" as an action of "lack[ing] a place": this should serve to illustrate just how the stories defining space disperse and disintegrate as the pedestrian moves out of a place, for the definition of city space is similar to walking itself. It holds to no single space, and it is in no way anchored. The stories and legends allow people to move freely within city space, but without them there can be no space to move within at all, for space ceases to exist. Thus it can be seen that as the subject moves through city space, so he defines it: there is no city space without him. He creates the space to move through as he moves through it. The city is subject to the views and stories that the mass population project upon it. The city is there to be manipulated, molded and used, and yet it emerges the same at the end, for no image projected upon it can ever remain since the pedestrians are not static and nor is the space in which they move"(*The creation of city space by pedestrians according to de Certeau*. Francesca Wodtke, 1998).

> "The act of walking is to the urban system what the act of speaking, The Speech Act, is to language or to spoken utterance" (de Certeau1990:177).

> "By walking, we are in the world, we are in a specific place, while walking in this space, we make it a place, a house or a territory, a house with a name (...) A city that does not allow walking is not also a city that denies a house for the mind?"[14] (Hillman 1993:53).

Michel de Certeau, in *The practice of everyday life*, examines the role of the pedestrian as essential to city living, given that it is walking people who bring life to it. Through movement in everyday life, the perception of the city in its totality takes on different meanings, and all of them together construct a city's general image and character (which have different meanings themselves). It is the people who write the 'urban text', and more importantly, it is the mass movement of people who write this text. "With thousands of individuals each writing his own story and giving his own interpretation, the city is pieced together something

14 Author's translation

like a patchwork quilt of individual viewpoints and opinions. 'The created order is everywhere punched and torn open by ellipses, drifts, and leaks of meaning: it is a sieve-order.' It takes a single city to provide the stimulus, but it requires a multitude of people – all unaware of their role in the creation of the city – to provide the meaning" (de Certeau, in Wodtke 1998).

Walking is one of the essential elements of the life of places. Streets, sidewalks, spaces between buildings and all sorts of open spaces (parks, plazas, parking lots, empty lots, etc), not only occupy a very large portion of the territory of the city but are distributed through the entire fabric. Most of them are characterized primarily as spaces of transition. Successful appropriations of such spaces uphold a variety of activities and characteristics, and often unlock further possibilities of uses and users, as they are intrinsically diverse. In this complexity, concepts of identity (past and future), and permanence and flux (both in the physical and temporal dimensions) are essential, giving these places the dynamic character that promote possibilities of meeting and exchange, rest and contemplation, leisure and culture, economic, social and political activity, etc. On the other hand, the disregard in the treatment of spaces at the pedestrian scale and the marginal character associated to spaces which are inactive tend to promote a condition and/or a sense of seclusion, abandonment or danger, producing negative perceptions to 'voids' in the urban fabric. These environmental characteristics strongly affect the dynamics of everyday living, the experience of place and the perceptions of quality of life.

The amount of space dedicated to circulation throughout the urban fabric already provides an indication of the role of movement to life in the city. The way it is structured can also give indications of the state of mobility and accessibility, as well as of the socio-spatial relations. For that reason, in the process of transformations that aim to improve the quality of life in the 21st century city, addressing this spatial entity is fundamental. The street and sidewalks are essential subjects in urban design, given that environmental qualities of urban space[15] (and the processes of transformation) are directly related to the experience of the city at the pedestrian scale and everyday life. They not only

15 "The long list of perceptual qualities described in the literature includes: adaptability, ambiguity, centrality, clarity, compatibility, comfort, complementarity, continuity, contrast, deflection, depth, distinctiveness, diversity, dominance, expectancy, focality, formality, identifiability, intelligibility, interest, intimacy, intricacy, meaning, mystery, naturalness , novelty, openness, ornateness, prospect, refuge, regularity, rhythm, richness, sensuousness, singularity, spaciousness, territoriality, texture, unity, upkeep, variety, visibility, and vividness"(Ewing, R. et al 2006, p.S225).

provide a physical connection to all urban functions, but are determinant in producing good public spaces.

Eduardo Yasigy, in the introduction of his book *O mundo das calçadas* (The world of sidewalks), reminds us of the importance of addressing transformations at the pedestrian level and scale: "It is up to the city to answer to what is in the spirit of the time – Zeitgeist – of the globalized world. The purpose of human society, according to the biologist Laborit, is not to build cities, but to live. This really changes things. This simple statement about things connected to the body suggest, right away, several options of reorganization of urban life, where public space, widely confused with the sidewalk, represents a more important issue. I firmly believe that it is impossible to humanize the city without the pedestrian system, because the biological facet is the great human condition. (...) It is in the sidewalk that universal happens, the meeting with the other, with the different, whose essence gives meaning to democracy, and therefore, to our daily challenge" (Yasigy 2000:23-24).

When we look at cities and analyze the different spatial relations (such as the proportion of what constitutes an individual's dwelling, or of spaces that compose streets, viaducts, roads and sidewalks), we can start to understand how much of the city's space is "public" and how much of that is actually of public domain. This relation, which allows for more or less use of the city (space, equipment, etc), and for more or less interaction between people, can inform about the type of relationship people have with their community and their environment, an analysis that is instinctively drawn by being in city space, and experiencing the sense of place – which "sits somehow between the objectively share properties of environments and subjectively idiosyncratic experiences of them" (Relph 1997: 213).

Different models and periods of development have taught us lessons about successful dynamics of urban space and public domain, spaces and places which are not defined by a single gesture, but by several intertwined elements that comprise the nature of city living: activities, social structure, spatial characteristics, etc. Through equilibrium of variety, density and scale of different material and immaterial factors (which were built through time) successful urban spaces are validated and may become spaces of public domain. As the French revolution brought about ideals for society, modern interventions that are often illustrated by Haussmann in Paris exemplify the new type of public sphere and space: "the new boulevards incorporate the conditions of anonymity and

individuality, allowing both free circulation and inattention to the differences and helping, this way, to consolidate *the image* of a public space which is open and egalitarian" [my italics] (Caldeira 2000:212).

The rising demand for more affordances for quality urban spaces (Gehl, 1996, 2006) that support and promote diversity and exchange – spaces of plurality – reinforces the significance of the city itself as meeting place as we recognize and discover moments throughout the city fabric. These 'moments' are supported by a complexity of elements that should inform transformations at different levels: perception, everyday use of space, common people and situations, social interaction, cultural, economic, political and spatial factors and processes, etc. In addition, the imprints of time in the city are seen in space, and assume different configurations according to this dynamic. Memory and identity, therefore, comprise not only a documental quality of urban living, but are part of the present culture and determinant of attitudes. With the notion of 'place' as spaces with values and meanings, memory and identity are connected to celebrated places and monuments, but are equally shaped in everyday moments, in paths and ways.

The preoccupation with the production of public successful spaces has been the focus of many studies in urban planning and design, as well as all disciplines interested in aspects of city living. The idea of place-making and public domain are key elements in the process of producing a thriving space which responds to the needs and desires of a diversified society and contributes to the improvement of the quality of life in the community and in the city. Beginning in the 1960s, the work of William Whyte (1980), Kevin Lynch (1960, 1981), Jane Jacobs (1961) and many others brought into discussion elements of urban configuration that had been overlooked by the modernist planning practices, such as the experiential qualities of the city, the dynamics of perception, identity, culture, social processes and the political/administrative approach. Their work is a reaction to the planning model that transformed cities during the post-war time of industrial and technological development, migration and rapid urban growth and is an argument for a city with qualities that support and enhance the meaning of community, experience of its inhabitants and users. Often inspired by phenomenological work, these approaches examined facets of spatial identity and environmental behaviour, but also raised a political debate around the role of the government in regards to economic development and the transformations it was promoting in the city.

Jane Jacobs called the attention to the importance of the relationship of people in the streets and sidewalks, and used the neighbourhood as here basic unit of understanding of how the urban phenomenon is produced. *The Death and Life of Great American Cities*, first published in 1961, expresses a strong opposition to practices of planning, with particular attention to the neighbourhood structure and major projects of intervention in large areas of the city. Questioning the practices of orthodox planning (represented by Howard's Garden City, Le Corbusier's Ville Radieuse and Burnham's City Beautiful), supported by the understanding of the real experience of life and space in the urban environment, she looks into the dynamics of urban processes, cycles of decline and regeneration, control, and the promotion of transformations in regards to governing and planning approaches, agency, and the role of the citizen. In her analysis, she recognizes the role that the neighbourhood plays as part of the city (and therefore her argument that it does not need to be self-sufficient) in contrast to the structure of a town, bringing to the discussion the importance of articulation of these neighbourhoods at the urban scale and the specificities of cities versus suburbs.

Jacobs emphasizes the importance and meanings of public spaces, specifically of sidewalks and streets. By recognizing the relationships that take place in those spaces and further analyzing the public and private dynamics which shape the character of urban living, she understands the intrinsic aspects of cities, whose very essence is the coming together of individual and public life with the fulfillment of needs and dreams supported by diversity in a safe and dynamic place, as public relationships in sidewalks is a private social way of bringing people together, thus enforcing contact at a local level and allowing for the "brains behind the eyes" – when people take responsibility, choose to act and take part in the daily events. This realization goes further than the morphological and economic justifications for concerns of safety in cities, as she understands that segregation of uses and users influences the level of security of a neighbourhood.

This aspect takes us to the discussion of the element that is essential throughout her analysis: the role and need of diversity in cities, which could be translated into an "enormous collection of small elements" (Jacobs 1992:148). Jacobs draws attention to the indispensable conditions for generating diversity as it should serve – in common places and facilities – different people, functions, purposes and schedules. According to her, diversity is provided by certain physical configurations such as short blocks and opportunities to turn corners, which

promote permeability and fluidity through the fabric; by mixing buildings of different ages and conditions (and thus allowing economic variety); and by the concentration/density of people, including residents. Jacobs also brings into the discussion the way the 'planning institution' tended to approach the decline and regeneration of certain areas: in interventions guided by models of 'clearing' of problematic areas and the processes of consolidation of places through the understanding of the need of diversity that should be supported at all levels and degrees, such as primary and secondary uses, re-habilitation, investments, and the configuration of the fabric and borders.

Through explorations of everyday life and routine, different aspects of social, economic and political natures compose the complex dynamic of cities. The meaning of place in contrast to space has been a central issue in the contemporary way of using and/or appropriating the city. The notion of place involves not only emotional and temporal components, but an experience which is individual and collective. In the public space this is manifested as shared identity as well as tensions, and is essential to the idea of public domain, where encounters and exchanges happen and are desired. Melvin Webber has in fact argued that the effects of the development in the patterns of communication and technology would require a restructuring of the idea of place: "it is interaction, not place, that is the essence of the city and of city life"(1964: 147)

For Marc Augé, in *Non-places: introduction to an anthropology of supermodernity*, the production of spaces where the idea of non-place is predominant in our contemporary urban landscape (or what he calls supermodernity), characterized mostly as spaces associated with transit and communication, designed to be passed through rather than appropriated, which promote a crisis of identity in the individual and in society, giving its abundance and its incapability to support relations between individuals and the community. In his exploration of what constitutes place, there are certain elements of space which are essential to several social phenomena: "The political language is naturally spatial (even if when speaking of right or left), without a doubt since it is necessary to think simultaneously about unity and diversity – being centrality the nearest expression, full of images and more material, to this contradictory intellectual obligation" (Augé 1955:64).

The composition of interdependent functions and uses results in the complexity of the social dynamics in time and place(s) and of the city in its unity. In this

perspective, according to Augé, the notion of itinerary, intersection, centrality and monument are not only useful in describing traditional anthropological places[16], but are also representative of the contemporary French space[17], especially urban. In addition, since Paris has been, generally speaking, a reference of 'successful city-making' to most western cities, these mechanisms can inform our understanding of quality of urban spaces. In Paris' configuration of itineraries through intersecting historical references, monuments and centres are composed throughout the territory – and even transposed to the underground metro system (Idem, p. 66). Nonetheless, the reality of communications and technology is also bringing significant changes to life in Paris: "less and less do people live in Paris, as much as they work there, and this movement indicates a signal of a more general change in our country. The relationship with the history that permeates our landscapes might be in course of anesthetization and, simultaneously, de-socialization and artificialization (...) our cities became museums (re-valued, exposed, illuminated monuments, reserved sectors and pedestrian streets), while roads, high-speed trains and express ways deviate us from them" (Idem:69).

Although affordances for public spaces within the fabric can be found throughout the city, articulating opportunity and demand is not always simple, as it comprises different interests and practical issues such as policy, economic viability, responsibility and management, to name a few. Different models of urban planning have addressed public spaces [and nature too, for that matter] as isolated elements that existed to fulfill very specific roles such as to frame monuments, to embellish certain urban areas, or even as escapes from city life. Nevertheless, we have seen that today the landscape of urban areas has been undergoing transformations to accommodate new functions, towards an urban environment which provides the desired characteristics and supports better living. In this 'model', spaces that may have been disused, left over, forgotten or unplanned, especially post-industrial spaces and small lots within the fabric, can be "rediscovered" and transformed with cohesiveness, supporting the needs of the community, into places of public domain.

16 The anthropologic place is the concrete and symbolic construction of space that couldn't explain alone the vicissitudes and contradictions of social life, but to which they refer when defining place, characterised by being identitary, relational and historical (Augé 2005:51-52).

17 Based on an urbanistic tradition of aesthetics and [perhaps] influenced by "a political ideal of plurality, democracy and equilibrium, over which everyone agrees in theory, and an intellectual, geographic and political model inherited from history which is not very compatible with this ideal that continuously incites the French to re-think the fundamentals and re-define the centre" (Idem:68).

Hajer & Reijndorp draw attention to the mismatch between ideas about 'good public space' and where 'public domain' actually can be found. With the understanding that the exact significance of public space is specific to each place, in different scales and to different people, a normative solution is not an efficient approach, whereas more important than the aesthetics of public space, is the specific functions and administration of it. In this respect, the authors point out the main concerns governing some basic principles in the 'production' of public space which do not respond effectively to the need of promoting public domain:"there is still an approach to public space that focuses on themes such as the lack of safety and 'mindless' violence. (...) The call for simple solutions to complex problems will also partly determine the way that the public space is rearranged" (Hajer & Reijndorp 2001:9). "The essence of public domain, whether as regards to a specific space like the Ramblas in Barcelona or a type such as the street, lies not in the formal characteristics but in the overlapping of and exchange between different social realms" (idem:113). The authors state that the key to compressing is generating public domain by bringing a number of elements that are meaningful for different groups into close proximity with one another. (...) In this context, connecting emphasizes the importance of the way in which different places are related to each other" (Idem: 117).

Furthermore, Hajer & Reijndorp reinforce the essence of the transitional character of public domain: "More friction please! (...) many places do not develop because of the dominance of the sense of boredom and the lack of safety" (idem:130). Sennett (1971:138) also argues that it is through encounters and dissimilarities that problems are dealt with, and the sense of community is strengthened. In this perspective, safety and livelihood is achieved by understanding the importance of the in-between spaces design, and boundaries and conscientious design of different spaces, and their interrelationships may provide interesting mechanisms in promoting public domain.

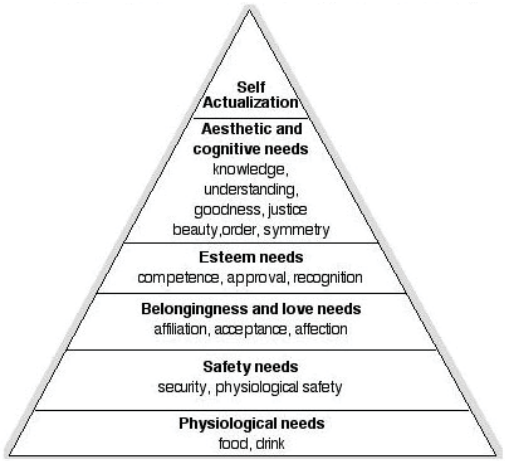
"A super specialization of spaces does not allow for a response to the multiple needs of individuals or the collectivity, and rarely produce a pleasant living space"(Marsan 1987, p.17).Vitality of urban spaces depends on the presence of people at different times, and the support of the pedestrian in its multiplicity of activities is fundamental in the constitution of public domain, allied with characteristics of variety and diversity, understood in terms of use, design and scale. The complexity of successful public domains has revealed us that

affordances (for different people, at different times for sitting, walking, gathering and exchanging) are clearly understood as part of the design field, but go far beyond as it intersects the spheres of social and cultural identity, politics and economy. As cities or areas within them may tend to specialize in certain functions, policies and measures based on a vision for the city of 'humanistic' planning can help to promote the balance of land use diversity and density. This is especially effective if the administration works with the community stakeholders and in recognition of the character and identity of place, as well as promoting creative solutions, by looking at the potentials of the place.

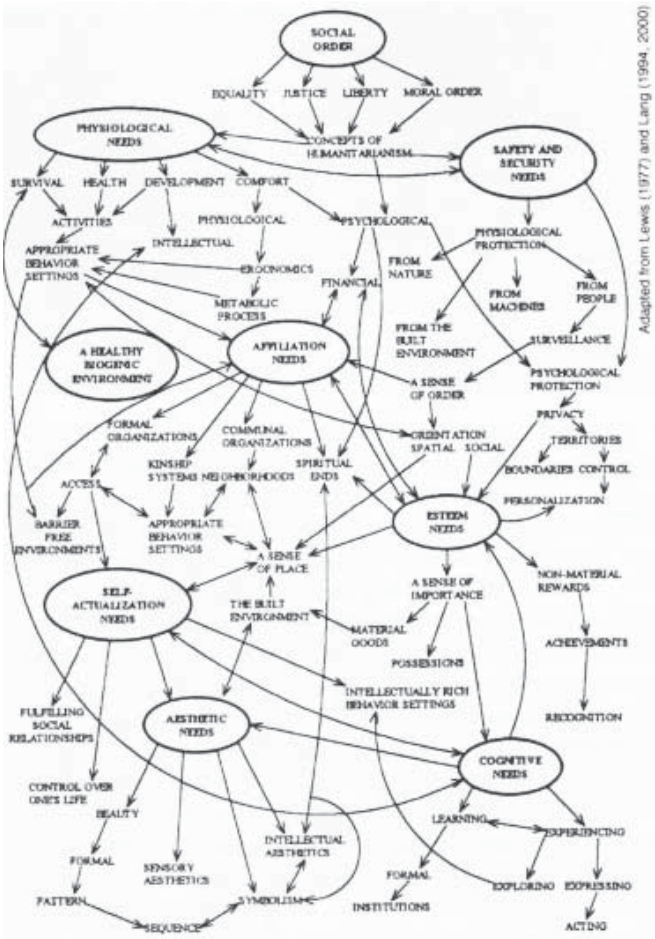
According to Carmona in the past 30 years, much work has been done involving "contemporary urban design of urban space as an aesthetic entity and as a behavioural setting. It focuses on the diversity and activity which help to create successful urban places, and in particular, on how well the physical milieu supports the functions and activities taking place there. With this concept comes the notion of urban design as the design and management of the 'public realm' – defined as the public-face of buildings, the spaces between frontages, the activities taking place in and between theses spaces, and the managing of these activities, all of which are affected by the uses of the buildings themselves, i.e. the 'private realm'"(2003: 7).

"If urban design is concerned with the whole nature of human experience it has to address the nature of activities and the people who engage in them as well. It is the set of behaviours settings and how the milieu affords activities and simultaneously acts as an aesthetic display that is important" (Lang 2009, p.8). Some of these are represented by the figure ground and massing relationships, the nature of the façades that compose a space, the uses that connect to it, material and aesthetical characteristics such as pavement and lighting, activity patterns, and the people who use it, etc.

Based on Maslow's hierarchy of human needs, Lang articulates a model that relates those human needs and the functions of the built environment The relationships between those aspects illustrate the complexity and interdependency of meanings and functions of public space (this could be extended to the complexity the non-linear process of urban design). Furthermore, urban design "deals with what actually constitutes the public realm and with the role of conflicting public and private interests in shaping it" (Lang 2009:14; xxvi).



Maslow's hyerarchy of needs



Lang's Human needs and the functions of the buit envrionment

'Good' design responses that support public realm depend on identifying potential spaces in the city and exploring possibilities that are sustainable to the level of making sense economically, understanding and translating the local necessities into designs that improve people's quality of life through exciting spaces at the same time that it negotiates the different interests and scales, an exercise that is very specific to place. These dimensions of human/pedestrian scale and qualities of space that embodies public realm, are articulated through a set of strategies, processes and procedures, as well as results, which we will address in this next section.

2.2 A typological framework

In order to address the magnitude of urban challenges and complexities which go beyond the technical aspects of city planning, urban design has become an important instrument articulation of visions, strategies and processes. Different theories of urban design have addressed the roles, processes and instruments that encompass the intervention in the built environment. The practice is usually characterized by a non-linear approach: it addresses specific realities, but within a larger context; it involves different actors in its process; and it structures interventions that articulate a multiplicity of interests, functions and meanings. This set of preocupations can be translated into typologies of conditions, intentions, strategies, procedures, and products, and are structured by different theories of planning and design. In order to develop a cohesive intervention, it is useful to prioritize certain elements, such as the character, the process or the mechanisms that will structure the urban design through a typological framework.

Joan Busquets, in his essay on the contemporary approaches to interventions, highlights the 'lines of work' which have been answering to the "pressing issues our cities face." He categorizes the main character, or the nature of interventions, which shows the richness and plurality of urban design transformations today. These are:

1. *synthetic gestures* (key buildings with urban synergies, e.g. Guggenheim Museum Bilbao);
2. *multiplied grounds* (large urban artefacts as a driver, e.g. Lille Intermodal Station in Lille, France);
3. *tactical maneuvers* (minimum critical mass as a driver, always something to be improved, e.g. Malagueria housing project in Évora by Álvaro Siza, Portugal);
4. *reconfigured surfaces* (the restructuring of fine-grain open space through judicious design and public and communal spaces, e.g. West 8's Schouwburgplein in Rotterdam);
5. *piecemeal aggregations* (the urban fragment at the intermediate scale, integration between infrastructure and city, public and communal spaces, and architecture and services, e.g. Paris around the Seine, east side of Amsterdam, Battery Park city in New York);

6. *traditional views* (rethinking revival, e.g. Seaside, Florida);
7. *recycled territories* (large landscapes and decentralization, e.g. Emscher Park in Germany, which restructured a large tract of abandoned industries in the Ruhr Valley, converting them into new recreational space);
8. *core retrofitting* (the updating of historic cores, reorganizing traditional and historic fabrics to guarantee their operative potential as active urban centres, e.g. Busquets' plan for Toledo, Spain);
9. *analog compositions* (rethinking the master plan and its scales, as it is no longer the all-embracing omnipresent 'fix-it', e.g. new strategies for London, by the task force Design for London);
10. *speculative procedures* (experimental investigations in urbanism towards new principles of urbanism through competitions, design schools' research, etc (e.g. Blur Building in Switzerland by Diller + Scofidio) (Busquets 2009:132-134).

In his book *Urban Design: a typology of procedures and products*, Jon Lang investigates the practice of urban design through a categorization of projects "in terms of: (1) the design and implementation procedure, (2) the product type and (3) the major paradigm that structure the process and gives form to the product" (Lang 2009:xxii). We are particularly interested in the major procedural types of urban design:

1. *total urban design* where one team is in control of the whole project;
2. *all-of-a-piece urban design* where one team creates a master, or conceptual, plan and writes guidelines for the development of individual sites within that plan by different entrepreneurs and their architects;
3. *piece-by-piece urban design* where proposals to get specific activities into an area are controlled by zoning codes and incentives and penalties;
4. *plug-in urban design* in which infrastructure elements are used as catalysts for development" (Idem 2009:44)

These procedural types provide a clear understanding of the possible approaches to the practice, which are necessary to articulate the vision and strategies that will guide the process. In the next section, we will explore the possibilities of working with the vision of wholeness (which in turn addresses

more specifically the political sphere urban interventions and an infrastructure of public spaces), and two of Lang's procedural types are particularly compelling. In the piece-by-piece urban design procedure, the interventions in existing spaces are framed by a vision, and articulated through incentives given to the private initiative to promote certain qualities in a specific area, or district. In plug-in-urban design, projects are used as catalysts for development. This typology refers to urban design projects as infrastructure themselves (such as the case of Curitiba's transportation system), as well as components that focus on re-establishing links, such as pedestrian bridges and buildings, and work as catalysts for new meanings and uses of the area. This later procedural type supports a framework for interventions of the specific conditions caused by infrastructure of the fragmented configurations of post-industrial cities, as these types of infrastructure, as we have seen, tend to create significant ruptures in the urban landscape.

Current strategies in urban activation and transformation involve an approach that addresses the issue of urban transformation at the streetscape, by reclaiming public spaces and streets for pedestrians and in regards to the comprehensive qualities of culture, valorization of public space, etc. Yan Gehl's (1996, 2006) work is an example of these strategies at the planning level, and highlight the aspects of articulation of interest, comfort and affordability for activities to take place in them. There is a number of examples related to transformations that become references of sustainable practices, "in which urban districts and neighbourhoods explore new more self-sustaining models, making advances in generating their own energy, processing their own waste, and reducing auto dependence with a greater mix of uses and more mobility alternatives" (Greenberg, in Krieger and Saunders 2009: 202). Significant examples are Vauban in Freiburg, Germany (derelict military zone turn into sustainable model city); Viikki, near Helsinki, Finland (residential and work zone within an university district, a living laboratory for green design that integrates gardens and pathways, composting, recycling, etc.); Malmö, Sweden (docklands 'Bo01' site designated as ecological quarter, with a strict set of environmental codes), among others. (idem: 202-204).

We would also like to mention the opportunity to address 'lost spaces', or 'anti-spaces' (Trancik 1986) and conditions of the urban landscape through more temporary and flexible interventions and less formalized responses. These changes, guided by a vision (which is strong and clear, but not static) and a plan of spatial transformation based on the use at the pedestrian scale with

place-based responses reflect a faster and more flexible approach, which can also have a significant catalytic effect in the area. The way the process is structured, it generally promotes new exchanges between the administration and the community, strengthening participation as well as agency. Moreover, this approach gives a spatial opportunity for creativity and exploration of new expressions in the city.

The publication *Urban Pioneers* has compiled the ideas and processes of an approach to urban development that capitalizes on the values of temporality and flexibility in Berlin and Amsterdam, which are permeated by unused/un-built/degraded spaces and liminal conditions. As stated by Ingeborg Junge-Reyer (Berlin Senator) in the book's preface, "temporary use has already become a magical term: on the one hand, for those many creative minds who, in a world ruled by the profit maxim, are trying nevertheless, to create spaces that reflect and nurture their vision of the future; and, on the other, for urban planners to whom it represents a chance for urban development, albeit one to which they must first grow accustomed – for planners tend not to have to deal with matters of a temporary nature. Ultimately, it is a chance also for property owners. The undiscovered district, the dead end on the urban landscape, the blind spot in public perception might all in fact be set in motion, brought to the light of day by (temporary) use" (2007:17).

In the scope of 'alternative' responses, it is also opportune to highlight practices that explore possibilities beyond institutionalized processes of city transformation, or what Provost and Vanstiphout refer as 'Ditch Urbanism' or 'Ditch School of Urban Design', which deal with "different urban conditions far removed from the professional spotlights (…) This disparate school shares one strand of DNA: the emancipatory, collectivist, anticonformist, breakthrough élan of the Modern Movement in its 'heroic age'(Provost and Vanstiphout, in Krieger and Sounders 2009, p. 187). Some examples of these are: "the Urban Think Tank in Caracas, Venezuela, astist Jeanne van Heeswijk in the Netherlands, the Centre for Urban Pedagogy (CUP) in New York, Rahul Mehrotra and the Urban Design Research Institute in Mumbai, City Mine(d) in Belgium, Public Architecture in San Francisco, Atelier Bow-Wow in Japan, the Everyday Urbanism group in the United States, and Stalker in Italy are some of the groups that invent and realize their own projects from outside official institutions and client-architect-budget relations, analyzing existing social and spatial situations and retrofitting them with programs that bring their particular ideal version of reality a little closer. (…) Their projects often rely on maniacal commitment to one city or

neighbourhood; they dive in and dig up everything possibly useful for their intended projects and hold on until there is at least one 'fact on the ground', one realization of their intentions that proves their ideas viable and prepares the way for more. These offices, groups and artists have abandoned the idea of the conventional architect's office or urban planning department and have blurred the boundaries between urban planning, urban design, art, and social work. (…) They engage with some condition neglected by the officials or professionals, and they explore and analyze its real social and cultural lineaments. They use design to visualize issues and solve problems. (…) Their interventions can be physical objects but even then are more importantly tactical manipulations of political landscapes (Provost & Vanstiphout 2009:188).

In the sphere of public participation, there are different roles that are crucial in the articulation of urban realm, such as to respond to local needs and aspirations, to foment human development through flexibility, etc. From the perspective socio-spatial justice, Rios, in his paper *Envisioning citizenship: toward a polity approach* in urban design argues that there are "possibilities for advancing democracy through operative practice" (2008, p.1), supporting a better articulation of local and institutional interests (with the facilitation for the formation of political communities), as well as the exercise of citizenship. "To realize the possibilities of a polity approach in urban design, an explicit connection between public space design and the production of new social relations is required. [...] The ability of practitioners to produce a more inclusive and egalitarian political community is in large part contingent on their ability to provide leverage for social groups vis-à-vis government agencies, non-profit organizations, and private interests. As such, methods and techniques of citizen participation should be employed as tools to engineer more democratic outcomes. This not only includes the use of participatory technologies during formal processes, but also requires going outside of formal decision making to reveal marginalized and non-elite perspectives" (idem: 4). The process of democratic participation is fundamental in order to structure a collective short, medium and long term vision, at the same time that it creates mechanisms of control and management.

> "Left almost exclusively to the market game, the lived space consecrates inequalities and injustices, and ends up being, most of the time, a space without citizens"(Santos 1926:43).

In the practice of urban design, plurality, interdisciplinarity, flexibility, participation, etc, are fundamental aspects, and they are reflected in its processes, procedures and results. In the next section, we propose that urban design, with a vision that articulates these aspects through the idea of wholeness (Alexander et al 1987), and a close connection to the approach and strategies proposed by landscape urbanism and landscape infrastructure, along with the understanding and mechanisms of place-making and participatory processes,can help to integrate all aspects related to city building towards a city that is primarily focused on people and their quality of life.

2.3 The idea of wholeness: towards an infrastructure of public spaces

Finding opportunities and potentials for spaces where public realm and other social and environmental characteristics can work as catalysts in improving the quality of life within the fabric and articulating those in the different urban scales and domain is a component of city building which urban design is specifically able to develop, as it has the ability to negotiate between objectives and processes of participation among stakeholders at different levels of administration. It is also capable of offering flexible and comprehensive responses to various social and spatial conditions, given that in the urban design approach, the city is essentially comprehended in its several dimensions. It is able do so by addressing aspects related to aesthetics and social functions of space, and developing different approaches and frameworks to guide the production of these spaces and the role of the professionals, the administration and the community in the process. An essential component of this process is the question of "how to ensure that the life in the city is given the required attention and care in city planning" (Gehl, 2006: 74), which certainly requires a comprehensive understanding of the city through knowledge and data related to the characteristics of public spaces and the pedestrian realm, so they become "a basis for debate and decision-making, and an important baseline for creating strategies regarding a given city's public space policy" (idem).

With all these dimensions, the opportunity to address certain conditions of the post-industrial city – through an integrated process and a vision that recognizes the significance of public space for today's contemporary idea of city living – can structure a vision for city building that effectively responds to principles of sustainable development and quality of life. Public spaces, as we have seen, have a role on our contemporary society in improving environmental qualities, providing opportunities for encounters and exchanges, bringing life (and safety) to the streets, articulating public realm, and beyond: "lived space for survival, self-fulfilment and self-expression" (Schmidt 2010:7). There is a great potential in identifying spatial opportunities distributed throughout the city and articulating them into a system of public spaces as infrastructure (given that the aspect of fulfilment and evolution – in reference to Maslow's hierarchy of needs, is directly related to the experience that happens in public space). This approach can respond to socio-spatial ruptures related to fragmentation of urban space, and to the desire for spaces of public realm, supporting human

and social development with creativity, identity and culture, in opposition to the spectacularization, homogenization and gentrification effects of urban renovation projects that 'produce' public space driven by market dynamics.

Christopher Alexander's notion of the 'Growing Whole' – *as* proposed in the book *A new theory of Urban Design* (Alexander et al. 1987) – helps to structre a unifying principle for our conceptual framework. The structural quality and an organic character of cities that grew as a whole, according to the author (idem1987:2), has certain fundamental qualities and essential features that allow a city to grow whole: piecemeal growth, unpredictability, coherence (instead of fragmentation), and fullness of feeling. This approach proposes that we "learn to understand the city as a product of a huge network of processes and learn just what features might make the cooperation of these processes produce a whole (...) through a single process that works in many different levels" (idem:19-20).

Interventions in the urban fabric are required to address a multiplicity of needs, functions and dimensions, demanding a shift in paradigms in order to respond to all its potentials. Landscape urbanism has especially addressed decentralization and residual spaces derived from de-industrialization (Waldheim 2006), especially through the articulation of "surface conditions –not only configuration, but also materiality and performance (...) [brings to the process] the ability to produce urban effects traditionally achieved through the construction of buildings simply through the organization of horizontal surfaces"(idem: 37). Corner (2006:24) states that infrastructural landscapes have the "capacity to function as important ecological vessels and pathways", and in fact "embody some of the more significant potentials of landscape urbanism: the ability to shift scales, to locate urban fabrics in their regional biotic contexts, and to design relationships between dynamic environmental processes and urban form."

This practice derives from another paradigm shift, whereas in the past a conscious effort was necessary for the perception of 'nature' in the city[18], landscape and 'green' have become strong elements and symbols for contemporary

18 As antagonist ideas (nature and city) especially in the late 19th century industrial city of chaos, the attempt of dealing with consequences of unplanned rapid urbanization brought to the foreground different ways of looking at this problem, which involved qualities of "nature" – and suburbanization, Howard's Garden City and Olmsted's Park Systems were some of the responses to these processes.

urban development."The reappearance of landscape in the larger cultural imagination is dues, in part, to the remarkable rise of environmentalism and a global ecological awareness, to the growth of tourism and the associated needs of regions to retain a sense of unique identity, and to the impacts upon rural areas by massive urban growth"(Corner 2006:23). The resulting awareness of sustainable, energy efficient living concepts leads to a better integration of nature into the urban sphere. This type of landscape is finding its way into many post-industrial cities, producing positive effects in the urban climate and providing spaces for the development of new possibilities of access to nature and places for cultural and social activities (leisure, sports, urban agriculture, etc), but also as comprehensive and integrated systems. Moreover, it is enhancing its organic character.

In fact, the understanding of the city as an organism can be strengthened by the idea proposed by Alexander: "this feeling of 'organicness,' is not a vague feeling of relationship with biological forms. It is not an analogy. It is instead, an accurate vision of a specific structural quality" (Alexander et al. 1987:2).

Alexander also proposed that seven rules would structure a single process, guided by an overriding rule[19]: "Every new act of construction has just one basic obligation: it must create continuous structure of wholes around itself", or, as he also explained, "Every increment of construction must be made in such a way as to heal the city" (idem:22).

In the process of city building, the idea of wholeness is very powerful. It allows the city to be apprehended as an organism, which in turn, allows the systems that compose it to be seen not only as they function, but how they function together, that is, their functioning in relation to others and to the whole. This understanding has the ability of break tensions of hierarchy of those systems (and departments), and allow them to work collaboratively and integrated towards common objectives. Furthermore, as they are not a sum of its parts, 'deficiencies' will affect the whole, and the process of addressing the condition can also involve the different systems.

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19 The set of rules and subrules refer to control mechanisms of centralities, scales, use, functions, characters, the relationship between public and private spaces, streets and circulation, architectural qualities, etc. These subrules are rich, as so many dimensions of the design project are addressed, but in the scope of the study, we feel that only the overriding rule is able to contribute to the articulation of a compelling vision.

In fact, this idea relates closely to Trancik's argument, in *Finding lost space*, which is "centered on the concept of urbanism as an essential attitude in urban design, favoring the spatially connected public environment over the mere planning of objects on the landscape. This approach calls for making figurative space out of the lost landscape."(1986:1). Trancik looks into the history of urban design approaches, and identifies three theories: the figure-ground theory, the linkage theory and the place theory. In the figure-ground theory, the relationship between voids and masses (as a two-dimensional abstraction of open spaces and buildings) are useful in understanding the structure of urban spaces. The linkage theory "tries to organize a system of connections, or a network, that establishes a structure for ordering spaces"(idem:97))., and focuses on patterns of movement and circulation, how the spaces of the public realm are connected. The place theory "adds the components of human needs and cultural, historical and natural contexts"(idem:98), encompassing the dimensions of culture and identity, as well as form, perceptions and use which are specifc to the place. Taken together [these theoris] can provide us with potential strategies for integrated urban design. "(idem:97). This integrated urban design approach proposed by Trancik is very complelling. It provides fundamental comprehension of spatial, social and cultural dimensions of city building, essential in structuring the vision and the process of transformation: cohesion throughout the different scales of the fabric, how spaces and moments in the city are connected and how we move through them, and the human relationships and needs that happen in place.

> "The city is made of crossings. The challenge in understanding urban change is to walk through the two paths that lead to it, without privileging one over the other"(Lepetit 2001, in his essay on urban hermeneutics)

In this dynamic, a structuring vision, where a common objective organizes the different functions, there is a better chance of individual systems to produce collective results. In the first chapter we explored how the principles of sustainable development and quality of life are essential in the contemporary reality, and that they can be articulated (through planning and urban design) by strengthening public realm throughout the urban fabric through public spaces. From Alexander's prerspective, this would mean 'healing' the city through them, where all systems work with this common goal. In fact, one way to address certain 'deficiencies' or conditions in the city is to look at them as

opportunities (to support spaces of public realm), which does not necessarily mean removing it.

Furthermore, by looking at the city as a whole, congruencies and links appear, and we are able to see how things work together and come together. Where these links happen, also can interesting moments and places, structured together. Infrastructure itself can articulate those moments and meanings, and in the context that requires multi-programming, support an infrastructure of public spaces: "landscape is a medium, it has been recalled by Corner, Allen and others, uniquely capable of responding to temporal change, transformation, adaptation, and succession. These qualities recommend landscape as analog to contemporary processes of urbanization and as a medum uniquely suited to the open-endedness, indeterminacy, and change demandad by contemporary urban conditions"(Waldeheim 2006:39).

As we saw in the previous section, Lang's procedural types (Lang 2009:44) can also help to frame a strategy for the process of intervention. With the piece-by-piece urban design procedure (where interventions in existing spaces are framed by a vision, and articulated through incentives given to the private initiative to promote certain qualities in a specific area, or district), or with plug-in-urban design (where projects are used as catalysts for development), and can address projects where infrastructure themselves, or through components that focus on re-establishing links, such as pedestrian bridges and buildings, and work as catalysts for new meanings and uses of the area.

In essence, the complexity of issues and conditions that city building entails requires more than ever an approach that is based on how things work together, through a vision that integrates the different systems, local realities and the multiplicity of activities, functions and actors. It is primarily the political aspects of city building (strongly regulated by the citizens) that have the power to structure a cohesive vision and produce consistent long term changes. But for this, a process that integrates the functions and systems of the city can reveal powerful connections and opportunities to respond to the city's and citizens' needs and desires, and it can be achieved through the idea of wholeness and its articulation through urban planning and design.

In the next chapter we will address opportunities found in three 'classes' of spaces in Montréal and São Paulo, characterized by conditions of disuse or

degradation commonly present in the post-industrial landscape, and which could articulate the opportunity of transformation of the local reality through the provision of affordances for the public realm. Moreover, we believe that these conditions have the potential to be articulated in the larger scale of the city as an infrastructure of public spaces, through the idea of wholeness that we have just discussed.

Chapter 3: Opportunities: three 'classes' of spaces in Montréal and São Paulo

In this chapter we will look into spaces of the post-industrial urban landscape of Montréal and São Paulo, which are characterized by conditions of disuse, degradation, stagnation, liminality, etc, and which could be articulated with the need for places of public meanings and functions, in order to contribute to improved environmental conditions at the local scale as well as the larger scope of the city. We will first make an overview of the process of urban development in Montréal and São Paulo, in order to contextualize the scope of opportunities and challenges, and also to provide the basis for the understanding of intrinsic aspects of identity and character of these cities. We will then highlight interventions and ideas that respond to those conditions generated by local actors such as citizen groups, students, architects and planners, agencies, etc, which respond to a comprehensive understanding of the local scale and of the larger scope of the city, and therefore, have the potential to articulate transformations that together compose an "infrastructure of public spaces" through the idea of wholeness.

3.1 An overview of the process urban development in Montréal and São Paulo

> "Although Montréal is sometimes described as the most European city of the north-American context, and half of the population of Montréal is descendent of French and still speak French, no one could ever mistake Montréal for Paris. In contrary of Paris – and all other north-American cities – Montréal is surrounded by residential suburbs, and has a very well defined commercial centre, with large office buildings, in contrast to the neighbouring residential areas with lower buildings (...). Downtown Montréal is a typical North-American anything-go: tall buildings, of any shape, steel and glass buildings, brick buildings next to empty spaces and parking-lots. The effect is of improvisation, not

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Montréal: view from Mount-Royal about1870

planning" (Rybczynski 1995:23).

Montréal

Located on the Saint Lawrence River, Montréal is centred on an island roughly 50 km long and 16km wide. Its metropolitan region has a population of approximately 3.6 million (2006 census), and 1.6 million in the city. It is a multicultural city, with French and English as the two official languages, and with about 28% of the population born outside Canada.

The European occupation began in 1535 with Jacques Cartier, and the city remained under the French regime until 1759, when it passed to the administration of the British. It was politically incorporated as a city in 1832, a few years after the opening of the Lachine Canal, which promoted it to the largest and most economically significant city in the country in the late 19th century with rapid industrialization. From the technological advances and political transformations, to the later displacement of industries and capital to the west and consequent changes in the modes of production and mobility, the different phases of development configured the city's urban landscape and its social and cultural character and identity in this process of urban development.

Morphologically, there are also several significant events in the history of

Montréal that reflect quite significantly in urban (re)configuration, such as socio-political mergers and demergers, the construction of transportation networks (the Metro and highways and overpasses cutting through the city), and large business and cultural complexes especially in the downtown area, etc. In these transformations, fundamental characteristics and morphological patterns in the phases of growth and development of the city of Montréal are discernible especially in regards to the configuration of urban lots, the development of transit corridors, and the expansion of development in suburban-like environments. The studies of the development of Montréal's urban morphology (such as by Germain & Rose 2000, and Marsan1981), indicate that village character to the districts within the city originate from the characteristics of the French regime, such as the street plan (which followed geographical characteristics such as the presence of the rivers), the orthogonal grid of large rural fields which were subdivided into long urban lots served by a network of major (commercial) and minor (residential) roads, and scattered settlements. These characteristics were also described by Melvin Charney, in Montréalness of Montréal: Formations and formalities in urban architecture, based on the French patterns of settlement, which defined the essential urban character and structure, the orthogonal pattern of long urban lots, buildings aligned by the street and a housing type of party walls, have all contributed to making the street and the square "defined spatial entities [...] which subsumed individual buildings", a unique characteristic of the city in relation to other North American cities (Charney 1980:299).

In the early 19th century, the demolition of the old city's fortifications in order to stimulate the growth of the faubourgs beyond the walls, for instance, promoted the expansion towards the mountain (housing the upper and middle classes), to the east and west of what is today downtown Montréal, and when a large rural population moved into the city in search of employment, the areas which were mostly occupied were Lachine, the Port area in the east, and the Northwest of the city core (the latter attracting the clothing industry workers) (Germain & Rose 2000:38).

With industrial development accelerated by the port activities, the demand for low-cost housing grew in the city. The adaptation of the land configuration to accommodate for this growth resulted in the construction of row-housing or plexes. These row houses were separated by laneways in the back, which became important spaces of functionality, sociability and leisure (as noted by Germain & Rose, 32% of Montréal households were homeowners in 1837, yet by 1881 this figure was only 15%). Charney also points out that the *quartiers populaires* housed

the immigrant population coming from rural Quebec, developing innovative construction methods (of plank construction and layers of materials creating pockets of air for isolation), with "façades were gradually pulled back from the street to make way for a dense zone of entrances, staircases and balconies, fitted with a band of trees as in some urbanised park, a zone which related each dwelling directly to the street. The grid was differentiated into avenues, rues and ruelles, each with a specific use and form. At the intersection of streets, the corners of buildings were truncated, setting apart the outline of a square. Entire blocks were composed as singular buildings, while each dwelling maintained direct access to the street" (Charney 1980: 301), and several neighbourhoods are still today characterised by the presence of plexes and ruelles, or back lanes.

In the late 19th century, as Montréal became the financial and industrial capital of Canada, beautification of the city and the provision of space for recreation were undertaken by the administration, with the creation of outdoor public spaces such as Park Mont-Royal (1873), Park Lafontaine (1891) and Île Sainte-Hélène (1875). At this time, the port in the East of Montréal attracted the relocation of industries in the area, and so the Maisonneuve district also experienced large growth in population. In 1910, apartment buildings (of up to 10 stories) were common in the downtown area and wealthier suburbs of Montréal, although high-rise residential buildings were built after World War II. According to Germain & Rose (2000:65), this typology represented 50% of housing units built from 1921 to 1951. With growth halted by World War I and the Great Depression, the municipality promoted major public works in order to create employment. The City Beautiful movement and the Garden City were the predominant models to address the deteriorated living environment of the urban population. From the mid 1950s to the mid 1980s, the corporate city model of urban redevelopment meant large-scale projects that reconfigured Montréal's core towards an 'international' urban landscape. In this model, modern superblocks of corporate buildings, such as Place Ville Marie and Sunlight, were linked by a network of pedestrian underground passages. This network connected also to the new Metro system, which in turn strengthened development within the city core. As Lortie (p.95) explained, this was done by creating large apartment complexes close to stations and promoting commercial development within the city and around the metro lines, with new centralities along the urban corridor. The opposite effect was created by the broadening of local streets into major arterials and the construction of highways (such as René-Levesque and Ville Marie Expressway). The new highways cut through consolidated neighbourhoods, ostensibly serving the growing suburban neighbourhoods (also motivated by Expo '67).

As an attempt to change the face of the city, large scale projects, such as the construction of Radio-Canada complex (which razed 700 houses), came as a 'solution' to the poor conditions of the existing housing stock. Also, the high demand for new housing was addressed by different projects of neighbourhood redevelopment[20]. The administration also made explicit efforts to put the city in the international spotlight with Expo '67, and again with the Olympic games of 1976. In this thirty year period, the morphological configuration of Montréal changed significantly, based on large projections of economic and population growth. At this moment, however, attitudes towards neighbourhood redevelopment began to be contested, as heritage and the deep transformations in the urban fabric were not congruent with the citizen's perceptions of urban life in Montréal. The active engagement of the civil society against the Milton-Parc project (which previewed the demolition of historic housing to give place to high-rises, towers similar to the neighbouring La Cité complex) marked the reaction against this model of urban renewal.

The provision of affordable housing, with few exceptions, relied mostly on the private initiative, a fact particularly evident for the conditions and availability of housing for the lower income population, especially in areas close to the city centre. Demographic growth predicting a population of 4.8 million in 1981 and 7 million by the year 2000 (Lortie 2005: 88) justified investments on infrastructure and the vision behind the megaprojects undertaken in the 1950s and 1960s. Super blocks and major arterial roads transformed the local landscape, producing a population displacement from these areas. Institutional investments in road infrastructure and in the expansion of the suburban fringe have all contributed to the transformation of the urban dynamics and landscape. Although maintaining a large amount of employment, the availability of affordable housing within the island, especially of one that corresponded to the needs of new families (typologically and financially), has since not been sufficient to keep the population within city limits.

Marsan, in *Montréal: l'avenir d'un centre-ville, problèmes et défis* also indicated that downtown Montréal's evolution tended towards a super-specialization and

20 Examples of such projects are: the government funded Les Habitations Jean Meance in the late 1950s (which created 800 low-rent units distribute through high-rise and low-rise buildings as well as row-houses), the cooperative development Cité Jardin du Tricentenaire (with 167 single family houses based on concepts of morality, cooperativeness and green space) and the Construction of single family apartment buildings (walk-ups) in the suburbs, which supplied housing for a new type of household of singles or couples without children.

homogeneity of the urban fabric, expressed by the ground occupation of 46% by office buildings, at the expense of the liveliness of streets. According to Marsan, the commercial function of downtown Montréal has a unique condition, which is the underground system. If, on one hand, it responded to the harsh winter conditions and the tendency of big Malls to move to outer areas of the city (draining out commercial activity from the core), it has also removed a large number of pedestrians from the streets, which were left with the main function of circulation. As the author pointed out, finding the balance between the two is important in order to promote the diversity of interests and uses of the whole downtown, attending to the needs of all users and of residents and improving environmental qualities of the area. Charney also called attention to the 'systematic abstraction of passages and sights of the city – entrances, streets, squares, etc – in detriment of public space and the architectural references of 19th century, brought about by large-scale interventions. These conditions have in fact been addressed and balance has been restored to a large extent in the downtown.

As Montréal transformed from having centrally located industries, with the initial opening of The Saint Lawrance Seway (allowing ships to bypass the Lachine Rapids), and the displacement towards the west, with high technology industries (with the aerospace, biochemical and communication), the urban fabric underwent significant transformations. Urban transformation projects in Montréal certainly have strenghts as well as structural problems, which are well summarized by Charney: "At the same time that public symbols are seen to be alive and well in the cultural affirmation, if not in the social articulation, of people. The resolution of these references in architecture is caught, however, between the total reproduction of large-scale urban interventions, with its tendency to automate and normalise sign systems, and the replication of things-as-they-are, emanating from small scale interventions the quartiers" (Charney 1980, p. 301).

Montréal's image or identity could be what Charney refers as 'Montréalness', in many expressions of urbanity in Montréal, through a language used in interventions that encompass the character of the city, from spatial configuration to design elements and visual communication. There are some factors that also help to build this image, or character: the essential physical characteristics of a small population in an island (although heterogeneous, given that around 31%

of the population is immigrant[21], predominantly bilingual, and/or trilingual), the recognition of its architectural and urban heritage (results of efforts by significant figures and institutions in support of the local character and community, such the CCA, Heritage Montréal), as well as the collaboration of academic institutions with strong tradition in urban studies, programs intended to promote directly the aspects of creative expression of urban culture, and a restricted number of firms which have developed the more recent projects (and maintain a cohesion and style), to name just a few.

It is relevant to highlight that the residential configuration of a considerable amount of neighbourhoods of the city – characterized by plexes (high in density, but low in height), has been important in maintaining the character and identity of the city, at the same time that it has helped to support the pedestrian scale and public realm of streets. Furthermore, there are a considerable number of parks distributed through the city, which are generally well maintained, safe and accessible to all. However, although efforts are made to address the situation, significant socio-economic differences expressed by the peripheral distribution of the poorer boroughs are still directly related to deficiencies in accessibility to services and facilities, including public spaces.

Montréal is one of five UNESCO cities of design. The Ville de Montréal's Bureau du design proposes that "a Design city should, ideally, create situations (through zoning, tax incentives, public works, etc.) that encourage change in some areas and allow other area to be left alone. A design city should be a place where the most stylish districts and businesses stand out, in part because less stylish neighbourhoods can continue to exist and thrive."[22]The statement is quite comprehensive in the understanding of the dimensions of sustainable urban environments, having design and culture not only as representations of its identity and character, but as an expression of urban development and of city marketing practices that explore global and local specificities.

There are publications and programs proposed by different city departments that support this type of progressive development, such as the city's action plan *Montréal, Design of the City/City of Design*, the publication *Cahiers des bonnes pratiques en design – Imaginer, réaliser la ville du 21e siècle,* the portal *Montréal2025*

21 According to the Profil sociodémographique: Agglomération de Montreal (2010), based on the results of the 2006 Canada Sensus.

22 Developed by the New Design Cities symposium, held in Montreal in October 2004. http://ville.montreal.qc.ca/portal/page?_pageid=5497,26447577&_dad=portal&_schema=PORTAL

imagining>building[23], the *sustainable development plan*, but also of the urban planning process, that includes participatory budget, and can produce a vision in order to support positive transformations that enhance the city's identity and character and improve its environmental and social conditions. There are important investments towards organized cultural programs, festivals and activities of different kinds, and spaces of the city dedicated to them (such as the old port, Quartier International and Quartier des spectacles, Place du Festival, La cite des arts du cirque, among others). Perhaps the results of those types of investments are more direct and evident than those of the neighbourhoods, but the reality is that many lack (or need improvements in) several infrastructural components, including urban housing, transportation and health care, basic demands that do not seem to answer to the current supply, and which has not been fully addressed by governmental initiatives.

At the same time that there is a preoccupation with the city image at an administrative level, several urban intervention projects have been objects of controversy. Some have to do with investments applied to what can be considered already overdesigned spaces in areas of the city that are not necessarily relevant to its general population, nor produce significant environmental or economic improvements, mainly in the downtown area (in detriment to much needed attention to less privileged neigbourhoods with specific infrastructural requirements). With that there is a debate concerning the re-introduction of a tramway in the city, with the studies of different routes and the population it would benefit from this type of investment. Other controversial projects are for instance the re-development of the Lachine Canal and Griffintown, a run-down historical neighbourhood adjacent to downtown with high speculative real state aims, the construction of two mega-hospitals, and the reconstruction of the Turcot interchange, all of which require substantial investments and will significantly affect the neighbourhoods of those areas. On the issue of governance (and taxation), Pascoal Gomes, of the MUEC *(Montréal Urban Ecology Centre)* highlights that "cities are part of the solution, but they have very few resources and little power to realize their ambitions. The true fiscal imbalance in Canada is the disadvantage cities have in relation to other levels of government. Cities should have access to a bigger part of the tax base. Cities also need to change their methods of governance to re-establish a transparent relationship with citizens and ensure optimal use of limited public

23 http://www.montreal2025.com

resources [...] and implement a Participatory Budget that is appropriate for its context"(Gomes, 2011).

In the community sphere, there are also great accomplishments, as it is possible to recognize a growing interest and engagement by the local activists and communities throughout the city in the process of city making and urban design. From the workshops promoted by non-profit and non-governmental organizations with the collaboration with the universities, to citizen's forums that discuss this subject directly, issues that affect the configuration of the urban environment, have become more accessible to public deliberation and allowed more possibilities of participation in the development process (such as in public consultations). They also reflect for instance, in the city's Charter of Rights and Responsibilities. Institutions such as the universities that develop projects with the communities, building not only a channel for exchange but also more informed research and confident participation, to non-profit organizations such as the Montréal Urban Ecology Centre, Équiterre, Vivre en Ville, CRE-Montréal, among many others, which have tackled urban and sustainable development issues at a practical and community level, serving as bridges between the different scales and agents.

The *Ecocity World Summit 2011*, which took place in Montréal, is an example of the deliberate effort to bring into discussion the most knowledgeable and innovative ideas for sustainable urban environments and to put them into practice. The press release regarding the results of the conference summarize some of the challenges of Montréal: "Before becoming an ecocity, Montréal and its greater metropolitan area will meet many challenges: ending urban sprawl and increasing density in existing urban areas, investing more in public transportation, bike and pedestrian infrastructure, and greening, and creating more space for citizens in decision-making processes. Revising the *Act Respecting Land Use Planning and Urban Development*, currently underway at the National Assembly of Quebec, and developing a new *Metropolitan Land Use Planning and Development Plan,* an initiative taken on by the Montréal Metropolitan Community, are two excellent opportunities for ending urban sprawl and increasing the density of existing areas around efficient public transportation hubs" (Gomes,2011).

Werner Haberkorn
webluxo.com.br/noticias/morar_em_sao_paulo_1930.htm

São Paulo, downtown: Vale do Anhangabaú,1940s

São Paulo

São Paulo is located in the Southeast region of Brazil, at approximately 800 m of altitude and around 60km from the Atlantic coast. It began as settlement of a Jesuit mission in 1554 (intended to convert the indigenous *Tupi* population), a few decades after the beginning of foundation of the first coastal villages by the Portuguese colonizers (in the 1500). It wasn't until the late 1800s, when the commercialization of coffee, that the city started to have a more significant role in the economic and political scenario in Brazil. This was also a period when large numbers of European immigrants arrived in the country and in the province to work in the agriculture and later in the industry, which provided the basis for the exponential growth of the city, especially in the second half of the 20th century. São Paulo is today the largest city in Latin America, with approximately 11.2 million inhabitants, and around 20 million in its metropolitan region (according to IBGE 2010 census[24]). It is the financial centre of Brazil, where 11.8% of the country's GDP is produced (idem). These numbers derive from the explosive industrialization and growth it underwent within a few decades, which allied to a lack of political control in many aspects

24 http://www.ibge.gov.br/cidadesat/topwindow.htm.

of this development has produced inequalities and deficiencies at all levels of the urban and social systems. Like many Brazilian cities, São Paulo is marked by socio-economic contrasts that reflect in the urban space: from the quality, presence or absence of basic infrastructure and public space, to walls and gates that border the sidewalk and detach it from housing.

In terms of spatial development, there are significant geographical features 'hidden' in the city, and the different political and urbanistic decisions throughout history have transformed the natural landscape. For instance, a high concentration of tall buildings tends to hide the hills and valleys, whereas viaducts and bridges connect the city in the different planes. And while the topographic variation today is felt by the pedestrian, it is remembered as an obstacle in the discussion of issues that would 'upset' the car dynamic, such as the introduction of bicycles lanes. Other features, such as rivers and water courses, were fundamental structuring elements of the early settlement, and since then, crucial in political decisions regarding city planning and development, and in the every other aspect of the experience of the city.

Between rivers Tamanduateí and Anhangabaú, the first settlement (historic downtown) was contained until the 1700s, because of its safe position over the hills. With the need for more urbanised lots, given that the coffee elite moved to the city (also attracting a significant number immigrants), the viaduct do Chá overcame the valley to expand towards the west, and later to neighbourhoods that housed the coffee elite and their villas (semi-rural properties that were subdivided into urban lots). Some were based on planning models such as the garden city, such as "Jardins", Higienopolis (the hygiene city), Bela Vista, etc. Influenced by the gaps in the legislation that allowed the opening of private streets (and therefore more lots), the configuration of streets didn't follow strict patents or grid, at the same time that "this legislations ensured the quality and value of areas occupied by the rich, but also maximize the profit of entrepreneurs in the poorest areas"(Medrano 2006, p.14).

The perimeter of the first ring expanded once again in the end of the 20th century until it met the rivers Tietê and Pinheiros, marking the third phase of growth, with the decline of coffee and the advent of the industry. These expansions did come with the sacrifice of the rivers that were mostly rectified, and either buried or canalized. As a consequence of this type of development, flash floods have always been 'news' in the rainy summer season, not surprising

though, considering that most of the valleys that served as flood planes for their periodical overflows eventually became interesting commodities as land values increased, and that the "concrete city" (as it has been known in Brazil) fundamentally lacks drainage surface. The city grew, from 1950 to 2000 from close to 2.2 million to over 10.4 million people, and to support this exponentially fast growth, basic (and heavy) infrastructure was introduced to support industrial development, but many areas and aspects of planning were completely neglected and the poor were pushed out to the periphery into 'informal' growth areas (favelas).

This period of growth was also marked by the advent of the car industry (São Paulo's neighbouring municipalities housed several car factories). In the 1950s, the plan of Avenues by technologist and future Mayor of São Paulo, Prestes Maia, conducted planning into a direction that would not only change the principles that structured the city ever since its foundation, but become the utter planning model until the present, literally tying the city in concrete. Interestingly, in proposing the plan, Prestes Maia referred to models such as Paris, Vienna, Moscow to sell the idea of the radial system of avenues and roads, but as explained by professor Alexandre Delijaicov[25], in the documentary *Entre Rios*[26], "forgot to mention that these cities were primarily structured by the rail and waterway systems before the road system." Although using as image the cities that were structured mainly for the pedestrian and public transportation, Prestes Maia was able to sell the vision of an automobile city having the same environmental qualities of the cities that he used as models. This was the moment when the car industry was booming and modernist principles of planning took form mostly in the shape of large avenues, viaducts, overpasses and highways that 'scared' the morphology of the absolute majority of cities in the American continent[27]. What this meant for São Paulo also that the need of a car would perpetuate until these days, and that most of the investments to try to solve circulation and traffic problems would be towards expanding the road system by creating new lanes (in sacrifice of rivers, sidewalks and even entire blocks), new viaducts, new highways.

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25 School of Architecture and Urbanism, University of São Paulo.

26 Entre Rios [translated as between rives] is a documentary produced in 2009 by Caio Ferraz as his final project requirement for the undergraduate program in architecture of the University of São Paulo

27 In Brazil, the car also represented progress and modernity. Differently than in the USA, where the car was accessible to the workers who produced it, only the elite had access to it until recently, and it has always been a symbol of status.

The car culture (and all its infrastructural components) is entrenched in the way of life of Paulistanos, although it is not completely by choice: not only is public transportation essentially inefficient, expensive and uncomfortable, but the priority for the individual automobile was instituted by governmental actions as it continues to be reinforced by political decisions. The Plan of avenues has been continually re-implemented throughout the Municipal and State administrations, by the continuous enlargement of major avenues, transformation of small streets into avenues, the construction of viaducts, etc. These transformations have happen in detriment of everything else: public spaces, sidewalks, street parking, watercourses and rivers, river banks, parks, and even housing. Traffic 'eats' everything it can find in the margins of the street.

The conglomeration of disparate economic classes and the fear of violence have determined the configuration of the private space, as well as the public, a process that took form in the separation of the private property with gates and walls in São Paulo. In "City of Walls", Caldeira analyses the changes that took place in the city based on this framework. There are many ways in which segregation shaped the configuration of São Paulo: areas within the city where different social groups concentrate (with distinctive form and typologies), areas away from the city centre such as peripheries or suburbs (with different levels of accessibility to infrastructure and services depending, of course, on the social and economic status), and sometimes the overlaying of different social groups separated by technology and walls (but don't have much interaction in the public spaces). In this last form, the author identifies these spaces as "fortified enclaves"[28], which are "privatized closed and monitored spaces for residence, consumption, leisure and work […] justified by the fear of violence. These new spaces attract those who are abandoning the traditional public sphere of streets for the poor, the 'marginalized' and the homeless" (Caldeira, 2000: p. 211). In her analysis, she shows how these spatial changes and instruments are transforming public life and public space, given that "in cities fragmented by fortified enclaves it is difficult to keep the principles of accessibility and open circulation, which are amongst the most important values of modern cities. With the construction of fortified enclaves, the character of public space changes, as well as the participation of the citizens in the public life (ibidem).

28 Enclave: "an enclosed territory that is culturally distinct from the foreign territory that surrounds it" enclave. (n.d.). WordNet® 3.0. Retrieved December 10, 2008, from Dictionary.com website: http://dictionary.reference.com/browse/enclave

The type of production of space that we see in São Paulo also works for the speculative market interests dictated the growth of the city disregards public space, and although permeated by open and unused areas, the disarticulation of public space is so evident that even the basic element that connect them, the sidewalk, reflects this condition. There are some serious problems in sidewalks: they are too often too narrow, broken or unpaved, occupied by posts and other equipment, levelled for the car to go in and out the garages, inappropriate materials, etc. The lack of involvement by the administration is blamed on the legislation that states that the responsibility is of the lot owner, as it isn't actively regulated by the municipality, which results in the condition that prevents its use by the general population, let alone for children (and strollers), elderly, handicapped, etc. The basic function of moving through the city is a challenge.

The origin/destination research conducted in 2007 by Cia. Do Metropolitano (SP's Metro) shows very important figures that demonstrate the contradictions and paradigms of urban mobility and the planning decisions that shape the city space: of a total of 38.1 million daily trips in the metropolitan region, 66% are done by motorized mode (45% individual and 55% public), and 34% are exclusively non-motorized. Although accounting for about 35.9% of motorized trips, busses represent only 6% of the vehicles that circulate in the city. According to a note published on June 27, 2011[29] by the CET (Traffic Engineering Unit), during 4 peak hours, 456 thousand vehicles circulate in the city (12% of the total number of cars in a day). The unit releases on the news the daily level of congestion, which measures the length of still traffic, averaging from100km to 150km on those peak hours. These numbers show that the approximate 5% of the population moving in private vehicles cause the traffic to stop, and given that streets (and parking lots) account for 80% of public space in São Paulo, we can say that a very small portion of the population occupies significantly the city's public space. Pedestrian movement accounts for 34% of all trips in the city[30], a volume that ranks among the highest for large cities, and shows how much potential there is in investing in better pedestrian infrastructure and public space. However, taking into account that traffic represents one of the biggest and critical problems of the city, this number also exemplifies one of the main characters of the city: contrast and contradiction. Unfortunately,

29 http://g1.globo.com/sao-paulo/noticia/2011/06/sp-tem-35-de-toda-frota-de-veiculos-registrada-no-pais.html

30 All trips realized by reason of work (which accounts for 44%), education (35%), personal errands (9%), leisure (4%) health (4%) and shopping (4%). According to the origin-destination survey of 2007: Pesquisa Origem e Destino (2007).

among the reasons for high active transportation rates is the condition of inaccessibility to other means or inefficiency. The success in numbers of the system (in regards to ridership in all systems, and for the metro efficiency and cleanliness) is concomitant with the saturation of all systems[31].

Eduardo Nobre (2010), in an article about the planning priority given to the expansion of Marginal Tietê – São Paulo's third avenue ring, questions the justifications and implications of this type of model, as it has been historically and systematically replicated in the city. The first consideration is that distances seem further and density feels like over-crowdedness (in the metro system, which is more efficient and comfortable than the bus and train, during peak hours, there is an astonishing concentration of 8.7 passengers per square metre, according to CPTM in May 2009) when trying to move through the city, both in the individual car or in busses and trains. Secondly, the public investment in this type of development (which prioritizes the private car, by continuously expanding the road system while public transportation is clearly underfunded) represents a large proportion of the city's budget in public improvement. Thirdly, there is a high tradeoff to pay when expanding the road system: less public space, less green space, more traffic, pollution, less mobility.

The meanings of this model are deeply set in the urban culture of the city. If on one hand, it is technically challenging to 'change' a city such as São Paulo, on the other, the way of thinking the city would need to be transformed at a community as well as at the political level. There are different indicators, for instance, of the individual mind-set that seems to be building in the everyday use of the city that reflect on the city form: the culture of the individual car, the culture of huge walls that detach housing from the street, the culture of shopping centres as leisurely spaces (all associated with the lack of their antagonist alternatives: public transportation, 'feeling' of safety, public spaces, etc), of a city that grew without giving much thought to the idea of living spaces and of spaces for people as much as it did for space for 'development'.

31 "Metro itself is far from covering the entire urban area in the city of São Paulo and only runs within the city limits. Another company, Companhia Paulista de Trens Metropolitanos (CPTM), serves 22 of the 39 municipalities that make up the São Paulo Metropolitan Region with commuter lines, which total six lines (7, 8, 9, 10, 11 and 12), 260.8 kilometres (162.1 mi) long, serving 93 stations and carrying 2,100,000 passengers a day. Metro and CPTM are integrated through various stations. Metro and CPTM both operate as State-owned companies, and have received awards in the recent past as one of the cleanest systems in the world by ISO9001"(http://en.wikipedia.org/wiki/S%C3%A3o_Paulo_Metro)

Candido Malta Campos, urbanist who has been contributing with teaching and practice for over 45 years in São Paulo, is an advocate of reducing the number of cars by establishing a fee for cars that circulate in the city, which would be used in turn to finance the expansion of the Metro System[32] (according to him, expanding the Metro corresponds to half of the cost expanding the road system). Malta Campos has recently highlighted in an interview to the newspaper Estado de São Paulo (2011) the challenges of urbanism in São Paulo, which ends up being restricted to punctual interventions. The legislative instrument called Operações Urbanas, allied to the City's and District's Plans, according to Malta Campos, not only aim to broaden the scale of the punctual interventions, but have become a new way of governmental action in the cities, articulating State and Municipal government and the private entrepreneurs in different levels and areas of the city, seeking community support at this intermediate scale. In fact, this instrument is part of the Statute of the City, which represents a significant step towards developing a more comprehensive and long term plan that encompasses provisions such as local application of resources, continuity of the plan through different administrations, and public participation.

There is a significant volume of information and analysis produced in regards to urban development in São Paulo, including academic research, projects and competitions. The representation of the professional urbanism community has been finally gaining more voice through the articulation of organisations such as *Escola da Cidade*, *Instituto Arapyau, Instituto Ethos*, *Instituto Socioambiental, Rede Nossa São Paulo*. These institutions have produced, for instance, the document São Paulo 2022[33], a set of "ideas, guidelines, indicators and goals" for the next ten years, based on the comprehensive survey on quality of life (IRBEM) and the vision of justice, democracy, intelligence and sustainability. In fact, it is relevant to say that in these surveys over the past 3 years, the perceptions about the quality of life in São Paulo indicate that general satisfaction is 4,9 (in a scale of 1 to 10). Six in 10 citizens responded that they would move to another city if they had the chance. With over ¾ of all aspects rank below the 5,5 average, with the ones related to public transparency and participation among the lowest (3,5). (IRBEM:2011).

32 In Interview for Revista E (2006).

33 www.saopaulo2022.org.br

São Paulo is a city of diversity and contrasts that comprises an exceptionally rich culture, with beautiful places that are unique and authentic, and a very resilient, driven and creative population. The scale of problems is proportional to the scale of opportunities. Public participation in the urban planning and design process would represent a shift towards a much needed awareness and public involvement in order to build the necessary vision to address its many challenges. Given the scale of the city, the interventions at the neighbourhood level are essential in engaging the community and building knowledge of the possibilities for a considerable improvement in the environment and in quality of life.

3.2 Working with 'degraded 'conditions: opportunities for urban design

Peruzzo 2009

Montréal - Bellechasse

clfmag.com/?cat=575, feb 22 2010

São Paulo - Av. 13 de Maio

Rocardo Cardim 2009 arvoresdesp.wordpress.com

São Paulo-Maria Paula viaduct, downtown

Peruzzo 2010

Montréal - Rue St. Denis, Quartier Latin

In this section we focus on three spatial typologies in Montréal and São Paulo that represent expressive conditions of the post-industrial city: infrastructure, depurposed spaces, and small treasures (spatial "voids"). These typologies are characterized by stagnated conditions, residual/fallow spaces and degraded elements of the urban landscape, and can be addressed in a way to respond to the need for places that support public realm and to contribute to improved environmental conditions and quality of life. We highlight some spaces and interventions that correspond to the local reality and to the larger scope of the city. We decided to focus on 'degraded' conditions that can be also be articulated within a larger framework, through the idea of wholeness as an opportunity of interventions at the pedestrian scale as well as structuring public spaces at the city scale. Jon Lang's fourth category of processes of urban design serves as reference for the potential results, as plug-in urban design interventions. And although several of these conditions have interrelated characteristics, they were categorized based on the main character of intervention: *Infrastructure* (viaducts and bridges, railways and highways, water systems, etc), for instance, is often connected with *Depurposed spaces* (buildings, brownfields, industrial structures and complexes, etc).

We find that it is important to briefly address the nature of these spaces, which we named, for a lack of a better word, degraded, or fallow (or dormant), liminal, disused, leftover, etc. As they are in many senses residual of different processes of urban development, they are characterized by ruptures of the urban tissue. Cupers (2002: 1760-178) called these spaces 'margins': "the margin is the ultimate transitory position one can take (…). The margin is the place where architecture reaches the border of intentional intervention." We believe that an intervention in such spaces should address their intrinsic characteristic in order to promote authentic responses to the specific reality, enhancing the values specific to place and to its users. As Cupers points out, theses spaces have fragile qualities and in fact require "an increased sensitivity of the professionals involved in our urban environments towards the hidden possibilities that lie within the margin and its practice"(idem: 179).


douaireg 2007 flickr

Montréal - Highway throughGriffintown


Peruzzo 2009

Montréal - Dalhousie Station reabilitation


Peruzzo 2009

Montréal - Rail tracks through the old port


Marin Jr 2012 Flickr

São Paulo - Sta. Efigenia pedestrian viaduct

3.2.1 Infrastructure: viaducts and bridges, railways and highways, water systems

Infrastructure was generally constructed as single-purpose and independent elements of the urban system. Most of these large structures were built in response to industrialization and fast urbanization, in the first half of the 20th century. They are usually characterised by significant ruptures of the city tissue and, therefore, conditions of degradation and liminality, since the characteristics of the human/pedestrian scale that support functions of social interaction tend to become disconnected from the urban fabric.

We could say that the transportation is the most apparent **infrastructure** in the urban fabric. The individual car brought about a revolution in the way we moved, and shortened distances so we could go further, and this model of development that prioritizes the car over the people still dictates the configuration of many cities today. However, as the capacity to expand the network for cars in the city is reaching the limits while congestion problems continue to increase, administrations are forced to deal with the problem of transportation in a more comprehensive way. We are also arriving at the end of the life cycle of these structures, where investments will need to be systematically allocated to address the issue. There is, therefore, and opportunity to explore how these interventions can bring positive transformations to the urban fabric. Several possibilities can be contemplated: from the activation of spaces under and around viaducts and bridges, to transforming these structures into public spaces (such as pedestrian promenades and parks), or by removing them all together and reconstituting the ruptured fabric, all with a great potential to be addressed in light of the promotion public spaces as infrastructure (given their scale and diffusion through the city).

In Montréal, the presence of the transportation infrastructure is quite expressive, with highways cutting a valleys through the city (such as the Ville-Marie Expressway, which separates the Old city and the newer downtown), massive overpasses (such as the Turcot interchange, object of controversy between the population, the local and the provincial government), as well as a rail network that divides many boroughs. The city has addressed some of these issues in more central locations, such as in the old port, and there has been massive investments for the regeneration of the area.


Peruzzo 2009


Peruzzo 2009


Peruzzo 2009


Peruzzo 2009


Peruzzo 2009

Bellechase overpass and train tracks


Proposals produced by 4 groups which participated in the Atelier (2008) promoted by Ville de Montreal: INSITU-VLA-NL-KL; NIP-ACDF-MB-JL-FB; OUVRAGE-COLLECTIF, CU-ADLR-BT

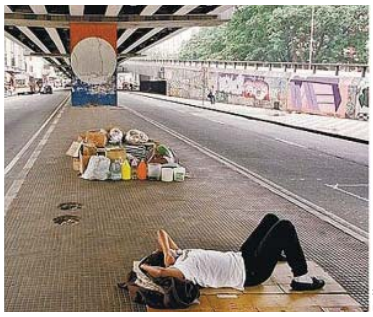

Author's proposal 2009

Proposal to build pedestrian walkway to overcome the physical ruptures (traintracks and viaduct) and redevelop the area through retrofiit of historic buildings

The **Bellechasse** overpass (over rail tracks), which is located on the border of two boroughs (near the city centre), is an exapmple of how these these types of infrastructure strengthen certain ruptures in the urban fabric, but at the same time, can be regarded as landscape infrastructure. The area is characterized by a significant process of deindustrialization, with a considerable amount of depurposed spaces and buildings., but there are beautiful views and complelling opportunities in this in-between space. There have been several projects and proposals developed for the area, given the location near downtown and served by the metro system. The city promoted a competition for ideas in 2009, where multi-disciplinary groups proposed urban design and architectural responses, which essentially embraced the industrial character of the place and addressed the ruptures created by the rail tracks, through mix development that included housing, leisure facilities and open spaces.

Folha imagem 2000

Folha imagem 2000



Folha imagem 2000

Felipe Morozini 2008 http://www.flickr.com/photos/morozini/3984669122/in/photostream/

Folha imagem 2000

Minhocão - São Paulo
Cutting through the consolidated fabric, this overpass has always been regected by the population, yet, plans to re-configure have not been put into practice, a reflex of a administration priorities over the course of history.

Entries to the competition http://arqpb.blogspot.ca/2010/05/no-caldeirao-da-insanidade.html

Proposals for the competition for ideas for Minhocao 2006

In São Paulo, there are a number of examples of how infrastructure can affect the urban environment. **Minhocão** is considered the most emblematic symbol of policies of rodoviarismo or' road-oriented' development of the city, as it makes its way through buildings in complete disregard for the existing urban tissue, and was the object of several proposals. *Minhocão*[34] (the big earthworm), as this 3.4km overpass is known in São Paulo, was built in the 1970s, and illustrates the attitude of prioritizing the car above all other considerations. It was 'designed' oblivious of the residential tissue as an east-west connection for the individual car (no busses, and the region is supplied with metro and bus corridor), in a central region. The impact in the environment, especially its immediate surroundings, is significant: lack of light and ventilation on the street below, terrible living conditions for the residents of the buildings it borders, and the degradation of the whole area in general. It has always been the object of discussion, protest, academic studies and even competition of ideas[35], promoted by the City (in 2005). In May 2010 the City announced its demolition, but still hasn't developed a project for that. The overpass is closed on Sundays for the use by the pedestrians and cyclists, and its popularity has also exposed the need for more public spaces of São Paulo's population.

34 For a documentary produced about the minhocao, refer to Sodre et all 2007

35 Ironically, the award was named "Prestes Maia", the author of the plan of Avenues for São Paulo in the 1950s.

tourisme-montreal.org

www.mikearchambault.info/canoe/results.html

Peruzzo 2009

Pedestrian affordances to access the water margins

Peruzzo 2009

Montréal- The area from the old port to Lachine canal

n8fire flickr.com/photos/louisjacob/

undermontreal.com

Inside the Montréal's former water intake conduit

water is one of the most fundamental and valuable resources in our cities. The perspective of growing urbanization will need to address the issue more comprehensivelly, involving the conservation of sources, rivers and streams, collection of rainwater, filtration and reuse, etc. Not only is water vital to urban systems, it is present throughout the fabric. Although the hydrological systems were often determinant of first settlements, during industrialization, many cities simply disconnected from this natural feature by channelizing and burring their rivers and streams, or disconnecting the public realm from their margin. Many projects of revitalizations have capitalized on both visual and physical connections with the water. In most cases, the intervention in water infrastructure will require a reconfiguration of the whole system for treatment (sewege and polution)[36]. The potentials for improving the enrivonmental qualities of an area through projects that address water bodies and water courses are significant, as we have seen in many interventions in river margins and port areas. It offers natural paths and systems of linkages, thus opportunities of an infrastructure of public spaces.

Montréal, for instance, is an island but with very little access to its margins, but it has recognized the potentials for redevelopment through some significant projects. Areas such as the Old Port and going west into the Lachine Canal

36 Please refer to undermontreal.co for further information on Montreal's water treatment system


Mello 2008


Nelson Kon 2007

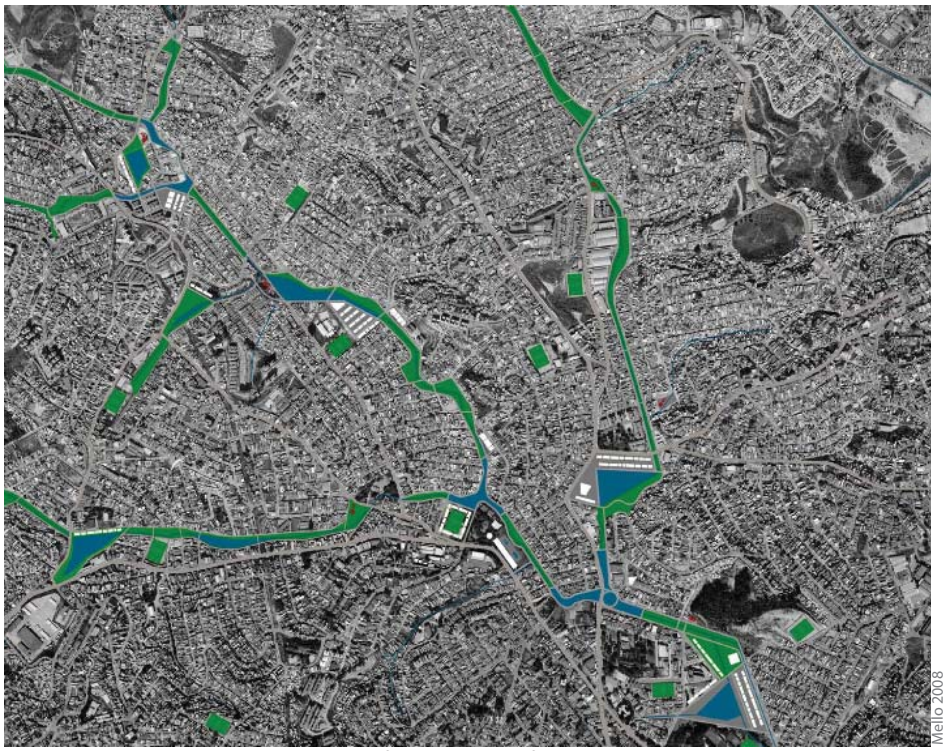

Nelson Kon 2007


Nelson Kon 2007


Lalo de Almeida 2007


Lalo de Almeida 2007

Sao Paulo - Overview of water collectors, present mostly at peripheral and poor areas, deprived of basic amenities and public spaces

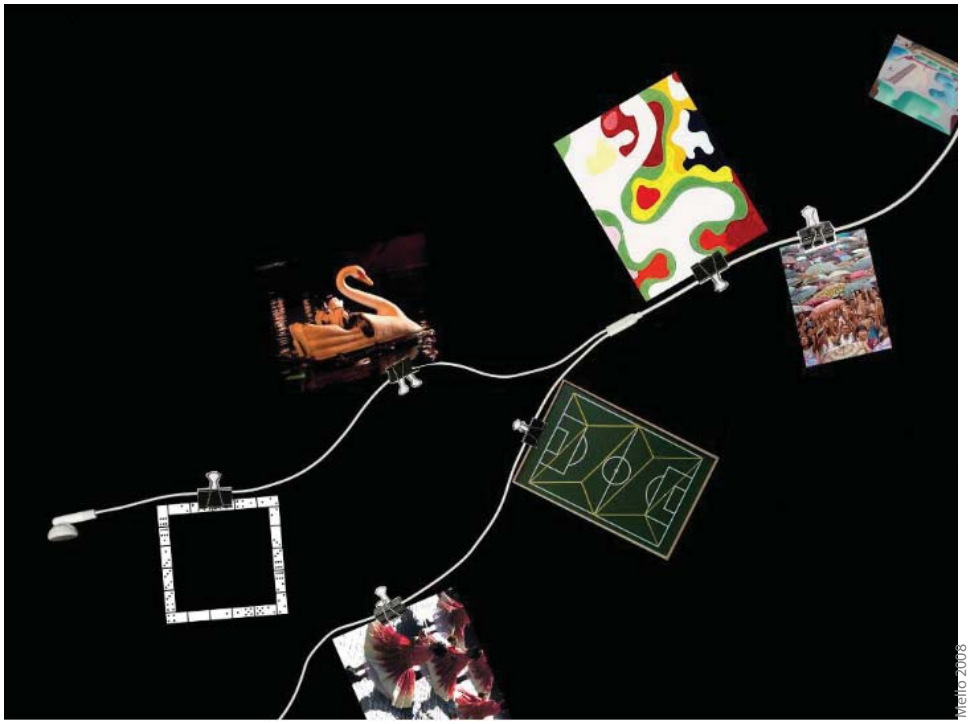

Mello 2008

Distribution of the water infrastructure throughout the territory

(which has been transformed into a linear park) have been undergoing a significant transformation and new meanings of place are being introduced. Within a different framework, the Directorate of Large Parks and Nature in the city are also developing the project to connect the Montigny Stream Basin Ecoterritory to Le parc fluvial des rapides, across the Mont-Royal.

São Paulo, which is permeated by rivers and valleys, has incredible opportunities to transform its urban environment through a more sensible response to the hydrological system. It is in fact a necessity. Areas such as Avenida do Estado, Vale do Anhangabaú, the Pinheiros and Tietê rivers, and the water collection basins are just some of the examples that permeate the city and expose the opportunities.

A very compelling project for reservoirs in São Paulo, proposed by Fernando de Mello Franco (at the Urban Age Conference in São Paulo 2008), **Water voids**, embodies the paradigm of thinking of infrastructure more comprehensively as it integrates the functions and expectations of sustainable development and public realm. São Paulo, as many other cities, has built a system of very large reservoirs intended as rainwater collectors. These "water voids" are usually located in peripheral areas of the city, where the poorest population lives. These could transform from ruptures, into and



Mello Franco's proposal for articulation of the water infrastructure with different activities and functions to support the local community

articulated system of public spaces and facilities. Not only would this simple response address the problems of flooding at regional scale at the same time that it would improve the people's quality of life at the local scale (these areas can become centralities, concentrate opportunities), but it would also represent a significant change in urbanistic attitude that often disregards the poorer populations (especially when they are located in the peripheral areas, distant from the eyes of the richer class). He proposes the reconfiguration existing reservoirs to accommodate for new uses (through landscaping, etc.) and transform the margins of the reservoirs into active public spaces, but also that the concentrated treatment system becomes more diffused through the fabric. This way, the issues related to a significant impermeabilization of the urban fabric that cannot absorb the rain water, resulting in constant flash floods, can be addressed at the location were they happen instead of literally transporting the problem throughout the city, which is not only inefficient and expensive, but requires a size that inevitably creates physical ruptures in the urban space, and consequently further marginalizing the already deprived areas.


Peruzzo 2009

Montréal - Old Silos


Peruzzo 2009

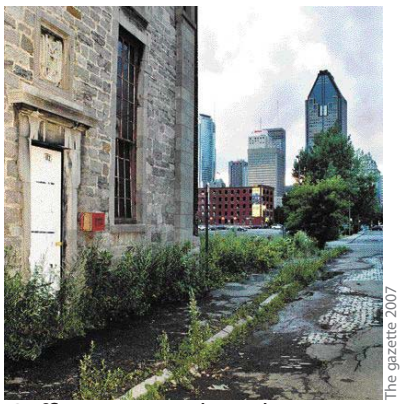
Montréal -Turning bridge in Lachine canal


Andre Jean B flickr 2011

Griffintown - remaining industrial architecture


Peruzzo 2009

Griffintown - residential


The gazette 2007

Griffintown - residential


Peruzzo 2009

Depurposed CN -Wellington station in the Lachine canal, Montréal

3.2.2 Depurposed spaces: brownfields, industrial structures and complexes

The post-industrial landscape is characterized by the presence of **depurposed** spaces and buildings, although their presence in many cities is becoming less frequent. They are usually centrally located and provided with different infrastructure (transit, water, energy, housing, etc), which enhances their land value. We could say that because infrastructural elements were usually provided after the implementation of these structures, they themselves do not promote many significant ruptures in the urban fabric, but rather structure the physical milieu as well as place identity (in opposition to the implementation of such structures today). In fact, the industrial architecture has produced aesthetically interesting (and historically significant) buildings. Many industrial areas have undergone significant transformations already. We feel that there is a great opportunity to address these spaces not only from the point of location, but from the perspective of preservation and enhancement of the identity and culture of place, through projects that support local communities (and prevent gentrification processes that characterize so many reurbanization and requalification projects).

The presence of industries in Montréal and São Paulo can still be recognized through a few remaining elements such as chimneys, warehouses, silos,


2012 domusweb.it

Griffintown- Darling Foundry: retrofit


operation patrimoine.com 2011

Hochelaga Maisonneuve - Retrofit
Residential cooperative Station N1


Peruzzo 2009

Hochelaga Maisonneuve - Presence of some active industries


Peruzzo 2009

Hochelaga Maisonneuve - Retrofit of industrial buildings into residential strengthening the existing urban fabric


Peruzzo 2009

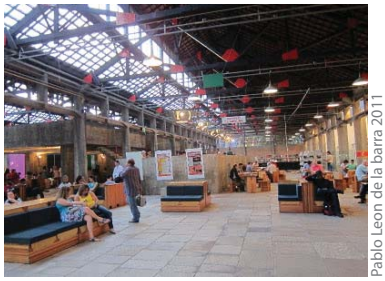
Griffintown- Darling Foundry Preservation of architectural qualities and flexible extention into the urban space

workers' housing, etc. Many are characterized by beautiful architectural characteristics, materiality and design that have historical significance and presence in space. They have a strong connection with the urban fabric and to the community, spatially (for instance through scale and materiality) and through a dimension of personal history and identity as well.

Griffintown has been the object of controversy for many years. An enclave in prime location (directly southwest of downtown), the area housed the poor Irish immigrant community in the early nineteenth century (that worked in the canal and in its industries). It has been partially re-purposed by the project of Cité du Multimedia, and the remaining spaces and structures have resisted several attempts to raise the area to make space for a new real estate development. A few industrial and residential structures still remain,and there are very compelling spatial qualities and architectural and historical heritage.

Hochelaga Maisonneuve has been undergoing considerable urban renovations. With urban design transformations allied to incentives in the housing sector (renovating, retrofitting industrial buildings and constructing new housing for families), an effective process of urban regeneration promoted by the administration in conjunction with private investors, has generated sustainable improvements for the local population. Although for a long time considered a disadvantaged community, an increased sense of place and community has been enhanced by a consistant attention given to this area.

Pablo Leon de la barra 2011



Pablo Leon de la barra 2011

Caio pimenta

SESC Pompeia

pt.wikipedia.org

Gasometro

totalspguide.com/?postID+2380

totalspguide.com/?postID+2380

Cinemateca

Pablo Leon de la barra 2011 centre for the aesthetic revolution.blogspot.ca

Attention, Children: "sesc before sesc"
photo of the factory in the 70s, before it was tranformed into SESC Pompeia

"Nobody transformed anything, we found a factory with a beautiful structure and an important original architecture... the children would run, the teenagers would play football under the rain falling from the roofs, laughing when the ball splashed on the water... We only added some small things: a bit of water, a staircase..." Lina Bo Bardi on her intervention on SESC Pompeia

In São Paulo, several post-industrial neigbourhoods have been undergoing transformations that in general raise the fabric, including significant historic buildings, to make space for real estate developments characterized by strong gentrification, a reflection of the dynamics of land speculation in urban space. The city's heritage department has worked to avoid the destruction of historical buildings and areas, and although many interventions have been quite successful, often the smaller structures tend to disappear. The downtown has received quite a bit of attention and investment from the public administration through a process that in fact did not produce gentrification. As the elite does not seem interested in those post-industrial areas, the biggest challange is to in fact to bring use to some structures that were depurposed. Preservation strategies have been able to articulate the public interest and strengthen the fabric, preventing the degradation of the neighbourhood in an emblematic example from the progressive architect Lina Bo Bardi, in1977: Sesc Pompéia (former warehouses converted into a highly successful centre for arts, leisure, culture, community at all levels). The Cinemateca (an old slaughterhouse transformed into a cinematheque) and Gasometro (an old gas company that recently became the administrative headquarters of the city's Gas company) also successful examples of retrofit which have been able to preserve architectural qualities of the industrial city.


alanah heffez 2010 spacingmontreal.ca

Griffintown corridor cultural: spacial explorations and social engagement


Sergey Tsynkevych 2011 McGill daily

Griffinton: exploring continuities through spaces and spheres


Peruzzo 2009

Hochelaga Maisonneuve : historic references in urban space


Sarah Gilbert2011 mileendings.blogspot.ca

Mile-End sidewalk gardening: environmental improvement and community engagement


averagejoecyclis.com 2011


Peruzzo 2009

Montréal - Peel basin: affordances

3.2.3 Small treasures: streets, corners, parking lots, void spaces

The way relationships and needs manifest in city living and in urban space has a direct relation to the way we use and inhabit the city and to the way we move through it. The experience of the city is significantly defined by this movement (Hajer & Reijndorp 2001; de Certeau 2001). In many ways, life in the city structures and is structured by paths and 'ways', hence the importance of spaces of transition. This movement encompasses not only the perception of the city and of sense of space, but qualities of socio-spatial configuration and of citizen and community participation in city building. Through the assessment of these types of spaces, it is also possible to address matters that belong to the private and public spheres, which are directly related to segregation and safety, for instance.

Moreover, in terms of small-scale interventions, that is great potential in expropriating spaces that do not have any social function, that are void, and re-structuring a network of small parks or public spaces, even through a temporary activation. This is an opportunity to not improve environmental qualities related to climate (mediation of heat-island effect, rain-water collection systems, etc) and to all affordances that public spaces can offer – from leisure, sports, playgrounds, community gardens, etc, and that are directly related to the small local

dipity.com arte urbana

Stairs Cardeal Arco-Verde: expressions and appropriations

Cristiano Mascaro uol.com.br/animae/fotogrts/mascaro

Sta. Efigenia viaduct: perspectives of the city and specific sence of place

Fernando moraes 2012

Vila Madalena, Beco do Batman: appropriation of public space

2011 bicicleteiros.com.br

significant discussions about the rights of the people vs. the car

SESC archives

Sesc Pompeia: windows to moments in the city

We know that in Montréal there are many affordances for the use of the street, as it is permeated by a sense of public realm. This character is reinforced by the housing structure of plexes in most neighbourhoods of the city, and there is a considerable attention paid to affordances for the pedestrians, and although this is more evident in the richer and more centrally located neighbourhoods, both the city and the civil society have been actively addressing the city landscape at the scale of the pedestrian. This sense of place is in fact fomented by and the care given to small and larger parks, projects of green alleys, temporary pedestrianizations, urban agriculture, etc. Montreal Urban Ecology Centre has been an essencial articulator of discussions, plans and explorations of possibilities to improve the quality of life in the city through sustainable practices, social engagement and urban design (take for instance the *green, active, healthy neighbourhoods*project, a catallogue of cool ideas, guides to urban greening, etc.

In São Paulo, even though the city has seen a progressive deterioration of its public space (especially since the implementation of the plan of Avenues in the 1950s), still has an inherent rich urban landscape quality. It has, however, has undergone a significant period of de-valorization of the public realm in the streets (intensified by a systematic 'cagefication' of houses), although a considerable portion of its population move by foot only (34%). Patterns of

spatial segregation and the sense of insecurity have recently been affected by the introduction of bicycle paths, through a heated discussion. The results of the survey on quality of life of 2011 (*IRBEM 2012*), which shows that the sense of security[37], both related to the fear of violence in the city – including the fear of traffic, especially related to pedestrian deaths – is very high, and has significantly deteriorated in the last year (10% for the fear of robbery and 5% for the fear of traffic). Certainly the poor conditions of sidewalks is a result of all the policies that did not promote the public sphere. Perhaps, with he introduction of the bicycle paths (which generated heated discussions in relation to the rights of the car), the pedestrian dimension migh gain a new breath in the discussion of the city by the people, and possibly to the administration. This pedestrian scale allows us to build a physical connection to these spaces and to the city, and engage.

Our experience of place is unique in many ways, determined by many variables. It is personal and anonymous at the same time that it is social and depends on our life among others; it is instantaneous at the same time that it is timeless; and it depends on everything else we have experienced. A city encompasses exponential interpretations and responses.

37 89% of respondents find the city unsafe to completely unsafe (54% and 35% respectivelly).

Conclusion

> We are living in a moment of historical transformation, characterised by the bipolar opposition between techno-economic globalization and socio-cultural identity. As in all major processes of social change, the new paradigm is characterised by new forms of time and space. (...) Confronted by this whirlwind of social and spatial transformation, the intellectual categories that constituted the foundation of planning in general, and of city planning in particular, have been made obsolete. Yet, the issues treated by city and regional planners are more important than ever, and the stocks of skills accumulated in the field, both in the profession and in the academic institutions, are absolutely precious. What is at issue is the ability of city planners, and of their teachers, to renew their thinking, their framework, and their method, while departing from the world that is left behind: a world centred on the welfare state, on rigid zoning, on the belief in models of metropolitan growth, on the predictability of social patterns, on the legitimacy of national governments, on the long term benefits of economic growth without social and environmental constraints and on the view of the world from patriarchalism as a way of life. (Manuel Castells 1998, p.26)

As places of exchange, cities are, by nature, in constant transformation. The operative forces that enable the economic and political dynamics are determinant in how the city will change, and today, these dynamics have to respond to a set of preoccupations regarding sustainable development and quality of life. They are spatially expressed in the city, socially, economically, environmentally and culturally, primarily through public space.

In this study, we wanted to examine how contemporary expectations of urban living today, beyond the primary roles of the city, relate to public space, and what are the roles of urban design in creating lively and sustainable environments. Different expressions and dimensions of urbanity (and city living) today could respond to aspirations and needs of individuals and as a society, through the consideration of issues that are essential to the articulation of a vision for a more sustainable and exciting city, and one that supports human development in all its facets. A parallel between the development of the city in all its dimensions

(including an assessment of the quality of life) and Maslow's hierarchy of needs in human developmental psychology, is very useful in understanding the potentials and needs (as well as the reality) of a city. Through this framework it is possible to identify different needs and issues that require governmental attention, from basic food and health to sheltering, infrastructure, safety, democracy and public participation, etc., and to address a complex interrelation between all these needs and how they happen in the city building process – and expose certain inequalities, as shown by Lang (in his model relating human needs and the functions of the built environment). If basic infrastructural conditions are not achieved, the primarily functional role of the city cannot evolve to support further societal aspirations. Socio-spatial justice is therefore crucial in order to establish the conditions for a sustainable urban environment that represents the aims of the 21st century society. These are all interrelated in our perception of the city and of different aspects of quality of life.

In the dynamics of change, the public administration and the private interest have reurbanized and requalified whole areas of the city, under different embedded values and meanings, and culture being one of the most powerful in our contemporary society. "The contemporary city is visible today as the capitalist accumulation of cultural signs and symbols. Every cultural meaning is becoming a commercial artifact" (Cupers 2002: 22). The danger is to fall in the consumption of the city itself, one that is unauthentic, homogenized and which does not respond to the needs and aspirations of the local community. Moreover, spaces that follow this logic promote further socio-spatial inequalities and ruptures.

Urban transformations certainly have a political and economic connotation, at the same time as they are increasingly associated to values of sociability, identity, culture and public realm. In general, interventions in urban space that are dictated by a market structure of capital accumulation tend to produce more inequalities and fragmentations. Urban spaces in general often suffer significantly from a dynamic of speculation, and the planning and design process can be benefited by instruments[1] of control as well as an inclusive process or participation. In this perspective, it is not surprising that most examples of successful strategies for participation can be found in cities with a consolidated history of democratic development, with an administration

1 In Brazil, the processes of participatory budget and the "Estatuto da cidade" are important instruments of planning that are able to effectively control speculative tendencies and produce long term and sustainable planning visions.

that takes on the role of articulator and provider of essential services and infrastructure, since the most efficient interventions usually involve political willingness to promote these changes and creative and flexible processes and proposals, including active citizen participation, enabling transformations that will bring a real benefit to the community in all scales.

From the city plan's goals and objectives to its implementation, there are different strategies that support spatial justice, with special emphasis on citizen participation in the different instances of planning and development. An important issue is to recognize the specific needs and potentials of places and to articulate strategies to foment positive transformations. An effective transformation requires an articulation of political will and administrative support. It must also relate to the local reality, through the understanding of the needs and aspirations of a community and efficient but also creative design responses. This articulation of people and interests is essential, in order to achieve more significant and democratic results for the society as one in its plurality, through different levels and instances of participation, responsibility and governance. Agency and participation have a determining effects in the process, as does the understanding of everyday use (and management) of the city. These issues are in direct relation with the ability of cities to adapt to these transformations of morphological, cultural, economic and social nature. The growing concern for social and spatial equity, quality of life and opportunities for fulfilling needs and desires at the personal and social levels, demand from the city a vision and a commitment to improvements at the human scale, and more dynamic and flexible responses.

One of our objectives was to examine the roles that urban design plan in effecting change, and we find that it has been progressively recognized not only as a tool to achieve certain functions in place-specific interventions through inclusive and flexible processes (and results), but also as an important articulator of a comprehensive vision of transformations of different urban scales, in light of the pluralistic meanings of public places today, through adaptive reuse, retrofit, etc. We wanted investigate how these issues translate into thee urban design practice, especially in regards to the post-industrial city, which offers so many opportunities for creativity and exploration of inherited and new identities through the public space dimension. Besides being capable of promoting inclusive and flexible processes with catalytic and constructive results that are place specific at the same time that they relate to the larger city

scope, urban design addresses the dimension of temporary use and agency, which enhances the character of flexibility and opportunity to foment new ideas and relationships.

We wanted to discuss the opportunities to create lively public spaces in the city by addressing lost/residual spaces of the post-industrial landscape. We chose to illustrate some of the potentials by addressing three spatial conditions in Montréal and São Paulo, through a perspective of opportunities to improve the quality of life but by respecting the intrinsic qualities of place, related to historic identity, morphological character and other social-cultural meanings. The idea of wholeness, which structures the vision of public spaces distributed and connected as landscape infrastructure through the city, is a framework through which the qualities of public space could be articulated and become a cohesive layer in the urban landscape, and the experience of the city is celebrated. It would be mostly benefited by a vision that would recognize the potentials of different scales and realities through different moments of urban transformation processes. We find that interventions in this type of framework needs an approach that multi-dimensional, flexible, and sensitive to place specific conditions, as the potentials we addressed in the cases we chose to illustrate, but requires also a systematic undertake that involves a comprehensive survey to catalogue potential spaces, but also of the development of flexible processes of engament of citizens and of development of ideas and design responses.

City making is a complex and dynamic process, which requires a balance of structure (in all regards, such as, for instance, physical infrastructure and amenities, maintenance and governance, services, as well as defined rules for spatial development, including function, use, design, participation, etc), and flexibility to allow (and foment) spontaneity, creativity, etc, in spatial appropriation (that derive and support social relations, individual and community expression and identity), and thus a richer and more authentic city. These ideas are tightly connected to the needs and aspirations of sustainable urban environments, from the social, economic, environmental, and cultural dimensions, especially from the perspective of recognizing the importance of transforming the 'lost' spaces into public places that support those dimensions. The urban experience can promote very creative responses and support human development as individuals and as a society, through a city that is accessible, resourceful, creative and exciting, diverse, sustainable and just.

In essence, urban design has an important role in building a vision that integrates environmental sustainability, socio-spatial justice with the different systems, local realities and the multiplicity of activities, functions and actors, as well as to respond to the city's and citizens' needs and desire through flexible and inclusive processes. Ultimately, the compelling argument for the visions and strategies that guide the transformations of urban space will always be dependent on the ability to build upon the needs and desires of the population, considering the complex aspects of socio-economic and morphological reality, and its ability to project the vision and aggregate new values. We wanted in our study to demonstrate that there is an array of opportunities to address conditions in a way to promote sustainable development through the articulation of public spaces for community and human development, and to improve quality of life for all.

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