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Future City Description

As of 2008, for the first time in human history, half of the world's population now live in cities. And with concerns about issues such as climate change, energy supply and environmental health receiving increasing political attention, interest in the sustainable development of our future cities has grown dramatically.

Yet despite a wealth of literature on green architecture, evidence-based design and sustainable planning, only a fraction of the current literature successfully integrates the necessary theory and practice from across the full range of relevant disciplines.

Springer's *Future City* series combines expertise from designers, and from natural and social scientists, to discuss the wide range of issues facing the architects, planners, developers and inhabitants of the world's future cities. Its aim is to encourage the integration of ecological theory into the aesthetic, social and practical realities of contemporary urban development.

Francis T. Marchese
Editor

Media Art and the Urban Environment

Engendering Public Engagement
with Urban Ecology

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Chapter 6

Mobile Maps of Chameleonic Cities: Urban Cartographies and Methodological Procedures and Experiences

Pedro Marra and Carmen Arozlegui Massera

Abstract Every day, hundreds of thousands of people circulate throughout the center of Belo Horizonte, the capital city of one of Brazil's largest states. The physical space of this city changes constantly, and it is the site of conflicts with the government and among the population. Understanding the constant process of change is essential to performing appropriate ethnographic fieldwork. However, difficulties may occur when dealing with the temporal dimension of observation, when working with passersby, and with the current technological nature of recording artifacts. Traditional academic fieldwork has had trouble capturing this chameleonic city's changing characteristics and its continuous expansion of urban images and representations. This chapter discusses the experiences related by The Urban Cartographies Research Project, a research group who dealt firsthand with such methodological difficulties. First, this research explores how temporality and spatiality are constructed in contemporary cities and tries to evidence the temporal mobility engendered by global capitalist fluxes, especially on developing countries and within the context of mega events, such as the FIFA World Cup. Next, this chapter describes and reviews the specific work of the research group, highlighting its methodological practices. Then it discusses some examples of urban interventions that focus on urban art experiences. Such experiences reveal ways of exploring and making academic findings visible, as well as inviting the city's inhabitants to take part in participatory knowledge-based construction strategies. Finally, the research discusses the group's recent experimental methodological

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procedures and outlines future actions that might allow for a better and more participatory understanding of an ever-changing and mobile city, thus allying the social sciences and various artistic practices.

Introduction

Every day, hundreds of thousands of people circulate through the center of Belo Horizonte, the capital city of the Brazilian state of Minas Gerais. The location is in a constant state of change. Daily, new buildings emerge, city traffic is reorganized, and seasonal vacations and celebration days create boosts in the circulation patterns of the people. The city center encompasses different regions, mutating according to the presence of people, trees, benches, and other urban equipment and drawing and redrawing its own invisible and symbolic borders. Multiplicity is the key to understanding modern and contemporary cities, which often are characterized as chameleonic because the most prominent feature of such cities is their constant state of change, like the skin of an animal.

This chapter discusses the fieldwork experiences of a research group who faced methodological difficulties when dealing with these changes in urban inquiry. The group, called the Urban Cartographies Research Project, has been researching citizens' everyday practices in Belo Horizonte's urban space setting since 2004 in order to determine their roles in the city space configuration. Our research produced mobile maps using sound, video, photography, and texts to register peoples' uses of the space.

Traditional academic fieldwork and artistic projects alike have trouble capturing a chameleonic city's characteristics, as well as the continuous growth of urban images and representations. The main difficulties occur when dealing with the temporal dimension of observation, the issues that emerge when working directly with passersby, and the current technological nature of recording artifacts. How can we contemplate these various changes in the appropriation of space over time? What can we do to keep from reducing our conversations with a city's citizens to "interviews with qualified informants?" How can we include both the researcher's own urban experiences and alternative recording methods which incorporate digital media such as soundscapes, image sequences, urban installations, and social networks? In an effort to answer these questions, this article discusses some of the strategies inspired by contemporary urban art interventions that were created and incorporated by the research group.

This chapter first explores how temporality and spatiality are built into contemporary cities, evidencing the temporal mobility engendered by global capitalist fluxes, especially in developing countries, as well as within the context of mega events such as the FIFA World Cup. Next, we describe and review the work of the research group of which we are a part, The Urban Cartographies Research Project (UCRP), pointing out the methodological procedures we call upon so that we can address the issues discussed in the first section. Then, we discuss certain

experiences of works of art in an effort to elicit the esthetic procedures that help us to explore and make our findings visible and invite the city's inhabitants to take part in participatory, knowledge-based construction strategies. Finally, we describe and analyze the methodological procedures with which we have recently been experimenting to try to outline future methodological procedures we may need to understand our ever-changing and mobile city, in a participatory way, thus allying the social sciences and various artistic practices.

Understanding the Temporality and Spatiality of Belo Horizonte's City Center

Belo Horizonte is the capital of Minas Gerais, Brazil's second-largest state in terms of population and third-largest state with regard to economic relevance. The city was planned and built to serve as home to the state's government at the end of the nineteenth century, and today, it has a population of approximately 2.3 million people. It is mostly a commercial and services city, although neighboring cities (which include a metropolitan area with a population of approximately 5.2 million people) serve as home to a number of industrial plants.¹ The previous capital of the state, Ouro Preto, was a colonial city with narrow and curvy streets, tucked in among mountains mined for gold in the eighteenth century. However, Belo Horizonte was planned as a European-style modern capital with wide streets full of trees and avenues crossing each other along two orthogonal planes, all encircled by an avenue designed to allow for the rapid transportation of both goods and people. As Ermínia Maricato (2000) has stated, however, this modern urban tradition offers up the city only to those few who enjoy the rights of citizenship. One hundred and sixteen years after its inauguration, Belo Horizonte has outgrown its original borders, confirming Jane Jacob's view that "it's foolishness to plan a city's appearance without knowing what kind of innate and functional order it has" (Jacobs 2000).

The Seventh of September Square² is one of the main areas of interest in the city and is an excellent example of some of these contradictions. It is estimated that every day around 10,000 people travel the city's streets and sidewalks during peak hours (2:00 pm to 3:15 pm), because it is one of the main traffic articulators for the city. At Christmas time, it is estimated that 800,000 people per day circulate through this space (see Fig. 6.1). The space also serves as host to certain bank headquarters and government buildings responsible for issuing official documents such as identification cards and passports. At the same time, various commercial and recreational activities (e.g., street trading and services as well as artistic and circus presentations) can be found in the Seventh of September Square. The Square is also

¹Most of the industrial factories in Belo Horizonte are dedicated to automobile manufacturing, food production, and mining; the city is situated on the biggest iron reservoir in the country.

²The square's name celebrates Brazilian Independence Day.



Fig. 6.1 Seventh of September Square, Belo Horizonte, Brazil

known as a place for criminals to acquire illegal guns and false documents. All of these factors together demonstrate what Milton Santos has called the hallmarks of a complex place “which generally coincide with metropolises, [where] there is a profusion of vectors: from the ones that directly represent hegemonic logics to the ones opposed to those. They are vectors of all orders, searching various objectives, sometimes external to themselves, but intertwined by a common space” (Santos 1996).

Thus, the contemporary city is the location of a vast array of disputes focused around its space, meanings, and resources and what configures it as a territory. Rogério Haesbaert conceptualizes the notion of territory as “always and concomitantly an appropriation (at a symbolic meaning) and [a] domain (at a more concrete political-economic approach) over a socially shared space” (Haesbaert and Limonad 2007). These contests over urban space are evidenced by the space’s various uses of place that introduce into it the different temporalities and spatialities. The street, from the point of view when inside a car, is different from the point of view of a pedestrian; the citizen in a hurry, on his way to his job, experiences the sidewalk differently from the one who is there painting or selling his work.

A city is also, simultaneously, the mutant presence of a series of events in which we take part as actors or audience, and that have made us live that certain urban fragment on a certain way that, when we cross it again, it reactivates that memory fragment. (Canevacci 1993)

The new technologies of information and communication, in a globalized context, speed up this changing process by making it easier to connect every city in every country to worldwide capitalist financial fluctuations. As a result:

[T]he local space started to compress in it the whole world, to offer to its inhabitants, mainly in the big city, the multiplicity of times/speeds that represent practically a synthesis of the whole diversity of rhythms on the transformations in a planetary level. (Haesbaert 2006)

And, as Doreen Massey puts it, “for there to be multiplicity, there has to be a space” (Massey 2004), which in the case of a contemporary city such as Belo Horizonte means its features are constantly changing.

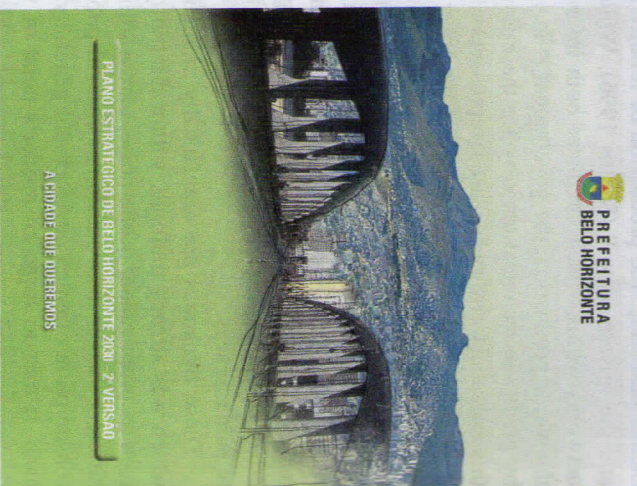
However, work is necessary in order to produce this kind of city. As Milton Santos has said, “the production of fluidity is a joint venture by the government and the private sector” (Santos 1996). While the private sector provides private networks within which circulates both information and structuring commands to the whole production, the government is in charge of providing, either directly or by grant, the technical territory for these flows. The contemporary city is part of this technical territory because it represents a field in which infrastructures are built. Therefore, it needs to be prepared by governments to receive what is necessary to accomplish those networks in order to make it a part of this whole system. In recent years, economic prosperity and the projection of mega events such as the World Cup and the Olympic Games have provoked adaptations of the city center, resignifying Belo Horizonte’s urban space under the sign of urban requalification, real estate speculation, and strategic planning. These interventions mostly include urban equipment repair, street widening, traffic reorganization, and the rebuilding of public spaces.

These dynamics are dramatically changing the city’s meanings – a process which was already multiple, within the frailty of visual, sound, and textual signs such as propaganda, traffic noise, and graffiti, among others – trying to coin two different images to two different kinds of public, since it “is an important factor in consumption-oriented development generally” (Burbank et al. 2002). On the one hand, it tries to forge an insider’s point of view, attached to invented traditions (Hobsbawm and Ranger 1997) through which the city’s inhabitants are able to express their individual identities. On the other hand, it aims to sell to foreigners a desired image that can be used to structure future investments and business opportunities in certain chosen economic areas. Mega events such as the FIFA World Cup are seen as moments:

intended to spur local economic development by attracting tourists and media recognition for the host city. Pursuing a mega-event is a risky policy, however, because it requires a substantial outlay of resources [...] and the potential benefit to the city may be largely intangible. (Burbank et al. 2002)

The front page of Belo Horizonte’s strategic planning booklet, released in 2009 and entitled “The City We Want,” is an example of this image-coining process. It shows an imagined city that connects different city sites, buildings, and natural resources that couldn’t be shot in a single picture. In the first plane, you see Ponte Tereza bridge, a construction preserved from the earliest days of the city, which is still protected today as part of the city’s heritage. Behind the bridge, the image shows the city’s skyline, shrunken by the monumentality of the bridge. In the background, there are the Curral Mountains, the main local element of the natural landscape. Lines are drawn along the image’s contour, as if the city is being redesigned. The small skyline camouflages the older buildings, and the mountains hide part of the city and part of the slums, which are rendered nearly unrecognizable. Figure 6.2 shows to foreigners what the city administrators “think” they want to see; the image hides what has been decided should not be shown: the not modern, not very tall buildings, the slums in the mountains, and the back slope, devastated by

Fig. 6.2 Cover page of the "Strategic Plan of Belo Horizonte 2030 – second version." Published by the Belo Horizonte City Hall, 2008 (Use by permission. Link: https://bhmetasresultados.pbh.gov.br/sites/all/themes/metas/pdf/planejamento_2030.pdf. Visited at 04/10/2014)



mining activity. At the same time, Belo Horizonte's urban planning for the FIFA World Cup in 2014 includes only reforms addressing the city's stadiums and airport, as well as the building of car and bus highways to connect those stadiums and airport to the city center, with no work being done to the regions of interest to its citizens. At the same time, the lack of accommodations in the city has been addressed with the construction of big hotels owned by international chains. New construction has been seen in various regions of the city, including the central area around the bohemian zone, in an attempt to disrupt and replace the low-cost prostitution currently found there with more lucrative forms of business tourism. These urban interventions mimic models conceived of and implemented during Barcelona's preparation for the Olympic Games in 1992, which was widely considered to be successful "in physically transforming the metropolitan area, including run-down inner city areas, as well as the waterfront and harbor and bolstering its economic competitiveness, particularly as a tourist and convention center" (Sharp et al. 2005). The result:

may have provided extraordinary leverage for financing public projects [...] to transform the lagging city into a metropolis prepared to face the challenge of a unified Europe [...] at the expense of a hinterland particularly ill equipped in terms of urban policies and proper amenities and on which fall, increasingly, the problems that the central city displaces rather than resolves. (Sola-Morales 1993)

In order to implement such marginalizing policies, and just before those urban interventions occurred, a series of derogatory news stories about downtown Belo



Fig. 6.3 Samples of newspaper portraying negative news about downtown Belo Horizonte (Used by permission)

Horizonte were published in the newspapers and broadcast by media, reinforcing an image of criminality, drug abuse, and prostitution already present in the city's collective imagination. This media campaign contributed to the arguments supporting urban reform (see Fig. 6.3). Sadly, in the field of academia at the beginning of the year 2000, a diagnostic study bolstering such arguments also took place. The study used a set of social science methodological procedures such as observation, surveys, and semi-structured interviews with people who lived and worked in the neighborhood to collect people's expectations and desires regarding what the region should become. Of course, these methodologies faced issues with regard to capturing movement. Therefore, most of the people who were either already downtown or who were in transit were excluded from the study. The outcome of this diagnostic research was a set of maps (Fig. 6.4) that oriented urban planning and requalification sites, but designed them to be distant from their "intervention objects" (Hissa 1998); the results were "plans far more rigid and inflexible and less responsive to changing circumstances" (McCoy 2003).

The Urban Cartographies Research Project (UCRP) questioned the value of these maps. On the one hand, the maps were a very specialized kind of text, readable only by experts and not accessible to the average city inhabitant. On the other hand, they froze the city's movement and vitality, tying some groups of people (or urban practices) usually in motion to a specific place. They also were initiated from a point of preconceived identities, so these maps did not achieve "a politic of exposing the maps of power through which the identities are constructed" (Massey 2004). An example of such rigidity is how these maps dealt with prostitution. According to the study, prostitution occurred only in one place, in some quarters of Guaicurus Street, and only at night. However, you can find different kinds of prostitution throughout the day and in several sectors of the city, including in other downtown areas. In the evening, prostitution can be found all along Afonso Pena Avenue, one of the city's most important streets. The UCRP also noted that these regions are



Fig. 6.4 Urban dynamic maps produced for the “Rehabilitation Plan of Belo Horizonte Downtown.” Published by the Belo Horizonte City Hall, 2007, pages 11 and 12 (Used by permission. Link: http://portalpbh.pbh.gov.br/pbh/ecgp/files.do?evento=download&urlArqPfc=piano_reabilitacao_hipocentro_p1.pdf. Visited at 04/10/2104)

not homogeneous in terms of the types of activities they house. There are many considerable differences among the practices surrounding this prostitution, from variations in the price rate to the types of prostitutes available (female, male, and transsexual, for instance). We also noted that, according to these maps, all homeless people do in the street is rest. Such a representation denies other activities such as informal car washing and the selling of parking tickets. The main objective of this kind of diagnostic study is usually to reinforce a derogatory image of a city in order to justify a perceived need to “clean up” the city center. The proposed reforms came as an effort to mint an alternative image of the city, a more marketable one, which would attract international investors and business and, thus, make the city more “sustainable.”

What this diagnostic study missed due to its top-down planning is the everyday practices that arise from the inhabitants’ uses of their city’s space. One example of a practice that was totally ignored by the study is the street cry. Upon first look, the street cries sound like people screaming randomly within a large flux of pedestrians. However, a more careful study (Franco and Marra 2011) found that these street cries (which are performed by individuals holding informal jobs) are intimately connected both to the fluctuations of people and the noise produced by downtown urban dynamics, thus creating a site- and time-specific event. Therefore, what can be heard in the street cry is the coining, through urban experience, of a kind of intuitive understanding of the entire capitalist strategy for organizing the city. The cries usually interact with the forces manifested by traffic jams and pedestrian fluctuations. They find a fracture in the system in order to affirm their existence in public places and defy their situation of being underemployed. By ignoring city

cries, this kind of strategic planning often fails to achieve true political recognition. As argued by Massey, “a more complete recognition of difference should recognize its contemporaneity, recognize that the ‘others’ real existence could not only be following us, but have their own histories to tell” (Massey 2004).

The Urban Cartographies Research Project

The Urban Cartographies Research Project aims to understand the city in all of its mutant manifestations and to perceive its inhabitants’ acts which often are invisible to urban planning politics. The UCRP’s objective is to help build up public spaces through the development of collaborative research projects and alternative diagnostic methodologies. It was created in 2004 in response to certain experiences with the Federal University of Minas Gerais’ Cultural Centre, which is located in a popular commercial region in downtown Belo Horizonte, next to the train station and the bohemian zone with its small, dirty bars, and low-cost prostitution. This Cultural Centre used to present visual, scenic, and musical arts shows to a middle class and comparatively rich public, but this group grew increasingly resistant due to the Centre’s “dangerous” location and lack of parking lots. In 2002, though, the Centre’s occupation proposal changed in an effort to establish a dialog with the population who regularly lived, worked, and visited the area; the shift was toward a programmed diversification in hopes of encouraging the public to appropriate the Cultural Centre. Thus, the arts began to share space with a popular Internet access space, a library containing newspapers and magazines, young people from the city’s suburbs, workers such as prostitutes, and marketers from the surrounding areas holding meetings with professional groups.

At this time, Belo Horizonte’s downtown requalification, as described above, was just beginning. Thus, the Federal University Cultural Centre began to register this transformation through two media projects, R.U.A. and Concreto Sonoro. R.U.A. (Audiovisual Urban Register) produces short videos, mixing together a documentary and a poetic approach, about a variety of themes related to the space occupation in Belo Horizonte’s center. Among these works, the video *Rele*³ synthesized some of the issues that would later be developed by the Urban Cartographies Research Project, such as the several kinds of urban space occupation enacted by its inhabitants, the methods of urban mobility, and routes throughout the city designed and used by the population, connecting several far-flung regions. At the same time, *Concreto Sonoro*⁴ (Sonic Concrete) has produced radio programs

³This video is available at: http://www.youtube.com/watch?v=O6-STW1_aqE. Last access: 4th of February, 2014.

⁴Some of these radio programs can be heard at: <http://dajameladomequarto.tumblr.com/post/3234283596/programacao-radio-le-1> and <http://dajameladomequarto.tumblr.com/post/4005368391/programacao-radio-le-2>. Last access: 4th of February, 2014.

broadcast by a radio station in Belo Horizonte. Beyond a preoccupation with the city's sonic space formation, its noises, and voices, the programs began working with soundscape techniques as a means of understanding the place's temporality, spatiality, and rhythms.

These two experiences worked together within the laboratory of the Urban Cartographies Research Project; in 2004, the UCRP systematically began grouping together an interdisciplinary team with researchers from the fields of History, Communications and Media, Computer Science, Arts, Museology, Social Sciences, Psychology, and Architecture. Beyond the preoccupations previously mentioned, the research also intended to explore and elaborate upon alternate forms of registering, capturing, and visualizing the urban fluxes that materialize on various uses of urban space through the production of space- and time-mobile maps. After a series of discussions about the researchers' and the public's imaginary construction of Belo Horizonte, an intensive fieldwork period was organized in 2005. The International Situationist procedure of "drifting" was reinterpreted to produce a cartographic drifting. During these drifts, researchers walk along predetermined routes through Belo Horizonte's downtown, in order to register anything that might attract their attention. The group observations rely heavily on photographic and video cameras to register sound recordings and record field text notes. The researchers also employ searches of public archives to gather together both old and contemporary photographs, as well as short stories and print news published in the past, in order to deal with the collective imagination of the place.

In March of 2006, the group organized an exhibition at the Federal University Cultural Centre that brought together people from the surrounding area and the research results, in order to establish a dialog regarding what was produced. The rooms were organized in an effort to create an interactive environment in which visitors could manipulate the printed pictures, read parts of the short stories and other texts, and see and listen to the audio and video material captured during the research. A new set of cartographic drifting was made in 2007; this time, the walking occurred along routes that connected two bus stops in different regions of downtown Belo Horizonte. Based on an observation made during our first set of driftings, we concluded that the downtown area was a hub for bus transfers. The city's public transportation system uses buses that cross the central region and are arranged in a way that several bus routes together connect the two distant neighborhoods. Downtown has become a very busy port at which people transfer between buses to get to another region of the city. The bus stops were reinterpreted as arrival and departure gates, and the routes we researched simulated the population's everyday walking routes.

From this point, new cartographic driftings were organized around themes such as the city's bohemian life or its material heritage, circulating among monuments and around certain buildings. This research generated several academic articles that were subsequently published in journals and books and presented at symposiums and congresses focusing on the methodology that was developed (Silva 2009; Silva et al. 2008), the material heritage of the city (Silva 2007), collaborative mapping (Silva and Franco 2009), popular service cries (Franco and Marra 2011), bars and

bohemian life (Garcia 2011), live music performances in the city (Garcia and Marra 2012), and soccer (Marra 2011), in addition to doctoral theses on the sociability that forms around newspaper and magazine stands (Fonseca 2008) and the types of visual communication that exist in the city (Gonzaga 2009). Besides these academic endeavors, the group actively participated in activist protests focusing on public space questions, urban planning, regulation of public forums, and academic extension programs leading from the city's public educational system. During 2007, Urban Cartographies research was also introduced on the city's Educational Public Network, in nine schools located in different regions throughout the city; students and teachers collaboratively mapped, diagnosed, and otherwise became more aware of their surroundings. This extension project was also used as means of introducing new technologies of communication and information into the classroom in a way that could be integrated into the school's pedagogical project.

The task of building up a database that would be able to gather and intertwine all of the pictures, videos, sounds, and texts produced by the research was a difficult one, and it turned out to be more arduous than we had originally thought. Our intent was to create a tool that would make possible the hosting of and access to the entire body of material produced and collected by the research team. This digital device would also make possible not only the uploading of new material but also the creation of a virtual ambient where memories and experiences could be shared by connecting data and targeting a broader audience in order to bring about discussions, collaborations, and interactions among the various academic fields. Some categories discussing the problems of mobility within the urban setting were constructed by the group, such as "fixed," for what could not be moved; "moving," for what could be moved by their own agency; and "movable," for what could be moved by means of the action of another being. We believed these categories to be relational enough to deal with the complexity of the problems we proposed ourselves. The task remains incomplete, though, for a number of reasons. First, we faced the subjective problem of this categorization, since it relies on the interpretation of the researcher to determine some situations (e.g., traffic cones would be classified as fixed because they are tools for organizing traffic, fixing routes, and controlling the fluctuations of vehicles, though they can be moved, making it also possible to classify them as movable). On the other hand, it was difficult to automate some descriptors and keyword criteria (e.g., how should one make a computer distinguish people from cars in a single photograph? How can one make a computer determine whether or not an object moves, either by its own power or by the action of another thing, since a photograph freezes every movement?). These were some of the problems that made the task difficult and required the manual work that was employed to construct the database.

Today, the group is currently developing a research project focusing on the four squares located in the center of Belo Horizonte. The investigation is attempting to compare the population's uses of the four places, analyzing (1) how the physical changes being made to these urban spaces relate to these processes, focusing on how people use public urban equipment and cultural heritage buildings at these locations; (2) the sociability aspects and space sharing related to these four locations, focusing

on the disputes and division experienced by various social groups, in a self-organized way, present in the place and through mobile networks; and (3) verifying how these groups dialog with or otherwise face the global capitalist fluxes that take part in the physical interventions being performed on the city's spaces.

The group also continues to create procedures geared toward making visible this mobile and mutant character of the city in both space and time. Some of these techniques involve talking to people in the squares being researched, following people in their everyday routes through the city, making more generalized observations, writing in field notebooks, and photographing and recording sounds in these squares.

Learning from Urban Art Experiences: From the People's Everyday Practices to Event Disruptions

Faced with the need for methods that might adequately capture the chameleonic features of the city and the mega events approaching, the UCRP asked how art might provide new strategies of understanding urban practices, conflicts, and negotiations. The UCRP, conscious of the drawbacks of academic fieldwork, opened themselves up to the study of contemporary urban art in the hopes of understanding alternative ways of intervening in the city.

Whether or not urban art is capable of promoting a people's emancipation is quite a controversial issue. Several case studies (Sharp et al. 2005; Tornaghi 2008) reported on how art interventions could emphasize the gentrification processes, accentuate social exclusion, and become an authoritarian imposition upon locals. Other studies have claimed that such interventions "can help develop senses of identity, develop sense of place, contribute to civic identity, address community needs, tackle social exclusion, possess educational value, and promote social change" (Hall and Robertson 2001). Urban art interventions can provide "pointers to what, in public art terms, would define an inclusive city, as one giving expression to the multiple and shifting identities of different groups, as indicative of presence rather than absence, and of avoiding the cultural domination of particular elites or interests" (Sharp et al. 2005). In any case, the main concerns emerging from such studies not only deal with the concepts of inclusion, collaboration, and the promotion of social change but also, as Tornaghi has said, "the measurement of social benefits of the arts is one of the main challenging and arguable questions which animate an endless debate between critics and advocates of public art" (Tornaghi 2008). The way a local population relates to such intervention "shifts the emphasis from outcomes toward the processes through which public art is produced and how these can foster a sense on inclusion" (Sharp et al. 2005).

The term "city art" is ambiguous and comprises a large group of practices. However, the urban art interventions this research is interested in are those which articulate everyday people's practices, modify people's urban space appropriation,

and point to participatory processes in urban space formation. In fact, the most provocative issues resulting from the conjunction of art and urban space emerge from three key features of art itself. On the one side, art deals with the concrete, material, and temporal dimensions of place. It proposes a site-specific intervention where the subject is not the mean citizen of social science's studies but an individual within his or her own intersubjectivity. Conversely, art proposes artifacts, either ephemeral or permanent interfaces that provoke modifications in the functional grid of the city; people's everyday practices are disturbed. As a third perspective, art may also evoke people's participation in the construction and experiencing of possible future worlds, as well as crystallize and highlight unequal social relations in order to make people aware of them.⁵ Public art can be conceptualized as "different art manifestations – sculptures, video, music, and performances – that are located outside the conventional arts sites, such as museums and galleries, in public spaces" (Tornaghi 2008). Chiara Tornaghi (2008) points out that this public nature of public art is usually conceived in one of five ways: (1) as publicly visibility, in which the work is placed in key or strategic urban spaces; (2) as art installations in colonized public spaces, pointing to a gentrification process; (3) as critical pieces of art supporting discussions within the public sphere; (4) as process-oriented works, in order to explore the city inhabitant's participatory agency; and (5) as objects connected to places and populations in areas targeted by regeneration programs, in order to show local community roles in place making within these intervention actions.

The street cries, mentioned earlier, negotiate their sounds within the overall body of city noise. Such types of dialog permeate all urban events, from the everyday passing by of pedestrians to eventual political demonstrations. Sometimes integration becomes confrontational; sometimes it occupies the interstices of the city's rhythms. Thought of as a continuum, the word "event" contains different grades of determinacy. In the case of the street cries, the event is closer to the "the fortuitous, the accidental, transience, and unpredictability" (Doane 2002). This aspect of the event as contingent is connected to life, the concrete, and valueless practices. Perhaps this aspect is the one that relates best to Lefebvre's "lived space" (Lefebvre 1991) since it relates to our everyday lives, activities that actualize space and do not signify. Everyday practices such as the street cry are events not predicted as possibilities but rather events that simply happen. The social sciences approach to city planning ignores such nuances of time and space and the specificity of the events that occur as everyday practices for the citizens of Belo Horizonte. Different kinds of temporality occur within the urban space. For example, the sidewalk, which was intended to allow for a free circulation of people, actually features certain individuals who stand and offer products and thus invite passing pedestrians also to stop. This stopping slows down traffic; it works at the margins

⁵ Such features – the site-specific, the disruption of the social grid, and the value of participation – all have a performative lure that approximates such practices with the drift procedure so extensively used by the research group.

of the general capitalist logic and confabulates against the mainstream imagery of consumerism. This situation presents a different scheme for understanding urban temporality as an intervention into a manifest creativity and of people finding gaps and taking advantage in order to introduce into the city different and singular rhythms connected to the inhabitants' respective subjectivities. This kind of event may confront the logic of capitalism, as Milton Santos states:

The strength belongs to the slow ones and to those who do not hold the speed [...]. Who, in the city, has mobility – and can travel through it, or scan it – ends up seeing too little of the city and of the world. Their communion with images, frequently pre-fabricated, is their pedition. Their comfort, which they do not want to lose, comes, exactly, from their familiarity with those images. The “slow” men, for whom such images are a mirage, cannot, for a long time, be in phase with this perverse imagery, so they discover confabulations. (Santos 1996)

But those creative powers usually attributed to the poor are also the subject of appropriation by the capital, as Hardt and Negri remember, since “the poor [are] defined not by lack but possibility (...) [they] are completely within the global rhythms of biopolitical production” (Hardt and Negri 2009). They can renew the capitalist strategy of colonizing the city, as some city cries also show. Some cries are autonomous, but others – usually the ones announcing services and products related to telecommunications and dentists' offices – work within an underemployment scheme, structured by private business and agencies who make the work viable, bringing the participants drinks and lunch during their break time. The techniques developed by street cries have also been adopted by large stores located in other regions of the city center (e.g., in clothing shops at Paraná Avenue) where announcers emulate radio ads in order to invite people waiting at bus stops to enter the stores and buy. The challenge remains how to “find ways to translate the productivity and possibility of the poor into power” (Hardt and Negri 2009).

Urban art experiences deal with place, but, contrary to the quotidian actions of local people, the events constitute situations that interrupt everyday practices. Artistic approaches find and expose fractures in the way capital defines the city space. They seldom take the form of big panels, strange objects, or performances; sometimes they are mediated by technological means that try to disrupt everyday life in order to show the city's problems and point out possible worlds yet to come. However, art interventions also try to “eschew monumentalism as it was expressed in the nineteenth century with its thinly disguised appeal to elite interests” (Sharp et al. 2005) in what may reinforce power relations. The disruption of everyday life ranges from events that incorporate citizens' tactics, to those who question them or create new space fruitions. Urban art proposes a movement toward structure and the making of meaning.

Considering works that affect the soundscape of the city, the work *Evoke* by Usman Haque (2007)⁶ exemplifies one of those strategies. In this event, colors

and morphing shapes are projected onto a gothic British church in response to the sounds produced by the interactions of passersby. People scream, clap their hands, or sing into a microphone connected to a computer that captures the sounds, interprets them, and creates psychedelic images that are then projected onto the church's facade. This work of art creates an event that lures people into coming to a familiar place and seeing it differently. It challenges the definitive monumentalism of a socially significant building. Although *Evoke* has been produced in other places and therefore is not purely site-specific, it causes a memorable urban experience for passersby. The Gothic church, a significant and symbolic landmark in the city, becomes a screen of interactive painting, a strange spectacle of forms and colors. The proposed interaction, however, narrows down the possibilities for appropriation of the event into everyday practices. Haque's work evokes one very specific way of relating to the projected surface: the production of loud sounds such as screaming, singing or clapping hands. As a result, the eye candy produced by this interaction has the power to make people re-signify this place, but in a narrow way, since the possibilities for interaction are few and somewhat predetermined, lacking the power of facing the various local forces implicated in that public space. Moreover, the event invades the place, ignoring and expelling quotidian non-planned uses of the site. Of course, these are risks artworks usually face. The effect an art intervention has on public space should be evaluated on a case-by-case basis in order to understand what impact it might have on dealing with its discussion and conformation. Certainly, such work refers to the most used sense of the word “event,” connoting “a high degree of constructedness, as in the notions of a media event or social event” (Doane 2002). It leads to identifying a structure that makes an event meaningful, transcendent, a representation of totality. Such events could relate to everyday life activities, but they are made significant through a narrative. In *Evoke*, such narrative emerges from the memorable experiences imprinted on the passersby. Most importantly for our discussion here, such events interrupt the quotidian and do not articulate any aspect of the citizen's daily appropriation of urban space and could even create another kind of monumentalism, one that proposes as art the task and obligation of solving conflicts that belong to the capitalist production of place.

Another kind of artistic intervention that we find relates closer to our proposal is *Post Urbano* by the Argentine group WokiToki.⁷ As stated by the creators, this intervention proposes a web platform that would allow for “urban signposting,” creating an environment of collaboration between the dwellers and users of the city. Reedited in the city of Rosario, Argentina, a website visitor can create his or her own sign, marking the place on a satellite photo of the city and thus telling a story about an experience with the place. Later, the web posts are transcribed into posters and placed in the actual urban space, photographed, and then added to the initial web post. The experience of the territory, densely populated by stories and other significant moments from the lives of the individuals who visited there,

⁶Information on this work may be found at: <http://www.haque.co.uk/evoke.php>. Last visited on the 14th of February 2014.

⁷Information on this work may be found at: <http://post.wokitoki.org/>. Last visited on the 14th of February 2014.

gets entangled with the web of "information flow." Their proposal "investigates the circulation, the value of information reconsidering notions of identity, territory, border and city."⁸

Synthesizing several experiences of geo-referencing using the API of Google Maps and other mobile technologies, the site allows for tagging various affections for stories about and impressions of the city. Different from sites that focus on building exclusively digital platforms for collaboration,⁹ the project proposes a direct intervention into the city, creating a connection between the digital nowhere land of the Internet and the genuine experiencing of the city. The printed posters of 100 × 70 cm allow for a simple assemblage and therefore are easy to adapt to different spaces. Instead of mimicking the advertising strategy of poster repetition, the posters/signs place a particular narrative into a concrete territory. The project proposes that the user go to the specific places shown on the map and find the posters telling these everyday intimate stories (e.g., one such sign reads "this is the house in which I was born" and bears the author's signature). This kind of work inscribes into the city the subjective experiences of the common citizens who are able, then, to reclaim the immaterial possession of the place, thus creating affective urban territories. More than a question of offering visibility to less powerful people's points of view, *Post Urbano* invites people to experience, visit, and live in the whole city by encouraging them to search the places in the city where the posts are registered or insert into the city their own experiences with it. The result is the establishment of a discussion regarding the conflicts inherent in the meaning of place, because the posts can be erased or contested by other posters. WokiToki's proposal brings about the potentialities embedded in the evidencing of the dynamics of constitution of places and territories; it also serves as a way of taking part in the building of space.

Latest Work

Inspired by and evolving from these art experiences, the UCRP has developed experimental procedures to capture the dynamics of Belo Horizonte's city center. The focus of these procedures is to evidence the city's aspects of mobility.

The first procedure, named "audiovisual postcards," was produced through panoramic photographs of certain spaces and audio recordings made during this photographic registration. Focusing the procedure on transitional spaces – semipub-

⁸Information on this work may be found at: <http://post.wokioki.org/>. Last visited on the 14th of February 2014. Cited translated by the author: "La propuesta indaga sobre la circulación, el valor de la información reconsiderando las nociones de identidad, territorio, frontera y ciudad."

⁹Several projects focus on the potential of web map applications for developing people's collaborations in the territory. Developed by the UNISINOS <http://portocalegre.cc/>, the main objective is to create "a space for citizen collaboration, where you can meet, discuss, inspire, and transform the city itself."

lic becomes hosting bars and other kinds of commerce and services – these posters show both an internal and a street ambience. These transitional spaces, in their architectural design, articulate the tensions among private and public spaces. The audiovisual postcards turn these tensions visible by showing both internal and external aspects of place. Cars can be heard and seen at the same time, as can people crossing the street, people talking, music being played, etc. Serial postcards, taken at different hours of the day, show the various different uses of the space by different groups of people. For example, in Fig. 6.5 the postcard shows a balcony in the late afternoon when the space is occupied by people who are fresh from work and looking to spend some time drinking beer as they wait for the traffic to abate. The same place, later in the evening, becomes a funk party where people come to dance and flirt.

Another procedure, called "10 × 10x1," consists of a 10 min recording of a public space's soundscape, coupled with one photograph taken every minute. These photographs and sounds are then edited into a 10 min short film, with every photograph shown for one complete minute. Such a procedure shows the changes in a place over a short span of time. Figure 6.6 shows a "10 × 1" taken in the Seventh of September Square, at one of the sidewalks often used for political and activist protests. On this particular Friday, at about 6 pm, there was a student protest against the arrests of certain young people during the Independence Day Parade the week before. The audio track communicates the sounds of the protest, while the images show that the demonstration didn't disturb pedestrian movement in the square. One of the main arguments against political and popular manifestations in the city center is that they cause traffic jams from which emerges "all this desire of suppressing every obstacle to free circulation on goods, information, and money, in order to guarantee free competition and assure market leadership, becoming a global market" (Santos 1996). Of course, a big demonstration from out of nowhere bursts into the streets can make the traffic worse or even paralyze the city. However, they are not the cause of traffic jams, since mobility in the city is already difficult due to the large number of cars in the streets and the poor public transportation system. This record, then, could be used to show detractors that this argument against demonstrations is not necessarily valid.

This particular 10 min recording also shows what kind of people this type of event attracts or repulses. Surrounding the square are the headquarters of several financial institutions, such as banks and credit funds. The pictures were taken at a time when the individuals who worked at these institutions were scheduled to leave work. However, you can't see anyone wearing a suit in any of the pictures. They may have taken other routes so as not to cross the youth demonstration. On the other hand, later in the audio track, one can hear two people talking about one of the young men who was arrested and had not yet been released. Again, the repetition of these registers during other hours of the day serves to capture different situations. Groups, urban equipment, and people's practices all tend to attract certain people while repelling others, according to the particular social group's preferences, experiences, and affections.



Fig. 6.5 A balcony facing the Seventh of September Square (To see the video, go to: <http://vimeo.com/76094751>. Produced by Maíra Oliveira and Pedro Marra)



Fig. 6.6 Image showing a frame of the video produced through the “ 10×1 method” (To see the video, go to: <http://vimeo.com/76092900>. Produced by Maíra Oliveira and Pedro Marra)

These kinds of methodological procedures can help witnesses to grasp such mobility in both space and time. The citizens of our cities possess forces that, although not so strong as capitalist fluctuations and mega event interests, are potent powers in urban space dynamics.

One of the drawbacks the UCRP observed with their initial cartographic drifts was the immense quantity and diversity of data collected. The visualization of the data, the recording of the researchers' interpretations, and the broadcasting of the results all were performed insufficiently. Therefore, the challenge we face today is to create different ways of organizing the material, tagging the data, and exposing the results to a wider public. We plan to explore such drawbacks promoting events in which the material produced by these methodologies is projected and shown to people in the squares being researched. Such events aim to verify the passersby's self-consciousness of the city's changes and to discuss the group's results with the city's inhabitants, finding out what these processes mean to them and also connecting them to a shared urban experience. We want to explore the possibility of projecting these images and playing the sounds in the city, using its buildings and streets to make pedestrians stop, so we can initiate conversations with them about these materials and about the place and their urban experience. By using a disruptive approach, the group intends to grasp the city's attention in a way that allows them to feel free to expose their thoughts and feelings to the researchers, without caring about what we want to hear; the goal is to have the city's inhabitants focus on what they have to say, in the informal conversations so common in everyday life. By doing so, we expect to reach these people not as mere qualified informers in an interview but as participants in the processes of urban building and rebuilding.

Planned for the future is another approach to data gathering, inspired by the experience made by Tia DeNora in her study of the impact of music on consumption behaviors in stores in the United Kingdom (DeNora 2004). She proposed "consumer shadowing expeditions" in which she "shadowed a volunteer shopper such that both shopper and shadower wore clip-on microphones: the shopper was asked simply to 'think out loud' and the shadower commented on the volunteer's activities" (DeNora 2004). We thought of following pedestrians, trying to observe their actions and the ways they walked through the streets: where they walked more quickly or more slowly, where they stopped, etc. We also hope to invite them to comment on their own actions, the way DeNora did, giving them recorders and asking them to think out loud about what they are doing, seeing, hearing, about the places they pass, etc. Besides allowing access to people's thoughts and experiences about the city, the experiment represents another way of inviting Belo Horizonte's citizens to take part in both the city's symbolic construction and the UCRP's findings. Also, these recorded thoughts can later be edited in order to evidence the diverse affections and meanings provoked by the city. The results of such an experiment could generate a locus of interaction between the social sciences and the arts, since data collected from an ethnographic methodological procedure could be used as raw material for sound artistic work.

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Chapter 7 Electric Signs

Alice Arnold

Abstract *Electric Signs* is a documentary film about signs, screens, and the urban environment. The film takes us on a journey through a variety of urban landscapes, examining public spaces and making connections between light, perception, and the culture of attractions in today's consumer society. This chapter summarizes the research that underlies the film and extends the discussion of several key ideas. The film and this chapter are divided into six sections: New Sign Systems (the introduction, discusses the role that outdoor advertising plays in shaping public space and public expression in urban environments), Manufacturing Consent (the section looks primarily at Hong Kong and describes how networked LED displays are transforming public spaces in cities by creating a sophisticated level of mediated experiences; it makes connections between real estate developments, marketing strategies and technologies, consumerism, and public space), Sign Wars (this section looks at the political fight in Los Angeles between the outdoor advertising industry, politicians, and community activists who oppose more outdoor commercial signage; it also explores ideas about visual culture and the urban environment), Pale Daylight (a history section that connects the industrialization of light, outdoor advertising, and sign spectacles), Media City (this section looks at the merging of the built environment and the media sphere; global cities; the etymology of the word screen; the connections between screens, surveillance, and data collection; and sustainability issues), and Urban Lightscapes (the conclusion, the importance of public space and people's ability to shape urban environments).

Introduction

New screen-based sign systems are putting TV-style advertising into the public domain in cities around the globe. These electronic signs, along with the innovative tall buildings they are integrated into, are reshaping urban environments and redefining areas of public space by intensifying the commercialization of the public sphere. In addition to the explosion of screens in public spaces, screens

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