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Madrid, 2007.**Abstract:**

This article presents some partial discussions of the research "Image and representation: maps from urban daily life", which deals with the city as a space of experience, enabling critical and poetic reflections to architects and urban planners. In the contemporary metropolis, spaces formed by flows of images, people and information live side by side with places connected to the history, permanence, imaginary and limits. Recognizing its visuality, its conflicts and tensions can lead to sensitive ways of urban interventions. Considering the complexity of the stimuli generated by these environments, as well as the new information and communication technologies, this research aims to discuss the image and the poetics of great metropolis. We are studying the existence of conceptual matrices in the contemporary city in order to unravel the implicit diagrams in its structure. This proposition is based on the Situationists writings about "drift" (*derivè*) and "psychogeography", and on Deleuze's [1] diagram concepts. This first moment involves breaking with the automated look, according to the urban drift procedures - "a technique of the transient passage through varied ambiances" [2]. The possibilities of urban image mapping are investigated from the grouping of photographic images (people, cars, architecture, places, paths, memories, colours, graphisms). The images are deconstructed and reconstructed in order to clarify, at each time, the generative principles as: simultaneousness, superimposition, excess, mobility, permanence. Joan Fontcuberta's [3] work is the reference used for the photograph map construction. These studies took place at Madrid, Spain.



Image created from 900 photographs, using a free software and an image captured by satellite (Google Maps, district of Madrid).  
Map of the routes traversed.

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## Poetics of Generative Cartography

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### Abstract

Contemporary metropolis challenges us to frequent exercises of reflection, discussion and criticism. Spaces formed by flows of images, people and information live side by side with places connected to the history, permanence, imaginary and limits. Considering the complex stimuli generated by these environments as well as the new information and communication technologies the research "*Image and representation: maps from urban daily life*" aims to discuss the image and the poetics of great metropolis. We believe that recognizing its visuality, its conflicts and tensions can lead to sensitive ways of urban interventions. This paper presents some partial discussions of this research. We are studying the existence of conceptual matrices in the contemporary city in order to unravel the implicit diagrams in its structure. This proposition is based on the Situationists writings about "drift" and "psychogeography" and on Deleuze's diagram concepts. This first moment involves breaking with the automated look, according to the urban drift procedures – "a technique of the transient passage through varied ambiances". The possibilities of urban image mapping are investigated from the grouping of photographic images (people, cars, architecture, places, paths, memories, colours, graphisms). The images are deconstructed and reconstructed in order to clarify, at each time, the generative principles as: simultaneousness, superimposition, excess, mobility, permanence. Joan Fontcuberta's work is the reference used for the photograph map construction.

### 1. Reading the City

Lynch was one of the first authors to approach the image of the city, introducing the idea of "imageability" and "legibility". He investigated the mental image of American cities from the point of view of its inhabitants, and discussed the importance of perception of physical elements to construct the legibility, that is, the ease with which the parts of urban environment can be recognized and organized into a coherent structure [1]. His study emphasizes formal and visual aspects of the built environment, expressed in concepts of visibility and imageability, that superimpose to legibility. He presents the following elements of urban image as a fruit of overlapping descriptions and images (mental maps) of many individuals: paths, edges, districts, nodes, and landmarks. Further, he notes the change of images constructed by people according to the place and the urban elements. Lynch believes it is possible to create clear and harmonics urban images – a highly imaginable city (apparent,

visible or readable) with an aesthetic domain that simplifies the environment. He also understands the city as a continuity, with numerous distinct but identifiable parts, where the user could easily orient and move himself.

Amos Rapoport [2] considers mental images as specific arrangements that go beyond consciousness, synthesizing abstract or concrete information. They are mental representations of parts of the reality, known through direct or indirect experience, and group environmental characteristics organized according to certain rules. Thus, this image includes the idea of structure or schemas and incorporates a certain type of ideal and functioning of the world. He defines the components of the image as: 1) ideals and preferences, affective ordering of values; 2) knowledge of reality and ordering of its elements; 3) similarity and grouping in terms of structure, properties and components.

With a broader approach, Rapoport makes some criticisms about Lynch's understanding of image saying that his studies are not reflected in the design process of the built environment. Besides eliminating the "meaning" in the image studies, Rapoport points the super valuing of "legibility" in relation to "complexity" of the image. The perception of social and physical aspects of a city converts it into informational flow. Between deprivation and super stimulation there are desired levels of information. These are the components of environmental complexity. The perception through the senses enriches experience. The memory is always a reflection of the perception richness. The cognition purpose is to clarify the means and simplify them, by focusing on some limited parts.

The city is rich of stimuli and the perceptive experiences are desirable. People desire to know the means cognitively, but also perceive its sensorial richness. The complexity is constituted by the game between the cognitive and its overcome. Then, there is no contradiction between legibility and complexity in the urban environment. They not only are not exclusive but complementary: one depends on the cognition and the other depends on the perception. Where there is excess of clarity, there is not any interest; the complexity is in the small scale of clarity. The perception partially depends on the orientation in space and time. Even if people desire guidance capacity, they also want the complexity and richness. An urban place is not considered attractive if it does not offer possibilities of new information and certain hazards of disorientation (thus avoiding full adaptation, homeostasis and total subliminal perception). Therefore, the complexity not only relates the cognition to perception but suggests levels and "steps for change", i.e. challenges that avoid changes [3].

Contemporary studies in the anthropology field introduce new paths for understanding the image of the "supermodern" city. Marc Augé explores the concept of "non-place" – public spaces of rapid movement as airports, bus stations, subway stations, means of transport, or also hotel chains and supermarkets. Diametrically opposed to the idea of identity place, readable, relational and historic, non-places are ephemeral, provisional, crossing spaces. However, he clarifies that the place and the non-place have transitory polarities: the first is never completely erased and the second is never fully performed – like palimpsests in which re-register without ceasing the scrambled game of identity and relationship. [4]

In "*The Polyphonic City*", Massimo Canevacci [5] makes an essay about his personal experience in São Paulo city, Brazil, enabling new forms of complex societies interpretation. Featuring São Paulo as "patchwork city", he presents a methodology of "give voice to many voices", trying a polyphonic approach to the mult-vocal city. For him, there is no possibility to represent São Paulo objectively. The city shows itself in different facets, that allows one, at any time, a new survey of concepts. To capture the local reality he uses the "drift", characterized as "abandonment to the emotions flow" and defends the attentive look for the signs interpretation.

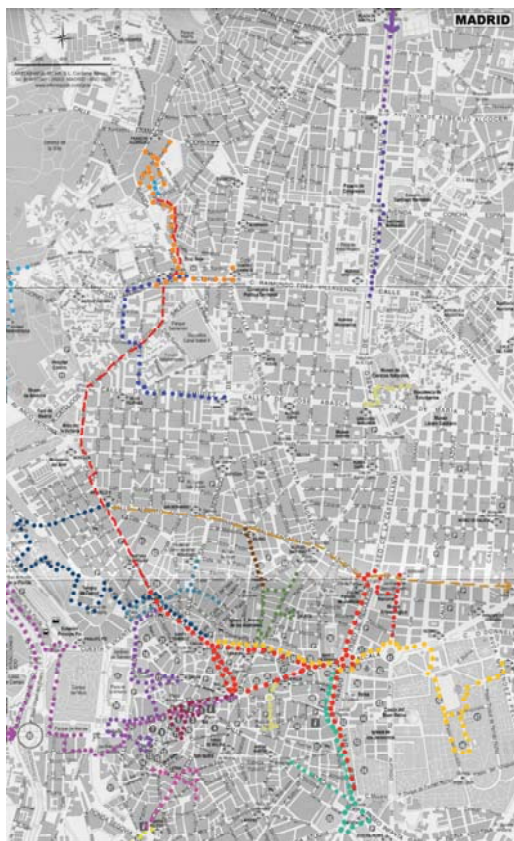
## 2. Poetics of Drift

The drift (*dérive*) – "*a technique of the transient passage through varied ambiances*" [6], created by the Situationists – is characterized by a kind of experimental behavior connected with the urban society condition. The walking aimlessly, the chance, conduct to everyday re-interpretations, to the automated look breakup, leads to an appropriation of urban space by pedestrian. "*The dérive entails playful-constructive behavior and an awareness of psycho-geography effects (...)*" [7,8]. The psycho-geography studied the urban environment, especially the public spaces, through the "drift" and tried to make the map of various affective behaviors on this basic action of walking in the city [9]. The Situationist thought continues current by the critical strength of their ideas, by the announcement of the spectacle-city, the media-city, "whose control of flows is increasingly determined by electronic networks and the urban territory turns into pure virtuality" [10]

### 2.1 Walking through Madrid

The city was speculated by walking, by drift. Attention and observation were used as opportunities to discover and associate ideas by an unforeseen way. The photograph was the medium used to register this experience. Starting the knowledge of the city by its Centre was a natural impulse (as any visitor). On the other hand, it was necessary to overcome the initial moment of "traveller" in order to achieve the concentration needed for the research work and critical reading.

There was no concern with historic journeys initially, the city was revealing itself naturally. In the exploratory phase, the routes were often fragmented, disconnected. Using the subway, it was common to leave a place and get out on another without knowing the transition between the points. Not all places were photographed. This was a preliminary recognition and had a certain fear. I had a rough idea of the areas that I wished to go: the Centre, the North-South axis of *La Castellana* (crossing several neighborhoods), East and West boundaries. I noted the complexity of the proposed study, once Madrid had extensive approaches possibilities. This phase lasted three weeks. The next step was the preliminary analysis of the first records in order to select the most interesting cases. The first impressions were more sensorial: materials, shapes, colors, textures, rhythms, sensations of amplitude and stricture, monumentality, commanded, many



Descrição dos Percursos

- **Percorso 1.** 02/01: manhã, sem documentação, à pé e de carro. Proximidades da residência: Calle de la Ribera, Calle de Naranjos, Calle Alpendre Rodriguez, Calle de Francisco Rodriguez, Calle de la Duración, Av Del Doctor Federico Rubio y Galí, Av de Pablo Iglesias, Av de la Reina Victoria.
- **Percorso 2.** 02 a 05/01: manhã, tarde em noite. Centro da cidade: Gran Via, Plaza de España, Plaza Callao, Plaza Puerta del Sol, Calle Preciados, Calle Alcalá, Plaza de Cibeles, Paseo del Prado, Paseo Realitico, Plaza Colón, Calle Serrano.
- **Percorso 3.** 06/01: Gran Via, Calle Alcalá, Puerta de Alcalá, Parque del Retiro, Av Menéndez.
- **Percorso 4.** 08/01: manhã. Sem documentação: Puerta de Toledo, Ronda de Toledo
- **Percorso 5.** 10/01: Paseo del Prado / Estación Atocha / Plaza del Emperador Carlos V / Calle de Atocha / Calle del Doctor Drumen / Calle de Santa Isabel / Centro de Arte Reina Sofía.
- **Percorso 6.** 12/11: manhã e Tarde neve em Madrid. Entorno de / de La Ribera, Cidade Universitaria.
- **Percorso 7.** 14/01: Av de la Reina Victoria, / Calle del General Rodrigo, / Julián Romea, Paseo de San Francisco, / de Guzmán el Bueno, Av de Filipinas, / Cas Bernmudez / Tietros del Canal. 2a parte Barrio del Pilar, / de Ginm de Irma / Calle 30 (M30) / Av de la Ilustración, Paseo de la Vaguada, Teatro de Madrid.
- **Percorso 8.** 16/01, 11:00 a 17:00h: trajeto a pé: Estación Chamartin, Calle del Padre Francisco Pullau, Cuatro Torres Buenas Area (CTBA), Paseo de la Castellana, Plaza Catilla, Edificio Realia / Caja Madrid / BNE / Plaza de Cuaco (metro) / Gran Via, Plaza de España, Calle de Ferraz, Calle de Bailén, Plaza de Oriente, Teatro Real, Calle de Lepanto, Calle de Vergara, Plaza de Isabel II, Plaza de Rumiñel, Calle de San Nicolás, Calle Mayor, Catedral de la Almudena, Muralla Islámica de Madrid, Cuesta de La Vega, Cuesta de Rarcon, Jardines Del Emir Mohamed I, Calle de Segovia, Costanilla de San Andrés, Calle Del Alamillo, Calle de Alfonso VI, Calle de la Morenia, Plaza de Alamillo, Calle de Segovia, Ronda Segovia, Catedral de la Almudena, Calle Bailén, Palacio Real.
- **Percorso 9.** 18/01, 11:00 a 17:00h, trajeto a pé: Puerta de Toledo, Calle de Toledo, La Latina, Plaza de la Cebada, Calle San Millán, Plaza Casorro, Calle Ribera de Curtidores, Calle Ruda, Plaza Puerta de Moros, Plaza San Andrés, Costanilla de San Andrés.
- **Percorso 10.** 21/01: Plaza Puerta del Sol, Calle Mayor, Calle Cava de San Miguel, Calle del Sacramento, Plaza Mayor, Mercado.
- **Percorso 11.** 06/02: (ônibus) Calle Alberto Aguilera, Calle de Ghova, Calle de Goya, Calle Alcalá, (a pé) Plaza de Manuel Serrera, Plaza de Torres / (metro) Calle de O'Donnell / Torrespaña
- **Percorso 12.** 07/02: Plaza de Chocua, Calle de Gravina, Calle Hortaleza, Calle de la Farmacia, Calle Fuenarraval, Gran Via
- **Percorso 13.** 11/02: Plaza de España - Calle de los Reyes, Calle Del Per, Calle San Bernardo, Noviciados
- **Percorso 14.** 19/02: Paseo de La Católica, Nuevos Ministerios, Estadio Santiago Bernabeu, Torre Picasso, BBVA / Paseo de la Chopera - Matadero
- **Percorso 15.** 24/02 - Manhã: Puerta de Ángel, Paseo de Estremadura, Mercado Tirro de Molina, Calle de La Ribera de Manzanares, Glorieta de San Antonio de la Florida, Calle de Anticoro Marinas, Glorieta de San Vicente, Principe Pio, Paseo de la Florida, Paseo la Virgen del Puerto, Campo del Moro, Parque de Atenas, Calle de Segovia, Calle de Juan Duque, Calle de Manzanares, Cuesta de Javaquino, Jardines de las Vistillas, Plaza de Grabríd Miro, Calle de la Morenia, Calle de Bailén, Calle Mayor, Calle del Rollo, Calle del Sacramento, Marcedo de San Miguel, Plaza Mayor, Calle de Postas, Calle de San Cristóbal, Calle Mayor, Plaza Puerta del Sol
- **Percorso 16.** 26/02: Centro / Templo de Debót / Gran Via / Plaza Callao
- **Percorso 17.** 27/02: Bilbao, Calle de Fuenarraval, Museo de Historia (fechado)

1. Madrid Map. Routes.



Traçado hipotético das muralhas islâmica e cristiana sobre o mapa atual de ruas  
Fotografia Instituto de Estadística de la Comunidad de Madrid

2. Hypothetical Islamic and Christian Wall

times, the look. As well as formal and structural: serial vision, the main paths, buildings and striking elements, the squares, urban equipment, boundaries, neighborhoods. The meanings was also incorporated: the old town, the baroque city, industrial and post-industrial city, cultural city; the power of capital (trade, advertising,

tourism), workflows, history, leisure, fun, live meeting, including, art, culture, society. I felt the need to return to some places, and complete some paths. The initially imagined homogeneity was undoing itself and the singularities were revealed. Little by little, breaking with the automated look, I experimented the daily life and the unusual. This step lasted one month and enabled me to have a clearer idea about cases of interest: the area between the *Rio Manzanares* and *Calle de Toledo*, taking as the axis to *Calle de Segovia*, because that represent the city generator principle and also by *the recent reintegration project of Rio Manzanares at the city*. 2. *Paseo de La Castellana* – because it represents the transition from the historic city to the hypermodern town.

## 2.2 Generative Cartography

Whole systematization and data analysis was developed in Brazil. Several joints of photographs, maps and mosaics were tested to discover the creative research sense. Finally, I reached the proposition of conceptual matrices in the city in order to unveil the implicit diagrams in its rhizomatic structure.

I sought to deconstruct and reconstruct the image to make clearer the array generator: groupings by colors and textures, people, graphics were some tests. I intend to perform work on video so that I can add sound and moving images. I believe the studies about Deleuze's [11] diagram concept will enable advances at theoretical formulations and practices, to fetch graphical synthesis representing the embryo of new ideas of city. What I present in this article, therefore, is a partial result of what I desire developing. On the other hand, the photograph synthesis exposed is not restricted to the two reported regions of Madrid, being this one choice for other trials in video. This work is only a part of a larger study to be developed in São Paulo city.

Following are exposed some tests using a freeware photo mosaic programme. They were constructed under a Madrid's cartographic base, from Google Maps, and with 900 photographic images taken from that city in the beginning of 2010. This technique is referenced to the Joan Fontcuberta work, presented in the magazine "Fisuras" belonging to "Googlegrames" series which "*are made by using a freeware computer programme of photomosaic connected on line to a searcher in Internet, using as search base, words related to the topic of photography*" [12].

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3. General cartography. Image created from database of 900 photographs, using a freeware computer programme and image captured by satellite (Google Maps, district of Madrid).



4. Sign cartography



5. People cartography



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