

revista do nomads.usp nomads.usp journal ISSN 2175-974X CC BY-NC

a cidade e os outros the city and the others SEM1 2013

PROCESSES OF CREATING SPACES AND THEIR TRANSITION COMPONENTS

ADELINE GIL e DORIVAL ROSSI

Adeline Gil is art director at Quiçá Design 3D Productions, professor and coordinator of Graduation Course of Digital Design at UNIARA (Brazil). Her interests are the processes of creation in arts and design, interaction design, collaborative design, philosophy and practice of design. She is Doctoral candidate in Visual Arts at UNICAMP, Master in media communication by FAAC - UNESP and graduated in Industrial Design with specialization in Visual Programming.

Dorival Rossi is PhD in Communication and Semiotics (PUC 2003), Master in Visual Communication (USP 1996) and Architect (USP 1990). Professor at Universidade Estadual Paulista - UNESP BRAZIL. Experience in Transdisciplinary Design, Architecture, Communication, Arts and New Technologies. Creator of the Postgraduate Program: Specialization in Game Design Lato Sensu at UNESP. Researcher in Semiotics and Complexity in Design.

How to quote this text: GIL, A. G. S., ROSSI, D. C., 2013. PROCESS OF CREATING SPACES AND THEIR TRANSITION COMPONENTS. **V!RUS**, São Carlos, n. 9 [online]. Translated from Portuguese Luis R. C. Ribeiro. Available at: <http://www.nomads.usp.br/virus/_virus09/secs/submitted/virus_09_submitted_7_en.pdf>. [Accessed: dd mm yyyy].

Abstract

The aim of this paper is to investigate, in light of Deleuze and Guattari's theoretical framework, the creative process mediated by digital technologies, discussing concepts such as virtualization, actualization, and emergence. It examines how digital media affects, but does not determine, the creation processes in question. Digital technologies act as producers of

differences at events in which new territories and subjectivities are created. The creation processes under investigation are divided into two groups: (a) urban interventions, emphasizing the creation of the installation AirCity:arte#ocupaSM; and (b) participation of digital media in social and political spheres, analyzing the Smart Mobs phenomenon. It is also the purpose of this article to identify elements capable of acting to create spaces of representation as well as detect lines of deterritorialization and reterritorialization or even potencies circulating in these creation territories and the forces that concur to actualize them.

Keywords: creative process; spaces; digital media; subjectivities; virtual.

1. Introduction

The contemporary city space, continually transformed by new communication practices, is not "[...] a problem among others, it is the number one problem, the problem-intersection of economic, social and cultural issues" (Guattari, 1992, p. 173). In this sense, it is relevant to understand how these practices emerge in their settings and how they participate in creating new spaces.

We are living in an era that indicates the possibility of "reappropriation of the media by a multitude of subject-groups, capable of managing it via resingularization" (Guattari, 1990, p. 47). In this post-media era, according to Guattari (1990, 1992), one might think it is possible for informational and communicational machines to participate in creating new agencies of enunciation, transforming coordinates, references. Lévy (1993, 1999) identifies a space where this is already happening: assuming the consistency of a sensitive, lively space of signification, capable of becoming other spaces, in keeping with a collective interaction.

The purpose of this article is to shed light on the space of the city, its communication and self-production settings, as regards its transition components rather than its compositions of order. In current interventions, it is possible to notice that there is some form of communication created by those mixtures, processes, and variations recursively enabled by it. Digital media are a condition and not a determinant of an event, as affectability,

which can increase or decrease its potency, where the concept of real-time arises as variation, transition, change in nature and not greatness.

There follows the definition of some concepts: *interactivity* and *affectability*; *individuation* and *territory*, in order to apprehend the creation processes of the productions analyzed in Sections 2 and 3 below, as well how they affect and are affected when subjects encounter spaces in continuous process of virtualization and actualization.

1.1. Interactivity and Affectability

Interactivity is a very broad concept and is not related to digital technologies alone. According to the concept of open work (ECO, 1991), a work exists only when the interactor is included. Suely Rolnik (2007a) mentions the politics of subjectivation and relationship with the other in artistic productions from the 1960s — a period marked by intense experimentation with new ways of living. According to several authors (Primo & Cassol, 2006; Plaza, [nd]), it is possible to identify different degrees or levels of interactivity: (a) interactivity in which feedback is built into the system, i.e., users interact and the system already has preprogrammed answers; (b) users interfere with contents and the system responds in a personalized way; and (c) a type of interactivity capable of coordinating different spheres: technological, social, cultural, and political.

It is important to classify interactivity under different categories in order to understand the communication phenomena that take place in the city space. However, in order to obtain a broader and more comprehensive grasp of these phenomena, there is the need for a perspective that can encompass all possible lines and trends circulating in territories of contemporary productions.

The term *affectability*, coined by Deleuze/Guattari/Espinosa¹, appears to be more adequate than interactivity, since it addresses the affective/sensitive dimension of the encounter with digital media, an encounter that involves

¹ Gilles Deleuze and Felix Guattari's thought encompasses many others, i.e., it is permeated by the thought of other authors, such as Spinoza's concept of affectability (Deleuze, 2002), and it ends up being transformed by a process that no longer sets the authors apart.

subjectivities, collectivities, and city spaces, which constitute one another. *Affection* is not related to the state of a body qua inducted by another body, but the transition from this state to another. Affections are becomings or potentialities that can increase or reduce our power to act. The degree of interactivity is no longer an issue; this becomes: what affections is this body capable of?²

1.2. Modes of individuation in co-dependency with the medium

The concept of *individuation* was elaborated by French philosopher Gilbert Simondon. The author construed individuation as something not exactly human. For him, individuation is the amalgam of individuals and the media; information in this context is not restricted to message supports or signals. Information creates form, i.e., it participates in the creation of an individual/medium combination (Santos, 1994).

Simondon called *unstable equilibrium* "a regime capable of achieving new settings without discarding itself, a system in which new forms emerge, and yet, because of its very instability, these forms can give rise to others" (Santos, 1994). It acts in conjunction with the concept of modulation. Instead of viewing an individual as the recipient of form; it modulates itself. What allows this self-modulation to occur is its meta-stability regime, a stability made and remade at every rupture of meaning, incorporating the compositions of forces that have led to each rupture (Rolnik, 1999). When intensive difference bursts, small perceptions come into play, generating a redesign of the statistical distribution of potential occurrences or saliences in a field (Pimenta, 1999) in search of metastable tension (in unstable equilibrium).

Simondon defines transduction as transformation through which forms, no longer categorized as subject or object, are modified at their pre-individual level.

Psychism opens to a trans-individual collective. "Knowledge becomes

² A body cannot be reduced to an organism. See Deleuze, G. & Guattari, F. (1996), v. 3.

simultaneously activator of a world and builder of a body" (Santos, 1994). Individuation is, thus, an ongoing activity, a problem to be solved by leaps, phases of becomings that will lead to new operations.

We gain new senses of ourselves, new skills, by transiting and/or being simultaneously in different worlds: the virtual and the present, according to Ascott (1998). The author refers to a type of trans-individual perception, whose rise is accelerated by techno-scientific advances. In the author's words:

cyberception involves transpersonal technology, communication technology [...]. Transpersonal technology is network, hypermedia, and cyberspace technology [...]. It is through cyberception that we are able to apprehend nature emergence processes, media flow, and invisible fields and forces of our multiple realities. [...] We create and inhabit parallel worlds and open divergent paths to events" (Ascott, 1998, p. 165-167).

To Ascott, the city space, qua an amalgam of systems of interfaces and communication nodes, also perceives us.

However, it is important to differentiate how perception and sensation may refer to distinct powers of the sensitive body. Perception, driven by empirical exercise of sensitivity, brings the other's formal existence to existence translated into visual subjectivity, an and auditory representations, and so forth. Sensation, driven by intensive exercise of sensitivity, engendered by the encounter between the body, qua a field of forces, and the world forces that affect it; it brings the other's living presence to subjectivity, a presence capable of expression, not representation. Rolnik (2007b) called this intensive exercise of the sensitive vibrating body.

For the author, there is a paradox between these two modes of apprehending the world, a constitutive paradox of human sensitivity. Subjectivation modes and politics , among other factors, vary according to the modulation flexibility of this dual exercise of the sensitive, i.e., of the relationship established by this paradox with a "malaise caused by the tension between the infinitude of processes of production of differences and the finitude of forms in which these differences make sense" (Rolnik, 1996, [n.p.]). Depending on the relationship, it mobilizes "life qua power for creation and resistance" in the subjectivity (Rolnik, 1996, [n.p.]). Likewise,

"the degree to which a subjectivation mode favors or constrains life processuality -- its expansion as a differentiation power -- is dependent on such politics" (Rolnik, 1996, [n.p.]). Thus, information — in a type of communication that can make the intensive sensitive — is not given by an emitter, it is created via affections.

According to Bergson (2005), we know the inner world through affections, not the outer world through perceptions, even though this inner/outer distinction is meaningless at this point. Experimentations in art and design have helped to achieve a non-psychological subjectivity, of the order of sensations, affections; different from psychological subjectivity, which is related to intelligence and perception, associated to willpower or sense of self. An affective production breaks down the idea of a self that acknowledges itself and the world as forms, thereby allowing the creation of new forms.

Multiplicities are defined by means of relationships with the "exterior," with the outside: "through the abstract line, escape route or deterritorialization according to which their nature changes when they connect to others" (Deleuze & Guattari, 1995, v. 1, p. 16); hence the possibility of referring to multiplicities of multiplicities and the difficulty in focusing on spatial multiplicities alone, as if they could be isolated from others, such as subjectivity and time.

1.3. Territory, deterritorialization, and reterritorialization

The mobile dimension of digital communication and its relationship with physical space have been studied by *Grupo de Pesquisa em Cibercidades*, coordinated by Lemos.³ For Grupo de Pesquisa, electronic communication devices both deterritorialize and reterritorialize the individual. From some angle of cybercities, it may be stated that there is the establishment of dynamic forces reconfiguring space and social practices in light of telematic networks. Thus, new political, economic, social, cultural, and subjective spaces are created.

³ Cybercities Research Group: http://www.facom.ufba.br/ciberpesquisa/andrelemos/. Accessed on: March 30, 2013.

On the other hand, *Núcleo de Estudos de Habitares Interativos* from University of São Paulo at São Carlos, Nomads,⁴ focuses on transdisciplinary knowledge about contemporary living and design processes of these spatialities.

Media Lab⁵, at Massachusetts Institute of Technology, USA, conducts several studies on relationships with the territory via digital media technologies involving augmented reality, locative media, and so forth. Among their goals is to promote civic participation in governmental decisions, social networks, and cultural processes.

It may be said that agencies occurring today involving cities, networks, and digital media can work in the direction of allowing some kind of deterritorialization that establishes relationships with the virtual in the sense that the territory relates to itself and external circumstances. The concept of virtual qua potential is closely related to the concept of design: project, projection power. For a better understanding of the concept of virtual, we should refer to Deleuze and Guattari's (1995) concepts of land, territory, deterritorialization, and reterritorialization.

Land and territory are components of a scheme with two indiscernibility zones: *deterritorialization* and *reterritorialization*.

Deterritorialization can be relative when historical connections between land and territories are sketched and erased in it, e.g., the State, which takes different territories to a higher unit, and the city, which extends its territory to commercial circuits. Absolute deterritorialization, in turn, can only be considered under certain non-given relationships, that is, to be determined, with relative deterritorializations, affirming reterritorialization as the creation of a new land to come. Its relationship with historical conditions is different: it deviates from a set of conditions to create something new. The territory appears at the margin of certain decoding process, certain freedom, allowing the emergence of expressive qualities. This means that when there are expressive qualities, there is territory and it becomes a

⁴ Núcleo de Estudos de Habitares Interativos: http://www.nomads.usp.br/site/. Accessed on: March 30, 2013.

⁵ MIT Media Lab: http://www.media.mit.edu/. Acesso em: 30 mar 2013.

transition territory, open to new deterritorializations.

Digital media promote qualitative relationships among signs, acting as a transition territory. A space characterized by signs can lead to an escape route, defined by a process of decoding and deterritorialization or, in short, it is virtualized; at the same time, it translates or actualizes powers of the virtual: it is differentiated.

1.4. Machinic Interface

Deterritorialization lines are given in territoriality circuits. Thus, when Deleuze and Guattari refer to lines instead of points, event and process rather than structure, these should not be simply understood as opposed to each other:

It is not, however, about placing the two types of multiplicities in opposition [...] according to a dualism that could not be better than that between the one and the multiple. There are only multiplicities of multiplicities forming a single agency, exerted in the same agency: hordes in masses and vice-versa (Deleuze & Guattari, 1995, v. 1, p. 46).

The web itself, qua multiplicity, with its micro-processes is in several agencies with unifying machines. Hackers' actions, some indeterminacy degree in systems, collaboration software, and many other examples, indicate emerging processes that remain connected, in mutant settings, to large telecommunication systems, institutions, economic and social systems, among others.

Events involving many modes of interactivity tend to disseminate aesthetic processes, operating space hybridizations, transitions of intensity, sensations that do not lend themselves to representation. Guattari (1992) uses the term machinic interfaces to place the problem of transitions, coordinated by a transversality related to different modeling systems, systems in the form of hypertexts. The machinic interface manages the agglomeration/articulation of intensities and different existential territories.

According Guattari, "that which distinguishes modeling from meta-modeling is the fact that it possesses an organizer of possible openings to the virtual and to creative processuality" (Guattari, 1992, p. 44). By apprehending the object of study in its creative and processual dimension, it is possible to increase informational complexity, a recomposition of territories, also open to micro-events, remaking itself continuously. It is Guattari's term 'organizer of openings' what that which could allow a new practice integrating science and art and involving aesthetic research of advanced technologies, qua transition components, creation of new territories.

As pointed by Pimenta (1999), that which allows transitions may be related to its de-programmability. According to this logic, all conclusions become relative and provisional, in continual falsifiability, conjunctions and disjunctions between different kinds of language. For Pimenta, deprogrammability is designed as the basis for new spatial thinking.

2. Urban artistic interventions

In order to identify the various ways in which digital media act as a differentiation component in creation and subjectivation processes, and its relationship with the virtual qua potential, a division is required: (a) urban interventions and (b) activism mediated by digital technologies.

During the international art event Arte#ocupaSM,⁶ participants occupied the Vila Belga Railways Central Administration building in Santa Maria, Rio Grande do Sul, as well as its surroundings:

The event involves the "occupation" of Vila Belga, a historical site in disuse since 1997, when the railway company was privatized. Vila Belga was built from 1901 to 1903 to house employees [...]. The "occupation," conducted through networks and connections organized especially for the event, appropriated the physical and virtual space of the building (Hildebrand, Oliveira, & Foglia, 2012, p. 25).

In the space-time of the event, through various projects, conducting meetings and transformative experiences resonated in social, political and technological spheres. By means of collaborative artistic practices, aimed at preserving cultural heritage, it was possible 'to make visible what was

⁶ Event held in Santa Maria, Rio Grande do Sul, Brazil, in 2012, lasting five days with the participation of over 40 artists and researchers from several countries. For more information, go to: http://arteocupasm.wordpress.com/. Accessed on: March 30, 2013.

hitherto invisible,' e.g., the project Air City (Hildebrand, Oliveira, & Foglia, 2012), which explored the possibilities of compiling collective narratives via mobile devices. In the authors' own words:

This project seeks to be a "system qua work of art," where the public can activate spaces and narratives [...]. Emerging and locative media, equipped with devices and geo-location features, integrate digital content to a locality, a territory, for monitoring, mapping, localizing, building territories and actualizing narratives and memories [...]. The project is part of a research process that explores possibilities of action in public space through alternative digital transmission without using institutional networks" (Hildebrand, Oliveira, & Foglia, 2012, p. 27).

Artistic interventions, like the aforementioned ones, encourage other ways to interact with the city space, and inspire users to produce other spatialities within the city.

It is also important to remark that the city is, in a complex fashion, both product and producer, in a setting where collaborative art practices, manifested as local actions, give rise to a dynamic process involving other spheres at a different level: social, cultural, economic, and political.

3. Participation of digital media in social and political spheres

The so-called digital activism has been studied by academics and has reverberated in numerous media. One remarkable example of this activism is an event that occurred in the Philippines in the early 2000s, when a group of protesters, organized via text messages, grew rapidly and was partially responsible for ousting President Estrada due to corruption.

The phenomenon of self-organization of crowds via social networks has been termed as *smart mobs* (Rheingold, 2002), i.e., a crowd that is organized through digital media for whatever political, social or artistic purpose. Smart mobs come together, perform a given act, and disperse quickly.

In cases like these, while we can speak of autopoiesis, since self-production takes places, continuously specifying its limits, its existence is only possible in relation to outside elements. Thus, the concept of autopoiesis eventually extends to "social, collective, and evolutionary systems, which maintain different types of alterity relationships" (Guattari, 1992, p. 52).

The encounter between smart mobs and communication technologies, which bring interaction qualities to spaces, involve a multiplicity of systems and agencies, including content and expression as variables of these agencies, in which signs are organized in different ways, are deployed in semiotic chains that can deviate from their signifying function, evidencing the processual nature of this kind of encounter.

Therefore, before classifying these multitudes as masses composed of "individuals [...] who will exercise the sense of equality" (Lemos, 2004, p. 36), it is necessary to consider that these movements involve singularities at a pre-individual level, constituting and dissolving agencies. They operate with codes, connect differences, promote dissonances, and create the consistency of an event.

If these movements and their deployments are judged according to some modeling system of a discursive nature, with its signifying function, which creates stratified/signified territories, we run the risk of missing transitions of intensity, transitions between spaces and times, which are of the order of creative processuality. That which constitutes their deployments is their assemblages, agencies. Therefore, in order to apprehend these movements in their processuality, we should proceed according to a paradigm "that borrows other more collective, more social, more political procedures..." (Guattari, 1992, p. 42).

Thus, the space of the city, continuously transformed by communication technologies, transcends visible and functional structures.

Changes in everyday rhythm, caused by movements such as smart mobs but also by others, e.g., urban interventions, installations, performances, which may or may not make use of digital technologies — can be examples of communication qua transition. In this process, signs express events at the same time as they are created at the meeting point of many collective forces, as percepts and affects, forces that compel us to think:

> Perception is no longer a state of affairs, but a state of the body as induced by another body, and "affection" is the transition from this state to another, such as increasing or decreasing the powerpotential, under the action of other bodies: none is passive, but it is all interaction, even weight (Deleuze & Guattari, 1992, p. 199).

The logic of discursive assemblages works with references alluding to lived and felt experiences, which is different from a multi-referential, multidirectional logic that "deterritorializes contingency, linear causality, the weight of states of affairs and meanings that beset us" (Guattari, 1992, p. 42) in order to produce meaning. The operation over a plane of consistency drawn according to this logic is experimentation; and nomadism is movement.

3.1. Transversal Politics

Smart mobs point to the use of communication technologies that make sensitive, and also visible, different power relationships that interfere with the process of living. However, their escape routes are always in danger of being reterritorialized, over-codified, capitalized, made into one more component of the show, i.e.: such events are at risk of becoming a means of communication in the service of a unifying machine.

Integrated global capitalism incorporates micro-processes in its favor at such a high rate that they have to be continuously created in all areas.⁷ In addition, it is possible to introduce a hypermachine virus in the very power of triggering microprocesses. Hence the urgency of creating temporary autonomous zones (Bey, 2001) in light of this speed (Virilio, 1994).

Rolnik (2007a) suggests that a new alliance is being established between art and activism in contemporary society: a combination of macro and micro, which are different ways to cope with tensions of life, at different levels of tension faced by every individual. Facing here concerns the creation based on the forces at play, not the denial of these forces.

Hence, "the operation characteristic of the macro political action intervenes in tensions arising in visible, stratified reality, between poles of conflict in assigning places established by the dominant cartography in a given social

⁷ As is the case of Napster, the first massive program for peer-to-peer sharing of files, which changed the music industry and, more recently, Youtube, <http://www.youtube.com>, a site that allows its users to upload, watch, and share videos in digital format, which was eventually bought by giant Google. At its origin, the Internet itself was originally conceived to share information among universities; it did not have a commercial or political purpose per se.

context" (Rolnik, 2007a, p. 9), i.e., at the level of stratification that defines subjects, objects, and their representations, while:

the operation characteristic of micro-political actions interferes with the tension of paradoxical dynamics between the dominant cartography with its relative stability and an ever-changing sensitive reality [...]. At the micro-political level, we face tensions between this level and that which is already foreshadowed in the diagram of the sensitive, invisible, and ineffable real (Rolnik, 2007a, p. 9-10).

Artistic and/or political movements, technological innovations in communication and design, often created with more democratic purposes, may be potential war machines, not that they aim at war, but as a form of resistance. It is proper of a war machine to disassemble, be disassembled and reassembled in another 'place.' They can also work as vectors of deterritorialization or accelerators of a larger process involving macro and micro-politics and leading to reterritorialization of the assemblage.

Communication design productions have also played an important role in constructing cartographies that favor "an opening to the possible in individual and collective existence" (Rolnik, 2007a, p. 8). Thus, territories can be generated in which aesthetic experience and freedom of creation can vibrate again.

4. Final remarks

Deleuze and Guattari point out that science tends to become gradually more the science of events, instead of structural. The disappearance of arborescence schemes in the interest of rhizomatic movements is a case in point. Scientists are increasingly concerned with singular events, of an incorporeal nature, which are conducted in bodies, in bodily states, totally heterogeneous agencies among them, hence the call for interdisciplinarity (Deleuze & Parnet, 1998, p. 76).

According to Deleuze and Guattari, the dimensions of creativity are not found in representation, already considered in space and time relationships, but in non-discursive relations. Through this logic, capable of grasping the creative dimension of the encounter among subjectivities, collectives, and spaces of the city, becoming one another, the movement and process intensity are taken into account. Their operations may be connected to:

- a multiplicity characterized by the inseparability of variations, an intensive multiplicity;
- a concept of real time that can respond to this logic of intensities the concept of duration, created by Bergson/Deleuze/Guattari;
- the production of sense in the encounter with representative and nonrepresentative formations;
- a complex relationship involving both arborescent schemes and rhizomatic lines.

Communication qua transition can function as a means of diverting, creating, and opening to coexistence of differences. This openness implies ethics and aesthetics, because, according to Guattari, in a post-media era, it is possible to transform references, valuing systems, i.e., it is possible to think of a non-consensual type of communication that encompasses differences, noises.

After the advent of digital media, there is the possibility of a new practice as a means to achieve an extra-aesthetic or even ethical-aesthetic objective, which implies a condition of alterity in relation to the world and life. Is it ethical, because it is about building worlds, choices involving social, technological, scientific, cultural, and ecological dimensions all at once. These choices are of the order of the method, i.e., the project, but a project qua process.

Understanding the city space, its communication and self-production contexts in its transition components, implies conceiving a condition for architectural and urban creation that evolves as the contemporary city changes.

References

ASCOTT, R., 1998. Arquitetura da Cibercepção. In: GIANETTI, C. (org). Ars telemática. Telecomunicação, internet e ciberespaço. Lisboa: Relógio D'Água.

BERGSON, H., 2005. A Evolução criadora. São Paulo: Martins Fontes.

BEY, H., 2001. TAZ. Zona autônoma temporária. São Paulo: Conrad Livros.

DELEUZE, G.; GUATTARI, F., 1995. Mil Platôs. Capitalismo e esquizofrenia.

Rio de Janeiro: Ed. 34, v. 1.

DELEUZE, G.; GUATTARI, F., 1996. *Mil Platôs. Capitalismo e esquizofrenia*. Rio de Janeiro: Ed. 34, v. 3.

DELEUZE, G.; PARNET, C., 1998. Diálogos. São Paulo: Escuta.

DELEUZE, G., 2002. Espinosa. Filosofia prática. São Paulo: Escuta.

ECO, U., 1991. Obra aberta. 8. ed., São Paulo: Perspectiva.

FLUSSER, V., 2008. *O universo das imagens técnicas*. São Paulo: Annablume.

Cybercities Research Group, 2013 Available at: http://www.facom.ufba.br/ciberpesquisa/ andrelemos/. [Accessed 30 march 2013].

GUATTARI, F., 1990. As Três Ecologias. Campinas: Papirus.

GUATTARI, F., 1992. *Caosmose. Um novo paradigma estético*. Rio de Janeiro: 34.

JOHNSON, S., 2003. *Emergencia: a vida integrada de formigas, cérebros, cidades e software*. Rio de Janeiro: Jorge Zahar.

LEMOS, A., 2004. *Cibercultura e mobilidade*. In: Leão, L. (org). Derivas: cartografias do ciberespaço. São Paulo: Annablume.

LÉVY, P., 1993. As Tecnologias da Inteligência. O Futuro do pensamento na era da informática. Coleção Trans, Rio de Janeiro: 34.

LÉVY, P., 1999. Cibercultura. São Paulo: Ed. 34.

HILDEBRAND, H.; OLIVEIRA, A.; FOGLIA, E. AIRCITY, 2012 - arte#ocupaSM - *Terrítórios da Memória Urbana*. In: ARTECH 2012 - Proceeding of 6th International Conference on Digital Arts, Faro/Portugal, v. 1, p. 25-34.

MIT Media Lab., 2013. Available at: http://www.media.mit.edu/. [Accessed 30 march 2013].

MORIN, E.; MOIGNE, J., 2000. *A inteligência da complexidade*. São Paulo: Peirópolis.

Núcleo de Estudos de Habitares Interativos, 2013. Available at: http://www.nomads.usp.br/site/. [Accessed 30 march 2013].

PIMENTA, E., 1999. *Teleantropos. A desmaterialização da cultura material. Arquitectura enquanto inteligência e metamorfose planetária.* Lisboa: Estampa.

PLAZA, J., 2013. Arte e interatividade: autor, obra, recepção. Available at: http://www.cap.eca.usp.br/ars2/arteeinteratividade.pdf>. [Accessed 30 march 2013].

PRIMO, A.; CASSOL, M., 2013. *Explorando o conceito de interatividade: definições e taxonomias.* [s/d]. Available at:

<www.psico.ufrgs.br/~aprimo/pb/pgie.htm>. [Accessed 30 march 2013].

RHEINGOLD, H., 2002. Smart Mobs: the Next Social Revolution. Nova York: Perseus Books.

ROLNIK, S., 1996. *Despedir-se do absoluto: Entrevista a Lira Neto e Silvio Gadelha.* Número especial da Revista Cadernos de Subjetividade: Gilles Deleuze. (Interview).

ROLNIK, S., 1999. *Novas figuras do caos. Mutações da subjetividade contemporânea*. In: SANTAELLA, L.; VIEIRA, J. (orgs). Caos e Ordem na Filosofia e nas Ciências. São Paulo: Face e Fapesp.

ROLNIK, S., 2007a. *Com o que você pensa?* Núcleo de Estudos da Subjetividade - PUC – SP. Available at: http://goo.gl/swi8O. [Accessed 30 march 2013].

ROLNIK, S., 2007b. *Cartografia Sentimental. Transformações contemporâneas do desejo*. 3a. ed. Porto Alegre: Sulina.

SANTOS, R., 1994. *Gilbert Simondon: vestígios da autopoiese*. Transcript of a lecture at the meeting on "The cognitive sciences and subjectivity", UFF, (Courtesy of author).

VIRILIO, P., 1994. A Máquina de Visão. Rio de Janeiro: José Olímpio.