



# Disruptive Strategies in the Post-Digital City

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## Abstract

The development of the sociotechnical apparatus shaping our Post-Digital space and culture ran simultaneously with the conception of a relational and processual reality and the development of computation and networks, which are becoming ubiquitous. These technologies have embedded in our physical space, giving birth to a fuzzy system that struggles between the opportunities for collective engagement, offered by the networked communication, and the capacity of control of a pervasive and opaque system. Art has been experimenting with these new technologies from its inception thus assuming the aesthetical and political commitment to develop strategies capable of disrupting the codes of domination and promoting a collective and constructive appropriation of space. These strategies refer to practices of embodiment and encounter, capable of promoting new assemblages towards the accomplishment of the Right to the City, the new citizenship proposed in the theories by Lefebvre and the actions of the Situationists.

## Keywords

Post-Digital Space, Right to the City, Hardware Criticism, Appropriation.

## Introduction

The city is the place of togetherness. It is the space of sociability and politics, as well as the ecological environment of our affordances and a collectively constructed form. This space is practiced and conceived according to an apparatus that codifies it; the set of relations, discourses, institutions, laws, police measures and philosophical propositions supported by certain forms of knowledge and supporting the relations of power; a space dominated and segregated in static functional parts. [1] However, at the same time it is the lived space, appropriated by its inhabitants and the rhythms of their moving bodies. [2] The body is not a substance but a producer of differences, that becomes understandable only when is considered conjointly with its medium. It became engaged with the reality around, interchanging information, starting new rhythms that produce resonances able to create new assemblages. Deleuze identifies this poetic activity with the ecological capacity of art. [3] The capacity to render the space expressive and give birth to the territory or inhabited space, where the process of subjectivation is possible. There is not subjectivation without the production of an appropriated space. It is a continual revolutionary activity,

deterritorializing the codified towards the production of new assemblages.

The ongoing of capitalism and gentrification leads to a homogenization and fragmentation of space. The places of experience and identity vanish and the Dissolving City only endures as a museum or spectacle. [4] Later on, Castells attributes this dissolution of places to the rising of the space of fluxes. [5] The space of power, that organizes production in a global space thanks to the use of networked media. Territorialization and subjectivation become impossible in the fluid space and a new way of delocalized and diffused control appears. The Control Society, where individuals are always objects of information but never subjects of communication. [6] However, in his recent study about networked social movements Castells points to the possibility of appropriating the networks. [7] The net could become a place for encounter, a public sphere, where new social movements can begin. These movements are able to reach the street and produce social and spatial changes.

Lefebvre identifies the appropriation of the space with the “jouissance”, a way of enjoyment not related to non-work more than to productivism, to excess rather than to accumulation, to gift rather than to exchange. [8] In terms of space, it relates to the use as usufruct, the right to benefit from, use and enjoy something that is held in common ownership, as long as it is not damaged or destroyed; common space that Agamben proposes as a result of the profanation, it being a way to challenge the apparatus that produces the dominated space, a form of use freed of goals, able to liberate the mediums, to return the spaces confiscated by power, and open it to the creative energies of the collective. [9] Both concepts refer to practices of embodiment and encounter, producers of disruptive situations where a liberated body moves and acts across the common space and oversteps the borders that fragments it in functional divisions. The appropriation is a poetic practice that renders the space intensive, where molecular bodies capture the noise and indeterminacy to start new interactions, the activation of non-actualized intensities capable of resonating towards the creation of new assemblages and territories.

The commitment to the aesthetic and political appropriation of the virtual and physical space has led to the development of strategies that materializes, firstly, as building blueprints; then, as spatialized metaphors on the net, and finally, as embodied practices in the Post-Digital space. These are

raised from different fields that share a critical and productive attitude, increasing the capacities of the collective to interact and actualize the intensive matter and which applied to the common space are able to activate its collective production, the Right to the City.

### **The Architecture of “jouissance” or the mechanization of leisure: New Babylon vs Fun Palace**

The playful appropriation of the space proposed by Lefebvre was practiced by the Situationists giving birth to practices such as the *dérive* (drifting), and the construction of situations. These are poetic actions involving the construction of environments that must be both the products and the instruments of new forms of behavior directed to revolutionize everyday life. New Babylon (1959-74) by Constant Nieuwenhuys was the project aiming to be the architectural space of these practices. [10] Conceived as a social space with movable articulations it was the playground of Homo Ludens, the new citizen with energy for becoming involved in the creative construction of a new environment and way of life after being liberated from work. It was an intensive space where physical dimensions were shaped by the actions of its inhabitants, made intensive by the use of technology as a tool for realizing experimental collectivism, by means of the promotion of communication. This labyrinthine city was never constructed; Babylon must be the work of New Babylonians, for their creators it was only a model of reflection and play, an instrument to develop a new conception of social space.

In 1964, the architect Cedric Price, commissioned by Joan Littlewood and advised by a cybernetic committee directed by Gordon Pask, started another unrealized project. Fun Palace had to be a transformable building that emerged as a conversational process of the interactions among its occupants. [11] This building-sized transformable machine abandons the Situationist revolutionary goal of transforming life to become a space for leisure and the education of the masses. The authors of this building-toy responded to a different concept of human nature. The Homo Ludens is considered as a subject of learning and control, leisure is no more a chance for the freedom of creativity but an opportunity to educate the new specialized workers of the industrial era. Contrasting with the participatory architecture, the space collectively created by the inhabitants of New Babylon, Fun Palace is a responsive architecture, where technology is not an intensification of space, but a cybernetic machine that tracks and calculates the spontaneous movements and behaviors of its occupants; an interactive construct that responds to the actions of the people within it while at the same time shaping them and their behavior. The architect becomes the engineer of social space, and their creation a concrete machine for techno-social construction.

### **International City Stand: Dematerialized metaphor on the Net**

In 1990, Internet became accessible to humans through the interface, a virtual environment that spatializes information following familiar metaphors. This new medium for networked communication was soon considered as a new public sphere; the anonymous, open, Agora, not hierarchized and freely accessible for the making of a new democracy. Amsterdam City was one of the first experiments for the collective appropriation of this new medium. It appeared as a free services provider in 1993, and was shaped as a city.

The Digital City was an interface built around the notion of square. In it, the city was used as a metaphor to show the culture-in-the-making resulting from the interaction between complex community spaces and the conceptual diversity and assembly that we can find in an open medium for general-purpose. [12] The Digital City closed in 2003. Nowadays social networks have substituted these services.

Social Networks are platforms for sharing and self-promoting driven by software, a social space where the architecture of participation encounters with algorithmic control. In it, our behavior leaves traces, data, retrieved and processed by the algorithms of artificial intelligence. The self-aware collective creation of space that characterized new Babylon shifts to the control driven by the non-transparent processes of a modular system that shapes our relations, a space where our choices are computed to capture our desire.

Software is not a neutral tool; it shapes our relations and processes of involvement and determines ways of seeing and knowing. Software becomes a producer of culture and space. Matthew Fuller analyses how software criticism can foster disruptive interventions in the modular and in continuous variation control systems that are shaping our society, strategies that arise looking behind the software events. These are interpretive and reductive operations carried out according to the implicit politics of the dominant apparatus and with aesthetic capacities towards forms of control and production. Software criticism analyzes the indeterminacy of these events to propose new couplings towards unexpected results. [13]

Fuller points to three strategies observed in different projects. Critical Software, consisting of the creation of pieces of software designed to open the black box of computerized processes, making explicit the protocols, statements dynamics and sequences of normalized software. Social Software, software produced, changed and developed as a result of an ongoing sociability between users and programmers. Free-software creates its own culture. Finally, Speculative Software, which takes advantage of the abstraction of hardware resources led by the process of virtualization to explore the potentiality of all possibilities, introducing creation and the possibility of change. It explores the capacity of software to foster transversal forms of connection, encounter the noise, and make the ordering of data categories or subjects spam out of control, leading to the possibility of a mutant epistemology and creative intervention.

## The Post-Digital Space

Nowadays, computation is becoming ubiquitous. It is embedding the algorithmic processes of software into physical reality and reaching all the fields of our daily lives. The information becomes pervasive and the networked devices of the internet of things become new mediators of our relations with our world, which reduces everything to data, everything becomes normalized, stored, processed and retrieved towards a traceable and responsive space.

Post-Digital research is involved in the study of the development of this new responsive space. It is a reflexive criticism addressed to understanding the epistemology and ontology that this situation is producing towards a productive engagement with the new non-human agents that are populating our environment. Considering urbanism, it concerns the construction of the programmable space, not as unrooted, homogenized and fragmented no-where, jeopardized by the fuzzy relational systems of an imperceptible apparatus, but as a transactional environment populated by human and non-human agents, a space rooted in the specifics of the local and able to embrace difference; a space populated by open systems that foster participation, empowering citizens, that can be appropriated for new uses and where everybody can be engaged in its social production.

### Disruptive Strategies in the Post-Digital City

Post-Digital strategies challenge the Apparatus that produces and maintains our contemporary space. These strategies start in a reflexive analysis encompassing not only the devices and their functioning but also the processes, social relations and politics in which they are merged. With this aim, their practitioners refuse general standardized solutions to focus on situated issues arising from local communities. They do not accept information as a fact to be consumed passively and appropriate the spaces of knowledge and production for the common space. These strategies arise from research as production and are aimed at producing things that embody information and its processes, objects capable of invading the public space producing unexpected results and transforming the programmable space in writable information, where it becomes an interpretative experience open for creative intervention.

These strategies will be presented in three differentiated groups. The first are strategies making information tangible, directed at challenging the models implied on the production of cartographies of our space. The second considers the strategies that embody new social relations fostering new ways of social gathering and participation inherited from the traditions of FLOSS and DIY. The third includes strategies directed at the intensification of space and the speculative production, introducing new non-human agents on the space able of promoting new intensities and affects towards the production of new assemblages exploring new possibilities.

### Embodied interfaces

All our actions in the urban space are tracked producing data that are gathered and mined without our knowledge. The

processing of all this data has led to a new form of cartography showed in well-known projects such as the Senseable City Lab's Real-Time Rome, Preemptive Media's Air, or Stamets' Crimespotting. Real-time visualizations that are aggregated in complex models, interactive dashboards as the IBM's City Forward. These models are used to redesign our environment towards an increasing efficiency and sustainability. However, they operate at an abstract level, disembodied from the reality that produces this data they normalize people, reduce differences, discriminate parts of the reality, and support concrete institutional frameworks and kinds of knowledge. Opposing these models we can find projects that produce new ways of interfacing information, making it tangible towards an increasing of our awareness and literacy of the communication process we are immersed in.

The projects produced by Julian Oliver consist of new objects produced to disrupt the automated systems and communication infrastructures producing our environment, thus resulting in the extension of our knowledge and capacity of intervention in these systems. In this way, the Transparency Grenade (2012-14) detonates leaking the information around. It captures all the traffic at the site and securely and anonymously streams it to a dedicated server where it is mined for information. Border Bumping (2012) is a work of dislocative media, an app that situates cellular telecommunication infrastructures and redraws national borders according to the disparities between virtual and political territories. [14]

### Embodiment of new social processes

Following the tradition of Free and Open Source Software, we find collective projects that engage people in the remixing, production and sharing of things. The open hardware connects with social processes such as the Do it Yourself and Do it with Others, fostering new ways of sociability and reuniting people around the experimentation with the engineered objects interfacing our reality. These new local communities emerge in places such as Hacker spaces and City Labs confronting situational issues and the collective management of them. Projects such as Pachube are digitally-enabled places for the encounter of these communities. These are platforms allowing people to collect their own data that are shared in an open public network, free to interpret and reuse. [15] Other related projects extend towards the production of their own devices for data sourcing. This is the case of the Sense your City or the Data Citizen Driven City. [16] [17] When people produce their own sensing devices in a shared and open way, they promote the awareness of how things work and how to engage in the production of the ecologies where they interact. They boost new epistemologies engaged in the appropriation of the spaces of knowledge and production towards a collective production and engagement in our environment.

### Intensive space and speculative production

Finally, we find projects that use technologies to make the space intensive, by means of exploring the capacity of virtualization to create encounters between different realities.

Speculative production consists of the exploration of all the possibilities of space. It produces new things with new powers of assembly, where the noise produced by the playful actions of people is transformed into signals interacting in an open communication system towards the emergence of unexpected assemblages; a poetics of connectivity that occupies the space with ephemeral or more stable unexpected structures. As an example, the DIY City 0.01a (2012) is a prototype for a future mass-participation performance. In the project, the very streets themselves, and the buildings that look upon them, become the canvas for an urban-scale three-dimensional projection, a graphical environmental 'wiki' that gathers the desires and expectations of a collective towards the production of urban space. [18]

## Conclusion

In our Post-Digital situation, the apparatus mediating our relations and producing our space have become a pervasive

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system where the mechanized processes of computation are reaching all the fields of our existence. They are determining forms of knowledge and production towards a functionalized reality in which we are immersed without being real users. For an effective territorialization of this reality that allows the process of subjectivation, an appropriation of these technologies is needed that allows information to become experienced in a public space. The examples studied here, are proposals that engage people in the participative production of the things mediating our reality. This playful appropriation increases our knowledge and awareness of the process producing our lived space, allowing our intervention and productive engagement. It boosts the profanation that challenges the dominated space of control producing a space open for productive disruptions towards an increment of our affordances. These practices are fostering new ways of collective engagement in the production of space, proposals that germinate new productive forms to the accomplishment of the Right to the City.

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