URBAN HACKING: ARTISTIC PRACTICES FOR EDUCATIONAL MEDIATION AND PRO-ACTIVE CITIZENSHIP

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Abstract
Urban environments in large cities are often designed by organizations disconnected to people, their memory, experiences and inequalities. The resulting urban pattern ends up being a discontinuous layout, through which we move between different nodes, impoverishing the intermediate spaces; in other words, the frictions that occur in public space.

Against this kind of development, many artistic initiatives are detected and will be studied in the course of this article, in which citizens acquire an active role in the city through the generation or reconfiguration of urban spaces. The artistic tools of this methodology are made up of micro-actions with a participatory approach; experimental and educational. It seems that they are the ones who allow us to imagine a new city and its possibilities. We would therefore understand these practices as urban hacking, where hacking refers to the fact of transforming and intervening the city code, in order to achieve new goals.

Key words
Public space; educational mediation; urban transformation; citizen participation.

Resumen
Los entornos urbanos de las grandes urbes, muchas veces son diseñados desde las organizaciones ajenas a los individuos, su memoria, sus vivencias y sus desigualdades. La trama urbana resultante acaba siendo un tejido discontinuo, por el que nos movemos entre diferentes nodos, empobreciendo los espacios intermedios; es decir, las fricciones que se producen en el espacio público.

Frente a este tipo de desarrollo se detectan iniciativas artísticas, que serán estudiadas en el transcurso de este artículo, en las que los ciudadanos adquieren un rol activo en la producción de ciudad a través de la generación o reconfiguración de espacios urbanos. Los instrumentos artísticos de esta metodología consisten en micro-acciones con un enfoque participativo; experimental y educativo, que permiten imaginar una nueva ciudad y sus posibilidades. De este modo, podemos entender estas prácticas como hackeo urbano, donde el término hackear se refiere al hecho de transformar e intervenir en el código de la ciudad, para poder cumplir nuevos objetivos.

Palabras clave
Espacio público; mediación educativa; transformación urbana; participación ciudadana.
1. INTRODUCTION

This article represents a synthesis of a previous research: “Urban Hacking: catalog of architectural practices for a pro-active citizenship”¹, based on the Urban Hacking concept itself, to designate a typology of artistic practices detected in the urban space of our cities. When we evoke the idea of urban hacking, we can determine two lines of intervention based on two criteria: participation actions and socio-cultural activation objects.

To contextualize this kind of projects, as well as the significance of the concept urban hacking today, its antecedents emerged in 2008. After the economic crisis, which caused urban paralysis and a real housing bubble, architectural practice stops focusing only on the design and construction of buildings to normalize new territories of action, which go beyond the physical object and are materialized in different artistic, cultural and pedagogical disciplines (Baraona, 2011). If the past era of economic abundance gave us a rise of bureaucratized and excessive developments, at a time of scarcity, like the current one, more contained actions will correspond to it, but also more open to the spontaneous play of its inhabitants.

The administration’s rigid action structures, such as general planning or top-down decision-making methods², intensify the current devastating urban situation. In recent years, the search for public spaces and alternative planning proposals have become a reality, to face the urban empty spaces derived from the crisis mentioned above (Di Siena, 2009). For this reason, new forms of urban intervention that incorporate natural tendencies, informal occupations and non-permanent actions that can create opportunities for degraded and abandoned spaces, and waste that the city itself generates apart from commercial production, should be promoted (Lefebvre, 1968).

¹ The research carried out by the author in “Urban Hacking: catalog of architectural practices for a pro-active citizenship” is visible and accessible on the account: www.instagram.com/hackeo.urbano

² Top-down method is the one that takes decisions based on global variables to progressively descend to specific ones.
Following on from this, let us take as an example the practices applied in the Alicante school of architecture (Calvillo and Mesa, 2018). Specifically, in the subject of architectural projects from 2010 to 2013, certain pedagogies were put into practice trying to change the students perception about architectural practice. Architecture was designated as “prosthesis”: of low materiality, assemblages of existing elements as a method of intervention that multiply the options and articulate conflicting coexistence without neutralizing them. As a result of these considerations, the power of “micro-actions” is considered a method of urban acupuncture, with a participatory, educational and experimental approach that imagines a new city and its possibilities (Mesías-Lema, 2019). This allows us to return to the visions of the situationists, to retrieve and educate the active inhabitant, who approaches the city in a more playful, dynamic, ephemeral and sustainable way; giving a more recreational and intensive use to urban space (Jacobs, 1961).

Earlier on, due to the rise of citizen participation, new urban strategies called P2P (Freire, 2009) have evolved in recent years. These new methods have agents, methodologies and objectives that couldn’t be further from the traditional ones. In this participatory urbanism, new initiatives arise in which citizens acquire an active role in the production of the city through the generation or reconfiguration of urban spaces (Nebot, 2014). In this regard, citizen participation emerges as the process engine, not only as discussion and deliberation, but also as direct action in the city “construction” (Freire, 2009).

In Spain, different groups have been established recently, they are known as ‘Recetas Urbanas’ (http://www.recetasurbanas.net), ‘Straddle3’ (https://straddle3.net), ‘Caldo de cultivo’ (http://caldodecultivo.com), ‘Esto no es un solar’ (https://estonoesunsolar.wordpress.com), etc. They have brought about the legal vacuum and the temporary cession of lots, a more optimistic artistic practice that changes the game rules (Trachana, 2013). Empty lots, temporary buildings, citizen participation, employment plans, mediation and education and new logics as: how to introduce the concept of Urban Hacking in the artistic practice.

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3 P2P, an acronym for the English voice peer to peer, in analogy to digital networks, which means peer to peer. It is a method of collaboration and exchange of files (applications, programs, photos, videos) between two or more users.
2. URBAN HACKING AS A SENSITIVE ARTISTIC PRACTICE

The term “Hacking” refers to the action of exploring and introducing alterations in a code or a device (Bartlebooth, 2016). It is strongly believed that the hacker is the one who infiltrates in computer systems without permission, breaking their security mechanisms to illicitly and maliciously alter their operation (Fossatti, 2011). Despite this, the American programmer Richard Stallman, founder of free software, argues that we should not confuse the figure of the hacker with a computer criminal. It was the media, when they discovered hackers in the 1980s, that decided to point out only their most controversial and illegal side. Although it is true that some of them have been dedicated to the sabotage of networks and theft or destruction of information, they are called crackers by the rest of the community in order to identify them (Himanen, 2002).

4 Etymologically it is an Anglicism that designates the people who were dedicated to cutting firewood in order to make chips. Later the computer scientists appropriated the term by the similarity when taking the source code of a program.
Hacking as the fact of precisely analyzing an object or system, understanding the logics and mechanisms that make it work in order to propose alternative and new uses (Baraona and González, 2013). Thus, can this concept have positive applications in the artistic field applied to the urban environment as an educational mediation?

Is John Cage a real hacker in his controversial “musical piece” 4’33’...? It is more a reflection or a different look to reality, rather than a musical composition. Or the American singer Lady Gaga, who wore a dress made with real beef at the ceremony of a well-known music award: is this a hack into the stereotypical world of fashion or is it simply a provocation? The artist defended herself: “I am something more than a piece of meat”. Another curious case is the DRM Chair; the peculiarity of this piece of furniture, designed by the Swiss Les Sugus, is that it only allows you to sit on it eight times. Then, it will self-destruct, thanks to an arduino system that detects the user. A hack into the design industry and its planned obsolescence or an allegory to understand restrictive systems and proprietary software?

All these examples have in common intelligence, exploration and passion for the field that occupies them. Therefore, the ones that show a playful intelligence, are those that have a “hacking value”.

A city, a territory, the streets or a community of neighbors can also be understood as codes to be modified and varied, allowing us to introduce certain degrees of informality and dissidence (Himanen, 2002). For this reason, we must know its programming language, its extension and how to introduce variations on it to transform the original. In this way, rather than intervening in the city code, we interfere in order to achieve new objectives.
There are many positive applications of hacking applied to the urban environment: architecture can be visually re-signified, abandoned spaces rehabilitated, improve or expand the functions of public and private objects, generate unexpected public events, point out spaces that we commonly do not pay attention to, transgress arbitrary urban barriers... We could say that “urban hacking” is the particular utility in the hacker imaginary, which refers to the creative and constructive activity that uses planned actions, in order to produce sustainable cities for the people who inhabit them (Fossatti, 2011).

Once the scope of the proposed concept has been defined, the research progresses with examples that show the theoretical definition of the term. We will study all those practices and micro-actions that occur in urban environments for public use. They promote the appropriation of urban space by citizens, transforming it to fulfill other functionalities.

In this way, when starting to study the cases, it was necessary to point out certain differences. There are two different groups: activist practices associated with the term of hacking itself and related with performance in one hand, and on the other physical objects designed to fulfill specific functionalities.

**2.1 Citizen participation actions**

In addition to the citizen initiatives that contribute to building an emerging model of urban planning, politics, and especially local governments, can contribute to generate the conditions for these dynamics to emerge. It is no longer a matter of selecting and designing specific projects, but of setting up scenarios for citizen participation and education in public spaces. In this way, strategies are essential for citizen empowerment that provoke the appropriation of technology and information (Freire, 2009). Even so, it is not enough just to create spaces for participation. It is important that we recover the tradition of the situationist philosophy that recognizes the active inhabitant who, far from remaining passive before the world, can imagine his life, that is, create and recreate it (Trachana, 2013).
Image 15. Diagram of the concepts and relationships that were carried out in the category of projects known as “citizen participation actions”. Source: self made.

pro-active citizenship
those who question the why of things, get involved in the problems of the city and take the initiative in seeking the how and where to develop urban changes.

workshops
specific events focused on group work to obtain pre-defined objectives

care network
chain of supportive relationships in response to different needs in the neighborhood connecting the people or families who may need support and the people who can offer it

participatory processes
set of phases or operations that aim to combine and give value to the maximum number of subjectivities

assemblies
open and public meeting for joint decision-making

alliances and affections
neighborhood unions for a common goal

walks
way of exploring the city, where the important thing is not the point of arrival but the path, so walking is no longer a means to become an end in itself. Through drift, we go from physically describing the city, entering it and feeling it.
Below are 4 examples of artistic practices that facilitate the creation of spaces for participation, in addition to being developed collectively by pro-active citizens:

The first of them, *El Beso* project, is based on a public art and cyberfeminism proposal that cultivates the generation of community around the Bellas Vistas neighborhood. It also supposes a symbolic re-signification of Topete street and its memories (cartographic and affective). All this thanks to the participation of their neighbors, in an analog and virtual community creation project. In this way, the added value of the project resides in the potential of social mediation dynamics in the creation of new care networks among neighborhood residents.

In the second case, *Cadires a la Rambla*, lies a meeting place between residents and visitors in a public space as emblematic as the Ramblas of Barcelona. This initiative is currently being developed since 1991 and colonizes the street with more than 150 wooden devices designed by students. Even so, this action goes beyond the formal design of the chairs by the students. The goodness of this project resides in the ability to create a space for dialogue and participation in a critical and vindictive way, to deal with current problems in the city.

Another interesting project developed at the Elisava Design University, by students of the ephemeral architecture master's degree, is VORA. It constitutes a safe boundary between cars and users of the new pedestrianized spaces to promote outdoor activities, such as leisure, teaching and culture, in times of coronavirus. In this way, this design allows to occupy the public space giving it a specific use and also its ephemeral quality allows it to adapt to the needs of the moment, in this case making it possible to give classes outdoors and thus reduce the risks of contagion caused by the pandemic.
The last case in this category, *El Templete Fantástico*, is based on a pilot program of collaborative actions around the Templete dedicated to José Menese, in Puerta del Ángel. Over the course of four months, a series of open and free artistic actions were carried out, suitable for all audiences (7 in total: in which there were dance, music, food, dynamization with pneumatic structures and magic).

This project is interesting due to the fact of re-signifying an urban and iconic element for the neighborhood, through participatory actions. In the end, the design of these activities has a purpose that goes beyond the recreational. They allow to transform a disused space while it is recovered for the enjoyment of the neighbors.

In these examples, mediation is understood as an educational process that allows new dialogues to be undertaken, acting as a “bridge” between different activities, rebuilding the relationship between the parts and resolving conflicts. In other words, the main virtue of urban hacking as a mediating element is the fact of promoting new ways of communication with citizens and making artistic practice available as a tool for expression and appropriation of the urban space.

It is not about convincing anyone of a specific discourse, it is about activating their curiosity, educating by expanding the forms of knowledge and reflecting on what has been experienced with a critical vision: approach, educate, participate and question. Encourage citizen participation, fostering active two-way mediation, in which they learn to listen to the interests of society, generating an open, continuous and improvement dialogue.
2.2 Social and cultural activation objects

Public space has been reduced, on many occasions, to places of passage and transit: parks, squares, streets, cultural centers, promenades, under-bridges... they have lost their essence as such. Privatization and legalization have been stripping them of their original qualities, for they have ceased to be public spaces for common use, as they do not function as instruments to activate the collective sense.

That is why the artistic practices studied here are understood as a distanced tool from the big works of architecture or engineering and are closer to the networks that make life forms possible (Calvillo and Mesa, 2018). It could be said that artistic practice should be a tool that allows us to imagine the unimagined. Tools open to reconfiguration and reuse, that allow the construction of problems that were not foreseen. That they are technologies of aspiration, that allow us to expand the horizon of new urban expectations (Estalella, 2016). In this way, these tools must allow experimentation in the city to develop new urban natures calling for participation, but without designing what should happen in a specific place or at a specific time.

Image 24. diagram of the concepts and relationships that are established in the category of projects called "objects of socio-cultural activation".
Source: self made.
The first case, *Identidad*, is a wooden pavilion that divides Plaça Nova in two, recovering the old square from 1714 and showing the evolution of the Roman arch to the Catalan vault. The urban contribution of this project is based on generating a new meeting point in the city, activated and giving a specific use to an oversized space such as Plaza Nova.

Along the same lines, the project #estaesmiplaza is being developed. It is an inflatable object that allows the development of a sequence of actions that seek to promote the use of public space for neighbors and children. The plastic membrane of the structure serves as a support to host collective interventions through drawings, compositions and writings to encourage freedom of expression and imagination. The device enables us to activate a space within the Plaza de Callao and allow new uses, since they are generally large transit areas only.

Another similar project is *Mar de plástico*, a cultural initiative within the framework of Sens Arts Week, organized by the Luis Seoane Foundation during the International Education Week in A Coruña. This activity put teachers, artists and students to dance in María Pita square, in A Coruña, as part of “Zaborra puztu / Infla tu trash”, an initiative that consists of enabling existing funds for inflatable structures made from plastic materials. The project involved a network of schools in Spain, which work collaboratively from the concept of eco-justice, reuse, bio-ecology and environmental awareness. The goodness of the initiative lies in creating, through the visibility of excess plastic, playful architectures as artistic installations that take over the public space.
Finally, it is worth mentioning Todo Sobre Ruedas project, an intervention in the public space that introduces a series of recycled mobile furniture, causing other uses beyond the daily ones (playing, reading, staying, sunbathing, rest...), but new uses such as sofa races, basketball games on lounge chairs or a mobile siestodrome. This action allows providing pro-active citizens with the necessary tools to appropriate public space. The objects made it possible to activate the plaza by users who normally did not inhabit it while generating unsuspected and spontaneous interactions.

Urban hacking practices in its physical aspect play in our favor. They are considered activators of the public urban space since they encourage the resurgence of unexpected events in places that were not designed for it, either because they were considered to be transit areas, abandoned places, underused infrastructure or degraded areas. These are hacked transforming them into sports uses, children’s play spaces, cinemas, artistic exhibition spaces, meeting spaces or spaces for protest and demonstration.
3. CONCLUSIONS

Urban hacking, as an alternative and possibility within artistic and educational practice, has a series of virtues that make projects more than mere objects for economic or speculative gain. Case studies reflected in this article have many benefits that seek a clear desire to improve cities, not only in the physical dimension but also in the socio-cultural layout. Virtues such as mediating between city and society, activating degraded or unused spaces, giving second lives to obsolete objects, creating care networks between communities and make citizens acquire the notion of belonging to the public space. For this reason, it is important that initiatives and policies that promote them continue to be promoted by public administrations that allocate more economic resources, so that agents involved can see their work dignified.

It would also be interesting to observe what situations could arise from these actions if the processes were normalized and included in the usual practice of studios and groups. That is to say, in all the cases of interest in this article, there is a personal will of the authors to carry the project out, with resources in many occasions reduced or non-existent; but what would happen if these practices were standardized and large architecture studios received orders to “activate an abandoned lot in collaboration with the neighbors.” I think the answer is not so much that these types of practices are standardized, but in seeing them as one more option within the discipline and therefore facilitate the legal and bureaucratic issues to carry them out.

Finally, the intention of this research does not deny the existence or validity of a more orthodox artistic or architectural practice, related to construction. But the existence of both is defended, since only with the first many urban needs are detected that must find an answer. This may reside in normalizing urban hacking as practice within the artistic discipline.

4. REFERENCES


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