
Re-dis-covering Lorca

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ABSTRACT. The aim of this investigation is to develop strategies of intervention and rehabilitation on the most affected quarters of the city of Lorca after the 2011 earthquake. It is proposed to revive the relations that already existed in LORCA but may have weakened over time, long before the earthquake, understanding the scope of the project as an opportunity to improve the whole urban fabric on one hand, and to recover the relations and connections that have been destroyed due to the physical disappearance of the elements that used to provoke them, on the other.

KEYWORDS. Networks, Lorca, infrastructure, energy, memory

Juan Antonio Serrano García*_Paloma Baquero Masats**

**University of Granada
Serrano+Baquero arquitectos
Puerta Real 1, 5º A. C.P. 18009. Granada
juan@serranoybaquero.com
650603647*

***University of Granada
Serrano+Baquero arquitectos
Puerta Real 1, 5º A. C.P. 18009. Granada
paloma@serranoybaquero.com
669848204*

1. Introduction

LORCA was the most affected city on the earthquake of 2011 in the East of Spain. A public contest was held to reflect on the possibilities of recovery of the city, the visible and the invisible part of it. We consider this place as not constituted by a succession of separate elements but by the relationships between them. They are complementary relations, sometimes physical and sometimes virtual, that unite urban fabric in various scopes: social, cultural and identity.

Intervening in this place, so marked by the earthquake, is understood by the team as the generation of series of events in the landscape, which can produce spatial and temporal continuities that contribute to the preservation and maintenance of existing networks (natural, social and physical) and are able to generate new areas of opportunity.

The proposal explores the ability of architecture to give value, enable and transform the territory in which it stands, investigating the relations between ways of living and the history of the soil and its changes, understanding the intervention as a new layer that stores biological, social and infrastructural memory of the site.

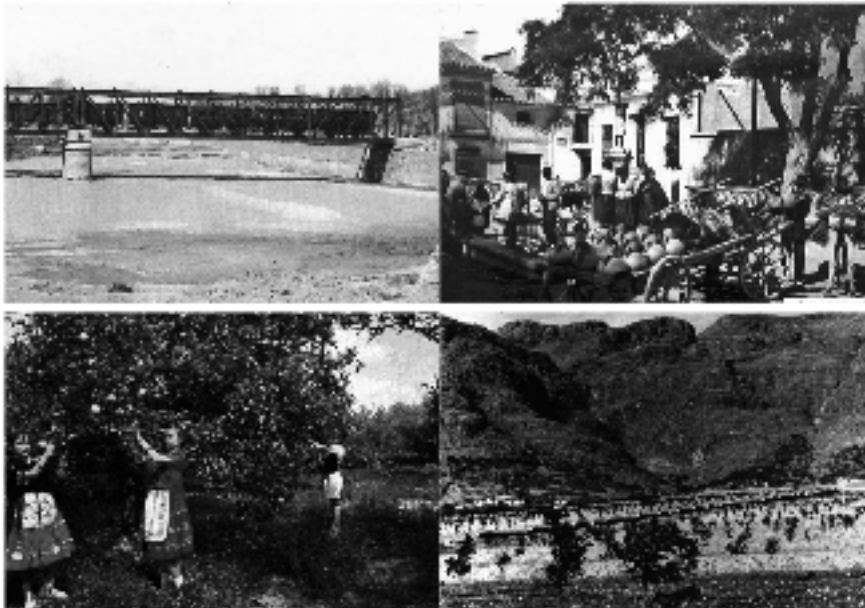


Fig. 1. Lorca, Murcia

Thinking about the evolution of the city of Lorca, we know that, as an open system, it is able to generate negative entropy through the exchange of both energy and information, with the environment.

When a living being (another open system) is isolated from its environment (the territory of which it gets energy and food, for example) and then becomes a closed

system, it begins a process of inexorable degradation. This has happened in some neighbourhoods outside the centre of LORCA, where the bonds of which we speak have been broken. They are residual spaces that remain outside the urban routes, as empty and unproductive islands.

Two strategies are defined to operate:

-Re-discovering Lorca. It consists on retrieving the character that the territory has always possessed and that has been damaged in recent years. The disclosure of these layers containing the identity of the place is essential to build a city with a landscape in continuity and coherency with its history.

-Networks covering Lorca. Once the character of the territory is revealed, we propose to intervene covering it with series of interconnected networks, generating the necessary complexity.

2. Re-discovering Lorca

Understanding history as a continuous accumulation of time and information, we think it is very important not only to perform a reconstruction of the damaged buildings but to keep or recover the essence of the site, its status of memory and diversity, working with strategies that are able to reconnect it with the city, being actively reinstated in its urban fabric and achieving a memory exercise, enhancing the value of the history of the place.



Fig. 2. Lorca in 1945 and in 1956

Thus, the project not only maintains the existing lines but also tries to recover the relations of these places with the territory in which they are located, the soil and the environment, making a study of their evolution through aerial photographs and tales about the site.

As explained above, LORCA can be understood as a superposition of layers that store biological, social and infrastructural memory, that build the collective memory of the society that lives there.

The passage of time is a biological process of degradation, of constant movement of matter and energy that leads to a slow growth of information.

This strategy is based on the reformulation of the territory through the recovery and detection of previous layers, which have been blurred over time or have been eliminated in the process of urban growth and evolution.

3. Networks covering Lorca

Overlapped to the enhanced previous layers, an infrastructure network that accommodates multiple uses is built, offering the number of dwellings required for everyone in the neighbourhood to regain their home.

This infrastructure is very primitive, with no special finishes or dressings. It will be an activity container that will create many employment opportunities.

The strategic position of the facility cores and wet rooms will result in an economization and an easy construction and maintenance of the whole building, since both floors and ceilings will be released of them.

This, together with the distance between pillars chosen for the new buildings will result in passant houses, with the benefits of lighting and ventilation that it entails, as well as in areas of high flexibility.

The material simplicity equally affects the potential earthquake resistance, because it would be a construction according to the seismic requirements for the location of the project and it would be released from objects that might drop, offering a high constructive coherence.

We intend to study the role of the user (occasional or regular) as an active partner in the architectural project, rather than as a passive client. The generation of activities acts as a source for landscape maintenance or sometimes for its discovery, leading to specific forms of coexistence with the land by occupation and participation strategies.

Through the appropriation (understood as a dynamic process of interaction with the environment that generates links to the sites) a site is transformed into a place, it is perceived as own and gets full of meaning, generating a symbolic identification by the user through an affective process. This is of great importance in an intervention like this, after an event that has led not only to physical destruction of certain buildings, but also to the emotional damage of people who inhabited them. It is intended that such users do not return to any house, but to their home.

It is in this sense that we talk about appropriability, as it might be impossible or maybe inappropriate the precise reconstruction of the previous housing and living conditions. It is important to build a place that can offer improvements, always under the will of the inhabitants, who are able to customize their home.

The existing alignments are respected, as well as the road structure. Some of the tracks become pedestrian in order to facilitate community living and moving flows of people coming to the mix of activities proposed as a complement to the existing ones. The unified treatment of the pavement according to the unveiled layers on each site will produce a continuous perception of the neighbourhood, something that could spread throughout the city by creating footpaths and bike lines.

The predominance of public space and community programs will make these neighbourhoods spotlights of activity, contributing to the revitalization of the urban

fabric and participating in the exchange with the city continuing its entropic processes in form of multiple opportunities of development and complexity construction.

2.1. Neighbourhood of San Fernando

The district of San Fernando was built in the late 70's to house the families affected by the flood of 1973. This means that many of the inhabitants, who are living in manufactured homes provided by the Red Cross or have been welcomed by their families, have had to leave their home twice. This time it is intended to make them able to return to their homes in the same place where they lived, in many cases, for over 30 years.

This "coming home" will be held in a special way, since the project involves the recovery of the character of the place by a reformulation of the territory, through the enhancement of its stratigraphy.

The position of this neighbourhood is considered strategic, as it is an important area of development where the new public infrastructure has been placed in the last years.



Fig. 3. Map of the location of the neighbourhood of San Fernando. Lorca.

For this reason, a rehabilitation of the existing is proposed, or rather a recycling, preserving the buildings in good conditions for both economic and environmental reasons but introducing some improvements.

The process of historical documentation of this area has shown the transformation of the soil of the site. The land of this neighbourhood was agricultural, specifically a citrus tree plantation, found in the vicinity even today, as in most places still linked to agriculture in Lorca.

We proceeded, according to the Re-discovering strategy, to recover that state of land when it was related to its environment and the living conditions of the site, making it compatible with the residential program and the connectivity needing. The project works as a transition (and not a limit) between the urban environment

and the natural one.

A process of urban archaeology has been applied to reveal what was there before the construction of the buildings.

An orange grove, which could be exploited actively, as happens in the adjoining plots, for the use and enjoyment of the community is replanted. In this garden, which radically transforms the existing fabric, all kinds of common activities will be accommodated to serve the neighbourhood or the entire city. Some empty areas, as courts in the orchard, have been planned to develop an outdoor cinema, a picnic area, a workshop area for the elderly, temporary markets or camp games for children.

The new liveable network consists on two types of structures: one that is newly built in the lots subject to demolition, and one that is attached to which has been preserved.

We propose the conservation of all buildings that were reported in good conditions in the technical reports, because of the economic and environmental savings and to avoid people being forced to leave their homes, focusing on providing them asylum as soon as possible.



Fig. 4. The neighbourhood of San Fernando before the project.

An infrastructure network is built around the houses, improving living conditions. It is not reconstructing (rebuilding what already existed), or restoring (enabling a decadent construction) but recovering (starting a new cycle from the old).

These new spaces, built as a freestanding structure, are added on the outside of buildings in each plant to enlarge the rooms, creating new ones or producing terraces. Facades with small windows could be replaced by large transparent ones, which may allow people to enjoy the natural environment around them.

Overlapped to these networks there are the roads that give access to the underground parking hosting vehicles previously parked on the streets that now are pedestrian, the pedestrian network itself, the bike and sports network, the bicycle parking, the collection and accumulation of rainwater infrastructure on the roofs for a later use to water the gardens, and the accumulation of solar energy to supply the set net.

This infrastructure will be complemented by ICT networks, whose introduction would be accompanied by informative sessions and workshops held in the spaces provided in the garden, in the expanded areas of the existing buildings or in the multipurpose areas of the new ones.



Fig. 5. The neighbourhood of Lorca after the project.

The networks are exposed below:

-Infrastructure to improve the existing housing network: Freestanding net that will wrap buildings and provide greater stability and the possibility of expansion for a better use of the landscape conditions, sunlight and thermal control.

-Infrastructure for the new housing: A new network of homes is built in the place of the missing ones. They are simple and effective structures, modulated with a fast method of construction through prefabrication technology.

-Energy network. Solar ditches: We propose an energy grid that can unify scenically the place of the intervention with other agricultural lands by an infrastructure of irrigation ditches that collect solar energy from the sun during the day and can be used as public elements.

-Water network. Irrigation pools: The roofs of the buildings will be used not only to collect sunlight but also water, that after being accumulated in a series of pools, will be used to irrigate the park with orange trees.

-Mobility network: The area of influence of cars will be reduced, but instead some parking areas will be expanded, building two large underground parking. The pedestrian and the bike networks will be the most important ones, planning to extend them to the centre of the city.

-Entertainment network among the orange orchard: Playgrounds and recreational areas for neighbourhood residents and the rest of the citizens will be located here.

-Trade and work network: The lower plants of the existing buildings, expanded with the new infrastructure that surrounds them, are proposed as new areas of trading and working, mainly small and medium businesses, in order to generate activity in the area.

-Social facilities network: The lower plants of the new buildings, with greater height, will serve as receptacles of social and leisure facilities (kindergarten, library, gym), to involve residents and users from all areas of the city.

Legends

- Fig. 1. Lorca, Murcia.
Fig. 2. Lorca in 1945 and in 1956.
Fig. 3. Map of the location of the neighbourhood of San Fernando. Lorca.
Fig. 4. Neighbourhood of San Fernando before the project.
Fig. 5. Neighbourhood of Lorca after the project.

Bibliography

- AAVV. *Viviendas sociales en mulhouse, francia: invernadero doméstico. Arquitectura Viva nº105*. Pág.62-65. Madrid 2005.
- BOHIGAS, ORIOL. *Artículo 'Lacaton y Vassal. Diario El País*. 17 de Noviembre de 2004.
- DE DIEGO, ESTRELLA. *Entrevista a Anne Lacaton Arquitectura: Más por menos*. Luis Fernández-Galiano Ed. Fundación Arquitectura y Sociedad 2011. Pág.60-67.
- HALBWACHS, MAURICE. *Los marcos sociales de la memoria*. Anthropos. 2004
- ILKA Y ANDREAS RUBY. *Espacio extra, extra grande. Sobre la arquitectura reciente de Lacaton y Vassal*. 2G Libros. Lacaton y Vassal. Ed. G.G. Pág.6-10. Barcelona 2007
- ILKA Y ANDREAS RUBY. *Arquitectura naif. Notas sobre el trabajo de Lacaton y Vassal*. 2G Libros. Lacaton y Vassal. Ed. G.G. Pág.11-23 Barcelona 2007
- JONES, M. *The elusive reality of landscape. Concepts and approaches in landscape research*. Norsk Geografisk Tidsskrift-Norwegian Journal of Geography 45. 1991.
- LACATON, ANNE; VASSAL, JEAN-PHILIPPE. *Materia al desnudo. Arquitectura Viva Nº124*. Pág.84-85. España 2009
- LACATON, ANNE; VASSAL, JEAN-PHILIPPE. *La libertad estructural, condición del milagro*. 2G nº60 Pág.162-175. España 2011.
- MONTANER, JOSEP MARÍA. *Tramas urbanas: la pérdida de la memoria*. Centro de Cultura Contemporánea de Barcelona 2004 Conferencia pronunciada en el marco del debate "Traumas urbanos. La ciudad y los desastres". CCCB, 7-11 julio 2004.
- RUIZ SANCHEZ, JAVIER. *Ciudad, complejidad y energía*. Revista ciudad y territorio 171. 2012
- SCHLÖGEL, KARL. *En el espacio leemos el tiempo. Sobre historia de la civilización geopolítica*. Siruela. 2007.

Biography

Juan Antonio Serrano Garcia and Paloma Baquero Masats are architects, graduated in the School of Architecture of Granada in 2009. They have a PhD in Advanced Architectural Design (School of Architecture of Madrid).

They have worked on several architectural offices during 2009 and 2010, when the office Serrano+Baquero was constituted, making urban, interiorism and architecture projects. The more outstanding ones may be *Rurban Geology* and *NewWaterGarden*, that resulted winning projects in European XI contest (2011), and *horizontal showcase*, a little store built in Granada in 2010.

At the moment, both architects are focusing on investigation, conducting several investigation projects on urban issues and working on their doctoral thesis, and assisting as teachers in the School of Architecture of Madrid.