

The Architecture of the Periphery: An insight into the work of Aldo Rossi and its current relevance to the recent developments in the northern periphery of Madrid

La arquitectura de la periferia: una interpretación del concepto de “periferia” en el trabajo de Aldo Rossi y su actual relevancia en la reciente construcción del Norte de Madrid

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Fecha de envío: 02/04/2017 Fecha de aceptación: 11/01/2018| Fecha de publicación: JUNIO 2018



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Abstract

This article analyses the recent development of the periphery in Madrid within the context of Aldo Rossi's seminal book *The Architecture of the City*. The objective of this article is to emphasise the importance and relevance of Rossi's work within today's context, and to highlight his work as a tool with which to understand the current peripheral developments across Europe. Secondly, the article examines some of the challenges left by Rossi's work and looks at some of the critical work undertaken since the 1960's. This is followed by a more specific look at the work of the most recent theorists working within the context of Madrid itself (Abalos & Herreros) and considers them in light of Rossi's work. The article finally tests this theoretical approach (theory) before looking at the (project) most recent development in the northern periphery of Madrid (2008-2017). The article concludes with some insights into the application of Rossi's work today and highlights the current relevance of his work in relation to the continuing peripheral developments across Europe. Critically, the article is structured around the importance of the relationship between theory and project, as this tension was critical to the group *La Tendenza*, to which Rossi himself belonged.

Keywords: Periphery; Madrid; urban expansions; Aldo Rossi

Resumen

Este artículo examina la importancia del trabajo de Aldo Rossi y su libro clásico "La arquitectura de la ciudad", con el fin de explorar el contexto de la periferia desde un punto de vista teórico. El artículo se enfoca aludiendo a la importancia del mismo en el contexto actual, entendiéndolo como una herramienta que sirve para analizar la periferia europea. De la misma manera, se busca indagar en su pensamiento y trabajo a través del estudio de la ciudad actual, y el análisis crítico que se ha desarrollado desde que se escribió su obra, insistiendo en el seguimiento teórico más reciente llevado a cabo por Ábalos y Herreros en Madrid y que conecta su trabajo con la obra Rossiana. Finalmente, el artículo analiza sus propuestas teóricas a través de un caso de estudio (proyecto) como el de la reciente periferia Norte de Madrid (2008-2017), verificando la aplicación de estas teorías en dicho proyecto, y destacando la importancia que la obra teórica de Rossi sigue teniendo en la actualidad.

Palabras clave: Periferia, Madrid, extensiones urbanas, Aldo Rossi

I. Aldo Rossi's "*L'architettura della città*" (The architecture of the city)

"The city, which is the subject of this book, is to be understood here as architecture. By architecture I mean not only the visible image of the city and the sum of its different architectures, but architecture as construction, the construction of the city over time. I believe that this point of view, objectively speaking, constitutes the most comprehensive way of analyzing the city; it addresses the ultimate and definitive fact in the life of the collective, the creation of the environment in which it lives." (Rossi et al, 1988: 1).

If we take this quote by Aldo Rossi, we can extrapolate some concepts about his understanding of the city. He says that the city is about architecture. Architecture is not understood here as just an image of the city or a collection of different buildings but as part of the building process itself, as construction. The city and its architecture are, in his view, built over a period of time with the traces of memory becoming part of the whole city environment. The idea of time and the collective is also present. In his view this is the most comprehensive way of analysing the city.

This view of the city poses some interesting questions. It emphasizes the relevance of architecture, not just for the provision of buildings, but as an integral part of the process of building the city itself. The idea of process here is twofold. On the one hand the city is built, over time, as a process, and on the other hand he emphasizes the importance of the construction process itself, and how the buildings create the city. Here we can see the process of building and construction, and therefore architecture, as essential elements in the creation of a city.

The peripheral city that has been built in Madrid over the last fifteen years exemplifies fast track construction, building social housing to meet not just residential demand but real estate speculation as well (Marcinkoski, 2015: 104). Not only was the city built in these peripheries the fastest construction project in recent Spanish history but what makes it even more remarkable,

with reference to Rossi's view of the city, is that it is a tale of a city built fast, without any adherence to the qualities that Rossi considers essential in the construction of the architecture of a city; both memory and permanence.

In the peripheral areas of northern Madrid we see a series of partially occupied social housing blocks, which were constructed in order to meet residential demand, but it has quickly become clear that the construction of this number of residential units was not really necessary. By this we mean that more units were built than were required causing a huge financial crash and contributing to the economic crisis. Therefore, Rossi's manifesto becomes important here not just in terms of using his theory to understand what this new emerging city does not have, but also in a critical way to see what this new city offers in the context of the European city. Furthermore, an important aspect of Rossi's manifesto was his critique of functionalism. In this sense, the importance of Rossi's work is even more relevant today, as the city developed in the peripheral parts of Madrid does not have the qualities of the European city that Rossi exemplified in his manifesto.

In this article, we propose the possibility of developing a theory of the periphery within architecture, exploring the core elements both in architectural theory and its practical application in relation to the northern periphery of Madrid.

Starting with this hypothesis we aim to explore the concept of the periphery in architecture, by using Aldo Rossi's 1968 book *L'architettura della città* (The architecture of the city) as a reference point with which to start this process.

The importance of Aldo Rossi's view of the construction of the architecture of the city is also outlined by the Italian architect Stefano Boeri when he explains how this new peripheral city is emerging as a backdrop to the old traditional city:

"A new urban geography, defined by the realisation everywhere of a multitude of lonely buildings unable to constitute itself

as a collection of homogeneous artefacts, has transfigured boundaries built in centuries of history.” (Boeri, 2011: 82).

These new boundaries can be explored in contrast with the old traditional city that Rossi describes. Rossi's concepts, categories and types allow re-interpretation as a new technique that can be applied in a new context.

The idealised view of the city and the terms which he uses in *The architecture of the city* offer us the opportunity to tell a different tale: one that may help us to understand *the architecture of the periphery* in this case in the Northern Periphery of Madrid. This new city which reflects our current society is built and is given life in a territory that is a metaphor of itself: “A polyarchic society that has finally built a territory that reflects the likeness of where it emerges from, behind the apparent chaos, with an excess of equivalent rules.” (Boeri, 2011: 7).

Significantly, the importance of carrying out a study of the periphery is established by Aldo Rossi himself in the last chapter of his book. Not only is Rossi concerned about the growth of cities, he also emphasizes the importance of studying this phenomenon in particular:

“It is logical that the extraordinary development of cities in recent years and the problems of the urbanization of the population, of concentration, and of the growth of the urban surface have taken of prime importance in the eyes of urbanists and all social scientists studying the city.” (Rossi et al, 1988: 160).

For him, the phenomenon is not just important in terms of growth but also as a subject of study in its own right. Although he mentions the concept of the *megalopolis* developed by Jean Gottman (1969)¹ and also the work of Lewis Mumford in the US, he is particularly interested in the effects on people of the expansions of the cities in Europe. In this article, we want to use

1. This article does not focus on the work of Jean Gottman, only referring to it in relation to Rossi's work, but for further information on his work regarding the megalopolis please refer to Gottman, J., 1969. *Megalopolis: the urbanized northeastern seaboard of the United States*, Cambridge, Mass.: MIT Press.

the point where Rossi concludes his book as a starting point to explore the questions he left as inconclusive or open in his study. The project we intend to explore in order to consider some of these questions is the recent development of the two Urban Action Plans built in the Northern Periphery of Madrid: Las Tablas and San Chinarro.

This early preoccupation of Rossi's with the European peripheries was manifest in his early days as editor of the journal *Casabella* where he wrote articles about the living conditions within the peripheries of Milano in Italy that were emerging in the 1960's.

Rossi associates the city with two main values, *memory and permanence*:

“City and region, agricultural land become human works because they are an immense repository of the labour of our hands. But to the extent that they are our ‘artificial homeland’ and objects that have been constructed, they also testify to values; they constitute memory and permanence. The city is in its history”. (Rossi et al, 1988: 34).

We see these two values here interrelated and inextricably linked with history. Memory and place, of a city built over a period of time and he also refers to the idea that the city itself is as an *artificial object* that has been made by men. Over time, the agricultural land becomes the city, which is built by men. History and city become interweaved, and are seen here as two qualities that go hand in hand. When he writes this passage, he emphasizes his point by writing it in italics that the “city is in its history”. If there is no history, there is no city. The concept of the city and the region are seen here as a testimony of our values, which constitute history. History is that place *where memory and permanence* can co-exist together.

For Rossi, the city needs to have both these qualities of memory and permanence, however, the landscape that we see in Madrid is a mixture between rural and urban; this new city has been built fast in the middle of the existing rural landscape. It is questionable how memory

and permanence can be qualities that exist in this new peripheral city. Rossi's critique of the functionalist city in the 1960's is now relevant to these new peripheral settlements that are emerging as a result of recent planning in Madrid, as the city is left to develop in relation to speculation and market forces.

This connection of speculation and growth in the context of the periphery is an interesting one; Rossi sees the cities of today as places where growth occurs as a direct result of speculation. However, the residential element is an essential part, an urban artefact in this whole process. The landscape that he describes in America is that of a single-type of house reproduced across the landscape, whereas in Europe these residential areas are sub centres of the main city centre. For Rossi, in order to have a successful approach to these residential areas; "It is logical and important to understand that the success of residential complexes is also related to the existence of public services and collective facilities." (Rossi et al, 1988: 71). This means that these residential areas or sub-centres cannot operate properly without connections and facilities for the people that live in them. That is why, for him, it is of paramount importance to study the concept of dwelling as a way in which to understand the city: "[...] the study of the individual dwelling offers one of the best means of studying the city and vice versa." (Rossi et al, 1988: 71).

According to Italian architect Pier Vittorio Aureli:

"Rossi's hypothesis of autonomous architecture involved more than the rejection of the naiveté of functionalism, nor was it just a call for a rational language: a theory of form liberated from the sequence of formal styles in the service of the dominant bourgeois institutions." (Aureli, 2012: 55)

His reading of the city is political, and his critique of returning to a rational language is a reaction to the capitalist interests that dominated the construction of the city. In today's context, the peripheries that have grown at the boundaries of most European cities, and of particular interest in terms of this article, Madrid, respond

also to economic forces and interests. In this context, Rossi's theories remain relevant as they offer a critique of the capitalist forms and interests that govern the city today: "Instead of simply advancing in tandem with the further modernisation of architecture and the city, the need for renewal became visible as a demand for a theoretical refoundation of architecture in the relation to the city." (Aureli, 2012: 53-4). This is a critical question in relation to the peripheries, the question we asked in the hypothesis at the beginning of this article was, is it possible to arrive at a theory of architecture for the periphery in Northern Madrid? However, where Aldo Rossi's work was a demand for a re-foundation of architecture in relation to the city, this new city that we see in Madrid and indeed in cities across Europe requires a critical foundation of theory, as the city responds first and foremost to capitalist and economic interests.

II. Critiques of (and challenges to) Rossi's work

Previous investigations into Rossi's theoretical work have left several questions unresolved, or have addressed them without sufficient clarity, particularly regarding some of the ideas that he developed concerning the architecture of the city and how these could be applied to a new emerging context: the periphery. There is also a dilemma regarding the duality and dialectic between *architectural theory and project* and how this might be resolved in the architecture of the periphery. In this section we summarise the Spanish thinking on the urban periphery, and discuss how architectural discourses from *La Tendencia* and from Aldo Rossi have influenced Spanish architecture and discourse, including an explanation of the critical relationship between theory and practice central in relation to the Spanish context and indeed to this article. This generation of architects, influenced so much by the Italian School, are the actors that have shaped the critical discourses, architecture and planning in Spain since the 1960's.

However, despite being new and exciting Rossi's work wasn't always easy to interpret, as some of the concepts can be ambiguous and indefinite. This difficulty in being precise and specific with some of the theoretical *terms* is

explained by Rafael Moneo: "The concepts presented are vague, imprecise, diffuse. But it was enormously attractive to my generation" (Moneo, 2004: 104). Rossi's influential book had a massive influence for generations of architects:

"In 1966 he published *L'architettura della città*, elaborated with material taken from previous articles [...] So influential was it that by the close of the sixties, concepts like "place", "type", "monument", and "urban form" had become household terms" (Forty, 2004: 308).

Understanding this self-governing force and the autonomous processes under which the city develops is a difficult. Albert Pope writes:

"Traditional formal analyses have been regarded as instrumental inasmuch as they have distilled design strategies down to an established typological base. [...] Typology derives from the dominance of form. It is not simply meaningful to establish a typology of form in a city of space. The value of the analysis thus derives, not from explicit intervention strategies but from the identification and elaboration of the unseen potential of Megalopolis." (Pope, 2009: 21).

If we look at the reminiscences left by Rossi's theories we can grasp the unseen potential that Albert Pope points out here concerning the autonomy ruling the periphery, and the challenges of looking at the possibilities of a taxonomy but not in terms of the creation of a catalogue of mere types of built form, but by using it as a value for analysis that will offer us the identification and elaboration of the potential of the periphery.

An *acknowledgment* of the influence of the work of Aldo Rossi and *La Tendenza* in Spain is essential in order to understand the context of this article, not only because Rossi's work has become fundamental in the Spanish context in the last thirty years, but also because the application of urban analysis and the tension between theory and project has been fundamental in Spanish architectural thinking and practice and also in Urbanism since the 1970's.

A whole generation of architects were influenced by his work and by the work of some of the Italian architects working in a similar way during that time.

These interventions and tools have continued to influence Spanish architectural thinking, focusing on the discourses emanating from the Schools of Madrid and Barcelona and a series of key figures from that time (see Figure 1) who produced a body of critical work from scholars about the work of Aldo Rossi.

Aldo Rossi wrote the prologue for the book *La Torre di Babele* (The Tower of Babel) by Ludovico Quaroni's, who was one of the most important architects of the Post war period in Italy, where he emphasized the importance of the city constructed as architecture, being architecture. The idea of *quartiere* (translated into English from Italian as district or neighbourhood) was essential to the idea of projecting in the city (Sainz Gutiérrez, 2011).² Rossi refers to this concept of *quartiere* in his book *The Architecture of the City*, in order to define the residential districts, clearly influenced by Quaroni and his concept of the *quartiere* as an essential part of projecting in the city. Quaroni was not just one of the main influences for Rossi, but was also a mentor for Manuel Solà-Morales i Rubió who worked for him in Rome for a year before returning to teach in Barcelona in the 1970s.

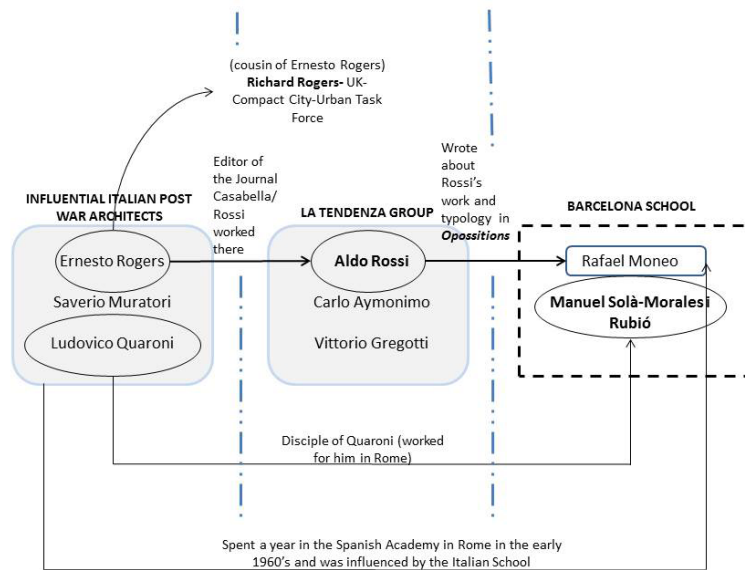
Aldo Rossi worked on the magazine *Casabella-Continuità* at a time when the publication played a leading role in Italian culture. He was editor (1961-1964, nos. 249-294)³ and the editorial group at the time in number 253, included not only Quaroni, but also other figures of *La Tendenza* such as Vittorio Gregotti, and Giorgio Grassi under the directorship of Ernesto N. Rogers (Rossi, 1961: 1).

Ignasi Solà-Morales (Manuel's brother) was an architect and philosopher who played a key role

2. V. Please refer to this publication for further information and a synthesis of Quaroni's influence in the work of Aldo Rossi and *La Tendenza*.

3. Biographical Note in: A. Rossi, et al., *The Architecture of the City* (Cambridge, Mass.: published for the Graham Foundation for Advanced Studies in the Fine Arts and the Institute for Architecture and Urban Studies by MIT, 1988), 202.

Figure 1 -Diagram showing the relationship and connections between different architects and theorists in relation to this study. Rafael Moneo was a close collaborator in architectural projects and a colleague of Manuel Solà-Morales i Rubió, and also taught with him in Barcelona for ten years from 1972. They worked together and they built the project as a team of L'illa Diagonal (1993) in Barcelona. Source: (Author's own)



in defining the relationship between photography and the concept of terrain vague that defines the contemporary peripheral metropolis. Ignasi was also part of the team that published the Spanish Edition of the book *The Architecture of the City* in Barcelona in 1971 so he has a clear influence in divulging the Italian discourse in Spain (Rossi et al, 1998: 197). The influence of the Post-war Italian architects in Spain was an essential part of the theory and culture of architecture which developed in the 1970s: key architects such as Rafael Moneo, who in 1963 spent two years at the Spanish Academy in Rome (see Figure 1).

Urban Analysis became the main tool and approach used to understand the city in the Spanish context. Manuel de Solà-Morales Rubió developed a course specifically about the peripheries at the University in Barcelona, and he wrote most of the literature in Spain about forms of urban growth. He refers to the importance of opening urban analysis further than the Italian group of *La Tendenza* (of which Aldo Rossi was a member):

“Already in the years 1968-1970, we have translated for the first time in the Laboratori Gregotti, Aymonimo, Rossi and a long list of other scholarly articles that

were unreachable (Moneo presented theoretically the discussion of the idea of type in the year 1974 in *Opositions*). But the programme *the forms of urban growth* supposes precisely the will to open up the urban analysis to a wider field other than just strict observation of morphological types.” (Solà-Morales i Rubió, 1997: 13) [Author’s translation].

The influences of *La Tendenza* and the Venice group (Aymonimo, Rossi, etc) are clear, but he expands further on the challenges left by them and the limits of their theories. Rafael Moneo introduced the concept of typology to an American audience in *Opositions*. He also wrote another article in the same journal about Aldo Rossi. It is worth noting that Peter Einsenman was one of the editors of this journal, and he also went on to write the Preface and the Introduction to the American edition of *The Architecture of the City* by Aldo Rossi which was the first English version of the book.⁴

Aldo Rossi developed analogical thinking in

4. The Institute of Architecture and Urban Studies (1967-1984) created the journal *Opositions* in 1973 to foster the emergence of a critical voice independent of academic and professional institutions. *Opositions* stimulated the formulation of competing critical projects, disseminated the works of Anglo-

what was a clear second stage of his career when he wrote the book *A Scientific Autobiography* as a collection of fragments and ideas of +his thinking and the images that influenced his thoughts and his architecture. Peter Eisenman, in his Editor's introduction to the American edition of the book *The Architecture of the City*, explains the importance of feelings and memory in his work:

"For Rossi, the city is a theatre of human events. This theatre is no longer just a representation; it is a reality. It absorbs events and feelings, and every new event contains within it a memory of the past and a potential memory of the future." (Eisenman in Rossi et al, 1998: 7

His theory proposed a critique to establish a political reading of the city against of the capitalist changes at the time.

III. The Madrid periphery in the current context: Abalos & Herreros' concept of descampados and its relationship to the work of Aldo Rossi

This section introduces the works of Abalos & Herreros who were part of the Madrid School in the 1980's and were influenced by the work of the earlier generations, their work follows on from these discourses and focuses more directly on the context of Madrid and the terms used to define the current discourse on peripheries.

Here we introduce the two key definitions in the context of this theory which are: *areas of impunity and descampados* (Abalos & Herreros in Beigel, Ábalos&Herreros2002). These two terms refer to the areas in the periphery; out of the city boundaries in the open country. They also question whether these areas contain a model or a typology:

"One is tempted to ask whether they might contain a metaphoric model, a

quasi-model, or whether it is possible to think of their compliment, de-edification, given that the term 'descampados' embodies a fascinating concept: land that has lost its attributes as the city approaches, sterilised before being occupied, but also given a transcendental role in its new context. We ask ourselves whether architecture could be constructed this way...."(Abalos & Herreros, in Beigel, Ábalos&Herreros2002: 28).

So, for them:

"Areas of impunity" are precisely those zones in which this ambiguous status is produced in an exceptional way, a status whose designation as public or natural space is imprecise. These formerly negative zones are endowed with a new urban status by the gaze of new social subjects and their practices."(Abalos & Herreros, in Beigel, Ábalos&Herreros2002: 28).

Abalos & Herreros describe these concepts as having a new urban status, what we intend to explore in this article is whether or not these areas appear in Madrid.

A critical question in the subsequent analysis is whether the role of these areas is a transcendental one or not in the peripheral system and if it is whether it contains a model or not. Abalos & Herreros take a critical view on the issue of location in relation to the project. For them in recent decades there have been four main approaches to this topic (see Figure 2):

"Many forms of anchorage to the location have been developed in recent decades, from those involving the phenomenological root (Anchoring is the title of an important text by Steven Holl), via the Bergsonian influence in Moneo's work and the structuralist effect of the *genius loci* in Aldo Rossi, to attitudes that come from the Frankfurt School (Frampton and his contextualism)." (Abalos & Herreros, in Beigel, Ábalos&Herreros2002: 29).

American formalism and the Italian Tendenza, and introduced to the American context the phenomenological, structuralist and Marxist criticisms of contemporary European scholarship. Anon, *Oppositions* | Canadian Centre for Architecture (CCA). Available at: <http://www.cca.qc.ca/en/collection/799-oppositions> [Accessed 14 February 2013].

However, they discuss in theoretical terms a significant shift in architectural theory in relation to location: "In recent years we have witnessed an important shift (see Figure 2): "every location has started to be regarded as a landscape, and has ceased to be a neutral background in which more or less decidedly sculptural, artificial architectural objects stand out." (Abalos & Herreros, in Beigel, Ábalos & Herreros 2002: 29).

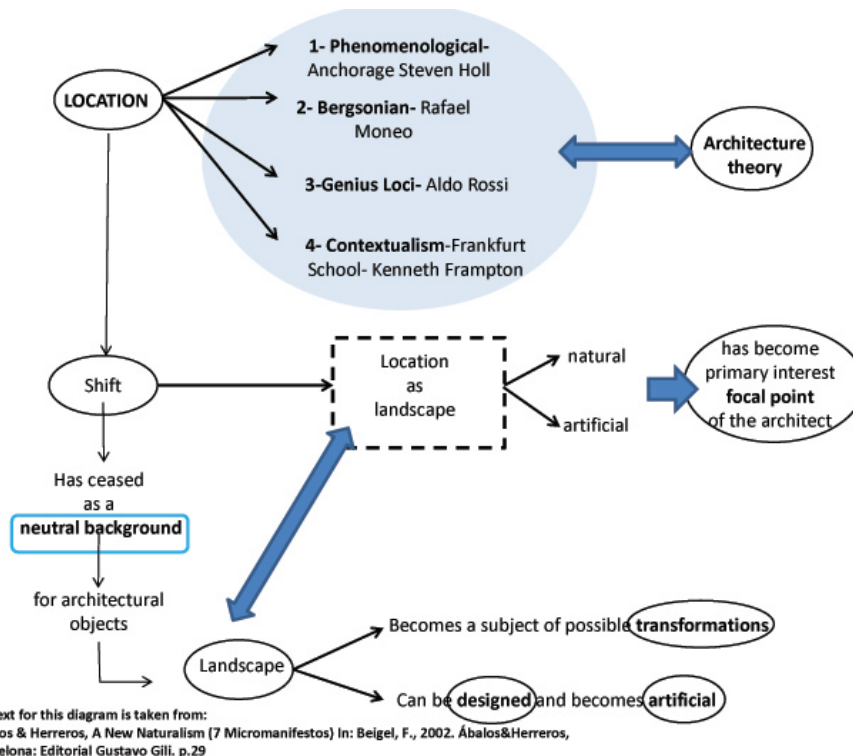
For them, it is necessary to find a new poetic way to see these new types of conditions in architectural practice:

"If we were modernist architects, we would think of this city in moral terms, and would produce reformist policies. However, we think it is much more necessary and, if you wish, more closely linked to architectural practice, to find a poetic substratum in this magma, to understand this as something that calls for a new kind of gaze and via this, to attain a critical dimension."(Abalos & Herreros, in Beigel, Ábalos&Herreros2002: 29)

We think this is interesting in two ways: they look at different ways to look at place and location in these areas of *impunity*, or *descampados* where the natural and artificial meet, but they also propose a new gaze that finds a poetic dimension to this magma. To us this is a critical question, in the sense that peripheries, defined by them with negative connotations and lack of regulations, might contain this element that they lack by definition, which are the poetics of space, and therefore they pose a critical dimension not just in terms of definition but also in theoretical terms. Can the periphery have a poetic dimension after the shift they imply in recent decades of architectural thinking in relation to place and location? We think the poetry or the poetic dimension could also be associated with the concept that another Madrilénian architect Rafael Moneo refers to, which is that idea of continuity.

This connection between finding the poetic dimension in these areas of impunity as they are defined by Abalos & Herreros also connects with that idea of location that they mention when they defined the four theoretical approaches to

Figure 2 - Main architectural theories about location and the shift that has occurred in architecture theory that requires a new location in these areas of impunity that acts as focal point for the architect. (Adapted from A&H). Source: Authors.



this theme, one of which they defined as *Bergsonian Moneo*. Abalos & Herreros used *collage* as a technique to offer these different views that come together while looking at the city, but in Moneo's writings when he refers to the city as an "open game" in relation to continuity:

"According to this view the city is an "open game", a game of solitaire in which we find ourselves dealing new cards that transform but do not destroy the patterns of the rules that others laid down before. Our work as architects modifies the field of action-the city and its buildings- and prepares the ground for those who will come after us. As we see it, accepting the specificity of a work of architecture-what it makes it different from a painting or a piece of sculpture-is crucial for the architect, we believe there is a logic to architecture that involves a particular way of learning and proceeding, a logic that incorporates the notion of continuity" (Moneo & Moran, 2010: 169).

This "open game" is about the new cards and tools but is also about understanding the rules of the past in this sense, but as we are using tools and methods in this context the idea of collage as a tool becomes apparent in the sense that we intervene as architects in a selection of choices that determine our intervention both as a building, or in the city. The connections between these tools either using different names such as open game, or as a collage still do not resolve the question posed clearly on the periphery which is, that if the notion of continuity can appear in the periphery as a concept, or if the periphery can have the poetic dimension that gives it certain continuity. This exploration can also be carried out by using the tools of Aldo Rossi, to explore on the ground what typologies occur in the periphery, or if new typologies occur that can be identified and introduced or replaced those of Rossi's traditional city being explored in this new context.

Abalos & Herreros establish in their writings their connection to Aldo Rossi, as explained earlier and the idea of *genius loci*,⁵ but other

influences in their work clearly show a connection with Robert Venturi. In an interview, Hans Ulrich Obrist asks Abalos & Herreros about the influence of Venturi and Rossi in their work, and they answer:

"[...] A lot of things we've done come from our student years, years in which Venturi and Rossi were leaders in the field. [...] The influence of your student's years is always there. In a sense, the first things we did were strongly technical, as a kind of statement against that cultural period. Still those projects were very much based on part of the work of Aldo Rossi and Giorgio Grassi, for example. The rigorist part, not the historical one, was what we took from them. Then we started working in a more relaxed way in disciplinary terms, and some aspects of Venturi's work began to seem interesting to us, just by sliding into other contexts." (Ulrich Obrist Beigel, 2002: 128).

The relevance of this is the strong theoretical influence of both thinkers in their work and the connection between this and the work that this article develops. Rossi's work in *The architecture of the city* and the work of *La Tendenza*, and also the work of Abalos & Herreros offer us new tools and types to develop the work on the Madrid periphery. While the two periods may seem disconnected, they are not as they influenced their work and the way their thinking processes developed since the 1970's. However, in the same way that it was relevant in this study to refer to the critique of Rossi's work, Abalos & Herreros are also critical of this.

IV. The project: Theorising the periphery in Madrid, and an insight into the project

In preparation for this article, we carried out extensive fieldwork between 2013-2016 in three key peripheral areas of Madrid to explore if we could arrive at a theory of the periphery. Thinking about the aforementioned gaps left in Rossi's work, we walked these areas in a series

5. For Aldo Rossi's definition of the locus please refer to Rossi,

A. et al., 1982. *The architecture of the city*, Cambridge, Mass.: MIT Press. p.103

of stages, photographing them and collaging some of the ideas to complement our hypothesis and these are some of our findings. The three areas in Madrid that we chose were; the Northern Periphery of Madrid Telefonica City, which is one of the corporate HQ's that recently moved out into the periphery from the centre like other financial corporations. And the two PAU's (Urban Action Plans) of Las Tablas and San Chinarro as they have almost been completed and clearly represent a study area of these kinds of developments that emerge in the residential peripheries of the city (see Figure3).

An insight that became apparent to us when we walked through these vast residential areas is that they present as experimental, like a huge testing ground for the ideas of architects: "A

Figure 3 Map showing three different areas of study in the North of Madrid: Telefonica City (in yellow), Las Tablas and San Chinarro (in purple). City Centre (in white), and the Ensanche 19th Century Extension (in red). Source: Image credit Google Earth (23/09/2016)



feast for the hungry architect, the periphery is dotted with a dozen examples of interesting architectural experimentation." (Prat, 2008: 39). According to Juan Herreros, architects, "[...] view the peripheries as a deregulated zone in which they could rehearse a new scale, typology and programmes, and activate new types of public spaces." (Herreros in Cantis & Jaque, 2009: 285).

During the fieldwork we also found a lot of interesting points such as a proliferation of private space versus public realm, for example there were 24 hour CCTV cameras in a lot of the residential blocks, but these were also present in the corporate headquarters of offices and shopping malls. Another example of this was that in the area of Telefonica Headquarters the only café we could find was a Starbucks. There were also clear definitions of private space in front of some of the blocks instead of good public realm.

This was particularly clear on the ground level or street level where there was a proliferation of CCTV cameras and a clear lack of public space.

We also found certain elements that are almost vertebral throughout the whole peripheral system, they are as follows:

Areas that appear in the whole study of northern periphery which different authors refer to as terrain vague, voids, areas of impunity, or simply empty spaces that have a critical role in this system of the peripheral city. These areas are characterised by a lack of control, they have a negative connotation, and an absence of regulation which frees up the land and makes it flexible and ready for construction. These qualities emphasize their importance from both an economic and speculative point of view but also as dynamic and nomadic territories that allow these peripheries to exist, develop and fluctuate, eventually merging into the bigger system. Together with the de-regulation and close connection with the infrastructure they contribute to the expansion of the peripheries in a fundamental way. Aldo Rossi writes "In the capitalist city the application of economic forces is manifested in speculation, which constitutes part of the mechanism by which the city grows." (Rossi

et al, 1988: 140). And this article concludes that what Rossi envisaged in his theory of the city, has actually occurred in the areas studied that have been developed speculatively.

We can also see the emergence of a strip/corridor typology throughout the whole peripheral system which plays an integral part. This corridor appears in the three perspectives and throughout the whole study in the Northern peripheries. One characteristic of this type of corridor is that there are elements coming off it, such as the shopping mall, the petrol station, the McDonalds, the corporate HQ, but also all the residential areas and the green spaces. What is even more intriguing is its nature. When we look at the architecture of this Strip we see, in the North of Madrid particularly, the appearance of signs. The Strip of motorway in the North acts as an element dividing the two neighbourhoods (Las Tablas and San Chinarro). Here the motorway is somehow as Robert Venturi and Denise Scott-Brown would define it civic, and we can see an architecture, of signs, high speeds, big scales, and ultimately an architecture that is closely connected, to be driven through and designed for the motorcar. This type of Venturi-Scott Brown style of corridor is again a central element that connects the whole system together.

The relationship between infrastructure and this new construction boom that was led by the extension of the peripheries is clearly interconnected.

The findings from this research confirm the relationship between image, infrastructure, and urban expansion connected to speculation and the change of land use, and promoted by the planning, led to what we found on the ground: "We have shifted from a diffusion of the centrality to an indiscriminate invasion of the territory."Roch in Borja, Muxi & Cenicacelaya.²⁰⁰⁴: 81)

Also, another observation that is visible at every level within the area studied is what Abalos & Herreros defined as a *de-countrified landscape* where we see urbanisation merging with the agricultural almost confronting the natural and artifice landscape but as they write:

"One is tempted to ask whether they might contain a metaphoric model, a quasi-model, or whether it is possible to think of their compliment, de-edification, given that the term 'descampados' embodies a fascinating concept: land that has lost its attributes as the city approaches, sterilised before being occupied, but also given a transcendental role in its new context. We ask ourselves whether architecture could be constructed this way..."(Abalos & Herreros, in Beigel, Abalos&Herreros2002: 29).⁶

This land in the peripheries has almost been built too quickly and this study concludes that the quality of the landscape and the opposition between nature and the built form appeared in these areas after the study. We can conclude that these areas appear everywhere in the different areas studied and that they have a pivotal role in the periphery of the city.

While those two elements become clear throughout the whole study carried out, other characteristics which are part of this cartography also appear:

There is a type of generic architecture and urban monotony including the repetition of almost identical blocks throughout the PAU's. Architecture and planning based on zoning (separate uses for commercial, residential, offices).

The whole space is designed for and around cars, with the cars clearly influencing the whole design from the layouts of the spaces (access to shopping mall, petrol station, wide roads) to the navigational details (such as bollards, roundabout, manicured landscape to be seen from the driver seat) and the signs.

There is also a clear sense of incompleteness, the whole place has the feeling of being an on-going building site. This is also intrinsically connected with the idea of nature and the area being 'sterilised before being occupied'. The periphery is mixing with what was not so long ago agricultural land and merging of the natural and

6. The term descampados translated from Spanish as open country or "de-countrified".

the artificial isn't cohesive. From the perspective of the citizen this is immediately clear in the amount of vacant underground units and scruffy, incomplete public spaces.

The typologies that emerge are the shopping malls instead of streets, a Starbucks instead of the independent café, the McDonalds instead of the local family-run restaurant, the corporate HQ instead of the office, and the private University campus which is out of town, instead of being located in the centre. All of these typologies are in big spaces that are designed to be accessed by cars.

There are some large scale green areas and public spaces but in many cases they are too large for human use and in relation to the residential buildings are totally out of proportion making them appear inhospitable. These peripheries are clear areas of architectural experimentation, where architects have tried new programmes, typologies, and ideas.

Another really interesting observation is the concept of Control in the public spaces and how clearly these areas have developed into CCTV dominated environments. You can see this through the use of bollards, cameras, fences, and signs indicating that much of what is visible is private property, shrubs border off enclosed complexes and CCTV controls the corporate HQ's and the University campus. This is also clear in the typologies that emerge (i.e.: the McDonald's, the Starbucks and the petrol station) with a much more commercialised type of environment to the detriment of public space.

What we saw across the peripheries in Madrid were buildings and spaces that had been designed to be carefully controlled. The relationship in this case between the individual and the architectural space is one where the individual is confined as an object of information as Foucault writes:

“Each individual, in his place, is securely confined to a cell from which he is seen from the front by the supervisor; but the side walls prevent him from coming into contact with his companions. He is seen, but he does not see; he is the object of

information, never a subject in communication.” (Foucault, 1995: 200).

This kind of control puts the individual in a position where he is merely able to move through the space gathering information through the control mechanisms that have been put in place. This together with an environment designed towards private occupation environments show us a city in Madrid where the public and the individuals' rights have been shifted towards more private interests and controlled environments.

It is clear, that all the elements mentioned above are interdependent of each other but when considered together, as they have been in this article, they present a picture of a real state expansion of the peripheries that is based almost exclusively on economic profit. In the case of Madrid too much was built too quickly, and as this cartography shows the types of peripheries that have been created are not environments that have been designed for people to enjoy.

This new European city of Madrid emerges as a city of zones and single uses, where architects tried typologies and experimental approaches, where the scale was so big and the relationship between building and spaces so large that they are not suitable for navigation on foot by pedestrians but have been designed for cars, and is ultimately a system that is about control and profit expansion.

On a purely economic basis this level of expansion was potentially highly profitable, but if you consider it in relation to what Aldo Rossi describes in his book *L'architettura della città*, as a place it is entirely without either memory or permanence. This new city led by profit and built too quickly hasn't allowed citizens the time to build memories or to establish any form of permanence, it is without soul.

Looking back historically, the 1985 plan of Madrid expanded the infrastructure, while the 1997 Madrid plan promoted uncontrolled growth particularly in the residential sector, and this tendency promoted in the plans is now clearly visible in the modern periphery of Madrid. Through this study we have demonstrated that the speculative concept shown in the plans of

Madrid and its treatment of the periphery, actually occurred on the ground in all the study areas.

We have also shown that the relationship between the periphery and the infrastructure is essential in freeing up land cheaply to build houses, or other buildings for more commercial uses. This cheap land allows houses to be built for the working and middle classes and corporate companies to move their workforce outside the city, but this type of development is clearly to the detriment of the public realm and this is evident across two areas firstly in the control of private over public and secondly in the way the environment has been designed principally for cars and not for people.

We don't think that we can arrive at a theory of the periphery for the European city in the case of Madrid in the same way that Aldo Rossi did in his book, as the city of Madrid today is a much more complex entity than European cities were in the 1960's. In fact, this article confirms that a theory alone does not work on the ground, and that other approaches are required to study the peripheries of European cities. This article intended to re-visit the question of taxonomy not just as a mere catalogue of built form, as a cartography of both visual and narrative elements of the periphery with all its complexities. Earlier in his career, even Aldo Rossi was more interested in classifying and arriving at an urban theory, while later in his writings he was more interested in analogies, fragments, and a more subjective view.

However, the conclusions we have reached do show the importance of a different approach (both visual and narrative), with different perspectives that are interrelated offering us a new view of the object of study, and confirming that to understand the project we need to test it on the ground, as what we find in most cases is not what the theory suggested in the first place.

The economic role of these areas show us a system that while it works, it also failed in terms of the big economic crisis that indeed we have seen in Spain after the event of the construction boom.

As Juan Herreros writes:

"This exploration, carried out from within the centre, gave birth to an entirely new lexicon of "waste grounds", "areas of impunity", "large scale containers", "infrastructures" and the need to build a periphery that exploited its new specific conditions- in particular, its contact with nature and hybridisation of uses with an urban setting whereby industrial, residential and other specific resources cohabit naturally." (Herreros in Cantis, & Jaque, 2009: 285-6).

Confronted with this situation I asked myself if anything could be learnt from this. Herreros writes;

"[...] we have built a mediocre city around Madrid, and not exactly out of nothing. In fact we had everything in our favour." (Herreros in Cantis, & Jaque, 2009: 286). From the analysis we can see in the cartography these waste grounds and infrastructures that he describes ending up with a mediocre city around Madrid.

If we see this in contrast with the recent building boom in the city, we could therefore say that this type of territory is vital in terms of the development of the land in the Northern periphery. Another clear observation from the fieldwork is that these areas are also nomadic, meaning they are flexible for different uses as there is a total lack of control in these areas. Abalos & Herreros define these areas as 'areas of impunity' which they state as having on one hand "an ambiguous status" but also as "negative zones" that are "endowed with a new urban status."⁷ In this case the definition and the negative connotation and the absence of regulation also reveal and emphasize its importance from a speculative and economic perspective. This territory is moveable and flexible meaning it can have any use you want (and the geography of Madrid's flat plateau has made it easy for this expansion to happen) which makes it perfect for the construction boom that we have seen in recent years in the city. The land available at the centre of the city does not offer the free land that these nomadic spaces offer, and lacks this kind of dynamism.

7. These characteristics have been taken from figure 1 and were used by Abalos and Herreros as terms to describe areas of impunity.

Figure 4- From top to bottom areas of impunity, or empty spaces found in the fieldwork. From top to bottom 1- PAU Las Tablas, this area was open 2-Transition area located at the end of PAU Las Tablas and before PAU San Chinarro, this area was fenced off, but you could enter in certain parts 3. Area at the end of PAU San Chinarro and next to the building Mirador by MVDRV, this area was totally fenced off.



Dynamism here is seen as a territory that can transform itself:

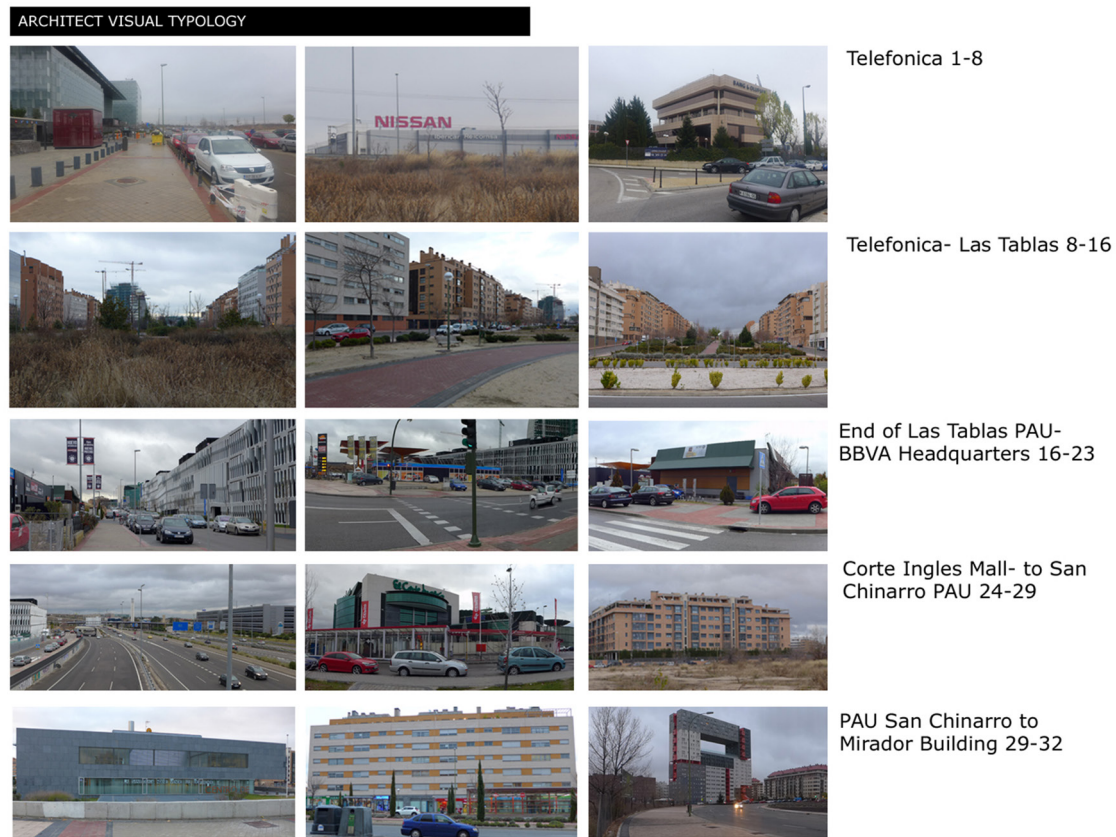
“At the margins, on the other hand, we find certain dynamism and we can observe the becoming of a vital organism that transforms itself, leaving entire parts of the territory in a state of abandon around and inside itself, in a situation that is difficult to control.” (Careri, 2014: 110).

This quality of dynamism is not just reflected in the territory's own capacity to transform but also in the sense that these areas that can

continually evolve as there is no specific controls over them.

This study confirms the relationship between economic development and the dynamism of this territory in the periphery of Madrid. This shows the dynamism of these areas and its important role in shaping the structure of the peripheral environment through spontaneity and creativity, but also connected with flexibility for speculation of the territory. On the one hand the territory we see from this perspective reveals itself as what Abalos & Herreros define as a “De-countrified landscape” where we can

Figure 5 – The visual typology summarise emerging characteristics resulting from fieldwork-architect for Madrid's Northern periphery
Source: Authors



see that kind of urbanisation merging with the agricultural land, and in the case of Madrid you can see this land is almost rural, with the ongoing building programme that occurs in the Northern periphery (Figure 4) where we can see this agricultural land mixing with the existing building sites (Figure 5 stages 1-8) where we see the first the new block built in the middle of the rural landscape, or the kind of de-countrified landscape that is present in front of the corporate HQ of Telefonica City. According to Abalos & Herreros this type of landscape represents the “dissolution of the natural-artificial. An opposition that we observe at every scale.”⁸ And on this visual typology below we can really see these characteristics.

For example, we can see the building El Mirador as a “counterpart of the anonymous structures flanking its facades” or as “a build-

ding that challenges the conventional closed, donut-block apartment complexes.”⁹ On the other hand we can see the MVDRV building as monument in the landscape, standing out as a modern residential monument against the generic apartment blocks (Figure 5 stages 29-32). The architecture of the periphery in Northern Madrid has become the generic landscape of a place that, as Abalos & Herreros discuss, is in between the urban and the rural, and the MVDRV building which stands out against the repetitive and monotonous blocks here is a monument to the type of city that is emerging in the North of Madrid.

8. These characteristics have been taken from figure 1 and

were used by Abalos and Herreros as terms to describe areas of impunity.

9. These characteristics have been taken from figure 1 and were defined by Ramon Prat.

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