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**REFLECTIONS ON PUBLIC SPACE AS A COMMON
VALUE**

**PUERTA DEL SOL (MADRID) BETWEEN *LOS
INDIGNADOS* AND VODAVONE, OR WHO IS
OCCUPYING WHAT**

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Puerta del Sol (Madrid) between *Los Indignados* and Vodafone, or who is occupying what

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ABSTRACT

This paper aims to examine the complex relationship between public spaces and the images and meanings created and derived from them, as well as the conflictive relationship between political and economic establishment that appropriates these spaces and meanings and those social agents who resist said appropriation. Recent events that occurred in Puerta del Sol, Madrid's most central square, will be the background to and focus of this analysis. Since 2011, this square has been reclaimed as a place for political protest and contestation, while at the same time it has also been used for testing new ways to commercialise the public space.

The first part of the proposal deals with these two different ways of appropriating public space; reflecting on the reasons why some uses of it, such as Sol Occupation, has been considered conflictive and problematic, while others, such as the renaming of the place, has been mostly accepted as harmonious and nonexclusive. The second aim is to discuss the role of the geographical space in the social and political contest against the power.

Two main conclusions, each of one related with the issues that have been raised, can be highlighted. The first one denies the idea that these new social movements could be non-spatial. These recent mobilization processes have disproven the apparent lack of connection between the physical and socio-political dimensions into which the concept and reality of public space may be divided.

The second conclusion is related with the social images and symbols that are created and projected from public spaces. The relabeling of Puerta del Sol square involves acting upon reality, in as much as access to reality is achieved via words and concepts. With the addition of a commercial name, the traditional denomination of this space is trying to be detached from its political content and connected with another meaning that is associated with the imaginary of a sophisticated, and supposedly aseptic from an ideological perspective, economy.

KEYWORDS: Public space, common value, Los Indignados, Puerta del Sol, Madrid.

1. INTRODUCTION

Puerta del Sol is probably one of the most centric, accessible and symbolic places in Madrid. A classic meeting point and the spot where the country's radial road system begins, the square also hosts the building known as Casa de Correos, whose bells announce the New Year to all Spaniards every 31 December¹. In consequence, it is a focal point not only for the city of Madrid, but for the whole country. In addition, over the last few centuries the square has often been used as a forum for the expression of political dissent.

This role as a forum for political dissent was resumed on 15 May 2011, when a number of participants in a protest march decided to stay and, after being expelled by the police, spontaneously gathered once more. This led to the occupation of the square, which was soon covered in tents, for nearly a month. This process was the origin of a movement known as the 15M or *Los Indignados*², which quickly expanded to other Spanish cities with the occupation of central urban spots, and which is still influencing the country's political scene.

What started as a local and isolated act of protest, rooted in specific elements of the economic crisis that has been affecting Spain since 2007, reached surprising levels of global projection, especially after appearing on the *Washington Post's* front page a few days later. Connections were made between these events and the so-called 'Arab Spring', especially with the iconic precedent of Tahir Square, in Cairo, as well as with the movements that soon followed in other western cities. Through this connection with broader and more complex protest movements, the events in Puerta del Sol transcended the national context and projected their political and symbolic presence beyond the physical occupation of the square.

Two years later, in June 2013, the underground metro station in Puerta del Sol, known simply as 'Sol', was relabelled 'Vodafone Sol' for a three-year period³. The agreement between Metro de Madrid and the British phone provider involves the inclusion of the company's name and logo on all internal signs throughout the network, the mention of the name of the company in the sound announcements and a change to the name of Line 2, which is to be known for the duration of the agreement as 'Linea Vodafone'.



Figure 1: Plaza Sol-ución (Sol-ution Square) vs Vodafone Sol. Source: Henrik Reeh

¹ On New Year's Eve, nearly every Spaniard follows a tradition, which consists of eating a grape with each toll of the bell, in a sort of rite of passage. Puerta del Sol is the most emblematic symbol of this celebration; thousands of people congregate there to eat their grapes, an event which is broadcast by virtually all TV stations and other media.

² This collective took its name from Stéphane Hessel's essay *Indignez-vous*.

³ The counselor of transportation of the current regional government, Pedro Rollán, announced that this contract is not to be renewed after its finalization in the summer of 2016. He admitted that the main reason is the 'social upheaval' that the measure supposed. *El País*, 19/02/2016.

As illustrated by the images above, the 15M movement (left) and the Vodafone marketing campaign (right) have both tried to appropriate the name of the square as a way to alter its meaning. The following discussion will try to ascertain what social agents are really behind the creation of meaning in urban settings. The discussion is not concerned with the ways urban space is managed as a traditional public space, but with the generation of common value and, therefore, with the degree of legitimacy which different agents possess to intervene on this public space, appropriate it or, in the case of the marketing strategy, commercialise it.

2. WHO IS OCCUPYING WHAT? ABOUT A SEMANTIC QUESTION CONCERNING THE RIGHT TO THE CITY

According to several studies, a significant proportion of Spaniards supported the 15M movement⁴. Whether or not they took direct part in it, the population seemed to believe that the protesters were entitled to stay in the square and that this was a legitimate way of publicising their ideological stance; at the same time, it was also understood that the presence of the protesters could interfere with other uses of the square. In other words, while it was assumed that the camp installed in Sol was a justified use of public space (for the expression of political dissent), it was also accepted that this could conflict with other equally legitimate functions.

In contrast, it does not seem that renaming of an underground train station by adding a corporate name was perceived in the same way, a process which involved the appropriation of a symbolic meaning and something that could be in conflict with other values associated with the square. No general perception exists that this commercial use is contradictory and conflictive in the same way that the 15M protest was.

Strictly speaking, it cannot be said that this commercial campaign founded no opposition. The initiative *Tapa La Marca* proposed an action of civil disobedience aimed at covering over Vodafone's logo. The first reason given for this was conceptually and ideologically significant: 'We cover the trademark because it is a symbol of the pillaging, the marketisation of all that belongs to all of us in common'⁵.

The fact is, however, that the new name has been assumed (although not used) without widespread resistance. Most criticism was based on practical reasons rather than on theoretical and political arguments such as those presented by *Tapa La Marca*⁶, for instance the low price which according to some the company had to pay in order to appropriate this emblematic space.

Indeed, for our argument, the quantitative factor – how many people oppose the initiative – is less important than the qualitative one – the reasons behind the opposition. For our purposes, it is worth explaining why some uses of the public space are considered conflictive and problematic, while others are accepted as harmonious and nonexclusive. One of the keys to clarifying this point could be found in G. Lakoff's (2004) analysis of the frames which are activated in our brain by the words and the concepts that we use. The process of framing is related to ideas within a worldview and also to the language used to

⁴ Fundación Alternativas <http://www.falternativas.org/laboratorio/libros-e-informes/zoom-politico/especial-15-m>.

⁵ *Tapa La Marca*, http://wiki.15m.cc/wiki/Tapa_La_Marca.

⁶ It must be stressed that the well-known writer Antonio Muñoz Molina published an article in *El País* in which he pointed out that 'the privatisation of an underground train line, calling it Vodafone is the usurpation of something as collective and public as the oxygen in our streets, as the words in our language', 'La ciudad tomada', *Babelia*, *El País*, 18/07/2014.

transmit said ideas; Lakoff has pointed out that, over the last few decades, conservative ideologies are making more efficient use of these cognitive processes.

In this sense, it is significant that the relationship between the 15M and the city, especially concerning the camp on Puerta del Sol, has generally been described as using concepts that evoke conflict and, what is even more harmful to the public perception of the movement, even a potentially illegitimate use of the urban space. Two verbs are repeated particularly frequently: *ocupar* (occupy) and *tomar* (take), which can be positively understood, since they evoke activism and the defence of public rights, but they can also be negatively understood, by eliciting the idea of a forceful, and potentially illicit, takeover. If the positive connotations seem to refer to the social and political dimensions of the movement, the negative implications are essentially focused on the geographical notion of the city as a constructed reality. This is manifested in the definitions of both terms in the *Diccionario de la Lengua Española*⁷, which defines *ocupar* (to occupy) (first meaning) as ‘to take possession of a territory, place, building, etc. invading it and keeping hold of it’⁸; and *tomar* (to take) (fifth meaning) ‘to occupy or acquire a fortress or city by force, treaty or assault’⁹.

In contrast, the change to the name of the station is generally alluded to with technical neologisms, generally in English (*renaming* or *rebranding*), which contributes to present the process under an aseptic light, quite outside any ideological debate. Aside from some groups which were directly involved in the 15M movement, no one has discussed the possibility that this, apparently non-ideological and peaceful operation, may have other implications. Following Lakoff’s (2004) theory, these implications become immediately apparent if the terms *renaming* or *rebranding* are substituted with others which evoke conflict, others which bring to mind different frames, as illustrated by a piece published by the British newspaper *The Telegraph*: ‘the move is likely to spark controversy in some quarters. Sol was the focal point of protests against the Spanish government’s handling of the economic crisis, and *Vodafone’s takeover* of the station could rub salt in that wound’¹⁰.

In truth, the discussion seems to be focused on highly abstract matters. Nevertheless, the fact remains that these meanings and metaphors form the basis for social perceptions of the use of public space and of who has the right to use it and for what.

As a place where individuals relate to one another, where society relates to political power, and therefore as a forum of conflict, Puerta del Sol is, among other things, a contested space. This space is at the centre of the theoretical discussion about the concept of public space as a common asset and the production of common value in large cities.

3. FROM THE SPATIALITY OF SOCIAL MOVEMENTS TO THE PRODUCTION OF COMMON VALUE

Although political activity, for many authors, is still related to forms of spatiality – ‘if words and actions are generators of public space, space also generates diverse forms of politics’

⁷ The dictionary of reference for the Spanish language, published by the Real Academia Española de la Lengua.

⁸ Equivalent to the Oxford Dictionary’s fourth meaning of ‘Occupy’: ‘Take control of (a place, especially a country) by military conquest or settlement’ [Translator’s note]

⁹ Roughly equivalent to the Oxford Dictionary’s first (1.1) meaning of ‘Take’: ‘Capture or gain possession of by force or military means’ [Translator’s note]

¹⁰ Katherine Rushton, ‘Madrid rebrands metro in Vodafone deal’, *The Telegraph*, 24/04/2013, <http://www.telegraph.co.uk/finance/10016166/Madrid-rebrands-metro-in-Vodafone-deal.html>. My emphasis.

(Innerarity, 2006: 96) – for a long time, social theory seemed to put aside the role of geographical factors in political mobilisation. This neglect was reinforced by the fact that some of the most visible and novel movements in the late 20th century, for example those connected with alter-globalisation, had an essentially nomadic character, migrating in the wake of major international summits.

In contrast, the mobilisation cycle that we are now focusing on, which was initiated in 2011, was not only sedentary but also made that very sedentarism one of its identifying marks (Hard and Negri, 2012). As explicitly pointed out in reference to Puerta del Sol, this movement fought to defend this sedentary nature because ‘without the communities generated within a specific geographic space, the development of stable and large-scale organisational structures and of generally accepted political projects remains, for the moment, uncertain’ (Díaz Parra and Candón, 2014: 2).

A. Sevilla (2014) has put forth a similar argument by pointing out that one of the essential characteristics of the 15M movement was its ability to occupy a central urban space for a long period, rearranging its functions, its uses and its transit rules. The movement created a city within the city, with its own forms of territorial organisation, and established vertical relationships with other cities where similar movements were in progress (upwards) and with other neighbourhoods of Madrid and the movement’s thematic assemblies (downwards). In fact, it was this sedentarism that made possible the construction of a unified action programme, based on a series of spatial practices which operated as a set of prefigurative politics.

This spatial dimension of social mobilisation did not only become manifest in specific events, like the Puerta del Sol camp, but has in fact been presented theoretically by some of the most important contemporary authors in the field, such as D. Harvey, M. Hardt and A. Negri. Indeed, in these movements political agents do not form a homogenous group, as was the case with more traditional class-, ethnic group-, or gender-based categories (Keuchevan, 2013). In consequence, there existed no previous basis for action that could be maintained by the mere circulation of information and ideas. The foundations for the movement were therefore laid down in situ using the relationship of affection and the results of a ‘being together of bodies and the corporeal communication that is the basis of collective political intelligence and action’ (Hardt and Negri, 2012: 21). A coincidence in time and space is, it follows, mandatory, and this can only occur in a public space, since it is understood at the same time as both political forum and physical fact.

In conclusion, against the idea that these new social movements could be non-spatial, the reality is that spatiality had a very distinctive meaning for them. Furthermore, the true dispute was not over the space generated by new communication technologies, but the physical one; insofar as the symbols which were generated in it, and transmitted from it, are a zero-sum game. Therefore, these recent mobilisations have disproven the apparent lack of connection between the physical and socio-political dimensions into which the concept and reality of public space may be divided; this contradicts the assumption that socio-political mobilisation would progressively migrate towards a limitless virtual space, leaving streets and squares devoid of an ideological purpose.

It was the presence and settlement of the protesters in Puerta del Sol that made possible the creation of a new community built upon the reality and imaginary of the square. This square, which was understood as a historical fact with a definable setting in place and time, also became the symbolic centre of the capital of a country that was in the middle of a severe economic crisis. In this regard, this symbolism and the relationships which derived

from the spatial fact emerged spontaneously and circumstantially, following the protesters' decision to stay.

Indeed, according to D. Harvey these communities must be understood on the basis of a so-called 'moment of "irruption"', which in this case was defined, among other factors, by the economic crisis, the measures implemented to solve it, and its public perception. It is following this trigger, this moment of irruption, 'when disparate heterotopic groups suddenly see, if only for a fleeting moment, the possibilities of collective action to create something radically different' (Harvey, 2012: xvii).

Among other innovations, the 15M movement radically modified the previous discourse surrounding the economic crisis and, more importantly, its political management. In addition, on a deeper level, it also transformed the perception of the relationship between politics and the individual with proposals for new participative alternatives, which must not be understood as a generalised rejection of representative democracy at the individual level.

The meanings acquired by Puerta del Sol through its connection with the 15M movement can be conceived as the creation of a new common value, which was achieved by presenting a new form, a new practice and language of collective action, and also a new way to construct reality and a new political discourse. Traditionally, the idea of the commons had been static and fundamentally related to natural resources. Now, a new dynamic concept has emerged, in which the commons are considered a part of the social process: 'the language we create, the social practices we establish, the mode of sociality that define our relationship, and so forth' (Hardt and Negri, 2009: 139). These commons are generally created in large cities, insofar as they concentrate on 'the biopolitical production because it is the space of the common, of people living together, sharing resources, communicating, exchanging goods and ideas' (Hardt and Negri, 2009: 250).

As a result, public spaces such as Puerta del Sol 'became an urban commons as people assembled there to express their political views and make demands' (Harvey, 2012: 73). The 2011 mobilisations dedicated these spaces to the production and exchange of ideas; they were turned into spaces for the production of subjectivity (ideas, meanings, codes, symbols, etc.), a subjectivity which is only meaningful as a form of common value produced by a network of cooperative agents.

For this reason, the meaning of the 'occupation' of the square should not be tinted with the aforementioned negative hue. Based on Puerta del Sol, as a pre-existent physical and political public space, the 15M mobilisation created a common value that did not previously exist. It was created as it was being used and experienced. Therefore, the movements that produce such a value are the rightful owners of the subjectivity thus created – its symbolic content and the associated imaginary.

In fact, the negative sense of the occupation should be connected with the attempts at re-appropriating of the urban commons thus created, an operation which, according to Hardt and Negri (2009), can be carried out in two different ways. On the one hand, in the form of property equity derived from positive externalities such as a quality environment and connection or proximity to services, which the market internalises in the form of price differences that are unrelated to objective construction factors. Second, in relation to the subjective value of the commons, which in an urban environment can be embodied by the aesthetic quality, imaginary and symbolism of a certain area; this cannot be directly appropriated as a commodity, but can be turned into a symbolic rent which is later realised in different economic areas, for example tourism.

However, in the form of either real estate rents or symbolic rents, the re-appropriation of the value of Puerta del Sol was notably hampered by the values and meanings amassed by the 15M movement. In consequence, a complex process of re-signification of the square was set in motion in order to interfere with its real estate and symbolic value.

4. OF THE APPROPRIATION OF PUERTA DEL SOL AS A COMMON VALUE

During the 2011 mobilisation, detractors systematically emphasised the losses that a reduction in economic and commercial activity would cause. It is therefore not surprising that political efforts were focused on restricting the right to carry out further protests in the square. For our purpose, the attempts at changing the function of the square are especially worth highlighting, including the prohibition to stage similar events and even the elimination of the traces of the 2011 protest through the transformation of the physical space¹¹.

One of the most important initiatives in this regard, *Piensa en Sol*, was set out by the architects' guild in 2013, with the support of the former local and regional governments. The analysis of the specific proposals are beyond the scope of this paper and will not be examined in detail here¹². An examination of the urban quality of the square is also beyond the scope of this text, but it is worth stressing that, replicating what has been done in other squares of the city, an empty and hard urban model focused on transit, consumption and temporary privatisation was followed in Puerta del Sol (Ardura, 2014). This model is often regarded as 'inhospitable', but was, paradoxically, perfectly suited to the sedentary political mobilisation proposed by the 15M movement. Its suitability for protests seemed to be at the core of the debates about the need to reform the square, merely four years after the last time the square was subjected to urbanisation works.

José Antonio Granero, the dean of the architects' guild, claimed during the presentation of *Piensa en Sol* that 'both locals and tourists feel detached from Sol, and this can only result in the trivialisation of the square'¹³. As previously noted, criticisms of Puerta del Sol from an urban perspective are perfectly justified. However, despite these deficiencies, Sol was regarded more fondly than ever by some locals and visitors alike, something which was clearly connected with the symbolic value acquired by the square during the 2011 mobilisations.

The fact was that the 'fondness' and 'detachment' associated with the square as a result of the imaginary developed by the 2011 mobilisations, by those agents and people for and against, made the appropriation of the symbolic rent harder. The important national and international symbolism of the 15M movement was to a large degree 'imprinted' on the square; 'Sol', the word that locals generally use to refer to the square, soon turned metonymically into an expression used to allude to the social and political movement that crystallised there. In consequence, in our opinion the implications of Vodafone's sponsorship exceed the scope of a mere commercial agreement; the idea was to interfere

¹¹ It should be mentioned that the proposals we are going to cite were made in a moment in which the conservative Popular Party ruled both local and regional governments of Madrid with absolute majority. After May 2015 the regional government is still ruled by Popular Party, with a different president and relative majority. On the contrary, the local government is currently ruled by *Ahora Madrid*, a coalition of left wing parties and social movements, therefore, its vision about the imaginary of Puerta del Sol in relation with 15M and the related proposals have radically changed.

¹² See Paisaje Transversal, 2013.

¹³ Bruno García 'Sol vuelve a mudar de piel', *El País* Madrid, 18 May 2013 http://ccaa.elpais.com/ccaa/2013/05/18/madrid/1368902988_013052.html.

with the symbolic value that connected what may be regarded as Madrid's most important urban reference point with a political discourse aligned with new left-wing social movements.

Changing the name of the underground station also entailed intervening in the name of the homonymous square to which this station is the main access point; it is an action that, therefore, went beyond reinforcing the economic and commercial nature of the square, a nature which is as important to the square's definition as its social and political projection. What lied behind this step was an attempt to change the meaning and the imaginary of the square by detaching it from the set of images and symbols related to the social movements that used the square as their main gathering point.

Indeed, the renaming of the square involved acting upon reality, in as much as access to reality is achieved via words and concepts. With the addition of a commercial name, the traditional denomination of the space, Sol, was detached from its political content and connected with another meaning that was associated with the imaginary of a sophisticated, and supposedly aseptic from an ideological perspective, economy, which is aptly represented by a telecommunications company.

As a consequence of this disinfection, conflict in the square can no longer be regarded as a legitimate reflection of the democratic political game, but only as a demonstration of a lack of civic spirit (Delgado, 2011, 29) – an inadequate use of a place which must be now the stage for other kinds of representation. Once cleansed of undesirable connotations, the square would then be available for the manifestation of an ideal concept of a public space where conflict has no place. Once this is achieved, the symbolic rent generated by the space is then ready to be appropriated.

5. CONCLUSION: PUBLIC SPACES AND HISTORICAL DENSITY

In April 2014, the gigantic illuminated sign installed by the wine company Tío Pepe in the 1950s, which had been removed to be restored only a month before the 2011 mobilisations, was reinstalled in Puerta del Sol. I do not intend to argue about the idoneity of the re-installation of the sign, especially since this sign was not re-installed in its original location. What is of interest to us here are the differences between a sign that may be considered a traditional part of the urban landscape, understood as a form of collective creation, and a campaign such as Vodafone's, which was aimed at renaming a public space that had been turned into a central place used for the production of common value (Figure 2).



Figure 2: Different kinds of advertising: between the physical and the symbolic landscapes. Source: Diego Barrado

Tio Pepe's sign tries to catch the eye of the passer-by, to capture his or her attention; it tries to be seen and remembered in connection with the place. As such, it is integrated from landscape and topographical points of view; it is but one layer of the public space understood as a physical place for socialisation.

In contrast, the Vodafone Sol campaign tried to penetrate the field of codes and symbols. By settling in the moral space, rather than in the physical one, it does not look for perception. Ideally, locals and visitors should neither see nor hear the name of the trademark: they should assume it, thus erasing other pre-existing meanings of the square.

Concerning this relationship between memory and space, Maurice Halbwachs (2004), writing in the 1940s, pointed out that space cannot be understood as a blackboard which you can write on and then clean off as many times as you like. Space assumes and preserves the traces of human groups over time, in the same way that the group absorbs space's; space, in this regard, is a collective creation, of symbols, languages, and shared affections. In consequence, the public management of space goes much further than simply regulating its public use. It also involves ensuring that it can be shared historically, in a response to the accumulation of layers of meaning left by the groups and social functions that have contributed to its collective construction. In short, space has to be understood as a repository of time.

This space and its associated temporal density, the memories and meanings left by the groups that have used it as a place for representation, are a collective construction and, therefore, a common value. To erase such memories, to open a chasm between past and

present in order to enable its symbolic appropriation, as Vodafone's political and commercial strategy tried to do, is to illegitimately occupy public goods which no individual should be able to dispose of.

REFERENCES

- Ardura, A. (2014). "Madrid. Espacio público confiscado. La privatización y resignificación del espacio público en los procesos de transformación material de las plazas del centro de Madrid". *XIII Coloquio Internacional de Geocrítica. El control del espacio y los espacios de control, Barcelona*, (en línea). <http://www.ub.edu/geocrit/coloquio2014/Alvaro%20Ardura%20Urquiaga.pdf>, ultimo acceso 20 de mayo de 2016.
- Delgado, M. (2011). *El espacio público como ideología*, Madrid: Catarata.
- Díaz Parra, I y Candón, J. (2014). "Espacio geográfico y ciberespacio en el movimiento 15M", *Scripta Nova*. Vol. XVIII, nº 470 (en línea) <http://www.ub.edu/geocrit/sn/sn-470.htm>, ultimo acceso 20 de mayo de 2016.
- Halbwachs, M. (2004). *La memoria colectiva*, Zaragoza: Prensas Universitarias de Zaragoza.
- Hardt, M. y Negri, A. (2009). *Common Wealth*, Cambridge, Massachusetts, The Belknap Press of Harvard University Press, 434 p.
- HARDT, M. y NEGRI, A. (2012). *Declaración*, New York: Argo Navis.
- Harvey, D. (2012). *Rebel Cities. From the Right to the City to the Urban Revolution*, New York: Verso.
- Innerarity, D. (2006). *El nuevo espacio público*, Madrid: Espasa Hoy.
- Keucheyan, R. (2013). *Hemisferio izquierda. Un mapa de los nuevos pensamientos críticos*, Madrid: Siglo XXI.
- Lakoff, G. (2004). *Don't Think of an Elephant. Know Your Values and Frame the Debate*, Vermont: Chelsea Green Publishing.
- Paisaje Transversal (2013). "Puerta del Sol: de la resimbolización a la emancipación", #Piensa en Sol, *Paisaje Transversal blog*. (en línea) <http://viveroiniciativasciudadanas.net/2013/10/01/puerta-del-sol-de-la-resimbolizacion-a-la-emancipacion/>, ultimo acceso 20 de mayo de 2016.
- Sevilla, A. (2014). "Espacio público y protesta ciudadana. Reflexiones sobre la espacialidad del 15M", *Club de Debates Urbanos* (en línea) <http://oa.upm.es/30323/>, ultimo acceso 20 de mayo de 2016.