# #188 PLACES OF WORSHIP

Space and religion in Lisbon suburban configurations

# **ISRAEL GUARDA**

Instituto Universitário de Lisboa (ISCTE-IUL), CRIA, Lisboa, Portugal israel.guarda@iscte.pt

# ROSÁLIA GUERRREIRO

Instituto Universitário de Lisboa (ISCTE-IUL), CRIA, Lisboa, Portugal rosalia.guerreiro@iscte.pt

#### TERESA HEITOR

Engineering, Architecture and Geo-resources, Instituto Superior Técnico, Lisboa, Portugal teresa.heitor@tecnico.ulisboa.pt

# **ABSTRACT**

The emergence of new religious movements is a global phenomenon. Although becoming subject of inquiry by recent academic works concerned with new spiritual content and practices, the places of worship persist an overlooked subject. The aim of this research is to understand the implications of spatiality in the constitution of the new places of worship within Lisbon suburbs after the 1970's. It analyses the relationship between place centralities and new spatial cultures and urbanities in suburban landscapes. It also analyses change and persistence of traditional pattern of sacred spaces. To pursue these aims space syntax methodology was used in order to analyse street networks configuration to understand location of places of worship. The main technic was segment analysis. The syntactic measures were calculated to understand the relationship between global and local structures and read the city as a whole (urban and suburban). Using GIS software, places of worship were mapped within Lisbon region according to different religions. The patterns of distribution are then compared with the syntactic measures. The results have confirmed the hypothesis of space dematerialization and placelessness which characterizes the new religious movements. The pattern of distribution of places of worship (factories, warehouses, shops, cinemas, etc.) in Lisbon region follow places of good accessibility (global and local). The value of space remains not in its symbology but in its accessibility and functionality.

#### **KEYWORDS**

Houses of worship, religious movements, spatial patterns, spatial cultures

# 1. INTRODUCTION

The emergence of new religious movements is a global phenomenon. Although becoming subject of inquiry by recent academic works concerned with new spiritual content and practices, the places of worship persist an overlooked subject.

Religion leaves an imprint on landscape, through culture and lifestyle. Many rituals leave their mark on the physical appearance of an area. Traditional religious structures - such as places of worship, and other sacred sites - dominate many landscapes (Park, 2004:2). Seeking for good



accessibility, large infrastructures and dense populated areas, new religious movements, seem not to follow this principle. As we can see in the following propaganda by Igreja Evangélica Acção Bíblica, believers are well aware of this non-spatial idea of religion: "The church is not this space, these walls, this furniture, these equipment, this decoration. The church is the people who are already here and those who will be reached by God with our collaboration".

According to Yi Fu Tuan "the religious person is one who seeks coherence and meaning in his world, and a religious culture is one that has a clearly structured world view (1976, p.271-2). Religious observance - church attendance, and so on - affect the time management, spatial movements and behaviour of believers. However, the territorial imprint of these new religious movements, do not create spatial cultures that promote local identity and community. What is the place of religion today? How much does organized religion matter in terms of its physical environment? What is the role of religion in defining spatial cultures? What is the persistence of the traditional pattern of sacred space?

In this paper we will look at the distribution and dynamics of religion in AML, consider what factors might account for the observed patterns, and look in detail at the processes of change. We are not concerned so much with religion per se, but with the many different ways in which religion is expressed in space. It sees religion as a human activity, and explores its social and spatial patterns.

This study is part of an ongoing research in CRIA – Centre for Research in Anthropology, at ISCTE IUL, which analyse the contemporary landscape of religious in AML after the 1970's. Such region includes most religious and ethnic groups found through the world and is part of the international debate on urban informality of European southern countries - related to realms of the planning, construction and governance of the built environment. In this paper we explore the distribution of places of worship of Igreja Universal do Reino de Deus (IURD), a recent religious movement in expansion and compared it with the traditional religious Catholic Church.

In this paper we put particular emphasis on the study of street networks configuration as a major factor for placement of places of worship within AML. It analyses the relationship with the place centralities and how they help to form new spatial cultures and urbanities in suburban landscapes. It also analyses change and persistence of traditional pattern of sacred spaces.

# 2. BACKGROUND

Mapping space and religion in the context of contemporary metropolis is not an usual thematic across disciplinary research despite some relevant studies have been emerged recently in different fields.

The human geographer Yi-Fu Tuan, in is book "Religion: From Place to Placelessness" (2009) poses the question of what does it mean to be religious in the modern world and argues that religion experience moves toward universalism and placelessness.

Zelinsky and Matthews in the book "The Place of Religion in Chicago" (2011) provide a detailed, systematic geographical study of the religious landscape within a metropolitan area - Chicago. They have scoured the city to document and investigate the locations and traits of the various houses of worship (roughly 4900) classifying them along various lines: denominational affiliation, size - prominence, architectural style, conditional of building, racial-ethnic composition date of erection, and character of the immediate environments. The authors aspire to fully and accurately describe the current material manifestations of organized religion within Chicago, the physical and locational attributes of houses of worship and there temporal and spatial arrangement.

According to Bret Carrol (2015) spatial analysis as moved to a central position in American religious landscape. Religious practice involved fundamental spatial distinctions between sacred and profane, inside and outside, centre and periphery, and up and down that provided believers with a sense of social, geographic, and cosmic orientation. Attention to the spatial



dimensions of religious practice generated fruitful research and new concepts of space on and new studies of churches and other built environments.

In the context of space syntax literature, Kershen and Vaughan (2013) explore the relationship between patterns of immigrant settlements and religious practices in the east end of London, over the last 350 years. They found that places of worship provided a spatial locus for communal solidarity not just for religion but also for the emergence of spatial cultures. Although the analysis of urban space and religious practices has not deserved special attention in space syntax literature the theory and method holds a special position in the context of the spatial humanities - a new interdisciplinary field resulting from the recent interest in space, also known by "spatial turn" (Bodenhamer et al, 2010). With a set of analytical methodologies for representing and studying the morphology of human-made spatial systems though quantitative and well defined analytical procedures it can help to understand the importance of religion dimension of urban life.

In Portugal such studies are almost inexistent despite the emergence of new religious movement within the metropolitan areas. Particularly interesting is the case of IURD, a religious movement which was born in Brazil in the 1970's. The movement is characterized by an expressive increase of its faithful in this country. According to the IBGE Census, the number of IURD believers increased from 269 thousand in 1991 to 2.1 million in the year 2000 (Lima, 2007). In Portugal there is no specific data about the number of practitioners. However, by searching the term IURD in Google Trends - a real-time online search data to help you gauge consumer search behaviours over time, one can understand the importance of this religion in Portugal and particularly within metropolitan areas. Setubal, Lisbon and Porto are the regions which concentrate the main interest (Figure 1 - bottom).



Figure 1 - IURD and the most popular online search terms in the past 5 years on Google Trends tool (values in percentage).

Particularly interesting is also the pattern of distribution within the world. According to the most popular online search terms in the past 5 years, Portugal ranks 4th in the world regions interested in this religion. The first three are, Mozambique, Angola and Brazil (Figure 1 – above). Such aspect confirms the importance of Portuguese language in the dissemination of this religious movement around the world (Rodrigues and Silva, 2014).



# 3. ONGOING WORK AND OUTLOOK

Mapping has become one of the key tools by which arts and humanities researchers have collaborated and innovated, and by which they have interacted with the social sciences. Mapping has also become increasingly informative and rewarding methodologically. "This renewal of interest stems in large measure from the ubiquity of Geographic Information System (GIS) in contemporary society" (Bodenhamer et al.2010).

Following this approach and after identified the two main religious movements in the AML, IURD and Catholic places, we used GIS software to analyse distribution patterns and dynamics. A total of 306 places of worship (50 IURD places and 256 Catholic churches) were mapped within the metropolitan area. The data was collected online from IURD (www.universal.org), Patriarcado de Lisboa (www.patriarcado-lisboa.pt) and Diocese de Setúbal (www.diocese-setubal.pt) (Figure 2).

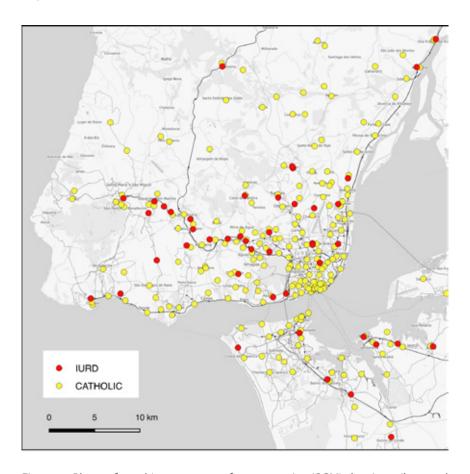


Figure 2 - Places of worship over a map of transportation (OSM) showing railway and train stations across AML (Lisbon Metropolitan Area)  $\frac{1}{2}$ 

In order to compared the spatial patterns of distribution of the new religious movements (IURD) with the accessibility patterns we elaborate a space syntax analysis of AML.

Space syntax (Hillier and Hanson, 1984; Hillier, 1996) is a way of researching cities to understand how social and economic process shape space over time. Through its set of methods and tools for analysing patterns of space, certain spatial structures are uncovered and related to the way people use space.

Applying these set of methods and techniques and using DepthmapX, Space Syntax Toolkit and Ogis free software, the spatial structure of de AML was modelled as a network of street segments based on the axial map developed by Teresa Heitor and João Pinelo (2005). Amongst



the sort of variables that can be calculated we analyse in detail the measures of 'integration' (NAIN) and 'choice' (NACH). Integration measures the distance from each spatial element to all others in a system and Choice measures the potential movement that passes through each spatial element on shortest or simplest trips between all pairs of spatial elements in the system (both up to a certain radius and given a definition of distance), (Hillier et al, 2012:155-156). Other definitions for integration and choice are that they represent, respectively, the to-movement and the through-movement potentials of a space. One of the great advantages of space syntax is that it analysis space at the micro and macro scale of the city at once. Thus, it will be possible to make comparisons across radii where a crucial factor is that different radii will define systems of different sizes where different patterns and scales of to-movement and through-movement are found (Figure 3).

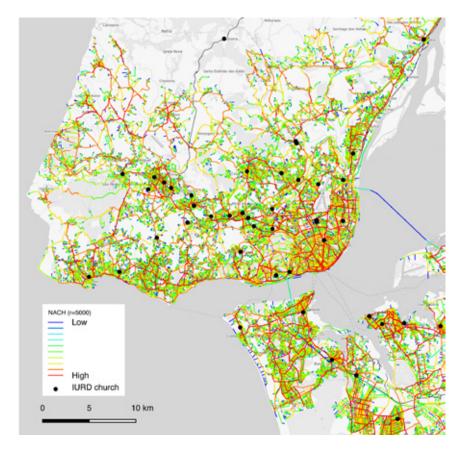


Figure 3 - Space syntax analysis of AML spatial structure, showing Normalized Choice (NACH) 5000 m and IURD Places of worship.

# 4. PRELIMINARY RESULTS

The results of space syntax analysis were then compared with the patterns of distribution of places of worship. NACH 5000 m is the radius which best fit the location of IURD places (Figure 3). Global and local accessibilities seem to be important simultaneously. The spatial pattern of IURD places seems to capture with certain accuracy the main flows of contemporary development of Lisbon suburban axis: Amadora-Sintra; Odivelas-Loures-Malveira; Sacavém-Vila Franca Xira; Arco Ribeirinho Sul and Almada-Quinta do Conde-Setúbal, which correspond to the main populated areas. Occupying pre-existent infrastructures (factories, warehouses, shops, cinemas, etc.) reveals also the importance of transportation and the location of railway stations across AML (Figure 2).

# Proceedings of the 11<sup>th</sup> Space Syntax Symposium

The aim is to investigate further correlations between the collected data of places of worship and space syntax parameters. The treatment of statistical data and the use of ethnographic methods will help to understand the existing communities and spatial cultures. Future steps will include also the analysis of visual prominence, date of construction, denomination, ethnic affiliation and architectural style(s) of the houses of worship.

We hope this research forms a contribution to our understanding of an overlooked element of the Portuguese urban scene: the religious landscape of the contemporary metropolitan areas. It seeks to contribute to the study of religion in Portugal - such an in-depth examination of a suburban area religious geography is original and a welcome addition to the space syntax literature.

#### **AKNOWLEDGEMENTS**

The first author wish to thank the funding from the strategic plan of the centro em rede de investigação em antropologia (CRIA) uid/ant/04038/2013.

# **REFERENCES**

- Bodenhamer, D. J., Corrigan, J. and Harris, T. M. (2010) *The Spatial Humanities GIS and the Future of Humanities Scholarship*, Bloomington: Indiana University Press.
- Carrol, B. (2015), 'Religion in Space: Spatial Approaches to American Religious Studies'. In: J. Barton (Ed.), Oxford Research Encyclopedia of Religion, Oxford: Oxford University Press.
- Clarke, P. (Ed.) (2006), Encyclopedia of New Religions Movement's, London: Routledge.
- Hillier, B. and Hanson, J. (1984), The Social Logic of Space, Cambridge: Cambridge University Press.
- Hillier, B. (1996), Space is the Machine: a configurational theory of architecture, Cambridge: Cambridge University Press.
- Hillier, B., Yang, T. and Turner, A. (2012), 'Normalising least angle choice in Depthmap and how it opens up new perspectives on the global and local analysis of city space'. In: *The Journal of Space Syntax*, vol. 3 (2), pp. 155-193.
- Kershen, A. and Vaughan L. (2015)," There was a priest, a rabbi and an imam ...": an analysis of urban space and religious practice in London's east end, 1685–2010'. In: *Material Religion*, Volume 9 (1), p.10-35.
- Lima, D. N. O. (2007), 'Trabalho", "Mudança de Vida" e "Prosperidade" entre fiéis da Igreja Universal do Reino de Deus'. In: *Religião e Sociedade*, 27(1), p.132-155.
- Park, C. (2004), 'Religion and geography'. In: Hinnells, J. (ed), Routledge Companion to the Study of Religion, London: Routledge.
- Rodrigues, D. & Silva, M. (2014), 'Imigração e pentecostalismo brasileiro na Europa: o caso da Igreja Universal do Reino de Deus', *Revista Angolana de Sociologia*, 13, p. 97-113.
- Tuan, Y. (1974), Topophilia: a study of environmental perception, attitudes, and values, New-York: Columbia University Press.
- Tuan, Y. (2009), *Religion: From Place to Placelessness*, Chicago: The Center for American Places at Columbia College Chicago.
- Zelinsky, W. and Mathews, S. A. (2011), The Place of Religion in Chicago, Chicago: University of Chicago Press.