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► To cite this version:

Alicia Bianchi, Giovanni Fusco, Karine Emsellem. The real estate ads, a new data source to understand the social representation of urban space. ECTQG 2021 - European Colloquium on Theoretical and Quantitative Geography, Nov 2021, Manchester, United Kingdom. hal-03507802

HAL Id: hal-03507802

<https://hal.science/hal-03507802>

Submitted on 3 Jan 2022

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The real estate ads, a new data source to understand the social representation of urban space.

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Keywords: Real estate ads, urban space, socio-spatial representation, residential context, textual data.

Real estate ads are a rich source of information for urban geographers. They relate properties inscribed in urban space and are intended for a target population. They reflect the reality of a property and the projection of potential buyers in it, as well as in urban space. They speak indirectly of individuals, social groups, places, urban forms, objects in space as they are represented by its authors and readers (Figure 1).

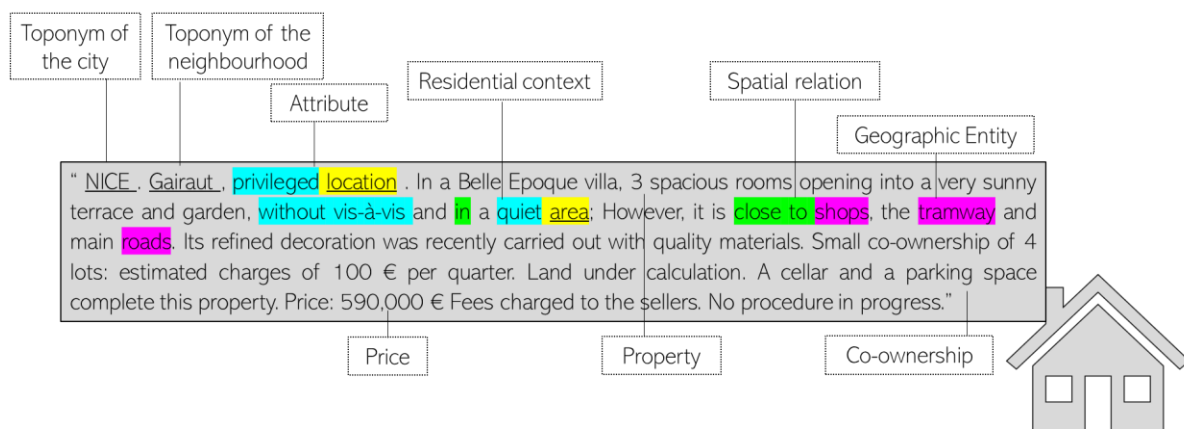


Figure 1: Real estate ads from a web about a property located in Nice (France) written in English

Previous research on real estate ads usually focuses on the analysis of the market value of properties in urban space (Ribardi re and Valette, 2017). Descriptors of the piece of real estate and of its asking price are of central importance in these analyses. However, real estate ads also contain descriptive elements of the spatial context of the proposed property and, indirectly, offer the possibility to investigate the social representation of the different subspaces within a wider urban real estate market.

In this contribution we propose to expose how French real estate ads can constitute as a new corpus to study the social representations of urban space in French metropolitan areas.

We define social representations of urban space as a set of specific meanings in relation to the urban space shared by a social group (Jodelet, 2015).

Usually, the methods used to collect representations of urban space are mainly based on surveys or interviews with individuals or groups of individuals in the form of speeches, quizzes, or mind maps according to the stakes of the research (Alba 2004, Dernas, 2018). However, it is a time-consuming, and tedious method which takes a lot of time to set up and to realize. It is necessary to have a significant number of individuals surveyed even. In recent years, new data sources have been proposed to study the social representations of urban spaces (Hu et al. 2019).

We think that real estate ads can be added among these new data sources, and this for several reasons.

Firstly, real estate ads are punctual data located in the space. Although still in the minority, some ads are geolocated to the property (address or XY coordinates). They allow to conduct studies at a very fine scale.

Secondly, real estate ads always have a text that corresponds to the description of the property and its environment. Different strategies to highlight the property are chosen depending on the target population (to use this or that word, enhancement of this or that characteristic, choice of platform). Real estate ads are the witness of the urban society which produced them because their text testifies at a given historical moment the information relating to the urban space mentioned and differently valorised. They mention geographical entities of several kinds (human and administrative boundaries, natural features, roads and transit facilities, amenities, architectural features of the neighbourhood) and toponyms (Figure 1). The territorialized resources to which housing gives access (Sigaud, 2015) are important in residential choice. The location of the property can be valorised in the text across different spatial scales: Either by the location “Located in...” or by a distance “Nearby...”, whether real or perceived (Figure 1). The geographical elements or atmosphere of the city are meaningful for the author and the reader. We can safely assume that the reported features are already the results of a cultural filtering for the purpose of the ad, mentioning those considered important for the target population and omitting others.

If ads relating to properties in a given subspace consistently highlight the same contextual features, addressing the same target population, they indirectly characterize that subspace as being the place of the young, of the established or wannabe upper-class, of suburbanite families with children, etc. The presence/absence of toponyms is also particularly informative of the capacity of each subspace to become a recognized place in the social representation of city dwellers.

Third, we believe that real estate advertisements are traces of urban realities and representations. Thereby, in our analyses, we make an important assumption: the social representation of a given neighbourhood or residential context relates less to the ads' authors and more to their target population. Real estate agents must reflect the prevailing social representation of urban space of their potential clients if they want to successfully propose their service on the real estate market.

The authors speak of the individuals either directly by mentioning the target population ("Ideal for families", ...) or indirectly by describing the residential context. For example, the specific attractions mentioned, the vocabulary used, the attributes of the residential context, can all echo the residential trajectories of the target populations who are based at least on lifestyle, lifecycle and social status (Shearmur and Charron, 2004, Fusco and Scarella, 2017).

However, analysing real estate ads present many challenges to overcome:

To study real estate ads in geography, you have to pay attention to the location of the ads. Even if the real estate ads are punctual objects in space, their location are not perfect (erroneous location or not located) but also can have different scales of location (Department, city, neighbourhood, residence, address). Therefore, a fine-grained spatial analysis is only possible when the location is identified at the address.

The other challenge is relating to the specific character of the text. The latter can be written in telegraphic style, sometimes not real sentences with only sequences of words, sometimes are neglected with spelling mistakes. It is therefore necessary to manage textual biases to be able to capture important information and their contexts.

Real estate ads also need careful attention to the biases of real estate marketing. They are marketing objects who respond to business strategies introducing cognitive biases. Their speeches are very oriented: Only positive aspects are mentioned, and the other aspects are implied or unspoken. These specificities must be addressed by any analytical procedure of real estate ads.

Moreover, to qualify the social representation of urban space we need to specifically address the words related to the spatial context (Toponyms, geographical entities, spatial relations among them and the piece of real estate). The very fact that features of the spatial context represent a small fraction of real estate ads makes a lexicometric approach relatively difficult. A grammatical analysis of the ad could thus be necessary to understand which attributes are specifically associated to geographical entities. Therefore, the greatest challenge would be to extract the desired information by separating information relating to space and to the property.

Finally, real estate ads are massive data which are regularly updated and available throughout the national territory thanks to the development of online platforms. The downside is the notion of temporality: It's difficult to have the old data because the ad disappears from the platform after the sale. Contrary to surveys, the description of social representation of space in real estate ads is poorer but their massive nature allows a relatively thorough coverage of whole metropolitan areas, as well as the automation and reproducibility of the methodology at different scales.

An analytical protocol tackling these challenges is presently under development and will be tested on the corpus of real estate ads from French metropolitan areas.

Acknowledgement: This research was carried out thanks to a research grant by KCityLabs, KINAXIA Group (CIFRE Agreement with UMR ESPACE).

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