Urban challenges in a complex world: Resilience, governance and changing urban systems

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Abstract

The aim of this paper is to analyse social change in the city from within by focusing on the dynamics and the selectivity of intra-urban housing mobility for the transformation of urban neighbourhoods. In order to address the relationship between mobility and social structure, this paper uses data from national censuses of 1991, 2001 and 2011 for the towns of Milan, Turin and Barcelona, together with unpublished data from municipal statistics. This data is used in order to analyse social divisions of space and gentrification, and their relation to intra-urban residential mobility.

Key words: residential mobility, segregation, urban social geography, southern Europe, Milan, Turin, Barcelona.

1. Introduction

Residential mobility is a relevant issue for urban studies, and notably for urban geography, town planning and urban sociology. This is because it is linked to a multiplicity of other questions concerning the structuration of urban space, neighbourhoods dynamics [1], the dynamics of segregation [2, 3] the relationship between housing markets and labour markets [4] urban policy [5], aspects of behavioural geography [6, 7], and aspects of social practices in space. A particular concern is the relationship between social and ethnic groups and social space, i.e. the space/society dialectic. Indeed since the beginning of the 20th century the social sciences have manifested a strong interest - explicit or implicit - in the importance of mobility within cities [8, 9, 10]. Such a concern has produced means by which to comprehend the complex relationship between the spatial distribution of social groups and the phenomena which determine their social morphology. But the social sciences’ interest in the topic of residential mobility has not been continuous. Indeed a literature review on the subject shows that, while residential mobility constituted an important field of theoretical and empirical research during the 1960s and 1970s [11, 1, 2, 3] it was seldom commented upon after the 1980s [12, 13].

Our aim is to propose that residential mobility studies can give important insights in terms of understanding the dynamics of the social division of space and segregation that tend to be studied in a static diachronic way of 10 year intervals. The study of intra-urban mobility is important because it helps to uncover one of the hidden dimensions of the organization of a large city. Intra-urban mobility matrices describe a zero sum movement from neighbourhood to neighbourhood or within neighbourhoods. Such movements can be higher or at least equal to migration flows to and from the city. The study of these matrices helps to uncover hidden dimensions of the social transformation of the neighbourhoods in terms of segregation and gentrification.

2. The Study Area

Barcelona, Milan and Turin are chosen as the study areas because of the particularly interesting characteristics of their structures and growth, the similarity of their size, and the availability of data on residential mobility. The three cities became the main destinations of immigrants from the peripheral regions of Spain and Italy after the Second World War. Their development occurred mainly during the 20th century, with an extremely rapid phase of growth in the 1950s associated with industrialisation and an unprecedented increase in migration from the economically backward regions of their respective countries. Since 1950, the core areas of these cities have experienced dramatic changes in both their economic bases and spatial structures. Immigrants arriving during the period 1951-1971 were domestic and mainly settled in the intra-urban substandard housing areas and in the new working class suburbs. From the mid-1970s, the three cities experienced de-industrialisation and urban decline, and a drastic decrease of migration and residential mobility. Since the end of the 1980s to the mid-1990s, these cities have attracted thousands of immigrants from developing countries.

3. Research questions

In the history of urban studies there has been an important corpus of investigations on social division and ethnic segregation using a variety of indices
that are mainly static. This paper analyses trends in residential mobility and its relationship with the dynamics of the socio-spatial changes in the cases of Barcelona, Milan and Turin. During the last three decades these three cities have been affected by the processes of rapid industrialization and urbanization, and successively by dramatic processes of deindustrialisation and tertiarization.

In order to understand the social structuration of each of the three cities examined in this paper, it is necessary to try to answer a number of basic questions:

- Has the decline and/or increase of the population had an effect on residential intra-urban mobility?
- What is the relationship between migration and residential mobility?
- What is the relationship between inter-neighbourhood and intra-neighbourhood mobility?
- Is residential mobility a general pattern in the three cities that equally concerns the whole population or only some particular social groups and some areas in the city?
- Is there a relationship between social segregation, gentrification and residential mobility?
- How has the transition from Fordism to post-Fordism affected the social and spatial mobility of the three cities, and how has mobility reshaped the social structures and the spatiality of the city?
- What are the similarities and the differences in terms of the redistribution of social groups in the intra-urban space of the three cities?

4. Preliminary results

Figure 1 represents intra-urban mobility in Turin during the period 2008-2012. The strongest movements concern the central and western parts of the city. The weakest movements have occurred in the hillside residential area, where are concentrated many of the city’s most wealthy members of the population residing in owner occupied villas and up-market apartments. The historic centre has tended to expel its population to the contiguous working class area to the north (Aurora) and its contiguous bourgeois area in the south (Crocetta). The centre acts as a social selection mechanism that expels population (mainly blue collar workers) along a centre-north corridor from the centre to the periphery, the latter comprised of working class areas formed during the Fordist era. There is an important exchange of flows between the socially homogeneous western districts (lower middle class); between three working class areas in the north-west (Valetta-Lucento) and between three industrial areas in the south-west (Mirafiori, Lingotto and Santa Rita). In terms of intra-neighbourhood mobility, the higher scores are recorded in the traditional working class areas and in the white-collar areas in the west.

In the case of Milan we can observe two processes of population deconcentration (Figure 2). The first has occurred from the historic centre to the contiguous middle-upper class areas of Venezia, Vittoria and Ticinese. The second has taken place from the semi-central areas to the most peripheral working class zones: from Bovisa to Affori, from Centro Direzionale to Niguarda and Corvetto and from Venezia to Monza are the most intensive.

Fig. 1 Turin 2008-2012 Intra-urban residential mobility (23 quartieri)

Fig. 2 Milan 2008-2012 Intra-urban residential mobility (20 zone di decentramento)
The exchanges between western peripheral and semi-central areas are intensive and more symmetrical than those occurring in the rest of the city. The highest levels of intra-urban migration are recorded in the upper class district of Magenta, and in three working class areas in the periphery of the city: Monza, Corvetto and Vialba. The intra-district mobility of the centre is lower in comparison with Turin and Barcelona due to the facts that the centre acts more as a selective mechanism, and that its residents are mainly wealthy and owner occupiers. The centre records negative intra-urban migration balance with all the other neighbourhoods with all the other. These processes occur in both periods analysed 2003-2007 and 2008-2012.

In the case of Barcelona there is an inverse relationship between intra-urban mobility and migration. While the former has grown the latter has decreased. 2007, the beginning of the crisis, marks a significant turning point. In this year the city obtained its maximum number of immigrants (102,993 new inhabitants). In 2013, after six years of uninterrupted crisis, immigration had dropped to 75,964 (-26.41%). Emigration had also decreased from 62,433 to 53,704 inhabitants (-13.98%). In both flows the share accounted for by the Spanish population increased. Migration flows in Barcelona are closely related to intra-urban mobility. The latter has increased as a result of the exodus of Spanish population from the city and the weaker inflows of foreign population. During the period 2003-2007, inter-district flows were intense and bi-directional between contiguous districts: Ciutat Vella and Sants-Montjuic, Ciutat Vella and Eixample, Eixample and Gràcia, and Eixample and Sant Martí. There were also significant uni-directional flows indicating three distinct processes: deconcentration of the Ciutat Vella, high interaction between the upper class areas of Sarria San Gervasi and Eixample, and processes of the continuing eviction of modest populations to the working class areas of Sant Andreu and Sant Martí.

Between 2008 and 2012 (Figure 3) there was a marked increase in intra-urban mobility. This unexpected growth occurred in a period of economic crisis characterised by a decrease in employment, migration and housing production. A quantitative increase of inter-district flows occurred, with new exchanges between the upper class areas of Eixample and Sarria-Sant Gervasi, between the lower-middle class districts of Horta and Nou Barris, and a further increase of exchanges between the working class areas of Sant Andreu and Sant Martí. In both periods the highest levels of intra-district mobility occurred in Ciutat Vella, Eixample, Sant Andreu and San Martí (Figure 3).

The three maps treat the spatiality of the intra-mobility flows. In the case of the historic centre of Turin mobility is highly selective (Figure 4). During the period 1991-2011 there was a continuous process of filtering-up and gentrification: the upper middle classes recorded positive net migration, while white collar and blue collar workers were forced to leave.

Fig. 3 Barcelona 2008-2012 Intra-urban mobility (10 districts)

5. Conclusions
The resulting “pictures” of the social composition of the three cities show a number of common features and differences concerning the gentrification of the historic centre and the isolation of some peripheral neighbourhoods. The diachronic analysis to and from the centre confirms the existence of filtering up and gentrification processes, the expulsion of low-income groups towards the periphery, and an increase in residential segregation. Intra-urban mobility has not been less important than inter-urban mobility. In the cases of Milan and Turin intra-urban mobility was very intensive during the Fordist period while for Barcelona intra-urban mobility has been very important in the last decade. Mobility is highly selective, in particular in the historic centre of the three cities. This is mainly due to the processes of gentrification and land use change.

Intra-district mobility represents the highest mobility for all neighbourhoods, all ethnic groups, and all social groups. This is because of the territoriality of information of the local housing market that corresponds grosso modo with the limits of the district; forms of topophilia due to social networks, the functional structure and the landscape of the area; and efforts to maximise accessibility to particular services (schooling and other infrastructures). Inter-district mobility has a negative correlation with spatial distance and social distance. In the three cases the hierarchy of factors explaining intra-urban mobility are: socio-spatial proximity followed by sectorial rent gradient, concentric rent gradient and social proximity. In the cases of Milan and Turin net inter-urban migration is
negative for all neighbourhoods, while net intra-urban migration is negative for the centre, zero for the peri-central districts and positive for the peripheral working class areas.

From this analysis it emerges that there is not just a social division of space nor just an ethnic division of space, but a complex pattern of social division that forms complex spatialities, the details of which we are still guessing at if we do not take into consideration the analysis of intra-urban residential mobility. The cores of the metropolii analysed have fluid social geographies that are difficult to describe with the standard census data because of the rapidity of change of the migration flows in quantitative and qualitative terms, and their impact on the social and functional structuration of intra-urban space.

**Bibliography**


