This chapter will examine the cartographic representations of Villa Celina, an area located in the south-western suburbs of Buenos Aires, Argentina, and in particular the mapping of three neighbourhoods of social housing built in 1958-62: Barrio Vicente López y Planes, Barrio Urquiza and Barrio Sarmiento. Since these neighbourhoods were built, their inclusion in the maps of the area has often been partial or incomplete, becoming more exhaustive only in recent urban charts. While it is inherent to maps to be limited in the extent of detail they can represent, in the case of the south-western suburbs the incompleteness of the representation appears to be particularly acute. The role that Barrio Vicente López y Planes, Barrio Urquiza and Barrio Sarmiento (BVLP/U/S from now on) and their inhabitants occupied in twentieth-century Argentine society will be explored in relation to the mapping of Villa Celina in order to shed some light on the limitations of these cartographic representations.
The way in which urban maps represented BVLP/U/S has varied over time, often involving telling omissions. The same can be said about areas that have been developed more recently in Villa Celina: these places have not been portrayed fully – if at all – in the urban charts published during the last ten years. As will be argued through an analysis of official and commercial maps, the zones that were only partially shown were areas which did not comply with urban or legal regulations, or areas whose place in the collective imagery was to some degree controversial.

Figure 1. Barrio Vicente López y Planes, Barrio Urquiza y Barrio Sarmiento in context: mark (A) corresponds to Villa Celina, mark (B) to the city centre, and the lines designate the river Riachuelo and city district boundary respectively. The circles point to the shantytowns reported by the Plan de Emergencia (CNV, 1956). The polygons outline the neighbourhoods. Drawn by A. Massidda.
There are of course technical reasons why maps are restricted in the information they are able to include: each square inch of paper or screen, for example, can only support a limited amount of readable data. Distortions related to the representation of a tridimensional object in two dimensions inevitably occur too. However, the decisions taken to overcome these difficulties and produce a map are structured by the perspective of the cartographers, and embody a codification of their views; they are specialists empowered to decide on issues regarding urban representation. Further, there are instances in which the exclusion of information can no longer be attributed to technical difficulties of representation, such as the cases where maps represent shantytowns or black-market fairs as blank spaces, parks or water (d'Angiolillo et al., 2010, pp.187-93). Such transfigurations rather suggest that the irregular status of these places is hampering their cartographic representation.

Considering the complex history of Villa Celina, an area that was already fragmented by the time when internal migrants were forced into BVLP/U/S, technical limitations are insufficient to explain the omissions from the maps.

A selection of maps of Villa Celina will be analysed in relation to social, political and cultural matters. To understand these, a brief account of the political situation of the south-western suburbs will be outlined, including a summary of the genealogy of BVLP/U/S in their historical context. The analysis will draw on concepts traced by the French philosopher Michel Foucault to shed some light upon the way in which a modality of knowledge – maps – is embedded in, and at the same time reproduces, relations of power present in society. The five urban maps studied span six decades, and include two official charts (1956, 2011) and three commercial urban guides (1965 circa, 1986, and 2008).
Urban conceptions in the Plan de Emergencia

BVLP/U/S were built as part of a plan of eradication of informal settlements implemented in 1956-1964, a period during which both the physical fabric of the settlements and their residents – mostly internal migrants and workers – were at the centre of political and urban debates. Shortly before, in the 1940s, numerous internal migrants had moved to large cities in Argentina, finding the latter already overcrowded and settling thus in shanty towns (Germani, n.d., p.40). Some groups of shanties already existed in Buenos Aires, and expanded during this influx, while many new settlements emerged. Although shanty towns were spread around the city in general, most were located in the northern and the southern suburbs, and in particular along the lowlands of the river Riachuelo (Fig.01). The coalition that took over the government through the coup d'état of 1955, Revolución Libertadora (RL), was backed by a wide spectrum of political actors, including conservatives, liberals and socialists, most of whom felt uneasy about the presence of internal migrants in the city. Furthermore, they were explicitly troubled about the emergence of the shanty towns. Once in power, the RL called for a commission of specialists to issue a plan to remove the settlements and relocate their inhabitants to purpose-built neighbourhoods of social housing: the Plan de Emergencia (Massidda, 2011).

This unease was rooted in earlier decades of Argentine history. During the government of Juan Domingo Perón (1945-1955), the groups that supported the RL had been disgusted with the social and political ascendency of workers and migrants and with what they felt as an invasion of the city (Podalsky, 2004, pp. 01-21). Metaphors of intrusion, for example, abound in literary works written by anti-Peronists, while the rhetoric of the political opposition animalized the working classes through phrases like ‘zoological barrage’ (referring to the Peronist demonstrations) or
‘the paws in the fountain’ (the Peronist supporters stepping into the fountains of the central square in one of these demonstrations) ii. This discourse became official during the administration of the RL, and initiatives like the Plan de Emergencia stressed the difference between ‘us’, the inhabitants of the formal, established city, which included members of the government and the commission writing the plan, and ‘them’, the settlers.

Six neighbourhoods of social housing were built under the Plan de Emergencia, BVLP/U/S being three of them (BHN, 1958). The design of these neighbourhoods consisted of the repetition of three housing typologies forming continuous rows of houses, and a communal centre which included shops and facilities. The neighbourhoods built in Villa Celina were composed on average of 950 houses each. The housing rows were paired back-to-back creating blocks twenty-seven metres wide and typically eighty-one or one-hundred and two metres long iii. Edge blocks varied in length, in some cases in order to follow the borders of each plot. This layout differed substantially from the urban grain of the existing city, which consisted on a continuous grid of blocks of approximately one hundred by one hundred metres. In the context of Buenos Aires, where the urban fabric had traditionally been homogeneous, the layout of the neighbourhoods appeared as an interruption and contributed to their isolation.

In addition to accommodating former shanty town residents, the neighbourhoods were presented by the Plan de Emergencia as ‘adaptation dwellings’: by inhabiting them, the dwellers would be forced into a specific lifestyle (CNV, 1956, pp. 151-53). Ignoring the results of surveys of shanty town population previously taken, which had shown a wide variety of households, the houses were designed exclusively for nuclear families of five to ten members. Residents were not
allowed to host more people than the houses were designed for or to undertake extensions. Moreover, each room should only be used as prescribed: to this aim, concrete tables and benches and steel-framed beds were incorporated (BHN, 1958, p.5). The construction was commissioned to the Banco Hipotecario Nacional (National Mortgage Bank) and the last stages completed by 1964 (Yunovsky, 1984, p.100).

The Plan de Emergencia did not formulate an explicit strategy for segregating the former shanty towns' residents from the rest of the city. Segregation, however, was implied in the design of the neighbourhoods, the lack of concern about their social and urban integration, and the Plan's hostile discourse toward the informal settlements' inhabitants. The neighbourhoods were not conceived of as part of the existing urban fabric but rather as self-functioning communities inserted in the city's gaps. Furthermore, the very idea of their educative function was also a way of segregation, since it implied that the residents were not yet in a condition to join the existing city and should not reside in it until their re-education was complete. They were a burden to society and it was the mission of the government to educate them in the ways of civilization so that they may become citizens. The neighbourhoods built by the Plan de Emergencia remained thus in a hybrid condition between what might be called the 'formal' and the 'informal' city: although planned and built in the context of a State-funded programme, they suffered stigmatisation and isolation as is often the case of the shanty towns (Massidda, [2013]).

Official mapping of Villa Celina 1956

The map shown in Fig.02 is a detail of the chart Lanús, published in 1956 by the then Instituto Geográfico Militar (IGM; Military Geographic Institute; currently Instituto
Geográfico Nacional). This map combines consecutive surveys of Buenos Aires and its surroundings taken from 1907 to 1910 and updated in 1949 and 1956. Over this background I have marked the silhouettes of BVLP/U/S, built a few years after the publication of the chart. It is interesting to note that the blocks of the old core of Villa Celina (marked C), which were already built and consolidated by 1956, are represented in the same way as the empty land where Barrio Vicente López y Planes and Barrio Sarmiento would be built. The proximity of this low-lying area to the River Matanza made of it subject to frequent floods, and its grounds had in fact never been developed until the Plan de Emergencia. The 1958 report on the construction of BVLP/U/S corroborates this fact, since it does not mention any demolition of pre-existing blocks but rather stresses the costs of filling up the land (BHN, 1958, pp.2 and 6). The photos published in this report and the information collected through interviews to long-time residents of the area also depict this land as undevelopediv.
The grid pattern drawn where Barrio Vicente López y Planes and Barrio Sarmiento would be built might have referred to a planned extension of the city fabric, never actually materialized. The drawing of the traditional grid of Buenos Aires in areas that were not yet part of the built environment is noted by Adrián Gorelik in relation to a map published in 1904 by the Municipalidad de Buenos Aires, which traces the boundary of the city and its grid both in areas where the blocks already existed and in what was then plain countryside (Gorelik, 1998, p.27). In this sense these official maps are performing as planning documents rather than records of the existing city.
Also of interest is the way in which the chart omits the housing complex Barrio 17 de Octubre (currently General Paz), built in Villa Celina in 1948-1954 under the government of Juan Domingo Perón (Ballent, 2005, pp. 85-86). Were the map less accurate and complete than it is, the omission of Barrio 17 de Octubre could be attributed to poor production or to lack of detail. However, the overall map is exhaustive and well-detailed, which makes such an omission even more compelling. One possible explanation relates to the political context: the missing complex had been built by the administration that the RL had overthrown just one year before the publication of the map.

The information presented in this map can be read through the foucauldian lens of power-knowledge relations. In Foucault's approach, knowledge is not something given but constructed artificially, and usually inscribed in specific fields of power relations (Foucault, 1979, pp. 27-35). As part of the construction of knowledge, maps propose a reality in which power can perpetuate and reflect itself: in the case of Lanús, for example, by ignoring specific public works and taking as granted a subdivision that had been only planned. Beyond its task of reporting the existing city, the IGM invested itself with the right of producing new information. It should be borne in mind that the chart was not presented as a planning document but as the result of the recollection of geographical data. The map, in short, appears to be closer to an idealized version of Villa Celina, planned by public agencies, than to Villa Celina's material reality - in other words, not to represent Villa Celina as it was but as specific State agencies would have liked it to be.
Commercial maps in the 1960s and 1980s

The map *Buenos Aires y Alrededores*, published by the Automóvil Club Argentino (Argentine Automobile Club) circa 1965, presents an austere outline of BVLP/U/S (Fig.03). It shows only the internal roads, and remains silent about the pedestrian corridors, the common services and the perimeter routes (ACA, [1965]). The internal roads have been drawn as distributed evenly, in positions that differ from what satellite photos of the time show⁷. More than two decades later, the map of Villa Celina included in the *Guía Filcar* (Filcar, 1986) displays only car lanes too, but following a different pattern: only the perimeter and a selection of internal roads, this time in their actual positions, appear (Fig.04).

![Figure 3. Buenos Aires y Alrededores (Automóvil Club Argentino, [1965]). Courtesy ACA.](image-url)
Given that both ACA and Filcar maps were designed mainly for car drivers, it is not surprising that they did not represent all of the communal features but only the driving roads. However, had this been the only reason behind their incomplete representation of the neighbourhoods, both would have traced similar outlines – for example, showing all the streets open to cars. Furthermore, the missing information in the maps also calls into question their effectiveness: the pedestrian corridors were necessary to reach the houses, and information about the locations of blocks and collective buildings would have helped readers to find their way in the neighbourhoods too. The omission of key information about BVLP/U/S, necessary for occasional visitors to get their bearings around the area, suggests that the

Figure 4. Guía Filcar (Filcar, 1986). Courtesy Editorial Filcar.
publishing companies did not expect their readers to be particularly interested in these neighbourhoods.

While the map published by the IGM reflects the vision of a public institution, *Buenos Aires y Alrededores* and *Guía Filcar* offer a hint about the interest (or lack of) that BVLP/U/S generated among the city's population. Commercial maps are limited, as are official charts, since they select information according to what they anticipate the readers will need or look for: it might be said that they work within the boundaries of a collective consensus about an area. The map of the IGM was, as has been argued, embedded in a field of power relations – creating and reproducing information that responded to specific interests. Commercial maps generate a specialized type of knowledge as well, mainly because they are working for a theoretical, idealized reader. The success in the longer term of Filcar and ACA as cartographic companies suggests that their production was effective. It could be thus inferred that the actual users were not too far from the abstract reader that the companies foresaw.

This mechanism is thus not a top-down imposition of power – at least not only. The power relations shown by these maps are present and reiterated throughout society. I have in mind a foucauldian concept of 'power' here, where power is not something coming 'from above' but something reproduced by each member of society, and enforced through each relationship. Says Foucault:

> power is not exercised simply as an obligation or a prohibition on those who "do not have it"; it invests them, is transmitted by them and through them; it exerts pressure upon them, just as they themselves, in their struggle against
it, resist the grip it has on them. This means that these relations go right down into the depths of society (Foucault, 1979, p.27)

Power relations are thus embedded into society and multiplied by each of its members, who are at the same time subject to it – and this is how commercial maps, as a reflection of the users' interest, are also a tool to multiply these relations.

By employing this perspective, it can be argued that the under-representation of BVLP/U/S reveals the way in which part of the Argentine society neglected these neighbourhoods. The contempt toward the shanty towns expressed by some social groups, such as the ones who wrote the Plan de Emergencia, was passed on to the neighbourhoods built to accommodate their residents. I am thus arguing that this led to a lack of interest, by these sectors of the society, on mapping BVLP/U/S in depth. In addition, it has been already mentioned that the south-western suburbs of Buenos Aires had traditionally had a marginal role in the representations of the city for being poor, working-class areas – except during Peronism, which was precisely the political tendency that the RL aimed to attack. For all these reasons it is not surprising to see that neighbourhoods built for former informal settlers in the south-western suburbs were not mapped with as much attention as other areas until more recent decades.

The notion of social production of space proposed by the French sociologist Henri Lefebvre can also help to shed some light on the assumptions about the urban that underlay commercial maps. Lefebvre proposes a way of understanding how the collective construction of places, and their images, functions. For him, space is the result of the interaction of forces applied by society onto territory: social practice, representation, inhabitation or representational space. Space is a product, while at
the same time a medium of production: it is in space that processes of production are located, and for this reason it conditions them (Lefebvre, 1998, pp. 26-46). From this perspective, BVLP/U/S can be read as a collectively-constructed apparatus and not exclusively as the outcome of planners', architects', and government's design.

Furthermore, if space is socially produced, it is possible to argue that its representations express the social conception of each specific area. In line with Foucault's observations, Lefebvre thinks that representations of space are a particular kind of top-down knowledge, informed by reasoning rather than by inhabitation and experience, which as such helps to perpetuate the dominant system of production (Lefebvre, 1998, p. 36). Representation - in cartographic terms - is not the main focus of Lefebvre's work, but it is one of his interests, not least because he finds it to be a key mechanism for the collective construction of space. In the case of the maps analysed, the anti-Peronists' contempt for the masses of internal migrants and their alarm about the emergence of the informal settlements led to specific ways of perceiving and conceiving the spaces related to settlers: in this sense, these tensions and conceptions produced the spaces. Places like the south-western suburbs, the settlements, the neighbourhoods built under the Plan de Emergencia, and even the centre of Buenos Aires, were loaded with new meanings throughout these social transformations, and they were thus collectively produced. It must be noted that the conceptions found in the analyzed maps are not the only ones that emerged from the cited processes, which not all social actors experienced in the same way. Opinions did vary, and works like *Villa Miseria también es América* (Verbitsky, 1957), Antonio Berni's Juanito Laguna series (Berni, 1999), or the short *Buenos Aires* (Kohon, 1958) are good examples of views about the shanty towns that did not concur with the official one. But the social tension around migrants and
shanty towns was pressing enough at that time to leave a key mark on the social construction of space.

**Recent mapping**

Recent commercial maps have provided a more thorough representation of BVLP/U/S than their earlier counterparts. The *Guía Filcar* 2006 (Filcar, 2006), for example, includes and labels all the pedestrian corridors built in 1957-1964 (Fig.05). However, the recent extensions south of Barrio Vicente López y Planes and Barrio Sarmiento (D) are only partially taken into account. These consist of housing built following the old street pattern. For what refers to the Barrio Las Achiras (E), south of Barrio Urquiza, and the developments marked F, a trace of streets has been outlined, but without further information. In addition, other recent transformations in Villa Celina, such as the 'Barrio boliviano' (the land marked G, where a large Bolivian community settled in the early 1990s; Fig.06), are not represented at all. 
Figure 5. *Guía Filcar* (Filcar, 2006). Courtesy Editorial Filcar.

Figure 6. ‘Barrio Boliviano’, Villa Celina. Differently than what the maps suggest, the place is far from being empty. January 2011. Photo by Adriana Massidda.
Documents provided recently by public agencies, in turn, present more succinct information than commercial maps: a complete outline of the original neighbourhoods, but no sign of the recent settlements – and in this case no trace either. A cadastral plan issued in 2011 by the Municipality of La Matanza, for example, includes BVLP/U/S with their street names and complete layouts, but overlooks newer developments such as the areas marked E-G (Fig.07). Indeed the cadastral plans do not aim to portray the everyday life of Villa Celina but to provide a scheme of land ownership. The absence of the newer developments could be due to their administrative status being to some extent unresolved\textsuperscript{vii}.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure7.pdf}
\caption{Cadastral map of the district La Matanza by the Municipality. Printed on demand. January 2011. Courtesy Municipalidad de La Matanza.}
\end{figure}
As I have observed throughout the text, maps belong to a network of power relations which underpin decisions about what is represented and how. They are part of an artificial construction of knowledge which serves, and at the same time is generated by, power. This conception of power is not limited to official agencies, such as the ones who produced the maps I have presented, but also extended to and deeply embedded into the whole body of society. Power is thus born, and at the same time multiplied, by each individual. It is to control this multiplicity of micro-powers that documents emerge as tools of vigilance: 'The examination that places individuals in a field of surveillance also [...] engages them in a mass of documents that capture and fix them' (Foucault, 1979, p. 189).

Territory, Foucault argues, is the physical support of activities, the ground for the circulation of individuals. It is the point of connection between nature and the human species, and therefore a key element for power to be exercised on:

*I think we have here one of the axes, one of the fundamental elements in this deployment of mechanisms of security, that is to say, not yet the appearance of a notion of milieu, but the appearance of a project, a political technique that will be addressed to the milieu.* (Foucault, 2007, p. 27)

At the same time, writers like David Shane have related Foucault's concept of heterotopias - places of exception that redefine the rest of the spaces they are related to (Foucault, 1967) - to the informal, to the lack of representation of the informal, to what escapes this control performed by maps: 'The invisibility of these [informal] settlements on official maps, and yet their obvious presence adding to the city, conforms to the "hidden in plain sight" characteristic of the medieval almshouses
Finally, it is worth mentioning that the under-representation of the informal has also been stressed by David Harvey in the context of a critique of property speculation and the commodification of urban land (Harvey, 2012, p. 18).

Thus, even though the representation of BVLP/U/S is more exhaustive in recent than in older commercial maps, important transformations of Villa Celina have been overlooked: the information has been enriched but the problem has been updated. It could be argued that this process is embedded in the very nature of maps, since they aim to show a fixed image about territories that are continuously becoming. The fact that the places which are incompletely represented are the newest sectors of Villa Celina seems to support this interpretation. However, the construction of these spaces was well advanced by the time the maps were published. Their under-representation could be also read in terms of their relationship with other groups within society: until being collectively acknowledged it is unlikely that the public will expect to find information about them in the maps, and in this case the cartographic companies might not find surveying or collecting data about them worthwhile.

The importance of the most recent developments, i.e. the areas marked E-G, for the economy and atmosphere of Villa Celina becomes self-evident when visiting the site, both through conversation with residents and in the face of their hectic, lively activity. The differences between any of these recent maps and the actual built environment can be easily seen in satellite photos of Villa Celina such as the ones that are available online. The spaces that are emerging but are not fully acknowledged by official departments or civil groups offer, in many cases, a hint of unattended needs and potentialities of the populations residing in them. Thus, even today the way in which urban cartography deals with informal areas – whether they
are mapped or not, and in what ways – says something about the positions of different social and government actors toward these spaces and their possibilities.

Concluding remarks: representing the under-represented

Many of the problems outlined throughout this chapter appear more frequently in the suburbs than in the consolidated neighbourhoods of the city – at least in the context of Buenos Aires. The emerging, fragmented, hybrid areas are characteristic of the southern, western, and south-western suburbs, and consequently the controversies in representation and the gaps in the information are perhaps to be expected. Urban maps reflect the interests of different parties, and for this reason they are documents which help one to grasp not only the spatial transformations of the city, but more importantly the way in which the each space is perceived.

During the decades following their construction BVLP/U/S offered a challenge in terms of representation, for they necessitated the introduction of a new set of criteria with which to outline their fabric that was quite different from the traditional grid of Buenos Aires. The matter of representation was further complicated by political tensions around the shanty towns and their inhabitants, some of whom were transferred to BVLP/U/S. These tensions contributed to the partiality of the cartographic representations of BVLP/U/S. Later on, after tensions attenuated and the neighbourhoods came to be part of the collective imagination about the city, it became natural for cartographic companies to represent them more fully. The challenge for cartographers would be then whether and how to take into account non-official, emerging phenomena. There is currently some degree of variety in the way in which cartographic companies represent the under-represented, but it could
be said that in general terms urban informality tends to remain incompletely portrayed.

The nature of this work is that of a preliminary exploration of places which have received little attention before. I have shown how the tense position occupied by a geographical area of the city – the south-western suburbs – in the collective imagery affected not only the material interventions carried out on it but also the way in which both the area and the interventions were represented in various types of maps. I have also proposed a politicized interpretation of these maps: the omission of information involves issues related to society and power. As with other types of representations, maps perpetuate power relationships and consolidate the way in which spaces are collectively produced. Finally, I think that the nature of the suburban areas of Buenos Aires renders cartographic representation even more challenging, since conditions of inhabitation are not yet settled and spaces are difficult to classify. Many dichotomies such as formal/informal, ownership/invasion or ongoing/complete, for example, need to be suspended in order to apprehend the changing nature of the area. Questions of the political and the social underlay the discussion of urban mapping, and it is through an analysis that incorporates them that the complexity of the suburbs of can be grasped.

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Bibliography:


The political actors backing the Revolución Libertadora and their perspectives regarding the shanty towns were varied. I am referring here to the prevailing position.

‘Aluvión zoológico’ and ‘las patas en la fuente’ are the original expressions in Spanish. These belong to the oral tradition of the time but can be found in written form, for example, in CARL, 1985, p.11.

Although the original plans of the neighbourhoods are lost, the disposition of the buildings can be traced back using the satellite photos of the time and the plans provided by the BHN in its construction report (BHN, 1958). I have also used cadastral documents issued in the 1980s for the reconstruction of another PE neighbourhood, Barrio Rivadavia, to estimate the block sizes presented here.

In particular I greatly acknowledge José and Norma Furnari for their descriptions of 1950s Villa Celina.

See, for example, the 1965 satellite photo in http://mapa.buenosaires.gob.ar/ [last accessed 12th September 2012].

Please note that, apart from the cadastre, I rely only in oral sources for what regards the property status of this land.

http://maps.google.com.ar/ or other satellite maps.