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Article

Beyond Cerdá: Public housing in the Barcelona periphery

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Abstract: Mass migration into the city of Barcelona in the 1950s created an estimated deficit of 100,000 dwellings by the close of the decade, and by the early 1960s an estimated 100,000 people were living in shanty towns in and around the city. In an effort to address this crisis, central State and local housing authorities constructed a series of housing estates in the urban periphery, beyond the central ensanche (expansion), the centrepiece of Ildefonso Cerdá's 1860 master plan for the city. Using secondary sources, original photographs taken at the end of the Franco era, and more recent Google Earth images, this article discusses the role of the main housing authorities at the time, and examines the planning process that allowed the construction of these housing estates and their subsequent demolition or remodelling in the post-Franco era. The article finds that the public authorities allowed planning regulations to be contravened, or used loopholes and special measures within the planning laws, to construct housing units of minimal dimensions and generally poor quality in areas often zoned for other uses. More recently, "special plans" have been used effectively to improve or replace the majority of these estates. The article concludes that political will was the dominant factor in determining housing construction in the Franco era with the planning process being largely an irrelevance, and that residents' associations have led the struggle for improvements in these estates in the post-Franco era, with the revised planning laws providing an effective framework for change.

Keywords: housing estates; planning process; urban renewal; urban development; residents associations; Barcelona

1. Introduction

Ildefonso Cerdá's 1860 Plan de Ensanche (Expansion Plan) for Barcelona established the physical framework for the development of the city beyond its medieval walls, across the plain between the Llobregat and Besós rivers. Although the implementation of the plan–often simply called the "Plan Cerdá"-in the second half of the 19th century was somewhat compromised by speculative development and weak planning controls (Wynn, 1979), Cerdá's visionary plan and the underpinning egalitarian urban science are generally recognised as putting Cerdá at the forefront of the evolution of planning theory and practice in Europe in the 19th century. Indeed, Domingo (1973) saw Cerdá as the founder of an urban science, preceding Baumeister, Stubben, Unwin, Triggs and Haverfield. Today, Barcelona is a thriving metropolis of almost 5.7 million inhabitants and is often cited as the modern city par excellence, that has set high standards in its urban management based on the "Barcelona model" (Blanco, 2009) of urban development. The city exhibits an attractive blend of old city charm around the Ramblas with the unique octagonal city blocks (manzanas) of Cerdá's ensanche, dotted with modern service infrastructure and architectural gems such as the Sagrada Familia cathedral.

However, in the urban periphery, beyond Cerdá's ensanche, a very different landscape evolved in the Franco years (1939–1975), as the public authorities grappled

with the need for appropriate housing and shelter for the waves of migrants who arrived in the city in search of work and a better life. Cerdá's bold plan had been challenged and undermined by the property-owning interests of the day (**Figure 1**), but almost a century later, it was the public sector authorities, as much as the private sector, who were responsible for the development of an outer urban periphery—beyond Cerdá—that comprised a range of sub-standard housing estates of minimal dimensions and generally deficient in urban services, an exact counterpoint to the principles of urban development embodied in the Plan Cerdá. Although authors such as Ferrer (1974, 2011) have examined the planning contraventions incurred in these developments, there are few comprehensive accounts that track the origins and evolotion of these estates across the past 70 years, spanning the Franco and post-Franco eras as the country emerged from decades of dictatorship into a new democratic age. This article attempts to address this gap in the literature through examination of the role of the main entities involved in public sector housing provision, and provides details from a range of case examples, supported by archival and photographic evidence. This represents a contribution to existing literature on planning and housing in Spain that has not been covered in this manner to date, and provides a basis for comparable studies by researchers in other major European cities.

Figure 1. Cerdá's Plan of Ensanche y Reforma (Expansion and Reform). Cerdá believed his Plan would once and for all end the exploitation of the poor by landlords. This sketch shows Cerdá marching determinedly out on to the plain to construct the new houses, whilst the proprietors, some trampled underfoot, flee in fear. Source: Image obtained from Garrut, Josep M. "Ildefonso Cerda, his Ensanche and the Satire of Both". San Jorge, no. 51, pp. 6–19. (General Archive of the Barcelona Provincial Council, AGDB).

The extant literature suggests that similar developments were unfolding in many other European cities in the post-war era. As Monclús and Diez Medina (2016) note, "the building and proliferation of large housing estates was exceptional all over

Europe during the 1960s and 1970s. This was firstly due to the critical shortage of houses and the willingness to solve this problem rapidly; and secondly, because standardization and prefabrication afforded the possibility of building quickly" (p. 4). In Spain, similar developments were occurring in Madrid and Bilbao, but the social-political context differed from that in most other western European countries, in that housing policy was developed and implemented under a nationalist dictatorship. In the main, the enactment of housing policy lacked any formal input from democratically elected representatives or residents' associations until after the end of the Franco regime. This arguably resulted in lower quality developments that lacked the checks and balances provided by democratically elected local authorities, with plans and planning processes failing to be adhered to, despite being grounded in existing law and legislation.

The origins of public sector intervention in the provision of housing in Barcelona in fact pre-dated the Franco era. In the 1920s, the large infrastructure projects of the day–the new metro lines and the 1929 International Exhibition stadium on Montjuïc (the hill overlooking the city to the west)–brought a new influx of migrants to the city. This contributed to the rapid growth of the early shantytowns on Montjuïc and in the urban periphery, and led the local authorities to build the first four public housing estates in the city at Eduardo Aunós (to the west of Montjuïc), Barón de Viver and Milans del Bosch (later renamed Bon Pastor), on the banks of the Besòs river to the east of Barcelona, and at Can Peguera, in the north-east corner of the municipality (Ochoa, 2023). These single-storey dwellings were of minimal dimensions—averaging 50 square metres floorspace—and often constructed specifically to re-house the shanty dwellers.

Figure 2. Bon Pastor in 1976. One of the first public housing estates built in the Barcelona periphery in the late 1920s, the estate is now largely demolished, although the Barcelona History Museum (MUHB) have recently converted some remaining dwellings into a museum. Photo: M. Wynn.

The funding and construction of these casas baratas (cheap houses) was made possible by the second Cheap Houses Act (1921), whereby the Barcelona Council created the Patronato Municipal de la Vivienda (PMV) for Barcelona, which commissioned house builders to construct these four housing estates, which all remained largely intact until the 1980s. However, only Can Peguera remains today, much improved with new service infrastructure and upgrades to the housing stock. The other three, including Bon Pastor (**Figure 2**), were largely demolished and replaced by blocks of apartments, some of which were offered to the estate residents. Nevertheless, this re-homing process was characterised by resident protest and discord with the local authorities. More recently, at Bon Pastor, a remaining block of 16 dwellings has been turned into a museum with some homes having been preserved to illustrate the typical lives of residents in past eras (Ajuntament de Barcelona, 2023).

During the first post-war decade (1940–1950), 100,000 immigrants arrived in Barcelona, and an estimated housing deficit of 20,000 houses in 1940 (Borja, 1973) had increased to 80,000 by 1950 (Ribas i Piera, 1973) in the Barcelona municipality alone. In Barcelona, only 15,000 houses were constructed in the 1940s, of which 11,500 were financed by the private sector, and even some of the public sector estates, such as La Merced, were aimed at the middle classes. Cotorruelo (1960) summarised State housing policy in the first half of the century thus: "until the mid-fifties, the problem of the housing deficit was not tackled with the required intensity; very few new dwellings were constructed which came within the financial limits of the working-classes; and very limited attempts were made to subsidize the costs of house construction" (p. 169).

Indeed, between 1941 and 1950, State-aided construction in Spain as a whole was limited, with only 44,000 such dwellings being built out of a total of 509,000. A generally anti-urban ideology was prevalent in the early Franco administrations, in which the focus was on rebuilding the regions devasted by the civil war in the south and west of the country. Yet it was in the country's main cities that the housing shortage was most acute. In Madrid in 1950, over 6000 families were living in shantytowns, caves or ruined houses, and by 1955, the housing deficit in Spain as a whole was estimated at 1.5 million dwellings (de Teran, 1978, p. 342).

In Barcelona, many immigrants were forced into taking overcrowded sub-let accommodation, or building their own dwellings in the rapidly expanding shantytowns which had sprung up in the green zones and hitherto empty tracts of land largely outside the ensanche and in the adjoining municipalities (Wynn, 2024). By the end of the 1940s an estimated 26,000 people were living in shantytowns in and around the city and by 1954, the figure had doubled (Galera et al., 1972). The masses encamped in the shanty areas of the city represented an ever-present threat to law and order, and the General Strike in 1951 in Barcelona was repeated elsewhere in the early fifties; the resistencia de la población (popular unrest) more or less forced the Central Government to intervene directly in the housing sector, leading eventually to the 1954 and 1957 Housing Acts (discussed below), which introduced new subsidies for both private and public sector house developers.

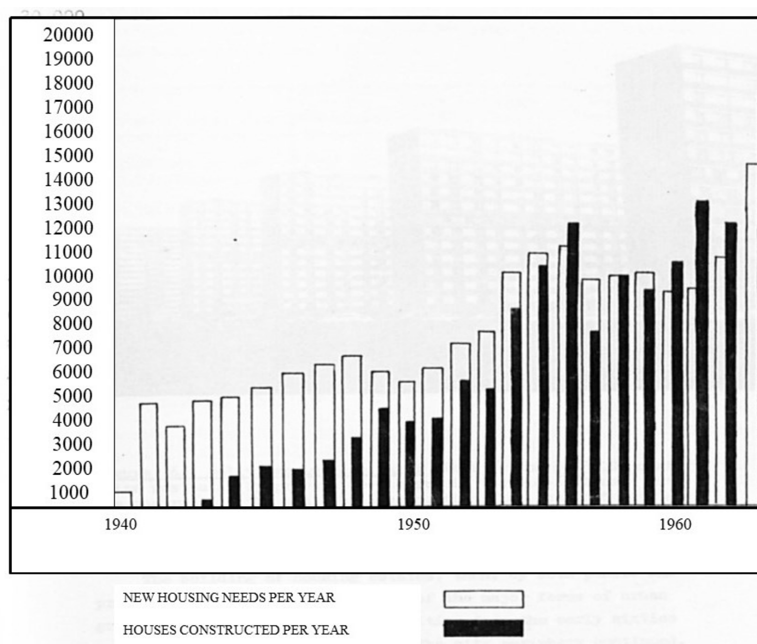

Figure 3. New housing requirements and house construction in Barcelona 1940–1963. Based on: Sala Schnorkowski (1977).

The mid-fifties witnessed a surge in house construction in the Barcelona municipality, with new houses exceeding new demand in some years (**Figure 3**). Between 1954 and 1958, over 40,000 new houses were built in the municipality of Barcelona, over 75% of them by the private sector, and it was in these years and in the early 1960s that the northern and eastern margins of the ensanche were infilled. According to Borja (1973), it was only in this decade that the "overflowing of the city into the sub-region" (p. 81) began on a large scale, as, with most of the ensanche infilled, both public and private promotors constructed estates in cheaper land in the peripheral municipalities. Because of the greater availability of space and advances in building technology (Paricio, 1973), these estates tended to consist of more and higher blocks—up to 15 storeys in some cases—far larger estates than those built in the early fifties.

Not all housing development was in the form of estates, but it nevertheless dominated growth in the Barcelona periphery. Busquets Grau (1976) identified three types of development that collectively made up the "human habitat" in the periphery. First, there were the remaining shantytowns; secondly, there were the old outlying settlements which had undergone piecemeal infilling and expansion, and thirdly, and most importantly, the burgeoning estate development, which is the focus here. The building of housing estates, by both public and private agencies, constituted one of the major forms of urban growth in the peripheral municipalities from the early sixties onwards, as the housing boom in the city periphery continued. The peripheral expansion of the city in these years in Barcelona in the outskirts of the ensanche, but also beyond in the adjoining municipalities of Hospitalet and Badalona, created neighbourhoods lacking in collective services, exacerbating the problems relating to public transport, road infrastructure, schools, drainage, and parking. In this context,

this article focuses on the public housing estates constructed in this era, and addresses the following research questions (RQs):

RQ1. Who were the main agencies in the provision of public housing in Barcelona in the Franco era?

RQ2. What was the role of planning in the rapid expansion of public housing estates in the Barcelona periphery in the Franco era?

RQ3. What has happened to these estates in the post-Franco era and what have been the key issues in determining their fate?

2. The planning and legislative framework

The Land and Urban Planning Act of 1956 was the key piece of planning legislation in Spain for the following two decades. The Act made provision for a tiered hierarchy of urban plans and planning authorities at the national, provincial, sub-regional, municipal and local levels. The National Urban Planning Council (NUPC), was set up within the Home Office as the "upper level planning authority in the country… to co-ordinate the plans and projects of the different Ministries that intervene in urban planning" (Presidencia del Gobierno, 1956, article 198). It was made responsible for the overall direction of a National Urban Plan, which was to set out the "major guidelines for urban development" (article 7) in all Spain. Councils of municipalities with a 50,000 population or more were made legally responsible for drawing-up General Development Plans. In other municipalities, it was the overall responsibility of the provincial or sub-regional planning commissions to do so. These General Development Plans, giving land-use classifications to the entire municipality, were, in theory, to be binding on all developers and development. Councils could combine together to form sub-regional planning authorities, and draw up sub-regional General Development Plans. Some of these, in fact, preceded the 1956 Act; such was the case in Barcelona, where the sub-regional plan had been approved by Central Government Act in 1953. Local Plans were "for the development of General Plans" (article 10) and were to contain the detailed design and lay-out for new development, and building regulations based on limits set in the land-zone classifications of the General Plan. Similarly, Roads and Service Projects were to design, program, and cost out the provision of service infrastructure (roads, drainage, sewerage system, street lighting) in the Local Plan areas. Local Plans and Roads and Service Projects could be drawn-up by any planning authority.

The land-use classification system was based on a three-way generic division of land into which all classifications were to fall—"urban land", "urban reserve" and "rural land". As a rule, land comprising, and within, the existing built up area at the time of plan approval was given "urban land" status, "urban reserve" comprised those areas earmarked for the possible future expansion of the built-up area, and all other terrain was classified as "rural land". Through this classification system, the Act could impose strict conditions on development. The 1956 Act emphasised that urban growth should proceed through the controlled development of new estates (poligonos): "For the implementation of General Plans, the plan area may be divided into so many estates, to attend to the necessities of urban development. These estates will normally comprise several blocks (manzanas) of development" (article 104).

The 1956 Act envisaged a model of urban growth in which the sprawl of the central core was arrested, and new development, carefully planned and controlled through the Local Plan mechanism, would take place in the "urban reserve" areas surrounding the central core (**Figure 4**). In reality, however, this model of urban growth was scarcely adhered to, as both public and private sector developers found ways to contravene planning regulations and land-use classifications. This was evidenced in the planning and construction of public sector housing estates, which were able to draw upon subsidies introduced in the 1954 and 1957 Housing Acts. The 1954 Housing Act introduced two categories of State aid. For "Group 1 houses", no direct State subsidy was given, but developers were conceded low interest loans and fiscal exemptions from the State-run Construction Credit Bank. "Group 2 houses" were divided into 3 sub-categories depending on house size and unit cost. 90% grants were available from the State for construction of these houses but the sale or rent return to the promotor was strictly limited. This limitation on profits restricted the uptake of grants by house promotors in comparison with the "fixed subsidy" system introduced in the 1957 Act, which provided a 30,000 peseta (£230) direct State grant, per house, for "fixed subsidy dwellings". Loans from the Construction Credit Bank were also made available at low interest rates, with fiscal exemptions. In 1963, certain incongruities between the 1954 and 1957 Acts were smoothed out in a further amendment Act. In parallel, the Ley de Urgencia Social (Emergency Social Law) was passed in 1957, which set out criteria for the future demarcation of housing estate development, and paved the way for the compulsory purchase of land by the public authorities for new housing development (Ferrer, 2011).

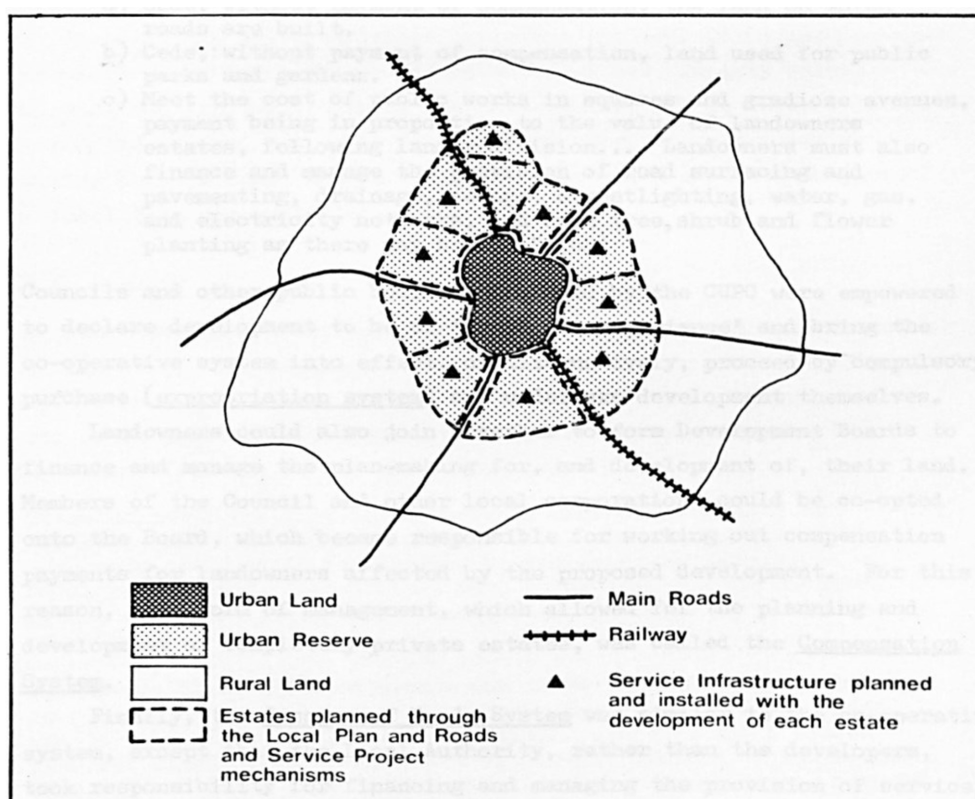

Figure 4. The model of urban growth envisaged in the 1956 Land and Urban Planning Act. Based on: de Teran, 1978.

In 1955, the first National Housing Plan was launched with the objective of constructing 550,000 houses between 1956 and 1960, and was followed in 1961 by a more ambitious Housing Plan with a target figure of 3.7 million houses in the period 1961–1976, a figure surpassed in 1975. The provision of housing, through direct intervention by State and local housing authorities, and through subsidising the private sector, was a major objective of successive Franco governments from the early 1950s onwards.

3. Research method

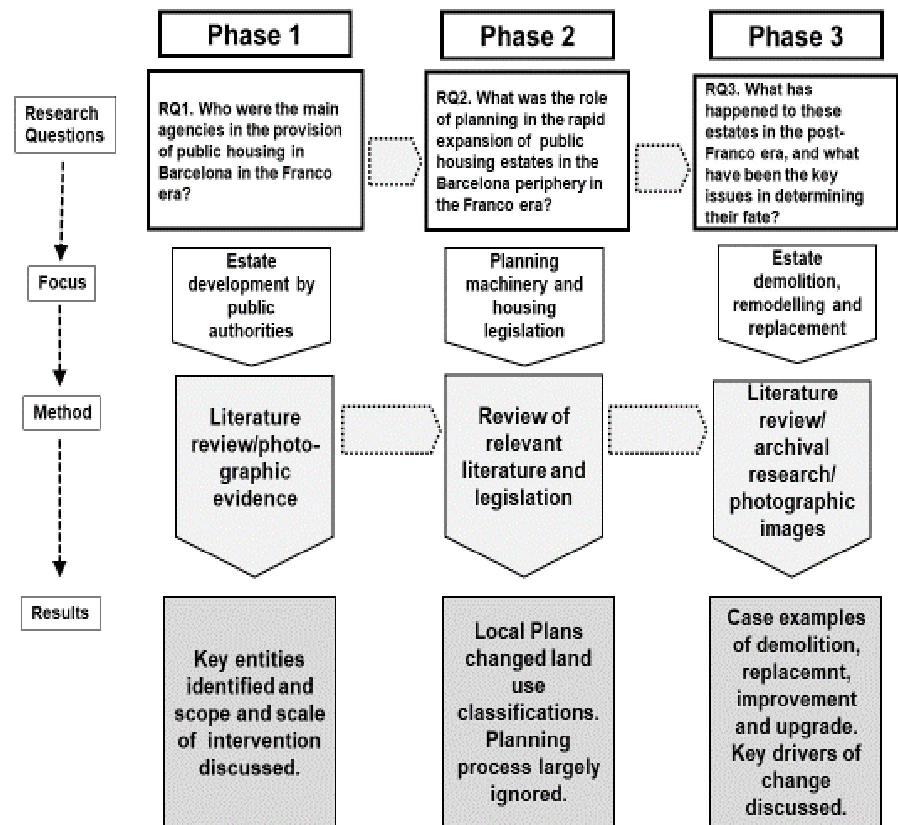

Figure 5. The 3-phase research process.

This article is based on a narrative analysis of secondary sources and photographic evidence from the mid-1970s, and more recent images obtained via Google Earth. The narrative synthesis is based on a scoping literature review and archival research in the offices of housing authorities and local councils in Barcelona in the 1970s (Wynn, 1981a). This is essentially qualitative research, which as Mason (2017) observes, provides a powerful source of information for analysis. The research process comprised three phases that addressed the three RQs (**Figure 5**). An examination of the relevant literature provided the basis for developing responses to all three RQs. A scoping review involves a “broad scan of contextual literature” through which “topical relationships, research trends, and complementary capabilities can be discovered” (Porter et al., 2002, p. 351). In the initial analysis of available literature in the 1970s, this was achieved by accessing sources available in local libraries, architects colleges and the Barcelona history museum archives. As Bell et al.

(2018, p. 97) have observed, such an approach can provide "a means of gaining an initial impression" of relevant themes and that "the narrative review may be more suitable for qualitative or inductive researchers, whose research strategies are based on an interpretative epistemology". The initial review of literature from the 1970s was complemented by more recently published material located online in academic databases, including IEEE Xplore, Google Scholar, Web of Science and Science Direct.

Some of the key literature relating to public sector housing development is analysed and cited, particularly that published in the late Franco and immediate post-Franco era in the 1970s. It was in these years that the full impact of the public housing policies was in evidence in the haphazard, infrastructure-deficient urban periphery, when the residents' associations were gaining in confidence and organizational capabilities, and when the political climate was rapidly adapting to the new freedoms ushered in by the democratic era. This combination of events produced a raft of new literature in Barcelona that analysed and critiqued the planning, housing and design policies and developments of the era. Where necessary, translations from Spanish or Catalan into English were done using Google Translate, or at source using other online translation facilities.

This combination of methods was used to address the three research questions. In Phase 1 of the research, the activities of the main public housing agencies and authorities involved in estate development in the Barcelona periphery are examined. A review of the academic and practitioner literature is combined with illustrative images from the era to provide a summary overview of the intervention of central State and local housing authorities. In Phase 2, the plans and planning legislation of the era as they impacted housing development are assessed and the key role of the Local Plan (plan parcial) as a mechanism for subverting planning legislation is analysed, drawing upon academic literature of the time. In Phase 3, more recent literature and plan documentation is analysed to determine the fate of many of these housing estates, some being demolished because of the poor quality of building materials used, whilst others have been improved and upgraded with new services provision. Images from Google Earth are used to illustrate these changes and provide comparisons with their original condition 50 years ago.

In summary, the research method adopts an inductive approach, based on an interpretivist paradigm and qualitative data. This is a case study of Barcelona, providing conclusions about the nature of public housing in and after the Franco era, that apply to the Greater Barcelona Metropolitan Area. Generalisation beyond this context should be treated with caution.

4. Results and discussion

This section directly addresses the three RQs and provides a discussion of the findings.

4.1. RQ1. Who were the main agencies in the provision of public housing in Barcelona in the Franco era?

4.1.1. The early 1950s

In the early 1950s, the housing deficit in Barcelona was such that the local authorities were under increasing pressure to act. The seriousness of the housing deficit was highlighted by the Eucharistic Congress of 1952. As Fortuny (1974, p. 50) noted, "in 1951 a social tension, without precedent in the post-war, brought about the establishment of a certain new normality". The general strike of 1951 added to the pressure on the central government and local authorities to intervene to address the housing crisis. In Barcelona, this resulted in some early initiatives aimed at providing new homes, notably for shanty dwellers evicted in preparation for the Eucharistic Congress.

These housing developments of the early 50s were on a relatively modest scale in comparison with what was to follow in the ensuing two decades (**Figure 6**). In 1952, the "Civil Governor's houses" were constructed in the north-eastern suburbs of the city, funded by the Barcelona Provincial government, providing dwellings of minimal dimensions of between 17 and 25 square meters of floor space each, to re-house the shanty dwellers moved from Diagonal in that year. There were 41 isolated blocks of medium height (**Figure 7**), comprising nine hundred homes in total. These dwellings were poorly constructed and suffered "constant pathologies and required continuous repairs" (Ajuntament de Barcelona, n.d., para. 3). In the post-Franco era, in response to resident demands, the houses were demolished and replaced by new homes, complemented by new public spaces and collective services (see section 4.3 below).

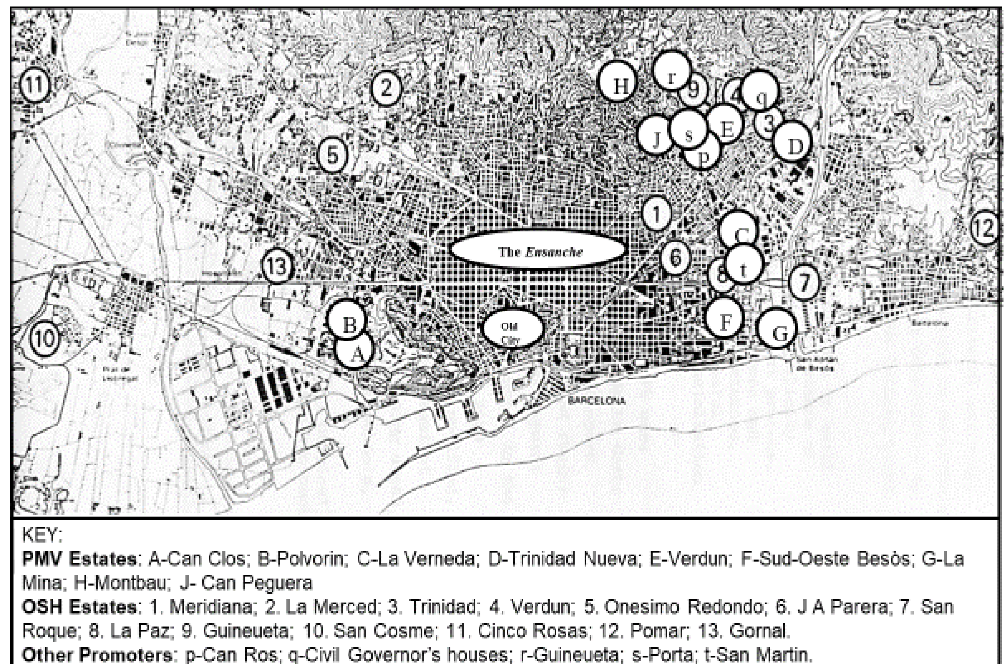

Figure 6. Public housing estates in the Barcelona periphery.

Figure 7. Casas de Gobernador Civil (The Civil Governor's houses). The corner of carrer de Aiguablava and carrer de Lucena in 1976. Photo: M. Wynn.

In 1952, the PMV built a new housing estate on Montjuïc at Can Clos (**Figure 8**). Constructed in just 28 days, the estate provided dwellings for 3000 people, mainly former shanty dwellers, who were forcibly moved from their shanties prior to their demolition. Alibes et al. (1973, p. 41) noted "the shanty dwellers from Diagonal thought they had been brought to a concentration camp when they arrived to see the barbed wire fences. They were moved in lorries with their furniture, having been given five days' notice of their resettlement. They were left in a wheat field and given the keys to their new houses and the wicks for the coal fires where they would have to cook. As there were not enough houses, two or three families had to inhabit each house".

Figure 8. Can Clos in 1976. Photo: M. Wynn.

Figure 9. Can Ros (Viviendas del Congreso Eucaristico) in 1976. Photo: M. Wynn.

In the same year, the Eucharistic Congress itself sponsored the construction of a new estate—Can Ros—which paradoxically was more for the middle classes than the urban poor. The estate (**Figure 9**) was built in phases, starting in 1952 and completing in 1962, there being over 2700 dwellings in total. The inhabitants were chosen by the promoters—it was an attempt to create a Catholic barrio of practicing Catholics and was therefore largely middle-class. Nevertheless, Cambril Soriano (2010), in her study of the estate, concluded "the materials with which the various buildings were constructed were of medium-low quality. An attempt was made to create a self-sufficient neighborhood, in which its inhabitants had everything they needed to lead a complete life, with shops, parks, large avenues, etc. Even so, being limited income homes, they were built with small dimensions, enough to comply with current regulations, and accommodate the largest number of people" (para. 1).

Soon, however, faced with the burgeoning housing crisis of the 1950s, the local and central public housing agencies were to respond with a housing and urban policy far more ambitious than anything previously attempted. The construction of social housing (vivienda social) started in earnest once new State subsidies were made available for house construction in the 1954 Housing Act. In Barcelona, it was the PMV (under the wing of Barcelona Council) and the central State Obra Sindical de Hogar (Union Housing Authority, part of the Ministry of Work and Labour Relations) (OSH)—who were largely responsible for the provision of new housing estates for the working-classes and urban poor. Two further public bodies played lesser but nevertheless significant roles: the Comision de Urbanismo de Barcelona (Greater Barcelona Planning Commission) (CUB), and the Instituto Nacional de la Vivienda (National Institute of Housing, part of the Ministry of Housing) (INV). The house construction activities of these bodies are set out in the sub-sections below.

4.1.2. The Patronato Municipal de la Vivienda (PMV)

The PMV was founded in the 1920s and built the first four public estates in Barcelona in the late 1920s and early 1930s, as noted above, after which they played no major part in house construction in the city until the development of Can Clos

(**Figure 8**) in the 1950s. However, although the PMV were financially dependent on the Barcelona Council and central State subsidies, they built over 16,000 dwellings in the 50s and 60s, nearly all in the eastern and northern suburbs of the Barcelona municipality (**Figure 6**). As with the OSH and INV estates, most PMV operations were aimed at the bottom end of the market and received central government subsidies.

In the 1950s, in addition to Can Clos, the PMV built a number of other relatively small estates in the city margins. An estate of 408 dwellings was constructed—again on Montjuïc like Can Clos—in the El Polvorin neighbourhood (**Figure 10**) in 1953, and was similarly plagued by physical and structural problems relating to the poor quality of materials used.

Figure 10. El Polvorin in 1976. Photo: M. Wynn.

In the district of San Martin to the north-east of the city centre, near to one of the largest shantytowns at La Perona, the PMV built the La Verneda housing estate (**Figure 11**) in the Vía Trajana area in 1952. As noted by the MUHBA (2022, p. 12), "there were three-storey blocks with an inner yard accessible from the street and the properties were connected by open-air galleries" (**Figure 12**). Again, poor quality materials were used in the construction of these dwellings, which eventually resulted in cement degeneration and their demolition.

Figure 11. The PMV estate La Verneda in 1976. Photo: M. Wynn.

Figure 12. The interior courtyard of La Verneda housing blocks in 1976. Photo: M. Wynn.

In the 1960s, the housing estates constructed by the PMV (and other housing agencies) increased in scale. The authority's largest estates were built at Sud-Oeste (South-West) Besós and La Mina on the eastern fringes of the ensanche, the former comprising 4800 apartments, the latter 2700 dwellings (Monclus et al., 2017). In Sud-Oeste Besós (**Figure 13**), the estate was built in two phases (1959–1961 and 1963–1966) and executed with subsidies from the Ministry of Housing on 34 hectares of flat land near the coast as part of the Local Plan for the Levante Norte area, and was one of the first estates in the Barcelona periphery that echoed the rationalist architecture of the 1930s Modernist Movement. As noted by Guerra Mirón (2015) "the construction of the Sud-Oeste Besós estate took place at a time of profound legal-institutional changes in the State management of housing construction, to solve its deficit in the cities, mainly due to internal immigration. This situation, which provided greater availability of public funds for the housing sector, began after the end of external isolation [of the country] in the early fifties" (p. 123). As noted in a recent historical dossier of the neighbourhood (Europan Europe, n.d.), the estate was built just within the area encompassed by the Plan Cerdá over 100 years previously, in an "area planned for a large city park in contact with the Besòs River" (p. 2). However, the "residential construction was not accompanied by the urbanization of public spaces or by a provision of services and equipment that gave an adequate response to the needs of the newly arrived population. In addition, the low cost of the intervention and the limited construction time conditioned the quality of the buildings, so that, later, structural deficiencies would also arise in the homes" (p. 3). This was to lead to a resident protest movement in the estate in the immediate post-Franco period in 1976–1977, discussed in section 4.3 below.

Figure 13. Sud-Oeste Besós in 1976. Some of the first large apartment blocks in the city displaying rationalist architecture. Photo: M. Wynn.

At La Mina, construction began in 1969 and was mainly intended for the re-homing of the inhabitants of the nearby Campo de la Bota shantytown (**Figure 14**). By 1974, more than 15,000 inhabitants had been re-homed there, at an average density of 5.6 persons per dwelling (Barcelona Field Studies Centre, 2024). The estate suffered high levels of social deprivation and illiteracy, and rapidly became seen as a "no-go" zone for many of the city's inhabitants.

Figure 14. The white blocks of the La Mina estate in 1976 (centre background), in which many of the shanty dwellers (foreground) were rehoused. Photo: M. Wynn.

Somewhat in contrast to the Sud-Oeste Besós and La Mina estates, the PMV also constructed the Montbau estate to the north-west of the ensanche in the foothills of the Collserola mountain range. The estate (**Figure 15**) has sometimes been cited as a model of social housing, having elements of the garden-city concept, with a relatively

spacious layout in comparison with other public sector estates of that era. It was very much an exception and, because of its cost, largely inhabited by the middle-classes. Nevertheless, as Alibes et al. (1973) note, problems arose because of the nature of the terrain. They observe that a 12-floor apartment block "was constructed in part over an old river and began to produce cracks in the structure, requiring remedial measures" (p. 81).

Figure 15. The Montbau estate in 1978. Photo: M. Wynn.

4.1.3. The Obra Sindical de Hogar (OSH)

In the four decades after the end of the Civil War, the OSH built 23,000 dwellings in the Barcelona sub-region (**Figure 6** and **Table 1**), and a further 25,000 in the rest of the Province of Barcelona. Apart from two small estates dating from the 1940s, all were built in the period 1954–1975, and took advantage of State subsidies made available in the 1954 and 1957 Housing Acts. In the 1950s, "the OSH adopted a new style of housing provision which came largely from the new atmosphere within the city" (Fortuny, 1974, p. 50). Jubert (1974) has drawn attention to the generally poor quality of house design, minimal internal room dimensions and poverty of service infrastructure that characterised their estates.

Table 1. The OSH housing estates in the Barcelona sub-region.

Housing estate	Date constructed	Number of housing units
Meridiana	1945	406
La Merced	1948	130
Trinidad	1954	1154
Verdun	1954	1464
Onesimo Redondo	1955	816
J A Parera	1956	1637
San Roque	1956–1960	3395

Table 1. (*Continued*).

Housing estate	Date constructed	Number of housing units
La Paz	1963–1965	2499
Guineueta	1964	1517
San Cosme	1965–1967; 1971–1973	1500 801
Cinco Rosas	1967–1968	1500
Pomar	1967	2000
Gornal	1972–1973	4262
Total		23,081

More specifically, Llorens et al. (1974) reported that in the early OSH estates, usable floor space in a two-bedroomed dwelling was 31 m^2 (constructed floor space 38 m^2), whilst in a three-bedroomed dwelling, figures were 39 m^2 and 49 m^2 respectively. Borja et al. (1971), however, estimated that the average floor space per dwelling of all publicly promoted houses built in Barcelona between 1950 and 1969 was 69 m^2. Verdun (**Figure 16**), one of the early OSH estates, epitomized the modest internal dimensions, rationality of street lay-out, and general low-rise development (3–4 storeys) that typified these early public estates. MUHBA (2022) detailed the OSH model for house construction, in which "the free-standing block became entrenched as a container for increasingly uniform properties. Its design neglected urban spaces and put off any changes in land use. Amenities, services and public transport did not come along until many years later" (p. 12).

Figure 16. The OSH estate at Verdun in 1976. Photo: M. Wynn.

In the early to mid-sixties, the OSH embarked on a new policy of building Neighbourhood Overflow Estates (unidades vecinales de absorción) (UVAs) outside Barcelona and Madrid, to re-house shanty dwellers, new immigrants and the urban poor. In Madrid, eight UVAs were constructed, housing 27,000 residents in total, and in Barcelona three such estates, of 1500–2500 dwellings each, were built (**Figure 6**) at San Cosme (in the Prat municipality), at Cinco Rosas (San Baudilio) and at Pomar

(Badalona) (**Figure 17**).

Figure 17. The Pomar UVA in 1976, built by the OSH in 1967 to house 2000 residents. Photo: M. Wynn.

From the outset, the UVAs attracted controversy, because of the poor quality of construction and materials, the lack of adherence to the urban planning process and land use classifications, and the treatment of residents forcibly relocated from Barcelona's shantytowns. Most notorious of all was San Come (Wynn, 1980), where the houses were constructed using an egg-box like structure (**Figure 18**) to allow movement of the shallow foundations in the alluvial soils of the river Llobregat flood plain. This produced massive cracking of the house walls, the cellars became flooded, and vent holes had to be opened up (often by the residents themselves) in the above ground support structure (**Figure 19**).

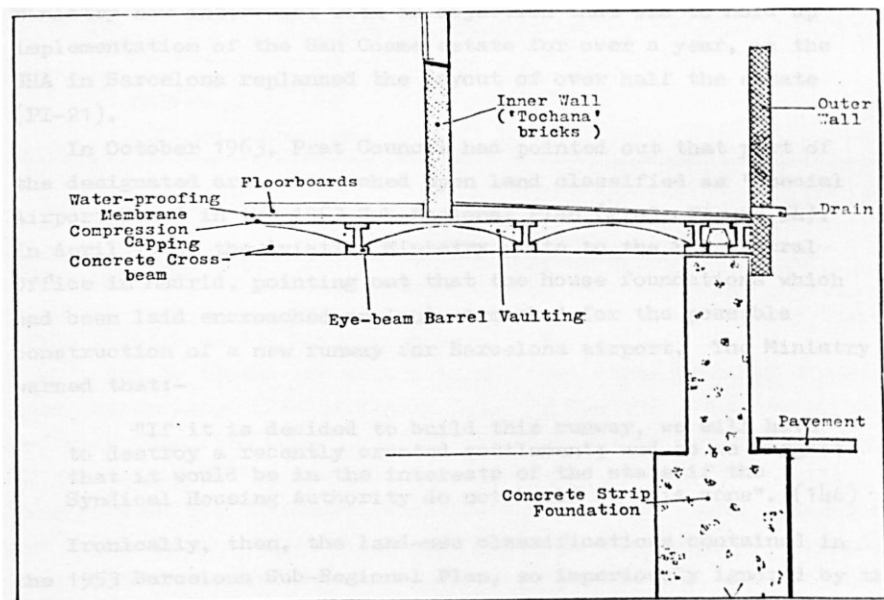

Figure 18. The San Cosme UVA: elevation of foundations and walls. Sent to Prat Council by the OSH, April 1965. Based on: OSH (1964).

Figure 19. Housing in the San Cosme UVA in 1978, showing the holes knocked through the egg-box structure to facilitate ventilation and drainage of the cellar. Photo: M. Wynn.

The 1960s and 70s witnessed the construction of ever larger estates by the OSH. In 1965, on the eastern margin of the ensanche, near to where the PMV would build their Sud-Oeste Besós estate, the OSH constructed 2,499 dwellings in a number of towerblocks in La Paz (**Figure 20**). MUHBA (2022) recently commented that the estate is "an example of the consolidation of the housing estate model of the 1960s when quantity prevailed over quality" (p. 15). Then, in the early 1970s, the OSH built their biggest estate yet, comprising 4262 dwellings at Gornal in the adjoining municipality of Hospitalet. They also embarked on an even larger scale project, 20 kilometres north of Barcelona, where over 5000 homes were constructed in two phases in 1970 in what became the satellite town of Ciudad Badia (**Figure 21**). Blanch (2018), in his account of the history of the development, notes that it "wakes up every day trying to fight against the stereotypes and fame that precede it. Its day-to-day life is very marked by the history of its creation as a 'polygon' during the late Franco era, which has pigeonholed it, and has sometimes slowed down its development possibilities … it dreams of leaving behind the negative image of a dormitory city" (para. 1).

Figure 20. The OSH estate La Paz in 1976. Photo: M. Wynn.

Figure 21. The dormitory city of Ciudad Badia in 1978. Photo: M. Wynn.

4.1.4. The Instituto Nacional de la Vivienda (INV) and Comision de Urbanismo de Barcelona (CUB)

Although the INV were primarily concerned with administering the State subsidy system for private and public sector developers, they also acted as the land acquisition agency for the OSH, and as house constructor in their own right, constructing over 10,000 houses in the Barcelona sub-region from the mid-fifties onwards, including the estate at Trinidad Nueva (**Figure 22**).

Figure 22. Housing at Trindad Nueva in 1976, where both the PMV and INV constructed apartment blocks in the 1950s. Photo: M. Wynn.

The CUB played a limited role as a housing development agency, but provided the design for a number of the early public housing estates built by other housing authorities or the private sector. The CUB was involved in some capacity in the construction of large estates at Guineueta (2500 houses), Porta (4635) and San Martin (10,870), which were built in conjunction with private sector developers. At Bellvitge (**Figure 23**), the construction of the entire estate was ceded to private sector developers. In 1964 the real estate agency Inmobiliaria Ciudad Condal S.A. (ICC) initiated the construction of this enormous neighbourhood of 13.000 dwellings and 40,000 inhabitants on land purchased from local farmers. It was to house the large number of immigrants who came to Barcelona to work in the automotive industry. A few years after the completion of the estate, Alibes et al. (1973, p. 37) noted "the rationalist type of urbanism that gives rise to blocks of houses sufficiently apart to allow the sun to reach them has been degraded here to the extent that the appearance is one of a row of dominoes, monstrously large, dehumanising". More recently, MUHBA (2022) concluded that, like the OSH estate at La Paz, the "construction of the towering Bellvitge blocks … are a good illustration of the shift in scale resulting from a policy which went for quantity rather than quality when building new residential areas" (p. 19).

Figure 23. The Bellvitge estate in 1976, planned by the CUB but developed by the private sector. Photo: M. Wynn.

4.2. RQ2. What was the role of the planning authorities and the planning process in the rapid expansion of public housing estates in the Barcelona periphery in the Franco era?

The CUB was the upper-tier authority responsible for definitive (final) approval of all plans, projects and permits for the 27 municipalities that made up the Barcelona sub-region. As noted above, they played a significant role as a plan-making authority, in liaison with the major councils in the sub-region, and in the design of the early public housing estates. Key to the development process was the approval of Local Plans, the lower tier plan in a hierarchy of plans, as detailed in the 1956 Land and Urban Planning Act.

In 1960, the administrative structure of the Commission was reorganised to reinforce the dominance of the sub-region's biggest municipalities in policy making, and as Montero (1972) observed, this resulted in "poorly justified political decisions, supported solely by municipal interests, lacking a minimum perspective of regional reality" (p. 14). By the end of the 1960s, Barcelona had more approved Local Plans than any other city in Spain, the majority of which were for new housing estates. Indeed, Ferrer's (1974) analysis of Local Plans approved in the Province of Barcelona between 1956 and 1970 shows that, of the 371 plans approved in this period, 197 were in the Barcelona sub-region, of which 113 were for new housing estates. Specifically, as regards these estates, Ferrer identifies a major ring of development in the peripheral municipalities of Badalona, Montcada, Esplugas, Hospitalet and Prat, containing 60% of all housing estate Local Plans approved in the Province as a whole.

Ferrer (1974) also points out that some of the publicly promoted housing estates, particularly those built by the OSH, were built in accordance with Local Plans, but these were not subjected to the formal plan approval process, but merely approved

within the plan-making authority itself. Wynn's (1980) analysis of the San Cosme estate in Prat provides an example of this flawed planning process.

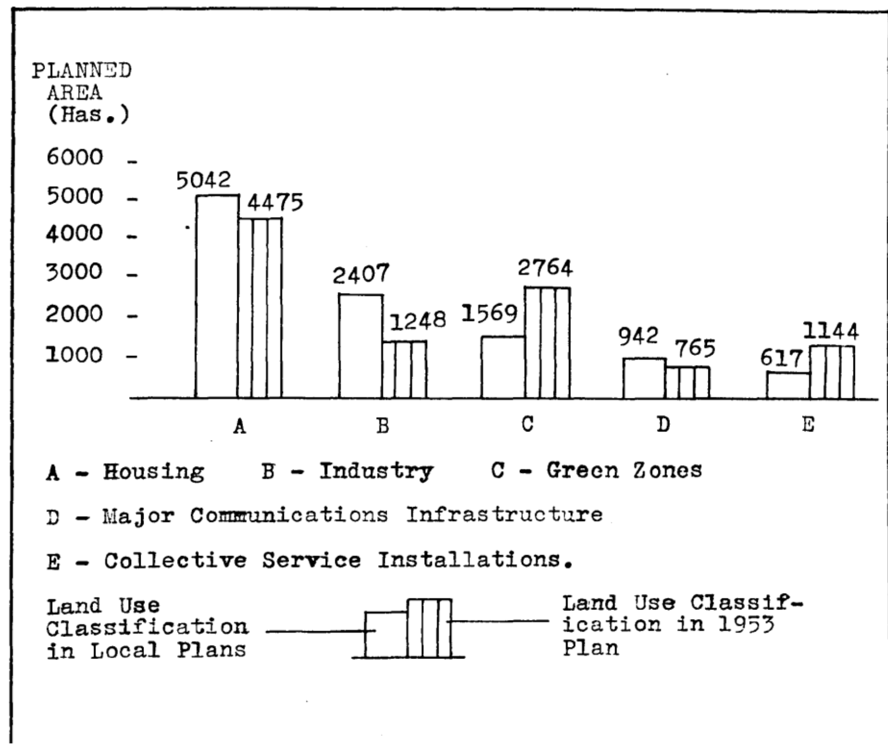

Figure 24. Changes in Land-use classifications in Local Plans in the Barcelona Sub-Region 1960–70. Source: Wynn (1981a), based on: Montero (1972, p. 14).

Local Plans have been a major vehicle for the reclassification of land to facilitate development by both public and private housing agencies. Teixidor et al.'s (1972) study of the 41 Local Plans approved in the Barcelona municipality between 1956 and 1971 reveals that over one-third of the area covered by these plans was reclassified for a different form of development than that specified in the 1953 sub-regional plan; and Montero's (1972) analysis of changes introduced in Local Plans approved in the sub-region in the 60s (**Figure 24**) gives an indication of the nature of these changes: industrial and residential classifications were introduced at the expense of green spaces and collective service areas, with 1295 hectares of green zones having been reclassified for other uses through the Local Plan mechanism. At the same time, there have been qualitative changes, above all within residential classifications, not reflected in **Figure 24** e.g., an existing low-density residential classification is replaced by a higher density residential classification in a Local Plan. Sabater Cheliz (1977) has shown that, with all changes introduced in Local Plans, the population potential of the sub-region in 1974 was 7.5 million, compared with 4.1 million in the 1953 sub-regional Plan and 4.7 million in the 1976 revision.

In summary, the 1956 Land and Urban Planning Act laid particular emphasis on the "estate" as the major morphological form of peripheral growth and required that a Local Plan and a Roads and Services Project be drawn up and approved before estate development could take place. This, then, would enable planning authorities to exercise a development control role at this level, as well as at the building permit level.

Studies undertaken in the 1970s on the role of Local Plans in city expansion (Ferrer, 1972; Herrero, 1972; Ribas i Piera, 1976) illustrate that the Local Plan mechanism was indeed a key element in the planning and development of peripheral growth, but that these plans were not always formally approved by the planning authorities, and that they were often used to bring about changes in land-use classifications, usually with resultant increases in residential and/or building densities. Decision-making was often partially or totally outside of the formal planning process, based more on "informal decision making" (Wynn, 1981b) that led to developments that contravened existing planning regulations and land-use classifications.

Figure 25. An apartment block in the Montbau PMV estate in 1978. Photo: M. Wynn.

This happened on a significant scale in Barcelona, with the resultant degradation of the urban environment in the city periphery. In addition, housing estate development was often progressed without the provision of made-up roads, green spaces, schools and community facilities contained in Local Plans. For example, even in Montbau, one of better quality PMV estates, much of the required roads and services infrastructure was left incomplete for many years after construction (**Figure 25**); and in many of the OSH estates, such as Verdun (**Figure 26**), road infrastructure, green zones and other facilities included in the Local Plans were provided only in the post-Franco era.

Figure 26. The Verdun housing estate in 1976. Photo: M. Wynn.

4.3. RQ3. What has happened to these estates in the post- Franco era and what have been the key issues in determining their fate?

In the aftermath of Franco's death in 1975, the planning and regulatory framework for addressing the housing problems created in the previous era changed significantly. The 1976 Housing Act introduced the concept of "social housing", whereby loans were made directly available to the first-time buyer rather than to the developer, but it was more in the realm of planning legislation that the housing estates of the Franco era were impacted. The Land and Urban Planning Reform Act of 1976 introduced a new form of local plan—the Special Plan of Interior Reform (Plan Especial de Reforma Interior) (PERI)—for "the improvement of the urban and rural environment and the city suburbs" (Presidencia del Gobierno, 1976, Article 22). At the same time, the 1953 sub-regional plan for Barcelona was revised and expanded and the CUB was replaced by the Barcelona Metropolitan Area Authority (Corporación Metropolitana de Barcelona) (CMB), comprising 36 municipalities in total. These changes signified the start of a new era in which the CMB exerted a firm development control role after two decades in which the sub-regional authority had acted as a rubber stamp authority for the planning decisions of the larger Councils. This transition was reinforced with the coming of democratically elected local as well as central authorities and Catalan autonomy. The new plan—the Barcelona Metropolitan Area Plan—made provision for the drawing-up and approval of PERIs "when modification of the existing building density, or provision of new service infrastructure, are considered necessary" (Corporación Metropolitana de Barcelona, 1976, article 333). This provided the planning process and mechanism for the demolition, renewal or rehabilitation of the peripheral housing estates in Barcelona, including the provision of new service infrastructure.

By the late 1970s, several such initiatives were well underway. Roca Cladera (1979) noted that two such plans were approved in 1977, three in 1978 and 3 more

were under study, all drawn-up by Councils in the Barcelona periphery and all covering Local Plan areas developed in the sixties and early seventies. These included the OSH housing estates at San Cosme, Gornal and San Roque, as well as the Bellvitge estate (originally planned by the CUB but later transferred to the private sector for construction and management). At the time, Roca Cladera (1979) concluded that these plans represented "a real precedent in our planning history. Until now planning has essentially concerned extending the built-up area to the exclusion of service and free space areas… this has signified, then, a qualitative change in the content and function of urban planning" (p. 61).

The majority of the smaller public housing estates built in the 1950s and 60s were demolished. In most cases, using the PERI planning mechanism, replacement public housing was constructed to improved design and quality standards, and residents were offered appropriate accommodation in the replacement homes. Such was the case at El Polvorin (**Figure 27**), La Verneda (**Figure 28**), and the Civil Governor's Houses (**Figure 29**) near to Verdun. In all three estates, the Institut Català del Sòl (INCASOL), a public entity which is financed by legally required landlord bond issues, managed the construction of the replacement housing and urban renovation. At La Verneda, demolition of the blocks affected by cement degeneration began in 1997 within the framework of a PERI approved in 1994, and replacement dwellings were built in a phased reconstruction plan.

Figure 27. The El Polvorin housing estate (Carrer de Segura) in 2020 (renovated by INCASOL in the 1990s). Compare with **Figure 10**.

Source: Google Earth.

Figure 28. The replacement dwellings at La Verneda in 2020. Compare with **Figure 11**.

Source: Google Earth.

Figure 29. Carrer Aiguablava in Verdun, where the old Civil Governor's houses stood. Compare with **Figure 7**.
Source: Google Earth.

Figure 30. The replacement housing in the OSH San Cosme estate in 2020. Compare with **Figure 19**.
Source: Google Earth.

Of the UVAs built by the OSH, San Cosme was also largely demolished and replaced by new housing designed with significant input from the local residents' associations (**Figure 30**). At Pomar, the estate houses have been reclad and improvements made over time (**Figure 31**), and the majority of these 2000 homes are now in private ownership. Nevertheless, serious deficiencies were found in some of these dwellings in 2019 because of aluminosis (Lopez, 2019), requiring further urgent repairs and replacement of structural elements. This is one of several problems that has plagued many of the estates built in the Franco era due to the poor quality of house construction. In some instances, the use of prefabricated aluminous cement joists led to dangers of building collapse. To repair such joists "it is necessary to use a system of extensible metallic half joists that adapt to the existing ones that are deteriorated, the space between them is filled and then a functional replacement is carried out without having to touch the damaged slabs and with minimum inconvenience for the users" (FinquesFeliu, 2021, para. 10). In 2001, the newspaper El Pais reported that 16 housing estates in the region had suffered from the effects of aluminosis, including the public housing estates San Cosme, the Civil Governor's houses, Trinidad Nueva, Sud-

Oeste Besòs, El Polvorin and La Paz, all of which were either demolished and rebuilt, or required major structural repairs (Padilla, 2001).

Figure 31. Housing in the Pomar estate in 2020. Compare with **Figure 17.**
Source: Google Earth.

Some of the other larger public estates, such as La Mina and Sud-Oeste Besós, have been remodeled and upgraded, but much of the basic structure left intact, mainly because of the scale of the original estate construction. La Mina has "the greatest social deprivation within the Barcelona metropolitan area", and "suffers from an urban layout which has created enclosed streets within a fortress-like setting, marginalised from the outside world", with homes "of poor quality with very limited living space" (Barcelona Field Studies Centre, 2024). In 2002, a PERI was drawn up and approved for La Mina, involving the partial demolition of oversized multi-family housing blocks, the opening of roads and public spaces, and the creation of new urban infrastructure in the area (Sainz Gutiérrez, 2011). This was implemented in phases in the following decade, but the estate is still plagued by a combination of social problems and poor-quality housing and infrastructure.

Figure 32. The PMV estate Sud-Oeste Besós in 2020, showing the tree-lined Rambla Prim. Compare with **Figure 13**.
Source: Google Earth.

In Sud-Oeste Besós (**Figure 32**), the estate has undergone two phases of remodeling that involved the replacement of some ground floor structures and a range of services upgrade projects, including "the residential park, as well as urbanization projects (the Rambla Prim), improvements in the accessibility of buildings with the placement of elevators, (and) the installation of pneumatic garbage collection" (Barna Diario, 2021, para. 12).

The construction of new road and rail infrastructure has also had a significant impact on reshaping the Barcelona urban periphery with new ring roads, urban motorways and high-speed rail lines cutting through areas previously occupied by a range of habitats. This includes some of the old public housing estates, notably in the north-east of the municipality, where the outer ring road (the Ronda de Dalt or B20 motorway), planned in the 1976 Barcelona Metropolitan Area Plan, cut through the estates of Trinidad Nueva and Verdun, leading to the demolition of some of the apartment blocks, the upgrading of others, and provision of new service areas and green spaces (**Figures 33** and **34**). This is part of a wider urban renewal plan for Trinidad Nueva instigated by Barcelona Council's Instituto Municipal de Urbanismo (Municipal Urban Planning Institute) (IMU). This renovation of the area "gives a strong identity to the neighborhood based on a new organization of the streets, the renewal of public spaces and the layout of the housing blocks" (Ajuntament de Barcelona/Institut Municipal d'Urbanisme, n.d., para. 1). This involved the construction of more than 350 replacement homes and a further 380 new social housing dwellings will be built. There will also be a new pedestrian connection with the "green routeway" of Trinidad Vella.

Figure 33. Part of the Trinidad neighbourhood in 1976—a mix of privately constructed apartment blocks to the immediate left and the public estates of the PMV and INV in the distance. Photo: M. Wynn.

Figure 34. A similar perspective of Trinidad in 2020. Some of the privately constructed flats to the left have been demolished to make way for the new ring road. Some of the former public sector INV apartment blocks remain alongside the ring road. Photo: Google Earth.

A key factor in the improvement and/or replacement of many of the public housing estates in Barcelona in the post-Franco era has been the increasingly effective role of the residents' associations in pressing the housing and other government authorities for action. According to authors writing in the immediate post-Franco era, such as Berriatua (1977) and Castells (1978), the residents association movement in Spain was one of the most advanced in Europe in terms of organization and political activity. Borja et al. (1971), referring essentially to the Barcelona situation, identifies the mid-sixties as the turning point in the history of the movement. They note that the relative passivity of the working classes up until the mid-1960s manifested itself in a general acceptance of the disorderly growth of the city and the scant publicity given to the role of Local Plans in the development process. However, from the mid-sixties onwards, the working classes and certain elements of the press adopted a more active stance, as witnessed by the increasingly successful campaigns against the lack of collective service installation (schools, hospitals and green zones). By the mid-seventies, the political and academic left were hailing a number of victories by residents' associations in their fight against housing agencies, local authorities and developers (Marti and Moreno, 1974; Sola-Morales et al., 1974). In many of the public housing estates, residents demanded house repairs, the provision of missing schools, roads and green areas, the drawing-up of missing tenancy agreements, or the complete demolition and re-building of the estate. The residents' associations moved from an essentially defensive stance in the early seventies, to a more positive involvement in the planning and development processes in the post-Franco era, formulating (often with the help of consultant planners and architects) their own proposals for housing renewal and improvement (**Figure 35**).

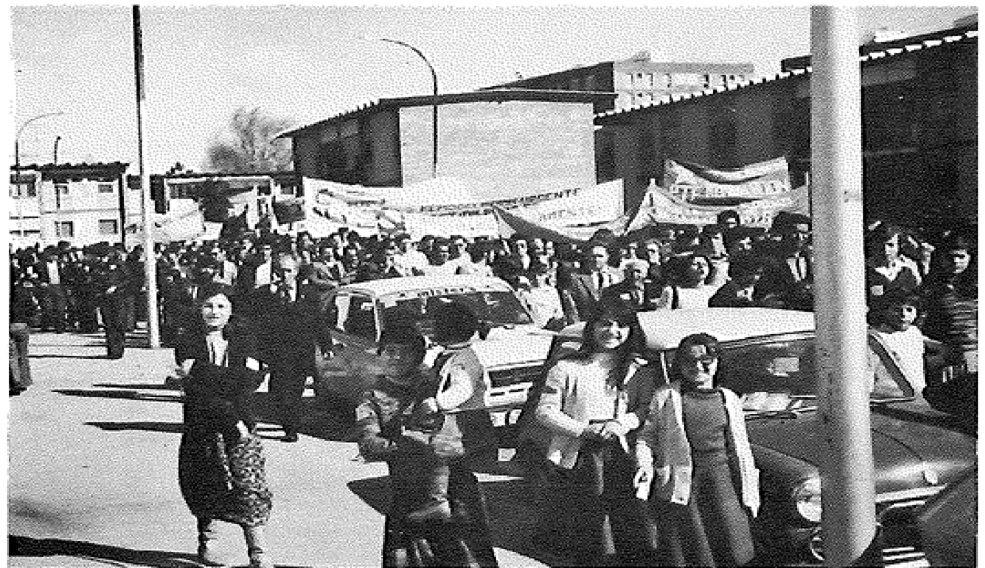

Figure 35. Local residents march in San Cosme, an OSH unidad vecinal de absorción, in February 1978, to protest about delays in the implementation of the plan for the remodelling of the estate. Photo: M. Wynn.

5. Conclusion

In Spain, as in most of western Europe, the age of large-scale housing estate construction by State and local authorities came to an end in the 1970s. In his analysis of urban planning in Europe in the late 20th century, Urban (2023, p. 257) notes, "the retreat of the State from the responsibility of housing was among the most consequential moves of late twentieth-century governance, and at the same time highly inconsistent. It evolved against the background of a rhetorical trope that collapsed the negative image of modernist large housing estates with that of State intervention into housing and sought remedy in removing both", and so "in the mid-1970s most West European countries scrapped the construction of large, municipally planned estates". The mid 1970s was thus a turning point in the construction of large public housing estates across western Europe. Urban (2023) points to the "economic recession, combined with the fact that these programs had been largely successful with regard to their original goals and made the housing shortage less pressing" (p. 257) as the drivers of this change. In Spain, there were also other factors at play that impacted the construction industry as a whole, and led to its contraction in the immediate post-Franco era. As noted elsewhere (Wynn, 1984, p. 140), this "reflected a crisis in demand rather than supply, although the cost of materials and limited credit facilities were hindrances to developers. Rural-urban migration was less marked from the early seventies onwards, as economic growth in the country's main industrial centres slowed … … there was also a reduction in general purchasing power of the middle and lower classes with house prices rising more quickly than salaries. Economic expectations dropped and the scarcity of loan facilities for house buyers further limited demand".

Nevertheless, the public housing estates in the Barcelona periphery dating from the Franco era left a legacy of sub-standard dwellings and service infrastructure deficits that the democratically elected administrations of the past 50 years have had

to deal with. There have undoubtedly been some achievements in the demolition and replacement of many of the poorest quality estates, the rehabilitation of others, and the introduction of new green zones and service infrastructure. Ada Colau, mayor of Barcelona between 2015 and 2023, recently claimed "we are leaders in social spending and public housing. We have increased green spaces and bike lanes [and] improved public transport…" (Gilmartin, 2023, para. 2). The MUHBA (2022), however, recently pointed to "progress in the democratic period that was nevertheless more effective in transforming public space than in housing issues" (p. 1). This criticism is evidenced in many of the large public housing estates, where the accommodation remains much the same, but green spaces have been added between and around the apartment blocks (**Figures 32** and **36**).

Figure 36. The La Paz estate in 2015. Compare with **Figure 20**—green spaces, including the Rambla Prim, have been added around the tower blocks to improve the urban environment.

Source: Google Earth.

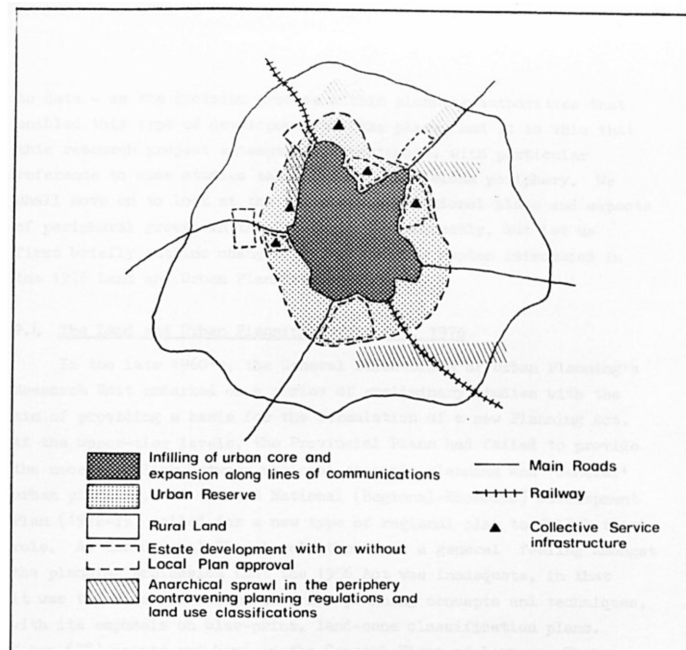

Figure 37. de Teran's Model of Urban Growth in Spain 1956-78.

Based on: de Teran (1978).

From an urban planning perspective, the creation of the Ministry of Housing in 1957 and the preoccupation of Franco's governments with housing policies and programmes contributed significantly to the rupture of the tiered hierarchy of plans and planning authorities which were central to the functioning of the planning system laid down in the 1956 Land and Urban Planning Act. In the immediate post-Franco era, de Teran (1978) highlighted the contrast between the intended model of urban growth embodied in the 1956 Act (**Figure 4**), and what had transpired in reality (**Figure 37**), with housing and industrial estates (with or without Local Plan approval) and haphazard shanty development spreading into land classified as "urban reserve" and "rural land" in General Plans, with increased building densities resulting in congested and overcrowded city centres.

This analysis cuts a sharp contrast with the Barcelona model of urban renewal celebrated in the post-Olympic Games period (since 1992) which "ensured that culture was integrated as a vernacular expression into the physical landscape of a re-emerging city, actively linking the design of public space with a new democratic culture and social citizenship programmes" (Degen and Garcia, 2012, p. 12). Indeed, in 1999, the Royal Institute of British Architects awarded its Royal Gold Medal for Architecture to the city of Barcelona, for its "ambitious yet pragmatic urban strategy", which has "transformed the city's public realm, immensely expanded its amenities and regenerated its economy, providing pride in its inhabitants and delight in its visitors" (Rogers, 2019, para. 71). Blanco (2009), however, also points out that the model has "received strong criticism from certain segments of the city's academic elite and several local social movements", which suggests that "territorially speaking, the strategies of urban regeneration have also been very varied", and that "the networks of urban actors involved in processes of urban change have been significantly diverse" (p. 355). This has resulted in an urban landscape that exhibits a marked contrast between the celebrated city centre and Cerdá's ensanche, and the poorer neighbourhoods of the city periphery, where the provision of green spaces has been enhanced but the adjoining housing accommodation remains deficient in many regards.

An important element in this debate is the issue of home ownership. The majority of the dwellings in the publicly financed and constructed housing estates of the Franco era were sold on in a policy aimed at expanding home ownership, but this has been at the cost of the publicly owned rentable housing stock. As Alberdi (2014, para. 1) noted, in the new millennium, "housing policy in Spain fundamentally emphasises home ownership". Public funds were used to subsidise hundreds of thousands of affordable home ownership units, only for them to be resold on the private market when their protected status expired after twenty to thirty years. In Barcelona, there were only 7,500 council flats remaining in 2015, which gave rise to the council's "Right to Housing Plan" aimed at doubling Barcelona's rentable publicly owned housing stock by 2025 (Gilmartin, 2023). In 2023, Barcelona Council (Ajuntament de Barcelona. Area for Urban Planning, Ecological Transition, Urban Services and Housing, n.d.) reported that "in total, the public housing stock managed by the municipality exceeds 11,500 units in 2023... this expansion is achieved through the combination of three mechanisms: construction, purchase, and acquisition, and a municipal contribution of around 1 billion euros in expenses and investments" (paras. 2–4).

This study clearly has its limitations. It examines the origins and implementation of housing policy in Barcelona through an analysis of secondary sources and with photographs taken by the author in the 1970s and subsequent Google Earth images. It is not fully comprehensive in that not all public housing estates in the Barcelona periphery were visited or studied, nor were any interviews with individuals involved in housing developments recorded or analysed. Nevertheless, it contributes to the extant literature by examining the role of the key entities involved in public housing development in that era, and in assessing the role of urban planning mechanisms in the development process. It also provides a historical perspective on how these housing estates have evolved over the past 70 years. Looking back over this period, one can discern several key events that have shaped public housing development in the Barcelona periphery. The 1957 Housing Act and accompanying Emergency Social Law provided the State subsidies and necessary powers for public authorities (and private sector developers) to plan and implement the new larger scale housing estates. The majority of these developments used the Local Plan mechanism and other loopholes to bypass many elements of the formal urban planning process, whilst the architectural and construction qualities were generally poor. These housing estates, which were developed mainly on the northern and eastern fringes of Cerdá's ensanche and in the peripheral municipalities, became one of the fundamental drivers of Barcelona's development, supporting the demographic growth of the city and the eradication of shantyism.

In the mid-1970s, the arrival of democracy and the surge in resident association protest movements led the public authorities to invest in replacement and renewal projects, and service infrastructure improvements, that started to address some of the legacy problems inherited in the estate developments of the previous two decades. By the time of the Olympic Games in 1992, all shantytown dwellers had been re-housed in public sector estates (or returned to their place of origin), and the era of large public sector estate development was over. The post-1992 era took on a new dimension with the apparent emergence of the "Barcelona model" of urban management, based on close ties between the public administration and the private sector in pursuing higher quality developments with adequate provision of green spaces and community services. Since 2015, however, there has been widespread recognition of a new housing crisis, emanating from the delayed sell-off of many of the public sector estate dwellings and the need to grow the public sector provision of houses for rent. As Pareja-Eastaway and Varo (2002) noted just after the turn of the century, "taking into account that public housing, built by public developers, is almost negligible and that government housing policy programmes basically stimulate ownership, the 'social housing' concept lacks an adequate definition in Spanish housing policy" (para. 1). This apparent contradiction is now at the forefront of the debate around public sector housing (Larsen, 2020)—we have moved from a focus on the lack of adequate housing, to anger and protest regarding infrastructure and quality deficiencies, to replacement and remodelling initiatives, and now to the politics and policies for addressing ownership inequality.

In some regards, this brings us full circle, back to Ildefonso Cerdá. As Roberts (2019) has pointed out, Cerdá "wanted to ensure that each citizen had, on a per capita basis, enough water, clean air, sunlight, ventilation, and space", and more specifically,

"his plan embodied what is—then and today—a striking egalitarianism" (paras. 19–20). The public housing estates which were planned, developed, demolished, remodelled and refurbished by the local and central authorities were outside the scope, and beyond the boundaries, of Cerdá's plan. But the principles of his egalitarian urban science are arguably more relevant today than they were in the middle of the 19th century, when Cerdá drew up his utopian plan for Barcelona, still regarded as a landmark in urban planning history.

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