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Between city and home: Spaces of transition in London Postwar Housing

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Abstract

In the period between the idealistic vision of the 'Reshaping society' and Thatcherism, in the so-called 'Swinging London', the second wave of modernism is facing the demands and the quantities of bombed cities. The architects of that season, moved by political ideals and interpreting the cultural ferment, have been responsible for shaping the city on the collective dreams and aspirations of the society and for forging the identity of London as unique experience in the international panorama. This paper focuses on the spatial relations between city and home, how they raised in that specific historical context, in which form they realized, and what are the architectural implications for current design culture. The methodology, based both on the literature review and on the graphic comparison of six case-studies, is articulated in four steps. First, the six case-studies are selected according to specific criteria. Second, the sociohistorical background is reported. Third, the cases are shortly introduced using text descriptions and graphic tools. Fourth, the cases are compared. This process leads to the definition of four transversal architectural items: the density, the settlement pattern, the basement, and the threshold, intended as elements able to raise connections between past and contemporary design culture.

1. Introduction

The result of Postwar London election sees an unexpected victory for Attle's Labor Party over Tories led by Winston Churchill. By performing a dominant role after World War II, the Labor Party encourages relevant renovations in the administrative and legal framework, which become the

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fertile ground upon which social policies can grow and reshape many aspects of urban living (Mikaelyan, 2017) The idea of the Welfare State is promoted by authorities through both the realization of important public facilities and Housing Estates. Indeed, London experiences a steady increase in the population, as the adopted term *"Baby boom"* suggests (Bonvalet, Clément and Ogg, 2015). Despite the alternation of governments, the role of the public administration remains essential in the process of transformation until the overcoming of Margaret Thatcher, when various public institutions began to be partially privatised (Lowe, 2004). The Abercrombie *Greater London Plan* of 1944 enlarges the power of the municipality, which is involved in the promulgation of a series of *Housing and Town Act* with the purpose of guiding the transformation of the city to face problems rising from slum conditions housing and bombed areas. For instance, the Housing Act of 1949 removes the obligation on local authorities to provide housing only for the working classes, marking a turning point in the development of mixed typologies. Many scholars focused on the history of the welfare state in Britain (Gladstone, 1999; Fraser, 2002; Harris, 2004). MacMillan, who was Housing Minister in the first 1950s, declared the ambitious will to build 300,000 houses per year. The spirit of that period was a rush against time to provide homes for people and comes out clearly in a booklet published by the Minister of Housing and Local Government, where Macmillan declared, "the people need more homes. They need them quickly. This is the most urgent of all social services. For the home is the basis of the family, just as the family is the basis of the nation. We have to try to meet their needs at a time of great economic difficulty. For we have to expand in a period of general restriction. This surely means that we must try to build the greatest possible number of houses out of the available labor and materials. At the same time, since we are not dealing with ephemeral or temporary projects, we must preserve standards. For we have to think of the future as well as of the present. Our object in this booklet is to suggest ways in which we can do both things - that is, build good houses and more houses. If we can together help to build the People's House in the quantities that People need, we shall have done something to be proud of. We shall deserve, and receive, the gratitude of thousands of our fellow-countrymen, young and old. It is in this spirit that I ask you to study this handbook. It is a guide, not an instruction. I hope it may be an inspiration" (Pepper, 1977). In that period, England and London experienced the second wave of modernism, characterized by the need to supply housing for an increasing number of people. On the one hand, this scenario leads to the realization of housing models based on the serial repetition of elements, such as slabs and towers that start reshaping the city's landscape, due to the introduction of bonuses for high-rise buildings. On the other hand, even if the Garden City imagined by Ebenezer Howard[1] is far to be realized inside the city boundaries, the New Town Act of 1946, following the principles stated by Abercrombie's Plan, states the guidelines for the construction of new

settlements in the countryside around the main cities. As addressed by Rodney, "the State subsidized housing policy developed as a brave utopian socialist experiment during the interwar period in Britain, reaching its zenith in the mid-1970s, at which time the state supplied almost a third of the nation's housing. The postwar London, between the rebuilding demands and the economic boom, experienced unparalleled levels of new construction of schools, hospitals, public housing, transport infrastructure and new towns. (…) More than any other, this period defined and created the landscape of modern Britain. (…) Public housing projects became an area of experimentation in the realization of modernist ideals of high-density private accommodation and in the use of new building technologies and materials" (Rodney, 2009). A turning point is represented by the establishment of the Greater London Council (GLC)[2] in substitution of the LCC, which, together with the different boroughs, was in charge of coordinating the process of reconstruction according to the concept of welfare state. The welfare state can be synthetized with five key points belonging to different areas of society: health care, education, social security (and employment), personal social services, and housing (Jones and Lowe, 2002). This new attitude can enjoy the new formal alphabet from technology's progress. Architecture experienced new syntactic variations on the expressive topics of constructivism, modernism, and its overcoming. This paper investigates the spatial relations between home and city in London's postwar housing experience, how they were raised in that specific historical context, in which form they were realized, and the architectural implications for current design culture.

2. Methodology

This research moves from the assumption that a qualitative approach to space, based on comparisons, is a fruitful tool for a critical understanding of the highlighted architectural season and testing the design issues of the past with the challenges of contemporary living. The adopted methodology is articulated in four steps. First, six case studies were selected based on the following criteria: a) geographic location (London downtown area), b) realization time span [estates whose realization take place between 1965 (establishment of the GLC Greater London Council) and 1980 (the implementation of the right-to buy, introduced in the Housing Act of the same year marks the beginning of a new economic cycle in the realm of building construction) are considered], c) search for heterogeneity in terms of morphology and typology, and d) innovative character of adopted solutions. These criteria led authors to choose the following estates: Lillington Gardens by John Darbourne and Geoffrey Darke (Pimlico, 1961-1972), Brunswick Centre by Patrick Hodgkinson (Saint Pancras,

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[1]Howard (1945).

[2]Greater London Council. It was the top-tier local government administrative body for Greater London from 1965 to 1986. It replaced the earlier London County Council (LCC), which covered a much smaller area. The GLC was dissolved in 1986 by the Local Government Act 1985, and its powers were devolved to the London boroughs and other entities.

1965–1972), Trellick Tower by Ernö Goldfinger (North Kensington, 1966–1972), Alexandra Road by Neave Brown (Camden, 1967–1980), Maiden Lane by Gordon Benson and Alan Forsyth (Camden, 1976–1982), and Odhams Walk by Donald Ball (Covent Garden, 1979–1982) (Figures 1 and 2).
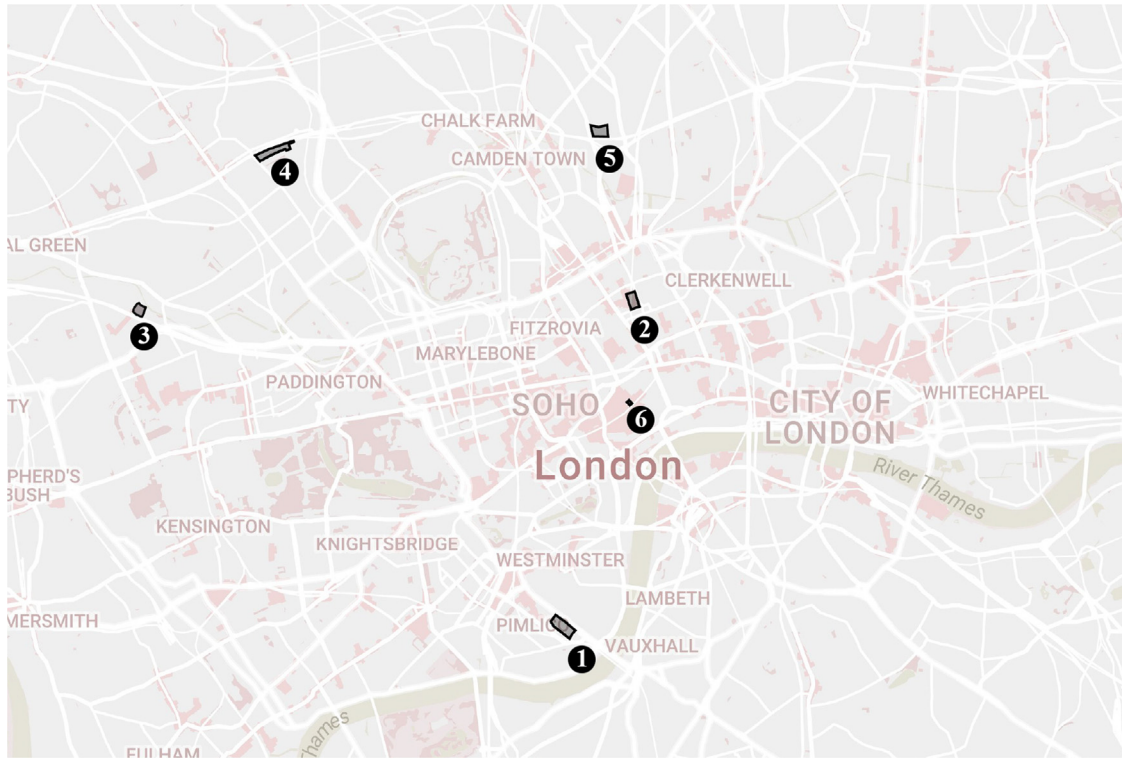

Figure 1 Location of selected case-studies, enumerated from 1 to 6. 1. Lillington Gardens; 2. Brunswick Centre; 3. Trellick Tower; 4. Alexandra Road; 5. Maiden Lane; 6. Odhams Walk.

Figure 2 From top left: Lillington Gardens, Brunswick Centre, Trellick Tower, Alexandra Road, Maiden Lane, and Odhams Walk.

The authors are aware that the list is controversial. Some exclusions, such as the Barbican Estate and Robin Hood Gardens, should be reconducted to consider a reasonable number of cases. However, the authors believe that these case studies represent a significative sample of London's postwar design culture. Second, the sociohistorical background is reported in its main features, which refer to the influence of Smithson on the architectural thinking of the time. Third, a short introduction followed by the analytical reading of the case studies is performed using graphic tools. This paper focuses on the space of relation between home and city, and the authors chose to report the drawings representing the ground floor plans and vertical sections as the most effective graphic means to highlight spatial characters. Fourth, the comparison between all cases discusses permeances, invariant of the space and discontinuities to raise the design topics and related variations. This process led to the definition of four transversal architectural themes: density, settlement pattern, basement, and threshold. These themes are intended as elements to raise connections between past and contemporary design culture. Given that architecture is not only a technical discipline, the use of graphics and bibliographic tools is essential for the definition of a research method that seeks evidence in drawings for a dissertation.

3. From function to relation: The influence of Smithson

The four primary functions, namely, dwelling, work, recreation, and transport, defined in the Athens Charter (1933) represent the premises for modern town planning on the basis of the concept of zoning. Thus, Smithson's research finds its roots in the necessity of interpreting human relations compared with urban structures. "To build has a special meaning in that the architect's responsibility towards the individual or groups he builds for, and towards the cohesion and convenience of the collective structure to which they belong, is taken as being an absolute responsibility. No abstract Master Plan stands between him and what he has to do, only the 'human facts' and the logistics of the situation" (Smithson, 1968).[3] Rejecting this separation and

proposing an approach based more on human relations rather than the functional program, Smithson transfers the artistic feeling of his time into architecture. From this perspective, the Institute of Contemporary Arts, under the guidance of Herbert Read, is the cultural environment upon which figures such as Eduardo Paolozzi, Reyner Banham, Richard Hamilton, and Nigel Henderson, all belonging to the Independent Group and following different paths, challenge the boundaries of visual arts. In particular, Nigel Henderson's photographs are shown in some important exhibitions[4] to demonstrate the need of shifting the interest from the function to the relation, finding in the Smithsonian thinking the perfect counterpart. The idea of *"Urban Reindentification"* arises and suggests a renovated and ambiguous relationship between the public and private realm, between intimate and collective, and between domestic and urban. At that time, London's urban fabric could be deduced from the spreading of the terraced-house typology, a peculiar evolution of the row-house type that became the matrix of the settlement pattern, which is still recognizable today. The continuity with the built-up fabric is lost when, during the postwar season, the introduction of new typologies targeted to satisfy the demands of the bombed city radically changes the urban landscape. From the perspective of the architectural discipline, the postwar season exacerbates intense debate among the most influential figures of that time, such as the controversial realization of the Barbican Estate by Peter Chamberlin, Geoffry Powell, and Christof Bon (1965-1976). Although the separation of fluxes and the transition of spaces defined by high-level design makes this complex an oasis of peace within the urban chaos, Reyner Banham, who was closer to Smithson's proposal, strongly criticizes this project for its "complacent and minimal transgressive modern architecture" and writes that, "the Barbican, to put in bluntly, is Britain's largest voluntary ghetto - but not for the reason of high rents alone. It matches in its style and planning, architecture and amenities, what is now the prime educated middle-class dream of a good life in the city" (Banham, 1997; Fernandez and Moraz, 2013). Within this framework, London becomes an architectural experimental lab through the critical assimilation of architectural models due to the rich theoretical debate begun by Smithson and Team X, as well as to the administrative reorganization that places young architects working inside the boroughs to test new morphological and typological solutions, as the case of Camden clearly shows. As stated by Glendinning and Muthesius, "The initial propagation of avant-garde ideas by London-based or continental

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[3]«This new beginning, and the long build-up that followed, has been concerned with inducing, as it were, into the bloodstream of the architect an understanding and feeling for the patterns, the aspirations, the artefacts, the tools, the modes of transportation, and communications of present-day society, so that he can, as a natural thing, build toward that society's realization of itself. In this sense, Team 10 is Utopian about the present. Thus, their aim is not to theorize but to build, for only through construction can a Utopia of the present be realized. For them, "to build" has a special meaning in that the architect's responsibility toward the individual or groups he builds for, and toward the cohesion and convenience of the collective structure to which they belong, is taken as being an absolute responsibility. No abstract Master Plan stands between him and what he has to do, only the "human facts" and the logistics of the situation. To accept such responsibility where none is trying to direct others to perform acts that his control techniques cannot encompass requires the invention of a working-together-technique where each pays attention to the other and to the whole insofar as he is able. Team 10 is of the opinion that only in such a way may meaningful groupings of buildings come into being, where each

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(footnote continued)

building is a live thing and a natural extension of the others. Together, they will make places where a man can realize what he wishes to be».

  Alison Smithson, *Team 10 Primer*, Studio Vista, London, 1968, p. 3.

  [4]Such us the *This is Tomorrow* exhibition of 1956, held in London Whitechapel Gallery, with the famous collage '*Just what is it that makes today's homes so different, so appealing?*' by Richard Hamilton. The exhibition had a deep impact on society and the concept of aesthetic, deviating from the one of beauty, giving rise to pop art. Objects started to be conceived with an ambiguous nature, and things taken from their context acquired new meanings.

critics and propagandists was followed by the working out of detailed prescriptions and type plans by the architectural and planning teams and research groups of design-minded public authorities, such as the London County Council (LCC), Cumbernauld New Town Development Corporation, the Ministry of Housing and Local Government (England/Wales) or Sheffield and Coventry City Councils. Those patterns, propagated by government design manuals and the architectural press, were then routinely reproduced on a nationwide scale by the designers of other public authorities and 'package deal' private contractors" (Glendinning and Muthesius, 2000: 28). After a short phase of direct importation of modern models, basically subdivided between Lecorbusian and Scandinavian ones, which can be recognized in Alton East Estate, the design culture assumes a critical attitude by partly absorbing and re-elaborating other contemporary experiences and partly breaking away from ongoing tendencies, especially in relation to the high-rise issue.[5] The focus shifts on the relational potentialities given by minute tissues, which now can be tested on the new scale arising from war devastation. Urban prototypes are tested and combined with traditional and innovative typologies, leading to the experimentation of new design styles that wave between the vernacular and monumental. Tom Cordell's movie *Utopia London* (2015) press release states, "These young idealists were once united around a vision of using science and art to create a city of equal citizens. Their architecture fused William Morris with urban high-rise; ancient parkland with concrete".[6] This applied research, made by fertile and death rails, produced some of the most interesting housing experiences in the current design culture to provide a solution to a fast transforming society. In this sense, the selected case studies express design issues that the discipline has absorbed and reinterpreted. Their utopic energy, sometimes without considering the actual feasibility, makes them remarkable arguments about contemporary practice, in a context in which reflecting more on the relation between objects than the objects themselves is crucial.

4.   Six case studies

This part reports the *evidence* of this research. The six case studies are introduced throughout a short description and four graphic elaborations: the ground level plan, section, and two significative pictures. The re-drawing of the

housing estates, together with the literature review, ensures a deep and scrupulous understanding of their architecture.

4.1.   Lillington Gardens Estate

Architects: John Darbourne and Geoffrey Darke
    Location: Pimlico, London
    Years: 1961-1972
    Darbourne (1935-1991) studied architecture in London. After an internship, he moved to the USA, where he obtained a Master's degree in Landscape Architecture (Harvard). Darke (1929-2011) studied architecture in Birmingham. The two founded their office in London after being awarded first prize for the Lillington Gardens Estate competition. The following housing projects ensured them international success. Regarding the Lillington Gardens, the complex of buildings follows the roads' network and divides the inner space with further linear volumes, shaping a sequence of large courtyards, where the different functions are located and several pedestrian areas exist. The buildings' height ranges from three to nine storeys, thereby revealing an accentuated articulation of the volumetry. The continuity of facades is interrupted in some threshold points reconnecting the courtyard with the city public space. The character of elevations defines a peculiar relationship with the terraced house in front of them, given by the movement of masses. This estate, designed to host 2000 people in 780 units, is one of the biggest in terms of dimension and population (Figures 3-5).

4.2.   Brunswick Centre

Architect: Patrick Hodgkinson
    Location: Saint Pancras, London
    Years: 1965-1972
    Patrick Hodgkinson (1930-2016) studied architecture at the AA in London, together with Neave Brown and Kenneth Frampton. After graduating, he trained in different offices, including Alvar Aalto's office and then started collaborating with Leslie Martin. After the realization of the Brunswick Centre, he set his own practice and started a teaching career. The Brunswick Centre is a concrete megastructure that breaks the context's rules, in this case, the continuity of the street and the block's type construction. Two parallel slabs are proposed to define a multi-layered permeable system at the ground floor, which is characterized by a wide heterogeneity of functions. The section of the two buildings is carefully articulated to solve the different heights of the outside road and inner plaza and to ensure a sufficient degree of privacy for residents. Despite its initial difficulties, the Brunswick Centre benefits from a good reputation because of its strategic position (Figures 6-8).

4.3.   Trellick Tower

Architect: Ernö Goldfinger
    Location: North Kensington, London
    Years: 1966-1972
    Although Goldfinger (1902-1987) studied at the Ecole of Beaux Arts in Paris, his design approach is the product of the

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[5]Ronan Point disaster (1968) had a strong influence on high-rise public opinion. A gas leak caused an explosion and the collapse of one Ronan Point's corner, a 22-storey tower built in the 1960s using prefabrication techniques. The event was amplified by mass media and the cultural environment through the production of some movies (see the horror movie *The towering Inferno* (1974, USA), directed by Irwin Allen and John Guillermin, and the dystopian movie *Fahrenheit 451*, (1966, UK), directed by Ray Bradbury, set in the new Estate of Alton West), and novels (see the dystopian novel *High-rise* (1975), by James Ballard, recently transposed into a movie by Ben Wheatley (2015).

[6]Cfr.http://www.utopialondon.com/import/utopia_london/images/press/Utopia_London_Press_Release.pdf, last access 2017/12/12.
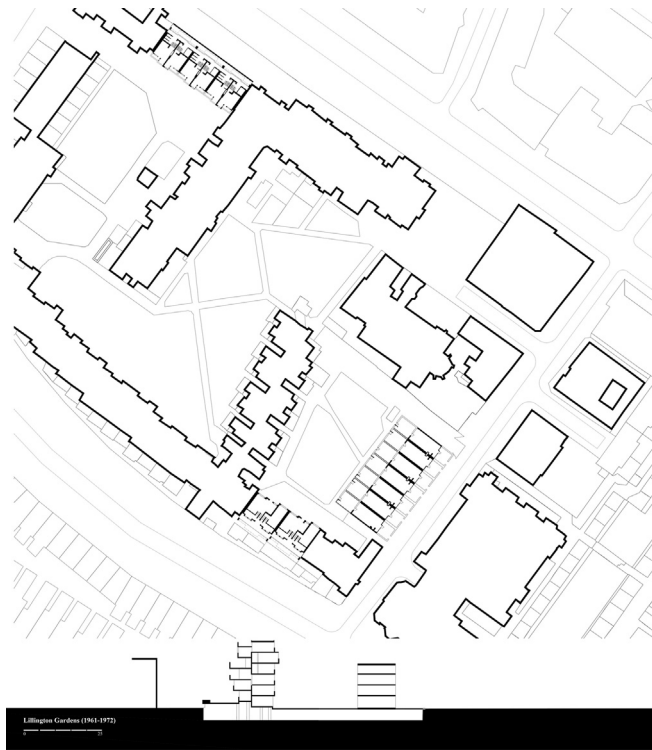
Figure 3 Lillington Gardens by John Darbourne & Geoffrey Darke (Pimlico, 1961-1972). Ground floor plan and section. Source: drawing by Gerardo Semprebon, in cooperation with D. Fusari, M. Ignaccolo, M. Mikaelyan.

Figure 4 Lillington Gardens by John Darbourne & Geoffrey Darke (Pimlico, 1961-1972). Photo by Gerardo Semprebon (2017).

cooperation with August Perret and association with Mies van der Rohe and Le Corbusier. Attracted by the cultural environment between the two wars, he moved to London in the 30s, where he eventually acquired influence in realizing many public and housing complexes. The Trellick Tower reproduces the clear ideological will of a collecting housing able to overcome English traditional models to encourage the values of sharing and living together. Its main character is the volumetric articulation corresponding to the

functional one. The main slab that hosts the apartments is detached from the service tower with elevators and boiler on top of it, turning this structure into the major element of the plastic composition. As described by Ernst May, "looking at Trellick Tower from the Westway coming into London, the building can be appreciated for its sculptural qualities, just as we might appreciate a sculpture by Max Ernst (…) Closer (…) the eye cannot take in the whole, and so the effect is different: it becomes not plastic but pictorial. The building

Figure 5 Lillington Gardens by John Darbourne & Geoffrey Darke (Pimlico, 1961-1972). Photo by Gerardo Semprebon (2017).

Maiden Lane (1978-1982)

Figure 6 Maiden Lane by Gordon Benson & Alan Forsyth (Camden, 1976-1982). Ground floor plan and section. Source: drawing by Gerardo Semprebon.

is experienced as an organized surface rather than as a three-dimensional mass" (Dunnett and Stamp, 1983). The main slab is characterized by the combinatory logic of the dwelling unit, which recomposes the façade by repeating itself (Figures 9-11).

4.4.   Alexandra Road Estate

Architect: Neave Brown

Location: Camden, London
Years: 1967–1980
Neave Brown (1929) studied architecture at the AA in the 1950s. After graduating, he joined the Camden Town Department of Architecture led by Sidney Cook, where he practiced innovative design schemes in housing estates. He had a brilliant academic career until he decided to practice fine arts. In Alexandra Road, the buildings' disposition defines a pedestrian street and a linear park,

Figure 7 Maiden Lane by Gordon Benson & Alan Forsyth (Camden, 1976-1982). Photo by Daniel Rey (2017).

Figure 8 Maiden Lane by Gordon Benson & Alan Forsyth (Camden, 1976-1982). Photo by Daniel Rey (2017).

which both connect elements working at the urban scale. The project performs as a reinterpretation of the Victorian style row house system, reproducing the same distribution and balance between built up and open spaces. The shape of the next rail tracks influences the two linear buildings that define Alexandra Road, which is a suspended pedestrian street integrated in the overall circulation system. Mark Swenarton reports, "Brown demanded that every dwelling should open directly, without any intermediate or transitional space, into the street network of the city, and at Alexandra Road provided a battery of external stairs expanded versions of the half-flight of stairs leading to the front door of a Victorian terraced house - so that the front door of every dwelling would connect directly to the street" (Avermaete et al., 2015) (Figures 12-14).

4.5. Maiden Lane Estate

Architects: Gordon Benson and Alan Forsyth
  Location: Camden, London
  Years: 1976–1982
  Benson (1944) received his first architectural education in Glasgow, and Forsyth (1944) was educated in Newcastle. They both completed their training at the AA in London. After graduating, they started working in the housing group of Camden Council's Department of Architecture under the leadership of Sidney Cook. They cooperated with Neave Brown and developed remarkable housing schemes, including the Maiden Lane. They then became known for their appreciated projects for public buildings. The Maiden Lane is defined by low-rise volumes interpreting the typical row-house dense tissue, which exploits the sloping topography
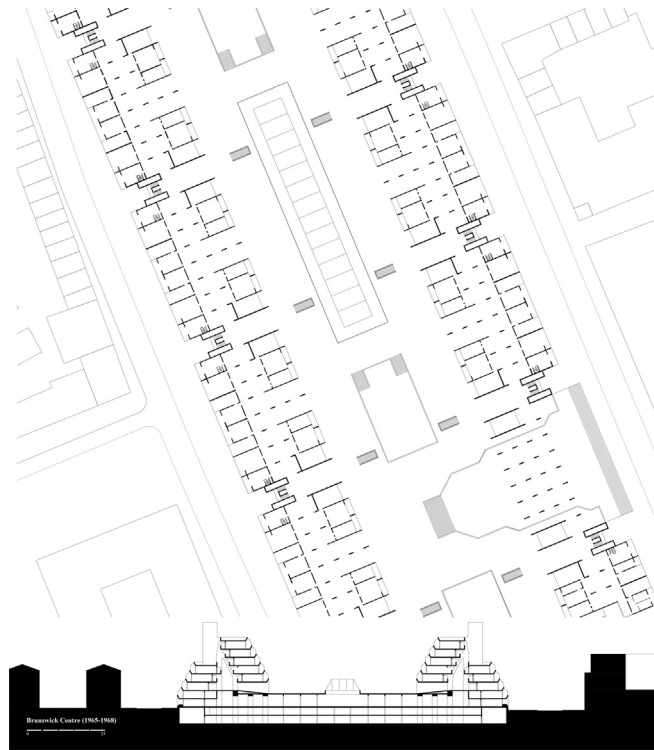
Figure 9   Brunswick Centre by Patrick Hodgkinson (Saint Pancras, 1965-1972). Ground floor plan and section. Source: drawing by Gerardo Semprebon, in cooperation with D. Fusari, M. Ignaccolo, M. Mikaelyan.

Figure 10   Brunswick Centre by Patrick Hodgkinson (Saint Pancras, 1965-1972). Photo by Gerardo Semprebon (2017).

and protects from external factors via peripheral high slabs. Squares and gardens placed at different levels are conceived as hearts of the development and assume the role of ending points of the circulation system. Many scholars find Maiden Lane's antecedent in the Siedlung Halen by Atelier 5 (Figures 15-17).

4.6.   Odhams Walk Estate

Architect: Donald Ball

Location: Covent Garden, London
Years: 1979–1982
Donald Ball (1938–1992) trained in London, where he worked for Denys Lasdun and Partners until he joined the GLC Architects Department in the 1970s. His design for Odhams Walk was awarded with many prizes. He became the director of Alan Turner and Associates, where he supervised many public buildings and housing projects. The design for Odhams Walk revisits the topic of the block by proposing a porous mass, cladded with red bricks, that

Figure 11   Brunswick Centre by Patrick Hodgkinson (Saint Pancras, 1965-1972). Photo by Gerardo Semprebon (2017).
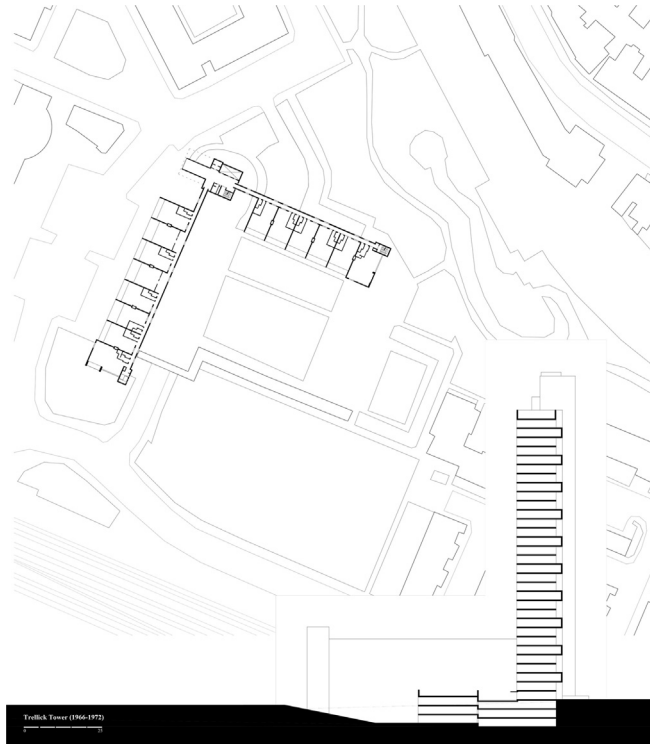

Figure 12   Trellick Tower by Ernö Goldfinger (North Kensington, 1966-1972). Ground floor plan and section. Source: drawing by Gerardo Semprebon.

builds relations with the near context re-articulating the volume with terraces, walkways, and cantilevered parts (Figures 18-20).

5.   Thematic comparison

The comparison between the case studies has brought to light four themes related to the transition of space between the private and public realm (or the home and the city),

which become the base for discussing the architectural implications of a significant part of London's postwar season design culture. The four themes are density, settlement pattern, basement, and threshold.

5.1.   Density

Considering the historical context highlighted in the first section of the paper, one can easily determine the relevance of the parameter of density as an essential attribute

Figure 13 Trellick Tower by Ernö Goldfinger (North Kensington, 1966-1972). Photo by Gerardo Semprebon (2017).

Figure 14 Trellick Tower by Ernö Goldfinger (North Kensington, 1966-1972). Photo by Gerardo Semprebon (2017).

featuring lifestyle in postwar society. The data have been collected during the literature review and come from different written sources. Density is a controversial issue when analyzing urban projects for different reasons, starting with the multiple ways to measure it. On the basis of the ST (site area), SLP (development area), dwelling units (n), and abitants (n), three types of densities have been calculated: the floor area ratio SLP/ST (FAR), dwelling unit ST/UN (DU), and population density ST/AB (POP; Table 1. Density parameters.). Consideration of the number of dwelling units or the local population can produce disparate results in terms of concentration. Hence, analyzing density alone is unnecessary, and a building's spatial features through their morphology and typology should be included. Authors address density as the intensity of a building on a specific site by mixing the quantities with the qualities emerging from the selected case studies. Looking at FAR, one can understand why the Odhams Walk ranks at the top, because it is an almost completely built block in the core area (Covent Garden), and the other complexes are spread on large plots and include wide open spaces. For the same reasons, Odhams Walk offers the lowest footage per unit and per person. Maiden Lane performs as the opposite estate, featuring extensive land use with the lowest FAR and the highest DU and POP, even if the project is not as large as Alexandra Road. Although Odhams Walk and Maiden Lane show opposite schemes and typologies, the buildings' heights are similar and range from two to four and from two

to six, respectively. This feature is a clear symptom of the typical British propensity to high density with low rise. This peculiar attitude can be found in all the three estates located in Camden Borough and gives credit to the thesis according to which, despite the divergent adopted solutions, the leadership of Sidney Cook in the Department of Architecture was orienting the design experimentation toward specific research lines. The reasons why the densities of the Trellick Tower are comparable with those of Odhams Walk can be found by considering that the tower is part of a broad estate that mitigates the concentration of units and people spreading them on a wide area. Considering morphology and typology, the Lillington Gardens show the most balanced composition in terms of numbers. The estate by Darbourne and Darke meets a great consensus by both the residents and cultural environment.

5.2. Settlement pattern

Volume disposition and hosted activities define the relation's level that can be expressed by the distance between objects and the correlated capability of determining comfortable urban shapes. Dimensions and comfort have been discussed by many scholars. In the 1960s, anthropologist Edward T. Hall defined the concept of "proxemics" by finding out four distances that characterize four communication levels: intimate, personal, social, and public. According to Hall, these categories are not equal for every

Figure 15   Alexandra Road by Neave Brown (Camden, 1967-1980). Ground floor plan and section. Source: drawing by Gerardo Semprebon, in cooperation with D. Fusari, M. Ignaccolo, M. Mikaelyan.

Figure 16   Alexandra Road by Neave Brown (Camden, 1967-1980). Photo by Gerardo Semprebon (2017).

culture, which actually exhibits different behaviors called "territoriality." For instance, although the Mediterranean context appreciates a crowded and intimate situation, Japanese sensitivity suggests close consideration for individualism (Hall, 1990). Jan Gehl achieves similar consideration within the framework of his studies (Gehl, 2006), focusing on the importance of the visual field. He explains that squares with distances below 100 m work well when users perceive visual contact within clear spatial limits. Hence, buildings as singular objects and urban devices should be considered, and this concept goes beyond the scale of architecture. From this perspective, inclusion is one of the most recurrent principles among the selected case studies. Lillington Gardens, for instance, reinterprets the topic of the enclosure, thereby confirming the shape of the block. Buildings arranged at the perimeter assume the role of an inhabited border and define a sequence of inner collective spaces, such as

Figure 17 Alexandra Road by Neave Brown (Camden, 1967-1980). Photo by Gerardo Semprebon (2017).
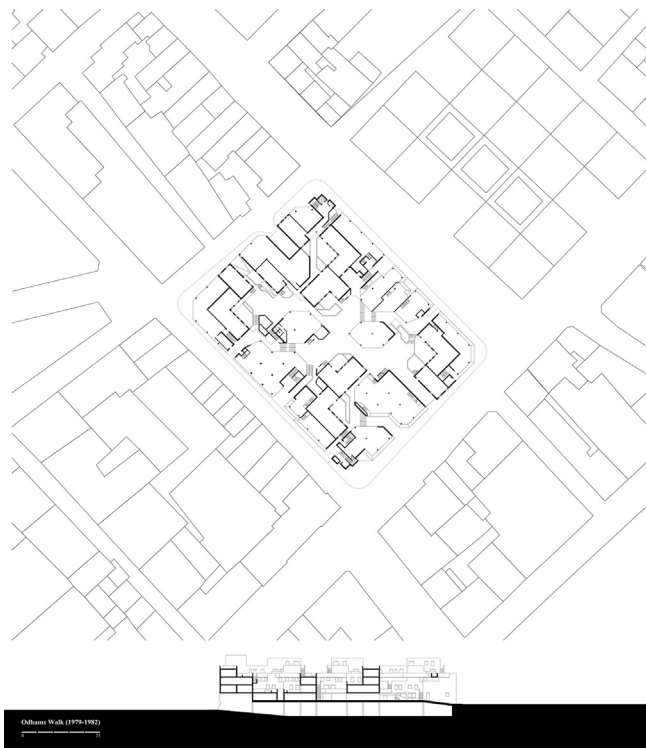

Odhams Walk (1979-1982)

Figure 18 Odhams Walk by Donald Ball (Covent Garden, 1979-1982). Source: drawing by Gerardo Semprebon, in cooperation with D. Fusari, M. Ignaccolo, M. Mikaelyan.

playground and gardens. These courtyards work as large sky-opened rooms and host public facilities such as the church and other commercial activities. Maiden Lane Estate, which is located within a former rail yard, is conceived to recreate a sense of community through the architectural definition of some borders and connecting axes. The grid is the principle according to which units are combined, drawing a repetition of compact islands and tiny passages. Perimetral buildings, performing rigid and tall masses that define the borders of the complex, include inner collective spaces for the community and protect them from noise and chaos. The space of transition between the home and city is protected by the disposition of the buildings, which define sequences of open spaces between the domestic and public. Odhams Walk is a built-up block in continuity with the urban

Figure 19 Odhams Walk by Donald Ball (Covent Garden, 1979-1982). Photo by Daniel Rey (2017).

Figure 20 Odhams Walk by Donald Ball (Covent Garden, 1979-1982). Photo by Daniel Rey (2017).

fabric, whereas the Trellick Tower represents a drastic discontinuity with the environment, following Goldfinger's will to provide green public facilities for everyone and not only for a family or community. Although the Alexandra Road Estate and Brunswick Centre both use the idea of delimitating a special space with tall buildings at two sides (i.e., the pedestrian street and elevated podium), an essential difference exists in the nature of these two elements. One shapes an almost intimate space of circulation permeated by the idea of reinterpreting the terraced house, and the other determines a public multi-functional slab open to all the fluxes of downtown populations. The consequences of this opposite statute can be appreciated in the definition of the two wings; one case establishes a continuity with the open space, and the other aims to separate from it (Figure 21).

5.3. Basement

The basement is the architectural element that defines how the building relates to the ground. Its articulation influences the transition from a condition to another, such as a semiprivate terrace and a public lane, as well as the monumental or domestic character of the artifact. The most significant case study is the Brunswick Centre, defined by Clare Melhuish as a "concrete megastructure" (Melhuish, 2005). The block is turned into a megastructure that condenses the different functions of the city within its strong and heavy masses, resonating some experiences by Antonio Santelia. As for Alexandra Road, its main trait is the oblique development of the section, which also defines the relationship between the street and large raised terrace. Public activities stratify within the ground and basement,

Table 1   Density parameters.

Estate	Year	Architect	Committent	Storeys	ST - Site Area (m^2)	SLP - Development Area (m^2)	Dwelling Units (n)	Abitants (n)	FAR - Floor Area Ratio SLP/ST (m^2/m^2)	DU - Dwelling Unit Density ST/UN (m^2/n)	POP - Population Density ST/AB (m^2/n)
Lillington Gardens	1960-1980	Darbourne & Darke	LCC (London County Coucil)	3-9	41,200	41,028	780	2000	1.0	52.8	20.6
Brunswick Centre	1962-1974	Patrick Hodgkinson	Camden Borough / private	5-8	32,500	36,540	560	1628	1.1	58.0	20.0
Trellick Tower	1966-1972	Ernö Goldfinger	GLC (Greater London Coucil)	31	12,351	16,015	219	767	1.3	56.4	16.1
Alexandra Road	1967-1980	Neave Brown	Camden Borough	3-7	53,200	53,550	520	1766	1.0	102.3	30.1
Maiden Lane	1976-1982	Benson & Forsyth	Camden Borough	2-4	29,000	21,879	225	672	0.8	128.9	43.2
Odhams Walk	1979-1982	Donald Ball	GLC (Greater London Coucil)	2-6	4752	7500	102	338	1.6	46.6	14.1

Figure 21 Figure-ground plan. From top left: Lillington Gardens, Brunswick Centre, Trellick Tower, Alexandra Road, Maiden Lane, and Odhams Walk. Ground floor plans. Source: drawing by Gerardo Semprebon, in cooperation with D. Fusari, M. Ignaccolo, M. Mikaelyan.
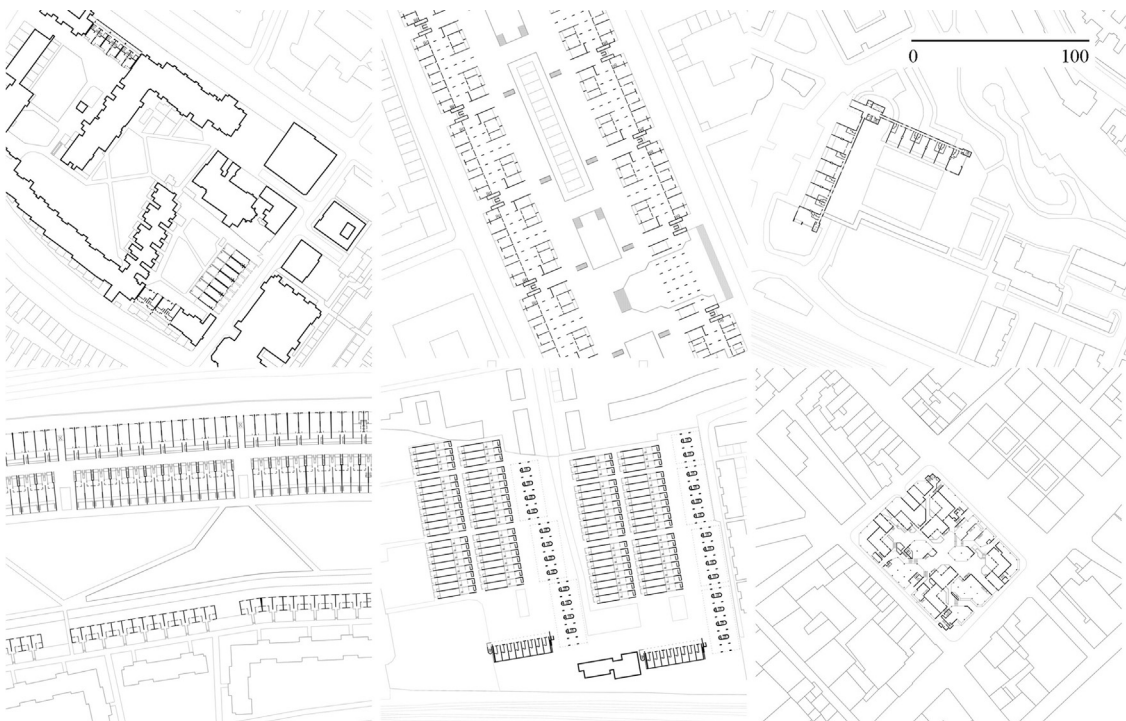

Figure 22 Ground level plan. From top left: Lillington Gardens, Brunswick Centre, Trellick Tower, Alexandra Road, Maiden Lane, and Odhams Walk. Ground floor plans. Source: drawing by Gerardo Semprebon, in cooperation with D. Fusari, M. Ignaccolo, M. Mikaelyan.

which becomes a sort of raised podium in relation to the street level. Houses concentrate at the longitudinal edges, defining two inhabit borders. The raising of the new public level sets up new visual relationships and places the Brunswick Centre in a privileged position. However, tenants experience a deep sense of alienation given by the exaggerated unit's concentration and lose their privacy. The problem is exacerbated by the weak social class of new tenants. By contrast, the Trellick Tower's grafting inside the ground generates a shifting in the ground level height. The foot of the skyscraper is treated as a *negative* space, dig, where the parking system, collective space, and public facilities can be found. The theme of inclusion is tackled without defining the architectural borders of the central space but through the articulation of the section. In the block of Odhams Walk, the basement is conceived as a weak element, whose porosity emphasizes the continuity between the semi-private realm of the inner yards' system and the public domain of the surrounding streets. Nevertheless, this porosity should not be addressed as an extension of the public ground inside the articulated block, because the space at the ground floor is tiny such that it protects the dwellers from the urban chaos rather than encourages public use. The Lillington Gardens and Maiden Lane show no peculiar features concerning the basement, considering that their ground level is basically treated as a sequence of open spaces defined by gardens and squares (Figure 22).

5.4. Threshold

The architecture attributes of entrances and circulation define the theme of the threshold. We can refer to the meaning from the word doorstep, where "... the transitory nature of the passage across an architectural element is formalized in the uncertain space laying between two places, between two conditions ... the doorstep is the element expressing the every day, the normality of an action regulating, in different ways but equal in the meaning, our lives ... the topic of housing becomes the one of habitat, conceived as the assemblage of practices and dwelling spaces that go beyond the sphere of the house, in order to stop within a more complex and vague field, the in-between one (a word coined by Van Eick)" (Salsa, 2015). The threshold is considered in a wide meaning as a sequence of spaces solving the transition from one condition to another. This scenario happens through the spatial articulation of different architectural fundamentals, such as gates, paths, pavements, entrances, covers, and walls. Distances between them are essential in the determination of the collective housing comfort level in the definitions of intimacy and security. The major problems occur where the circulation does not allow for adequate visual control, which discourages pausing in different zones. For instance, in the Trellick Tower, the long and narrow corridors combined with few escape ways are from the beginning stage of vandalism phenomena. Similar problems have been experienced in Maiden Lane and Brunswick Centre, whose construction was even interrupted because of new tenants' protests. Security, related to a threshold's space such as entrances and circulation in collective buildings, has been

one of the most problematic issues associated with collective housing. Given that the entrances are the stage where such phenomena occur, a distinction between separated and shared accesses may be suggested when discussing the six cases. The traditional English terraced house is perhaps the best example of the first group. Stephan Muthesius describes the terraced house as follows: "... Given the basic desire of each family to live apart, on a separate piece of ground, the densely built rows of houses seemed the most economical solution" (Muthesius, 1982), and he states that it is also the expression of a social ideology.[7] The terraced house system is the result of the combination of dwelling units side by side to preserve the façade's continuity and guarantee the separation of each entrance. As previously mentioned, the Alexandra Road Estate represents a clear reinterpretation of terraced house typology through the recomposition of its spaces both in plan and in section. The suspended street, above the vehicle level, interprets the domestic dimension of the estate and hosts entrances and other spaces of relation, such as terraces and walkways. The typical terraced house tissue is reinterpreted and blossoms in a capillary relationship between the city and home, maintaining the continuity of the urban system. The linear park becomes a public element of the surroundings due to its large dimensions. A comparable solution appears also in the low-rise units of Maiden Lane, where the resonation with the row house typology is explicit and exploits the slope to define gardens and terraces. Although Lillington Garden shows a standard circulation system with direct access at the ground floor and the distribution by stairs and superior levels, some cases (e.g., Trellick Tower and Odhams Walk) suggest that sharing accesses encourages a community's lifestyle. As for the high-rise building by Ernö Goldfinger, the thresholds consist of the public walkway around the estate and in the main entrances of the service tower and a double-height room with the elevators. The circulation is defined by a clear and hierarchical system of corridors and stairs connecting the service tower with the apartments. Meanwhile, Odhams Walk shows a highly complex spatial articulation between the dwelling units and the street. At first glance, the building by Donald Ball appears as a block of red bricks following the urban grid, because the wideness of the street prevents the observer from understanding the building in its whole. However, upon close examination, the view enlarges, so the movement of the masses becomes clear and reveals the complexity hiding

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[7] «... But the English row house of the eighteenth and nineteenth century does not just form a row of houses. It is in most cases something more than that: a row has an architectural unity which provides a heightened social image and which speaks of a special achievement on the part of those who planned and built it and those who bought or rented it. The final definition of the terrace is clearly related to practical elements, as well as to social status and to architectural elements. It was, in fact, their effective combination which let the terraced house type continue for so long. Indeed, when the two elements parted, when it was no longer fashionable to live in a terrace, and the villa and the semi-detached house took over as the most desirable types of residence, the terrace was relegated to the lower classes, and after 1920, it was largely phased out even there. Regularity was no longer the result just of style, but also economy». See Muthesius (1982). *The English Terraced House*. New Haven London: Yale University Press, p. 11.
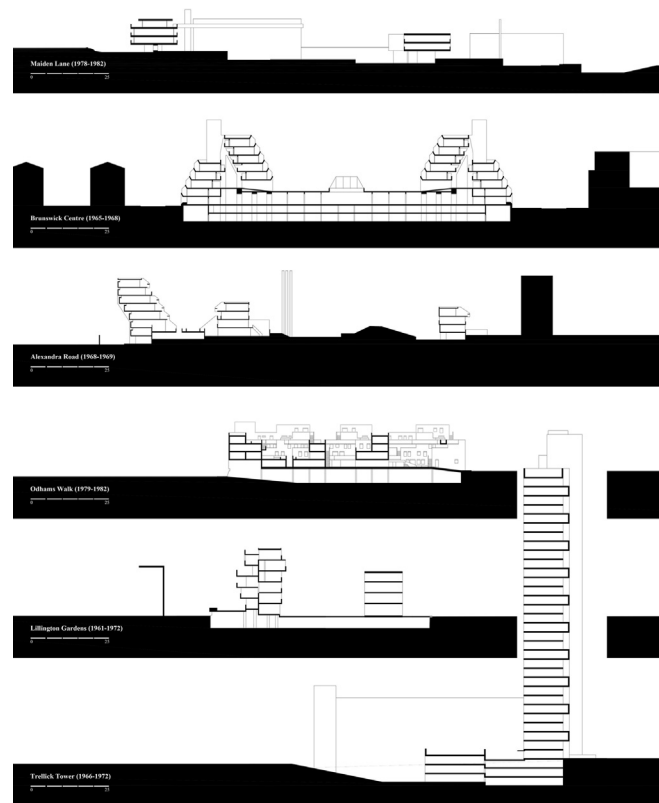
Figure 23 From top: Maiden Lane, Brunswick Centre, Alexandra Road, Odhams Walk, Lillington Gardens, and Trellick Tower. Source: drawing by Gerardo Semprebon, in cooperation with D. Fusari, M. Ignaccolo, M. Mikaelyan.

behind the facade. Once the threshold between the street and the inner yards is crossed, the spatiality completely changes. Even though the material is still the same, everything moves in the three axes. Open spaces melt together with small gardens and low basements; a large number of small staircases connects the ground floor environment with a sequence of small terraces equipped with benches and pausing corners, from which one can enjoy the ever-changing view of the estate. Corridors and even smaller stairs link the apartments to the circulation. This distribution system is imbued with the Lecorbusian idea of the promenade architectural. Thus, reaching one's flat becomes not only a functional action but also an aesthetic experience. The dwelling units share corridors and small terraces, as well as yards at the ground floor, thereby suggesting a logic of sharing that is typical of old neighborhoods or villages. This phenomenon is in strong contrast to both the model of the terraced house and the feeling of individuality that characterizes modern society (Figure 23).

6. Conclusions and perspectives

This paper focuses on the space of relation between home and city in London's postwar housing through a comparative approach between six selected case studies. The four themes are discussed and reveal permeances and variations recurring on some spatial patterns. Particular attention has been paid to the social and cultural connection by emphasizing with graphic elaborations how the transition of space between the domestic and the public realm was intended

during the postwar season. The huge demand for housing after the horrors of WWII suggest the adoption of high-rise typologies, as in many other European bombed cities, which experienced a real boom. This demand also met the expectations of developers and determined the well-known uncontrolled growth of the 1950s and 1960s. Conversely, this phenomenon did not take place in the UK. The British market refused tall buildings and experienced new high density without high-rise typologies (Swenarton, 2015), featuring compact housing estates concentrated in specific areas. The high level of density, in all the richness explained above, is the common feature of each estate. At the time, this concept encouraged the experimentation of sharing community lifestyles. However, the values of the welfare state and common good, functionally and formally programmed by the architectural and urban project of that season, were not sufficient to ensure the spatial and social integration. This season was destined to end with Margaret Thatcher's accession to power. As a final consideration, authors consider the ongoing demolition of the Robin Hood Gardens (started in 2017), the well-known Brutalist architecture by Peter and Alison Smithson, as an opportunity to reflect about both the legacy and destiny of the architecture of that period. This episode opens many questions and controversial issues about the relations between architecture and society. The architects of that season, moved by political ideals and interpreting the cultural ferment of the time, have been responsible for shaping the city on the collective dreams and aspirations of the society and for forging the identity of London's postwar architecture as unique experiences in the international panorama. Utopia is

the appropriate word to describe most of the aspects of the selected projects, and it is an idea that is evident in the innovative patterns or architectural figurative characters, whose alteration led to the experimentation of new formal expressions. However, even though all case studies adopted varying approaches, they all share a common attribute, namely, the will of establishing a critical relationship with the context; this relationship can sometimes be discontinuous but never divorced from reality. This attribute may be one of the most precious legacies of architecture.

Acknowledgements

Appendix A.   Supplementary material

Supplementary data associated with this article can be found in the online version at doi:10.1016/j.foar.2018.05.006.

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