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The Influence of Space Standards on Housing Typologies: The Evolution of the Nuclear Family Dwelling in England

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Abstract

This article explores the evolution of dwelling typologies in London, examining how regulations and standards have transformed housing layouts and indirectly informed personal and social interactions at home. Housing policy of the past century, as reflected through space standards, type plans, housing manuals, and reports, reveal a socio-political agenda of promoting nuclear family dwellings, traditionally a household of parents and their children. This article contributes to this discussion by exploring the contextual drivers, spatial reasoning, and evidence underpinning the decisions of housing reports such as the *Tudor Walters Report* (1918), the *Dudley Report* (1944), and the *Parker Morris Report* (1961). Changes in household structures can be seen through regulations: from multiple families sharing a house, to the separation of individual families into single homes, to prioritising the individual over the family unit. This article analyses how five historical moments in which typological shifts promoted nuclear family dwellings that have determined spatial hierarchies and family dynamics around cooking, eating, and socialising. Similarly, societal shifts in housing expectations, such as the changing perceptions of social status symbols, privacy, gender roles, and household dynamics have contributed to the spatial arrangement and layout of homes. By shedding light on the socio-technical transformations, this research highlights the need for innovative design solutions and evidence-based space standards to meet contemporary needs.

Keywords

design standards; housing typologies; nuclear family; post-war housing; space standards; terraced housing

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1. Introduction

How we live has influenced housing design and space standards, and they, in turn, have shaped the way we live. The size and design of spaces within homes are not only determined by space standards and regulations but a combination of demographic, social, cultural, economic, technological, and environmental drivers. Cultural beliefs, stereotypes, and shifting social norms have played a key role in influencing housing policy, shaping the physical form of homes, and defining the expectations and aspirations people have of housing. Many factors have been fundamental in the transformation of domesticity by defining a new spatial hierarchy of rooms and the social organisation and patterns of life at home. This article studies space standards and the continuous interplay of drivers, including spatial, technical, and typological changes, in relation to the nuclear family dwelling in England.

Housing regulations and space standards from British housing manuals, reports, and policies of the past century, reveal a socio-political agenda of promoting nuclear family dwellings—a household unit of two generations, traditionally parent or parents and their children. Minimum dwelling standards have typically been linked with the nuclear family (Gallent et al., 2010; Milner & Madigan, 2004; Park, 2017), with their plan reflecting the social relationships of the family (Hole, 1965) and common ways of using the home. This relationship between council housing, standards, and layouts has been widely discussed by architectural historians and practitioners, however, often focusing on one predominant period, design, regulatory, or social perspective.

For example, Carmona et al. (2010) and Park (2017) have analysed space standards in relation to council housing design. M. Roberts (1991) studied how housing policy was continuously shaped by family policy in the 20th century, although heavily steered by a gendered vision of the family and the division of labour. Sennett (2003) explored how urban growth in the 19th century led to the change of the household, from an "extended" family to the "nuclear" one. However, how standards and regulations are a means of designing dwellings and how this might dictate how people live is often overlooked, and the function and nature of domestic spaces have remained largely unchallenged. This article contributes to this discussion by studying how regulations and standards have had an impact on housing layouts and indirectly inform personal and social interactions at home.

Perceptions of home can widely differ, but within a specific time and location, there tends to be a shared understanding of what a home should be. For Forty (1992), this consensus influences the design of domestic spaces and items, determining what is considered beautiful or proper. The presence or absence of certain rooms reveals an interplay of government regulations, market forces, and technical concerns that shape our living spaces. An example of this is the disappearance of the parlour in interwar homes or the overlap of functions in contemporary open-plan dwellings. Regulations are not only situated "within particular models of society and governance prevalent at a particular time," but equally take "their shape from the philosophy of governance prevalent at that time" (Cooper, 2010, p. 147). However, the influence of building regulations on housing typologies and vice versa is not always linear and often difficult "to disentangle in terms of cause and effect" (Muthesius, 1982, p. 5). This article will offer a new examination of the correlation between housing regulations and design concerning changing forms of socio-technical reasoning and how this informs domestic use, family relations, and housing typologies.

Several reports have tried to provide coherent evidence on which to base housing policy and design. These include *The Way We Live Now: What People Need and Expect From Their Homes* (Finlay et al., 2012) and *How Occupants Behave and Interact With Their Homes: The Impact on Energy Use, Comfort, Control and Satisfaction* (National House Building Council, 2011). However, *Space in New Homes: What Residents Think* (Commission for Architecture and the Built Environment, 2009), which analyses the level of satisfaction in privately-built homes since 2002 in England, concludes that varying degrees of satisfaction with the design and layout of homes demonstrate the subjectivity of assessing housing quality and use. Although the subjectivity of housing experience is important, this article is particularly interested in the various shared rationales that have led to changing housing expectations and use as well as the socio-spatial dynamics that have informed new nuclear family dwelling typologies. This article delves into the reasoning of how dwelling typologies have adapted to changing needs and circumstances, and the spatial reasoning and evidence underpinning the decisions of policymakers and architects. It analyses the typological shifts evident in five historical moments that promoted nuclear family dwellings.

The first moment is defined by the Victorian terraced house and how shifting household sizes, along with concerns about hygiene, sanitation, and morality, created more compact housing replacing slums and addressing overcrowding. The second illustrates how the need to house the working class, as well as the preference for houses over flats, led to new dwelling typologies, such as the cottage flat. The third encompasses the period before and after the First World War when the *Tudor Walters Report* proposed the first widely adopted minimum space standards. The fourth and fifth moments relate to post-Second World War reports and manuals, such as the *Dudley Report*, the *Housing Manuals* of 1944 and 1949, and the *Parker Morris Report*.

These moments will be analysed through the services in the home and how they define spatial hierarchies and determine family dynamics around cooking, eating, and socialising. Technological advancements and the integration of basic sanitation provisions, water supply, and central heating into homes revolutionised room sizes, functionality, and the layout of bathrooms and kitchens. At the same time, the rising affluence of the working class and the introduction of household appliances like electric refrigerators and washing machines redefined what was considered essential in a modern home (Hollow, 2014). This article will highlight these societal shifts in expectations, such as the changing perceptions of social status symbols, privacy, gender roles, and household dynamics that contribute to the definition of domestic public and private areas and the spatial arrangement and hierarchy of rooms (Ravetz & Turkington, 2013).

2. The Victorian Terrace: Adapting Services Into the Functional Family Dwelling

The overcrowded and unsanitary conditions that led to widespread cholera epidemics in the 19th century, as well as Victorian morality and rapid industrialisation, resulted in the rise of the nuclear family dwelling. Prompted by unsanitary living conditions, in 1848, public health acts and model bye-laws were introduced as the first regulations defining minimum standards for housing. The Victorian bye-law terraced house was a smaller, more compact scaled-down version of previous terraced houses (Firley & Deupi, 2023), meant to control overcrowding and poor sanitation while providing housing for workers in the city.

The spatial layout of Victorian and Edwardian bye-law terraced houses reflected underlying gender divisions in traditional family life (Hepworth, 1999; Matrix, 2022). Historians have pointed out the symbolic distinctions

between the front and back, as well as the private and public spaces within 19th-century speculative housing (Burnett, 1986; Muthesius, 1982). Victorian terraces with only two rooms per floor typically had a parlour in the front room and a combined kitchen–living–scullery in the back room. In those with three rooms, the front room would be a parlour and the back rooms a kitchen–living room, with a scullery in the rear extension. Domestic chores considered private, such as laundry and cooking, were relegated to the kitchen, while more public activities such as receiving guests, would be carried out in the parlour (M. Roberts, 1990). The parlour was a room representative of social status, with larger houses having both a parlour and a sitting room.

The main heating source of a Victorian terraced house was coal. This had a significant impact on housing design to enable the delivery, storage, and removal of coal and its ash, with hearths and flues installed throughout a dwelling. Eventually, central heating would allow for more flexibility in the design of a home, as room layouts no longer depended on the position of chimneys.

The terraced housing typology, however, existed well before basic sanitation provisions became standard. Although water closets predate the sewer system, due to cost, they were mainly used by the upper classes and required the installation of individual cisterns, tanks, and pumps. It was also common for people to access sanitary facilities away from home, and bathhouses played an important role in serving nearly 1.5 million bathers in 1891 (Penner, 2014). In some working-class homes, the bath was moved from the kitchen into a separate bathroom, typically located at the end of a rear extension on the ground floor (Figure 1).

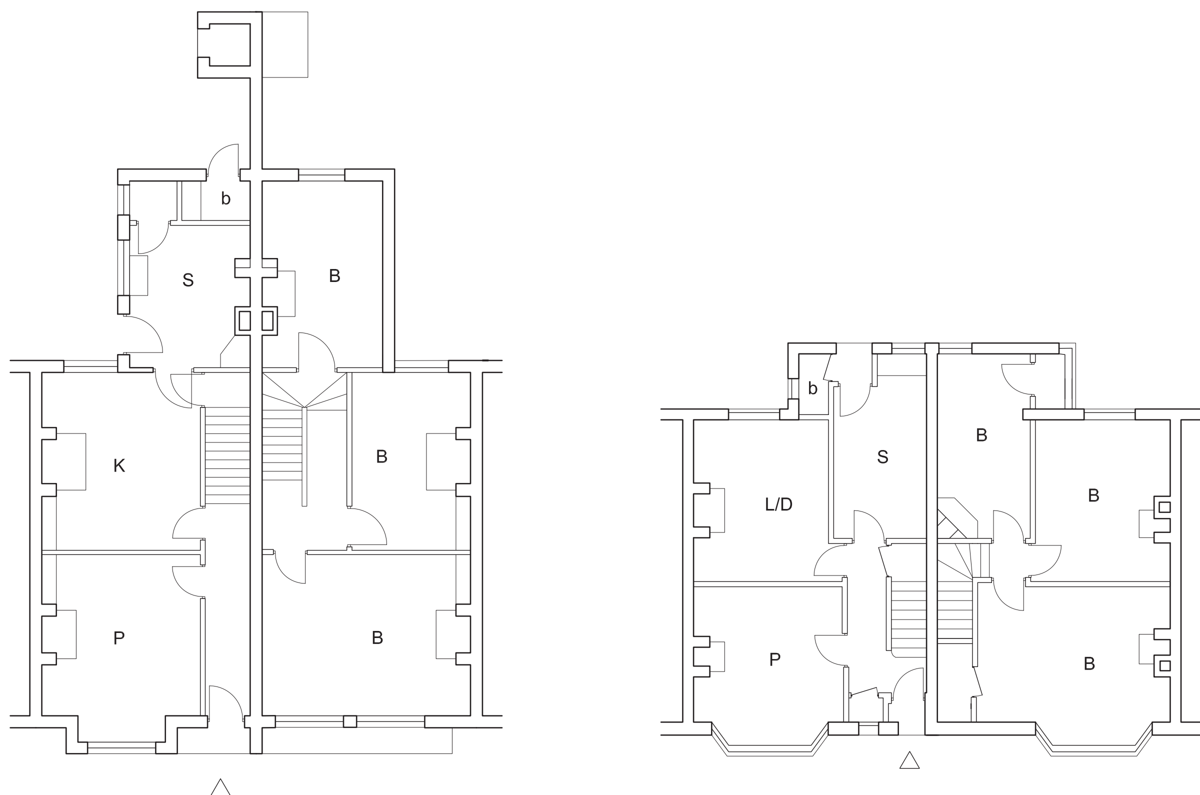

Figure 1. Variations in frontage and layout in three-bedroom two-storey houses: Artizans, Labourers & General Dwelling Company, Noel Park, 1881–1913 (left) had the scullery in the rear extension, while the London County Council White Hart Lane Estate, Tottenham, 1913 (right) shortened the rear extension by incorporating the scullery. Redrawn by the author from Muthesius (1982, p. 95) and Swenarton (2018, p. 35).

Typically, the kitchen was for cooking but also often for eating, and it was common for it to have a movable zinc bathtub. In comparison, the scullery was like a wet kitchen, used for food preparation, washing up, and laundry—activities requiring the use of water. Laundry was done in a "copper," a large metal tub with a heat source in which clothes would be boiled unless a house had access to a separate, shared washhouse. In larger houses, food storage would be in pantries, cellars, and larders, but, in smaller houses, people would buy their food on a more daily basis. Bye-law terraced houses had to be provided with a larder with a ventilated panel, but these were later often demolished to enlarge the kitchen. The kitchen was often too small to eat in; therefore, the family would sit for meals in the dining room and be served by the housewife (M. Roberts, 1990). New technology and services in the kitchen were seen as key to saving time and labour, but the technological "improvements" also reinforced the gendered nature of household chores (Pennell, 2016).

Victorian terraces became widely associated with slums and overcrowding, as terraced houses in cities like London were often sublet to two or three working-class families who shared the rent. Even though houses were designed for one family, multiple occupancy implied no major changes to the design, including bathrooms and services. Therefore, towards the end of the 19th and beginning of the 20th century, speculative builders began to provide smaller and more compact houses in the suburbs of London. These new small terraced houses, equivalent to just over half a standard-sized terraced house with a rear extension, were intended for the sole use of one family, thus creating new social, spatial, and technical standards. Changes in the terraced house typology would be subtle, and even though houses became smaller in size, they were used by a single family, as intended and designed for. However, how spaces were used would drastically change, since the nuclear family was now able to use all rooms without sharing with other families. One of the first changes was the elimination or shortening of the rear extension that housed the kitchen, scullery, and WC (Figure 1). This meant houses were built slightly wider than previously and the functions of the kitchen and scullery were often combined. Wider houses meant that bathrooms could be integrated into the home, and while still placed at the back of the house, they could be accessed from the inside.

3. Half-Houses and Tenements: The Alternative to the Two-Storey Family Dwelling

During the early Victorian period, housing standards were set not through regulatory measures but by introducing exemplary cases or prototypes, such as the "model dwellings" advocated by housing philanthropists and reformers (Clifford & Ferm, 2021). From the 1840s, philanthropic model housing companies and industrial reformers, including the East End Dwellings Company and Peabody Trust, played a significant role in the development of working-class housing that consisted of multi-storey tenement blocks, terraced houses, and cottage flats. These trusts developed "model dwellings" not only as spatial examples for standard housing design but also as a social model to counter the perceived "immorality" in slums. The model dwellings not only improved the living conditions of the working classes but also provided a competitive rate of return on investment, earning them the title "five percent philanthropy" (Tarn, 1975). However, the housing provision by philanthropic companies and social reformers was small, with the majority of working-class housing in Victorian England delivered by individual speculative builders (Mitchell, 1988).

The design of speculative tenement blocks drew inspiration from Henry Roberts' *Model Houses for Four Families*, created for the Great Exhibition of 1851 and constructed by the Society for Improving the Conditions of the Labouring Classes (Figure 2). Roberts' design featured self-contained flats for only one nuclear family, equipped with running water and natural ventilation, a defined separation of living spaces, including distinct

kitchen and living areas, and most notably, separate bedrooms for parents and children of different genders (Chey, 2018). Although the idea of the nuclear family was not new, what changed was the urban nuclear family and its way of operating (Ravetz & Turkington, 2013; Sennett, 2003). The family would only truly become "nuclear" once all functions and amenities were found exclusively within the home, and the family no longer depended on neighbours or shared facilities (Giudici, 2018). While the new housing models meant a great advancement in living quality, they also isolated the "model" wife in a self-contained unit (Giudici, 2018).

The repetitive and standardised layout of tenements reflected the pragmatism and moralist values of Victorian philanthropy (Davidovici, 2017). To avoid the multiple entrances and exits found in slums, which were associated with immorality and lack of control, the introduction of corridors was also instrumental in social control (Evans, 1997).

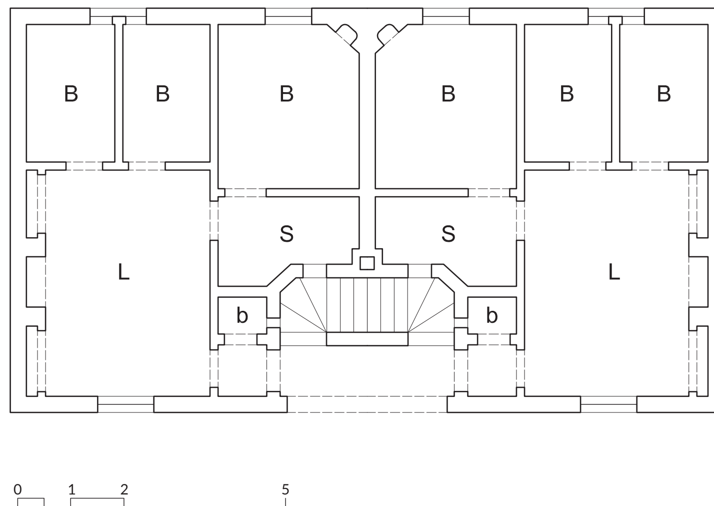

Figure 2. Plan of the double house by Henry Roberts for the Society for Improving the Conditions of the Working Classes in 1850. Redrawn by the author from Roberts (1851, p. 10).

Even though household sizes were reduced, many two-storey houses were still shared by at least two families, each occupying a floor or, in more extreme cases, a room (Thom, 2017). By 1911, 40% of families in London shared a house (Muthesius, 1982). Both financial constraints and the preference to live in a house rather than a tenement flat led to the informal adaptations of terraced housing. Guides for house conversions therefore emerged as early as 1871 with Banister Fletcher's *Model Houses for the Working Classes*, which proposed model plans for adapting existing terraced houses into single-storey one-family flats (Figure 3). By the 1880s, private developers began to offer shared ground floor sculleries or two-storey rear extensions with a room for a kitchen on both floors, as in Park Town in Battersea (Figure 4; see Thom & Reid, 2010). But more commonly, these subdivisions were made by individuals in less formal ways. However, other than overcrowding, there were several problems with sharing a small house. For example, piped water and a "copper" water heater were only available in the ground-floor scullery, meaning upper-floor tenants had to carry their water up the stairs.

The cottage flat, a dwelling typology mostly associated with Northern England, appeared in response to the need of workers who could not afford the higher rents of traditional family dwellings but desired to live in a house. Cottage flats, sometimes referred to as maisonettes, were at the time of their conception also called tenement flats or "half houses" (Thom, 2017). Unlike a maisonette or duplex distributed across two floors,

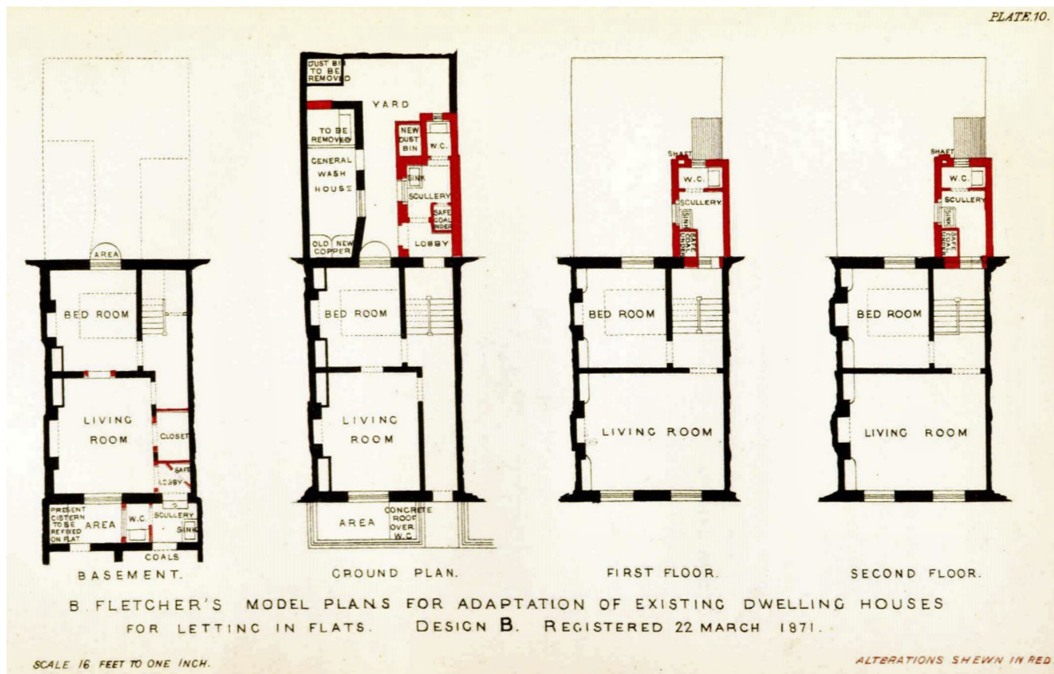

Figure 3. Model plans for alterations (in red) of existing dwelling houses for letting into individual flats. Source: Fletcher (1877, p. 26).

each cottage flat houses one family per floor. Its overall building appearance is similar to a two-storey suburban terraced house, but each cottage flat has its own ground floor street access with entrances of the adjoining flat above or below paired. Although each family occupied their own floor, the first cottage flats shared an entrance and an internal corridor leading to the stairs of the upper dwelling unlike subsequent purpose-built solutions (Figure 4). Purpose-built cottage flats were considered at the time a fashionable type of accommodation for young working families in London (Goodchild, 2016) and perceived as better than a flat within a block (Thom, 2017).

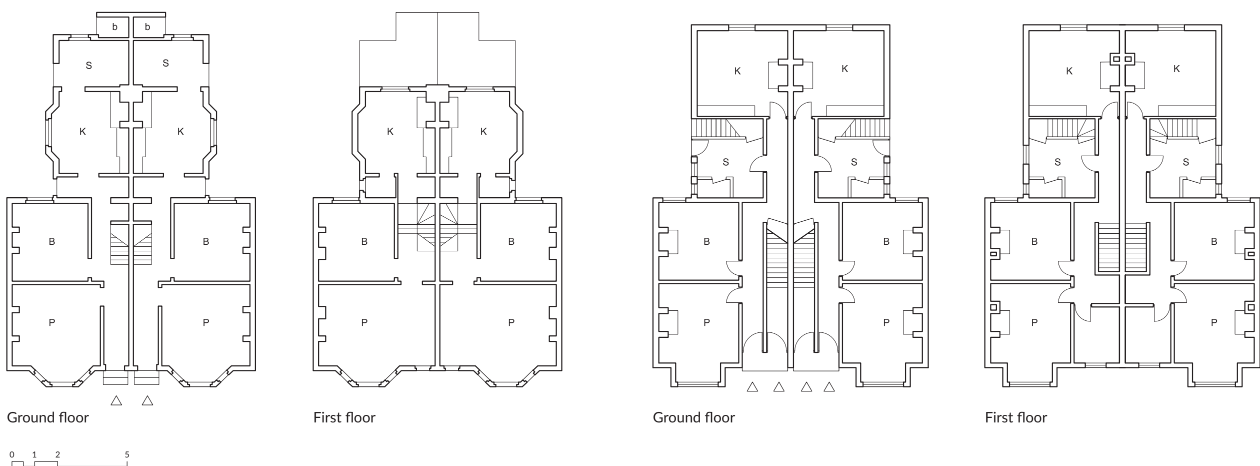

Figure 4. Ground and first floor of cottage flats: Park Town cottage flats, Battersea, 1884 (left) shared an entrance and a ground floor scullery but each had its own kitchen; North Bank Road, Walthamstow, 1905 (right) had separate entrances and services. Redrawn by the author from Thom (2017, p. 41) and Muthesius (1982, p. 166).

In London, the first cottage flats were Albert Street in Spitalfields (1858) and Victoria Cottages (1864) by the Metropolitan Association for Improving the Dwellings of the Industrious Classes, whose designs are attributed to Henry Roberts (Tarn, 1975). They were arranged in parallel rows of two-storey buildings with the uniform appearance of terraced houses. Starting with cottage flats, the transformation of housing typologies, such as semi-detached houses or maisonettes, were deeply rooted in social aspirations and necessities that preferred dwellings to function and appear like houses.

4. The Tudor Walters and the Compact Family Home

At the start of the 20th century, the average household size in the UK was around 4.5 people, but, in distinction to family sizes, they greatly diminished with the disappearance of resident domestic servants. For Ravetz and Turkington (2013), the new compact family home led to a family "nuclearisation" by cutting ties with the extended family and creating a stronger domestic culture and leisure time. This led to the growth of the middle class and new ideas of what constituted a home (Forty, 1992).

Published at the end of the First World War, the *Tudor Walters Report* by the Tudor Walters Committee (1918) included space standards and housing type plans to address a post-war housing shortage. According to Swenarton (2008), the report is the first time that housing quality was "formally acknowledged" at a national level. Despite being the first comprehensive housing report in the UK and consolidating the first space standards and developing typical dwelling plans (Jacoby et al., 2022), prior regulations and housing policy had a significant impact on housing typologies and their internal layout. For example, the Building Act of 1774, by determining the relationship between building classes, size, and shape, created an optimal way of designing buildings to avoid higher taxation, which effectively discouraged experimentation (Summerson & Colvin, 2003) and resulted in a standardised long and narrow Georgian terraced house.

Compared to subsequent Victorian bye-laws, the post-war standards recommended by the *Tudor Walters Report* were "a major innovation in social policy" (Burnett, 1986, p. 218), with the report focused not only on health but also on the design and layout of housing. The report's objective was to create a more compact home designed for the needs of the nuclear family. These new terraced houses were built in groups of four to six, featuring private gardens to both the front and rear. The space per person was calculated by the Committee based on criteria of health and convenience, establishing a space of 500 ft^3 (14.16 m^3) per adult (Tudor Walters Committee, 1918). This meant that houses ranged from 76 m^2 to 114 m^2 in size.

The Committee warned against common narrow-fronted houses with rear extensions and recommended shorter terraces with wider frontage to avoid overcrowding. They argued that wider homes would benefit not only from sun exposure but also reduced costs, as they required shorter rafters, less height in gable walls, and smaller party walls and chimneys (Tudor Walters Committee, 1918). The front and back rooms and the rear extension were accessed through a hall, and in cases when the back room was used for the kitchen, the scullery was accessed through the kitchen. The shift in width also allowed for more options to position the hallway and staircase (Figure 5), as well as a third bedroom and an upstairs bathroom. The third bedroom was considered essential by social reformers, as it allowed children of different sexes to be separated.

Even though by 1914 most dwellings had a piped water supply, this was shared in houses with multiple occupancies. It was subsequently in the interwar period that the bathroom made its way to the first floor,

with the *Tudor Walters Report* advocating having an upstairs bathroom in its type plans (Figure 5). All new council housing started to have a separate bathroom, typically located on the first floor above the kitchen, with the bath and sink in one compartment and the toilet in another. This signified a substantial shift in the domestic routines of households, distinguishing between upstairs and downstairs activities. Some bathrooms began to have both cold and hot water taps and water for baths was often heated by a back boiler, although some still heated it in pans or kettles in the kitchen on the ground floor (Ravetz & Turkington, 2013).

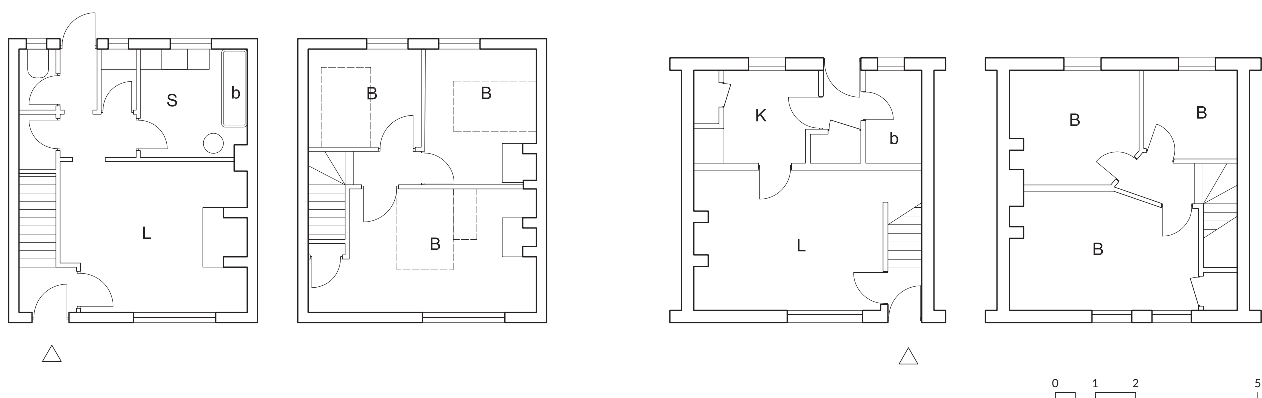

Figure 5. House type from the *Tudor Walters Report*, 1918 (left) and Office of Works Chapel House Estate, Poplar, 1921 (right). Note: Compared to Figure 1, these houses would be smaller and more compact. Redrawn by the author from Tudor Walters Committee (1918, p. 28) and Hobhouse (1994).

The need to separate the scullery from the kitchen came at the beginning of the 20th century. According to the Tudor Walters Committee (1918), evidence collected from working-class dwellings, particularly housewives, pointed out the inconvenience of household members washing in the scullery, especially when preparing meals. This was further corroborated by medical experts who accentuated the significance of access to running water and adequate washing facilities.

The report proposed two layout types: homes with a living room and larger ones with both a parlour and living room. The parlour was omitted in some homes due to cost, but this raised concerns with the Committee about the improper use of the rooms. They feared that the lack of a third room meant that dwellers "would live mainly in the scullery," both eating and cooking in the same room (Tudor Walters Committee, 1918). The Committee was aware of the practicalities of previous arrangements of using the living room for cooking, with one fire serving many purposes, thus, saving labour and fuel costs; nevertheless, they still opted to sacrifice functionality for the "cleaner activities of the family" (Tudor Walters Committee, 1918, p. 25). In defining where people should eat and prepare food, the Committee failed to fully address the needs of the working class by providing two day rooms in addition to a multifunctional kitchen (Ravetz & Turkington, 2013).

In lieu of a parlour, the living room was promoted as the new family room where no "dirty work" or eating would occur. But against the Committee's recommendations, some cooking continued in the family room. Houses had either a scullery or a kitchen, although activities would often overlap bringing confusion about the name of rooms, for example, the sitting room would be used also as a dining room and even for some cooking. The Committee emphasised instead that the parlour or living room should not be used to accommodate a

larger kitchen, and “where it is not possible to provide except in this way, we recommend that it be omitted” (Tudor Walters Committee, 1918, p. 25).

The Housing and Town Planning Act of 1919 (Addison Act) formally adopted many recommendations of the *Tudor Walters Report*. While local authorities only provided 2% of new dwellings before the Addison Act, this surged from 1919 to 1923 to over 60% (Bowley, 1985). The Housing (Additional Powers) Act of 1919 motivated private builders to adhere to the new housing standards by offering subsidies of £130 for rentals and £160 for saleable homes that met them (Spink, 2005). This incentivised consistency in design across private and public housing, but space standards ultimately led to rising rental costs, making the new homes unaffordable to the working classes they were intended for. Nevertheless, the recommendations presented by the Tudor Walters Committee reflect a snapshot of what society prioritised at that moment, as well as their judgement of what they felt was the “correct” way of living. The report instrumentalised the socio-spatial relations between space standards and the recommended ways in which households, as a nuclear family unit, should inhabit their homes.

5. Defining “Other” Households: New Post-Second World War Housing Typologies

The interwar kitchenette had a back door to the side driveway or back garden and sometimes a serving hatch to the back room, if used for dining. It combined all the food preparation functions of the scullery and kitchen but had no space for a table and chairs. Despite being small, the kitchenette was deliberately placed to permit monitoring of all circulation in a home, as the front door, hall, stairs, and back garden could be surveyed from its location. With the passing of time and more appliances such as washing machines and dishwashers, the kitchenette, however, seemed increasingly unsuited for modern life. Modern kitchens were inspired by the Frankfurt kitchen designed by Margarete Schütte-Lihotzky in 1926, which was suitable for both houses and flats due to its galley layout (Darling, 2005). A kitchen with cupboards saved space and came with gas, electric refrigerators, and deep sinks. The instantaneous water heater, first invented in the 19th century but improved in the 1920s, was widely installed now in council flats. The laundry moved into the kitchen with the arrival of a “twin tub” laundry machine that could connect to the sink tap. While bathrooms and kitchens represented an advance in living standards, they were expensive until the standardisation of fittings and connections during the interwar period increased efficiency and lowered their costs.

Similar to sanitary services, a large increase in the use of electricity for cooking came in the period between the wars. Local authorities began to rent out cookers and heaters to their tenants, in parallel to a rapid rise in their sales as well as that of toasters, kettles, and small appliances from the 1930s onward. The increasing affordability of household appliances and their constant advertisement profoundly impacted societal perceptions of what was deemed essential within the home. No longer regarded as extravagant purchases, domestic appliances like the electric refrigerator became increasingly seen as required in a modern home (Hollow, 2014).

In the late 1930s, housing stakeholders gathered input from experts, third-sector organisations, and professional bodies along with a growing interest in understanding and shaping public opinion. Council estate tenants were increasingly regarded as individuals with distinct needs, as “clients” or “users,” rather than simply recipients of government assistance (Hollow, 2014). For Clifford and Ferm (2021, p. 12), the post-war standards reflected “a belief in scientific rationality in their development and social democracy in

their application.” Thus, in 1942, as part of the government’s post-war reconstruction planning, the Ministry of Health created a new housing sub-committee under the chair of Lord Dudley (Design of Dwellings Committee or Dudley Committee) to consolidate evidence on which to base housing policy and standards.

The Women’s Advisory Housing Council, set up in 1936 and including more than 30 women’s groups such as the Mothers Union and the National Council of Women, coordinated a mass housing survey on how its members would like to live and wanted their homes to be laid out to meet their daily needs. The Mothers Union found that women wanted spacious and affordable family homes with three to four bedrooms. Their support for traditional family homes was based on the belief that poor housing would deter couples from having children (Beaumont, 2013). Parliamentary debates echoed this by asserting that “if you want a high birth rate it is very important not to have…over-concentrations of population in flats,” as women might want to have more children if homes are more attractive (UK Parliament, 1946). Evidence submitted by the Mothers Union to the Dudley Committee in 1942 incorporated many requests made by the women’s groups, a testament to their influence on housing design policy. Aspects such as the inclusion of gas and electric appliances and the concept of “dining kitchens” were included by the Dudley Committee in its 1944 *Design of Dwellings* report (Beaumont, 2013).

In addition to the *Dudley Report*, other post-Second World War housing policies, such as the *County of London Plan* (1943) and the *Housing Manuals* (1944 and 1949) encouraged housing schemes with a variety of dwelling typologies and layouts to cater to diverse and changing households. As the majority of dwellings built between the wars had three bedrooms, the *Dudley Report* called for new dwelling types, particularly for large families, elderly people, childless couples, and one-person households (Ministry of Housing and Local Government [MHLG], 1944a). Despite the *Dudley Report* and the recommendations of the 1944 and 1949 *Housing Manuals* for more diverse house types, standard designs were still predominantly for three-bedroom houses, with one-bedroom dwellings for older or disabled people only mentioned under the category of “other” (Milner & Madigan, 2004).

The MHLG later proposed that large families requiring four or more bedrooms should live in houses, other families in three-bedroom cottages or maisonettes, and small households in blocks of flats (MHLG, 1958). Mix-housing developments such as Alton West (1959) by the London County Council Architects Department led by Colin Lucas also included new housing typologies, for example, three-storey terraced houses with widths of only 3.66 m, stairs located centrally between a front and back room, and the kitchen and dining room on the ground floor separated from a living room on the first floor (Figure 6). While mixed-typology development created more housing variety, the assumption that certain households such as larger families were better suited for houses or maisonettes persisted. The *Dudley Report*, “aware of the keen controversy of the house versus the flat,” suggested that flats be “primarily for childless households” (MHLG, 1944a, p. 12). The *Housing Manual* of 1949 accordingly presented maisonettes as a compromise between flats and houses with a garden, although acknowledging there is no real substitute for a house with a garden, especially for families with young children (MHLG, 1949). Nevertheless, the post-war housing shortage and the reconstruction efforts changed London from a city of houses to one predominantly of flats.

The standards set in place were, therefore, a response to the spatial hierarchies of a household defined by traditional family life. While the provision of bedrooms was previously largely based on moral concerns, in the post-war period the focus increasingly shifted to “the user” and issues around privacy, flexibility, and personal

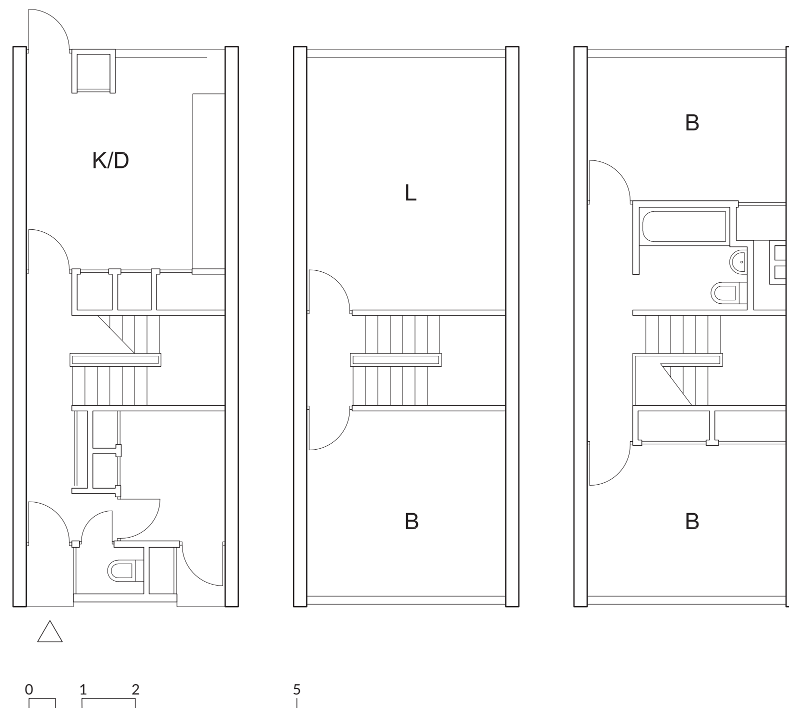

Figure 6. Three-storey terraced house: Alton West, 1959. Redrawn by the author from "The slab and point blocks of flats" (1959).

space. As opposed to the Victorian terraced house that had a socially representative "public" room facing the front elevation, many post-war houses switched the living room with the kitchen to gain privacy (Figures 7 and 8). This was especially common in maisonettes with external access galleries running along the front.

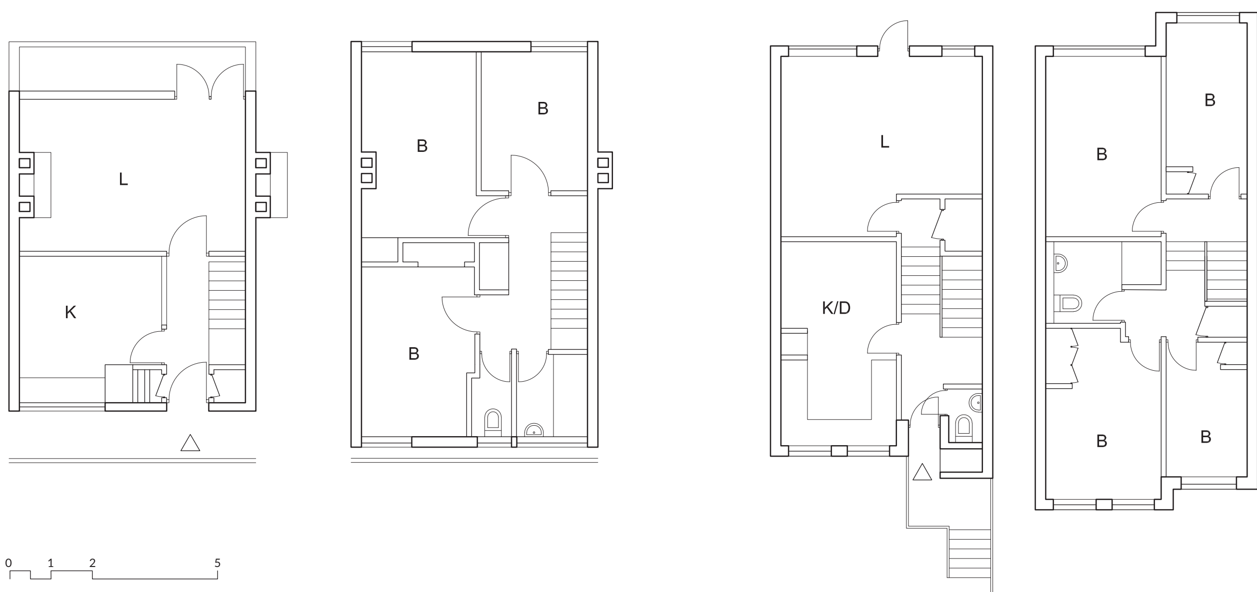

Figure 7. Ground and first-floor maisonettes: Canada Estate, Bermondsey, 1962 (left), and Lillington Gardens, Westminster, 1971 (right); both had the kitchen in the front and living room in the back and Lillington Gardens also had a downstairs toilet. Redrawn by the author from Crawford (1975).

Services in the home saw further changes when the *Dudley Report* suggested that homes with more than four occupants should have both an upstairs bathroom and a downstairs toilet with a washbasin (Figure 6). Its recommendations and standardised plans of the *Housing Manuals* of 1944 and 1949 also promoted substantially larger kitchens at the back of the house with space for both cooking and dining to ensure enough living space. While previously the living room housed many family activities, the report expressed people's preference to have a family room only for social and recreational uses (MHLG, 1944a).

The *Housing Manuals* eliminated the parlour altogether, proposing three new housing types: one with a dining kitchen, one with a separate working kitchen and dining room, and another with a kitchen–living room and a small separate utility room (Figure 8; MHLG, 1944b, 1949). Once the cooking equipment was moved to the kitchen, the *Dudley Report* claimed people would find it more convenient to have their meals there, because serving meals directly from the cooking stove to the table significantly reduced housework. The report also highlighted that there should be a separate area for laundry, for the "drying of clothes, and dirty jobs which should not be done in a room in which meals are eaten" (MHLG, 1944a, p. 12). But the Committee also acknowledged that the desire to eat where the food was cooked led to people eating in the kitchen, even if it was not fit for purpose.

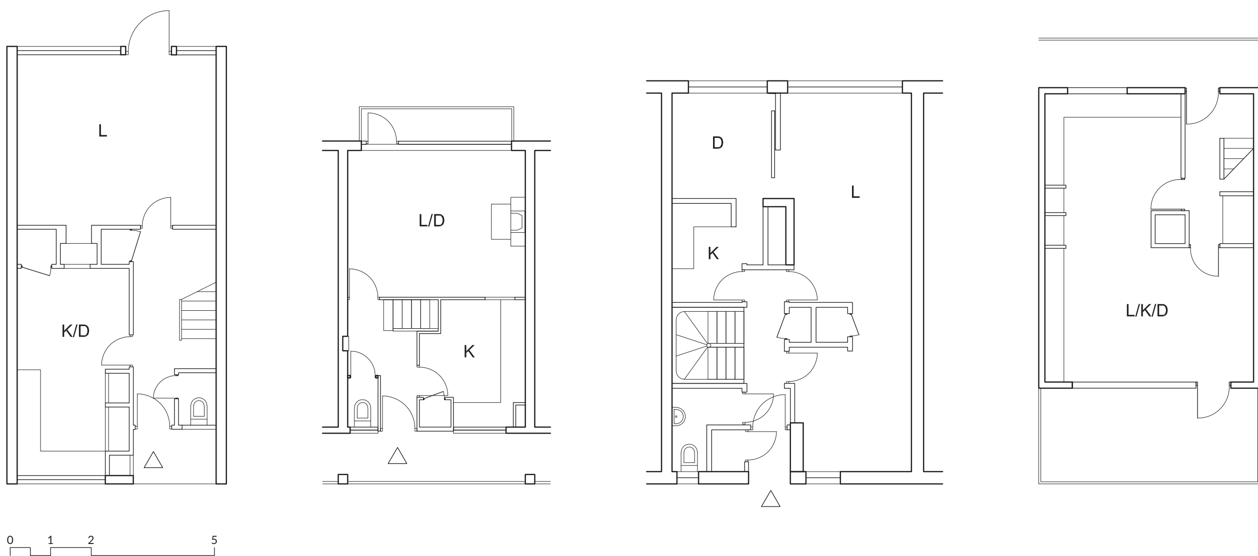

Figure 8. Ground floor of four examples of different kitchen, living, and dining layouts: From left to right, kitchen and dining room combined in a four-bedroom, two-storey house in Alton West, Roehampton (1959); living and dining room combined in a two-bedroom, two-storey London County Council maisonette type plan (1956); a separate room for kitchen, dining, and living in a four-bedroom, two-storey maisonette, in Linden Grove (1970); and an open plan combined living, dining, and cooking areas in a two-bedroom, two-storey maisonette in Thamesmead (1972). Redrawn by the author from "Alton West, Roehampton" (2009); London County Council (1956); Crawford (1975); Greater London Council (1976, p. 15).

6. Homes for Today and Tomorrow: Family Versus Individual Needs

Crucial to housing progress was the housing report *Homes for Today and Tomorrow* (*Parker Morris Report*), published in 1961 by the Parker Morris Committee for the MHLG. The Parker Morris standards represent the "first set of comprehensive, evidence-based space standards" (Park, 2017, p. 3). Similar to earlier housing reports, it made recommendations on minimum housing standards, including internal floor areas.

The recommended standards not only focused on dimensions and areas but also the usability of spaces, with spaces designed to meet the various activities associated with different family compositions and lifespans.

Aware of demographic changes, the Committee considered "the teenager" and the "working mother" as important members of the domestic space (Kefford, 2017). The *Parker Morris Report* thus re-imagined the family as individuals with different consumption patterns, necessities, and spaces in the home, which in turn had an impact on individual space and privacy as well as technical aspects such as central heating (Kefford, 2017). The privileging of the individual over the family unit is evident from the recommendation that all adolescent and adult children should have separate rooms, regardless of their sex. This advocated for more single bedrooms, even if smaller, in order to give each family member privacy.

The *Parker Morris Report* fully embraced an increasingly consumerist culture by acknowledging the shift from the home as a shelter to one that can do more than "fulfil the basic requirements" where people can "express the fullness of their lives" (MHLG, 1961a, p. 3). Leisure, hobbies, and consumption became an intrinsic part of the home (Kefford, 2017). The report's highlighting of a "home for family needs" (MHLG, 1961a) contrasted with previous reports on space standards that prioritised "traditional" family homes (Palate, 2022). Nevertheless, its notion of a "working mother" still had a gendered and paternalist tone that is now outdated (Park, 2017). This can be seen in *Design Bulletin 6: Space in the Home* (1968)—a supplement to the *Parker Morris Report* by the Ministry of Housing—that proposed space requirements based on activities such as "coming back from shopping loaded up, mother needs space to put the pram and the shopping" (MHLG, 1963, p. 4).

After the Second World War, architects responded to the decline of servants in homes and the changing role of working- and middle-class women by introducing "open-plan" designs (M. Roberts, 1990). While post-war standards promoted separated spaces and functions, new discussions about open-plan living emerged. Removing room divisions allowed the creation of a continuous space for the kitchen, living, and dining, spanning from the back to the front of the house (Figure 8). Although the Committee regarded open-plan layouts as a contemporary house design that could potentially gain popularity in the future (Kefford, 2017), it discouraged its adoption due to "little privacy from view, from noise, or from distraction" (MHLG, 1961b, p. 9).

The contradiction between the Parker Morris standards advocating for open spaces and, at the same time, for individual privacy led to concerns around flexibility. In 1961, the MHLG proposed the *Adaptable House*, a model home with 91 m^2 that provided more space and privacy, making it adaptable to a family's changing needs during what they called the seven stages of a family's lifecycle over a period of 50 years (MHLG, 1961a). The house, designed with movable partitions, provided surplus living space on the ground floor that could be converted into a bedroom when children became teenagers (Figure 9).

In redefining domestic use, the Committee was aware that the specification of space standards with determined room labels assumed a conventional arrangement and how each space would be used. They argued that flexibility could be achieved by looking at the needs of the dwellers and, instead of setting minimum room sizes, only proposing the minimum size of the whole dwelling. In that sense, the report made similarities between a modern-day kitchen and that of a 19th-century scullery due to the multiple uses it had. The "family homes" in Ravenscroft Road in West Ham, built in 1964 to the Parker Morris standards, had an extra room on the ground floor that could be used as a small bedroom or office (Figure 10).

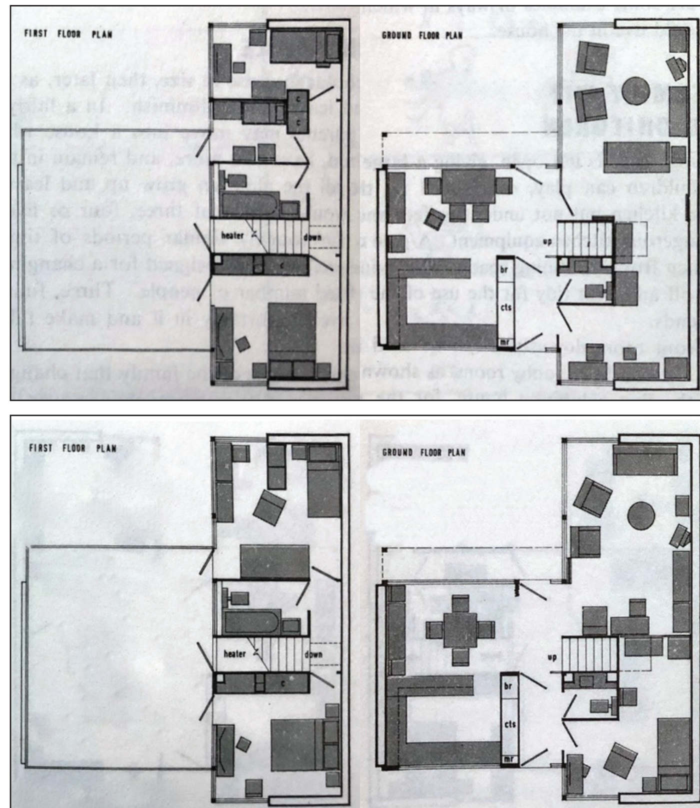

Figure 9. Comparison of lower and upper floorplans of a family with three young children (top) and a family of four adults (bottom). Source: MHLG (1961a, pp. 6–8).

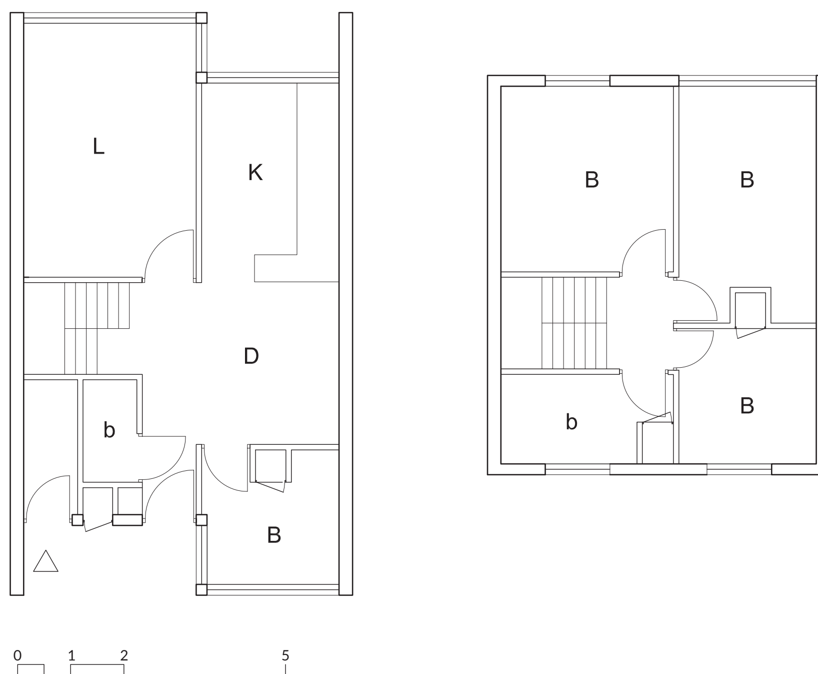

Figure 10. Ground and first-floor three-bedroom house following the *Parker Morris Report* recommendations: Ravenscroft Road, West Ham, 1964, MHLG. Redrawn by the author from MHLG (1969, p. 41).

However, new technical challenges arose in implementing the recommendation of the *Parker Morris Report*. For example, S. W. Gilbert, the secretary of the Housing Standards Sub-Committee of the Central Housing Advisory Committee, pointed out that the Institution of Electrical Engineers regulations made it impossible to use an electric appliance in the bathroom, preventing it from housing a washing machine or spin dryer, although the Committee considered this to be more efficient (Gilbert, 1960). Thus, regulations and user preferences or habits had to be better coordinated and make homes suitable to changing needs.

7. Conclusion

As Imrie (2005, p. 47) points out, "housing quality, or people's experiences of domestic life and living, cannot be understood in isolation from the moral encoding or order of domestic design." It is essential that space standards take into account the lessons learned from the past while forging innovative, evidence-based solutions that resonate with contemporary societal needs and aspirations.

While many of the reports previously mentioned may appear to be similar in how they determine minimal dwelling sizes, their reasoning is quite different, as are the outcomes and recommendations. Type plans and internal floor areas were presented as the optimal way of living, derived from ideas of future housing and needs, such as the *Parker Morris Report* and open-plan living. Once the baseline for sanitation and health was established through local bye-laws and the *Tudor Walters Report*, there was less emphasis on Victorian morals, with post-war space standards acknowledging the importance of evidence based on anthropometric measurements and social surveys. There was also a big shift from the *Tudor Walters Report*'s idea of the family as a cohesive unit, compared to the *Parker Morris Report*, which despite remaining paternalistic, prioritised the individual and their needs.

Henry Robert's self-contained flat for the nuclear family, novel at that time, is not drastically different to flat typologies today. Nonetheless, how we understand and inhabit them, has changed significantly. For example, living rooms used to imply a certain conviviality among family members, which might no longer be the case today in households of non-related adult sharers. Similarly, the hierarchy of bedrooms with its clear spatial distinctions between the parent's and the children's bedrooms is perhaps less applicable today where bedrooms host a variety of functions such as studying or working.

Even though one-family households still account for the majority of households, one in three UK households in 2022 was a one-person household (Office for National Statistics, 2022). Such demographic shifts, as well as a wider range of users, have to be reflected in new housing. A similar significant shift in household structures could be seen in the past: from multiple families sharing a house to the separation of individual families into single homes, to prioritising the individual over the family unit.

Many dwelling typologies continue to maintain a strong connection to their historical origins, prompting a reassessment of how social expectations and technical rationale should guide the development of housing design today. However, with shifting societal dynamics, climate change, and increased housing commodification, it is important to understand how space standards and building regulations might determine housing quality and have to be adapted to ongoing transformations. This prompts questions about the space standards needed to ensure adequate and equitable housing as well as the evidence that can underpin these decisions.

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Conflict of Interests

The author declares no conflict of interests.

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