

Morphological periods, planning and reality: the case of England's inter-war suburbs

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ABSTRACT: The physical forms of England's inter-war suburbs are examined, concentrating on those created by private enterprise. Attention is given to the contrasts between inter-war suburbs and those created before the First World War, and the timing of the adoption of architectural styles and other aspects of built form characteristic of the inter-war period is considered. In places, houses in Edwardian styles continued to be built well into the inter-war period. The dominant characteristic of the period was the creation of garden suburbs. The Tudor Walters Report was more an endorsement of such suburbs than a stimulus to them and many of its recommendations were not adhered to.

The inter-war period in England is widely noted by students of the city for its sharp contrast to earlier periods, both socially and physically. The demise of the compact city, presaged by nineteenth-century garden-suburb experiments, finally came to pass after 1918. In the stereotypic city of the urban morphologist at least, the change from the densely built-up Victorian and Edwardian city to the open, loosely-connected suburbs of the inter-war period was abrupt. The Tudor Walters Report, the sudden, massive contribution of government to housing provision,¹ the changes in the means of funding house building by private enterprise and, most important of all, the embracing of the garden-suburb ethos apparently by almost everyone who could actually influence development, as distinct from the majority of the architectural literati, contributed to the transformation of England's cities in the inter-war period. Town planning, hitherto largely limited to small areas, permeated more widely the statements of intent by central government and local authorities, yet simultaneously cities sprawled seemingly unimpeded over the surrounding countryside aided by the growth of motor transport and the

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¹ M. Bowley, *Housing and the State 1919–1944* (London, 1945), 271, Table 2.

break-up of landed estates.² These and other often interconnected developments, to many of which the First World War and its aftermath had given focus and often impetus, justify the recognition of the year 1918 as the beginning of a new era and a new morphological period.³

Reality is, of course, never that neat. Stereotypes may provide useful learning devices, but their effectiveness as models can also create undue satisfaction with what is at best a rough approximation and may gloss over complex processes underlying physical change. Furthermore, closer examination of the received wisdom on the English inter-war city suggests that undue reliance has often been placed on proposals described in planning documents and what in some cases amounts to little more than anecdote, no doubt in part because the compilation of information about the physical form of urban development is such a time-consuming task.

The lack of serious attention to the physical make-up of England's inter-war suburbs is remarkable when the significance of these suburbs, and English suburbs more generally, is considered within the pattern of twentieth-century suburbanization on a world scale. The huge suburbs created in England between the two world wars made that country, according to Fishman,⁴ the archetypal country of suburbs. Relative to city size, the impress of inter-war suburbs on city configuration, in terms of streets, building forms and land utilization, is probably greater in England than in any other country. Yet, paradoxically, the familiar landscapes that these suburbs provide have been the subject of practically no systematic investigation. Without it the conceptual development of urban morphology will be deficient in one of its more important test beds.

The aim of this paper is to consider, in a number of English inter-war suburbs, the extent to which some general notions that have enjoyed currency for at least several decades are actually borne out by the facts. Attention is confined to suburbs created by private enterprise, which accounted for roughly three-quarters of all suburbs created in England in the inter-war period.⁵ Two interrelated themes are examined.

The first concerns the nature and extent of the change that followed the First World War. Was there indeed an abrupt change from the creation of the physical forms, such as street systems, architectural styles and dwelling types, that are regarded as typically Edwardian to those commonly referred to as 'inter-war'? Or is it more realistic to regard 1918

² S. Pollard, *The Development of the British Economy, 1914–1967* (2nd edn, London, 1969), 144; D. Massey and A. Catalano, *Capital and Land: Landownership by Capital in Great Britain* (London, 1978), 69–70.

³ M.R.G. Conzen, *Alnwick, Northumberland: A Study in Town-Plan Analysis* (London, 1960), 8.

⁴ R.L. Fishman, 'American suburbs/English suburbs: a transatlantic comparison', *Journal of Urban History*, 13 (1987), 249.

⁵ Bowley, *Housing and the State*, 271.

as just a conventional marker in a period of transition, and if so what were the physical manifestations and duration of that transition?

The second theme concerns the significance of the Tudor Walters Report of 1918. To what extent did the physical form of inter-war suburbs correspond to the template provided by that report? Although the Tudor Walters Report is widely regarded among planning historians as a landmark in the history of British town planning,⁶ its influence on the residential areas created by private enterprise in the inter-war period remains largely unexplored. So much more attention has been given to the Report, at least to certain parts of it, than to the investigation of what was created on the ground in its aftermath that there is a danger of confusing the recommendations of the Report with the reality of what was actually built. The distinction between Report and reality needs to be clarified.

Examination of these themes calls for considerable basic information about inter-war suburbs and how they were created. Its acquisition entails field surveys, systematic abstraction from building records held by local authorities, searches through the archives of firms and organizations involved in suburban development, and, where practicable, interviews with individuals who created or occupied inter-war suburbs.

In this paper, attention is focused mainly on two cities that a review of existing data established had undergone the most suburbanization in the inter-war period.⁷ These are London, which had by far the most inter-war suburban development, and Birmingham. In the case of London, mapping of inter-war housing development in much of south-east England had been undertaken at the end of the Second World War,⁸ whereas in the case of Birmingham there existed housebuilding data but no map comparable to that of London. Four principal investigations of inter-war development were undertaken.

First, that in Birmingham was mapped at the scale of 1:10,000, principally using Ordnance Survey 'Six Inch' maps surveyed just before the First World War and just before the Second World War and aerial photographic surveys of 1948/50. Second, for eight study areas of 9–20 ha, four in Birmingham (Gravelly Hill, Hall Green, King's Heath and Handsworth Wood) and four in London (East Barnet, Edgware, Selsdon and Woodcote), building applications for 1919–39 were inspected, and the nature and location of development and, where available, the builders and architects were recorded. The study areas (Figure 1) were chosen so that, as far as the information then available permitted, between them they represented the main physical types of inter-war suburb, in terms of layouts and building types, created by private

⁶ G.E. Cherry, *Town Planning in Britain since 1900* (Oxford, 1996), 73–4.

⁷ J.L. Marshall, 'The pattern of housebuilding in the inter-war period in England and Wales', *Scottish Journal of Political Economy*, 15 (1968–69), 199, Appendix A.

⁸ P. Abercrombie, *Greater London Plan 1944* (London, 1945), Map 2.

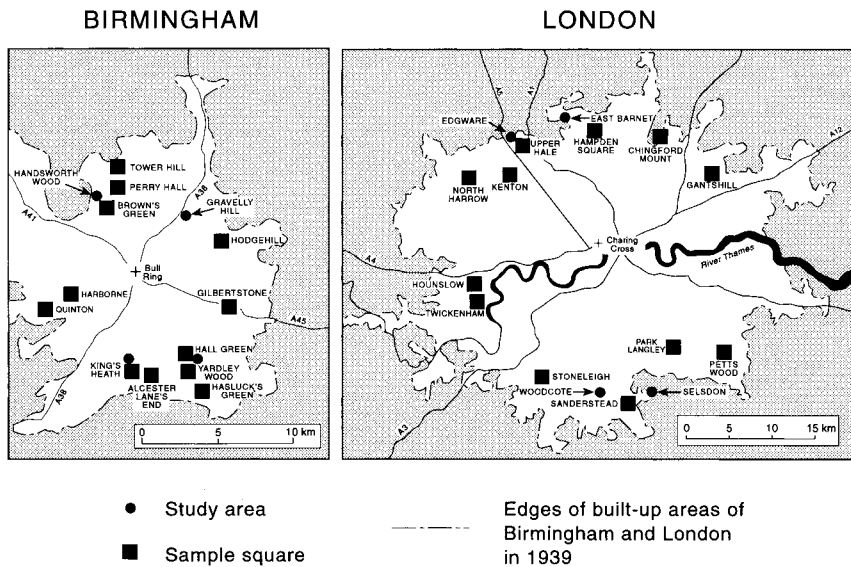


Figure 1: The study areas and the sample squares

enterprise in each city. Third, field surveys were undertaken of a sample of 24 squares, each of 25 ha, twelve randomly selected squares in inter-war London and twelve randomly selected squares in inter-war Birmingham (Figure 1). Fourth, for eight roads or parts of roads, one in each of two of the Birmingham study areas (Shepherds Green Road in Gravelly Hill and Tenbury Road in King's Heath), one in each of two of the London study areas (Orchard Drive in Edgware and Elm Park Gardens in Selsdon), and four in other urban areas known to contain well-documented, inter-war roads (Fourth Avenue in Chelmsford, Grand Avenue in Lowestoft, Southlands in Newcastle upon Tyne and Balmore Drive in Reading) very detailed chronologies were compiled of their pre-development, development and change. In addition to employing the sources already referred to, these studies of individual roads drew on interviews with builders and residents, and utilized, where available, rate books, electoral rolls, deeds and a variety of sources that were sometimes specific to particular roads or houses.

The work was undertaken principally by five researchers working full-time for varying spans of time between February 1992 and September 1997.⁹ Five other researchers made small contributions over comparatively short periods working part-time.¹⁰ The time-consuming nature of such work goes a long way towards explaining the previous reliance on secondary sources, in particular planning documents, which are infor-

⁹ In addition to the authors, they were Malcolm Horne, Oliver Sanders and Nick Morton.

¹⁰ Karl Kropf, Richard Mabbitt, Amanda Walsh, Caroline Whitehand and Susan Whitehand.

mative about recommendations and proposals but remain largely silent about actual creations in the landscape. Examination of what took shape on the ground, as distinct from what was proposed or what was thought to have been created, casts light on an important aspect of England's urban development.

The beginning of a morphological period

That the urban forms characteristic of the inter-war period were in most cases different from those that characterized the Edwardian period is in no doubt. For example, curved, rather than angled, street corners, became common, open green spaces, roundabouts and islands occurred widely, and houses generally stood further back in their plots to give larger front gardens; in short the road, drive and avenue superseded the street. Areas developed before 1918 having such features had nearly all either been developed at low dwelling densities (as at Woodcote, East Barnet and Handsworth Wood) or, in a few cases, had been self-consciously developed as 'garden suburbs' – Bournville, in Birmingham, is a well-known example.

The precise timing of this practically universal adoption of garden-suburb layouts is less clear. It has to some extent been masked by the fact that residential development slowly declined to very low levels over several years before and during the First World War and, particularly in the case of that by private enterprise, recovered only very slowly after it. The few areas in which development was about to occur, or was in its early stages when the First World War began, are thus of particular interest. A striking case is in the Gravelly Hill area, where a rectilinear street plan was prepared before the First World War, but not implemented on the ground. The actual development of three roads after the war was to an entirely different, curvaceous plan (Figure 2). However, it did not take place until 1928.

The nearest there is, within the study areas, to the juxtaposition of development just before 1918 with that just after is in the King's Heath area. There nineteen building applications for new dwellings were submitted in 1914–16, none in 1917–19, four in 1920–22, and then twenty-six in 1923, as the post-war recovery in private housebuilding began. The first cases of houses being set back relative to pre-war building lines were in 1923. An example of such setting back – giving a front garden depth of about 7.5 m (about 25 feet) for the houses applied for in 1923–25, compared with about 4.5 m (about 15 feet) for the houses applied for in 1914 – is shown in Figure 3. However, in a road containing similar-sized plots and houses in the East Barnet area, houses for which building applications were submitted in 1904 and 1907 already had front gardens with depths of about 8.5 m (about 28 feet), practically the same depths as those of houses in the same road for which applications were

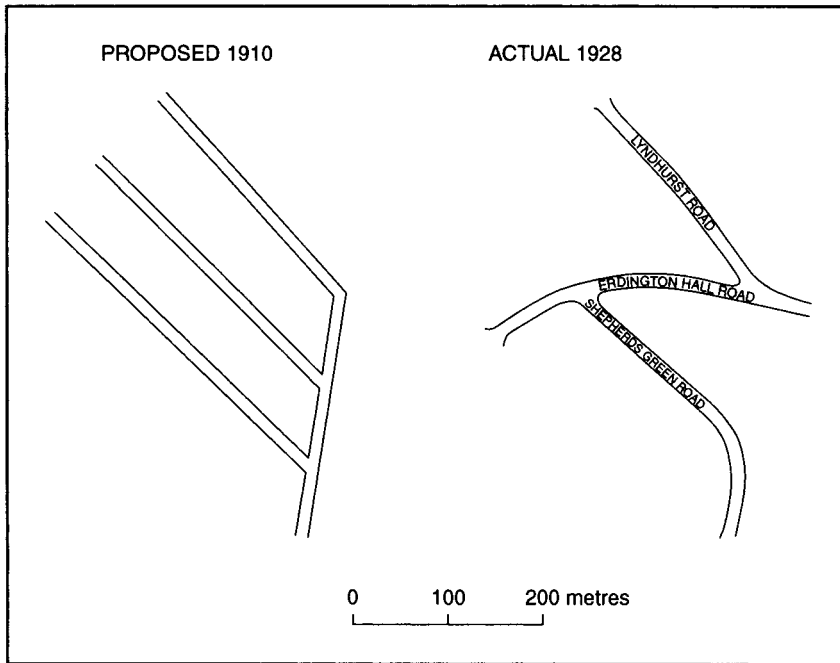


Figure 2: Proposed and actual street systems in part of the Gravelly Hill area, Birmingham

Sources: Lloyd George Finance (1909–10) Act, 1910, Ms plan (Birmingham Central Library); Ordnance Survey 1:2500 plan, revised 1962/63; and local authority building records (Birmingham Central Library)

submitted in 1925–29. After 1923, a front garden depth of much under 7 m (about 23 feet) was unusual not only in both these areas but in nearly all the other areas examined. The only major exception was the High Heaton area, in which Southlands was located. Here a front garden depth of only about 5 m (about 16 feet) predominated. Less systematic observation suggests that front gardens as shallow as this were widespread in inter-war Newcastle upon Tyne and its vicinity.

Five of the study areas (East Barnet, Gravelly Hill, Handsworth Wood, King's Heath and Woodcote) had sufficient development in the early inter-war years for it to be feasible to explore changes in their architectural styles following the First World War. In general, houses built in the first five to seven years after the war differed little in their styles from those built in the vicinity just before, or occasionally during, the war. Stylistic variety remained characteristic, particularly among the large detached houses built in the Woodcote and Handsworth Wood areas. Figure 4 shows, for two study areas, houses from the decade or so before 1918 (Figure 4A), in comparison with first, some of the earliest houses to

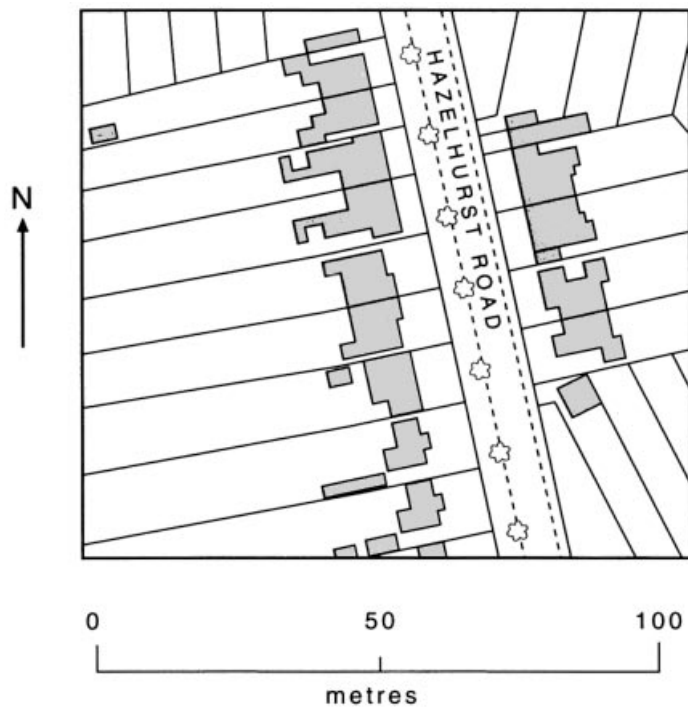


Figure 3: Part of Hazelhurst Road, King's Heath, Birmingham, showing inter-war houses to south (building applications submitted 1923–25) set back relative to houses built before the First World War to north and east (building applications submitted 1914)
Sources: Ordnance Survey plan at the scale of 1:2500, revised 1955, and local authority building applications (Birmingham Central Library)

be built in an inter-war style (Figure 4B), second, some of the last houses to be built in essentially Edwardian styles (Figure 4C), and third, houses approved in 1926–27 (Figure 4D). The last of these show a number of features that, in combination, were to give the inter-war house some of its individuality, such as hipped roofs, two-storey bays, lower average storey heights than those in comparable Edwardian houses, and, in the case of the semi-detached pairs, the separation of the main rooms of the two houses, rather than their entrance halls, by the party wall. In the East Barnet area, the application for the first houses in a new style was submitted within a year of the submission of the application for the last houses in the old style. The first pair of semi-detached houses in the new style was built adjacent to one of the last pairs in the old style, by the same local builder, F.A. Leake (Figure 4B (right), 4C (right)). In the King's Heath area, there was a period of some three years during the mid-1920s when both old and new styles were employed.



Figure 4: Architectural styles in the King's Heath area, Birmingham (left) and the East Barnet area, London (right), for which building applications were submitted at different times before, during and after the First World War. (A) Edwardian styles (King's Heath application submitted 1915, photograph 1998; East Barnet application submitted 1907, photograph 1997). (B) First houses in each area to employ an inter-war style (King's Heath application submitted 1923 – ground-floor facades later altered (photograph 1998); East Barnet application submitted 1926 – 'wings' to left and right added later (photograph 1997)). (C) Late use of Edwardian styles (King's Heath application submitted 1926, photograph 1998; East Barnet application submitted 1925, photograph 1997). (D) Characteristic inter-war styles (King's Heath applications submitted 1926–27, photograph 1998; East Barnet application submitted 1926, photograph 1997)

In the High Heaton area, which was almost entirely developed in the second half of the 1920s, virtually all the houses had 'universal' plans,¹¹ perhaps the feature that above all others characterized the inter-war, semi-detached house (Figure 5A). Although most were roofed in slate, which had been the predominant roofing material employed in this part of the country, and most others, for over a century before the First World War, in most respects, internally and externally, they fit well the inter-war stereotype. They contrast markedly with Edwardian back-wing terraced houses (Figure 5B). However, examination of the building application for the first pair of houses to be built in Southlands, the west-east axis of the area, reveals an architectural style and plan that is clearly a hybrid of the late-Victorian/Edwardian, back-wing terraced house and inter-war, semi-detached house (Figure 6). In this plan, approved in December 1924, the positioning of the scullery, wash house and coals in a rear wing was reminiscent of houses built before the First World War. But the rear wings of the two houses did not share a dividing wall, which had been the normal arrangement before the war. Moreover, the houses that were represented in the approved drawings were less inter-war in appearance than those actually built. This was most evident in the fact that in the approved drawings there was, at the front, a single-storey splayed bay of almost Edwardian appearance, whereas the two-storey bay that was actually built was polygon-segment in plan, which was to become a common inter-war form. Apart from three detached houses, all the houses built thereafter in Southlands conformed to the universal plan.

On the evidence presented so far, it might seem that there was some basis for regarding the transition from Edwardian to inter-war period characteristics as having occurred predominantly in the middle years of the 1920s. However, it would be surprising if there had not been variations, particularly geographical variations, in the timing of changes, especially as studies of commercial buildings have suggested that there were time-lags between the adoption of new architectural styles in the London area and in parts of the country distant from London.¹² In this respect the development of Grand Avenue, Lowestoft, is of particular interest.

The main phase of building in this road did not begin until the early 1930s, after a period of some twenty years during which no houses had been built. A remarkable feature of this renewal of building activity was the conservative plans and architectural styles that were employed. The first three houses to be built (approved in 1931) were practically

¹¹ G. Allen, 'Building to sell', in E. Betham (ed.), *House Building 1934–1936* (London, 1934), 138.

¹² J.W.R. Whitehand, 'The study of variations in the building fabric of town centres: procedural problems and preliminary findings in southern Scotland', *Transactions of the Institute of British Geographers*, n.s. 4 (1979), 563.

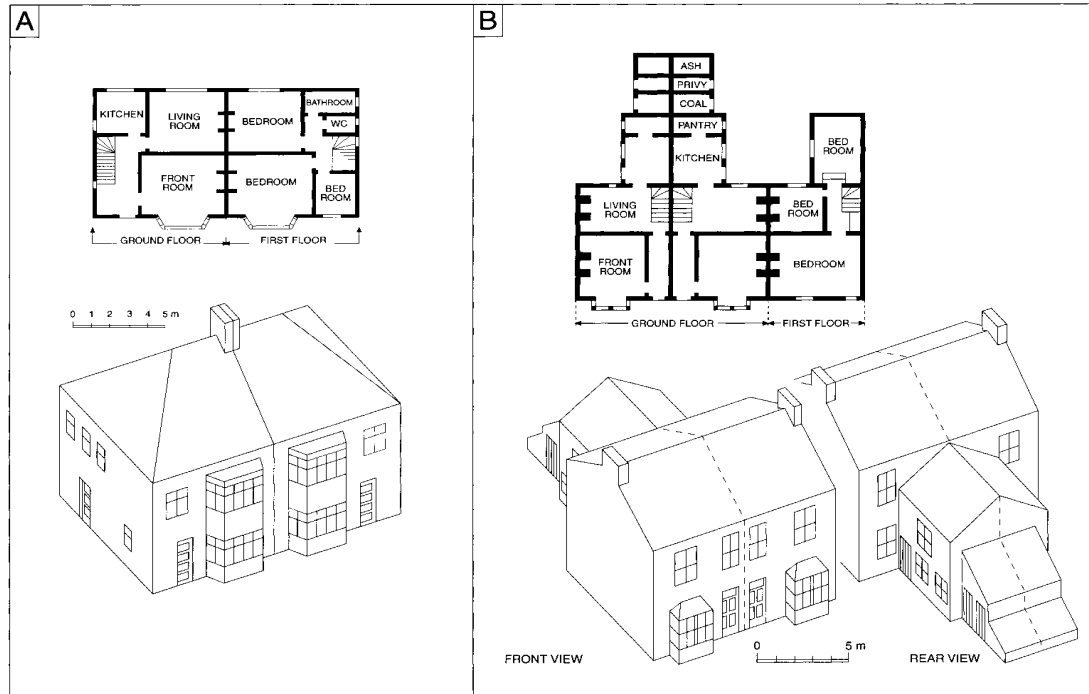


Figure 5: (A) Inter-war, semi-detached houses with 'universal' plan.

(B) Edwardian back-wing terraced houses

Source: adapted from M.R.G. Conzen, 'The morphology of towns in Britain during the industrial era', in J.W.R. Whitehand (ed.), *The Urban Landscape: Historical Development and Management* (London, 1981), Figs 8 and 12

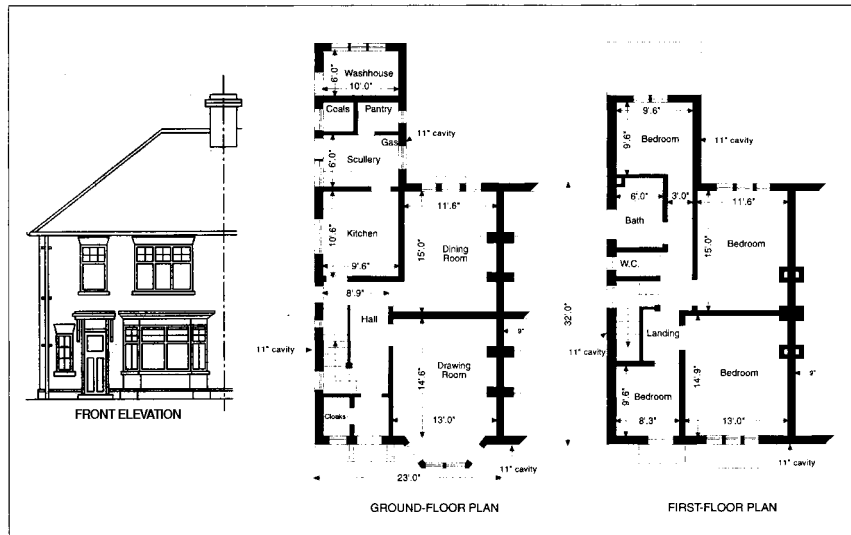


Figure 6: Front elevation and plan of No. 31 Southlands, High Heaton, Newcastle upon Tyne
 Source: Building application, submitted 27 Nov. 1924 (Tyne and Wear Archives Service, T186/A2469)

indistinguishable in their basic form from structures created widely in Great Britain in the late Victorian and Edwardian periods. A semi-detached pair, designed by local architects and erected by a local builder, not only had sash windows and splayed bays (Figure 7A) but the floor-plans had the hallmarks of small- and medium-sized houses produced *en masse* twenty to thirty years earlier, including front halls and main entrances centrally located within the pair and the back wings, containing the kitchens and other utility space, separated from one another by a party wall (this was a lateral inversion of the plan proposed to the local authority, shown in Figure 8). Similarly, the small detached house close by (Figure 7B), erected by a different local builder, would not have been out of place in an Edwardian suburb. In this case the builder provided estimates for three different combinations of wall and roof materials and the owner chose the most expensive and conservative combination, consisting of local red facing bricks and a roof of Portmadoc blue slates.¹³ On an adjacent pair of plots the same builder built a pair of semi-detached houses, approved in 1932, again of essentially Victorian appearance. But, with this exception, inter-war styles had taken over by the end of 1931, most of them employed by the same

¹³ Alternative estimates by F. Rushmere for a proposed house in Grand Avenue and an agreement between Mrs G. Rushmore and F. Rushmere for the erection of a dwelling house in Grand Avenue. These documents are in the possession of Mr and Mrs W. Wightman, 32 Grand Avenue, Pakefield, Lowestoft.

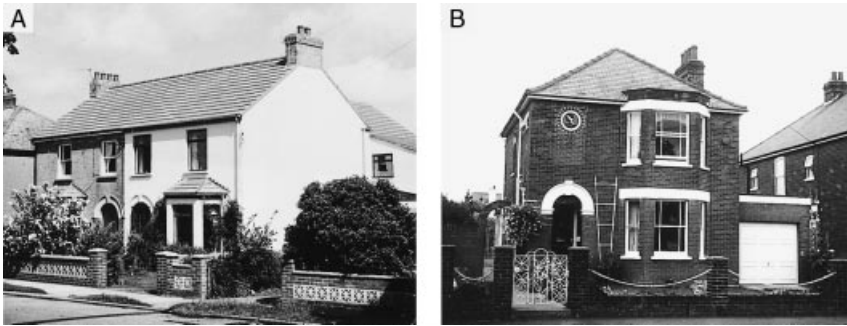


Figure 7: Front views of houses built in Edwardian styles in 1931 in Grand Avenue, Lowestoft (dated from local authority building records; photographs 1993 and 1995)

builder who had constructed the Edwardian-style, semi-detached pair earlier that year.

Clearly, to the casual observer the beginning of the inter-war morphological period may seem to have occurred abruptly in 1918, but the reality is that the relatively few houses built by private enterprise in the half-decade or so after the First World War differed little from those created well before the war and in exceptional cases the change to forms typical of the inter-war period did not take place until the beginning of the 1930s. This time-lag in the adoption of architectural styles regarded as typically inter-war accords with findings for town centres.¹⁴

The Tudor Walters Report and reality

The nature and timing of these developments have been influenced by many factors. In the absence of previous detailed research on the physical reality of inter-war suburbs, it is hardly surprising that some of the more striking prescriptions of the Tudor Walters Report should have maintained such a prominent place in discussions of inter-war residential development. Some one hundred thousand words in length, the Report was primarily concerned with the provision of new working-class housing, but contained much that was pertinent to housing more generally. It set out an official view of the form of future housing development that was unprecedented in its detail and it provided the basis for the Government's *Housing Manual*.¹⁵ However, although in some respects there was substantial accord between the Report's recom-

¹⁴ J.W.R. Whitehand, *Rebuilding Town Centres: Developers, Architects and Styles*, University of Birmingham Department of Geography Occasional Publication 19 (Birmingham, 1984), 10–17.

¹⁵ Local Government Board, *Manual on the Preparation of State-Aided Housing Schemes* (London, 1919).

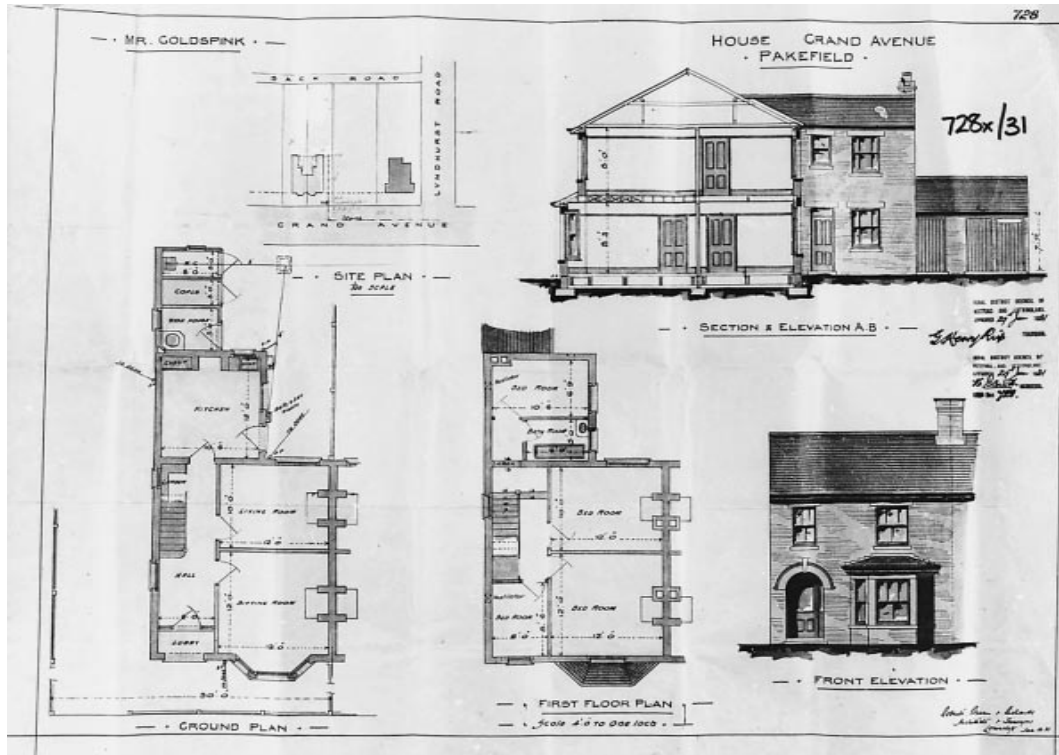


Figure 8: Extract (at a much reduced scale) from a building application for the construction of 19 Grand Avenue, Lowestoft, approved Jan. 1931
 Source: Building records, Department of Planning and Building Control, Waveney District Council

mentations and what was created in the landscape, in others there was practically none. The patterns of similarity and difference between prescription and reality in the case of private enterprise housing become evident from an examination of the sample squares.

In its introduction the Report looked forward to the creation of 'spacious suburbs with convenient and attractive houses designed by competent architects'.¹⁶ It was above all a recipe for garden suburbs. The recommended maximum dwelling density under normal circumstances was 12 per acre (about 30 per hectare),¹⁷ well under one-half the density prevalent in working-class areas created in the decade before the First World War.

In reality the average gross residential density over the 24 sample squares was a little less than 8 dwellings per acre (about 19 dwellings per hectare), well below the maximum recommended in the Tudor Walters Report. However, this average masked great variability, and in exceptional cases there were small parts of squares in which densities were nearly 50 per cent above the recommended maximum. In town-planning schemes, a great many of which were prepared in the course of the inter-war years, areas were sometimes 'zoned' at residential densities well below the maximum recommended in the Tudor Walters Report. However, the liability of local authorities to pay compensation to land-owners 'injuriously affected' by such restraints¹⁸ deterred them from setting maximum densities significantly below those that builders would have employed if unrestricted. The dominant influence on the densities chosen by builders was the nature of the house market. After the First World War this had become strongly influenced by the massive increase in the building of houses by local authorities to let to working-class households. That such houses were, in the aftermath of the Tudor Walters Report, at densities far below those of working-class houses built before the First World War, tended to set a new, lower maximum density that was acceptable to purchasers and tenants of new houses built by private enterprise. The fact that the average density of private enterprise houses built in the inter-war period was not only lower than that of those built in the Edwardian period but also well below the maximum recommended by the Tudor Walters Report needs to be seen in this context.

Considerable attention was given in the Report to road layouts, but whether recommendations were followed in practice depended on local

¹⁶ Local Government Boards for England and Wales and Scotland, *Report of the Committee Appointed by the President of the Local Government Board and the Secretary for Scotland to Consider Questions of Building Construction in Connection with the Provision of Dwellings for the Working Classes in England and Wales, and Scotland and Report upon Methods of Securing Economy and Despatch in the Provision of Such Dwellings* (London, 1918), 8.

¹⁷ *Ibid.* 13.

¹⁸ G.E. Cherry, *Cities and Plans: The Shaping of Urban Britain in the Nineteenth and Twentieth Centuries* (London, 1988), 91.

circumstances. For example, it was recommended that the 'universal' house plan be oriented so that the front faced between west and north-west.¹⁹ But, despite the major implications this had for the orientation of streets, in practice those orientations were more often related to the economic use of available land. The fact that the majority of street patterns in the sample squares in both cities had distinct 'grains' was influenced by the orientation of one or more major existing routeways within or in the vicinity of the squares. In Birmingham, these routeways were, with the exception of one canal (in the Perry Hall square) and one railway line (on the south-west edge of the Yardley Wood square), entirely roads. But in five of the London squares, the orientation of railway lines contributed in a major way to the geometry of the spaces within which developers laid out roads, often limiting the road layouts that could be used, if all available land were to be put to effective use. Such considerations rendered impracticable the Report's recommendation.

A further recommendation concerning roads was that, unless traffic was a major consideration (a rare condition in suburban areas even in the 1930s), they should meet at right angles, thereby minimizing loss of potential building frontage.²⁰ In fact, more than four-fifths of junctions were at right angles in London, compared with only three-fifths in Birmingham. For the same reason it was argued that open spaces such as playgrounds and allotment gardens should mainly occupy backland,²¹ but open spaces were absent in nearly half of the squares and where they were present the recommendation that they occupy backland sites was far from universally followed.

A diagram was used in the Report to demonstrate the saving in costs that could be made by constructing culs-de-sac in place of through roads (Figure 9), the former requiring less road surface and therefore entailing less road-making cost per house.²² In practice, the cul-de-sac occurred almost twice as frequently in London as in Birmingham.²³

Access for vehicles to the rear of back gardens was deemed inappropriate and unduly costly in the open type of development that the report considered should be generally adopted.²⁴ With gardens of the length envisaged, it was considered that back lanes would be too far from the houses to be convenient for bringing coal or removing refuse. It was believed that in general it was less expensive and more convenient to provide access to back gardens from the road in front of the houses by side paths in the case of semi-detached houses and the end houses of

¹⁹ Local Government Boards, *Report of the Committee*, 17.

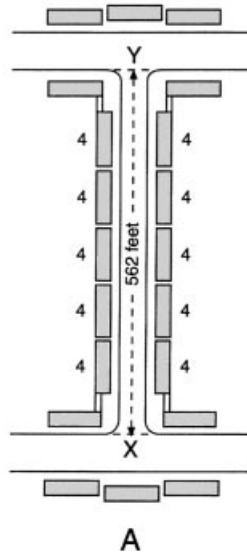
²⁰ *Ibid.*

²¹ *Ibid.*, 16.

²² *Ibid.*, 15.

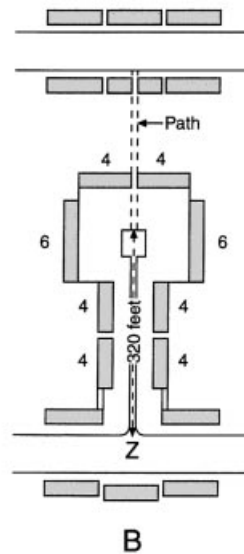
²³ J.W.R. Whitehand and C.M.H. Carr, 'England's inter-war, suburban landscapes: myth and reality', *Journal of Historical Geography*, forthcoming, Fig. 7.

²⁴ Local Government Boards, *Report of the Committee*, 17.



A

Total houses on cross road A	40
Houses lost on main roads X and Y owing to junction with cross road	8
Nett houses provided for by cross road A	32
Total length of road, 562 feet @ £6 per lin. yard.	
Total cost	£1,124 0 0
Cost per house, £1,124÷32	35 2 6



B

Total houses on road B	36
Houses lost on main road Z owing to junction with road B	4
Nett houses provided for by road B	32
Total length of road, 320 feet @ £6 per lin. yard.	
Total cost	£640 0 0
Cost per house, £640÷32	20 0 0
@ £4 per lin. yard. Total cost	426 13 4
Cost per house, £426 13s 4d÷32	13 6 8

Saving in cost of road by using Type B if of same width and construction as Type A £484 0 0
 Saving if narrower road and lighter construction owing to absence of through traffic 697 6 8

Figure 9: Diagram used in the Tudor Walters Report to demonstrate the saving in costs by constructing culs-de-sac in place of through roads
 Source: Local Government Boards for England and Wales and Scotland, *Report of the Committee*, 1918, p. 15

terraces, and by open archways through the ground-floor storey in the case of intermediate houses (Figure 10). In reality, back lanes were widespread in Birmingham, being major features in five squares. Indeed this type of rear access was the norm in the highest density squares in Birmingham.²⁵ Again, conformity with the Report's recommendations was greater in London, back lanes being a minor feature there, although there were considerable variations between squares.

With respect to the character of dwellings, it was in architectural style that departures from the features favoured by the Report were most evident. Ornament was deemed by the Report to be for the most part both out of place and costly, and back projections and dormer windows

²⁵ Whitehand and Carr, 'England's inter-war, suburban landscapes', Fig. 7.

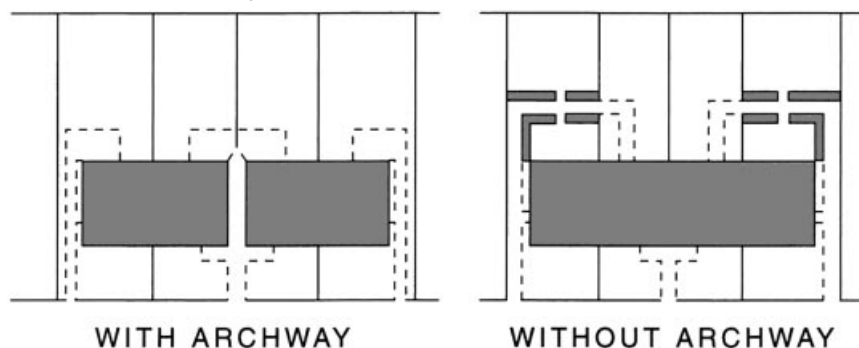


Figure 10: Illustration used in the Tudor Walters Report to show how access to back gardens from the road could be obtained with and without the use of an open archway
 Source: Local Government Boards for England and Wales and Scotland, *Report of the Committee*, 1918, p. 17

were discouraged on the ground of cost.²⁶ In practice, in virtually all houses there existed a clear view of the rear garden and enclosed backyards were avoided, as recommended.²⁷ But the large majority of houses examined possessed one or more of the following: ornamental timber, stained glass, leaded lights and bay windows. These and other adornments were regarded by developers as symbols with which to distinguish their products from the 'council houses' built by local authorities.

While conformity to the Tudor Walters Report did occur in respects additional to those already mentioned – there was, for example, practically universal compliance with the minimum distance of 70 feet (about 21 metres) between facing houses – examination of the facts has revealed that nonconformities were widespread. They were consistently more evident in Birmingham than in London. Admittedly the garden suburb, a fashion thoroughly endorsed by the Report, was adopted practically universally. But the fact that dwelling densities were on average well within the limits recommended by the Report suggests that the spacious layouts that are a hallmark of the garden suburb would have occurred anyway.

Conclusion

This study has underlined the fundamental distinction between residential developments in England before and after the First World War. The change that took place involved the adoption of a new ethos, that of the garden suburb: an ethos that underlay the Tudor Walters Report. What

²⁶ *Ibid.*, 36–7.

²⁷ *Ibid.*, 18.

had previously been largely confined to self-conscious experiments in social and physical planning, in the hands of inter-war speculative builders became a practically ubiquitous form. This striking change provided an overarching framework to the activities of the agents, especially the developers and builders, that were individually responsible for particular changes to the landscape.

The onset of at least some aspects of the profound change associated with the beginning of the inter-war morphological period was sometimes delayed for many years after the First World War. In extreme cases, generally away from the main concentrations of building activity in south-east England, what appeared to be Edwardian, or even Victorian, architectural styles were actually reproduced in the landscape as late as the early 1930s. Thus the practices and pool of knowledge upon which the building industry drew changed but, when examined locally case by case, the adoption of the new fashions has been shown to have varied considerably over time and space. Though remarkably distinct from the Edwardian period, the inter-war morphological period did not correspond as neatly to the years between the two world wars as urban morphologists have tended to assume.

The stimulus to the accelerated change that led to the distinctness of the forms that characterized the second half of the 1920s and the 1930s had a number of facets. Of those directly concerned with the building industry, the hiatus in housebuilding just before, during and immediately following the First World War inevitably meant that many of the firms that had been building in the Edwardian period had ceased to exist by the 1920s and that, when conditions more congenial to housebuilding eventually returned, new firms and organizations with less adherence to pre-war practices were formed.²⁸

In relation to the role of government, the Tudor Walters Report was in many respects a formalization of what was already occurring. It was heavily influenced by private-enterprise, garden-suburb experiments before the First World War. Furthermore, the reduction in dwelling densities that occurred after the First World War was more often than not appreciably greater than was necessary to comply with the Report's recommendations. This needs to be seen in relation to the huge increase in, and the low density of, local authority housebuilding. Private enterprise builders were keenly aware of the need to maintain the superior image of their products, and one aspect of this was to build at

²⁸ On the tendency for small firms to leave the building industry in slumps, see H.W. Richardson and D.H. Aldcroft, *Building in the British Economy Between the Wars* (London, 1968), 34. For a discussion of the domination of inter-war suburban housebuilding in London by firms created after the First World War, see J.D. Bundock, 'Speculative housebuilding and some aspects of the activities of the suburban housebuilder within the Greater London Outer Suburban Area 1919–39' (unpublished University of Kent M.A. thesis, 1974), 361.

densities that were even lower than those on the local authority housing estates.

In some respects there were clear departures from the Tudor Walters Report in practice. Recommendations concerning the orientation of houses were in reality subordinated to the creation of layouts that provided economic use of available sites. With respect to a wide range of recommendations, London was more conforming than Birmingham. Other differences between these cities were unrelated to the Report.

This paper leaves for future investigation a number of related matters concerning both the inter-war period specifically and morphological periods generally. The factors and forces responsible for the beginning of a new morphological period after the First World War remain only partially known. It is evident that local agents – architects, builders, property owners and those who invested in the built environment – were collectively a major part of the process by which new types of forms were implemented: it was they who selected certain forms rather than others from the range of possibilities. However, their role in the creation of new possibilities is not clear. The process whereby one morphological period follows another must be linked in some way to the innumerable ‘experiments’, both on paper and on the ground, made by those who contribute to the creation of the built forms within a particular morphological period. In creating the built environments in which future innovators will work, architects and builders, in particular, influence the context in which new ideas arise and thereby the raw material from which their successors will select and shape the features that are to characterize subsequent periods.²⁹

The main issues that have been considered here relate to the middle and later stages of an innovation adoption process. The actual innovation that gave the inter-war period some of its main characteristics, the garden suburb, took place much earlier but historico-geographical research on it remains fragmentary. Although the evidence needs to be assembled and systematically assessed, it seems likely that it is a general characteristic of morphological periods that their gestations are lengthy. Similarly, it may well frequently be the case that government intervention is a recognition of an irresistible tide of change rather than a causal factor.

²⁹ Cf. K.S. Kropf, ‘Facing up to evolution’, *Urban Morphology*, 2 (1998), 46.