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Author(s): Peter J. LARKHAM

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Peter J. LARKHAM

Contrasts in urban redevelopment: Catastrophic and gradualistic approaches

Introduction

The aim of this paper is to set consideration of the processes and forms of urban redevelopment in a wider historical and morphological context, rather than to present another detailed case study of urban redevelopment, of which many now exist. In particular, an answer is sought to the question of whether or not any constraints operate on the redevelopment process, or whether it may proceed by antecedent conditions of physical form.

First, what is the background to urban renewal? The simple answer is that individual buildings, urban infrastructures, and therefore entire

urban quarters, age and decay. Bourne highlighted the idea that it is the age of the building stock, coupled with changes in function and economic influence through time, that lead to change in the urban landscape. "The stock of buildings in a city represents an aging and declining asset.

Thus, not only is the present structure increasingly unsuited for the demands placed upon it by the market, it is becoming physically less suited through age and abuse, as reflected in declining values and rates of investment return (1). Most building fabric change is brought about by obsolescence, an indirect function of ageing. Obsolescence is

not a simple condition, and is caused by many factors. Five types of obsolescence have been identified that may affect any building or area. These include structural, functional and economic - the most important categories - together with rental and community obsolescence (2). Considering structural obsolescence, it is important to recognise that many modern buildings are usually designed for short lifespans: houses for some 60 years, with shops and offices having slightly shorter designed lives. In Western economies, this is for financial, rather than structural, reasons. All buildings require constant investment to ensure adequate maintenance of a sound structure and to enable to building to be fully used. As building age, their materials decay. If not repaired, this continued deterioration will bring the structure below the performance levels acceptable by even marginal users, and the structure will continue to decline until abandoned and demolished for renewal. Alternatively, when performance begins to decline below tolerable levels, the property will be demolished and the site immediately redeveloped (Figure 1). This concept of ageing and obsolescence underlies all urban renewal.

In theory, the answer is that all physical change in urban areas should be constrained. Many countries have legal restrictions that, at the simplest, zone acceptable land uses, and at the most complex, determine acceptable aesthetic criteria for new schemes. Such legal restrictions have a lengthy history. In Britain, there is the precedent of the development restrictions of the 1670s following the Great Fire of London: by no means the earliest restrictions, but the best codified. There were considerable restrictions on the speculative development of planned squares in the mayor Georgian urban estates; a code of Building Regulations was introduced during the Victorian period, and the 1947 Town and Country Planning Act further constraints virtually all development in Britain today. A more concrete theory, based on meticulous observations in numerous towns, was formulated by M.R.G. Conzen a German-born geographer

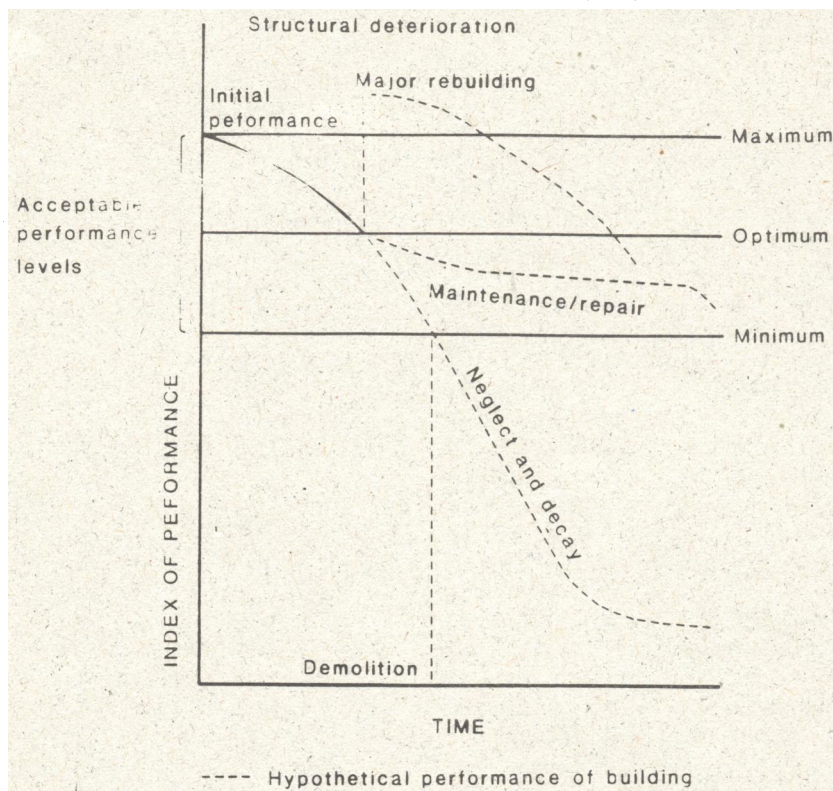


Figure 1: Structural obsolescence (adapted from P.Cowan: *Studies in the growth, change and ageing of buildings*, *Transactions of the Bartlett Society*, 1 (1963)). *Renewal and theory*

who also trained as a town planner. He divided the townscape, for analytical purposes, into town plan, building forms and land use. His subdivision of the town plan into streets and their arrangement into a street system, plots and their aggregation into street blocks, and buildings (or more precisely their blocks-plans) has become a standard way of reducing the complexity of reality to more manageable proportions.

The street system, plot pattern and building arrangement can be seen as a hierarchy with, for example, street systems delineating and containing plot patterns. The town plan contains, and forms a morphological 'frame' for, land and building use; which in turn determine the building fabric. The town plan is very conservative, resisting major change under most circumstances; building fabric is slightly less conservative. Thus, in their rather slow response to changing functional requirements, Conzen argues that these two features tend to reflect the patterns of past land ownership and capital investment. They therefore present a greater range and quantity of "traditional" (i.e.-pre- c.1850) forms, and contribute substantially to the historicity of townscape. Land use responds more easily to changing functional impulses, and its influence on the historical townscape is, therefore, more negative (3). Although some land use requirements can be accommodated in adapted older buildings, changing land requirements often involve the considerable replacement of traditional buildings in the central business district (CBD) by more modern buildings and, during the twentieth century, provision of new vehicular accesses to, and car-parks in, the town centre.

This concept of a morphological frame, composed primarily of streets and plot boundaries, being resistant to change and thus constraining the scale and form of urban redevelopment, must be examined closely. One major assumption of this concept stands out. This is the assumption of "gradualism": the idea that change proceeds slowly, and at a

uniform pace. This is, perhaps, understandable given that much of Conzen's minutely-detailed fieldwork was undertaken during the 1940s and 1950s. The towns that he studied were small market towns, often of planned mediaeval origin, often having undergone relatively little change in the Victorian period, and exemplified by Ludlow. Only his work in the city of Newcastle upon Tyne departed from these small-town concerns, and virtually all fieldwork was carried out before the lifting of wartime restrictions on building materials and the consequent post-war building boom. The concepts formulated under these conditions have come to dominate much of British urban morphology (4).

The nature and amount of change

Three decades of intensive urban renewal have passed in Britain since Conzen's first studies, and a variety of other towns have received detailed examination. Sufficient information is available to allow the concept of the morphological frame, and its role in guiding redevelopment through several centuries, to be reassessed.

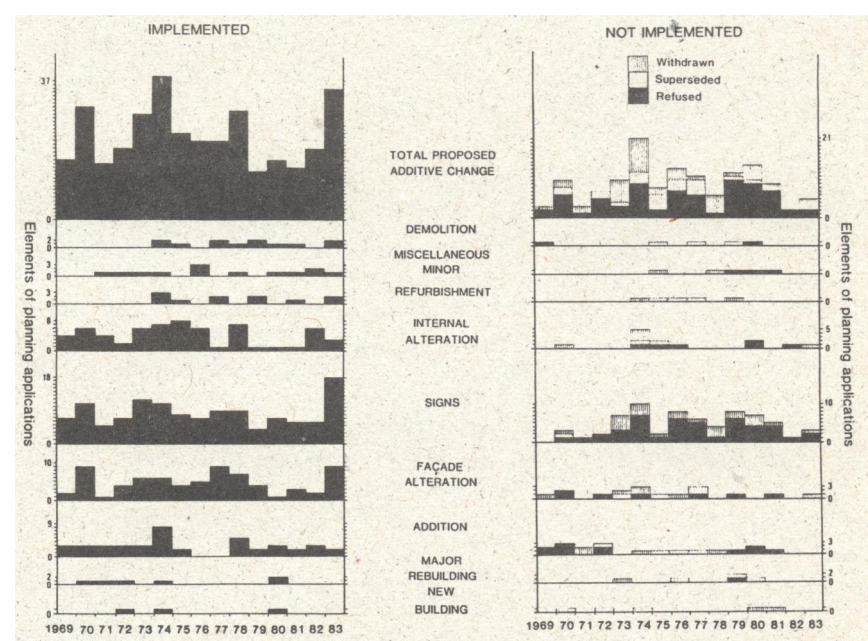


Figure 2: Amount of change in main street of Solihull, UK (from P.J. Larkham, *Changing conservation areas in the English Midlands, op. cit.*)



First, how gradual is urban redevelopment? In one case, during a timespan of only sixteen years, a large number of individual changes can be proposed and carried out, for example in the main street of Solihull, a small market town (Figure 2).

Many such changes are individually small and unexceptionable, but nevertheless they represent an insidious and inevitable accumulation of change that alters the character and appearance of any town. Yet, without exception, all of the proposed changes in this example are constrained by the morphological frame. Most changes affect only one plot - in the Solihull case these are altered and truncated, but are nevertheless still recognisably mediaeval burgages. Only one development proposed an amalgamation of plots, and part of this entailed retention of the front facades of the major buildings. This example, in a small country town similar to Ludlow, shows the validity of the concept of the morphological frame under normal circumstances, when redevelopment proposals are piecemeal, put forward by a wide variety of individual developers (5). This is the expected pattern of change in the English town, and it can be extrapolated back to the early twentieth century at least, and usually into the mid-nineteenth century when detailed building record begin. This relatively slow rate of change explains the survival into the modern townscape of major elements dating from the mediaeval period or earlier.

Redevelopment is not, however, always piecemeal or gradualist. The impetus for redevelopment is instead often catastrophic, and may be facilitated by a veritable catastrophe, such as the Great Fire of London in 1666. In this case, the complete destruction of the city centre provided the opportunity to build anew, solving two major problems of the old city. These were first the squalid living conditions in the old, overhanging, timber-framed houses, having inadequate drainage and water supply; and secondly the inadequacy of the street network, in both

width (because of mediaeval and later encroachments) and surface, to cope with the increasing amount of traffic. Ideas were in hand before the Fire to assist in solving these problems, but any measures would have taken many years to carry out, and would have been prohibitively expensive during a period of war. The Fire offered the opportunity for complete replanning. Christopher Wren produced probably the best-known plan. The scale of his proposed changes is immediately apparent: the plan is constrained only by the extent of the area of destruction, the location of the waterfront and the need for the new street network to meet existing streets. Activity among the would-be planners was great, with several competing comprehensive renewal schemes proposed (6).

Yet there was much resistance to this scale of change. Property owners did resist changes to their property boundaries, as delineated by a post-Fire survey; many simply wished to build anew. None of the many utopian schemes were adopted. They were not, as had been thought, killed by "the obstinate averseness of a great part of the citizens to alter their old properties, and to recede from building their houses again on their old foundations..." (7); this scale of scheme was simply seen as impractical. Instead, development followed very similar street lines to those existing prior to the Fire, although some improvements were made: churches were rebuilt in situ, and intangible boundaries such as parishes remained. The success of the post-Fire period was in delimiting the sizes of houses, and insisting on standards of materials, construction, lighting and space. By these means, overhanging timbered houses were replaced by uniform brick frontages. This is an example of the destruction of a morphological frame, but its virtual reconstruction along old lines. Urban fires, some large-scale and catastrophic, were common prior to the nineteenth century, and these frequency and scale of devastation produced a variety of consequences for urban form (8).

The reconstruction of Paris in the nineteenth century, under Napoleon III and Baron Haussmann, is a contrasting example of the success of the catastrophic change. Again, as in London, some efforts were made to ameliorate conditions before the period of catastrophic change. A Royal Edict of 1783, for example, established minimum widths for new streets and heights for new buildings. Such piecemeal efforts were unsuccessful. Under the Imperial plan, grandiose new boulevards, parks and gardens were carved through the pre-existing urban structure, fronted by new buildings, both civic and private, in a uniform monumental Second Empire style (9). The morphological frame of streets and plots was largely ignored. Zola evokes the image of Haussmann's "wounding slashes through the veins of a living city, wounds that spurt gold and give sustenance to a hundred thousand navvies and bricklayers" (10). This scale of change was made possible not by disaster, but by a style of government sufficiently powerful and autocratic both to conceive and carry out work on such a scale; and finding in Haussmann one able to do so through the slipperiest of financial means.

Examples of nineteenth century renewal in Britain

In Britain, the mid- to late-nineteenth century was a period of increasing concern for public health, focused on the squalid labourers' slums remaining in what were now inner urban areas, following the rapid outward expansion of the Industrial Revolution. The Artisans Dwellings Act of 1855, an extension to earlier legislation, provided the impetus for many large-scale changes. It added to slum clearance provisions the power for local authorities to purchase, property compulsorily, to pay compensation to landowners, and to widen a clearance area to enable co-ordinated rebuilding schemes to take place. However, since the Act was only permissive, rather than compelling action, the incentive to demolish and leave a site vacant was strong. "The

chief effect of the Act was to channel substantial compensation payments into the pockets of slum landlords, towards whom all such legislation seems to have been heavily biased" (11). Substantial urban redevelopments did, however, occur under the provision of this Act.

In Wolverhampton, for example, numerous old timber-framed slum dwellings existed in the town centre. The social and environmental conditions were extremely poor. The 1877 scheme proposed the clearance and renewal of 846 properties, which included 632 occupied houses of which 408 were old and in poor condition, while 54 were ruined and unfit for habitation. Although sizeable areas of the slums were cleared, the existing narrow and winding streets were substantially straightened and widened, and new buildings constructed to front them, the housing situation was made considerable worse as many more houses were demolished than were rebuilt (12). Figures 3 and 4 show Lichfield Street clearance area before and after redevelopment: the street widening and straightening, new plot patterns, and the creation of entirely new streets are clearly visible. In morphological terms, the pre-existing plot pattern was entirely destroyed and the street system was considerably altered, although the basic line of the Mediaeval street remained; now a major route towards the railway station.

In Birmingham, Joseph Chamberlain used to provisions of the Act to schedule a redevelopment area of 93 acres in the vicinity of Lichfield Street: an area "of narrow streets, houses without back doors or windows, confined yards, the impossibility, in many instances, of providing sufficient privy accommodation; houses and shopping so dilapidated as to be in imminent danger of falling, and incapable of proper repair" (13).

The cost to the City Council of the land purchase totalled nearly £2.4 million. A new street was cut through the existing framework of streets and plots, lined with grandiose commercial and civic buildings

in high Victorian style. The result of this major scheme was Corporation Street, "a great street, as broad as a Parisian boulevard from New Street to the Aston Road" (14), not artisan housing, as the 1875 Act intended. This is common to the schemes in both Birmingham and Wolverhampton.

Urban change during the twentieth century

The gradualist process of piecemeal change continued in British towns during the early twentieth century. Development was constrained both by the First World War and the Depression of the 1920s and early 1930s. Few major schemes were begun, although some councils began

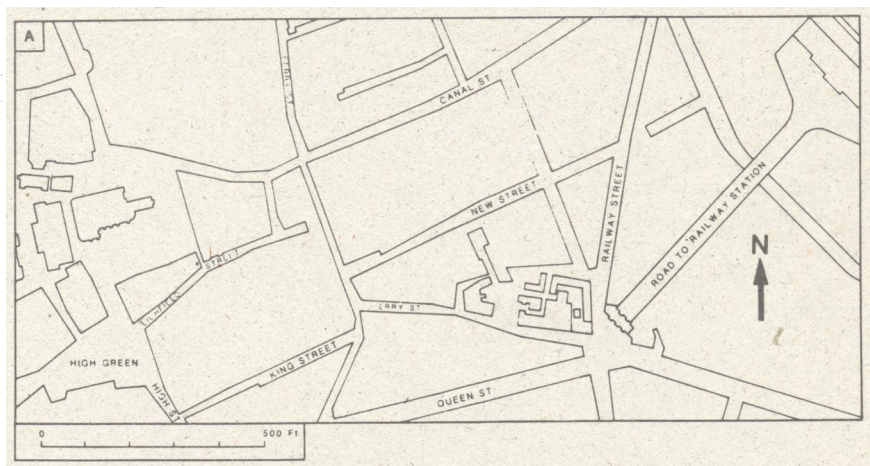


Figure 3: Lichfield Street area, Wolverhampton, before renewal in the 1870s.

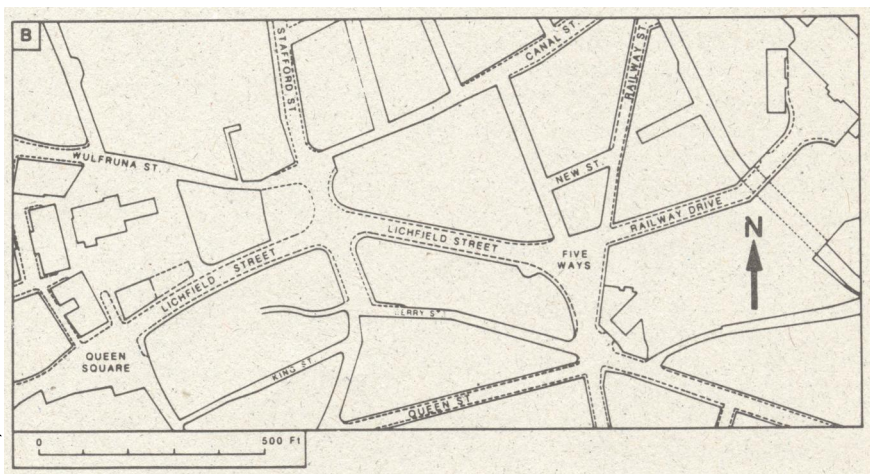


Figure 4: Lichfield Street area, Wolverhampton, after renewal.



street-widening schemes, resulting in new buildings being constructed along the widened streets. Queen Street, Wolverhampton, was widened in the late 1920s, resulting in a new block of similarly-styled shops and a department store; street widening in Northampton produced similar new rows of shops (15). However, in most cases the earlier plot boundaries appear to have been reused, the plots merely being truncated at the front by the road-widening, rather than, as is more usual, being truncated at the rear. Such developments were evidently constrained by the morphological frame; it would also seem likely that many property owners retained their plots fronting such streets, and merely redeveloped in situ.

Although a larger scale of development was evident during the increased prosperity of the mid- to late-1930s, all such activity was curtailed by the Second World War. When the wartime restrictions on building material availability were lifted in the mid-1950s, it became apparent the urban redevelopments were occurring on a much larger scale. Town centres. Whitehand emphasises that, for the town centres of Northampton and Watford in the later 1930s and from the 1950s onwards, many more developments were of larger scale, wider than the traditional mediaeval burgrave width of some 10 meters, and thus involving plot amalgamations (16).

The first impetus for such a scale of change was catastrophic, namely the considerable amount of wartime bomb damage. Great areas of town centres were either destroyed, or so badly damaged as to require complete reconstruction. In some cases, as eventually occurred during the rebuilding of London in the 1670s, old street lines were destroyed, albeit with some widening and straightening. Thomas Sharp, a prominent town planner, produced plans for the rebuilding of Exeter - badly damaged in the "Baedeker Raids" - and Oxford. His language is overtly sympathetic to the context of the historic city, although his plans are less so. He was, however, consciously attempting to integrate the new twen-

tieth-century phenomenon, the motor vehicle, into historic towns. His perspective sketches clearly show rows of bland, flat-roofed buildings of evident Modern influence lining his new and rebuilt streets (17). In many cases, however, redevelopment took the form of 'precincts', where traffic was segregated from service vehicles and pedestrians. Some grandiose schemes were proposed, such as for Bristol, where roofed structures would separate all traffic below from all pedestrian activity above (18). Appropriate materials and construction techniques now existed to make such schemes technically feasible. Those that were actually built tended to be less extravagant, but no less extensive, such as the new Coventry town centre. At the same time, extensive renewal projects proposed the demolition of large areas of slum housing - often nineteenth-century terraces - and their replacement with modern housing. This housing, often as

high-rise blocks, had greater provision of amenities but, over the last thirty years, has been shown to be largely of poor construction; some blocks have already been demolished.

The second major impetus for change in inter- and post-war Britain was the rise of the highway engineer. The importance of highway improvements as an incentive for large-scale urban change has already been mentioned, with the example of London in the 1660s. The increasing popularity of the private car was quickly leading to much congestion in town centres and, again as in pre-Fire London, streets were inadequate, and parking facilities scarcely existed. These problems could be solved by the construction of ring roads, tightly drawn around town centres, to divert through traffic. Extensive multi-storey car parks also became a feature of most town-centre retail redevelopments. At this

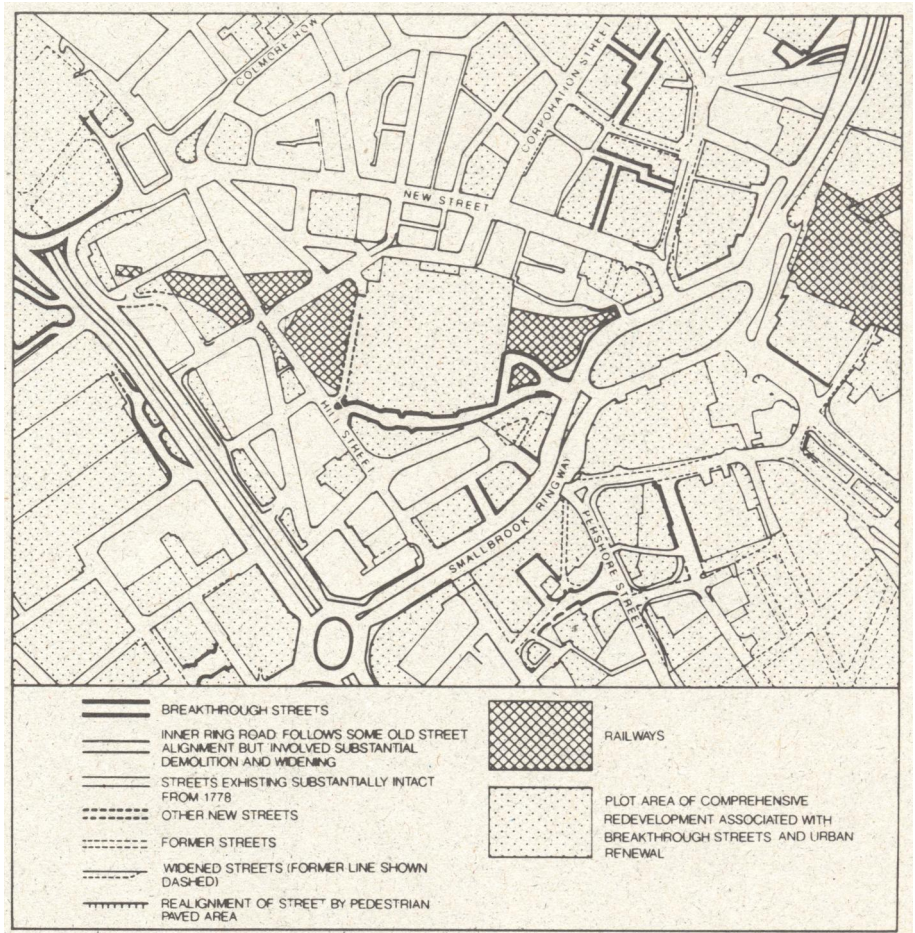


Figure 5: Analysis of post-war change in part of Birmingham city centre.

time, the senior officials responsible for planning in many urban areas were not trained town planners: many were engineers, and a considerable number were highway engineers. The influence of Herbert Manzoni on central Birmingham is typical in all but scale. He planned a high-speed network of radial roads, linked by three ring roads. "One of the advantages of this system was that in inner districts, road construction would help to demolish the slums... By the later 1930s some 8,000 slum houses had already been demolished as a programme existed for the removal of most of the remainder (some 32,000 dwellings) by the later 1940s" (19). The new ring roads smashed through the existing framework of streets and plots with little thought for any consideration beyond the immediate alleviation of traffic congestion. These schemes were extensive in both space and time, with Wolverhampton's ring road, for example, taking over twenty years to complete. An analysis of part of central Birmingham in the post-war period reveals the spatial impact of the new Inner Ring Road and the plot redevelopments associated with it (Figure 5).

This leads to some consideration of who is undertaking such changes. A general trend during the present century, observed in a number of towns, has been the replacement of individuals and local firms as developers and designers by firms from outside the town in question. Figure 6 demonstrates this trend for five town centres, ranging from free-standing county towns such as Northampton to London dormitory towns such as Wembley. Many of these external agents have been the major retail and service chains building for their own occupation, although the insurance companies and property companies building speculatively are also of considerable importance, particularly in the post-war period. Parallel with these trends is the effect of the growing concentration of development activity nationally in the hands of major firms operating nationwide.

These trends have a number of implications. It is argued that, up to the inter-war period, building owners,

architects and even builders were mostly either resident locally or had a significant interest, such as a branch of their business, in a town where they proposed a new building. The environments in which they took decisions had much in common with those of the residents and users of the services of those towns (20). Arguably, they had a greater sympathy for local stylistic idiom, the "spirit of place", and this is reflected in the size and style of their buildings. By the 1960s, however, many property owners were absentee. Architects had little knowledge of the towns in which they were commissioned to design buildings, and even builders tended to be from outside the town. These changes coincided with the increased use of powers of compulsory purchase by local authorities, who seemed in some cases to be acting as land assembly agents for speculative developers. They also

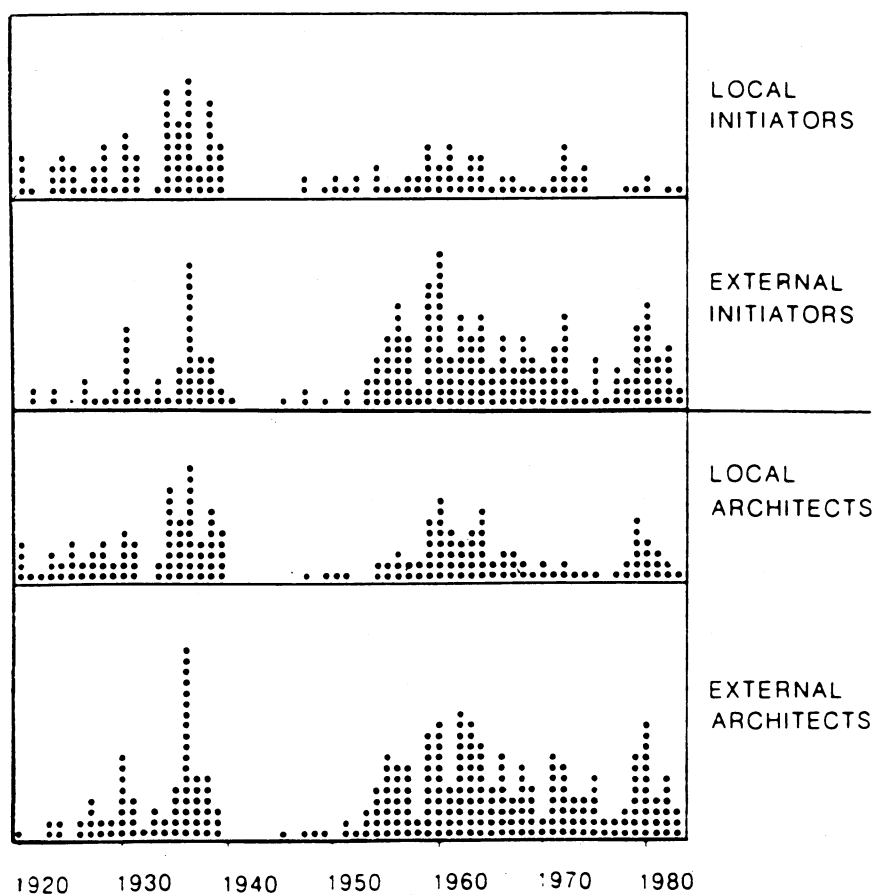


Figure 6 : Changing agents of urban change: comparison of local and external origins in five town centres, 1920 - 1983 (P.J. Larkham and M. Freeman, *A re-examination of reasons for using building styles, The Local Historian* 18 (1988)).



coincided with the ascendancy of the Modern movement in architecture (or at least the debased International Style variant), with its rejection of historical styles and decoration, and vernacular forms. As an example, it has been shown that the 'institutional patrons of architecture', principally property companies, insurance companies and pension funds, have adopted a particular style of development. This is characterised by an emphasis on new on new buildings rather than old ones, which reinforces the move towards a more restricted range of uses in town centres; a desire for large projects rather than small ones, with a consequent decrease in the number of available routes through the area concerned; the repetition of standard, adaptable building designs; an emphasis on tall, free-standing buildings; and a separation of buildings from their street setting by zones of open space, often filled with planted barriers (21). In short, this style is Modern. Smaller developers have never required the economies of scale and other benefits that the Modern style gave to the large 'institutional' developers.

To summarise the differences in perspectives of agents in the inter- and post-war periods, "it seems inescapable that boardroom decisions taken in the metropolis (or regional centre) against a background of national-scale operations would produce different results in the townscape from those taken by local individuals with a field of vision ending abruptly at the edge of their town's sphere of influence" (22). Put crudely, local agents tend to redevelop at scales and styles in conformity with the morphological frame: it could be said that rarely do they have the financial resources for larger schemes. External agents are less sympathetic, their redevelopments are much more extensive, and they have more ready access to finance for property development.

During the past two decades there has been a slump in construction following the 1973 oil crisis, and the rise of the conversation ethic has been noticeable. Both have led to smaller-scale schemes. With the increasing prosperity of recent years, conservation, and its regard for urban history and the existing pat-

tern of development, has been overtaken by another boom of large-scale redevelopment proposals. In many cases, these schemes are part of the so-called 'third-wave' of innovation in retailing, and form part of the struggle to revitalise town centres to compete with the giant edge-of-town shopping centres. The present proposals for Birmingham's Bull Ring are typical of this new wave of larger-scale schemes. Here, much of the historical evidence for the mediaeval town was destroyed in the immediate post-war period with the construction of the Ring Road, Bull Ring shopping centre, and coach station. The remaining evident, although much altered, burgage lineaments were swallowed by the Pavilions shopping centre, which opened in 1987. In the same year, the London and Edinburgh Trust acquired the lease of the Bull Ring area, and proposed a redevelopment scheme. One giant building would straddle the ring road, stretching from New Street to Moor Street railway stations. It would contain offices, large car-park, 174 shops and four major stores (23). Arguably, this has little impact upon the morpho-

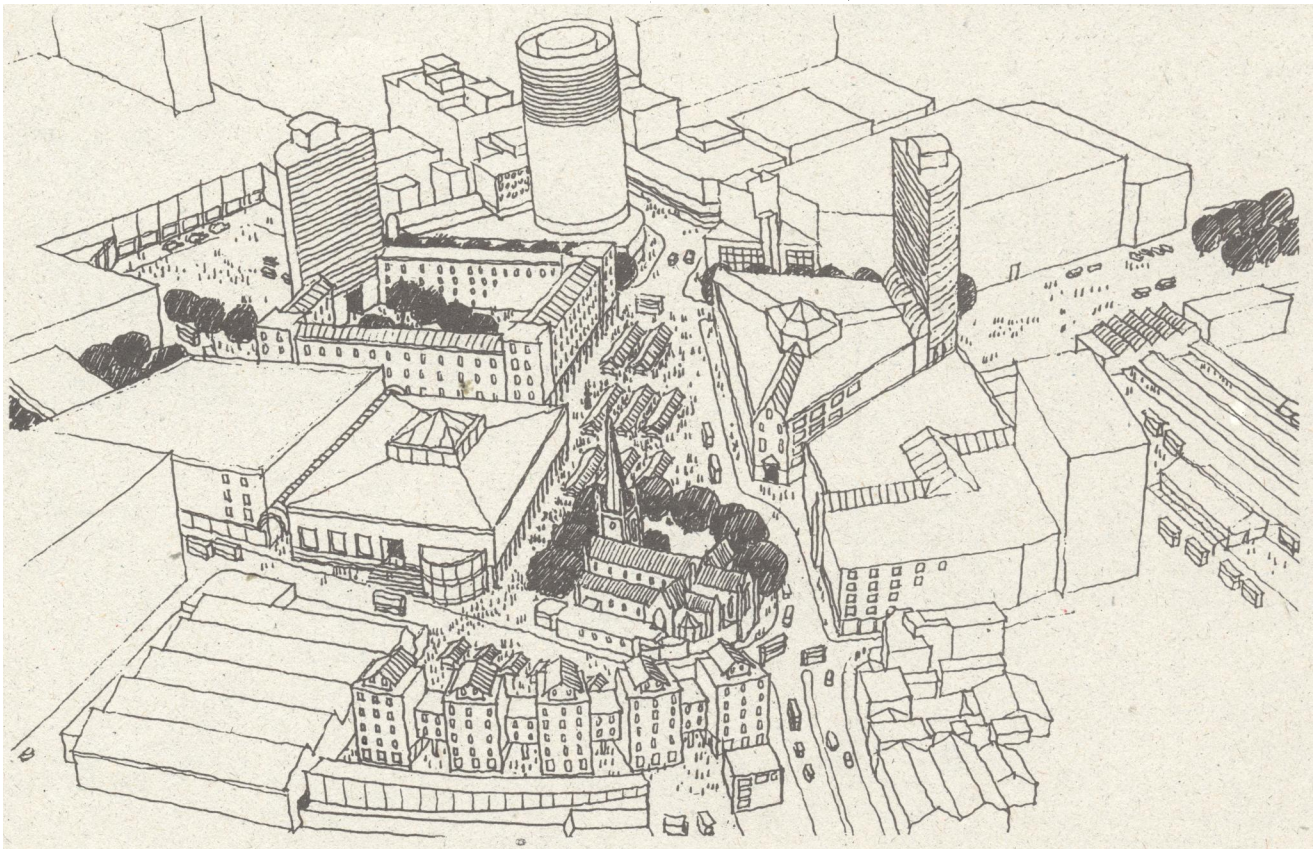


Figure 7: Alternative scheme for redevelopment of Birmingham Bull Ring: proposed by Birmingham for People, 1989. Reproduced by permission.

logical frame since, following the extensive redevelopments of the 1950s and 1960s, nothing but the odd street alignment remains. The developer is attempting to produce acceptable detailed proposals, differing from this original conception. The significant factor in this example is the efforts of a local pressure group, Birmingham for People. Disliking the monolithic shopping mall scheme, they have put forward their own proposals. These would result in similar land uses, but also include some residential accommodation. Interestingly, they propose a series of more traditionally-size buildings, closure of a stretch of the ring road, and it became evident that their plan essentially echoed the vanished mediaeval market and street plan of the area (Figure 7). The reason for their plan was the desire to restore adequate and easy circulation for pedestrians. Any direct notion of history would here be spurious, but it is interesting that development proposals (albeit unofficial) are learning lessons from the early urban history of the site. A mediaeval scale of streets allows good pedestrian circulation: smaller buildings allow construction to be phased (an important economic consideration), allows a better land-use mix and flexibility of use.

Conclusion

This brief historical review of urban renewal and redevelopment suggests that Conzen's concept of the morphological frame, where the existing street and plot pattern constrain and guide redevelopments, is not always appropriate. It is certainly of use when examining small country towns, and particularly in the period ending with the Second World War; the circumstances under which the concept was formulated. Attempts to apply it to larger urban areas, and to post-war urban redevelopments, have met with varied success. A variety of circumstances, including natural or man-made disaster, or an extremely powerful civic authority or landholder, can result in large-scale and sudden change occurring with hardly any consideration of the existing

urban form. In the developer is a large organisation, with a national of international sphere of operations and easy access to large financial resources, the development is less likely to respect the morphological frame than that undertaken by a small, local developer. Lastly, changing fashions in town planning and architectural style should also be considered, as the impact of the 1960s fashion for comprehensive clearance and redevelopment - now outdated - shows. Thus urban renewal, caused initially by obsolescence, can be seen either as a catastrophic change, sudden and large scale, or as a continuing process of redevelopment. This paper has shown that both processes occur, but it is unfortunate that most writing on 'urban renewal' concentrates upon the large-scale schemes for town-centre redevelopment and slum house clearance at the expense of the more common small-scale processes.

Dr. Peter Larkham, British Academy Research Fellow, School of Geography, University of Birmingham.

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