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Modernizing Glasgow - Tower Blocks, Motorways, and New Towns 1940-2010

Currently 12,800 words plus abstract and captions

Keywords: modernist architecture, modernist urbanism, "slum clearance", Glasgow, Gorbals, East Kilbride, Cumbernauld, Castlemilk, new towns, tower blocks

Abstract

This article presents the history of Glasgow's architectural and urban modernization, which resulted, among others, in the serial design of both modernist tower blocks and low-rise buildings, extensive 'slum clearance', motorway construction, and the establishment of new towns in the wider area. Drawing on select archival materials and a variety of published studies, the article draws a bigger picture of modern Glasgow, as it evolved as a result of comprehensive ideas, their partial implementation, and their subsequent modification over the course of seven decades.

The article shows that within the umbrella approach "modernist urbanism" there were in fact a number of different strategies. They were related to different municipal and national institutions, whose rivalries had a significant impact on the built outcome, and eventually proved to be more disruptive than the values and visions that these institutions shared. It will also show that the modern aspirations for grandeur were intrinsically vulnerable to disruption, and were largely implemented in a makeshift and reactive manner, which made the ambitious attempt to convert an ailing industrial city into a flourishing decentralised metropolis largely unsuccessful.

This is noticeable to date in particular architectural and urban forms, for example if one compares the peripheral housing estate of Castlemilk (built from 1954 by the City of Glasgow) to the new towns of East Kilbride and Cumbernauld (built from 1947 and 1955, respectively, by the British national government), or to the "Comprehensive Development Area" Hutchesontown-Gorbals (begun 1957, led by the City of Glasgow) in the city centre.

Decentralizing Glasgow

The Glasgow metropolitan region, Scotland's largest agglomeration with about 1 million inhabitants, is currently a sculpture park of failed modern utopias. There are Corbusian towers, there is La Defense-style deck urbanism, there are megastructures, inner-city motorways, partially finished garden cities, new towns based on cluster urbanism – and vast vacant lots left by demolished nineteenth-century tenements and closed-down factories. While this appearance is not without charm, it is above all the consequence of an unsuccessful mid-twentieth-century attempt to convert an ailing industrial city into a flourishing decentralised metropolis. The means for this end was modernist urbanism, understood as a set of architectural and planning approaches aiming at modernist architecture, automotive infrastructure, "slum clearance," functional separation, and decentralization.

This article will trace the convoluted history of Glasgow's ill-fated modernization in the 1950s and 1960s. It will show that the different strategies were related to different institutions, particularly the City of Glasgow and the British national government, whose rivalries had a significant impact on the outcome. It will also demonstrate that the main architectural models that were propagated at the time, the comparatively dense four-storey tenement as in the peripheral neighbourhood of Castlemilk (built from 1954 by the City of Glasgow), and the two-storey terraced or semi-detached house, as in the new town of East Kilbride that lies only seven miles further south (built from 1947 by the British national government) had comparatively little influence on the subsequent success of the new neighbourhoods, as evidenced by socio-economic indicators or reputation. Much suggests that there were three more important factors: the planning of shops and community facilities, the choice of the first inhabitants, and later socio-economic changes that were unforeseeable for the planners at the time, such as the decline of heavy industry and the increase of individual mobility.

Glasgow is typical for many cities, in which rapid modernization in the postwar period was followed by heavy disappointments with the results. It is, though, a particularly extreme case: Being one of the world's largest industrial cities in the early 1900s squalor and deprivation was particularly widespread. The modernization plans half a century later were particularly ambitious And deindustrialization in the 1970s was particularly harsh. The city can therefore serve as a textbook example for the mechanisms of modernist architecture and planning in the 1950s and 1960s, as well as its perceived failure from the 1970s onwards.

There have been many studies on Glasgow in the postwar period. Most present modernist urbanism in the context of policy analysis or architectural history, focusing either on particular aspects of urban governance or on the design of the built environment. Building primarily on this research, as well as on select archival sources, this article attempts at combine both, tracing the bigger picture, and thus explaining how concepts and ideas turn into streets and buildings – or rather, as it mostly happened in Glasgow and elsewhere – how ideas get applied in an incomplete and makeshift way and thus generate a rather different city. Much suggests that the built environment in Glasgow area, like that of many "modernized" European cities, results to a large extent from the debates of the postwar period. Glasgow's failed decentralization is therefore exemplary many similar stories in Britain and other European countries.

Glasgow City Council versus British Government

Today, Glasgow's postwar modernization is mostly seen as a failure, related to the shortcomings of modernist urbanism in general.² These include top-down planning, forced relocation, wasteful use of resources, bad maintenance, unwillingness to tackle social problems other than through physical improvement. Within the umbrella approach "modernist urbanism," however, there were different visions and actors. Unlike in France, where the decentralization of the Paris through new towns and tower block schemes was mainly a matter of national politics, or in West Germany, where peripheral tower block estates were mostly built by non-profit organizations steered by the local authorities, the redesign of British towns was carried out by both local and national authorities.

In the early postwar era British planners mostly relied on two strategies. The first was regionalisation, that is, the integration, or, in its more radical version, the dissolution of big cities into a regional network of settlements. The second was "slum clearance," that is, the demolition and modern rebuilding of poor, mostly nineteenth-century neighbourhoods. Both strategies were based on the principles of functionalist modern planning as laid out by Le Corbusier, Clarence Perry, Raymond Unwin, or Patrick Geddes: they aimed at functional separation into residential, commercial, industrial and leisure (park) areas and the model of an "automotive city" serviced by thoroughfares and motorways. Both were

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Studies of Scottish new towns include Peter Willmott, "East Kilbride and Stevenage: Some Social Characteristics of a Scottish and an English New Town", Town Planning Review 34 n. 4 (January 1964), 307-316; P. J. Smith, "Changing Objectives in Scottish New town Policy" Annals of the Association of American Geographers 56, n. 3 (September 1966), 492-507; R. Smith, East Kilbride – the Biography of a Scottish New town 1947-73 (London: HMSO, 1979); Alan Middleton, "Cumbernauld: Concept, Compromise, and Organizational Conflict" Built Environment 9, n. 3-4, (1983), 218-231; Ian Levitt, "New Towns, New Scotland, New Ideology, 1937-57" The Scottish Historical Review 76, n. 202 (October 1997), 222-238; Miles Glendinning "Cluster Homes: Planning and Housing in Cumbernauld New Town" Twentieth Century Architecture 9 (2008), 132-146; and in Rosemary Wakeman, Practicing Utopia – An Intellectual History of the New towns Movement (Chicago: University of Chicago Press, 2015).

There are architectural approaches to the topic in portions of Miles Glendinning Aonghus MacKechnie and Ranald McInnes, *A History of Scottish Architecture* (Edinburgh: Edinburgh University Press, 1996) or Miles Horsey [=Miles Glendinning], *Tenements and Towers: Glasgow Working Class Housing* 1890-1990 (Edinburgh Miles: HMSO, 1990).

¹ Michael Pacione, Glasgow: The Socio-Spatial Development of the City (Chichester: Wiley, 1995, revised edition Abingdon: Routledge, 2015); David Donnison and Alan Middleton, Regenerating the Inner City: The Glasgow Experience (London: Routledge, 1987); Thomas A. Markus, "Comprehensive Development and Housing 1945-75" in Peter Reed, ed., Glasgow, the forming of the city (Edinburgh: Edinburgh University Press, 1993), 147-165, S. G. Checkland, The Upas Tree – Glasgow 1875-1975 (Glasgow: University of Glasgow Press, 1976); Michael Keating, The City that Refused to Die (Aberdeen: Aberdeen University Press, 1988), A. Gibb, "Policy and Politics in Scottish Housing since 1945" in Richard Rodger, ed., Scottish Housing in the Twentieth Century (Leicester: Leicester University Press, 1987), or John Gold, The Practice of Modernism (Abingdon: Routledge 2007), particularly 81-83. An important source of information is also Miles Glendinning and Stefan Muthesius, Tower Block (New Haven: Yale University Press, 1994), which contains invaluable information from interviews with now deceased officials and administrators.

² Michael Pacione, *Glasgow: The Socio-Spatial Development of the City* (Chichester: Wiley, 1995), particularly 174-80.

legitimised by the belief in expert decision-making, scientific plans, rational organization, and state intervention. And both shared a technocratic attitude that focused on processes and numbers rather than people and their lives. This is for example evidenced in the impassive style of a 1954 document, which describes massive demolitions of homes and forced dispersion of their inhabitants as an exclusively technical procedure: "The following areas are intended to be redeveloped... These areas contain 15,666 houses and it is estimated that 5,138 houses will be rebuilt in the areas after clearance."

In the Glasgow case the main line of conflict was a question that the main theorists of regionalism, including Patrick Geddes or Lewis Mumford, did not explain in great detail: Should an overcrowded industrial city such as Glasgow be dispersed into the surrounding region, focusing on the benefits of regional and national planning? Or should it be rebuilt within the city borders, that is, should slum clearance and modernization be the first priority?

The city of Glasgow with its over a million inhabitants around 1950 (compared to only about 600,000 in 1980) embodied everything that modern administrators hated: pollution, insufficient traffic infrastructure, and above all an impoverished working class living in overcrowded nineteenth-century tenements. In addition, the local economy based on mining, heavy industry and shipbuilding had recovered from the economic crisis of the interwar years, but fell back in comparison with the general economic boom in Britain. Although unemployment at 3 to 3.5 per cent was low in absolute numbers it was almost twice the national average.⁴ There was a shared understanding that these problems had to be tackled by local and national policy.

Regionalization would have meant the creation of new towns. In line with the turn-of-the-twentieth-century Garden City ideas that were still dominant at the time it implied low-rise architecture composed of detached, semi-detached or terraced houses surrounded by ample green spaces. Containment would have meant an architecture that was based on the principles of the existing city: 3-4-storey "modern tenements" on the block perimeter, less dense than the nineteenth-century predecessors, but still forming corridor streets.

In the mid 1940s the two goals reflected the polarity between the most powerful actors at the time: the Edinburgh-based Scottish Office⁵ (the branch of the national British government responsible for Scotland), which promoted regionalization – the "planners", and the Glasgow City Council⁶, which promoted containment – the "housers." The Scottish Office, like the London government of which it was part, was associated with planning professionals who believed in the primacy of regional planning and aimed at an effective restructuring of the entire country, most famously through the 1946 New Towns Act that sparked Britain's influential new towns programme. The Glasgow City Council, on the other hand, and particularly its Housing Committee, as well as its city engineer and Master of Works Robert Bruce, promoted first and foremost slum clearance to improve the housing situation on its own territory.⁷

At the time Glasgow's councillors' self-confidence of representing Scotland's largest agglomeration and economic powerhouse was not yet too much affected by the impending decline of heavy industry, which would hit the city hard in the late 1960s. They still lived

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³ Archibald Jury, City Architect, Corporation of the City of Glasgow, *Written Statement* 1954 (Glasgow: Corporation of the City of Glasgow, 1954), p. 8, available at Glasgow City Archive, D-AP1/11.

⁴ S. G. Checkland, *The Upas Tree – Glasgow 1875-1975* (Glasgow: University of Glasgow Press, 1976), 46-47.

⁵ The Scottish Office, headed by the Secretary of State for Scotland, also included a powerful Department of Health. It was largely dissolved with devolution and the establishment of a Scottish Parliament in 1999; a small portion became the newly established Scotland Office.

⁶ Glasgow's local authority was officially called "The Corporation of the City of Glasgow" from 1895 to 1975, "City of Glasgow District Council" from 1975 to 1995, and "Glasgow City Council" since 1995. For better understanding, in this article it is referred to at all times as "Glasgow City Council."

⁷ For the battle between "housers" and "planners" see Miles Glendinning and Stefan Muthesius, *Tower Block* (New Haven: Yale University Press, 1994), 157-160 and 220-222.

the memories of the early twentieth century when Glasgow, at 1.1 million inhabitants, was among the world's ten largest cities and unchallenged "Second City of the British Empire." They thus fought any onslaught on municipal powers tooth and nail. This included the proposed resettlement of their "overspill population" – thus the official term at the time for inhabitants deemed too many – into the surrounding region, which would have weakened ratepayers' income as well as municipal decision-making competencies in general.

A portion of Glasgow City Council, however, was sympathetic to the national "planners". These include first and foremost the members of the Planning Committee, as well as the professional planners the Architecture and Planning Department established in 1952 under Archibald Jury (1907-2003). Jury, a dirigiste character and typical 1950s-style expert planner, in 1951 inherited the position of Glasgow's chief planning officer from Master of Works (chief planner) Robert Bruce, whose famous 1945 rebuilding plan will be discussed later. In contrast to Bruce, Jury and his staff promoted a national British planning agenda. The "housers" in the City Council's Housing Committee looked at them with mistrust. They perceived them as a fifth column of the national British "planning interests" aiming at undermining Glasgow's municipal authorities. Likewise, a portion of the Scottish Office was sympathetic to Glasgow's "housers" – the housing administrators, who hedged some sympathy for Glasgow City Council's approach.

The situation was further complicated by other long-standing conflicts, including Scotland against England, the Labour-dominated Glasgow City Council against the Conservative national government (both before 1945 and from 1951-1964), and the messy and gritty industrial metropolis of Glasgow against the representative and refined Scottish capital of Edinburgh where the Scottish Office was located.⁹

It was also complicated because of unclear political attributions. New towns as such could be connected to either a conservative or a progressive agenda. In retrospect, some scholars interpret them as an attempt at "collective radicalism" that followed socialist ideals, 10 while others see them as an example for a moralizing conservative policy without participation of the workers movement. 11 The confusion reflects the controversies over Garden Cities half a century earlier, which were related to either left-wing workers' emancipation or right-wing back-to-the-land ideologies.

In addition, the debate over dispersal versus containment was somewhat removed from reality, because it was reactive rather than visionary. Since the interwar period suburbanization was in full swing and the more affluent had long been contributing to urban sprawl and increasing car traffic. The debates therefore centred on whether this development should be halted or supported, and what policy would be most appropriate for catering to the city's majority of impoverished tenement dwellers as well as resolving the traffic chaos.

City Redevelopment vs. New Towns

The early position of Glasgow City Council is best summarized in the 1945 master plan by the previously mentioned Master of Works Robert Bruce. ¹² Bruce was Glasgow's chief planner from 1943 to 1951. The "Bruce Plan" plan is now mostly remembered for its

⁸ Miles Glendinning and Stefan Muthesius, *Tower Block* (New Haven: Yale University Press, 1994), 157-160.

⁹ Glasgow City Council was controlled by the Labour Party for most of the period since the 1930s, interrupted only by short periods in which no party had an absolute majority. Since the Second World War there were only two periods in which another party were in control (the Progressives 1950-52 and 1969-70).

¹⁰ J. Melling, Rent Strikes: People's Struggles for Housing in West of Scotland, 1890-1916 (Edinburgh, 1983).

¹¹ Ian Levitt, "New Towns, New Scotland, New Ideology, 1937-57" The Scottish Historical Review 76, n. 202 (October 1997), 238.

¹² Robert Bruce, *First Planning Report to the Highways and Planning Committee of the Corporation of Glasgow* (Glasgow: Glasgow Corporation, 1945) ["Bruce Report"], Glasgow City Archive, D-AP1/1 and TD312/10 (Folio of Maps, Plans, and Drawings). For an interpretation see Thomas A. Markus, "Comprehensive Development and Housing 1945-75" in Peter Reed, ed., *Glasgow, the forming of the city* (Edinburgh: Edinburgh University Press, 1993), 147-165.

preposterous proposal to demolish Glasgow's city centre in its entirety, including architectural gems such as Alexander "Greek" Thomson's St Vincent Street Church (1858-59) and Charles Rennie Mackintosh's Glasgow School of Art (1897-1909). It was published under the programmatic subtitle "The voice of time cries out to man – advance!" (figure 1). Bruce's catchy visualization of scattered modern blocks amidst park spaces now reads like a typical example of mid-twentieth-century hubris and prelude to the systematic destruction of architectural heritage. It can be rightfully criticized as an obsessively tidy-minded attempt to press messy urban reality into neat engineering diagrams. The virtual absence of resident protest against these plans—the only complaints came from business leaders fearing cost and disruption—is telling for the spirit of the time.

In the context of Glasgow's actually implemented modernization, however, the significance of the Bruce Plan is a different one. It lies in Bruce's proposals for the neighbourhoods outside the city centre, which were merely described by text and, unlike his city centre plan, were not supported by drawings. These included both nineteenth-century tenement districts and unbuilt peripheral land. Both were to be redesigned, albeit not comprehensively re-built. The report reads:

"It would be a reasonable approach to the problem to regard the Glasgow conurbation as an aggregate of, let's say, 25 'little towns', each separated from each other by physical boundaries such as railways, rivers, main roads (parkways wherever possible) or green wedges" ¹⁵

The City Council thus proposed a restructuring along the lines of Clarence Perry's neighbourhood unit, in which the small-town idyll in the quarter was balanced with the civic life of the city centre. The report includes stabs against the "planners," formulated in sentences such as "...the realistic answer to the question of a desirable urban environment lies not in the wholesale dispersion, but in the judicious re-shaping of the urban community and region." Bruce, like his colleagues, was clear that he did not want national planners to interfere with his city's integrity.

The estates that the City of Glasgow would later build on the peripheries in the 1950s—the largest and best-known are Castlemilk, Drumchapel, Pollok, and Easterhouse—correspond, at least in theory and plan, to this idea of a "little town" connected to the city centre. Castlemilk will be discussed in greater detail below. For these neighbourhoods Glasgow should remain the most important hub. The city centre was supposed to provide the bulk of commercial and leisure facilities for the new neighbourhoods. This position, possibly taken out of convenience more than conservativism, freed the City Council of the necessity to provide more than a few new schools, churches shops. As we will see in the following, this proved to be disastrous for the long-term development of these areas.

The position of the British government was embodied in the Clyde Valley Regional Plan, which was set up for a vast area covering the city of Glasgow as well as five surrounding counties. (figure 2) It was worked out by the Clyde Valley Regional Planning Advisory Committee under Patrick Abercrombie (1879-1957), the author of the famous 1944 Greater London Plan, and Robert Matthew (1906-75), the Chief Architect of the London City Council and mastermind of the Royal Festival Hall.

Their vision for Glasgow and the West of Scotland, published in 1946, was a regional network of towns. It was a bold plan that envisioned the displacement of 250,000 inhabitants from the city—about 200,000 would actually be resettled over the following decades. The Clyde Valley Regional Plan embodied the principles of "planners" ideology:

¹³ Michael Keating, *The City that Refused to Die* (Aberdeen: Aberdeen University Press, 1988), 20.

¹⁴ Ibid., 21.

¹⁵ Robert Bruce, *First Planning Report to the Highways and Planning Committee of the Corporation of Glasgow* (Glasgow: Glasgow Corporation, 1945) ["Bruce Report"], 74, available at Glasgow City Archive, D-AP1/1.

¹⁶ Ibid., 36.

 $^{^{17}}$ The plan was commissioned in 1942 by the Secretary of State for Scotland Thomas Johnston (1881-1965).

"The consideration of all contiguous towns and built up area as one unit, within which transport, open spaces, industrial and residential communities must be planned in conformity with a master plan." ¹⁸

The spatiality can be seen in in the map that shows towns and residential districts.¹⁹ The plan foresaw the construction of four new towns in the area, of which two, East Kilbride and Cumbernauld, were eventually built. Instead of the other two—Bishopton and Houston, both planned approximately 20 kilometres west of Glasgow—a third new town was eventually built in Irvine, 50 kilometres to the southwest on the Ayrshire coast.

As shown on the map, the city of Glasgow and the existing towns and villages near the new towns were to be integrated into the plan. Abercrombie's and Matthew's proposal tied them into a vision of nation-wide re-planning and resettlement for the entire country. The plan aimed at a comprehensively modernized region in which housing harmoniously aligned with well-distributed industry and preserved open spaces, in particular a greenbelt around Glasgow.

The Clyde Valley Regional Plan integrated housing and urban design into a framework of national planning that tackled all aspects of human life from industry to recreation. Although the new towns became the most prominent and most debated aspect of this framework they were never the only proposed solution for the housing crisis and answer to the desire for socio-economic restructuring. At several moments in the mid twentieth century the expansion of existing small towns was just as prominent. While commissioning the Clyde Valley Regional Plan in the 1940s the Tory Secretary of State for Scotland Thomas Johnston also established a committee to plan for the relocation of half a million houses in Scotland. In its 1944 report this "Scottish Housing Advisory Committee" suggested the expansion of small towns to an optimal population of between 15,000 and 50,000. These ideas became particularly influential under the Tory national government from 1951. The 1952 New Town Development Act, passed to partially counteract Labour's new towns policy, foresaw the resettling of population from overcrowded conurbations not to new towns but to "reception authorities," small towns that were to be significantly expended.

"Expansion" was by no means less daring than the construction of new towns. At some point it was planned that Glaswegians were to be rehoused in the remotest parts of the Scottish Highlands. For example Campbeltown at the tip of the Kintyre peninsula, to date a rather isolated place separated from Glasgow by a four-hour drive on along a curvy road, was to increase its population of 7,000 by one third. While Campbeltown's expansion remained unrealised other towns closer to Glasgow became subject to growth, albeit in a less orderly and comprehensive way than foreseen by the 1950s planners. Like the new towns these expansion plans implied a weakening of Glasgow's municipal powers and were thus opposed by Glasgow City Council.

The extent to which the Clyde Valley Regional Plan met with the disagreement of Glasgow City Council is exemplified in the direct opposition of Abercrombie's and Bruce's reports. For example, in 1944 Abercrombie recommended that the Castlemilk site on Glasgow's periphery should not be developed in the short run – because of the need for open spaces and land for roads. ²² Bruce replied that "[a]ny suggestion that this site should be used for purposes other than housing should be very strongly resisted" and issued similar directives

²⁰ Scottish Housing Advisory Committee, *Report on the Distribution of New Houses in Scotland*, Cmd. 6552, Parliamentary Papers, 1943-4, vol. IV. The committee was

established in March 1943, chaired by Joe Westwood, and reported on 25 May 1944.

¹⁸ Patrick Abercrombie and Robert Matthew, *The Clyde Valley Regional Plan* (Edinburgh: HMSO, 1946), 176, available at Glasgow City Archive, D-AP1/11.

¹⁹ Ibid. map following p. 160; see also description on p. 56.

²¹ Corporation of Glasgow, ed., *Industry on the Move* (Glasgow: Corporation of Glasgow, 1959), 1-4 Available at the Archive of Glasgow City Council (unsorted box). See also "The Blueprint for Dispersal – New towns and Settlements", *Glasgow Herald* 21 January 1959 (supplement), iv. Potential overspill regions include Sutherland and Ross, two even more remote rural areas in the North Highlands.

²² Patrick Abercrombie "Interim Report on Housing Sites" [1944], quoted after Robert Bruce, *First Planning Report*, (Glasgow: Corporation of Glasgow, March 1945), p. 87-89 Glasgow City Archive, D-AP1/1.

regarding Drumchapel on Glasgow's north-western periphery, which the Clyde Valley Regional Plan foresaw as an area full of open space. 23 Like Castlemilk, Drumchapel later became the site of a dense housing estate planned by Glasgow City Council. Bruce also stabbed against the Clyde Valley Planners in a 1946 memorandum, in which he ranted against their plans to include Glasgow's peripheral areas into the greenbelt.²⁴ He contested the Clyde Valley Regional Plan's figures about densities of over 400 people per acre in central Glasgow, maintained that the real amount was considerably lower, and therefore concluded that central Glasgow was much better than its reputation.

Bruce waged similar attacks against the new town of East Kilbride, which was to be built only two miles south of the Glasgow city boundary at Castlemilk. He stated that that the proximity of East Kilbride to Glasgow

"will result in a complete failure of the new town to establish itself as anything but an appendage of the city...I believe that the creation of the new town will be a measure of sprawl... which is greatly to be deplored in respect of the unnecessary additional distances which will be travelled between the new community and the City of Glasgow, but also on account of the unnecessary labour and expense in providing such communications."²⁵

He proved to be wrong - as will be shown in the following it was Castlemilk rather than East Kilbride, which in the following decades would suffer from being felt like a remote "appendage of the city."

The rivalry not only, as planning historian John Gold has pointed out, delayed the process and resulted in precipitated overcompensation later on.²⁶ First and foremost it led to different architectural and urban solutions in the Glasgow metropolitan region.

Modern Tenements on the Periphery vs. Semi-detached Houses in the Wider Region The conflicting parties promoted rather different design. The dissimilarities are apparent if one compares the peripheral estate of Castlemilk to the new town of East Kilbride. Castlemilk was planned from 1941 on a largely unbuilt land six miles south of Glasgow's city centre. Construction started in 1954. In 1971 the township reached its all-time high of 37,000 inhabitants and ever since has been shrinking.²⁷ East Kilbride was designated in 1947 and begun in 1950. As previously mentioned, the site of the new town was situated only about two miles south of Castlemilk, next to the existing village of East Kilbride. Its original target population was about 10,000, a number that over the decades was repeated increased. In 2016 the town had approximately 75,000 inhabitants and kept growing. The spatial proximity makes Castlemilk and East Kilbride appear like unequal sisters, developing next to each other but growing from rivalling visions. They are thus particularly telling examples of Glasgow's competing decentralisation models.

Castlemilk's urban form resulted from the principles of Glasgow's Housing Committee. Strictly following its remit, the committee was concerned with providing better housing, and numbers of units tended to matter more than quality architecture. The documents nonetheless point to particular design ideas. For example the Bruce Report, in spite of its extensive demolition proposals, shows a surprisingly strong commitment to the latenineteenth-century tenements that were despised by most planners at the time. The report points out that the inhabitants

"very rightly regard their dwellings, which are built in excellent sandstone and are very pleasing architecturally, as highly desirable and satisfactory. How much more satisfactory could tenemental development be if planned at the reduced densities to be permitted in the future?"28

²³ Robert Bruce, First Planning Report, (Glasgow: Corporation of Glasgow, March 1945), p. 87-89 Glasgow City Archive, D-AP1/1.

²⁴ Robert Bruce, "East Kilbride – Draft Precognition of the City Engineer" dated 1946, p. 2-3, available at Glasgow City Archive, D-AP6/16. ²⁵ Ibid., 5.

²⁶ John Gold, *The Practice of Modernism* (Abingdon: Routledge 2007), 81

²⁷ Castlemilk Partnership, Castlemilk Partnership Strategy Report (Edinburgh: 1990,

²⁸ Robert Bruce, First Planning Report, (Glasgow: Corporation of Glasgow, March 1945), p. 56-57.

Along those lines Glasgow City Council in the early postwar era promoted an updated version of the historical sandstone tenement.

In Castlemilk such "modern tenements" became the most common typology. A good example is the block **2-14 Birgidale Street** (c. 1955, Glasgow City Council, City Architect's Department) (figure 3). Four-storey walk-ups with pitched roofs are lined along the streets. The logic of the tenement is preserved. The block is a row of similar four-storey houses that form a corridor street, and the buildings are slightly set back from the street, forming little front yards. (The bay windows and red iron fences visible on the photograph add to the tenement impression but were 1980s additions – the original buildings featured balconies instead of bay windows and wooden fences). Despite the influence of the nineteenth-century precedents the design is clearly modern. There are no cornices, stringcourses, turrets, accentuated windowsills or representative corner towers. There are also no shops or offices on the ground floor, and instead of enclosed courtyards in the middle of the block there are larger green spaces that connect to those on adjacent blocks. Also the backside, invisible on the photograph, is a concession towards the twentieth-century block-in-the-park idea. The windows look on to lawns and greenery and the block is partially open and crossed by footpaths.

The "modern tenement layout" is also visible in the aerial view (figure 4). The corridor street is achieved through similar building design and plans on the perimeter block. The blocks are nonetheless more varied than in nineteenth-century neighbourhoods. The most visible difference is the treatment of the block corners, which in nineteenth century neighbourhoods are often accentuated through towers or turrets, and which in Castlemilk are either left open or cut out to provide a staircase serving two buildings. Most early buildings in Castlemilk were designed following that model, as evidenced in the **plan for unit 1** (1954), the north-eastern part of the township between Croftfoot Road, Castlemilk Drive, Dougrie Road and Carmunnock Road (figure 5).

The tenement focus came with an urban vision in which the neighbourhood unit model was noticeable, but not particularly prominent (figure 6.) In Castlemilk, certain facilities, such as schools and churches were designed as parts of the neighbourhood plan. But, in contrast to the neighbourhoods of a new town, Castlemilk supposedly profited from being part of Glasgow and, in theory, had access to Glasgow's shops and cultural amenities. Shops and services thus took a backseat in the planning process. To date Castlemilk, like all peripheral estates, lacks many amenities. What the "housers" promoted as a vision of metropolitan centrality in practice mostly meant cumbersome and expensive commuting journeys for the residents, and a notorious lack of shopping and leisure opportunities in the area.

The "planners" aimed at a different aspect for their new towns. East Kilbride was laid out predominantly with two-storey semi-detached or terraced houses lined along curved streets. An example is **1-7 Telford Terrace** (c.1955, East Kilbride Development Corporation) on Telford Road in East Kilbride (figure 7). The unspectacular semi-detached houses are serially built cheap version of the two-storey suburban dwelling of the interwar period, featuring unadorned concrete facades and pitched roofs. Garden City ideas are reflected in the setback of the buildings from the street, which look onto publicly accessible lawns.

Their main concern of the master planners was the harmony of the ensemble and the creation of a neighbourhood unit. The Telford Terrace buildings are part of The Murray, one of the four neighbourhood units of East Kilbride's original plan (figure 8). The others are Westwood, Mains, and Calderwood. They were all laid out around the "town centre" with shops and communal facilities. Before the plan was extended the town centre was within walking distance of less than 30 minutes for all neighbourhood units.

Built on an oval plan of approximately 1,000 by 700 metres The Murray contains two primary schools, three churches, and a park space around a stream. As the neighbourhood lies immediately south of the town centre only a small commercial area with shops and restaurants was included. Like the others neighbourhood units The Murray is surrounded by four-lane thoroughfares intersecting at large roundabouts, which are crossed through a network of pedestrian paths and tunnels (figure 9). As in Perry's 1920s vision, these thoroughfares were to serve as both barriers and access routes, enclosing the

neighbourhood and providing quick entry for its motorized inhabitants. In the 1950 plan The Murray was supposed to be connected to the town centre through a pedestrian underpass, which nonetheless remained unbuilt - hence the thoroughfare Queensway cuts the neighbourhood off from the town centre.

The Murray is a typical example of the picturesque neighbourhoods inserted into the landscape, which constituted East Kilbride. This corresponded to the ideas laid out in the Clyde Valley Regional Plan, in which the neighbourhood unit appeared as a generic module taking shape in response to the landscape (figure 10). The exact layout of the units was then determined by existing hills, valleys, forests and streams.

While not centring on architecture the Clyde Valley Regional Plan nonetheless gave certain architectural guidelines that ended up being reflected in East Kilbride. Design advice is summarized under the unsubtle headlines "good modern work" and "bad modern work," which emblazon above two collections of photographs on opposite pages.²⁹ (figure 11, figure 12). "Good modern work" means that buildings harmonise with the landscape in the sense that they are low-rise, small scale, and do not disturb the skyline. Examples include two-storey turn-of-the-twentieth-century arts-and-crafts residences as well as 1950s-style "Swedish timber houses." This approach reflects the "picturesque modernism" that at the time was promoted by Gordon Cullen and the Architectural Review, and incorporated influences from vernacular architecture and Scandinavian models. 30 The larger background consists of the Garden City movement and the nineteenth-century attempts to restore city dwellers' dignity by rehousing them in cottages in a semi-rural environment. 31

The Clyde Valley Regional Plan also proposed "a return to the Scottish traditional practice of building in terraces," which, given that Glasgow and Edinburgh largely consist of tenements rather than terraces, one would generally deem an English and not a Scottish tradition. But at the same time the plan pointed out that in any case the focus should be "not on the individual blocks but rather on architecture as a whole" - meaning the harmonious integration of buildings and landscape.³² The low-rise modern semi-detached garden houses would readily fit their ideas, but, in the same way, so would the dense "cluster urbanism" of later new towns such as Cumbernauld that will be described later.

How was the conflict between "planners" and "housers" resolved? The short answer is that it wasn't. Only at a surface level the "planners" asserted themselves, forcing Glasgow City Council to consent to the new towns as well as to national planning in general. This happened in the mid 1950s.³³ Also the Clyde Valley Regional Plan, although never formally adopted, was implemented with regard to many of its principles. The most important was the conception of the Glasgow region as a network of old towns and new towns moving towards successive decentralization. In 1954 Glasgow City Council accepted two main goals of the "planners": the green belt around Glasgow, and the necessity to construct

An example is the Lansbury Estate in London (1951, Bridgewater and Shepheard),

³² Patrick Abercrombie and Robert Matthew, *The Clyde Valley Regional Plan 1946* (Edinburgh: His Majesty's Stationery Office 1949), 16.

²⁹ Patrick Abercrombie and Robert Matthew, *The Clyde Valley Regional Plan 1946* (Edinburgh: His Majesty's Stationery Office 1949), 15-16.

opened for the Festival of Britain. 31 Miles Glendinning and Stefan Muthesius, *Tower Block* (New Haven: Yale University Press, 1994), 157.

³³ Scholars relate the moment to different documents. For Keating it happened in 1954 when the City Council repealed a 1946 resolution that forbade construction outside Glasgow's boundaries, and thus allowed for the construction of Cumbernauld. Michael Keating, The City that Refused to Die (Aberdeen: Aberdeen University Press, 1988), 22. For Glendinning/Muthesius the decisive document was the was a 1957 Report on the Clearance of Slum Houses, Redevelopment and Overspill, prepared by "planners" under R.E. Nicoll in Glasgow's Department of Architecture and Planning in 1957, but informed by the goals of the national British Department of Health Services' Planning Division, Miles Glendinning and Stefan Muthesius, Tower Block (New Haven: Yale University Press, 1994), 170 and 220. And for Ian Levitt it was the (National British) Housing and Town Development Act in 1957, which cemented the agreement between Glasgow City Council, Scottish Office, and New Towns Corporation. Ian Levitt, "New towns, New Scotland, New Ideology, 1937-57" The Scottish Historical Review 76, n. 202 (October 1997), 236-38.

100,000 flats outside the city. In Glasgow the "planners" gained greater influence. Robert Bruce resigned in 1951 and the planning functions of his department were reorganised. The new Architecture and Planning Department was established in 1952 under the already mentioned City Architect Archibald Jury. 35 In addition, influential theorists at the time perceived the planners' approach as superior. Archibald Campbell, Professor of Applied Economics at St Andrews University, in 1959 claimed that "the method of development by new towns is a proved success" and criticized Glasgow's policy of containment.³⁶ And the American Institute of Architects in 1967 deemed Glasgow's second new town, Cumbernauld, to be "the most significant current contribution to the art and science of urban design in the western world".3

In the long run, however, the "planners" victory was hardly convincing. Their cautiously worked-out plans for nationwide restructuring had already lost persuasive power with the financial crisis in the late 1940s and were further hampered under the Conservative British governments from 1951 to 1963.³⁸ The Clyde Valley Regional Plan, which had never assumed any official status, became successively less authoritative. At a national level planning collapsed with the demise of Labour's national plan in 1966-67, at a time when comprehensive planning worldwide came under attack.39

The great plans for the area, whether deriving from the Clyde Valley Regional Plan or from national frameworks, were gradually watered down or became subject to contradictory amendments. Over the following decades Glasgow's city-region was thus turned into a patchwork of partially executed ideas. The following subchapters will present three alternative visions that came to both amend and disturb the neat visions of the postwar era. The first were the Comprehensive Development Areas, cleared tenement neighbourhoods in central Glasgow that were supposed to be redeveloped following comprehensive schemes but in practice rarely were executed to plan. The second were the "scattered tower blocks" erected on gap sites all over Glasgow, usually without connection to a comprehensive plan. And the third was Glasgow' second new town, Cumbernauld, which was built on a site specified in the 1946 Clyde Valley Regional Plan, but followed ideas that were very different to those of the 1940s.

Rebuilding "Slum Clearance" Sites in the Inner City

Rebuilding "slum clearance" sites in the inner city was promoted by both "housers" and "planners," but the "planners" developed the approach into a particularly influential framework. Already the Clyde Valley Regional Plan had proposed the tabula-rasa redevelopment of large portions of Glasgow's tenement neighbourhoods, but it did not contain design proposals for the rebuilding. Those were specified a decade later, bringing together elements of prewar neighbourhood unit planning with postwar megastructure ideas.

These sites were referred to as Comprehensive Development Areas (CDA). In the late 1950s there were 29 CDAs planned, covering about one third of Glasgow's nineteenthcentury fabric with a total of 118,500 flats. 40 (figure 13) The first was designated in 1957 with grand fanfares, and to date is the best known. "Hutchesontown-Gorbals CDA" extended over two adjacent neighbourhoods on the south bank of the Clyde opposite the

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³⁴ This happened in the new Development Plan. Michael Keating, *The City that Refused to* Die (Aberdeen: Aberdeen University Press, 1988), 22. $^{\rm 35}$ Ibid.

³⁶ Archibald Duncan Campbell, "The Relocation of Industry" Glasgow Herald, 21 January 1959, (supplement), xvii, available at Glasgow City Archive, Town Clerk Department.

³⁷ "Stockholm, Tapiola, Cumbernauld – from Three emerged One", American Institute of Architects Journal 48 n. 1 (July 1967), 36-58, quoted after Miles Glendinning, "Cluster Homes: Planning and Housing in Cumbernauld New Town" Twentieth Century Architecture 9 (2008), 133-34.

R. Smith, East Kilbride – the Biography of a Scottish New Town 1947-73 (London: HMSO, 1979), 37.

³⁹ Michael Keating, *The City that Refused to Die* (Aberdeen: Aberdeen University Press, 1988), 26.

⁴⁰ Michael Pacione, Glasgow: The Socio-Spatial Development of the City (Chichester: Wiley, 1995, reprinted Abingdon: Routledge, 2015), 163

city centre: Hutchesontown and Gorbals. Both are often lumped together and referred to as the Gorbals.

In the early twentieth century the Gorbals had acquired a reputation as Glasgow's most notorious slum. This was despite the fact that the conditions of poverty, overcrowding and gang-related crime were not noticeably worse than in some other working-class neighbourhoods, and despite the fact that many of the local tenements from the 1860s and 1870s were actually former middle-class dwellings and not among Glasgow's worst housing stock.⁴¹ The public perception of the Gorbals as the archetypal den of misery was reinforced by popular books about the area, most famously "No Mean City" of 1935.⁴²

Once designated as CDA the old tenements were cleared. The new schemes evolved in collaboration between Archibald Jury's Department of Architecture and Planning (DAP) at Glasgow City Council and private architects such as Robert Matthew and Basil Spence. The centrepieces of the rebuilding were the two 20-storey **Queen Elizabeth Square** blocks (1960-62, Basil Spence, demolished 1993). Their prominence did not only derive from the renowned architect, but also from the riches-to-rags development that within less than a decade converted the towers from a shiny symbol of hope to an eerie emblem of distress and deprivation, which was now connected with tower blocks.⁴³ In the 1990s the Gorbals was cleared once again (figure 14). This time the area was rebuilt with neo-historical new tenements (begun 1992, various architects).⁴⁴

Hutchesontown-Gorbals CDA nonetheless was more than the Queen Elizabeth Square towers. It comprised several schemes called Hutchesontown A, B, C D and E, which were built between 1958 and 1974 (figure 15) The "planners" approach is less noticeable in the **Hutchesontown A flats** (1958, Glasgow City Council Department of Architecture and Planning, demolished 1980s), a three-storey zeilenbau scheme with pitched roofs, or in **Hutchesontown D** (1966-71, Scottish Specialist Housing Association, still existing) a group of four-storey pitched-roof "modern tenements" with maisonette flats, which form open blocks and look similar to those in Castlemilk (figure 16).

It is much more visible in **Hutchesontown B** (1958, Robert Matthew, mostly still existing), a series of 17-storey tower blocks and 2-4 storey residences connected through walkways. It is particularly conspicuous in **Hutchesontown C**, which next to the Queen Elizabeth Square towers included the multifunctional **Cumberland Shopping Arcade** (1966, Burke Martin Partnership, demolished 1980s). Influenced by Swedish precedents such as the Vällingby shopping centre on the outskirts of Stockholm, the arcade was a low-rise structure that combined 37 shop units, a supermarket, three pubs, two banks, a post office and several offices with 42 maisonette flats (figure 17). There was also a "service trades" development with a factory block next to it. A cinema, a bowling alley and a multi-storey car park remained unrealized. However carefully planned, the Cumberland Shopping Arcade also evidences the depletion that went along with the comprehensive

⁴² Alexander McArthur, *No Mean City* (London: Longman's, Green and Co, 1935), authored by McArthur in collaboration with London journalist H. Kingsley Long. See also John Buchan, *Huntingtower* [1922] (Oxford: Oxford University Press, 2008).

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⁴¹ Eric Eunson, *The Gorbals. An Illustrated History* (Catrine, Ayrshire: Stenlake Publishing, 1996), 45-46.

⁴³ For a congratulatory view see Ninian Johnston, "Miracle in the Gorbals" *Architectural Prospect* (spring 1957), 18; for a summary of the subsequent decay see Ronald Smith, *The Gorbals – Historical Guide and Heritage Walk* (Glasgow: Glasgow City Council, 1999), 26-30.

⁴⁴ Florian Urban, "New Tenements and the Image of the Past – the Crown Street Development in Glasgow's New Gorbals" *Architectural Research Quarterly* 17 n. 1 (March 2013), 37-48

⁴⁵ For a detailed analysis of Hutchesontown-Gorbals CDA see Paul Owens, *Hutchesontown: A Housing Story*, Bachelor of Arts Dissertation at the Glasgow School of Art, 2015.

⁴⁶ Ronald Smith, *The Gorbals – Historical Guide and Heritage Walk* (Glasgow: Glasgow City Council, 1999), 25-26.

redevelopment – the forty-odd shops in the new structures replaced more than four hundred commercial establishments in the old tenement neighbourhood.⁴⁷

Hutchesontown B, and particularly Hutchesontown C (with the adjacent shopping arcade) were strongly influenced by the "planners" comprehensive approach to urban neighbourhoods that was later referred to as "megastructure". Not only the Cumberland Shopping Arcade, but also the adjacent Queen Elizabeth Square blocks originally reflected an idea of combining several functions in one building. Basil Spence had first planned a single twenty-storey spinal building on huge pilotis that next to flats would have included shops and services. His plan was nonetheless subsequently modified, and Queen Elizabeth Square remained exclusively residential.⁴⁸

Following these megastructure ideas Hutchesontown C was to emerge as carefully planned "vertical city" with spaces for different functions under one roof, with the implicit goal of producing a new and better urban community. This idea was extremely prominent in the architectural discourse of the 1960s and all over the world guided more or less utopian proposals, from Kenzo Tange's Tokyo Bay Plan to the drawings of Archigram. Among the few built examples was the town centre in Cumbernauld new town, which will be described below.

The bold gesture is noticeable in the entire development. The rhetoric of wiping out the slums, cleaning up unhealthy areas, and lifting people up from the stench of the tenements to the clean air of high-rise flats pervaded planning and construction. There is no more mention of integrating new housing into the landscape or creating a harmonic urban entity. Of the Clyde Valley Regional Plan's ideological background only the principles of functional division and traffic segregation remained.

Worked out by "planners" at Glasgow City Council the CDAs like Hutchesontown-Gorbals were still part of a countrywide strategy – this linked them to the new towns approach. It was clear from the beginning that the new scheme would house only a fraction of those displaced from the old tenements. In purely mathematical terms of the 27,000 people residing in the old tenements 62 per cent had to be rehoused elsewhere – either in new developments in Glasgow, or elsewhere.⁴⁹

While the Hutchesontown-Gorbals CDA embodied a bold vision and was mostly carried out according to plan, the further fate of the CDAs first and foremost evidences the "planners" limited long-term sway over their own field of activity. Out of the 29 planned CDAs only 9 had been approved by 1969, and a total of 14 by 1974 when the programme was official stopped. And none was carried out according to the original plan. Less than a third of the approximately 50,000 council houses built between 1960 and 1972 was situated in the CDAs. ⁵⁰

A particularly telling case was the Anderston Cross CDA, designated in 1961 and built 1967-73, which straddles both sides of the ring road west of Glasgow's city centre (today's M8 motorway) (figure 18). Anderston Cross over the years became a deterring example of a jumble of prefabricated housing blocks, half-finished shopping areas, motorway exchanges, flyovers, and confusingly laid-out pedestrian paths. In the mid 2010s the tenstorey slab blocks in **St Vincent Terrace** (built c. 1968) on the south side of St Vincent Street were demolished. Over the years they had become subject to physical deterioration combined with an image of crime and misery comparable to that of the Queen Elizabeth Square blocks – and like the Gorbals they were replaced by a tenement-inspired low-rise scheme.

⁴⁷ Glasgow City Council, Architectural and Planning Department, *Hutchesontown Gorbals Comprehensive Development Area – Written Statement, 1956* (Glasgow: Glasgow City Council, 1956), 6.

⁴⁸ John Gold, *The Practice of Modernism* (Abingdon: Routledge, 2007), 179.

⁴⁹ Ibid., 179-81.

⁵⁰ Michael Keating, *The City that Refused to Die* (Aberdeen: Aberdeen University Press, 1988), 117.

Scattered Tower Blocks

It is impossible to write the history of Glasgow's modernist urbanism without discussing its most controversial outcome – the tower block. Tower blocks were built in all portions of de-centralized Glasgow: in "slum clearance" areas, in peripheral estates, in new towns, and between older buildings. For many they are the epitome of Glasgow's ambitious housing plans and at the same time the most conspicuous sign of their failure.

In the early debates on Glasgow's rebuilding – that is, during the controversies between "housers" and "planners" in the late 1940s and early 1950s - tower blocks did not play any significant role. Only over the course of the 1960s Glasgow advanced to become Britain's, if not Western Europe's, tower block metropolis. The proportion of 20-storey and higher blocks was three times that of London and eighteen times that of Birmingham. ⁵¹ Most of these towers were built in the years between 1961 and 1968, when high flats accounted for three quarters of Glasgow's annual housing construction – compared to less than ten per cent in any other given year between 1945 and 1974. ⁵²

Contrary to popular belief, however, there was never a plan to re-build all of Glasgow with tower blocks (even the Bruce plan was mostly a low-rise scheme). There were also no neighbourhoods exclusively composed of tower blocks. Tall blocks of flats were almost always surrounded by low and medium-rise typologies that did not surpass four storeys and corresponded to the height of Glasgow's historical tenements. This was also the case with Glasgow's most infamous towers such as **Sighthill** (1964-69, Crudens Ltd, demolished 2008-16) (figure 19), and **Red Road** (1962-70, Sam Bunton and Associates, demolished 2010-15) (figure 20), which at the time at 31 stories contained the highest residential buildings in Europe. Sighthill's ten towers and Red Road's eight towers did not stand by themselves but were part of larger schemes that included less-known lower buildings. The tower block, although prominent, was thus never an exclusive typology.

In the context of Glasgow's post-war redesign it has to be pointed out that tower blocks were to a large extent connected to improvisation and lack of comprehensive plans. Next to meticulously planned neighbourhoods such as Hutchesontown-Gorbals there were "scattered tower blocks," built all over the city in a makeshift manner, often outside a Comprehensive Development Area, and without consideration of the wider neighbourhood. In terms of sheer quantity the "scattered tower blocks" by far outweighed the high-rises that were part of larger megastructure schemes.

The "scattered tower blocks" were a particular telling example of the makeshift and somewhat irrational way in which allegedly rational planning translated into practice. They were built by Glasgow City Council outside a Comprehensive Development Area, mostly on gap sites, as quick as possible, no matter where no matter how. The main objective was to boost the number of completed dwelling units. Most of them were built in the 1960s. These include the **Royston Area A** (1960, Wimpey), **Scotstoun House** (1962, Wimpey), or the previously mentioned **Sighthill** (1964-69, Crudens Ltd., demolished 2008-16). Disconnected from their surrounding neighbourhoods and offering next to no amenities in their immediate surrounding these were convincing by nothing else but their speedy construction.

Glasgow's "scattered tower blocks" largely derived from the initiative of David Gibson, the convener of the Housing Committee from 1961-1964. Gibson was described as an energetic man obsessed with his mission to improve the housing conditions of the poor. A radically left-wing politician of working-class origin he lacked professional training as an architect or planner, but he knew the blight of Glasgow tenement life from his own youth. To him the proposals of comprehensive planning seemed ridiculous for their inefficiency to improve the housing situation of the masses. They thus had to be combatted, as a way of "seeking to avoid the continuing and unpardonable offence that bad housing commits

⁵¹ Miles Glendinning and Stefan Muthesius, *Tower Block* (New Haven: Yale University Press, 1994), 224.

⁵² Miles Horsey [=Miles Glendinning], *Tenements and Towers: Glasgow Working Class Housing 1890-1990* (Edinburgh Miles: HMSO, 1990), 49.

⁵³ Miles Glendinning and Stefan Muthesius, *Tower Block* (New Haven: Yale University Press, 1994), 221-23.

⁵⁴ For Gibson's role see ibid., 220.

against human dignity."⁵⁵ He was supported by his Housing Progress Officer Lewis Cross, an engineer from Yorkshire, who was responsible for sites and contracts. Gibson passion and conviction were key to his success. Where his planner colleagues were still pondering different ideas he was already calling the builders. It is fair to say that the "scattered towers" commissioned by Gibson and his allies were a major factor in making modern flats become standard for Glasgow's working classes.

Gibson's efforts were crucial in converting Glasgow into a hub of tower block construction, a somewhat unexpected development for a city that was neither, like Hong Kong or Singapore, riddled by spatial constriction, nor, like the socialist countries, ruled by a planned economy favourable to one-size-fits-all solutions. Among the reasons were not only architectural fashion, speedy construction processes, and government subsidy (until 1968) – but first and foremost the City Council's desire to rehouse displaced "slum dwellers" on their own grounds rather than exporting them to the wider region. At the all-time high in 1982 there were 321 tower blocks in Glasgow. Subsequently demolitions began slowly reducing the number of high flats.

The scattered towers were a particularly ambivalent outcome of Glasgow's decentralization strategy. On the one hand they were everything that modernist urbanism had promised to be: a effective relief of the housing shortage, and a noticeable improvement for the city's poor. In contrast to many overly bureaucratic policies, including regional planning along the lines of the Clyde Valley Regional Plan, their construction was efficiently implemented and benefited those for whom they were intended. On the other hand they suffered the same fate as many other modernist buildings, where technological shortcomings and deficient maintenance soon rendered living conditions just as bad as they had been in the tenements.

In addition, and this is most significant in the context of this article, the disorderly circumstances of their construction at any available leftover plot went against the whole project of scientifically planned renewal, and thus against the theoretical foundations upon which modernist urbanism was built. In the long run, this made them vulnerable to criticism from both critics and promoters of modernist urbanism. Where anti-modernist critics pointed to shoddy construction and leaking roofs the acolytes of comprehensive planning raged against the fact that they did not fit into a master plan and were thus incompatible with an orderly urban community.

Unpredicted Changes in the New Towns

A third disruption, next to rebuilt slum areas and scattered tower blocks, was the failure of the new towns to develop according to the original plans. Given the long-term of these plans, which often projected thirty years and more into the future, this is hardly surprising and points to the inherent inadequacy of detailed long-term planning in general. The tortuous fate of new towns development nonetheless was a further factor that led to decentralization of Glasgow becoming patchy and fragmented.

First, the ideas of a good town changed over the course of the 1950s. Second, there was the usual clash between theory and practice. And third, economic transformation led to different forms of everyday life than those envisioned by "housers" and "planners" in the 1940s. This is particularly evident in connection with Glasgow's second new town Cumbernauld, which was designated in 1955 and largely built in the 1960s and 1970s (figure 21).

In line with the theories of the architectural avant-garde at the time Cumbernauld was planned as a dense urban community. Residences were built around a conspicuous megastructure, the much-discussed **Cumbernauld Town Centre** (1958-67, Geoffrey Copcutt and team, repeatedly modified thereafter). The Town Centre was to be reachable from any portion of the town in less than 20 minutes walking, and combined town hall and

⁵⁵ David Gibson, quoted in ibid., 220. Gibson was aided by engineer Lewis Cross from the Architecture and Planning Department, who was able to carry out his philosophy of building as quick as possible, no matter where.

⁵⁶ Michael Pacione, *Glasgow: The Socio-Spatial Development of the City* (Chichester: Wiley, 1995, reprinted Abingdon: Routledge, 2015), 171.

shopping centre with residential functions.⁵⁷ (figure 22) Since the central functions of the town were concentrated in the Town Centre there were no neighbourhood facilities as in East Kilbride. From the outset Cumbernauld was thus very different from the neighbourhood-unit based East Kilbride.

The early phase of its construction was hampered by difficulties to relocate industry to the new town and achieve the envisioned employment structure, although a satisfactory employment level was eventually achieved. And from the late 1960s onwards the shift from heavy industry to service economy, increased motorization and mobility as well as the extension of the original plan led Cumbernauld away from the vision of a self-contained dense, pedestrian-oriented town. However, Cumbernauld was by no means a failure. Although overshadowed by the increasingly ill reputation of the town centre it nonetheless boasts comparative economic and demographic stability. Its image in the twenty-first century is comparable with that of East Kilbride, and significantly better than that of Glasgow's peripheral districts, Castlemilk, Pollok, Drumchapel, or Easterhouse. But to the visions of 1940s planners the reality of Cumbernauld is in many respects a disturbance.

As mentioned above, Glasgow City Council in the mid 1950s grudgingly consented to the British government's decentralization policies. A joint committee of the once antagonistic Housing and Planning Committees in 1954 accepted the principle of overspill, that is relocating Glasgow's overcrowded tenement dwellers into the wider region, and not on the city's periphery. These policies were subsequently codified in the 1957 Housing and Town Development Act and also enabled the construction of Cumbernauld.

Cumbernauld new town was built on a hilltop site 20 kilometres northeast of Glasgow, adjacent to the existing village of Cumbernauld.⁵⁹ It was planned for 50,000 inhabitants. In 1967 it had approximately 23,000 inhabitants on the original hilltop site. After extending the town to 3,200 hectares in 1973, almost the double of its original extension, the population rose to approximately 50,000 in 1983, more or less the same number as in 2016.⁶⁰ In contrast to the earlier new town of East Kilbride it could be seen as a 1950s interpretation of an Italian hilltop city. It was to generate a new version of urbanity that was based on the motorcar, but at the same time provided density and dignified spaces for pedestrians. The dense low-rise buildings are assembled around sequences of semi-public spaces, as visible in the **Houses on Balloch View** (c.1955) in the Seafar area (figure 23). There is a system of footpaths that lead from the houses to larger "distributor footpaths," which cross the streets through underpasses (figure 24). The Town Centre as its hub was thought to be in walkable distance.

The intellectual background of Cumbernauld is constituted by the debates of the time: the ideas of "cluster architecture" discussed by the Smithsons and others, the Team Ten debates over the "Heart of the City" and the beginning discourse on multifunctional and flexible megastructures. The close relation to the professional debates led Cumbernauld be perceived, as the American Institute of Architects claimed in 1967, "the most significant current contribution to the art and science of urban design in the western world."

⁵⁸ Joint Special Subcommittee on Housing Needs (combination of Housing Committee and Planning Committee), Minutes of the meeting on 8 January 1954, in folder "Joint Subcommittee on Housing Needs 1951-58," Glasgow City Archive, Town Clerk Department.

⁵⁹ Cumbernauld was planned by a team of planners under direction of L. Hugh Wilson, the former City Architect of Canterbury. All planners came from the south of England. Miles Glendinning, "Cluster Homes: Planning and Housing in Cumbernauld New Town" *Twentieth Century Architecture* 9 (2008), 135-36.

⁶⁰ Alan Middleton, "Cumbernauld: Concept, Compromise, and Organizational Conflict" *Built Environment* 9, n. 3-4, (1983), 222 and 225.

⁶¹ "Stockholm, Tapiola, Cumbernauld – From Three Emerged One," *American Institute of Architects Journal* 48 n. 1 (July 1967), 36-58, quoted after Miles Glendinning, "Cluster Homes: Planning and Housing in Cumbernauld New Town" *Twentieth Century Architecture*

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⁵⁷ On the town centre in relation to CIAM theories see Miles Glendinning, "Cluster Homes: Planning and Housing in Cumbernauld New Town" *Twentieth Century Architecture* 9 (2008) and John Gold, "The making of a megastructure: architectural modernism, town planning and Cumbernauld's Central Area," *Planning Perspectives* 21 n. 2 (April 2006), 109-131.

Alas, it was not meant to be. Some of the clashes between theory and practice would have been predictable with a little sensitivity for urban spaces. It would not have required too much imagination to grasp that a pedestrian oriented city based on regular twenty-minute uphill walks between home and shops reflected more an ideal of sun-dappled Italy than the Scottish reality of fierce winds and frequent heavy rain, and that the shortage of pubs and clubs would be sadly felt by large parts of the population.

Other aspects were less foreseeable – in particular increasing mobility and economic restructuring. In the early days this lack of employment was frequently mentioned as one of Cumbernauld's key deficiencies and of hindrance to the city's main goal, the creation of urbanity in an economically self-contained small town. Indeed, the relocation of industry from Glasgow was meticulously laid out in early planning documents, but not achieved in Cumbernauld's first years. ⁶² The difficulty to develop a factory relocation programme was tied to the tough negotiations between Glasgow City Council and the Scottish Office in the mid 1950s. "Overspill" to Cumbernauld eventually resulted only from a lowest-commondenominator agreement between Council, Treasury, and New Towns Corporation. Facing the danger of seeing the entire new town programme fail, the Tory Secretary of State James Stuart contented himself with Glasgow City Council's minimal financial contribution to the housing cost and did not insist on the financing of industrial relocation. ⁶³

In the long run, however, lack of employment seems to have been merely part of the town's teething troubles and was soon overcome. In 1983 Cumbernauld's employment situation was not significantly different to that of other parts of the Glasgow metropolitan area; it even had slightly lower unemployment rates than the average. While 58 per cent of the working population was employed outside the town-mostly in Glasgow-about a third was commuting to Cumbernauld from outside.⁶⁴ This means that only about ten per cent followed the model that had originally been envisioned by the planners and both lived and worked in the new town. This clearly voided the pedestrian orientation and the architectural attempts for promoting urban life along a small-town ideal. But it was in no way different from other towns in the late twentieth century. Rather, high commuting rates seemed to result from higher degrees of car ownership and more frequent work place changes, and not from an architectural or planning deficiency of Cumbernauld. Similarly, the fact that Cumbernauld did not become the projected hub of heavy industry was not the planners' fault, but rather a consequence of Britain's deindustrialization. Instead of a target of 56 per cent employed in manufacturing and 30 per cent in service industry (1950s target figures) the relation was reversed – only 28 per cent were employed in manufacturing, and 67 per cent in service industry (1983 reality). 65

Cumbernauld, as all new towns of the Glasgow region, was certainly successful with regard to the original goals of providing modern and less overcrowded housing. In the 25 years between 1945 and 1970 the impressive amount of 100,000 new council flats had been built in Glasgow and 200,000 Glasgow residents had been resettled to the new towns and expanded towns. 66

Cumbernauld was also successful in terms of resident satisfaction. By the late 1960s 87 per cent of residents liked their town. There was occasional criticism about isolation, deficient community life and "nothing to do in the town," but the level of content was

^{9 (2008), 133-134.}

⁶² For one of these documents see for example Corporation of Glasgow, ed., *Industry on the Move* (Glasgow: Corporation of Glasgow, 1959), 1-4, available at the Archive of Glasgow City Council (unsorted box).

⁶³ Ian Levitt, "New Towns, New Scotland, New Ideology, 1937-57" *The Scottish Historical Review* 76, n. 202 (October 1997), 223 and 234-36.

⁶⁴ Alan Middleton, "Cumbernauld: Concept, Compromise, and Organizational Conflict" *Built Environment* 9, n. 3-4, (1983), 228.

⁶⁵ Ibid., 222 and 228.

⁶⁶ Cullingworth, J. B., and C. Watson. *Housing in Clydeside*. Edinburgh: HMSO, 1971, quoted after Pacione, *Glasgow: The Socio-Spatial Development of the City* (Chichester: Wiley, 1995), 179.

significantly higher than on the Glasgow periphery.⁶⁷ This corresponded, to a certain extent, to objective advantages, such as the larger amount of shopping and recreational facilities.

The peripheral estates such as Castlemilk, Drumchapel, Pollok or Easterhouse fared much worse. The original enthusiasm about getting out of overcrowded tenements was similar to those who were moved to peripheral estates and new towns. But the satisfaction of peripheral estates dwellers quickly waned. In Easterhouse, in the mid 1960s, 34 per cent of all households had outstanding requests for transfer; most wanted to return to the Gallowgate area in Glasgow's city centre from which they had been removed. They were also particularly hard hit by industrial decline. In 1985 male unemployment in Castlemilk East stood at 42 per cent, and in Drumchapel at 41 per cent. Unbernauld it stood at only 16 per cent and in the region as a whole at 20 per cent (1983 figures).

It was in this sense that Robert Grieve, a "planner" and in the 1940s one of the key contributors to Abercrombie's Clyde Valley Regional Plan, in retrospect claimed history to be on his side. In 1986 he pointed to the success of new town East Kilbride: "A paradoxical outcome, seen today, is the popular and relatively well-maintained 'town' of East Kilbride only two miles from the disastrous 'estate' of Castlemilk."

At the time of Grieve's remark the new towns were the clear winners over the peripheral estates in terms of good reputation. Before becoming subject to a remodelling programme in the late 1980s Castlemilk's image was tainted by crumbling houses, badly maintained open spaces, and rising unemployment rates. The neighbourhood was constantly losing population. Cumbernauld, on the other hand, like East Kilbride, was not wealthy, well maintained by its Development Corporation, reasonably well reputed and economically stable. Cumbernauld's awkward and repeatedly rebuilt town centre was the only stain on an otherwise positive image, which reflected its portrayal as a charming and sometimes quirky idyll in Bill Forsyth's highly popular comedy film "Gregory's Girl" (1981).

Of course also this dichotomy between bad peripheral estates and more or less good new towns was subject to change. In the mid 2010s these attributions were no longer clear cut. Castlemilk's dilapidating council tenements were thoroughly re-vamped following the 1988 "New Life for Urban Scotland" programme financed by the Scottish Office. East Kilbride and Cumbernauld, in contrast, suffered from the disbanding of their respective Development Corporations in 1996, which ended their privileged status and integrated them into the local authorities. Both North Lanarkshire Council, Cumbernauld's local authority, and South Lanarkshire Council, East Kilbride's local authority, had looked at the new towns with envy and mistrust and were not willing to give them any special treatment; particularly in the case of Cumbernauld this contributed to slumping investment and a waning reputation. ⁷³

⁷¹ Strathclyde Regional Council, "Unemployment in Strathclyde" September 1983, quoted after Alan Middleton, "Cumbernauld: Concept, Compromise, and Organizational Conflict" *Built Environment* 9, n. 3-4, (1983), 231.

Robert Grieve, *Inquiry into Housing in Glasgow* (Glasgow: Glasgow District Council, 1986).

⁷³ Miles Glendinning "Cluster Homes: Planning and Housing in Cumbernauld New Town" Twentieth Century Architecture 9 (2008), 132-146, here 145.

Alan Middleton, "Cumbernauld: Concept, Compromise, and Organizational Conflict" Built Environment 9, n. 3-4, (1983), 223, referring to surveys such as A.J.M. Sykes et al., Cumbernauld: A Household Survey and Report, University of Strathclyde, Department of Sociology, 1967.
 There is much anecdotal evidence for this. Tenant Rose McLean recalled that her family

⁶⁸ There is much anecdotal evidence for this. Tenant Rose McLean recalled that her family was "over the moon" when offered a flat in Castlemilk in 1957. Castlemilk People's History Group, *The Big Flit – Castlemilk's First Tenants* (Glasgow: The Workers Educational Association and Castlemilk People's History Group, 1990), 4.

⁶⁹ Michael Keating, *The City that Refused to Die* (Aberdeen: Aberdeen University Press, 1988), 27.

⁷⁰ Ibid., 168.

Architectural Form had Little Influence

Architectural form, it seems, had very little influence on the qualified victory of new towns over peripheral estates. In the 1980s, at the time of Grieves's statement and before the reshuffle following Castlemilk's refurbishing and the dissolution of the New Town Corporations, the architectural differences between both urban forms had largely been watered down.

Castlemilk, next to the iconic three-storey and four-storey tenements, now featured a wide range of single-family and semi-detached houses. East Kilbride had three-storey zeilenbau schemes that looked rather similar to those in Castlemilk, as exemplified in the building 31 Sinclair Park (figure 25). The later extension of Cumbernauld in the 1970s and 1980s included low-density schemes that had little in common with the urban "housing clusters" of the original plan. And both peripheral schemes and new towns were dotted with rather similar high-rises, for example the three 20-storey Dougrie Road Towers (1960-65, City Architect's Department) in Castlemilk (figure 26), the eighteen-storey Dunlop Tower (1966-68, Wimpey) on Telford Road in East Kilbride (figure 27), or the twelve-storey towers Bruce House, Buchan House and Douglas House (1965, demolished 2015) on Allanfauld Road in Cumbernauld. Also the central shopping areas of East Kilbride and Cumbernauld have become more alike. East Kilbride's central area was once an agglomeration of small low-rise buildings served by large parking lots, while Cumbernauld's was the famous megastructure combining flats, shops, and leisure facilities in open and closed spaces accessible by foot or bus. After repeated modifications both are rather similar, fully acclimatised shopping malls surrounded by big car parks, and with few functions other than shopping.

What still stands out as different is the planning scheme. The neighbourhood units of East Kilbride and the cluster housing in central Cumbernauld are still conspicuously dissimilar from the street layout of Castlemilk. So are the famous separated footpaths in Cumbernauld and the orientation of both towns towards the central area that provides all kinds of facilities. Castlemilk, in contrast, features a rather fuzzy layout without a distinctive centre. Although it now features a certain amount of shops has to a much greater extent than Cumbernauld or East Kilbride remained a dormitory town.

It also seems that the original choice of inhabitants had a lasting impact on the area's reputation. Castlemilk as a destination for any Glasgow tenement dweller, including large amounts of unemployed, was very different from East Kilbride's successful policy to attract skilled workers and middle-class inhabitants and stem the influx of poorly educated and unemployed. Throughout the 1950s East Kilbride preferentially gave rental contracts for recently finished homes to those who had already employment in the new town. The East Kilbride Development Corporation extended these efforts through precise architectural policy. In 1957 it announced the construction of "managerial" houses for sale by the home-building company Wimpey to attract higher income earners: "The Corporation believe that the houses should be built for various grades of residents and that it would be folly to rubber stamp the town as being for one class of tenant only" ⁷⁴ They also promoted the increasing use of more prestigious materials such as stone.

Such class-based policies soon became subject to enhanced struggles with Glasgow City Council. East Kilbride Development Corporation wanted Glasgow City Council to pay for housing their "overspill population" in East Kilbride—referring to the skilled workers who had come under the employment clause. Glasgow, on the other hand, was only willing to contribute if they were allowed to send tenants "irrespective of employment" (i.e. unskilled or unemployed people). In the long run Glasgow City Council was able to assert itself to a small extent, forcing East Kilbride to accept a certain amount of unskilled workers. East Kilbride nonetheless continued to become the home of comparably wealthier and better educated residents. At the time electrical, chemical, and food processing industries at the time were flourishing. There was also a BBC department and a government taxation office ("Centre I"). Although the economic structure of East Kilbride has changed ever since, and although the long-term implications of this early policy are hard to prove, it seems to have been an element that pushed East Kilbride, and possibly other new towns, on to the

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⁷⁴ East Kilbride Development Corporation, Ninth Annual Report 1957, dated 31 March 1957, 37.

⁷⁵ Ibid. 38.

winning side of Glasgow's decentralization policies—obviously at the expense of those areas that did not have the option to choose their inhabitants.

The comparatively small influence of architectural form is further evidenced by the peculiar debates over Castlemilk's renovation in the late 1980s, in which the desired urban forms were more or less the opposite of what one would have expected. These debates took place in the context of the already mentioned state-funded renovations of Castlemilk's housing stock; the goal was at the same time to improve the image of the township. One would assume that in the 1980s, when all over Europe the tenement renaissance was in full swing and in Glasgow, too, new housing increasingly followed the nineteenth-century paradigm of dense, medium-rise perimeter block housing, Castlemilk's 1950s corridor streets and four-storey council tenements would be at the height of fashion. 76 But surprisingly, rather the opposite was the case. A local newspaper ranted against "the canyon effect' where walls and limited views create an unfriendly environment" and engaged in 1950s-style anti-tenement rhetoric against "[p]oor housing and primitive backcourts in need of urgent attention." Eventually, new construction in Castlemilk followed more suburban design principles with the two-storey row house or semi-detached house as the most common typology. While these interventions somehow went against the zeitgeist for urban areas, there is also no evidence that they significantly helped to convert Castlemilk into a desirable suburb along the lines of Glasgow's wealthier peripheral areas.

Conclusion

The mid-twentieth-century idea of a modern, decentralized and functionally separated city is often presented as a comprehensive vision, and Glasgow was a particularly radical example of urban transformation. And yet the Glasgow case shows how policies and design at the time were anything but consistent, but rather marked by diverging visions and institutional rivalries that were never completely resolved. It also demonstrates that modern aspirations for grandeur were often not really pathbreaking or visionary, but rather reactive, pragmatic, and makeshift.

Would Glasgow have been better off if the city had been redesigned according to one consistent vision - for example the cautiously calculated national planning model, or the bold vision of Glasgow City Council? Certainly not. The amount of pain and disruption inflicted on the relocated population would have been the same, and the internal contradictions within each of these models would have prevented any of them from becoming a long-term success.

Rather, the conflicts over Glasgow's decentralization evidence the limitations of any big plan. The struggle between City Council and Scottish Office, between "housers" and 'planners", and between the different "disturbances" such as Comprehensive Development Areas, scattered tower blocks or alternative new town paradigms show that an allencompassing long-term approach was intrinsically vulnerable to disruption. This is evident in the fact that the comprehensive schemes of the post-war era failed to be carried out according to plan. This was the case even though the institutions involved generally agreed on the basic parameters of reorganization such as functional separation and expert planning, and even though the affected population, at least initially, gladly cooperated with the relocation programmes. 78 In addition, the history of Glasgow's redesign points to the surprisingly disruptive potential of institutional rivalries, which tend to be more influential than shared values.

 $^{^{76}}$ For Glasgow's tenement renaissance see Florian Urban, "New Tenements and the Image of the Past - the Crown Street Development in Glasgow's New Gorbals" Architectural Research Quarterly 17 n. 1 (March 2013), 37-48 and Florian Urban, The New Tenement (Abingdon: Routledge, 2017).

77 "Bold masterplan for Castlemilk" *The Bulletin* (Glasgow), 1989, 9.

⁷⁸ In the early phase of the redevelopment programmes there is no evidence that those affected by "slum clearance" resisted being relocated. On the contrary, they were more than happy to leave. See for example interview with architect Ian M. T. Samuel, guoted in Miles Glendinning and Stefan Muthesius, Tower Block (New Haven: Yale University Press, 1994), 220. Resentment and resistance only started from the late 1960s onwards, when the former tenement dwellers realized that their new abodes failed to meet their expectations.

The metropolis is a key location for the modern experience and, according to the American historian Tom Bender, by definition unfinished.⁷⁹ This applies in a particular way to Glasgow. The museum of failed modernist tropes is now enlivened by different approaches to mid-twentieth-century heritage – including demolition, preservation, re-design, and adaptive reuse – and thus in many respects also became a textbook example of post-modernist urban design policies. The city is now more fragmented than ever. But this fragmentation and unfinishedness accounts for its particular character, and at the same time offers great potential for future redesign.

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 $^{^{79}}$ Thomas Bender, *The Unfinished City – New York and the Metropolitan Idea* (New York: The New Press, 2002), x-xi.

Captions

Figure 01: Bruce Plan, Core of the City - Robert Bruce, First Planning Report, Glasgow City Archive TD312/10, Folio 7

Figure 02: Abercrombie, Patrick and Robert Matthew, *The Clyde Valley Regional Plan 1946* (Edinburgh: His Majesty's Stationery Office 1949), p. 56, Glasgow City Archive, D-AP1/11

Figure 03: Castlemilk - 2-14 Birgidale Road, looking southeast (author)

Figure 04: Castlemilk Aerial, c. 1955, Royal Commission NoB21364

Figure 05: Castlemilk Plan, unit 1, c. 1954. City Council, Engineering and Surveying Division of the Architectural and Planning Department, Miles Glendinning Archive

Figure 06: Castlemilk, 2017 © Crown Copyright and Database Right 2017. Ordnance Survey (Digimap Licence)

Figure 07: East Kilbride - 1-3 and 5-7 Telford Terrace, looking southwest (author)

Figure 08: The Murray neighbourhood, East Kilbride, 2017 © Crown Copyright and Database Right 2017. Ordnance Survey (Digimap Licence)

Figure 09: East Kilbride - Roundabout at Queensway in The Murray neighbourhood (author)

Figure 10: ideal neighbourhood unit plan from Abercrombie, Patrick and Robert Matthew, *The Clyde Valley Regional Plan 1946* (Edinburgh: His Majesty's Stationery Office 1949) Glasgow City Archive, D-AP1/11, p. 260

Figure 11: "Good modern work" Abercrombie, Patrick and Robert Matthew, *The Clyde Valley Regional Plan 1946* (Edinburgh: His Majesty's Stationery Office 1949) Glasgow City Archive, D-AP1/11, p 293

Figure 12: "Bad modern work" Abercrombie, Patrick and Robert Matthew, *The Clyde Valley Regional Plan 1946* (Edinburgh: His Majesty's Stationery Office 1949) Glasgow City Archive, D-AP1/11, p 292

Figure 13: Comprehensive Development Districts as planned in the 1950s from Archibald Jury and City of Glasgow Housing Committee, *Housing Centenary – A Review of Municipal Housing in Glasgow from 1866-1966* (Glasgow: City of Glasgow, 1966), Glasgow City Archive D-AP1.8(62-63)

Figure 14: Queen Elizabeth Square in the 1980s shortly before demolition (Wikimedia)

Figure 15: Hutchesontown Plan (Paul Owens)

Figure 16: Hutchesontown D Elevation (Paul Owens)

Figure 17: Hutchesontown (Paul Owens)

Figure 18: Anderston Centre in 2011 (Wikimedia/ Rapid Assistant)

Figure 19: Sighthill in 2011 (Wikimedia/Peter Atkinson)

Figure 20: Red Road Flats in 2010 (Wikimedia)

Figure 21: Cumbernauld Plan © Crown Copyright and Database Right 2017. Ordnance Survey (Digimap Licence)

Figure 22: Cumbernauld Town Centre in 2017. The view shows the main entrance from the bus station under the overpass (Michael Kordas).

- Figure 23: Houses on Balloch View, Cumbernauld (Michael Kordas).
- Figure 24: Footpath system, Cumbernauld. The footpath leads from Balloch View towards the city centre, crossing Seafar Road through an underpass (Michael Kordas).
- Figure 25: East Kilbride 1-31 Sinclair Park at Telford Road, looking northwest (author).
- Figure 26: Castlemilk: high-rises on 21, 25, and 33 Dougrie Place. The low building is the Housing Office (author)
- Figure 27: East Kilbride: 31-51 Telford Road in the Murray neighbourhood. On the left is the Dunlop Tower (author)