

Cost-benefit break down: unplannable spaces in 1970s Glasgow

SARAH MASS*

1029 Tisch Hall, 435 S. State St, Ann Arbor, MI, USA 48109

ABSTRACT: This article examines a moment of uncertainty in early 1970s Glasgow motorway history: the planning of the East Flank of the Inner Ring Road and the potential removal of the Barrows Market. As sociological influences against wholesale urban clearance came into maturity in planning and community action, Glasgow planners carried out a feasibility study into the socio-economic costs of uprooting the commercial life of the Barrows. I suggest that reading this technocratic document for its cultural assumptions, ambiguities and tensions, rather than its engineering vision, opens up a different approach to the history of motorway planning.

Introduction

In 2011, Glasgow's M74 extension opened to traffic south of the River Clyde. Completed at almost three times its initial 2001 budget of £250 million, this eight-kilometre route linked the M74 motorway to Glasgow's Inner Ring Road – the M8 – south of the Kingston Bridge. Heralded as the 'most anticipated section of motorway to be built in the UK' and bearing the title of 'Scotland's most expensive road ever', the M74 extension was not without its controversies.¹ The Scottish Socialist and Green parties waged a high-profile campaign to delay planning permission, helping to organize the Joint Action against the M74, which empowered local residents to voice their concerns about the environmental impact of

* This article began as a paper at the 2016 International Conference on Urban History, and I appreciate Shane Ewen and Simon Gunn for encouraging me to submit my work to *Urban History*. I also thank the two anonymous reviewers, along with the Newberry Urban History Dissertation Group and the University of Michigan History Department Writing Seminar, for feedback on previous versions of this article. I owe special acknowledgment to Fergus Mason and Anne Cameron, archivists at the New Glasgow Society and the University of Strathclyde Special Collections, respectively. If any reader has additional information on the origins of the illustration in Figure 3, please contact the author. Above all others, my gratitude goes to Kathrynne Bevilacqua for helping me see this article to its completion.

¹ S. Baird, 'The M74 Motorway – completion', *Glasgow Motorway Archive*, 14 Feb. 2016, www.glasgows-motorways.co.uk/m74-completion/4578281641, accessed 25 Mar. 2017.

the motorway on their urban communities. Over 40 statutory and 300 individual objections were lodged during the project's eight-year-long planning process. Although 25,000 vehicles have been taken off Glasgow's Inner Ring Road since the M74's inception, the direct action inspired by the motorway construction remains one of the project's lasting social legacies.

Alongside the demolition and the construction, the community arguments and the technical counter-arguments, the M74 project also produced a remarkable example of urban-industrial public history. In 2008–09, Transport Scotland – in collaboration with Glasgow Museums – carried out a set of interviews with residents and former residents of areas adjacent to the site to 'record the memories of those who had a connection with former buildings identified as being worthy of archaeological examination along the route'.² These interviews contextualized the social life of the buildings to be demolished for the M74 – specifically, the Gorbals tenements, the Govan Iron Works and the Caledonian Pottery workshop – and were used as part of a series of public exhibitions held in the Scotland Street School Museum. In these interviews, the preparation for the M74 brought together the material and the human to uncover stories of 'modern' Glasgow – potteries, iron works and tenements – being displaced by another key player in city's history – motorway construction.

Many twentieth-century urban historians would focus on the first part of this M74 anecdote rather than the second, on the destructive scale of motorway planning rather than the subtle intertwining of social and engineering history. Historical literature tends to frame urban motorway building as a stand-in for the aims and methods of functionalist modernism,³ and, more recently, as the technocratic adversary of 1960s and 1970s community action.⁴ While the overlap between these approaches has invaluable linked planning with social and cultural histories, both fields still tend to take motorways as both the means and ends of urban change. Motorways are always assumed

² D. Walker, 'M74 Dig Oral History Project', www.academia.edu/4421647/M74_Dig_Oral_Project, accessed 25 Mar. 2017.

³ B. Schmucki, 'Cities as traffic machines: urban transport planning in East and West Germany', in C. Divall and W. Bond (eds.), *Suburbanizing the Masses: Public Transport and Urban Development in Historical* (Aldershot, 2003), 149–70; O.D. Gutfreund, *Twentieth-Century Sprawl: Highways and the Reshaping of the American Landscape* (Oxford, 2004); D. Starkie, *The Motorway Age: Road Traffic Policies in Post-War Britain* (London, 1982); P. Merriman, *Driving Spaces: A Cultural-Historical Geography of England's M1 Motorway* (Hoboken, 2007); J. Gold, *The Practice of Modernism* (London, 2007); C. Klemek, *The Transatlantic Collapse of Urban Renewal* (Chicago, 2011); P. Shapely, 'Civic pride and redevelopment in the post-war British city', *Urban History*, 39 (2012), 310–28.

⁴ J. Davis, "'Simple solutions to complex problems": the Greater London Council and the Greater London Development Plan, 1965–1973', in J. Harris (ed.), *Civil Society in British History* (Oxford, 2003), 249–73; R.A. Mohl, 'Stop the road: freeway revolts in American cities', *Journal of Urban History*, 30 (2004), 674–706; E. Avila, *The Folklore of the Freeway* (Minneapolis, 2014); K. Shelton, 'Building a better Houston: highways, neighborhoods, and infrastructural citizenship in the 1970s', *Journal of Urban History*, 43 (2017), 421–44.

to have irrevocably altered the networks, physicalities and memories of collective life in western cities, whether or not those cities are left standing or preserved in the motorways' wakes.⁵

This article argues that the quotidian power of urban motorways should not merely be 'read' in the built environment or in local political battles; motorways leave a trail of epistemological and bureaucratic documentation that elucidate how planners confronted ambiguity and irrationality in the urban landscape.⁶ More specifically, I argue that the planning of the Glasgow Inner Ring Road through the eastern edge of the city in the 1970s made material the culture and sociability of one of the city's most shadowy institutions: the Barrows Market. The East End of Glasgow was both home to one of Britain's largest and most notorious outdoor markets and the site of some of the most fiercely contested motorway planning in the country. These institutions and their related debate were understandably interconnected: the socio-economic deprivation of the East End invited low-profit, informal retail economy, while routing a motorway through these seemingly obsolete spaces was heralded by modernizers as the way to fix the East End's imbalance with the city's more affluent West End. This article, therefore, focuses on the intersection of market and motorway history in the early 1970s, when Glasgow planners and engineers assessed various routings of the East Flank of the Inner Ring Road. I argue that when technocrats were compelled to quantify the cost-benefits of swapping out entrenched socio-economic practices for the mobility promised by the car system, they were met by a shopping community whose boundaries and motivations did not fall within the behavioural norms of the imagined 'mobile consumer' in retail and infrastructure planning.⁷ In the gaps between the planners' 'model' and the reality of urban life, we can read 'culture' as a contested field of urban planning studies in the early 1970s.

Since *The Production of Space* was translated into English in the 1990s, geographers and planning scholars have repeatedly used Lefebvre's theoretical framework to distinguish between the distanced production of space by planners and the everyday use of space by citizens living and

⁵ An exception to this scholarship is the work of Simon Gunn, who has turned attention to the intersection of mid-century social investigation and the sociology of automobility. Gunn, 'People and the car: the expansion of automobility in urban Britain, c. 1955–1970', *Social History*, 38 (2013), 220–37.

⁶ This line of thinking is influenced by M. Hull, *Government of Paper: The Materiality of Bureaucracy in Urban Pakistan* (Berkeley, 2010).

⁷ See Economic Development Committee for the Distributive Trades, Shopping Capacity Sub-Committee, *Urban Models in Shopping Studies* (London, 1970); R.W. Bacon, 'An approach to the theory of consumer shopping behaviour', *Urban Studies*, 8 (1971), 55–64; L.P. Bucklin, 'Retail gravity models and consumer choice: a theoretical and empirical critique', *Economic Geography*, 47 (1971), 489–97; R.L. Davies, 'Patterns and profiles of consumer behaviour', *University of Newcastle, Department of Geography Research Series*, 10 (1973); R.A. Day, 'Consumer shopping behaviour in a planned urban environment', *Tijdschrift voor Economische en Sociale Geografie*, 64 (1973), 77–85.

working in the built environment.⁸ These studies have used public inquiry testimony, oral histories, photography, and even poetry as key cultural artefacts that speak back to the bird's eye view of modernist planning. My approach complicates Lefebvrian ideas of 'representations of space' and 'spaces of representation' by arguing that the peculiarities of shopping, especially within informal open-air retail sites, made even a technocratic representation of its social and cultural processes inherently incomplete.⁹ The struggle of Glasgow planners, as they attempted to quantify and aggregate the cost of disrupting the Barrows Market, does not simply represent the triumph of lived space over conceptual space. Instead, I show that we must think in historical and conjunctural terms, not just theoretically, about why Glasgow motorway planners sought to model retail and consumption informality in the first place.

The first section of this article establishes the context of motorway planning in early 1970s Britain and the particular fault lines between Glasgow councillors, planners and citizens. The next section focuses on the Barrows Market as a challenging study site, especially within the context of assessing the 'real' versus 'social' value of the environments potentially uprooted by motorway construction. The third section scales down these debates to the level of text, specifically the *Glasgow East Flank Motorway Feasibility Study* (1972). Focusing on one document, I argue that the planners' project of 'state simplification' often muddled the subjects and spaces that technocrats sought to clarify.¹⁰ In the case of the East Flank, planners needed to make sense of a cohort of traders and customers returning to a seemingly obsolete part of the inner city to engage in the anachronistic practice of open-air market shopping. For an inherently nebulous organism like the Barrows Market, this document in and of itself is a vital resource that seeks to impose retail and consumption research methods on the city's largest informal economic institution. The final section reflects on the legacy of Glasgow's contentious infrastructure building programme, especially within the contemporary context of brutalist architecture appreciation campaigns. When we allow the sheer physicality of modernist urban renewal to tell the stories of motorway planning, we risk missing more nuanced visions of urban life that dry, bureaucratic documentation can paradoxically produce. My approach makes the case that by slowly reading one artefact, the *Feasibility Study*,

⁸ For example, see N.R. Fyfe, 'Contested visions of a modern city: planning and poetry in postwar Glasgow', *Environment and Planning A*, 28 (1996), 387–403; P. Hubbard *et al.*, 'Contesting the modern city: reconstruction and everyday life in post-war Coventry', *Planning Perspectives*, 18 (2003), 377–97; L. Faire and D. McHugh, 'The everyday usage of city-centre streets: urban behaviour in provincial Britain c. 1930–1970', *Urban History Review*, 42 (2014), 18–28.

⁹ H. Lefebvre, *The Production of Space* (Oxford, 1991).

¹⁰ James Scott defines 'state simplification' as the tools of modern statecraft that 'did not successfully represent the actual activity of the society they depicted; nor were they intended to; they represented only that slice of it that interested the official observer'. J. Scott, *Seeing like a State* (New Haven, 1998), 2–4.

we can recreate the shadowy subjects and practices that are implicated and evoked in the production of infrastructure. This method suggests a different approach to the vast archive of functional modernist planning in post-1945 Britain.

Glasgow as motorway regime

Glasgow occupies a particularly notorious position in the history of British urban motorways. The city's earliest post-war planning proposals, both the Bruce Plan and the Clyde Valley Regional Plan, agreed that five major roads, all converging on Glasgow's centre, needed to be rerouted onto radial and arterial bypass roads, a model that eventually produced the city's Inner Ring Road.¹¹ Over the next 20 years, the city's proposed 75 miles of motorway construction (as opposed to London's 39 miles) were pushed through via the 'strong arm' of planning convener and future corporation¹² Labour Group leader Bill Taylor.¹³ Civic pride fuelled motorway backers, who relished the opportunity to outflank both England and Europe in constructing the 'first urban motorway'.¹⁴ Consequently, councillors and planners looked across the Atlantic rather than across the Tweed for inspiration: deputations flew to America and surveyed road building on a grand scale in Washington, DC, Baltimore, Philadelphia, New York, New Haven, Pittsburgh, Buffalo, Detroit and Chicago.¹⁵

In many ways, the relationship between motorway construction and social amelioration was a self-fulfilling prophecy in Glasgow. Over the 1960s, councillors and planners systematically dismantled forms of transport that had kept Glasgow running for over a century: tram lines were uprooted, trolley buses stopped running and Beeching cuts closed five of Glasgow's rail stations. Although the subway system remained, its revenue fell as the users of its inner-city stations moved to peripheral housing estates.¹⁶ While the residents who remained close to the urban core were the least likely to benefit from a new road system that linked the suburbs, new towns and the rest of the country – there were only 113 cars for every 1,000 residents of Glasgow – the corporation argued that the cheapness of land and obsolescence of social fabric in these inner-city areas was a golden opportunity to develop infrastructure along new lines.¹⁷

¹¹ R. Bruce, *First Planning Report to the Highways and Planning Committee of the Corporation of the City of Glasgow* (Glasgow, 1945). For more on the Bruce Plan versus the Clyde Valley Regional Plan, see Fyfe, 'Contested visions of a modern city', 389–96.

¹² The corporation was the local administrative body in Glasgow since 1895, governed by the council. After reorganization in 1975, it became the City of Glasgow District Council.

¹³ J.P. McCafferty, 'The Glasgow Inner Ring Road: past, present and future', in M. Glendinning (ed.), *Rebuilding Scotland: The Postwar Vision* (Edinburgh, 1997), 78.

¹⁴ *Ibid.*, 77.

¹⁵ *Glasgow Herald*, 28 Oct. 1961.

¹⁶ C. Pooley et al., *A Mobile Century? Changes in Everyday Mobility in Britain in the Twentieth Century* (Aldershot, 2005), 28.

¹⁷ H. Richardson, 'Glasgow's hollow crown', *New Statesman*, 19 Sep. 1975.

Yet 'obsolescence' was a social and spatial category of the corporation's own making. Since 1947, planning legislation had given local authorities the power to designate Comprehensive Development Areas (CDAs) in which compulsory purchase ('eminent domain' in the American context) could be used to tackle large-scale blight. Glasgow's 29 CDAs covered one twelfth of the city and nearly three-quarters of its district shopping centres, outstripping all British cities in magnitude.¹⁸ The scale of land needed for motorway construction meant that CDA designation and road building often went hand-in-hand: the North and West Flanks of Glasgow's Inner Ring Road were routed through a number of the city's CDAs (see [Figure 1](#)). After these flanks of the Inner Ring Road opened in 1972, planners and engineers turned their attention to the second stage of the project: the South and East Flanks. The proposed line of the East Flank – following the medieval nucleus of the High Street passing alongside the Cathedral, Tollbooth Steeple and St Andrew's Square before meeting the M8 at Glasgow Green – was deemed to be 'in another league' compared to the completed sections, a road plan that would eventually 'throttle Glasgow in a ludicrously tight garrotte'.¹⁹ Radical modernizers welcomed this proposal, seeing the total rebuilding of the city as the only way to 'destroy the last remains of the inhuman Victorian exploitation' that had characterized the residential and industrial density in working-class areas.²⁰ For this faction, a complete Inner Ring Road was the only way to bring outlying residents into central area shopping facilities, which in turn would address the socio-economic imbalance between the industrial, impoverished East End and the residential, middle-class West End.²¹

These arguments were countered by an increasingly vocal movement to conserve and improve Glasgow's existing built landscape. Groups including the Glasgow Institute of Architects, the Motorway Movement and the New Glasgow Society urged planners to 'weigh the importance of good communications against a good environment for the future prosperity and welfare of the city'.²² Petitions, editorials, seminars, and lectures spread the belief that a 'dismal, dirty, derelict, motorway-ridden city' would ultimately deter new business and exacerbate social inequality.²³ For the East End in particular, motorway construction would only hasten its environmental decline, as all potential routes would destroy

¹⁸ R. Miller, 'The new face of Glasgow', *Scottish Geographical Magazine*, 86 (1970), 9–10.

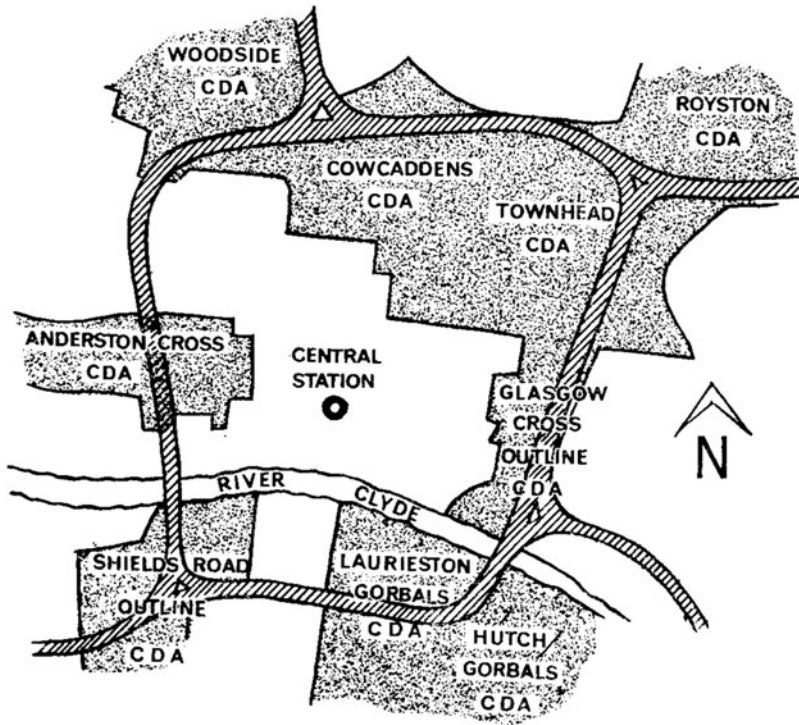
¹⁹ Richardson, 'Glasgow's hollow crown'; A. Jeffrey, 'Glasgow's mania for environmental self-destruction', *Architects' Journal*, 4 Apr. 1973.

²⁰ C. Thom, 'Motorway city', *Architects' Journal*, 10 Nov. 1971.

²¹ *Glasgow Herald*, 10 Apr. 1972.

²² New Glasgow Society Archives (NGSA), New Glasgow Society newsletters and news bulletins (NGS) 2/1, 'Battle for historic core', *NGS News*, 16 Jan. 1972, 1.

²³ See the editorial exchange in the *Architects' Journal*. Thom, 'Motorway city'; J.M. McKean and C. McKean, 'Motorway city', *Architects' Journal*, 17 Nov. 1971.



MAP III

Glasgow: CDAs in relationship to the Inner Ring Motorway

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Figure 1: 1960s model of the Inner Ring Road with CDAs. T. Hart, *The Comprehensive Development Area* (Edinburgh, 1968), 32. Reproduced with the permission of Tom Hart.

architectural and civic landmarks.²⁴ These pressure groups challenged two underpinning beliefs held by Glasgow's planners: that motorway building would ameliorate the socio-economic deprivation in the city, and that routing these new arteries through 'obsolete' areas would minimize public opposition. Through letter-writing campaigns, walking tours through potential development areas and calls for an East Flank public inquiry, protesters signalled to civic leaders not only that motorways uprooted historic landscapes, but also that these landscapes fostered community engagement.

²⁴ 'Inner motorway garrotte', *Architects' Journal*, 4 Oct. 1972; *Glasgow Herald*, 10 Sep. 1971; Glasgow City Archives (GCA), Planning Department files 1/7, Report on the East Flank of the Inner Ring Road, the Hamilton Motorway, and the East End Expressway, Nov. 1973, 2.

This tenor of civic action was not unique to Glasgow. Since the mid-1960s, the growth of citizen action groups, local amenity societies and environmental organizations on both sides of the Atlantic had forced consultation and preservationist arguments onto planning agendas.²⁵ By the early 1970s, these coalitions could count the scrapping of the Lower Manhattan Expressway, the London Motorway Box and Toronto's Spadina Expressway as international victories. Whereas Glasgow's motorway lobby had once looked across the Atlantic for inspiration, America eventually emerged as a blue print for motorway protest.²⁶ Even Glasgow's councillors knew single-minded pursuit of urban renewal swung dangerously close to the 'big brother' style of state planning, a label that did local government no favours in an era of renewed demands for direct democracy.²⁷ The extent of comprehensive development proposed by the corporation, the mileage of proposed motorway construction relative to car ownership and the power that the Labour party wielded on the local stage made consultation in planning a particularly salient issue of local political participation and representation.

One emerging theme in Glasgow planning disputes, therefore, was the relationship between the generic, international scale of motorway building and the specificity of the communities these projects touched. Local coalitions argued that motorways could not be unchanging infrastructure fixes across all urban types; the financial and social cost of their construction required frequent consultation and reassessment. Where councillors had once seen American-scaled motorways as the key to revitalizing Glasgow and setting it apart from its British and European urban competitors, civic amenity groups saw technocrats destroying the places and landscapes that gave Glasgow its intrinsic character. While civic boosters wanted to design for the city they imagined Glasgow could be, amenity activists wanted to design for the city they believed Glasgow citizens already knew. For planners to reach these communities and contextualize their investments in the built environment around the East Flank route would be a process fraught with both practical and professional tensions.

²⁵ The literature on these movements is vast; see Mohl 'Stop the road'; and C. Klemek, 'The rise and fall of New Left urbanism', *Daedalus*, 138 (2009), 73–82, for overviews. For case-study approaches, see J. Dory, 'Clash of urban philosophies: Moses versus Jacobs', *Journal of Planning History*, 17 (2018), 20–41; D. Robinson, 'Modernism at a crossroad: the Spadina Expressway controversy in Toronto, Ontario c. 1960–1971', *Canadian Historical Review*, 92 (2011), 295–322; Davis, 'Complex problems'. For contemporary British reactions, see J. Barr, 'The amenity protesters', *New Society*, 1 Aug. 1968, 152–5; Editorial, 'Motorways through our cities', *New Society*, 24 Jul. 1969; T. Bendixson, 'The accumulation of urban change', *Municipal Review*, 40 (1969), 16–18; M. Broady, *Planning for People: Essays on the Social Context of Planning* (London, 1968).

²⁶ See NGS/NGS/2/1, 'Glasgow roads plan obsolete?', and 'Cars no longer rule Toronto... or why Glasgow must heed the lessons of the Spadina Expressway closure', *NGS News*, 7 (1970–71), 1 and 4–5.

²⁷ 'Britain's mark 1 regional city', *Architects' Journal*, 6 May 1964; J.P. Boys, 'Packed meeting discusses Buchanan', *Architects' Journal*, 12 Feb. 1964.

The Barrows: environmental area and retailing focal point

Middle-class amenity groups like the Glasgow Institute of Architects, Motorway Movement or the New Glasgow Society tended to focus their critique of the East Flank on the historic physical landscape that would be uprooted by clearance and road building. Landmarks such as the Cathedral and the High Street, or Georgian features such as St Andrew's Square, could be tied to the city's medieval and merchant pasts. Yet the planned route of the East Flank swung dangerously close to another insalubrious institution of urban life: the Barrows Market. The Barrows had emerged out of Glasgow's rag trade after World War I, becoming a staple feature of the city's East End. Its weekend activity and supply of cheap clothing and home goods made it a draw for both shoppers and families in search of an affordable day out. Yet between 1945 and the late 1970s, the immediate vicinity of the Barrows lost nearly a third of its population due to slum clearance, leaving the market vulnerable to accusations of obsolescence on the part of engineers, planners and politicians.²⁸

The market first collided with post-war Glasgow planners in the early 1960s. In 1961, as part of the corporation's Quinquennial Review of the 1945 Development Plan, Glasgow Corporation held a public inquiry into land rezoning around the market. The viewpoints preserved in the testimony of planners, politicians and local stakeholders demonstrate a perceptible divide over the meaning of 'value' at the market area. For example, planning consultant David Wishart argued that there was no need to maintain or build up shopping facilities in the area, as the area would lose its residential character as new housing was built farther to the east. The anticipated division of the Inner Ring Road pre-emptively justified these views, forming a boundary between the 'attraction' of city centre shopping and the 'localness' of new shopping precincts in the eastern inner suburbs.²⁹ Local shopkeepers, as the owners of many of the properties up for compulsory purchase, also gave evidence at this inquiry.³⁰ They maintained that their enterprise had built up a valuable business district around the market; rezoning would create not only hardship in their own business lives, but also a literal 'blank area' along one of the crucial communication and commercial thoroughfares

²⁸ The population of the East End shrank from 150,000 in 1951 to 45,000 in the late 1970s. Between 1970 and 1973 alone, the population of Glasgow fell from 908,000 to 850,000. M. Pacione, *Glasgow: The Socio-Spatial Development of the City* (Oxford, 1995), 173; National Records of Scotland (NRS), Scottish Development Agency files 3/20, urban renewal director, (R. Colwell) Scottish Development Agency. Retailing in GEAR (23 Nov. 1979).

²⁹ GCA, Department of Architecture and Planning (D-AP) 3/1/2, cross-examination of D.S. Wishart, Quinquennial Review of the Development Plan enquiry, April–May 1961, vol. 3, 2282–3.

³⁰ Since 1959, property owners whose premises were bought through compulsory purchase needed to receive market value for their property. A. Ravetz, *Remaking Cities* (London, 1980), 67.

in the city.³¹ With the prospect of the East Flank looming, planners and shopkeepers fundamentally disagreed over the mode of quantifying and qualifying the existing retail value in the area: planners prioritized the redeveloped endpoint of improved communication between city centre and outlying districts, while shopkeepers defended their pre-existing businesses.

The 1961 Quinquennial Review's dissenting views over zoning and comprehensive development were harbingers of future planning debates not only in the Barrows vicinity, but also in the field of infrastructure planning itself. Throughout the 1960s, there was significant disagreement in the planning profession over how best to use social scientific methods in the service of urban development. These debates were brought to the public stage with Colin Buchanan's *Traffic in Towns* (1963), regarded as the seminal report in Britain for thinking of urban landscape as both built and lived environment.³² From the pages of *New Society* to traffic engineering conferences, Buchanan's ideas fostered debate between practitioners and their critics about how the intangible qualities of urban areas might be integrated into the technical field of infrastructure planning.

Buchanan's use of 'environment' proved to be one of the lasting fault lines between these social and technical strands of planning. His 'environmental area' concept held that road construction should consider the cost-benefit analysis of disrupting environmental and social relations in order to meet the individualist demands of the motorist.³³ Buchanan's theories around identifying, studying and integrating environmental areas into urban planning, however, were difficult to translate into practice and were even deemed 'political' by sociologists.³⁴ Much of this came down to questions of how to reach stakeholders in urban development projects: how should they be spoken to and spoken for? While engineers argued that 'reverence for urban communities should be avoided where possible', the shifting ground of citizen participation in planning demanded that this professional field consider landowners as 'individuals' with a stake in the survey process.³⁵ The language used to discuss place, community and ownership is telling: the property and concerns of the individual

³¹ GCA D-AP 3/1/2, evidence of B. Ahmad and others (objecting), Quinquennial Review, Apr.–May 1961, vol. 4, 2538. Closing address from Mr McNeill, Quinquennial Review, vol. 4, 2595.

³² For more on the Buchanan Report, see S. Gunn, 'The Buchanan Report, environment and the problem of traffic in 1960s Britain', *Twentieth Century British History*, 22 (2011), 521–42; and M. Bianconi and M. Tewdwr-Jones, 'The form and organization of urban areas: Colin Buchanan and *Traffic in Towns* 50 years on', *Town Planning Review*, 84 (2013), 313–36.

³³ 'City centre functions', *Architects' Journal*, 1 Sep. 1965.

³⁴ M. Broady, 'Social theory and the planners', *New Society*, 16 Feb. 1967, 232–3; Ravetz, *Remaking*, 132–3.

³⁵ J. Drake, 'Local participation including social aspects', in J.S. Davis (ed.), *Motorways in Britain: Today and Tomorrow: Proceedings of the Conference Organized by the Institution of Civil Engineers in London, 26–28 April 1971* (London, 1971), 30.

(either mobile or immobile) could be quantified, while the values of neighbourhoods or collectives were relegated to the affective realm.

In the field of retail and shopping development, there was a similar shift away from quantitative methods and toward considering more qualitative variables. In the 1950s and early 1960s, retail planning, like road planning, was undergirded by gravity models, which held that the capacity of a proposed motorway or a hypothetical shopping centre could be justified by aggregating the number of trips undertaken by drivers or shoppers.³⁶ This rationale, however, did not take into account the dependent variables in subjects' decision-making processes, which might include carpooling or using mass transit, walking or taking a shopping trip for pleasure without making a purchase.³⁷ Just as motorway engineers and consultants debated the benefits and drawbacks of engaging urban residents in infrastructure proposals, retail planners explored new ways of engaging the public in shopping development plans. Research centres like the National Economic Development Office's Shopping Capacity Sub-Committee and Manchester Business School's Retail Outlets Research Unit expanded the questions and methods that drew planners and sociologists to the particular economic dynamics of retail and consumption.³⁸ Additionally, groups like the Consumers' Association pressed for more direct citizen involvement in the planning of retail spaces and carried out shopping surveys that solicited the views of these market actors.³⁹ In both the transportation and retail sectors, planners were becoming more receptive – for both economic and ideological reasons – to citizen consultation in large-scale development proposals.

At first glance, the Barrows – a popular yet highly informal retail landmark that stood within the path of proposed motorway construction – might appear as an ideal study site for testing these new approaches to gathering and assessing resident movements and consumer choices. Retail markets anchored commercial vitality in ways that had been systematically disregarded in the 1960s by the vogue of large-scale motorway-retail developments, the most famous example of which was the Bull Ring Centre in Birmingham.⁴⁰ The Barrows, like the former Birmingham public market, was a hub of the local townscape, cohering a maze of small streets between the market and Glasgow Cross, a traffic pattern that would ultimately be uprooted by the East Flank, 'leaving the covered market adjoining as an isolated island in the middle of these

³⁶ See D.L. Huff, 'A probabilistic analysis of shopping center trade area', *Land Economics*, 39 (1963), 81–90.

³⁷ B. Ladd, *Autophobia: Love and Hate in the Automotive Age* (Chicago, 2008), 120–1; *Urban Models in Shopping Studies*, 51.

³⁸ See *ibid.* and D. Thorpe and P. Kivell, *Decentralisation of Shopping: Factors to Be Considered by the Community* (Manchester, 1971).

³⁹ 'Shopping', *Which?*, Nov. 1969, 336–41.

⁴⁰ J. Lintonbon, 'The drive to modernize: remodelling Birmingham city centre, 1945–1965', in J. Gosseye and T. Avermaete (eds.), *Shopping Towns Europe: Commercial Collectivity and the Architecture of the Shopping Centre, 1945–1975* (London, 2017), 234.

new developments'.⁴¹ In early 1972, William Holford and Associates, the consultant planners and engineers for the Inner Ring Road, undertook a survey of the Barrows area to grapple with the different costs associated with motorway construction, photographing the market and assessing the value of its permanent buildings. They concluded, however, that these physical characteristics or 'real costs' of site value could not explain the 'activity created within [the Barrows'] financial structure'.⁴² If planners were to spare the market from motorway development by realigning the East Flank, they would need to assess the 'social costs' of uprooting a viable commercial landscape in the East End of Glasgow.⁴³

The relationship of the Barrows Market to the prospective East Flank was conditioned by two related developments in 1960s urban planning: the integration of qualitative and social factors into infrastructure planning and the cost-benefit rationale of both motorway and retail development. Since the early 1960s, planners and shopkeepers had assessed the value of the Barrows Market according to two different sets of criteria: while the former saw it as largely ripe for infrastructure renewal, the latter believed its commercial draw made it a shopping destination in its own right. The market did not hold the historic coherency of Glasgow Cross's architectural landmarks, but rather supported the commercial livelihoods and retailing patterns of a diffuse, informal shopping area. Assessing the value of this 'environmental area', therefore, required new modes of reaching residents and visitors in the area, as well as of modelling their myriad attachments to the Barrows as a coherent urban space.

The Feasibility Study and urban legibility

Glasgow planners confronted these issues in the *Glasgow East Flank Motorway Feasibility Study* (1972). This document was put together by the Environmental Studies group, an arm of the Glasgow Planning Department. The presence of Environmental Studies in an urban planning department must be seen as a direct result of developments on the national level: the Town and Country Planning Act (1968) had expanded the brief of local and regional planning officers, while the establishment in 1970 of the Department of the Environment made explicit Buchanan's calls for more integrated approaches to planning and infrastructure.⁴⁴ This sub-set of the Planning Department reviewed the corporation's development and

⁴¹ *World's Fair*, 2 Sep., 7 Oct. and 16 Dec. 1972.

⁴² Robertson Collection, University of Strathclyde Special Collections (RC USSC), William Holford and Associates, *Glasgow Inner Ring Road: East Flank Motorway Constraints* (Glasgow, Mar. 1972).

⁴³ RC USSC, Glasgow Planning Department, *East Flank and Barrowland Study* (Glasgow, 1972).

⁴⁴ Environmental Studies first appears in Glasgow planning records in Aug. 1971, when the chief planning officer appealed for more funding and support staff for the department's expanding functions. Presumably, however, this sub-set of the department would have come into being in either 1968 (with new planning legislation) or 1970 (with the establishment of the Department of the Environment). GCA, Department of the Town

highway plans to keep in step with changing socio-economic conditions in the city. Environmental Studies thus bridged the engineering and sociological strands of urban planning discussed in the previous section.

Rather than making the Barrows 'legible' through land use and property values, the authors of the *Feasibility Study* tried to qualify the relationships and behaviour that animated the Barrows as a hub of commercial activity.⁴⁵ The *Feasibility Study*, therefore, represented urban society in a different light than sources like road protest campaigns or public inquiries into motorway construction. Unlike traditional protests, the communities affected by motorway construction did not reach out to planners; instead, the study's authors reached out to communities in order to measure and describe their boundedness and mobility. For an inherently nebulous organism like the Barrows Market, this document in and of itself was a vital resource that seeks to impose retail and consumption research methods on an institution of the city's informal economy. And for a time and a place where inner-city communities were in the flux of depopulation and deindustrialization, this social survey provides historians with a first-hand account of how one set of sociologically minded planners made sense of the anachronistic practice of returning to the inner city to patronize an informal street market.

The *Feasibility Study* was divided into four parts: background (the socio-economic context of the area affected by the East Flank), motorway alignments (the various routes proposed by Glasgow's motorway consultants), environmental effects (the cost-benefit analysis of each potential route) and a preferred alignment. These parts reflected Environmental Studies' interest in historical urban morphology, the social impact of large-scale infrastructure impact and the 'real' costs of buying, clearing and building on urban land. In this, the report was not unlike the subsequent investigations that the group would carry out into the *East End Expressway* or the *East End Study*.⁴⁶ Yet there were supplementary sections in the *Feasibility Study* that pushed its purpose beyond the field of socio-economic survey and into cultural inquiry.

An appendix section, entitled 'Barrows Study', was made up of the authors' observations at the market site and bottom-up survey work with stallholders and customers.⁴⁷ The aim of this appendix, in the words of the study's authors, was to assess the 'social and economic value' of the market, in part by qualifying the value judgments that shoppers and traders attached to bargain shopping, as well as by measuring the potential

Clerk 8/1/19/13, Planning Department Establishment, report by director of planning, Aug. 1971.

⁴⁵ For more on the disconnection between legible forms and lived experience, see Scott, *Seeing like a State*, 58.

⁴⁶ R.D. Mansley, *East End Expressway: A Background Study* (Glasgow, Nov. 1973); Glasgow Planning Department, *East End Study*, vol. II: *Strategy* (Glasgow, Aug. 1973).

⁴⁷ RC USSC, R.D. Mansley, *Glasgow East Flank Motorway Feasibility Study* (Glasgow, Jul. 1972), 68.

for this kind of commercial institution to survive relocation.⁴⁸ As detailed in the previous section of this article, the very use of these sociological surveys was a major bone of contention in professional planning debates. While social inquiry-inclined planners thought household inquiries put physical planning on 'a firm scientific footing', sociologists feared that planning's adoption of social inquiry would be a crude, determinist foreclosing of the discipline's more expansive philosophies and aims.⁴⁹ According to these sociologists, the post-war built environment of neighbourhood and estate housing was proof that planners ultimately overvalued the 'physical' environment rather than 'social' networks and communities. The aims and methods of the *Feasibility Study*, in particular the Barrows Study, directly confronted the issue of how to totalize a complex urban area and how to make the area's subjects and communities part of the survey and planning process. This drafted section – unlike published planning reports or models made for public consumption – captured the competing voices of planning theory at their most honest and their most perplexed.

The Barrows Study initially divided the socio-economic value of the market into main functions and ancillary functions. The planner-authors historicized the former in relation to budget shopping: whereas the early inter-war market grew out of the rag trade in second-hand goods, the abolition of Resale Price Maintenance in the 1960s, combined with increased consumer buying power and cheap ready-to-wear fashion, had shifted the balance of Barrows trade to new clothing, durables and Do-It-Yourself goods like linoleum, carpeting and other home goods. Spreading affluence and cheaper consumer prices, in turn, influenced the mobility and transport of market customers: the abundance of parking on derelict land and in depopulating streets drew in customers purchasing these large, bulky items, which cost about 75 per cent of similar items from city-centre retail outlets.⁵⁰

These main functions were collated fairly easily through first-hand observation, market day photography and quantitative comparison (see Figure 2). The ancillary functions – intangibles that had always set the Barrows apart from its competitors – were more subjective and ephemeral. The Study authors hypothesized that the patter of the market salesman, the novelty of a Sunday shopping trip, the appeal of browsing and face-to-face interaction all buoyed the street market in an era in which rising prosperity should have spelled its demise.⁵¹ In its *ad hoc* activity, the Barrows was an urban institution that needed to be understood in relation to its humanity rather than its physicality.⁵² The Barrows Study thus

⁴⁸ *Ibid.*

⁴⁹ 'Too simple', *New Society*, 7 Apr. 1966; Broady, 'Social theory'.

⁵⁰ Mansley, *Glasgow East Flank*, 66 and 70.

⁵¹ *Ibid.*, 72.

⁵² J. Jacobs, *The Death and Life of Great American Cities* (New York, 1992), 220–1.



Figure 2: Clockwise from top left: 'The Barrows on a weekday'; 'The Barrows on a weekend'; 'The Barrows on a Sunday'. Mansley, *Glasgow East Flank*, 12–13. Reproduced with the permission of University of Strathclyde Special Collections and Glasgow Council.

sought aspects of the market that were hidden from the planners' objective gaze: the affective draw of its form and tradition, the changes in class structures that either helped or hindered the institution's longevity and the weight that individual consumers gave 'bargain' shopping vis-à-vis the potential disruption of motorway construction.

To contextualize these changes, the Study authors needed to tap individual motivations and so proposed a questionnaire for shoppers and traders at the Barrows. This questionnaire posed six multiple-choice questions to shoppers, plus eight questions for stallholders. The questions touched on demographics (age and neighbourhood), trade practices ('Why have you come today? What are you buying? How often do you come? How do you travel?') and potential site changes ('What do the Barrows offer that other shopping centres don't? Would you still go to the Barrows if they were to move to different premises in Glasgow?').⁵³

⁵³ Mansley, *Glasgow East Flank*, 74–5.

This final set of questions most clearly revealed the planners' attempts to impose a qualitative, catchment rationality on the demographic shifts and population depletion in Glasgow's inner-city districts. Additional questions betrayed the planning belief that the market was a site of involuntarily frugality or poverty ('Would you still come to the Barrows if your income was greater? Would you still trade at the market if your overheads increased due to relocation?').

Frustratingly, this questionnaire appears to have remained in the template stage as the East Flank languished in indecisions through most of the 1970s. Its answers would have brought to light the socio-economic functions and the material stakes of an inherently fluid institution. In its draft state, the questionnaire does elucidate how a particular cohort of planners, coming from a particular strand of the profession, saw the spatial dispersal, the physical deterioration and the shopping draw of the East End as integrated and co-dependent variables in their motorway site assessment. The Environmental Studies group was aware that the Barrows represented one of those sites of 'organized complexity' in a city where multiple motivations, spheres of influence and networks of communication and transport co-existed.⁵⁴

Yet there were major divides within the Glasgow Planning Department over the decision to assess 'social cost' via individual questioning. Following the Barrows Study initial survey and questionnaire in the *Feasibility Study*, a separate, unnamed cohort of planners responded with a 'comments' section wherein they critiqued their colleagues' language, tone and entry point.⁵⁵ While the survey and questionnaire heeded the emotional or timeless connotations of the Barrows, the comment section foregrounded the very modern reasons for the market's popularity: shoppers were drawn to the abundance of street parking, the cheapness of nationally advertised goods and a network of shops around the market that traded on credit.⁵⁶ In the eyes of these planners, the goods and location of the Barrows attracted car-owning rational economic actors rather than nostalgic returnees to the inner city.

These materialist critiques were not impervious to the Barrows' emotional draw. This second set of planners believed that even in a 'regional economy which was not expanding and where wages are not rising in real terms', the irresistibility of 'impulse shopping' kept the market alive.⁵⁷ The comments section asserted that the novelty of Sunday shopping (still irrevocably linked to the Barrows and its environs) and the entertainment value of the market could keep the area humming despite depopulation and the threat of redevelopment. What had changed – and

⁵⁴ Jacobs, *The Death and Life*, 434, 439 and 441.

⁵⁵ There is no evidence in the document, the library catalogue, or subsequent cross-referencing in the archives about the identity of these 'comments' section authors.

⁵⁶ Mansley, *Glasgow East Flank*, 82.

⁵⁷ *Ibid.*, 83.

where the comment section finds fault with the framework of the survey section – were the demographics of the market's bargain shoppers. In their eyes, more attention needed to be paid to the changeover at the market, as well as to the potential that the Barrows was 'serving entirely different types of people nowadays from twenty years ago, coming...from entirely different areas and with different income structures'.⁵⁸ This oblique comment appears to question the usefulness of social inquiry for a retail-leisure draw like the Barrows. While the East End might have housed over half of the city's unskilled workers and lower socio-economic groups,⁵⁹ the catchment of the market and the flurry of car traffic suggested a counterpoint to myths of social mobility or embourgeoisement. Even as Glaswegians might change residential districts, the saliency of shopping tradition maintained the East End as a commercial hub for a diffuse community.

The Barrows, in its uneven catchment and leisure *cum* shopping atmosphere, challenged the very survey tools which planners relied upon in shopping or motorway feasibility studies. While the original questionnaire template laid out detailed multiple-choice questions to both shopper and trader, the comment section scoffed at this naive proposal. This second group argued there was an

Inherent danger mostly arising from the formalization of data from phenomena which are changing all the time. The kind of retailing which is practised in this area of the town is probably the most demand sensitive of the whole spectrum, and is liable to change at a moment's notice – That is how it survives, combined with an apparent cheapness, which is very attractive in a city whose economic base is not expanding.⁶⁰

For the commenters, polling market traders over relative social value or hypothetical market removal was pointless. These survey subjects '[were] probably not aware of what they'll be doing next week far less of highly complex economic judgments'.⁶¹ Pinning the effects of physical redevelopment to a set of economic practices which were highly fluid, contingent and changeable appeared outside the realm of the Environmental Studies group, working within the logics of cost-benefit analysis and rigorous economic and sociological methodology. Class divisions and professional elitism structured the assumption that social inquiry was only appropriate for a certain type of subject, whose motivations and networks might be modelled alongside lines of residential stability, steady employment and visible market relations.

Along with the obtuse and transient nature of the traders, the comment section argued that the insalubrious origins of the market compromised

⁵⁸ *Ibid.*, 84.

⁵⁹ Glasgow Planning Department, *East End Study*, 6.

⁶⁰ Mansley, *Glasgow East Flank*, 82.

⁶¹ *Ibid.*, 85.

the interview process. The very strength of the Barrows was its informality, as it functioned ‘completely fly by night – no questions are asked, people come and go as they like, and above all, they mind their own business. The reality is very far removed from what we might like it to be, it is none the less real for that.’⁶² The social survey was premised on the belief that determining the ‘real’ economic functions and relationships of the market would aid in assessing the cost-benefit of a motorway. Yet the reality of the Barrows was its resistance to rational planning and typical ‘market’ research. The *Feasibility Study* – in the tradition of the urban ‘grid’ – worked under the assumption that bureaucratic planning of motorway routes could be combined with commercial assessment of land use and catchment analysis.⁶³ However, the fluid and *ad hoc* Barrows activity disrupted the very planning logics of this relationship, relegating the retail market to an irrational, yet hyper real, aspect of city life.

The repeated social and physical surveying of the East End, in preparation for the East Flank, prepared the area for varying degrees of redevelopment, although in the end these studies did little to clarify a course of action for preserving or relocating the market. In the Barrows Study, we can see how debate over motorway planning debates played out on a level below public political battles. ‘Community’ was not merely a rallying cry for motorway opponents; it was a highly contingent category which feasibility studies and cost-benefit analyses could only partially rationalize. Informal retail practices, bargain hunting and place-based nostalgia made the Barrows a catchment draw, but the market’s fluid boundaries and changeable motivations made even qualitative units like ‘environmental areas’ or ‘social costs’ largely unreliable. The Barrows Market appeared as a highly physical and material site on maps or in photographs, yet its tenuous commercial networks and affective meaning sustained a community which was theoretically obsolete in the eyes of urban motorway planners. Reading documents like the *Feasibility Study* for their cultural assumptions rather than their technical recommendations, therefore, reveals an urban infrastructure vision that was only as coherent as its most ‘unplannable’ sub-unit.

Conclusion

Historian Joe Moran has pointed to the Department of the Environment’s 1972 booklet ‘How do you want to live?’ as the ideological end of the urban motorway programme in Great Britain. The early 1970s witnessed a critical breaking point at which the immediate psychological and economic costs of road building in cities outweighed their potential

⁶² *Ibid.*, 87.

⁶³ Scott, *Seeing like a State*, 58.

communication benefits.⁶⁴ In the aftermath of the oil crisis and during the height of inflation, the British state was wary of funding urban motorway systems that were ‘essentially of local importance’.⁶⁵ While these shifts characterized public rhetoric and central government funding choices, they also elided how provincial industrial cities and towns limped through the 1970s with motorway proposals in the works.⁶⁶ As motorways became less of a national initiative and more dependent on civic boosterism, their construction became more embroiled in local particularities.

In Glasgow, the spectre of the Inner Ring Road cast a pall over inner-city areas throughout the 1970s. Environmental Studies and consultant engineers and planners continued to survey potential routes of the East Flank before its final line – cutting between the Barrows and Glasgow Cross – was approved at the end of 1973 (see Figure 3).⁶⁷ Called an ‘agent of destruction’, and a ‘technocratic blight’ by its critics, consultants revised this East Flank route in 1976 so it might be economized through stage completion.⁶⁸ Despite the project’s ultimate cost and the backlash against inner-area urban renewal, the corporation’s consultant planners and engineers did not count the Barrows as an ‘area of special environmental importance’, and councillors still maintained that ‘major improvements’ could be achieved in the market area if the East Flank was ultimately completed.⁶⁹

Strathclyde Regional Council officially abandoned their plans for the East Flank of the Inner Ring Road in 1980, but this unfinished loop has never truly been laid to rest. In recent years, Glasgow Council has rebranded its vision as the ‘Glasgow East End Regeneration Route’, proposed in conjunction with the 2014 Commonwealth Games. The road, due to be completed in 2021, will link the M8 and the M74, fulfilling the original role imagined for the East Flank.⁷⁰ However, Glasgow has yet to resolve the 50-year question about how to balance ‘social’ with ‘real’ costs.

⁶⁴ J. Moran, *On Roads: A Hidden History* (London, 2010), 204; ‘Roads to destruction’, *Architectural Review*, Feb. 1973; ‘Dividing lanes’, *New Society*, 16 Aug. 1973.

⁶⁵ *Glasgow Herald*, 3 Dec. 1973. This ran parallel with central government and the Scottish Office’s vocal disapproval of Glasgow Corporation slum clearance and housing schemes, which had left large parts of the city derelict. U. Wannop and R. Leclerc, ‘Urban renewal and the origins of GEAR’, in D. Donnison and A. Middleton (eds.), *Regenerating the Inner City* (London, 1987), 65.

⁶⁶ Leeds promoted itself as the ‘Motorway city of the 1970s’, while construction on Middlesbrough’s urban flyover only began in the mid-1980s.

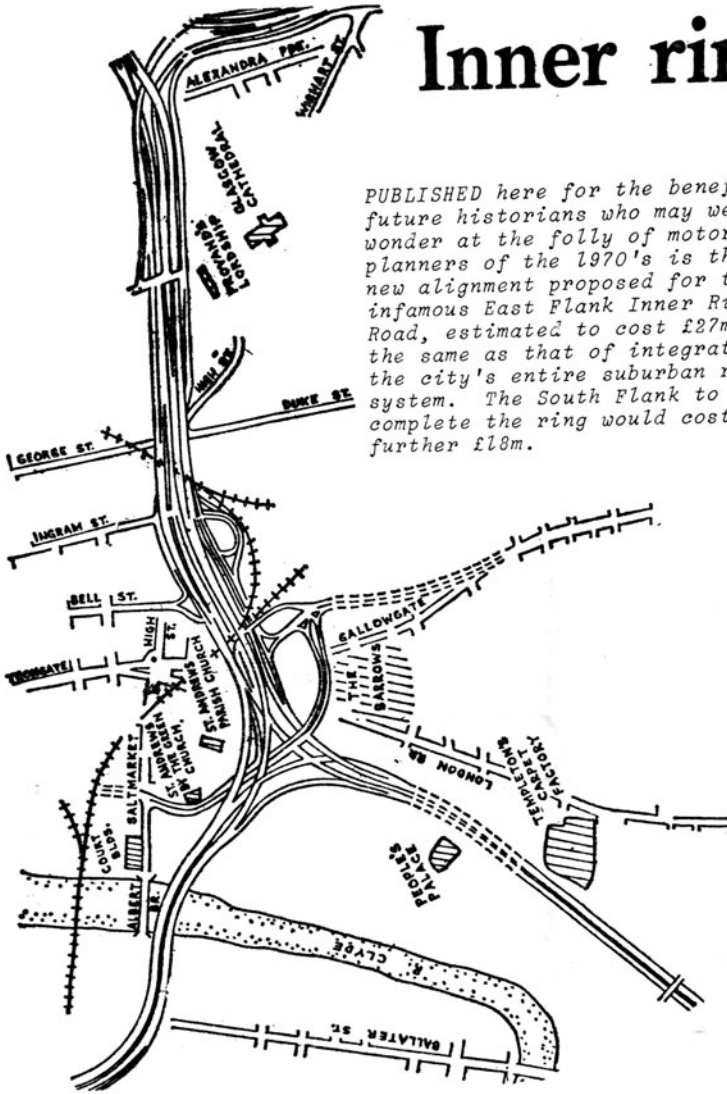
⁶⁷ Mansley, *East End Expressway*; Corporation of the City of Glasgow, *East Flank Report* (Glasgow, 1973).

⁶⁸ NGS/2/1/, *NGS News*, 3 (Dec. 1975), 3; J.V. Cable, ‘Glasgow’s motorways: a technocratic blight’, *New Society*, 5 Sep. 1974; NGS/2/1, *NGS News*, 6 (1973–74), 1.

⁶⁹ Glasgow Corporation, *East Flank Report*, 1; NRS, Planning files 12/2399/1, the City of Glasgow District Council – The East End Project (summary of existing plans, policies and programmes for Glasgow’s East End for consideration by the Governing Committee at the meeting to be held on 10 Dec. 1976).

⁷⁰ This route will swing far to the east of the Barrows. The biggest threat to the contemporary market are local and national government initiatives to turn the area into an ‘arts, events, and music quarter’ that might do away with the weekend market. G. Braiden, ‘Glasgow’s

Inner ring



PUBLISHED here for the benefit of future historians who may well wonder at the folly of motorway planners of the 1970's is the new alignment proposed for the infamous East Flank Inner Ring Road, estimated to cost £27m - the same as that of integrating the city's entire suburban rail system. The South Flank to complete the ring would cost a further £18m.

Figure 3: NGS News, 5 (1973–74). Reproduced with the permission of the New Glasgow Society.

The council has called the East End Regeneration Route a ‘symbol of the rebirth of the East End’, crucial for jobs, training and homes in the part of Glasgow hit hardest by de-industrialization. Yet there are artists and critics

notorious Barrows earmarked as arts, events, and music quarter in £30 plans’, *Glasgow Herald*, 3 Mar. 2016.

who accuse the motorway of perpetuating inequalities, destroying the everyday environment of Glasgow's deprived and car-less population.⁷¹

Alongside the continuities in political discourse about the benefits and drawbacks of urban motorway construction, there are revisionist attitudes around the cultural importance of this post-war environmental feature. These viewpoints overlap with another recent trend among historians, design enthusiasts and journalists: the re-evaluation of the aesthetic contributions of brutalist architecture.⁷² From campaigns to save Preston's Bus Station and Birmingham's Smallbrook Queensway to poetry collectives inspired by the Coventry Ring Road, advocacy and appreciation has coalesced around modernist transportation infrastructure.⁷³ Glasgow's much-maligned motorways have their own part to play in these recent developments. Stuart Baird, a civil engineer, and John Hassall, an employee of the Scottish highway maintenance sector, run the *Glasgow Motorway Archive*, a part-educational, part-enthusiast website. Together, Baird and Hassall have collected, collated and annotated the piles of planning, promotional and photographic documentation on the motorway system. Their site attempts to work against the narrative that motorways destroyed modern Glasgow, arguing instead that engineering made contemporary Glasgow.⁷⁴

Recovering the story of motorway planning through the vast amount of ephemera it produced is in and of itself a powerful contribution to the historical archive. Yet this curated archive contains its silences. In the words of Erika Hanna – writing on the marginalization of cyclists in the visions of Dublin planners – archival deficits can '[reveal] the disjuncture between the practices of everyday life and the creation of records'.⁷⁵ The context, contestation and findings of a document like the *Feasibility Study* underscore why the technological and human stories of motorway construction must be told in tandem, rather than in opposition. Civic and amenity protesters saw the vision of motorway planning as a technocratic 'folly' that would live on in infamy for 'future historians' (see Figure 3). As historians, therefore, we ought to interrogate the blind spots or obstructions in this vision, rather than letting subsequent social and political controversy speak for itself. Urban motorways refract the

⁷¹ P. Miller, "'Glasgow effect' artist Ellie Harrison reveals first work of project', *Glasgow Herald*, 24 May 2016.

⁷² E. Harwood, *Space, Hope, and Brutalism: English Architecture, 1945–1975* (New Haven, 2015); J. Grindrod, *Concretopia: A Journey around the Rebuilding of Postwar Britain* (London, 2013); O. Hatherley, *Militant Modernism* (London, 2009).

⁷³ 'Save Preston Bus Station campaign joint winner of Heritage Hero Award', *Twentieth Century Society Blog*, 4 Dec. 2014, <http://c20society.org.uk/2014/12/04/save-preston-bus-station-campaign-a-heritage-hero>, accessed 25 Mar. 2017; J. Holyoak, 'Why "our Regent Street" must be saved', *Birmingham Post*, 9 Mar. 2016; *Disappear Here*, www.disappear-here.org, accessed 25 Mar. 2017.

⁷⁴ S. Baird and J. Hassall, *The Glasgow Motorway Archive*, www.glasgows-motorways.co.uk, accessed 25 Mar. 2017.

⁷⁵ E. Hanna, 'Seeing like a cyclist: visibility and mobility in modern Dublin, c. 1930–1980', *Urban History*, 42 (2015), 289.

preconceptions of planners about the boundaries and vitality of urban communities. Tensions between the public and professionals muddle the cultural, social and economic 'value' of these areas, yet divergent views within the planning community exacerbate these ambiguities. Reading subsequent bureaucratic documents for their variances in method rather than their in-step futuristic vision can capture how ideas of 'value' and 'cost' were not objective features in infrastructure planning, but unquantifiable features of urban life.