

A HOMESPUN REVIEW OF URBAN RESEARCH

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Urban issues are complex and dynamic, changing in emphasis and connection. Themes conflate and resonate, connect and separate, dominate and diminish. Any research has to recognize and relate to these conditions. In particular where is the researcher coming from? In what direction is he or she heading? What points of attachment does the outcome of the research have where it can be placed in its context or fill out or amend previous conclusions? Can it effectively relate to the broader canvas of the city by interacting with its context to their mutual enrichment? What is the point of entry into the urban system and the assumptions behind that?

This paper takes an adventurous – perhaps idiosyncratic - look at how research might better drive insights into the complexity of the city and shape and illuminate policy options to address problems and issues. The discussion uses headings representing the main issues that need to be considered in undertaking research. Some of these headings overlap and reinforce each other.

THE RESEARCH QUESTION

Often the basic research question to be addressed is not clear or well articulated. Yet it essentially establishes the purpose of the research. It inevitably leads to a series of derived sub-questions. It also might be reframed if the carrying out of the research indicates it could be better formulated. But that does not absolve the researcher from making plain what the basic purpose of the work is as it commences.

Different conclusions can be drawn from much the same data and information, depending on what the research question is, and where the researcher is coming from. As Stuart Macintyre has put it in his lively book on *The History Wars*, each researcher has to 'show the consonance of your interpretation with the available evidence and persuade your peers of its plausibility' (Macintyre & Clark, 2003, p. 29).

Examples from history are particularly appropriate. The foundation and settlement of Adelaide is a well-researched theme, but there has been much recent reinterpretation of the evidence together with some new insights into the process of surveying and laying out the city. If the basic research question is 'Why and how did Adelaide come about', then a different account is given to that generated by the research question 'Did William Light or George Kingston design Adelaide?' Different insights, emphases and connections are provided in both narratives, and both are of interest and value. The comparison of and comment on these narratives drawn from different points of entry into the debate is contained in a recent issue of *Planning Perspectives* in 2008 where it is introduced by Robert Freestone.

Similar examples come from the founding of Sydney. Alan Frost also asked the broader question as to 'Why and how did Sydney come about' and by examining primary sources came to the conclusion that the idea that it was just a settlement for convicts is grossly misleading. Like many grand ventures, it had more than one purpose: another was to seek for materials to build ships for the Royal Navy – hence the early expedition to Norfolk Island. But overriding these other purposes may have been a grand overarching imperial vision by Pitt the Younger to establish a strategic base from which to cover India and the western Pacific, with a watching brief on the west coast of the Americas (Frost, 2011).

Despite Sydney being a convict settlement, J.B. Hirst asked the question as to how free it might be, as compared with conditions in England and came to the conclusion that "This was not a society that had to become free: its freedoms were well established from the earliest times" (Hirst, 2008, preface).

METHOD OF ANALYSIS

Data needs to be interrogated in the right manner and conclusions drawn that reflect the sophistication of the analysis and the quality of the data. Often it is appropriate to try two or three methods or to generate alternative scenarios to be explored by the same method. This is particularly important when major relationships between complex phenomena are being explored.

Again an example may be helpful. Newman and Kenworthy's *Cities and Automobile Dependence* (1989) contained a survey of a large number of cities around the world that appeared to show a correlation between urban density and car use, with low density accompanied by high levels of car use and *vice versa*. The policy conclusion which has largely been drawn from this was that raising urban density would increase the use of public transport, cycling or walking and decrease the use of the car. However the same data was subject to a much more sophisticated analysis by later researchers which drew attention to the importance of other variables affecting travel behaviour such as the concentrations of inner suburban employment in Sydney and Melbourne (Mindali *et al.* 2004).

Recently Stone and Mees (2010) have carried out a similar analysis to that of Newman and Kenworthy using improved data to increase comparability of data on urban density, public transport use, and private car use in urban regions of North America and Australia. In a sample of 41 'dispersed' cities higher density is not the overriding explanatory variable governing choice of public transport or private car use on journey to work. While significant, this analysis suggests that policies other than increasing density can be influential in raising the importance of public transport, such as maximising the carrying capacity of existing infrastructure.

REQUISITE VARIETY

This example might be pursued further in illuminating another principle: that of requisite variety. Complex phenomena such as travel behaviour and characteristics reflect a number of drivers (*sic*) and variables and their particular importance vary from place to place. To shape an appropriate policy response to guide traffic requires a sensitive examination of these circumstances.

Research using detailed data of commuting in Sydney at various spatial scales has led to the conclusion that 'the relationship between travel behaviour and urban form is complex and that simple analyses of density alone are likely to overstate the effect of both metropolitan and local scale population density on mode choice' (Rickwood & Glazebrook, 2009 p.1.). They conclude that 'access provided by local transit, on the other hand is a much better predictor of transit use' (p.14).

In similar vein recent research into the travel characteristics of higher density residents in Sydney and Melbourne has drawn attention to the different travel habits of different kinds of households. It found that higher density development facilitated travel by public transport where the household was orientated within the transport framework's sphere of influence (CBD and major centre employers). But the largest component of the high density population in Sydney consisted of 'Battler' households who had different requirements from and complex relationships with the transport framework (Bunker *et al.* 2009). The policy implications of these findings have more to do with the nature of the public transport system and the level of service it provides for different socio-economic groups of households, than with urban density.

SYSTEMS AND PROJECTS

Interest in urban systems was prominent in the 1960s and 1970s (McLoughlin, 1969). McLoughlin's discussion extended beyond physical systems of infrastructure but nevertheless resonated powerfully in that area. The service provision of electricity, gas, transportation, communication, water supply and management and sewerage and the operating requirements of each system were comprehensively analysed in two special issues of the *Australian Planning Institute Journal* in 1969. At that time these services were provided by state authorities. The metropolitan plans of these times were preoccupied with coordinating infrastructure systems one with another and with urban growth and change.

Managing such systems has become more complex with privatisation, outsourcing, and public-private partnerships (Graham & Marvin, 2001). Further, complex and hybrid options have developed in managing supply and demand for such services. These include the augmentation of supply by a major project such as building a desalination plant, together with the development of water recycling regimes and pricing configurations to shape demand and change household and establishment behaviour and attitudes. These complex choices also exist in the field of energy production and use, and in transport.

Transport is a particularly important field of urban policy: in shaping systems of public transport and those for private vehicle use and their relationship one with another. There are important choices here in the major and pivotal projects that shape and anchor these wider systems. Steele and Gleeson's recent (2010) review of governance, splintering urbanism, and urban resilience in the face of oil vulnerability draws attention to the complex policy choices now facing us compared with the relatively simple issue of coordination of the then state-run infrastructure systems in earlier times.

Influential commentators such as Ross Gittins (2011) have warned against the adoption of simple policy measures or of major projects without the complementary measures and adjustments that are needed to accompany them. However, there is little sign of governments attempting to influence travel behaviour by the comprehensive shaping of public and private transport systems of travel, and the convenient project of building high-density cities is used as a comfortable surrogate.

CONFLATION AND RESONANCE: THE ABSTRACT AND THE PHYSICAL

The growth of hybrid options involving building and managing the use of infrastructure draws attention to the intimate mixture of physical provision and the abstract conditions governing its use. A homespun example is in public transport where the existence of a railway or a bus route may provide an apparent travel opportunity, but where frequency of service, cost, and comfort are often more important in determining its level of use. A more sophisticated example is in the discussion of the implications of peak oil on the interaction of the physical and money systems of the Australian economy where "over-reliance on private motor vehicles can expose the economy to demand destruction" (Zeibots & Bell, 2010, p. 253). In this review, fundamental changes in the circumstances of the physical economy such as oil and energy availability

can affect growth, spending and investment patterns in the money economy, which in turn has implications for the circulation of money and the ability of that economy to invest in new infrastructure and industrial processes that enable adaptation to different circumstances and so sustain the quality of life of people living in that economy
(Zeibots & Bell, 2010, p. 254).

Most planning effort is directed at arranging the physical form and structure of the city in terms of land use, intensity of activity and communications. This is done to pursue economic, social and environmental objectives. However, there is less appreciation of the social, economic and cultural

context needed to accompany these arrangements and the services and programs that this context requires. Because of this there is more than a whiff of physical determinism about these plans and their effects and impacts on social, economic conditions and how far they reflect the behaviour of businesses, households, establishments and individuals.

Brendon Gleeson's *Heartlands* (2006) is an eloquent analysis of how much wellbeing depends on the transfer payments of governments, and their social and economic policies and programs as well as location and the character of the immediate urban environment. Planning does have some recognition of this synergy of the abstract and the physical. Sydney's *City of Cities: a plan for Sydney's future* (Sydney: Department of Planning, NSW 2005) benefited from consultants' reports identifying the nature of the regional economy in Western Sydney and the need not only for allocating land for industrial and commercial activities, but for the necessary training programs of different kinds to equip the workforce for more innovative and less vulnerable occupations (SGS Economics & Planning, 2004). *City of Cities* was then linked with an Innovation Strategy with the subsequent proposals for new business initiatives to be pursued in the major centres, and an institutional process outlined for this to happen. The efforts in these areas remain very patchy. Similar comments have been made both in Melbourne (Dodson & Berry, 2004) and again in Sydney (Fagan & Dowling, 2005) about the importance of regional development programs targeting regional populations (e.g. through labor market programs, language classes) as well as investing in general infrastructure projects.

LEVEL OF ABSTRACTION

The abstract social economic, environmental and behavioural drivers of growth and change in metropolitan regions and how they are both a determinant and consequence of the built environment is such an important consideration that it can be pursued further in looking at the level of abstraction used in metropolitan studies. Again examples are helpful, - and again taken from metropolitan planning.

A recent study of metropolitan planning in Australia was carefully organized to review a series of planning 'paradigms' for each decade since the Second World War (Hamnett & Freestone, 2000). This produced a fine account of how each paradigm or fashion dominated these particular periods and produced suites of plans for the various capital cities that, for example were dominated by themes of corridor expansion in the 1960s (Morison, 2000). Further, the chapters explained the genesis and purpose of the plans in useful detail.

However, a further level of abstraction provides different insights reviewing broad and secular socio-economic and governance trends, and how these were increasingly accompanied by a search for sustainability reflected in metropolitan plans (Gleeson *et al.*, 2004). This particular review deployed five investigative themes – policy, space, governance, finance and democracy. A similar level of abstraction is used in a review of metropolitan planning looking at the interactions of space, society and governance over time and the emergence of distinctive characteristics in Australian metropolitan planning (Bunker, 2009). A commentary on Sydney's then recent metropolitan plans which bounces about between the abstract and the physical and provides powerful insights into the interaction of the two realms is that carried out by Searle in 2004 (Searle, 2004).

SCALE

One of the excitements and frustrations of urban research is the difficulty in linking the various scales of investigation and analysis. At the macro-level, Census data is used in different ways for analyzing, mapping and understanding basic socio-economic characteristics of the population and the nature of the housing stock. This data has the advantage of being near-universal in coverage, is of high quality, carefully organized and capable of time-series of analysis over different periods. It also provides a context for, or point of reference for local studies and, for

example is often used to provide a socio-economic profile of the local population. Cross-referencing and tabulating of data, provides insight into the behaviour of population and household groups.

At the micro-level, many research exercises involve surveys or questionnaires of the local population, establishments, households or individuals. This is done to provide information on behaviour, attitudes, experiences, decision-making processes and future plans. These studies frequently rest within a context of Census data, but there is difficulty in raising their status from anecdotal, through informative and insightful to statistically significant. The numbers of interviews needed to provide accurate information on such behavioural and attitudinal characteristics held by different sectors of the population is large, particularly when significant cross-classifications are sought. This poses difficulties in developing housing, transport, social support and economic development policies with metropolitan wide components and coverage while adapting them to the problems, opportunities and prospects of localities.

In metropolitan planning, macro perspectives are dominant and local or regional population, housing and job *targets* are arbitrarily generated to accommodate long-term *forecasts* for the region. This also results in the domination of supply-side considerations in planning, which then sets up a brittle relationship with local circumstances which are more grounded in present and future demand characteristics. This sets up a tension between the requirements to house a future metropolitan population and the realities of the property, housing and labor markets which have to engage with and reflect those local and sub-regional conditions.

The implication of this kind of metropolitan planning is that frequent revision is required. An alternative approach is to construct plans which contain long-term objectives, but are more strategic in the process outlined to achieve them. This means responding more to the realities of different social, economic, environmental and behavioural circumstances over the metropolitan area and the opportunities or problems they present in pursuing those objectives. This contention is expanded at the end of this paper.

ACCUMULATING INSIGHTS, DEVELOPING UNDERSTANDING

It is a commonplace to observe that research into urban issues often raises as many questions as it answers. Accordingly there for is much to be said for continuing exploration in a particular tranche and accumulating insights and understanding so that conclusions are less unilateral and are more multi-faceted. This ambition is more appropriate for a team or unit of researchers as it obviously needs extended periods of time and the contributions of multiple skills. Such processes need to well-monitored, guided and adjusted.

Such an approach involves the accumulation and deployment of complex theories, concepts, data-bases, and information about these linked, connected and associated phenomena. The publication of progressive texts discusses and publicises interpretation of this mass of material as it accumulates. One approach is to discuss it from different points of view: policy responses; environmental challenges; local opportunities and problems; links with other policies and plans; economic potential; equity issues; institutional processes; decision-making configurations and thresholds etc.

An example is in some of the work of the City Futures Research Centre at the University of New South Wales over the last few years. This began a decade ago with early work on describing and understanding the characteristics of urban consolidation in suburban areas of Sydney carried out by the former Urban Frontiers Program at the University of Western Sydney.

From this, attention was directed to the various submarkets of housing demand that could be found in medium- and high-density dwellings in Sydney and Melbourne. This led to a developing interest to the way the development and redevelopment process worked in supplying these needs. This led to an examination of the function and role of selected areas in providing housing

for different kinds of households, and also of viable opportunities for developers. Case studies of particular areas undergoing new development or redevelopment have been used to exemplify these processes, including the north west and south west sectors and inner and middle ring suburbs.

This body of research now has two significant thrusts. One is to shape the interaction of housing demand, housing supply and housing finance in the different ways they are represented in various parts of the city e.g. the knock-down and rebuild replacement of redundant separate houses on the same sites. Another is concerned with the policies and regulations appropriate to encourage successful outcomes for these dynamic forces. Hence there is interest in the governance of the compact city, particularly in shaping these processes of change in better ways and in reforming the governance, operation and administration of strata corporations of quite different character.

This particular long-term theme has now assembled a formidable array of data. These data not only include macro-data such as that of the Census and valuation authorities but the results of surveys of the various actors and participants in these processes of development and redevelopment. In this way their behaviour, attitudes and experiences can help explain and understand what is happening and why.

COMPARISON AND CONTRAST

I can't recall the source but – 'the time lines of history run through the space circles of geography'. Comparisons of an area with other areas are helpful if properly conducted, but they need to appreciate the different circumstances of space, society and governance that must mediate such comparisons. But there are differing views on this. Some argue that globalization is producing 'unprecedented [planning] similarities across leading cities in the world [that] are happening despite diverse public policies' (Taylor, 2006: 1164). Others advance that the variety of city-region spatial planning might be reducible to a number of basic institutional types such as the North American, European and Asian city models (Newman & Thornley, 2005).

Of more value are detailed comparisons launched with the intention of showing how the unique circumstances of space, society and governance over time lead to the outcomes that they do. So Healey (2007) looks at three planning processes for three areas in different countries in this light and this is helpful in indicating what changes might be necessary and possible to improve outcomes in each case.

Comparisons over time are particularly helpful, but are subject to changes in the boundaries of the areas studied, and in the definitions of the characteristics studied. Despite this difficulty – sometimes pedantry – broad trends can often be usefully identified. Understanding the history of a place, and what past conditions are still relevant, limiting or helpful is essential. It is particularly useful to look at past plans and policies and how they have performed. As McLoughlin observed, there is far too little attention paid to examining how far these initiatives have fulfilled their intentions, justified their assumptions, and presented realistic views of what could be achieved (McLoughlin, 1992).

TIMING AND OPPORTUNITY

Timing is sometimes more important than substance, and a part-correct analysis at the right time may be more effective than a fully-developed argument when the opportunity has passed. In this regard *Cities and Automobile Dependence* (Newman & Kenworthy, 1989) has been enormously influential in drawing attention to the need to reduce dependence on the private vehicle in developed countries despite its unilateral proposals on how to achieve this. Debate about these proposals has itself stimulated further research of the kind mentioned above. Its timeliness has been reinforced by increasing concerns about climate change and dwindling oil supplies since it

was published. A seminal review is contained in a recent issue of Australian Planner (2010) on *Cities and Oil Vulnerability*.

In this vein, salvage operations often offer opportunities to correct course. It is not infrequent for research projects to go off the rails for one reason or another, and the reconstitution and redirection of such faltering projects often offers opportunities for initiatives not possible under less critical circumstances. An example is the joint Commonwealth-States Soil Conservation Study whose principal report was published in 1978 (Research Directorate, DEHCD, 1978). This study was initiated by the Whitlam Government, and when it was dismissed in 1975 there was a loss of interest, momentum and key personnel. However these new circumstances enabled the project to come forward with fresh ideas for the setting of national priorities for soil conservation and how they might be funded jointly by the states and Commonwealth.

WRITING

This is a subject in itself. How does one turn a research report from a litany - into a story - into a song which sings the mutual creativity and interplay of text and context? Research into urban phenomena has to acknowledge the dynamics and complexities of cities and avoid simple unilateral solutions which attract uninformed populist support. Almost any conclusion as to recommended action has to examine what further information is required; whether the same objectives could not be achieved by other means; and what supplementary and consequential support is needed to that proposed.

It's pretty useful to start with the basic research questions and how they may have been modified in the course of the research. A good introduction sets out the basic argument and methodology and outlines the main headings in which this material is set out. Because many of these points of discussion overlap and interact, it is frequently necessary to present much the same analysis from a different point of view. This is not repetition but resonance and builds up multi-layered argument and understanding.

SO – WHAT?

I am indebted to two referees who provided substantial comment that prompted me to extend its compass. This additional section asks the question : 'Does this analysis have any implications for urban policy?' This can only be a cursory discussion, because of the word limit on the paper, but provides the direction for a further paper.

An excellent source has just become available from which to draw propositions about the relationship of urban research to urban policy. This is the recently published report by the Bureau of Infrastructure, Transport and Regional Economics into population and jobs growth and commuting flows in Melbourne (BITRE, 2011). This provides an excellent and comprehensive analysis of changes in population and job growth, distribution and characteristics in Melbourne since 2001 and changes in travel to work. Importantly it contains an exhaustive analysis of how far these accord with the principles and proposals of *Melbourne 2030* (Department of Infrastructure, 2002) and its update *Melbourne @ 5 million* (Department of Planning & Community Development, 2008).

Two strands can be drawn in this cryptic comment on the lessons of urban research for urban planning and policy.

The importance of transport

The focus on land use planning in metropolitan strategies tends to overlook or not connect effectively with travel and transport. The clearest example of this is the case of Sydney where a series of transportation plans have been bedeviled and derailed (sic) by pet projects of successive premiers and cabinets. This has made effective connection with a long-range

metropolitan strategy extremely difficult. The neglect of access issues in the Barangaroo project seems to be yet another example of this.

Three points can briefly be made (in descending order of abstraction). First policies about public and private travel and transport and their relationship are likely to be the crucial instruments in addressing emerging issues of climate change, oil vulnerability and social justice (Australian Planner, 2010). Second, there is a clear move in metropolitan strategies to concentrate on the infrastructure needed, principally in the field of transportation, to shape and implement metropolitan strategies (Dodson, 2009), and those strategies that are closely linked with infrastructure and transportation plans offer more prospect of implementation, adaptation and funding of essential projects (Bunker, 2009 ; Productivity Commission, 2011).. In a perhaps unguarded comment the BITRE report on Melbourne said that "*Melbourne @ 5 million* and the *Victorian Transport Plan* retained similar goals to *Melbourne 2030*, but the 2008 VTP in addition proposed using transport investment to fundamentally reshape Melbourne and make jobs more accessible" (BITRE, 2011, p. 193).

Finally, transport provision and policies can pick up and ameliorate some of the unforeseen characteristics of urban development or the actual outcome of planning policies where these have not happened as anticipated. For example substantial population growth has taken place in Melbourne between 2001 and 2006 but "the majority of new residential development is occurring in areas that are not very well served by high capacity public transport, and this pattern is gradually becoming more pronounced" (BITRE, 2011, p. 206). In particular while outer suburban population growth has been concentrated in the designated Growth Area councils, jobs growth has been relatively dispersed and not concentrated in the activity centres as planned. Consequently 85% of employed residents living in these outer areas travelled to work by private vehicles in 2006. Most use of public transport was by residents travelling to work by rail to central Melbourne. Use of buses is minimal at about 1%. If there are to be strengthened, perhaps radical policies to encourage people to use public transport, then there are opportunities here to use buses of varying size at frequencies and routes that suit commuters. A start in this direction has been made with SmartBus services (BITRE, 2011). Such initiatives can be put in place and adapted much more quickly than significant changes in land use densities and mixtures. Having said that, there are signs in all capital cities of congestion and crowding on public transport and the consequent need for more services and rolling stock which often require long lead times to provide.

Changed emphasis in metropolitan planning

Questions have to be asked about the effectiveness of metropolitan strategies in their present form. Projecting population totals a generation ahead and then working back to distribute them and fix targets for local government areas and particular localities does not seem to work, and new strategies have to be produced every five years or so. Changes of government discredit these management approaches. In New South Wales the previous Labor government adopted a target of steering 70% of new dwelling development to 2031 in existing urban areas. The new Coalition government is more inclined to a figure of 50%.

The attempt to shape every aspect of a capital city in terms of employment, population, housing, urban land uses and densities, centres, open spaces and infrastructure a generation ahead rests on some heroic and often ill-researched assumptions. It is true each strategy has a series of supporting sections and maps on these principal topics, but the connections between them are so inflexible that it only needs a major change in any one of these variables to affect not only itself but also its linked partners. An example is needed.

There are mixed signals about the success in implementing the principles and proposals of *Melbourne 2030*. The aim is to move towards a more compact city through redevelopment and infill in existing urban areas to house more people; to reduce the size of lots in greenfields development through outer suburban growth; and to restrict outward expansion by defining an

Urban Growth Boundary. The objective of concentrating jobs in central Melbourne and the specialised Activity Centres has been achieved in the period 2001-2006. But the proposed restructuring of the city as a more compact metropolis through redevelopment in and around nominated general Activity Centres has not been successful. The Activity Centres were envisaged as the main vehicle and mechanism for concentrating and facilitating redevelopment, and each was to be the focus of employment and population growth in that locality.

At the time this element of the plan was attacked as unrealistic (Birrell *et al.* 2005). The analysis of the BITRE report seems to confirm this. Population and job growth has been higher than the metropolitan average in the Central Activities District of Melbourne. However the total growth of residential population in Central Activities Districts and Principal Activities Districts excluding Melbourne in the period 2001-2006 was 0.5% per annum compared with 1.3% for the Melbourne Statistical Division as a whole (BITRE, 2011, p. 77). The picture was similar in terms of jobs growth. Specialised Activity Centres such as Melbourne Airport and Parkville Medical and Bioscience precinct recorded relatively high rates of job growth. But the general Activity Centres between them recorded lesser rates of growth than the Melbourne employment zone as a whole so that all together "the selected activity centres experienced a lower rate of jobs growth than the remaining areas of Melbourne between 2001 and 2006" (BITRE, 2010, p. 129) and their employment share fell slightly from 31.1% to 30.8%.

In addition, the Urban Growth Boundary established in 2002 has been revised on several occasions and although the new released areas are subject to a levy, this continued revision is likely to continue with higher rates of population growth than anticipated and continued outer suburban expansion and road construction.

The current model of metropolitan planning might be called a vertical one where the metropolitan strategy acts as a coordinating mechanism designed to achieve long terms dispositions of the built environment and communications. Accordingly any change in its assumptions or predicted targets, or dislocation by aberrant policies in other areas will emasculate it.

In these uncertain and dynamic times when governments and society need to be quickfooted and flexible about their policies and individuals and households may be faced with considerable behavioural changes, a horizontal emphasis may be more appropriate. While still using long term perspectives, these scenarios would act more as scoping studies than defined targets. Instead attention would focus on the next ten years with shorter four-year and one-year plans of the regional space occupied by the city and its immediate rural environs. In these plans, the localities in which particular problems and opportunities are concentrated would be seen as matters for action and budgets and capital works programs deployed to address them. Monitoring of growth and change in the metropolitan area would be continuous and shaped to measure performance in strategic areas and progress in less critical areas.

There are some elements of this approach in some states. South Australia has a State Plan, an Infrastructure Strategy, a Metropolitan Strategy, a Capital Works Program extending over some years and annual funding of included projects in the Annual Budget. These are linked to varying degrees, but the top-down approach needs to be modified and enriched by the practicalities of immediate problem-solving.

It will be interesting to see how the metropolitan strategies due on 1st January 2012 to a common format reflect the methodology and process outlined by COAG to achieve this. Those specifications still reflect more of a vertical than a horizontal approach but there are elements of the latter.

SUMMARY

Research into urban conditions and issues has to engage with complex, dynamic phenomena. The more such research is able to reflect and illuminate its context and establish connections with other research ventures, the more effective it is likely to be in advancing understanding and shaping the suites of policy measures needed to embrace the issues arising. This paper suggests a number of dimensions and situations in which research can be moulded so that it provides effective avenues of attachment for these purposes.

Broad approaches drawn from discourse analysis - both inductive and deductive - to the collection and interpretation of information and data, can be useful in developing understanding. Constructs and processes in shaping and taking decisions can be of immense help in deciding what to do, if flexibly deployed.

The connection between urban research and urban policy is uneven and ambivalent. In terms of metropolitan planning, this may be partly due to the traditional vertical processes still followed in preparing metropolitan strategies.

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