

Socio-economic Disadvantage in Post-Fordist Cities

Scott Baum

Urban Research Program

Griffith University

Email: s.baum@griffith.edu.au

ABSTRACT

New national and international economic and social forces have reshaped national geographies in general and the characteristics of cities in particular, resulting in a range of diverse social and spatial outcomes. These outcomes, which include greater differentiation across, within and between metropolitan regions and cities, have become a feature of the economic and social forces associated with post-Fordist social structures. Within Australian cities clear divisions across socio-economic lines are seen to exist, and these divisions can be seen as being reflected in a number of measures of social malaise. The analysis presented in this paper sets up a typology of advantage and disadvantage across Australia's extended metropolitan regions and considers the way in which the broad patterns developed can be used to inform a greater understanding of disadvantage within Australian cities.

INTRODUCTION

The socio-spatial structure of contemporary cities and discussions relating to urban differentiation, segregation, social polarisation and social exclusion and inclusion are among central concerns in urban debates today. New national and international economic and social forces have reshaped national geographies in general and the characteristics of cities in particular, resulting in a range of diverse social and spatial outcomes (O'Connor, Stimson and Daly 2001). Where as socio-spatial outcomes may have been clearly defined in research focusing on cities and regions of the industrial era—here we might refer to the early and subsequent work by social area analysts (see for example Timms 1970; Theodorson 1982)—a new or different set of divisions have been seen to emerge in post-Fordist cities. These new divisions do not necessarily exist in complete isolation from divisions that have existed in earlier periods, but rather have developed from these existing patterns, reflecting the socio-spatial histories of cities. What are different about the contemporary socio-economic patterns are the factors and conditions leading to particular outcomes.

What we are now seeing, and have been seeing over the past decade or so is a complex set of interlinked factors impacting on the social and economic processes underway in cities. These interlinked factors have been referred to internationally by a number of researchers (Benassi et al 1997; Kesteloot 1998; Mingione 1996). Kesteloot (1998: 126) following similar arguments elsewhere points out that

At the theoretical level, there is a growing consensus about three distinct spheres in which the sources of polarisation originate, namely transformations in the division of labour,...; the restructuring of nation-states and particularly the slow dismantling of the welfare state; and finally the second demographic transition, which results in the appearance of new household forms and the parallel increase of single persons and social isolation.

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The concern is that the changing economic structure, including a new division of labour, the crisis in the welfare state and the changes in demographic and household structures are combining to make individuals more disadvantaged, while at the same time making others more advantaged. These changes are felt acutely at the level of individuals and households as they result in unequal access to resources and life chances. However, the changes also relate to the changing socio-spatial structure of cities as 'rich and poor concentrate respectively in rich and poor environments in terms of the resources of collective consumption, housing, mobility and access to jobs' (Kesteloot 1998: 127).

Within the international literature reference to these types of concerns can be seen in research by Marcuse (1997; 1989), Marcuse and van Kempen (2000a, 2000b), Soja (2000), Dear (2000), Mikelbank (2004) and Walks (2001) in North America and by Hamnett (2003), Wessel (2001), Rhein (1998) and Musterd and Ostendorf (1998) in the United Kingdom and Europe. Marcuse (1997: 228-229) talks about changes in space and race which have contributed to new processes of exclusion that are part of "a broad pattern that makes up the post-Fordist city", while Soja (1997: 193) talks about forces altering the urban social structure in a way that has seen the form of the city explode "to an unprecedented scale, scope and complexity". More recently, Walks (2001: 440) considering the changing socio-spatial structure of Toronto supported the list of earlier work suggesting that "the social ecology of the post-Fordist/global city may be characterized by increasing social complexity and differentiation among, between and within neighbourhoods". Outside of North America similar issues have also been taken up with Hamnett (2003) pointing to the changes occurring in London's social geography as the city is transformed into a post-industrial urban centre and work on European cities pointing to, among other things, the changes in segregation and social exclusion (see the collection by Musterd and Ostendorf 1998; also Rhein 1998; Wessel 2001).

Within Australia, the primate urban region in each state (Sydney, Melbourne, Brisbane, Perth, Adelaide, Hobart), together with the capitals of the two territories (Canberra, Darwin) have been transforming their economies, changing their physical landscapes and have seen the emergence of a set of new social realities reflected in differentiated socio-spatial and socioeconomic terms. Where once large working class communities may have been a dominant feature of most Australian cities (Baum et al. 2002), the economic and social processes that are characteristic of the post-Fordist world are seen to have changed or intensified the socio-spatial patterns of the cities. We see reference to the increasing suburbanization of poverty into Australia's middle ring and old outer suburban areas, the movement of an aspirational class of households to opportunities in new outer suburbs, the dividing up of the old working class communities into several groups of new disadvantaged communities with each being affected by the new economic processes in different ways and the development of new advantaged communities closely tied to developments in the world economy (Stimson et al. 2001; Baum et al. 1999, 2002, Randolph 2004, O'Connor, Daly and Stimson 2001; Glesson 2004).

This has been the focus of recent work by Randolph (2004: 492) who has considered these shifts and has argued that Australia's cities have experienced a range of intensifying pressures that are resulting in a series of different outcomes within and between cities. Although he provides little empirical support for his arguments, his conclusions are that

The turnaround in the inner-city, the suburbanization of disadvantage, the new aspirational suburbs and the increasingly multi-regional city structure with increasingly multi-scaling of processes and outcomes, all point to new forms of city structure that make a change from the prevailing patterns of the period between 1945 and 1980,

an argument supported by others including O'Connor, Stimson and Daly (2001) and Gleeson (2004).

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The empirical work that has been conducted on Australian cities has been wide ranging and in a collective sense do illustrate the uneven patterns that Randolph and others refer to. Early work by researchers including Stilwell and Hardwick (1973), and Stretton (1970) point to the significant divisions that existed in cities during early periods of post-industrial development. The more recent research has continued these themes with research by Baum and Hassan (1993), Gregory and Hunter (1995), Hunter and Gregory (1996) Raskall (1995) and Baum et al (1999; 2002) all providing insights into the socio-spatial structure of the contemporary Australian city. Gregory and Hunter (1995) use income data for collection districts, statistical local areas and statistical divisions and found that between 1976 and 1991 there was a significant shift towards more inequality between high and low income localities. Reporting on these findings they suggest that

Looking across the CDs [collection districts] from low to high SES areas, the pattern of income changes, measured in terms of 1995 prices, is quite smooth...The income gap between the top and bottom 5 per cent of CDs has almost doubled and has widened by \$20,144 (92 per cent). This very significant pattern indicates that the forces making for increased income inequality across households exert a strong and systematic neighbourhood effect (Gregory and Hunter 1995: 5).

While studies such as that conducted by Gregory and Hunter (1995) provide evidence of the change structure of advantage and disadvantage, other have provided an insight into the important spatial patterns in advantage and disadvantage associated with recent economic and social change (Baum and Hassan 1993; Stilwell 1989; Stimson et al. 2001; Baum et al. 1999, 2004). The indication from these studies is that there appears to be significant changes occurring in the economic and social landscape of Australia's cities and metropolitan regions, with certain areas accumulating a disproportionate share of disadvantage over the past three decades. Baum and Hassan (1993) show that how in Adelaide the outcomes of economic restructuring during the late 1970s and early 1980s resulted in localities on the northern and southern fringes of the metropolitan area becoming more unequal in terms of income and access to viable employment opportunities. The more recent work by Stimson et al (2001) and Baum et al. (1999, 2004), both precursors to the current study, show that across all metropolitan regions changes underway in social and economic terms have impacted on the socio-spatial structure resulting in some communities being identified as being communities of social and economic opportunity, while others were identified as being communities of vulnerability.

Concerns such as these are the focus of this paper. Specifically, the paper focuses on the socio-spatial patterns of advantage and disadvantage across Australian metropolitan regions using the most recent census data, supplemented by other data sources. The approach has similarities with earlier work on the socio-spatial structure of cities and essentially develops a set of ideal types or a typology of localities which focus on similarities and differences between locations. Such an approach has its beginnings in 1920s human ecology, and was carried forward into the second half of the twentieth century by approaches including social area analysis and factorial ecology (e.g. Timms 1970). Although falling into disrepute during the 1970s because of the failure to generate theory (Castells 1972), its value for understanding the social structure of cities has recently been recognized by Smith (1995). The typology building exercise undertaken in this paper allows the socio-spatial structure of cities to be understood with reference to a broad number of factors or indicators. Such typologies are not explanations of processes per se, but are "an attempt to systemize classification in aid of explanation" (Marcuse 1997: 248). They provide a "richer understanding of complex phenomena" (Mikelbank 2004: 961) and as such provide useful insights into the structural bases of local areas, both within and between cities and can offer the necessary comparative basis for detailed empirical research on any one local area or collection of local areas. It is the ability to elucidate the overall structure of localities that makes it

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Table 1: variables used in the analysis

Socio-economic change	Residential turnover (1) Point change in labour force participation rate (2)	1. percentage of persons moving into SLA since 1996 2. change between 1996 and 2001
Occupational characteristics	educated professionals (1) vulnerable occupations (2)	1: % of persons with degree qualifications or above classified as managers, professionals or para-professionals 2: % of persons classified as labourers, tradespersons and basic clerical with out post school qualifications
Industry characteristics	new economy (1) old economy (1) mass goods and services (1) mass recreation (1) construction agriculture (1)	1: % of persons employed in a given industry sector. Characterisation following O'Conner and Healy (2001)
Human capital	low formal human capital	% of persons who left school at year 10 (generally a minimum level of education)
Income /wealth	wage and/or salary (1) ratio of high income to low income (2) Tax imputation (3) Interest earned(3) Rental assistance (4) Pension receipts (5)	1: Average wage and salary earned (Australian Tax Office) 2: ratio of % high individual income to % low individual income 3: imputation credits and interest earned. (Australian Tax Office) 4. percentage of persons receiving rental assistance from government 5. percentage of persons receiving aged pensions
Unemployment and labour force participation	Labour force participation (1) Adult Unemployment rate (2) youth unemployment rate (3) part time workers (4)	1: % of persons in the labour force 2: % of persons aged 25 to 64 unemployed 3: % of persons aged 15 to 24 unemployed 4: % of part time employees
Household / demographic measures	Non-earner families (1) Single parent families (2) Age dependency (3) Recent arrivals (4) Poor English skills (5)	1. % of families with children (couples and single parents) where no parent is employed 2. % of all families 3. persons aged over 64 years as a % of working age population 4. % of persons arriving in Australia between 1996 and 2001 5. % of persons self reporting poor English skills
Housing	owner occupiers (1) public housing tenants (2) rental financial stress (3) mortgage financial stress (4)	1: % of households who are owner occupiers 2. % of public housing tenants 3: % of low income renters paying more than 30% of income on rent 4: % of low income home purchasers paying more than 30% on mortgage repayments

useful, with a number of recent studies adopting this type of approach to identify the broad social structure of cities (Coulton et al. 1996; Massey and Eggers 1993; Stimson et al 2001; Baum et al. 1999, 2002; Mikelbank 2004).

The typology is developed utilising a clustering procedure (m-clust) which quantitatively identifies similarities and differences between localities, classifies observations according to these outcomes and provides an analysis of the differences between clusters using graphical interpretations of means and

Table 2: Cluster means, individual variables, 7 clusters

	Advantaged clusters			Disadvantaged clusters				total
	Extremely advantaged new economy communities	Middle class advantaged suburban localities	Gentrifying/population change advantaged localities	Battling family-mortgage stress disadvantaged localities	Old-economy extremely disadvantaged localities	Peri-urban disadvantaged localities	Working class battler disadvantaged localities	
Residential turnover	48.3	41.6	55.4	43.4	40.7	43.9	43.1	44.7
Point change in labour force participation	1.8	0.003	0.7	-1.3	-5.4	-2.6	-1.3	-1.2
Average wage and salary	47207.49	36124.31	37394.26	31507.98	28870.37	28784.46	32173.83	34060.78
Income ratio	2.05	1.11	1.60	0.62	0.33	0.53	0.71	0.93
Imputation credit	2255.83	658.03	887.46	294.18	133.04	452.51	314.08	630.01
Interest received	1897.69	941.33	846.37	583.25	302.61	752.43	422.62	769.89
Pension receipt	7.18	9.96	6.74	11.3	9.02	11.67	6.43	9.11
Rental assistance	3.29	4.01	5.9	5.8	5.8	5.0	3.57	4.9
Educated professionals	48.2	34.9	39.6	22.0	13.2	20.0	21.6	27.6
Vulnerable occupations	8.3	13.0	11.4	18.8	25.1	20.5	17.9	16.7
New economy	31.6	22.5	24.2	17.8	13.6	10.1	16.1	19.1
Mass goods and services	35.7	38.6	40.8	36.5	33.7	33.7	35.4	36.4
Construction	3.7	6.0	3.9	6.8	6.6	7.8	8.5	6.4
Mass recreation	8.8	7.3	10.5	6.8	5.3	7.7	5.5	7.3
Distribution and transportation	7.1	8.3	7.1	9.6	10.1	7.6	9.8	8.7
Old economy	4.7	7.7	4.3	10.9	17.1	10.4	11.6	9.7
agriculture	0.67	0.62	0.71	0.96	2.18	12.39	2.80	2.60
Low human capital	19.8	30.5	23.9	40.7	44.6	45.6	37.9	35.4
Youth unemployment rate	9.6	10.8	12.9	14.7	19.5	13.7	10.74	13.2
Adult unemployment rate	4.4	5.3	6.8	8.2	11.4	7.1	2.3	6.9
Labour force participation	62.7	62.7	64.1	57.9	57.0	56.9	67.9	61.3
Part time work	30.8	30.9	29.4	29.8	30.3	32.4	30.2	30.4
Non-earner families	9.5	10.2	11.9	13.4	15.9	9.4	9.5	11.5
Single parent families	12.5	13.6	15.8	17.4	19.6	13.0	13.1	15.2
Recent arrivals	5.6	3.9	5.8	3.9	2.9	0.78	1.9	3.5
Poor English skills	6.1	9.1	9.9	10.8	10.8	2.0	3.8	7.8
Age dependency	21.9	21.3	14.1	21.4	15.3	24.4	11.3	18.5
Rental financial stress	17.3	19.9	19.5	21.5	22.5	24.5	19.7	20.8
Mortgage financial stress	5.6	7.5	7.6	10.6	12.5	13.0	9.2	9.5
Public housing tenants	2.4	2.5	6.2	6.1	9.6	2.0	1.7	4.4
Home owners	44.2	45.2	27.8	39.8	33.4	44.8	37.1	39.0

Note: shaded cells with bold figure indicated that this variable distinguishes this cluster from others; bold figure only indicates impo

confidence intervals. The typology building approach is conducted using 33 indicators of socio-economic performance obtained from Australian Bureau of Statistics Census data and other administrative data sets (see table 1) and is applied to 301 localities across Australia's extended metropolitan regions. Details of the clustering procedure are described in Fraley and Raftery (2002), while the use of graphs of means and confidence intervals to interpret differences between groups is set out in Masson and Loftus (2003). An in depth description of the typology building exercise is contained in Baum et al. (forthcoming).

ADVANTAGE AND DISADVANTAGE IN AUSTRALIAN CITIES

As shown in table 2, which reports the means for each of the variables included in the analysis, the model-based clustering procedure resulted in the selection of 7 clusters which could be divided into 3 advantaged groups of localities, 3 disadvantaged groups of localities and a single group of localities that might be thought of as being the average or marginal (neither relatively advantaged or disadvantaged).

Advantaged Communities

Extremely advantaged new economy communities

This first advantaged cluster comprises 31 localities found mainly in Sydney and Melbourne, but also in Perth, Canberra, Brisbane and Adelaide (Table 3). Spatially, the clusters are found predominantly in near inner city localities. The variables that differentiate this cluster from others suggest that it can be labelled as an *extremely advantaged new economy communities* cluster. Many of the residents in localities in this cluster might be thought to play a key role in sectors tied to new economy activities and have benefited from this association. Significantly, this cluster is differentiated from other groups and has the highest proportion of workers in new economy industry sectors (31.6 per cent), the highest proportion of educated professionals (48.2 per cent), the highest average wage (\$47207.49) and the highest income ratio (2.0) and the highest level of interest received (\$1897.69) and imputation credits received (\$2255.83). The cluster also has below average levels of persons employed in vulnerable occupations (8.3 per cent), and persons with low levels of education (19.8 per cent) and below average levels of households suffering mortgage financial stress (5.6 per cent).

Apart from these variables which strongly differentiate this cluster from the six others, the *extremely advantaged new economy communities* are also differentiated, along with other clusters, in terms of having below average levels of youth unemployment (9.6 per cent) and adult unemployment (4.4 per cent) and below average non-earner households (9.5 per cent) and single parent families (12.5 per cent). Moreover, the cluster also has below average levels of public housing tenants (2.4 per cent) and below average age pensions recipients (7.2 per cent), which is despite having an above average age dependency rate (21.9 per cent). Finally, this group of localities has a below average proportion of persons employed in the construction sector (3.7 per cent) and perhaps not surprisingly a below average proportion old economy workers (4.7 per cent).

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Table 3: The wealth belt localities

SYDNEY	PERTH
Woollahra	Peppermint Grove
Hunter's Hill	Cottesloe
Lane Cove	Nedlands
Mosman	Cambridge
North Sydney	Claremont
Ku-ring-gai	
Willoughby	CANBERRA
Manly	South Canberra
Drummoyne	
Pittwater	ADELAIDE
Leichhardt	Burnside – South-West
Waverley	Burnside – North-East
	Walkerville
MELBOURNE	Mitcham – North-East
Boroondara – Camberwell North	
Bayside – Brighton	BRISBANE
Stonnington – Malvern	Pullenvale
Boroondara – Kew	
Boroondara – Camberwell South	
Stonnington – Prahran	
Port Phillip – West	
Boroondara – Hawthorn	

Middle-class Advantaged Suburban Localities

The second advantaged cluster consists of 49 localities found in Sydney, Melbourne, Brisbane, Adelaide, Hobart and Perth (Table 4). Considering the factors differentiating this cluster from others it is labelled as the *middle class advantaged suburban localities* cluster. The localities found in this cluster include several middle suburban areas that have been doing well in terms of measures of affluence, although relative to the other advantaged clusters (especially the extremely advantaged cluster) the performance has been less impressive. The localities are also found in some outer metropolitan regions which have recently become the location of new middle class housing developments.

The cluster is significantly different from others in terms of an above average income ratio (1.1), a below average proportion of persons with low formal human capital (30.5 per cent), a below average proportion of old economy workers (7.7 per cent) and persons employed in vulnerable occupations (13.0 per cent). The cluster is also differentiated, along with other clusters, with regard to above average wage level (\$36124.31), above average new economy workers (22.5 per cent) and educated professionals (34.9 per cent). Additionally, it is also differentiated in terms of having below average proportions of youth unemployment (10.8 per cent) and adult unemployment (5.3 per cent), below average levels of non-earner households (10.2 per cent), below average levels of single parent families (13.6 per cent) and a below average proportion of persons receiving rental assistance (4.0 per cent). Finally, in terms of housing variables, this cluster has below

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average levels of households in mortgage financial stress (7.5 per cent) and below average public housing tenants (2.5 per cent).

Table 4: Middle class suburbia

SYDNEY	BRISBANE
Sutherland Shire – East	Jamboree
Sutherland Shire – West	The Gap
Kogarah	Chandler
Concord	McDowall
Warringah	Morningside
Blue Mountains	
Ryde	PERTH
Baulkham Hills	Melville
Strathfield	Stirling – Coastal
Hornsby	East Fremantle
Kiama	
Ashfield	ADELAIDE
Hurstville	Holdfast Bay – South
Burwood	Mitcham – Hills
	Charles Sturt – Coastal
MELBOURNE	Adelaide Hills – Central
Manningham – West	Prospect
Glen Eira – South	Mitcham – West
	Norwood Payneham St Peters – East
Mornington Peninsula – West	Unley – West
Whitehorse – Nunawading West	Holdfast Bay – North
Monash – Waverley East	
Monash – Waverley West	HOBART
Whitehorse – Nunawading East	Kingborough
Banyule – Heidelberg	
Whitehorse – Box Hill	
Hobsons Bay – Williamstown	
Moonee Valley – Essendon	
Glen Eira – Caulfield	
Manningham – East	
Maroondah – Ringwood	
Bayside – South	
Nillumbik	
Darebin – Northcote	

Gentrifying/Population Change Advantaged Localities

The final advantaged cluster consisted of 37 localities across Sydney, Melbourne, Canberra, Perth, Darwin, Brisbane and Adelaide (Table 5). The cluster represented the changing socio-economic characteristics of localities in cities and is labelled as a *gentrifying/population change advantaged localities* cluster. The majority of the localities were found in inner-city areas, reflecting the gentrifying activities that have characterised cities for some time. The cluster also represents the population change evident in Canberra and Darwin both of which have witnessed growth as a result of administrative functions of these places.

Illustrating the cluster’s advantaged position, it is differentiated from others in terms of an above average high-low income ratio (1.6) a below average percentage of persons with low education (23.9 per cent) and persons employed in vulnerable occupations (11.4 per

cent). It also has an above average level of persons employed in mass recreation industries (10.5 per cent). Moreover, reflecting the population change associated with the cluster it is differentiated from others in terms of having the highest proportion of population in-movement (55.4 per cent) and a below average percentage of home owners (27.8 per cent), reflecting the fact that localities with high population in-movement are more likely to have low levels of ownership.

Apart from these indicators, which are the most important differentiating variables, the clusters is differentiated from other clusters in terms of an above average wage and salary (\$37394.26), the proportion of educated professionals (39.6 per cent) and new economy employees (24.2 per cent), and a below average proportion of households suffering mortgage financial stress (7.6 per cent), all of which illustrate the advantaged nature of this cluster. The cluster is also differentiated in terms of having a below average level of persons receiving age pensions (6.7 per cent), and age dependency (14.1 per cent) and a below average level of persons employed in the construction industry (4.0 per cent) and old economy industries (4.3 per cent). The cluster also has an above average level of public housing tenants (6.2 per cent),

Table 5: Gentrifying/population change advantaged localities

SYDNEY	PERTH
Sydney – Inner	Perth – Inner
South Sydney	Vincent
Marrickville	Subiaco
Randwick	South Perth
	Mosman Park
MELBOURNE	Stirling – South-Eastern
Melbourne – Inner	
Yarra – North	ADELAIDE
Yarra – Richmond	Adelaide
Port Phillip – St Kilda	Norwood Payneham St Peters – West
Moreland – Brunswick	Unley – East
BRISBANE	DARWIN
Central	Darwin – Lyons
Dutton Park	Darwin – Palmerston
East Brisbane	Darwin – Chan
Hamilton	Darwin – Richmond
Toowong	Darwin – Waters
Grange	
Walter Taylor	HOBART
CANBERRA	Hobart – Inner
Gungahlin – Hall	
Belconnen	
Tuggeranong	
Weston Creek – Stromlo	
North Canberra	
Woden Valley	

Disadvantaged Localities

Working-class-battler Disadvantaged Localities

One of the clusters identified contained 46 localities found in Sydney, Melbourne, Brisbane, Adelaide, Perth and Darwin (Table 6). Spatially, the localities found in this cluster are found in middle and outer areas of the metropolitan regions. The cluster has been labelled as a group of working class battlers communities and can be considered to represent the middle or average group of localities, which while not necessarily showing high levels of disadvantage are not, relative to other groups highly advantaged. The cluster has characteristics of disadvantage, such as low incomes, but has relatively good labour force outcomes (i.e. low unemployment) and low concentrations of disadvantaged families.

The cluster is not significantly differentiated from other groups on any of the variables. It is however differentiated along with other clusters in terms of a below average high-low income ratio (0.7) and below average levels of imputation credits (\$314.08) and interest earned (\$422.62) and a below average percentage of persons with poor English skills (3.8 per cent). The cluster shares with the other disadvantaged groups an above average proportion of persons with low education (37.9 per cent) and also had below average wage and salary (\$32173.84), a below average proportion of new economy workers (16.1 per cent) and educated professionals (21.1 per cent) and an above average proportion of persons employed in vulnerable occupations (17.9 per cent). Unlike other disadvantaged clusters this group of localities had below average levels of youth unemployment (10.7 per cent) and unemployment generally (2.3 per cent) and common with the advantaged clusters, this cluster also had below average proportions of single parent families (13.1 per cent), non-earner families (9.5 per cent) and households in public housing (1.7 per cent). Finally the cluster has a below average proportions of age dependency (11.3per cent) and a below average proportion of persons receiving aged pensions (6.4 per cent).

Table 6: Working-class-battler disadvantaged localities

SYDNEY	BRISBANE
Blacktown – North	Bracken Ridge
Hawkesbury	Acacia Ridge
Penrith	
Wollondilly	ADELAIDE
Camden	Playford – Hills
	Adelaide Hills – North
MELBOURNE	Tea Tree Gully – North
Casey – Berwick	Tea Tree Gully – Hills
Knox – South	Marion – South
Yarra Ranges – South-West	Adelaide Hills – Ranges
Whittlesea – North	Onkaparinga – Woodcroft
Hume – Craigieburn	Tea Tree Gully – Central
Hume – Sunbury	Adelaide Hills – Bal
Frankston – East	Onkaparinga – Reservoir
Cardinia – North	
Macedon Ranges	PERTH
Maroondah – Croydon	Joondalup – North
Mitchell – South	Serpentine – Jarrahdale

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Casey – South	Joondalup – South
Moorabool – Bacchus Marsh	Mundaring
Cardinia – Pakenham	Kalamunda
Knox – North	Wanneroo – North–East
Melton	
Surf Coast – East	DARWIN
Mornington Peninsula – East	Darwin – Litchfield
Wyndham – South	
Wyndham – West	
Wyndham – North	
Banyule – North	

Battling Family/Mortgage Stress Disadvantaged Localities

The first disadvantaged cluster represents the largest number of localities (66) and were found in Sydney, Melbourne, Brisbane, Perth, Adelaide and Hobart and spatially tended to be located mainly in middle and some outer suburban localities (Table 7).

Consideration of the variables which differentiate this cluster from others suggests that the cluster can be labelled as a *battling family/mortgage stress disadvantaged localities* cluster. To a large extent the localities in this cluster represent the battling mortgage belt, but with disadvantage reflected by concentrations of disadvantaged families.

Table 7: Battling family/mortgage stress disadvantaged localities

SYDNEY	BRISBANE, cont.
Bankstown	Gold Coast – North
Botany Bay	Redlands
Holroyd	Wishart
Canterbury	Enoggera
Wollongong	Holland Park
Shellharbour	Doboy
Liverpool	
Blacktown – South-East	PERTH
Gosford	Stirling – Central
Parramatta	Bassendean
Wyong	Victoria Park
Rockdale	Fremantle – Inner
Campbelltown	Northam
	Bayswater
Melbourne	Canning
Monash – South-West	Cockburn
Frankston – West	Belmont
Greater Geelong	Swan
Moreland – Coburg	Rockingham
Moreland – North	Wanneroo – North-West
Darebin – Preston	
Hobsons Bay – Altona	Adelaide
Brimbank – Keilor	Marion – North
Moonee Valley – West	Charles Sturt – Inner West
Kingston – South	West Torrens – East
Maribymong	Marion – Central
Kingston – North	Barossa – Barossa

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Brisbane	Port Adel. Enfield – Coast
Deagon	Charles Sturt – Inner East
Wynnum – Manly	West Torrens – West
Northgate	Port Adel. Enfield – East
Merchant	Charles Sturt – North-East
Runcorn	Tea Tree Gully – South
Pine Rivers	Gawler
Redcliffe	Campbelltown – West
Moorooka	Campbelltown – East
	Hobart
	Clarence

The cluster is differentiated from all other clusters in terms of above average proportions of households with mortgage stress (10.6 per cent), non-earner households (13.4 per cent), and single parent households (17.4 per cent). All of these variables clearly point to the disadvantaged nature of this cluster. Apart from these variables, the cluster is also differentiated, along with other clusters, in terms of an above average proportion of persons employed in vulnerable occupations (18.8 per cent) and commensurately a below average proportion of educated professionals (22.0 per cent) and new economy workers (17.8 per cent). The cluster was characterised by low incomes with below average wage and salary (\$31507.98) and income ratio (0.62) and it has below average levels of labour force participation (57.9 per cent) together with above average proportions of persons with low formal human capital (40.7 per cent). Age dependency was above the average (21.4 per cent) and there were an above average proportion of public housing tenants (6.1 per cent). Finally, reflecting the blue collar characteristics of many of the localities within the cluster there was an above average proportion of persons employed in the distributive and transport industry sector (9.6 per cent).

Old-economy Extremely Disadvantaged Localities

The second cluster of disadvantaged localities represented a group of localities (37) that may be considered to have been hard hit by economic restructuring and are among the most disadvantaged communities in metropolitan Australia. These communities were found in Sydney, Melbourne, Brisbane, Perth, Adelaide and Hobart (Table 8). Spatially, they were located in some middle and outer suburban localities. Considering the factors that differentiate this cluster from others it is labelled as an *extremely disadvantaged old economy communities* cluster. The cluster reflects the negative outcomes of recent periods of economic restructuring whereby some localities, especially those places located in the so-called rust belt regions, have struggled to survive and reinvent themselves economically and socially.

Table 8: Old-economy extremely disadvantaged localities

SYDNEY	ADELAIDE, cont.
Blacktown – South-West	Port Adelaide Enfield – Port
Fairfield	Onkaparinga – Hackham
Auburn	Onkaparinga – North Coast
	Onkaparinga – Morphett
MELBOURNE	Playford – East Central
Hume– Broadmeadows	Playford – West

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Brimbank – Sunshine	Onkaparinga – South Coast
Greater Dandenong	Salisbury – North-East
Casey – Cranbourne	Port Adelaide Enfield – Inner
Casey – Hallam	Salisbury – South-East
Whittlesea – South	Salisbury – Bal
	Mallala
BRISBANE	
Ipswich	PERTH
Caboolture	Kwinana
Logan	Wanneroo – South
Richlands	Armadale
	Gosnells
ADELAIDE	
Playford – Elizabeth	HOBART
Playford – West Central	Brighton
Salisbury – Central	Derwent Valley
Salisbury – Inner North	Glenorchy
	Sorell

The cluster was differentiated from all others in terms of the highest proportion of persons employed in vulnerable occupations (25.1 per cent), and old economy industry sectors (17.1 per cent), and also above average levels of youth unemployment (19.5 per cent), unemployment generally (11.4 per cent), non-earner households (15.9 per cent) and single parent households (19.9 per cent). The cluster also has a below average income ratio (0.3), proportion of educated professionals (13.2 per cent), imputation credit (\$133.04), interest received (\$302.61) and point change in labour force participation (-5.4 points). The cluster is similar to the other disadvantaged clusters in terms of having a above average proportion of persons with low education (44.6 per cent), and a below average wage level (\$28870.37) and proportion of new economy workers (13.6 per cent) and an above average proportion of households suffering from mortgage financial stress (12.5 per cent). Moreover, it has below average proportion of persons employed in the mass recreation industry sector (5.3 per cent) and has below average labour force participation rates (57.0 per cent), and below average levels of age dependency 15.3 per cent). It has above average proportion of persons employed in distributive and transport sectors (10.1 per cent) and proportions of public housing tenants (9.6 per cent).

Peri-urban Disadvantaged Localities

The final disadvantaged cluster comprised 35 localities found mainly in the outer peri-urban regions of Sydney, Melbourne, Adelaide, Brisbane and Perth (Table 9). The distinguishing variables associated with this clusters point to a relative level of disadvantage and the cluster is labelled as the *peri-urban disadvantaged localities*. They represent places which have become part of the extended metropolitan region due in-part to increasing urbanisation and a shift to what some authors refer to as ‘sea change’ localities (Burnley and Murphy 2004). They are likely to be a mixture of places based on agriculture production and also consumption driven localities such as retirement communities.

Table 9: Peri-urban disadvantaged localities

SYDNEY	ADELAIDE
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Social City 15

Wingecarribee	Alexandrina – Coastal
Greater Lithgow	Victor Harbor
	Yankalilla
MELBOURNE	Barossa – Angaston
Mornington Peninsula – South	Barossa – Tanunda
Surf Coast – West	Alexandrina – Strathalbyn
Bass Coast – Bal	Light
South Gippsland – West	Onkaparinga – Hills
Cardinia – South	Mount Barker
Greater Geelong Fringe	
Yarra Ranges – North	PERTH
Yarra Ranges – Central	Gingin
Mitchell – North	Toodyay
Golden Plains – South-East	York
Hepburn – East	Murray
Moorabool – Ballan	Chittering
	Northam
BRISBANE	Murrindindi – East
Caloundra	Baw Baw – West
Brisbane Urban Fringe	Murrindindi – West
	Mandurah

The cluster is differentiated from all others in terms of an above average proportion of persons employed in agriculture (12.4 per cent) and an above average proportion of persons employed in vulnerable occupations (20.5 per cent). It also has a below average proportion of persons with poor English skills (2.0 per cent) and recent arrivals (0.7 per cent), reflecting the settlement patterns of recently arrived migrants in cities. The cluster is similar to the other disadvantaged clusters in terms of having an above average proportion of persons with low educational attainment (45.6 per cent) and low levels of educated professionals (20.0 per cent) and new economy industry workers (10.1 per cent), labour force participation (56.9 per cent) wage and salaries (\$28784.46) and income ratio (0.5). Against this, the cluster has below average proportions of non-earner households (9.4 per cent), single parent families (13.0 per cent), and proportions of public housing tenants (2.0 per cent), features shared with some of the advantaged clusters. The cluster has an above average level of age dependency (24.4 per cent) and above average proportion of households suffering mortgage financial stress (13.0 per cent).

DISCUSSION

This paper began by suggesting that the socio-spatial structure of the post-Fordist Australian city was likely to reflect the outcomes of recent processes of social and economic change, and that the outcome of these in terms of patterns of advantage and disadvantage might reflect a new or different social and spatial reality within Australia's metropolitan regions. The outcome of the analysis, which presented a typology of seven clusters (3 advantaged clusters, 4 disadvantaged clusters), points to two broad concluding outcomes. First, as has been argued both within the international literature as well as that which looks specifically at Australian cities, the contemporary socio-spatial structure of metropolitan regions appears to reflect the broad processes underway in the post-Fordist

city and that in some way these patterns can be expected to be different from the patterns seen to exist during earlier periods. Not that there is a new spatial structure; the resulting patterns are not so different from preceding periods. Rather, there have been changes in the components of that structure (Marcuse and van Kempan 2000b). That is, divisions between advantage and disadvantage exist, just as they have in earlier times, what is new are the ways these are expressed and possibly the strength of the divides between them. This has certainly been the view expressed by others working on Australian material (Randolph 2004; Gleeson 2004; O'Conner, Stimson and Daly 2001).

The divisions identified in the research are perhaps most noticeable at the extremes, that is between the highly advantaged new economy communities and the highly disadvantaged old economy communities. The group of localities identified as new economy advantaged have been an emerging feature of Australian cities as witnessed in previous research in various forms (See Baum et al 1999, 2002; Stimson et al. 2001), but are now perhaps becoming more differentiated from other localities as they become more and more characterised as the 'privileged community of the global elite' (Baum et al. 2002). They are not a feature of all the metropolitan regions and are certainly more dominant in those with identified ties to the wider global economy such as Sydney, Melbourne and Perth. In Sydney, increasing global city functions associated with the presence of regional headquarters, the development of national gateway functions and the development of significant knowledge based industry sectors have generated wealth and high incomes for certain individuals who are able to live in these 'privileged communities' often close to the CBD in what has been referred to as 'global Sydney'. While there is little evidence of citadels (Marcuse and van Kempen 2000a) those with membership to global Sydney communities are seen as being increasingly differentiated from other communities and localities often with symbolic walled suburbs as a defence against crime and deprivation (Connell and Thom 2000; McGregor 1997).

At the other extreme, the old economy disadvantaged localities show the negative impacts of the economic restructuring and other processes and are among the most disadvantaged places within the metropolitan regions. Some of the localities are found in urban areas that experienced marked industrial development during earlier periods and which have in the wake of deindustrialisation been unable to prosper. Some such as those found in Adelaide are among the nations poorest suburbs having emerged as new industrial areas with prosperous workforces in the 1950s only to suffer profound demise through the 1970s and 1980s (Peel 1995; 2003). If the new economy advantaged localities are in some sense moving away from the rest of the country, then the old economy disadvantaged localities are being excluded from the economic life of the surrounding society. While it is true that disadvantage in terms of unemployment and low incomes have been a feature of Australian cities for some time these contemporary disadvantaged localities might be thought of as being different; disadvantage seems more entrenched and possibly less easy to escape. If these places are reflective in some senses of the ghettos of exclusion discussed by Marcuse and van Kempan (2000a: 19) then the following observation is pertinent

...the residents of the abandoned city, particularly in the new ghetto of the excluded, play a different role from those of the old ghetto in many

respects...Older forms of the ghetto...remained an integral part of the mainstream economy, with residents of different classes and with a variety of prospects on the labour market. Their residents, when unemployed, were part of a reserve army of the unemployed, who had expectations of re-entering the mainstream labour force when conjunctural conditions changed. That holds less and less in the new ghettos.

The disadvantaged old economy localities are among Australia's equivalent to the new urban ghettos identified in the United States. The social and economic conditions might be at variance, but these are excluded places all the same and are likely to face the same issues of dependence, limited political participation, restricted socio-cultural integration and bad neighbourhood pathologies (Gregory and Hunter 1995; Musterd and Ostendorf 1998).

While these two examples represent the extremes in terms of advantage and disadvantage, the other clusters are also of interest. Gentrified and redeveloped inner city localities have now firmly been established as part of the advantaged socio-spatial landscape. These were identified as part of the population change advantage localities and although these places have in the past had much more mixed socioeconomic outcomes (Badcock 2001; Baum et al 1999, 2002) being characterised by both advantage and disadvantage, the pendulum appears to have swung much more in the favour of advantage. These places do of course, when combined with the new economy advantaged localities, represent the spatial shift in advantage and disadvantage whereby no longer are inner-city localities the sites of disadvantage, but rather disadvantage has tended to be increasingly suburbanised. Spatially, the disadvantage old economy cluster was predominantly a suburban cluster and the cluster of localities characterised by household disadvantage and financial stress due to housing costs (mortgage belt battlers) are also for the most part firmly suburban, located in the middle and outer rings of the metropolitan regions. But disadvantage has not entirely taken over suburbia. The growth in the new middle class has seen localities in middle suburbia prosper (middle class advantaged cluster), while for some have contributed to "a new rim of affluence" on the edge of the metropolitan regions. According to Randolph (2004: 489)

The "McMansion" suburbs – middle to higher income, large car dependent homes on small plots – are now a dominant feature of the new suburban landscape. These are not the lower income, more affordable fringe suburbs that characterized the 1960 and 1970s. Most notably, there is not a public housing development among them. This is new – the emergence of the middle classes on the urban fringe.

Finally, the peri-urban localities of the metropolitan regions represent the intensification of previous rural localities that have in many cases been engulfed by the commuter zones of the metropolitan regions. These peri-urban regions, might be thought of as suburbs in waiting and are the 'shadow that moves outwards as the city spreads and extends its influence into its immediate hinterland' (Bunker and Holloway 2001). They represent a new location of disadvantage in the metropolitan structure, although are ones that have been developing for some time and may also show signs of improving socio-economic fortunes.

Naturally, these socio-spatial patterns hold for some regions more than for others and it is certainly the case that the uneven social and economic histories as well as present trajectories of individual cities have impacted on the outcomes observed in each one.

At one extreme sits the Sydney metropolitan region. The internal structure of the city reflects its privileged position as the nation's major global city. It has far-and-away more advantaged localities than any other metropolitan region (bar Canberra and Darwin which might be considered special cases) and has less disadvantaged localities. New economy advantaged localities are a dominant feature while old economy disadvantaged localities only feature in a comparatively small way. Relative to the distribution for all metropolitan regions it has almost 1.5 times more advantaged localities than would be expected and almost half the disadvantaged localities. There may therefore be some trickle-down of advantage through all localities so that even the worse-off places are not, relative to other places, doing as bad. That is it appears that in some sense the consequences of broader social and economic transitions have been cushioned by Sydney's relatively robust economic performance and that in a sense Sydney is pulling away from the rest of the country. This has been suggested elsewhere for Sydney (Connell 2000) and is also an outcome observed in cities elsewhere (Drenan, Tobier and Lewis 1996).

The metropolitan regions of Canberra (Australia's national capital) and Darwin (the capital of the Northern Territory) reflect special cases. Both have economic structures tied largely to public service activities and associated functions, a fact that is reflected in the general level of advantage identified across these places. This does not deny the presence of disadvantaged households or individuals. Rather, it indicates no cluster of households or individuals is large enough to form a disadvantaged group that our methodology would have identified.

The other cities-Melbourne, Brisbane, Perth, Adelaide and Hobart- all have more disadvantaged localities relative to the distribution for all metropolitan regions. Melbourne has a more balanced structure of advantaged and disadvantaged localities, a fact that previous analysis has suggested is an outcome of that city's mixed fortunes over the past two or so decades (Baum et al 2002), while what have been referred to as Australia's two sun-belt metropolitan regions (Stimson, Shuaib and O'Connor 1998) also have seemingly more balanced structures.

The contrast to these is the two remaining metropolitan regions of Adelaide and Hobart. The structure of these two places reflects the parlous economic conditions that exist today, a position that reflects the sustained negative economic outcomes that have characterised these cities over the past two to three decades (O'Connor, Stimson and Daly 2001). The two 'rust-belt' cities and Adelaide in particular have many more disadvantaged localities relative to other metropolitan regions with the old economy disadvantaged localities being especially over represented in Adelaide. While these two cities are attempting to reinvent their economic structures, they are none-the-less at the bottom of the socio-economic hierarchy of metropolitan regions.

The socio-spatial structure of the eight extended metropolitan regions, then, vary because of the changing socioeconomic conditions that include economic, demographic, social and political changes experienced over the past few decades. The decline of the old economy and the rise of the new global economy have given rise to new groups of advantage and disadvantage across the metropolitan regions. Thus those urban areas most affected by the demise of the old economy have more vulnerable localities, but those benefiting most from the global economy have more affluent localities.

In conclusion, the analysis given provided a descriptive overview of the socio-spatial structure of contemporary Australian metropolitan regions. The typology developed provides a necessary basis for any detailed study of a particular locality or group of localities because it provides the context within which more in depth study can be comprehended. A clear pattern of advantaged localities and disadvantaged localities was observed, with a cluster of 'average' localities sitting between the various degrees of advantage and disadvantage. It is important, nevertheless, to be cautious about the way these findings are used. The analysis has by necessity, been broadly focused, identifying the main types localities that are thought to exist in extended metropolitan regions. Clearly, there will be sub-groups within these broad classifications. For example, the advantaged new economy cluster is likely to contain communities of the global elite, but also contain some sub-communities of disadvantage. A finer empirical analysis of each cluster type would therefore pinpoint the presence of these sub-communities, and this could be done using census data at the collector district level or by utilising other aggregated data sources or possibly ethnographic research.

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