

A Holistic Approach to Studying Segregation in Australian Cities

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Abstract: In this paper we are specifically concerned with research approaches to the growing societal divisions that have captured the attention of many urban scholars and policy makers. In this paper we argue that research on segregation has had an over-reliance on statistical measures of outcomes, which limits our understanding of segregation processes and impacts. A mixed method, multi-staged approach to research on residential segregation generates a more holistic picture of the processes and impacts of social segregation. We showcase a staged analysis of data from Sydney, Australia, using Vietnamese-Australians. The use of both statistical measures and field based insights enriches the understanding of segregation, and allows a more rounded basis for discussing policy responses and remedies.

Studying segregation

In a recent review of progress in urban geography, Hanson (2003:467) noted that articles on the category of 'segregation' accounted for 26 per cent of all published articles in urban geography (using the journals *Urban Geography*, *Annals of the Association of American Geographers*, and *The Professional Geographer*). The topic of segregation was more prominent than all other topics, including housing, immigration, labor markets and gentrification. A stock-take of other journals in urban studies would mirror Hanson's findings, with a journal like *Urban Studies* also having a significant emphasis on segregation studies over the last few decades. With segregation continuing to have a central place within urban studies, the methods we employ to undertake research on segregation need to be critically assessed.

The term segregation is most often used to describe the spatial separation of population groups into distinctive residential areas over time (see Massey and Denton, 1988 for a detailed account of the dimensions of residential segregation). However, research on segregation has most often been focussed on the distribution of particular ethnic groups. A prominent example of such research has examined the residential segregation of African-Americans and Anglo-Americans in the United States, and the infamous 'white flight' phenomena (see Massey and Denton, 1989; 1993; Fortuijn et al, 1998:367; Brama, 2006). This emphasis on urban division is perhaps not surprising given the importance of the Chicago School's theories of segregation during the early developmental stages of segregation studies (see Park *et al.*, 1925). The focus on ethnicity is also prevalent in Australian geography on segregation. Too rarely have studies of segregation considered other axes of 'dissimilarity', such as across income, age, household structure and family type – all factors which contribute to urban disparity. Johnston *et al.* (2001) proposed new approaches to the measurement of residential segregation, recognising the need to incorporate several population dimensions in any analysis of residential segregation. We agree, and argue that segregation is a complex multi-dimensional urban process and our understandings of this complex urban phenomenon should not be limited to the examination of a single set of variables, nor by the use of a single methodology.

In this paper we respond to the stated concern that research on segregation has been limited by a partial methodology. It has been argued that there has been an over-reliance on statistical measures (Gordon, 2004; Simpson, 2004) Statistical measures offer only a partial picture of residential segregation and neighbourhood change. The over-reliance upon statistical measures limits the conceptual base for segregation research as well as the contribution that can be made to policy discussions about this complex urban process. Recent work on social exclusion has tended to analyse social outcomes through a specific methodological lens. For instance, research on new residential developments has tended to use secondary statistical data (Randolph and Holloway, 2003, 2005), or ethnographic approaches to gather primary qualitative data (Caldeira, 2000; Low, 2003; Gwyther, 2005). Very little published work actually bridges the two very broad research approaches (qualitative and quantitative), although some current Australian projects on master planned estates has this intention. Another exception internationally is Simpson's work which used the Index of Dissimilarity (ID) in conjunction with interview data to examine 'racial' segregation in the UK following three riots in 2001. In this paper we propose to broaden the methodological base of urban research on segregation. By broadening the methodological base, we argue that the conceptual reach of segregation research can also be broadened. This paper begins with a brief review of recent literature that expands the conceptualisation of segregation.

We then move to a discussion of mixed method approaches and the possibilities of a multi-staged and mixed method approach for segregation research.

Motives and Impacts of Segregation

Segregation ought only attract policy attention if it can be shown to be generating real maladies. To our mind, matters of ethnic segregation only matter insofar as they have some identifiable impact upon subsequent settlement patterns, and more importantly, whether they are associated with uneven social and economic conditions and the broader matter of civic participation. Yet, segregation has long been assumed to be a negative urban process. Iris Young (1999) noted that the term segregation has almost always had a negative normative connotation. As an urban process, segregation has the potential to plunge sections of the citizenry into circumstances of intergenerational disadvantage, or inversely to protect and isolate affluence. Residential segregation can be a source of *serious injustice* (Young, 1999:237, emphasis added). According to Young (1999:240), the most important wrong of segregation is that it 'produces and reinforces unjust privileges and disadvantages'. Whilst segregation can be a source of injustice, scholars have dedicated less attention to what might be termed 'positive' elements of segregation in cities and urban areas. Dunn (1998) demonstrated some of the positive aspects for the Vietnamese community in Cabramatta, a suburb in Sydney, who were living in an area of ethnic concentration. There have been very few studies of the advantages for people in positions of socio-economic disadvantage living amongst others that are also socio-economically disadvantaged. And the self-segregation, or voluntary segregation, of the middle-class and elites, has only recently entered urban research agendas in a substantial way (Amin, 2002; Atkinson, 2006; Atkinson and Flint, 2004; Blakely and Snyder, 1997; Dowling and McGuirk, 2005; Gwyther, 2003; 2005; Kenna, 2004; 2007; Low, 2003). There is a growing set of commentaries on the undesirability of new residential enclaves and how they reinforce socio-economic homogeneity. Yet the movement of people into new, often exclusive, residential developments has yet to be rigorously analysed. We do not yet fully understand the motives of these residents that drive them to segregate from others in society. Statistical analyses alone would not provide these insights. Further, the everyday life experiences, be they positive or negative, and the quality of life for those in impoverished neighbourhoods cannot be understood using segregation indexes. Thus, the processes and impacts of segregation would remain only partially understood through the use of segregation measures alone.

A Mixed Method Approach to the Analysis of Segregation

McCarty (1954) argued that due to the complexities of geographic phenomena, like segregation, we cannot identify causes simply by inspecting the data. In the case of residential segregation, we are unable to determine from statistical data alone the factors that are driving segregation (e.g. fear or crime). Barnes (1998:221) noted that statistics are one of the ways through which we understand the world, 'our reality', but it becomes necessary to "illustrate the processes by which the construction of that reality occurs". Within human geography, there has been a critique of the divide between quantitative and qualitative data and the method used to obtain those (Phillip, 1998; Philo, 1998; Poon, 2005; Winchester, 2005). A multiple or mixed methods approach would employ a range of methodological strategies and the researcher would not necessarily have to privilege a particular way of looking at the social world (Phillip, 1998). The use of mixed methods for research in human geography is increasing in popularity and constitutes part of an ongoing debate (Winchester, 2005).

A special issue of the journal *Urban Policy and Research* on 'Qualitative research and urban policy analysis' (2006, 24(1)) showcased some of the recent approaches to qualitative research in urban studies. The editorial for that special issue noted the paucity of engagement with method issues in urban studies (Maginn, 2006:1). We feel that a balanced assessment of various methods for understanding urban processes and outcomes, particularly segregation, is needed. To do this, researchers need to critically assess the strengths and weaknesses of both qualitative and quantitative methods, be cognisant of how different methods might complement each other, perhaps by countering the weakness of the other methods. Research that adopts single methodological approaches too often tells less than half the story. Consequently, policy makers, governments and others, are hearing partial narratives of people and places within Australian cities. We argue that the employment of a mixed-method and multi-staged research approach will offer a more holistic understanding of segregation.

A mixed-method approach to segregation would begin by speculating on why segregation is occurring and who is most affected. In other words, the first phase would be conceptual, perhaps

with a policy orientation. Statistics can help unpack the extent and location of concentration, and quantitative techniques can identify social and economic variables that may be associated with segregation. Our argument is that a third phase should involve more grounded and perhaps qualitative methods that gather data on the actual experience and effects of segregation (or de-segregation). Finally, this work needs to be brought back to the conceptual and policy level. These phases are outlined below (and see Box 1) and applied in the sections that follow.

Box 1: A mixed method approach for research on residential segregation

1. Consider the problem: residential segregation, commentaries (media, opinion-makers), assumptions about segregation and assimilation, socio-economic conditions, cross-cultural contact, civic participation, current policies and suggested remedies.
2. Establish the extent of segregation, and its pattern, as suggested by statistical data (e.g. Segregation Indexes). But also map distributions to identify actual locations of concentration. Map associated data (class as well as ethnicity indicators).
3. Surveys and ethnography in and around areas of concentration.
4. Reflect on what is driving the process, investigate the impacts, analyse whether segregation persists, and does it matter? What are the policy implications?

Segregation analysis should have as its starting point a consideration of the issues and assumptions that underpin the research. Key questions should include whether segregation, or non-segregation, is a cause or contributor to some sort of social malaise within a specific city. What assertions have been made in this regard by opinion- or policy-makers? What social ills, if any, have been traced to segregation? As previously noted, the term segregation has almost always had a negative normative connotation (Young, 1999). As noted above, recent research has pointed to some of the positive elements of residential concentration (see Dunn, 1998). Critical reflection on the anticipated processes, impacts, and remedies of segregation are obvious though neglected first steps in segregation analysis.

A quantitative phase can be used to generate a robust picture of the extent of segregation, as well as its longevity and trends, and also the scale at which segregation is strongest. In the first instance, statistical analyses of segregation across a city, using larger geo-units can indicate whether there are specific regions of a city where segregation might occur. It would be wise to test such findings against the concentration levels of other groups. These comparisons can provide a relative sense of segregation, and can test assertions as to whether a group are more concentrated than others. The locations in which settlement focus has occurred still need to be mapped in order to identify the sites of such concentration. Segregation measures using more micro geo-units can also provide a sense of the extent to which a group is focussed within specific suburbs or blocks. Mapping of these particular areas is also necessary, and can be used to assess popular or policy assertions about the 'where' of segregation. One of the powerful aspects of quantitative data is the ability to investigate relationships across variables, so as to test the links between socio-economic segregation and ethnic segregation. Social profiles of the areas of located concentration should be generated. Data drawn into such profiles would include traditional census variables like average income levels, labour force status, educational attainment, age, ethnicity, as well as more targeted indicators like job accessibility and transport accessibility. Of course, none of these statistical or ecological associations are evidence of causation, however, they provide a powerful statistical context for a study of the extent, processes and impacts of segregation in a city.

The use of statistical measures alone cannot ascertain factors and processes that give rise to segregation. Also, they will provide little sense of the impacts and experience of segregation. Surveys or interviews, as well as ethnographic fieldwork can help with such speculation (Lees, 2003; 2004). Data from these methods can help determine whether or not segregation is a negative process for those concerned. This third phase of more qualitative data gathering can help us to interpret what the metrics mean for people, and how that experience varies across different groups, and how segregation is actually experienced in place. Surveys or interviews could gather important data on residents' housing histories, their perceived economic fortunes if they remain within their location, intergenerational aspirations, cross-cultural contact within and outside their own neighbourhood, and perceptions of the direction and desirability of neighbourhood change. Some of these data can be quantitative in nature, but some of the experiential insights would be less amenable to quantification.

Other qualitative methods can also provide insight into the public perceptions of segregation. Recently, researchers have also employed textual methods, like content analysis or discourse analysis, to analyse social processes in an urban context. In research on new master planned estates in Sydney, Kenna (2007) uncovered the exclusionary agenda of developers' of private master planned estates as depicted in their marketing campaign and the developers overt encouragement of socio-spatial segregation in Sydney through marketing material and community newsletters. Similarly, discourse analysis has proved useful for analysing urban policy (Jacobs 2006), and could help us critically assess the influence of governments and other agencies on segregation. Segregation is often a topic of strong public debate, and content analysis of such commentary could also generate valuable insights into the extent to which public controversy mirrors actual lived experiences. Dichotomies of good and bad places to live can become too easily associated with spaces of segregation.

Researchers analysing segregation need to give serious consideration to an overt bridging of the quantitative-qualitative dualism. By using both quantitative and qualitative data a number of the shortcomings of approaching research from a single methodological stance can be countered, especially in relation to the conceptualisation of segregation. We demonstrate the utility of such a multi-staged, mixed-method approach in the next section, using the example of Vietnamese-Australian communities across Sydney.

Research Stage 1. Considering the 'problem': Vietnamese-Australians settlement across Sydney

The 1970s saw a new phase of significant Asia-sourced immigration in Australia, triggered by three significant things: the Vietnam War ended in 1975; Australia liberalised its immigration policy towards Asia-born people; and Australia established a greater involvement in the Asian region. Since the early period of settlement there was concern about levels concentration of this migrant group, the majority of whom settled in Sydney and Melbourne (Thomas, 1997:282). Most Vietnamese immigrants in Sydney had settled close to migrant hostels where they had been provided initial housing and settlement services. These areas of Sydney had affordable private rental properties, were proximate to manufacturing employment, and close to major public transport arteries (Burnley, 1989:65-68; Dunn, 1993:232). Suburbs within outer western Local Government Areas (LGAs) became a focus of Vietnamese-Australian presence. Prominent among these suburbs was Cabramatta, which by the mid-1980s was bearing the cultural mark of this presence, particularly in terms of shop signage and retail patronage. The Federal Government closed the Cabramatta Migrant Hostel, and attempted other dispersal schemes, in order to assuage the degree of residential concentration of Vietnamese immigrants in Cabramatta and surrounding areas.

Areas of ethnic concentration, like Cabramatta, are almost always perceived in a negative manner in Australia. As we have suggested, a first phase of segregation analysis should revisit this assumption. Prominent commentators had been critical of Vietnamese-Australians being concentrated within the Cabramatta suburb of Sydney (see examples in Dunn, 1998). Importantly, this public debate and criticism had influenced government dispositions and policy. It is useful to re-cap the nature of these concerns. In that way, we can use available statistics and field data to assess such concerns (Steps 2 to 4 below). In a broad sense there were three categories of criticism of the concentration of Vietnamese-Australians in and around Cabramatta: cultural, economic and social.

The cultural concern regarded the extent to which concentration, through its cultural maintenance function (Boal, 1976:48), generates cultural apartness and hinder integration. This was certainly a central line of critique of Cabramatta from right wing political parties, including the One Nation Party (Dunn, 1998:505-6), and it was an implicit rationale for government action to address the concentration of Vietnamese-Australians. However, in an era of multiculturalism the formal policy prescription for cultural assimilation has dissipated, this is a political development that has been acknowledged by practitioners in the field of segregation studies (Johnston *et al.*, 2002, 211; Ley, 1999; Peach, 1996). In a political circumstance of multiculturalism cultural retention should not of itself be seen as nefarious, especially if culture is being reproduced and expressed. The expression of Vietnamese-Australian culture in Cabramatta would constitute a form of cultural participation in that context (Dunn & Roberts, 2006:186). Concentration without such cultural expression might be revelatory of a problem (assimilation pressures despite official multiculturalism, fear of racism, etc). Cultural invisibility, non-recognition, is a serious political

harm (Taylor, 1992:25). The cultural representation of a residentially concentrated group can only really be examined through field work.

Research on ethnic segregation in 1980s had a strong political economy emphasis. This was associated with a neo-Marxist interest in the ways that city structure, including ethnic segregation, aided the reproduction of class identities and politically divided the working class (Harvey, 1973). Ethnic separateness was seen as a core means for reproducing oppressive relations, such as the exploitation of migrant labour (Dunn, 1998:508-9). Our view is that economic concerns about ethnic segregation should be cast more broadly. Issues would include, for example, an assessment of the labour force fortunes of Vietnamese immigrants in the Cabramatta area, how they had fared in the housing market, and an examination of inter-generational socio-economic standing. This analysis would involve available statistics as well as histories derived from surveys and interviews.

Stated social concerns regarding ethnic concentration in Cabramatta make reference to crime and vice. The sensationalist media treatment of Cabramatta gives a strong sense that it is a site of crime and of poverty (Dunn & Roberts, 2006:197-199). In general, the focussing of multiple social problems within certain areas is problematic, it generates more profound levels of disadvantage, and reinforces divisions between affluence and deprivation (Young, 1999). Again, statistics are available on certain forms of social malaise (such as crime, single parent households, English language competence, etc) and field data can assist our understanding of the experience of such social issues. These provide much more reliable insights into social concerns about segregation than do popular constructions, such as reproduced within news media.

Research Stage 2: Establishing the extent of segregation using statistics

As noted above, using statistical measures has the benefit of allowing the researcher to establish the extent of segregation (i.e. mild or severe). Table 1 shows the results of calculations of Indexes of Dissimilarity (IDs) for Vietnam-born residents in Sydney, across a number of geographical scales. The ID values at the SLA level for Vietnam-born in Sydney have declined over time. This suggests the gradual dispersal of Vietnamese-Australians in Sydney, over that 10-year period. Poulsen et al. (2004) noted that the grandchildren of immigrants to Australia, from Asian and non-Anglo-Celtic countries are more likely to participate in spatial assimilation, and it is these generations that are likely to be driving the dispersal of the Vietnamese-Australians from areas of concentration.

Table 1. Index of Dissimilarity (ID) values as calculated across three geographical scales using data for Vietnam-born residents in Sydney, 1991 – 2001.

Geographical Unit	ID Value		
	1991	1996	2001
Statistical Local Areas (SLAs)	46.34	46.05	44.36
Suburbs	N/A*	N/A*	59.21
Collector districts (CDs)	N/A*	N/A*	70.20

*Note: Time series data was not available for the smaller geographical units.

Source: Australian Bureau of Statistics (ABS), 2002.

Fairfield SLA in Sydney's south-west has the highest percentage of Vietnamese-Australians in Sydney (13.7%) (ABS, 2002). To get a general sense of *where* the Vietnamese-Australians are residentially concentrated, we generated Figure 1, a thematic map of the percentage of Vietnam-born residents in Sydney's suburbs in 2001. When examining Figure 1 we can observe the spatial distribution of Vietnam-born residents in Sydney. Here, locations of concentration appear in Marrickville (inner west of Sydney) and along the south-west corridor of Sydney – Fairfield, Cabramatta, Bankstown and Lidcombe. Figure 1 highlights the spatial distribution of Vietnamese-Australians across Sydney, providing an understanding of the location-specifics of the Vietnamese-Australian community in Sydney.

Figure 1. Percentage of the population born in Vietnam, in Sydney suburbs, 2001.



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Source: Australian Bureau of Statistics (ABS), 2002.

Figure 2. Scores for the Index of Disadvantage for Sydney suburbs, as defined by the Australian Bureau of Statistics, 2001.



Source: Australian Bureau of Statistics (ABS), 2002 (SEIFA Data).

Throughout this paper we have argued that analysing residential segregation from the perspective of ethnicity alone would limit our understanding of residential segregation and constrain the conceptual base. Through the use of socio-economic data obtained through the 2001 Australian census, we demonstrate the importance of incorporating socio-economic variables. The Australian Bureau of Statistics (ABS) developed a measure of socio-economic disadvantage: SEIFA. Very simply, this technique 'summarises the information from a variety of social and economic variables, calculating weights that will give the best summary for the underlying variables' (ABS, 2001:3). SEIFA data is used quite extensively in Australian urban studies when analysing patterns of advantage and disadvantage in Australia (see Baum *et al.*, 2005). Figure 2 is a thematic map of the index values across Sydney, in which areas with a higher score have lesser levels of relative disadvantage. Areas to Sydney's south-west appear in Figure 2 as areas of higher socio-economic disadvantage.

Table 2. Suburb level socio-economic profile for Cabramatta, 2001.

Socio-economic variables	%
Persons*	19487
Households*	6847
Birthplace/Language	
Persons born in Australia	25.5
Persons born Overseas	67.2
Speaks English Only	11
Speaks Other Language	82.5
Indigenous Persons	0.2
Education	
Completed to Year 10	14.1
Completed to Year 12	31
University qualification	2.2
Employment	
Labourers, Tradespersons and Related Workers	36.9
Managers, Administrators and Professionals	18.3
Unemployed	9.7
Housing	
Separate Houses	33.2
Semi-detached Dwellings	18.3
Owner-Occupiers	31.3
Purchasers	11
Rent from State Housing Authority	3.3
Rent (Total)	40.5
Income	
Household Income less than \$400 per week	31.7
Household Income more than \$2000 per week	3.1
Families	
Couples with Children	49
One Parent Families	24.3

*Note: Figures are given as whole numbers not percentages.
Source: Australian Bureau of Statistics (ABS), 2002.

Fairfield SLA ranks at 849.20 on the Index of Relative Socio-Economic Disadvantage (ABS, 2002). This places Fairfield as the lowest ranking SLA in Sydney. If an area ranks under 900 for the index it is considered to have quite a significant level of socio-economic disadvantage (ABS,

2001). To begin to understand some of the aspects of socio-economic disadvantage in Fairfield, we have produced the statistics in Table 2. Cabramatta has been chosen as the focus for Table 2 as this suburb has been identified as a prominent area of ethnic concentration (in Stage 1). Table 2 shows some socio-economic characteristics of Cabramatta, a suburb within Fairfield that ranked at 662 on the Index of Relative Socio-Economic Disadvantage (the highest ranked suburb in Australia sits at 1061, indicating a very strong level of disadvantage).

Some of the more striking statistics to emerge from Table 2, in relation to Cabramatta, involve employment, housing and income. The majority of residents in Cabramatta are employed in labourer or tradesperson positions (these positions often include those employed in manual-labour, shop owners, etc). As we will see in Stage 3, many newly arrived migrants to Australia from Vietnam, who settled in Cabramatta, were employed in piece-work and manual factory labour. The socio-economic characteristic dominant in Cabramatta allude to the fact that the social and residential mobility of residents in Cabramatta is constrained. Low household incomes are one such variable that constrain mobility. In Cabramatta, over thirty per cent (31.7%) of households have a weekly income under \$400. Residents housing market status also impacts on mobility. Recently, urban commentators advocated the need for policy attention to Sydney's stressed private rental market, as the private rental market is becoming a source of severe, and largely unnoticed, disadvantage (Gleeson, 2006; Randolph and Holloway, 2005; Gleeson and Randolph, 2002). In Cabramatta, approximately 37% of residents are in the private rental market. In addition to this, 24.3% of families in Cabramatta are one-parent families (single-income households). This combination of factors are suggestive of constrained mobility.

Research Stage 3: Interview and survey data

For this third stage we have drawn on qualitative data from field interviews conducted with community representatives in Cabramatta during 1990 and 1993. These data were sought to help unpack the process of residential segregation: the experience, the drivers, and the location-specifics. The interviews were originally collected to help interpret statistical data that had been derived from earlier censuses (1981-1991), and they are re-deployed here to flesh out the patterns produced from more recent censuses.

Field interviews revealed that Vietnamese-Australians were very keen to participate in Australian society and that only a minority might prefer a form of cultural isolationism. One particular informant noted that the Vietnamese in Sydney "would have as much desire to be a part of the community as a whole ... for example they would love to have Australian friends" (interview transcript, 1990). Another informant commented that:

"Non-participation is the furthest thing from their [the Vietnamese] minds. They might perhaps, be a little frightened of the wider society, but they certainly are not interested in isolating themselves from Australian society" (interview transcript, 1990).

Informants pointed out that even if Vietnamese-Australians desired to isolate themselves from Australian society that this was not practical because of their permanent presence within Australia and the need to venture outside of the areas of concentration for purposes such as work. These comments question the assumption that residential concentration is associated with, or driven by, a desire for cultural apartness.

Informants identified residential concentration as a means to *participate* in Australian society more fully. Boal (1976: 49-50) identified that areas of ethnic concentration could function as a "base for action" for a given ethnic group to participate politically. However, cultural participation is one of the more stark, and readily observable, aspects of the Vietnamese-Australian presence around Cabramatta. An informant observed that:

"by concentrating in a certain area that would give you that chance to provide the means to promote your culture, to show to the people what we are, what we have, what we have brought along with us to this country" (interview transcript, 1990).

Cabramatta, as an area of Vietnamese-Australian concentration, provided an opportunity for cultural expression within a multicultural environment. This marking of the landscape began as an unco-ordinated and organic development, associated with signage and oriental architectural tropes. Later, the marking of the landscape was strategic and purposeful (Dunn & Roberts, 2006). The Cabramatta Pailau Association (a collective of Indo-Chinese-Australian cultural associations and other interested parties such as the Chamber of Commerce) took principal responsibility for developing the public spaces within Cabramatta town centre, and later they were assisted by the local government (Fairfield City Council). This cultural contribution culminated in the development of the Pailau Gateway in the main mall (Freedom Plaza), and this cultural development of public

spaces in Cabramatta is a source of considerable pride among community representatives (Figure 3). Speaking with regard to the Pailau Gateway, a member of the Pailau Association stated:

“But look, as you say, everyone takes pictures of it, everyone is proud of it, and lots of tourists. And it makes Cabramatta very unique” (interview transcript, 1993).

Field interviews reveal how cultural maintenance for Vietnamese-Australians is facilitated within an area of ethnic concentration. However, this cultural process was not associated with a desired, nor sought, cultural apartness. Indeed, the cultural marking of the landscape was seen as a form of contribution and participation. And this is quite consistent with the principles of official multicultural policy in Australia that were formally articulated in 1989 by the Office of Multicultural Affairs. Despite the current Federal Government’s ambivalence towards multiculturalism, the stated principles (including cultural retention and expression) have changed very little since that time.

Australia’s post-war immigration program had a central focus upon supplying labour for the expanding manufacturing sector (Collins, 1988). Immigrants of non-English speaking background with tertiary qualifications and professional work experience had difficulties in having such credentials recognised. Downward occupational mobility of such immigrants was common. These circumstances certainly pertained for Vietnamese immigrants in the 1980s and 1990s, and was a common story in field interviews. One informant noted that:

“a lot of Vietnamese women are doing piecework at home. ... it gives them financial support for the family. But on the other hand ... the employee really depends upon the employer, and they get very exploited. Not only women, also men. And they depend on the employer. They have to accept a very low price for their labour. But they don’t have a choice, because of the English again It might be paying only \$3-4 per hour, and they have to accept, because they cannot work elsewhere (interview transcript, 1990).

These patterns of labour market experience are facilitated by immigrant concentration. A subsequent question is whether such working patterns reinforce concentration, and more importantly, whether they reinforce a negative form of concentration. Housing histories, as well as the census data on residential mobility and changing rates of concentration (Stage 2), provide some answers to such questions.

Figure 3. The Pailau Gateway, Cabramatta, Sydney, 2005. The Pailau Gateway is the entrance to Freedom Mall in Cabramatta. The gateway promotes the cultural diversity of Cabramatta, and the Fairfield Local Government Area.



Source: Therese Kenna, 2005

A field visit to Cabramatta provides a strong sense of the economic activity and energy in the area. This vitality is another important economic aspect of the concentration of Vietnamese-Australians in the area. This commercial district, and the Vietnamese-Australian patronage it attracts, has provided opportunities for Vietnamese-Australians to become involved in retail and

other small businesses. Informants also pointed out that these retailing operations tended to be fiercely competitive, that prices were kept low, profit margins were tight, and that there was a dependence upon the use of unpaid family labour. Informants remarked:

“there are grocery shops practically along side of each other for five kilometres you may as well say. Everyone wants to go into [set one up] a grocery shop, there's too much competition (interview transcript, 1990).

“like bread shops; maybe the first bread shop is good, but the second one, the third one and tenth, compete with each other, and with the market being too small to support them. Therefore sometime they go bankrupt, because they share the clients” (interview transcript, 1990).

One would suspect that business failure in these circumstances would also be high. However, this does not detract from the obvious economic dynamism of the area.

As noted in Stage 2 of our multi-staged analysis, 82.5% of residents in Cabramatta speak a language other than English. The people thought to be less enthusiastic or able to involve themselves in the wider community included the elderly; particularly those who could not speak English. One informant noted:

“the first generation of any migrant community would have some language problems, some language difficulties. The language barrier is still there, so how could you expect a person with such a difficulty to fully participate in the Australian way of living? Say for instance, they sincerely wish to come to attend say Red Cross meeting or Lions Club meeting, but how could they come there without being understood by others and unable to understand others” (interview transcript, 1990).

Vietnamese-Australians without English language proficiency were seen as less likely to participate in the wider society, and more likely to remain in Cabramatta. However, the residential concentration, and the ability to shop and converse without adequate English language competency, was not necessarily seen as a problem.

By the late 1980s, there were a considerable range of migrant settlement services operating in Cabramatta and in nearby suburbs such as Fairfield. The density of service provision is likely to have had an effect upon the levels of concentration, enhancing processes of gravitation migration and chain migration for those Vietnamese immigrants who would need such services. The cultural associations themselves were able to efficiently locate their own welfare officers (funded by the Federal and State governments) in these areas. Cultural associations were able to:

“work much easier in the way that we have three offices one in Cabramatta, one in Bankstown and one in Marrickville, where many Vietnamese are living which make it much easier in a way that we have a geographical target group into which we can offer our service, otherwise it would be very difficult” (interview transcript, 1990).

However, there is always a danger that the concentration of welfare and social security services in a certain area, and the concentration of people in receipt of such benefits, can generate ‘poverty traps’. In Stage 2 we highlighted some of the compounding socio-economic disadvantages within Cabramatta.

The suburb of Cabramatta has public places where Vietnamese-Australians assemble and spend social time, there are shops which cater specifically to Vietnamese needs, and there is a notable presence of Indo-Chinese-Australians within the landscape itself. These field-based observations are not suggestive of social malaise. However, the area of Cabramatta did become known in 1990s as a place where illicit drugs could be purchased. As a result, street selling of heroin became quite prominent. A common experience for non-Vietnamese in the area was to be approached and asked if you were seeking heroin. Local community leaders and shop-keepers complained throughout the 1990s about drug selling and use in the area, and they were dismayed at police tolerance of this crime. This reputation was reinforced in media depictions, and generated an image of Cabramatta as a vice ridden enclave. In the mid-1990s, police cracked-down on drug selling, and new surveillance equipment was established in the public areas. The notice-ability of illicit drug selling and drug-use in the area dropped dramatically.

The use of qualitative data from field interviews with various informants in Cabramatta has allowed us to begin to understand the process of residential segregation, the drivers, the motivations, and the positive and negative aspects of concentration. This information was not obtainable from the census data, and only speculatively inferred from the socio-economic profiles. The data from field interviews in Cabramatta firstly informed us that residents of the area exhibited a desire to be part of the wider community and had no intentions for non-participation in

Australian society (contrary to much public opinion). One of the key benefits of Vietnamese-Australian's concentration in Cabramatta was linked to participation, both political participation and cultural participation. It was the latter that was more prominent in informant's discussions of the positive aspects of their concentration in Cabramatta, especially in regards to promoting their own culture and developing a rich, cultured, landscape in Cabramatta. The main barrier to the Vietnamese-Australians' participation in society was the lack of proficiency in English. Interviews with Vietnamese-Australians also pointed to some of the negative elements of their concentration, specifically with regard to the local economy. Informants noted their inability to gain an adequate wage and appropriate working conditions in the local area, with many engaged in piece work, and other factory-based jobs. Informants also commented on the limited scope for entrepreneurship in Cabramatta with the saturation of certain business types, especially small Asian groceries and bakeries. These negative economic aspects do not detract from the economic vibrancy of Cabramatta, as field observations provide us with a strong sense of an active local economy. Overall, the data from field based interviews and observations give us a much more nuanced insight into the experiences of residents in areas of concentration and of the drivers of segregation.

Research Stage 4: Reflection on the processes and impacts of segregation

Having reviewed the information presented in Stages 1 to 3 there are a couple of points to make. Firstly, popular and policy assertions suggest that areas of concentration are 'bad' and as such have been viewed in a negative manner (Dunn 1993; 1998; Young, 1999). The use of statistical measures alone is likely to contribute to this negative image. The data in Figure 1 and Table 1 suggest that a particular group (Vietnamese-Australians) are residentially concentrated. In Table 2, census data confirmed levels of compounding social and economic disadvantage for the suburb of Cabramatta, much of which constrains the mobility of the residents. The suburb of Cabramatta was significantly socio-economically disadvantaged, ranking at 662 on the SEIFA index. These data automatically contribute to a negative assumption about areas of concentration being 'bad'. An assessment of the qualitative data presented in Stage 3, demonstrates that not all elements of ethnic concentration should be viewed in a negative manner. Following from Boal (1976), areas of ethnic concentration, like Cabramatta, can provide a 'base for action', as the critical mass of members of the same ethnic group means that that ethnic group can develop advocacy groups and political representatives. Further, the residents in Cabramatta have mostly benefited from their ability to engage in representations and constructions of Indo-Chinese culture in the local area (i.e. contribute to the development of an obvious cultural landscape – shop signage, physical monuments, etc.). These positives aspects cannot be ascertained from statistical analyses.

Some researchers have attempted to define the opposite of segregation as assimilation, with an 'ideal' distribution being an 'even' distribution of population groups (Cortese, *et al.*, 1976). This assertion is also popularly backed by policy makers. Advocating an 'even' distribution of all population groups infers that any area that is 'uneven' in its population distribution is against the norm, and somehow 'bad'. One could argue that the opposite of segregation is more appropriately a randomness of distribution rather than a hypothetical 'evenness' (Cortese, *et al.*, 1976:631). However, residents' ability to disperse from Cabramatta is constrained due to their socio-economic circumstances, as presented in Stage 2 (and particularly Table 2).

While there may be a degree of socio-economic disadvantage in Cabramatta, there are many positive aspects to the concentration of Vietnamese-Australians in Cabramatta. We are left with the question of whether an area of ethnic concentration that is disadvantaged socio-economically is a cause for concern. The residents are well-served, they participate culturally, most residents are employed and the local economy is vibrant and active. All this is ascertained from the different research stages above. In the field based interviews there was no sense of any animosity amongst the residents in Cabramatta. Residents were clearly enjoying living in the area. If residents had presented a negative attitude towards Cabramatta and were expressing a desire to upgrade, or move, then we would perhaps be faced with a more serious problem. Many residents however, enjoyed living in Cabramatta, and the positive elements of the suburb clearly outweigh the negative.

Conclusion

Our central argument has been that the over-reliance on statistical measures, or any one methodological approach, has limited understandings of the complex urban process of segregation. It is our contention that a staged research project and a combination of research

methods presents us with a more holistic picture of the complex urban process of segregation. It is essential that emerging scholars be trained in both the qualitative and quantitative methods that can be used to understand segregation. Researchers trained in both qualitative and quantitative method can break new ground in the urban geography of segregation. A broad training in applicable method will assist with inter-generational exchange among urban researchers, enlivening urban studies' horizons, and securing the reputation and sustainability of its research traditions. This creates a number of possibilities for urban geography. A key disciplinary benefit of fostering the progressive development of segregation studies is to ensure that younger generations of urban researchers in Australia continue to engage with the issues and processes surrounding segregation.

The expansion of approaches to research on residential segregation will also help to better inform opinion- and policy-makers about this urban process. The use of statistical data determines whether segregation is occurring and the extent of segregation (mild or severe). The use of thematic mapping assists in identifying *where* segregation is occurring (spatial dimension). The qualitative data from field interviews sheds light on the process of segregation – the drivers, motives and impacts. Segregation is a process not just an outcome, and so research must grapple with the experience and motivation of segregation. We also demonstrated that there are a number of positive elements to residential segregation, which are not readily identifiable from statistical data alone. Hence, the use of a multi-staged, mixed-method approach will best assess lived experiences of residential segregation. Normative judgements on the positives and negatives of segregation, and the identification of processes and structures that sustain those, must be seen as crucial preliminary steps ahead of political statements and policy determinations.

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