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Patterns and trends in ethnic residential segregation in England, 1991-2001: a quantitative and qualitative investigation

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Abstract

This thesis brings together the themes of ethnicity, inequalities, locality and community interactions.   Through an exploration of the processes of residential segregation it demonstrates the complexity of narratives in English local authorities. The research addresses the policy concerns of community cohesion and regeneration and the role of neighbourhood within these. Using quantitative and qualitative research methods, it offers a thematic analysis of the factors affecting residential segregation. A quantitative analysis of the factors leading to variation in the residential arrangements of ethnic groups is conducted at the local authority level using multivariate techniques. The is followed by a qualitative exploration of these processes that reveals the complexity of the relationships between housing patterns, deprivation, ethnicity, culture and community relations. This is set in a critical realist discourse and in the context of a critique of New Labour discourse on community cohesion.

Patterns and trends in ethnic residential segregation in England, 1991-2001: a quantitative and qualitative investigation

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List of Abbreviations

BME	Black and Minority Ethnic
CIC	Commission for Integration and Cohesion
CLG	Communities and Local Government
GCSE	General Certificate of Education
GLA	Greater London Area
ICoco	Institute for Community Cohesion
IoD	Index of Dissimilarity
IMD	Index of Multiple Deprivation
LA	Local Authority
LGA	Local Government Association
ONS	Office for National Statistics
MAUP	Modifiable Areal Unit Problem
(M)SOA	Middle Layer Super Output Area
NSNR	National Strategy for Neighbourhood Renewal
ODPM	Office of the Deputy Prime Minister
RR(A)A	Race Relations (Amendment) Act
SD	Standard Deviation
SOA	Super Output Area

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Chapter 1

Problematic

The residential arrangements of ethnic groups became the subject of considerable interest when they were identified as a feature of urban areas that experienced unrest in 2001. There was a perceived association between physical separation, low levels of social interaction and socioeconomic inequalities. Policy concerns that connected the spatial with the social led to segregation becoming a focus for policy interventions in two areas: regeneration initiatives and community cohesion. Residential segregation was conceptualised both as problematic for community relations and associated with economic spatial inequalities (Cantle, 2001, Denham, 2001).

This research explores the relationships between locality, ethnicity and deprivation and their policy implications. It is primarily concerned with the extent to which England's ethnic groups live separately and with the processes leading to ethnically patterned residential arrangements. As multiculturalism drifts out of favour, there has been increasing concern about the disintegration of cross-community relations, especially between ethnic groups (See Cantle, 2001, Denham, 2001) . The notion that a multiculturalist emphasis on celebrating cultural difference has encouraged isolated communities with few shared values and little mutual understanding, has led to a new emphasis on commonality. Events such as social disturbances in Oldham, Bradford and Burnley, Muslim terrorist attacks in London and media interest in Muslim fundamentalism on UK turf appeared to highlight the breakdown of cohesive 'Britishness'. These have been perceived as evidence that ethnic or cultural 'difference' is problematic.

The increasing ethnic diversity of the British population is perceived as presenting challenges not only to community interactions but also to the management of populations and socioeconomic interventions. Ethnicity has been employed as a means of structuring the understanding of these multiple dimensions of diversity

and its management. Firstly, policy approaches appear to recognise that localised

physical separation contributes to the gap between members of ethnic or cultural

groups. Meanwhile, policy interventions in economics, health and employment

have begun to adopt approaches that are increasingly interested in locality. Thus, a

tension appears to have developed both between a localised approach to

socioeconomic needs and wider inequalities and also between concepts of

'Britishness' and ethnic diversity. This research brings together dimensions of

place, community, deprivation, and (in particular) ethnic diversity[1] in the context of

their management. These four dimensions are set in the context of New Labour

discourse of race and issues of governance.

Places, People, and Deprivation

There is considerable evidence of structural inequalities along ethnic lines and of a

strong relationship between minority ethnic groups and poverty. There is also

evidence of spatial inequalities and of the geographical concentration of

deprivation (Smith, 1999) with variation identified at the regional, local authority

and neighbourhood levels. In addition, there has been considerable evidence of

increasing spatial polarisation of income and class since the early 1990s (Dorling et

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[1] In this context the terms 'diversity' and 'ethnicity' are distinct. Understandings of 'ethnicity' are many and conflicting so this study adopts an understanding of ethnicity that reflects that of   based broadly on the definitions provided by Bulmer (1996): An ethnic group is a collectivity within a larger population having real or putative common ancestry, memories of a shared past, and a cultural focus upon one or more symbolic elements which define the group's identity, such as kinship, religion, language, shared territory, nationality or physical appearance. Members of an ethnic group are conscious of belonging to an ethnic group." (Bulmer, 1996). Perhaps more relevant to and to assist our understanding of current policy discourse is that of Berthoud, Modood and Smith (1997) who highlight the importance of share characteristics that distinguish one group of individuals from others and that are recognised by those on both sides of the group's boundaries (Berthoud et al, 1997). Such an understanding is distinct from that of 'race' in its combining of cultural, physical and social characteristics. In contrast, 'diversity' represents all types of communities in the UK. However, the focus of this research is the ethnic dimension. Unless otherwise clarified, the term refers to 'ethnic' diversity.

al, 2007, Noble et al, 2000et al, 1999, Dorling and Rees, 2005). Although this process is contested (see Mohan, et al., 2005), economically homogenous geographical areas have and continue to become more common (Taylor, 2008, Dorling et al, 2007, Dorling and Rees, 2005).

The importance of locality to patterns of deprivation and socioeconomic inequalities is compounded by evidence of an effect of neighbourhood characteristics on individual outcomes. So-called 'neighbourhood effects' mean that people living in poor quality neighbourhoods are more likely to experience greater deprivation than those in better quality neighbourhoods. Although Chapter Three demonstrates that the effect of neighbourhoods on individual outcomes is not consistent (CLG, 2007), the presence of other poor households sustains social norms that limit mobility and this in turn is believed to perpetuate levels of deprivation in such neighbourhoods. Thus, a complex relationship between the dimensions of place, inequalities and ethnicity has already been demonstrated. In recognition of this complexity, policy responses to inequalities have not only sought to deal with people-based structural inequalities but have simultaneously attempted to intervene through spatial approaches. From the 1970s policy interventions to tackle economic disadvantage became increasingly devolved and place-based. More recently, under New Labour although area-based initiatives (ABIs) became prominent, they operated alongside continued attempts to tackle structural inequalities. From 1997, in an apparent acknowledgement of the complexity of these relationships, the discourse of regeneration focused on a new notion of 'social exclusion' that captured the multiple dimensions of poverty (Social Exclusion Unit, 1997; 1998).

'Sleepwalking into segregation'

The second dimension of the social problems discussed in this research is 'community'. Chapter Three presents evidence indicating that deprivation and social polarisation are also likely to impact upon community interactions and threaten community relations. An exploration of residential segregation enables us to capture the complexity of the relationships and has itself already been subject to considerable research and policy attention. Since 2001 there has been a perception that the residential segregation of ethnic groups is not only very high but increasing. The notion that Britain is 'sleepwalking into segregation' (Phillips, 2005) suggested that British people are living increasingly separate lives due to the growth of residential concentrations of minority groups. Evidence of this apparently high degree of segregation was presented by reports into the street disturbances of 2001 (Ouseley, 2001, Cantle, 2002). Specifically, ethnic and religious groups are believed to be living in increasing isolation from each other, raising concerns regarding the impact upon community relations (Atkinson and Flint, 2004, Robinson, 2005, DCLG, 2008).

However, in contrast to popular perception, statistical evidence has indicated that ethnic groups have become increasingly integrated over time with black and Asian migration patterns being those of dispersal (Finney and Simpson, 2009). In addition, whilst English society is more ethnically diverse than it has ever been, the natural growth of minority populations is decreasing (Finney and Simpson, 2009). This research corroborates Simpson's analysis of segregation at the local authority level, finding no change in the overall segregation of white communities from non-white populations. However, although it is recognised that the media emphasis on the spatial challenges presented by ethnic diversity are largely unsupported by empirical evidence, the policy interest in spatial separation remains (DCLG, 2008).

It is also undeniable that structural disparities exist between ethnic groups with regard to life chances, educational achievement and employment opportunities.

Community cohesion policy: the discourse of 'Parallel Lives'

Although the degree of segregation is contested, concerns around the physical and social separation of ethnic and religious groups were given voice in the aftermath of the street disturbances in the towns of Bradford, Oldham and Burnley (Cantle, 2002, Ouseley, 2002). Concerns with ethnicity are specific and focus on south Asian groups, in particular the Muslim community. This is partially perhaps a product of the (perceived) enhanced visibility of Muslim populations and the perception that the values of such groups are incompatible with 'Britishness'. Undoubtedly this perception is the result, in part, of fundamentalist terror threats to the Western world which have highlighted apparent differences between Western 'Britishness' and a singular, cohesive, Muslim 'other'. However, it is also a product of a slightly higher degree of segregation for south Asian Muslim populations in England. This poses two questions. Firstly, is there any evidence that spatial separation promotes and sustains non-British values and poor community cohesion? The second question returns to the earlier policy dimension and reintroduces issues of poverty: why are members of this broad group more likely to live in geographical concentrations?

In terms of the community dimension, if this separation is deemed to promote cultural difference, how should be the policy response? The traditional British 'community' is perceived to be threatened by both individuals and 'other' communities which may appear to be stronger and more socially cohesive than the hosts. On the local scale, there is continuing concern about the decline of the neighbourhood and a lack of contact between households on the same street

(Howley, 2009). A multiculturalist response would have been recognition and celebration of difference, but in the current media context and increasingly diverse population, the response was to problematise. The religious and ethnic diversity of British society and a number of other threats appear to challenge the unity of different communities. Such threats included extremism, both political and religious, and the associated physical threats. Added to this is a media and government preoccupation with immigrants, in particular asylum seekers and refugees. Immigration and increased diversity are considered problematic for the cultural and economic impact they have on local communities. Economically, this situation is currently exacerbated by rising unemployment, the threat of higher taxes and the global economic downturn. Policy responses have included the community cohesion agenda.

Community cohesion is one of the concepts that has given rise to and gradually embodied concerns about ethnic segregation. The association between residential patterns and community relations are apparent in both research into neighbourhood effects and in the analysis of the disturbances of 2001.   However, the existence of these alleged links between spatial isolation and detachment from 'Britishness' is unlikely (Finney and Simpson, 2009). For example, Muslims are no more liable to have been charged with a terrorism offence if they come from 'segregated areas' than if they come from other areas. However, spatial isolation is considered problematic, owing to simultaneous social separation in multiple fields, such as education, employment and leisure. Thus, policy relating to community relations is necessarily entwined with that relating to economics, education, health, housing, employment and crime. It is this multifaceted separation of ethnic groups that creates and sustains divisions at the local level. These, in turn, are perceived to impact upon national identity and the degree to which populations share values.

Since its conception the community cohesion agenda has explicitly broadened to encompass relations between and the separation of communities along a multitude of other dimensions (for example, sexuality, faith, gender, class, employment and income). However, the focus remains on the separation of ethnicity and the policy is closely integrated with racial equalities legislation. This research asks whether there is evidence to support the focus on ethnicity in this policy context. Current policy within the Department for Communities and Local Government (CLG) may be understood as a three-way relationship between place, community (of which 'ethnicity' is a key feature) and disadvantage (in its many forms).

This chapter addresses issues arising from my research into residential segregation and its processes. It will present the policy questions which arose from the data and offer a framework within which these concerns may be understood. The research takes the form of a quantitative exploration of the level of segregation found in local authorities and its relationship with socioeconomic variation and population composition. These findings guided the exploration of the nature of segregation processes in three case studies, each representing a different degree of segregation. In the quantitative exploration cluster, analysis was conducted to explore the broad relationships between socioeconomic characteristics and segregation level. Regression analysis was then employed to identify the specific effects of changes in characteristics upon segregation. The qualitative element of my research involved interviews with community representatives from three case studies and aimed to explore the complexity of patterns and identify explanatory relationships not evident at the national level.

The use of the present continuous tense in Phillips' speech suggests a concern with dynamic processes, not simply the outcome of historical events. Thus, whilst segregation is measured as an outcome here, the processes of residential

segregation and their associated characteristics are the focus of analysis. My quantitative and qualitative analysis led me to a number of conclusions about the complexity of processes of residential segregation in England. The relationship between housing, employment, ethnicity and poverty are demonstrated to be complex but corroborate a number of earlier findings: firstly that ethnic residential segregation has not been increasing and secondly that the relationship between housing patterns and ethnicity is a key feature in variation in segregation outcomes. These findings have implications for regeneration and cohesion policies, in particular in terms of the apparently conflicting emphasis on ethnicity and place. In the context of regeneration and community cohesion, I questioned the pivotal role of ethnicity as a concept and the ways in which policies had been developed that were dependent on it. Not only was there a tension between ethnicity and place-based approaches, but ethnicity itself did not appear to be a helpful means of structuring interventions in all instances. This in turn led me to a number of questions in the following areas:

Diversity, Discourse and a Social Problem

The concept of ethnicity is a key feature of discourses concerning community relations and regeneration policy and is the fourth dimension of this research. Partly as a result of the nature of its conception, the community cohesion agenda adopts ethnicity as the baseline for identifying challenges to community relations. Ethnic differences and separation are presented as the key challenges to integration and evidence from specific cases appears to support this. Assumptions are made about the utility, relevance and appropriateness of ethnicity as a foundation or structuring concept in the management of community and social relations. The lack of substantive evidence for this connection suggested that ethnic residential patterns and social interactions may have been inappropriately

problematised by the community cohesion agenda. The identification of ethnicity as the key community difference presents difficulties, as it assumes that ethnic categories are a useful and relevant way to measure and understand communities.

Both multiculturalism and community cohesion conceptualise English society as a network of distinct ethnic categories. However, available ethnic and class labels alone are not adequate to capture or explain segregation and cohesion issues. They need to be employed together and with more sub-divisions, and take into account spatial boundaries. Qualitative data in this research suggests that even the calculation of segregation between individual ethnic groups is an inadequate means of capturing the complexity involved. Ethnicity is thus a contested concept, prompting questions about its validity as a structure through which communities may be explored and managed.

In contrast, ethnic understandings are also an integral part of interventions for tackling economic inequalities, as it is evidently possible to understand economic inequalities through an ethnic structure. Variation in the experiences of members of different ethnic groups and similarities within ethnic categories indicate that there is some validity in employing ethnicity as a structuring concept. The competing strategy to inequalities intervention is place-based regeneration intervention. However, the use of ethnic categories applies structural relationships to localities and assumes correlation between community boundaries and spatial boundaries. Although participants in this research were able to describe the processes and outcomes of spatial arrangements in terms of ethnicity, it appeared to be an artificial representation of the reality. The descriptions of residential arrangements within my case studies indicated greater complexity than the basic ethnic categories were able to provide. Although some ethnic categories do have

apparent patterns, it is problematic to use these as the qualitative reality does not always match the bounded categories employed in statistical research.

This also led me to ask if the examination of ethnic segregation offers any useful explanations of socioeconomic variation or problems. If this is not the case, why do both policy and social researchers examine and observe communities and social exclusion *through* the structuring theme of ethnicity? Ethnic categories assume differences between members of each group without recognising this as divisive in itself and may create an artificial understanding of social structures. This emphasis on difference may produce an inaccurate sense of internal homogeneity in ethnic groups (Forrest and Kearns, 1999); it is also contradictory to the stated purpose of the community cohesion agenda. This agenda aims to emphasise the shared characteristics between ethnic groups, yet by using ethnicity as a structure is simultaneously assuming that members of each category are similar. Further, my research shows that clarity in the boundaries between ethnic groups is not always evident in terms of spatial patterns or in the qualitative descriptions of social relations).

With regard to the relationship between 'ethnicity' and deprivation, the recognition of an interaction between deprivation and ethnicity assumes that by tackling one dimension, public policy will be able to achieve objectives in the other. However, whilst the acknowledgement of structural inequalities may enable policy to target community-specific programmes, it does not allow for the complexity of individual and group identities. Although there is a perception of strong links between spatial arrangements and ethnicity, there is greater spatial homogeneity of economic characteristics. Thus ethnicity may not always be the most appropriate means of understanding residential arrangements as this may be concealing arrangements relating to economic or social inequalities.

Finally, my difficulties around ethnicity are partially associated with the general application of labels to individuals. Whilst this eases the management of communities and targeting of resources and interventions, it also requires single group membership. This results in the exclusion of multi-group membership and ignores the complexity of identity and of the dynamic processes of group membership: group membership is not only multifaceted but can change over time. This raised questions about the use of categorisation and specifically 'labelling' in community cohesion as a *policy tool*. Labelling can be employed to facilitate and ease the management of differences, problematic groups and social disorder and it also identifies, validates and promotes the existence such differences and distinctions itself. The likelihood of multi-group membership increases within a super-diverse population, particularly where percentages of 'mixed ethnicity' individuals are increasing. Ethnic and religious diversity is one element that is considered problematic, with the development of community cohesion policy an appropriate response.

The discourse of policy documents and the responses of participants suggest that governance requires a system of labelling in order to structure policy responses to 'social problems'. The existence of such a system facilitates the regulation of these problems. My research investigated the relevance of the concept of ethnicity to the understanding of residential arrangements or community interactions, particularly in capturing the complexity of these phenomena. The findings brought together issues of public policy and social research but lacked a framework through which this understanding could be structured.

A Framework: 'Race' Concepts

These concerns can be understood in terms of a realist perspective that recognises the existence of a reality independent of individual consciousness. In this sense, race is a term understood to describe accurately certain features of human populations, and race ideas are those which draw upon a concept of race. Race is an element in the cultural system. This realist approach to understanding race in social research may provide a framework in which these difficulties can be understood.

The argument that 'race' as a concept is not always useful to social research helps to clarify the difficulties arising from the complexity of the qualitative data in my research (Carter, 2000). It also enables us to understand the role of labels and ethnicity in community cohesion and the development of discourse as a means of governance. In addition, within Fairclough's analysis of discourse in governance discussed below, it is possible to understand the role that this system of labelling has in managing the 'social problem' of social segregation. The realist theory of race is founded on the notion of analytical dualism and offers a framework within which the difficulties in community cohesion raised by my research can be understood. Analytical dualism separates the roles of structure and agency, making a distinction between what Carter refers to as 'system integration' (such as governmental policy) and 'social integration' (the responses of society to the same event). This theory of race can be applied to concerns raised by my research through the consideration of ethnicity as a concept, its role in the formation of identity, and the role of identity in governance. The concept of race or ethnicity is essential to the existence of those policies aiming to manage members of such categories according to their position within this membership. Equal opportunities

and race relations policies are dependent upon public and structural acceptance of the concept of ethnic difference between recognisable categories.

Carter argues that race ideas also have an objective existence in the form of documentation, suggesting that race ideas exist outside the internal beliefs of individual agents. This being the case, the concept of ethnicity may be a valid way of exploring tangible phenomena such as residential segregation but less appropriate for concepts like community cohesion. Community cohesion is concerned with ethnic identity and appears to fail to acknowledge the role of individual agency in identity or to accommodate agency in the construction of ethnic (or other) identity. In a realist theory, discourse is both a cause and product of the ideas that individuals hold about race. Subject positions are historically specific and subject to change, so community cohesion will have to deal with constant changes not only to the actual composition of the population but also to the identities of the existing population.

Another key feature of community cohesion is the identification of shared values. Common identity and the acceptance that structural inequalities exist assumes identification with or membership of a particular group. However, Carter (2000) argues that if the notion of identity is about how one chooses to identify oneself, then its usefulness for sociological purposes is limited. The analysis of ethnicity in segregation or cohesion, as with all policy, is based on self-identification questions in the census. This theory partially rejects post-modernist understandings of race as lacking in emphasis on human agency and instead introduces the realist notion of 'selfhood' as distinct from social identity. The former are those symbolic descriptions that are imposed upon agents and are associated with the social organisation of cultural resources. In contrast, selfhood focuses on the agent's internal definitions of concepts. He argues that to consider identity as a purely

social construct 'would deny the distinct characteristics of psychological phenomena'.

The very nature of ethnicity as a construction means that self-identification with a community and the official identification of a group membership may not correlate. Community cohesion assumes firstly that distinctions exist between ethnic categories and secondly that such distinctions are important to social order and community relations. In addition to this structure, we can observe the notion of identity within community cohesion as emerging as a set of boundaries, which dictate acceptable and unacceptable types of difference (Kundnami, 2007). Therefore, within discourses of community cohesion and segregation, identity is problematic firstly because it is a product of both structure and agency, and secondly because these identities can be labelled as more or less positive for the purposes of managing 'social problems'. By linking community cohesion to segregation and segregation to negative conditions, ethnic difference is problematised by association.

Because they confuse race and ethnicity without clarifying their definitions, the concerns and processes within community cohesion are perhaps too simple. This may be partly a product of the definitions with which research and policy must work and that confuse the two concepts. Finney and Simpson distinguish between race and ethnicity in the following way: race refers to socially significant differences associated with immigration, origin and skin colour, whilst ethnicity indicates a broader idea of difference in self-adopted identity (Finney and Simpson, 2009). Within identity, faith is a more recent addition to public and policy concerns about place and community relations and the growing interest in Islamic communities and in particular, South Asian Muslim communities. My concerns about the religious aspect of community cohesion can be understood in terms of

the additional layer that religion provides to understanding segregation and cross-community interactions. This complexity supports other analysis that indicates religion is a key element of understanding community cohesion and was a feature of the original disturbances that triggered the policy response. It is represented both as a social problem and as a solution within policy discourse (Furbey, 2008:119).

Because religious organisations are incorporated as partnership bodies, religion is part of the structure of community cohesion interventions at a national level as well as a local level. This description of considerable internal diversity of local religious communities is reflected by the role of religion in my findings. Yet religion presents many of the same difficulties as ethnic categories in terms of simplicity and the concealment of variation and complexity. The evidence provided in this thesis supports the difference in the nature of communities that nominally share religious labels (for example, Somali and Bengali Muslims in London) yet are explicitly identified as having different characteristics and cultures.

Governance

The mid-nineties saw the growth of collaborative governance models and the rise of 'new public management' (Skelcher, 2000). Community cohesion is an example of 'problem-oriented' governance in which central government defines 'problems' to be tackled and presents strategies for addressing them (Fairclough, 2000). The term 'community cohesion' (and its strategy) provides a conceptual structure for a previously undefined challenge to society. The promotion of ethnicity (and later religion) as a framework for this 'problem' also provides a tool for the government's solution. Race categories may deflect from debate around these groupings and identities policy may be used in governance to control and as a

means of regulating and surveying populations (Fairclough, 2000). This may explain how participants retain the use of ethnic categories in their discourses, despite their inadequacy as descriptions of community relations. The evidence from my research indicates that ethnic and religious categories are inadequate structures for policy on community cohesion, as such understandings of communities do not reflect the complex interactions with economic, physical and other aspects of social groups. Inequalities (both social and economic) can only be solved through the partnership of government and local communities.

Our understanding of the development of New Labour governance since the first term may be seen in terms of responsibility and partnership working. We can understand New Labour governance in the context of a fragmented state. The 'hollowed-out state' refers to the fragmentation of government bodies and an increase in the use of executive agencies; increased accountability, and a move towards citiznes becoming active customers (Skelcher, 2000). There are four key features to a 'hollowed-out state': the loss of government legitimacy, changing relationships between public employees and politicians and citizens, and the impact of transnational and regional institutions on the nation state. It is the fourth, the implementation of public management reform programmes, that has an impact on our understanding of the community cohesion agenda.

The impact of hollowing-out is the development of an emphasis on responsibility and accountability. This has implications for the organisational structure through which social challenges are managed. Organisations are increasingly fragmented and the New Labour response was, in part, an increase in the use of partnership working as a means of cutting across these boundaries. Although partnership working had begun during the previous two Conservative terms, and inter-agency working in health and social care has a longer legacy (Sullivan and Skelcher, 2003). In particular, cross cutting issues that fall within the remit of several departments

yet are not the responsibility of a single one (such as social exclusion and regeneration) can be managed through the use of non-departmental organisations. During the 1980s there was a perception of public sector management in crisis due to the division of authority for the management of cross-cutting issues was divided between different departments. As a result of this and the consequent competition for government resources, services had become fragmented and increasingly outsourced to the private sector (Sullivan and Skelcher, 2003).

As public sector management structures fragment, there is increasing uncertainty around responsibility and accountability. Government response from the mid-nineties has been a tightening of and devolution of social and economic responsibility towards the 'community' and its individual members. The impact of partnership working includes the definition of membership and, crucially the responsibilities of the organisation and individuals (Skelcher, 2000). Such responsibility enables greater transparency and thus accountability (Skelcher, 2000). Post 1997 partnerships are different to previous ones. Especially through the PSA system, then longer time horizons then Area Based Initiatives. In addition, Local Strategic Partnerships (LSPs) were introduced amongst other measures, to bring together organisations in a common local vision. Area-based initiatives (ABIs) were a key feature of policy implementation from the 1970s but became increasingly important under the Conservative Major government and subsequently, New Labour. In addition to the rights to receive support, individuals were expected to uphold their own responsibilities to society. This emphasis is especially apparent in the community cohesion agenda and the process of collaboration dialogue with communities. Area-targeting also has positive implications for governance. They are bottom-up strategies that permit better distribution of resources and exemplify New Labour's discourse on community involvement and on rights and responsibilities. Ball and Maginn offer a further

structure in which we can understand ABIs, arguing that the emphasis upon locality and locality managerialism are inappropriate (2004: 758).

The key feature of community cohesion implementation is typical of the New Labour approach to governance as understood by Skelcher and by Fairclough who provide a framework for understanding the method of promotion and implementation of community cohesion policy. In particular the devolution of responsibility to local agencies (partnerships, local government, and the local community).

The high level of partnership working that Fairclough attributes to the governance approach of New Labour is again most applicable to the community cohesion agenda, as local partnerships are deemed to be critical to the implementation of the policy, the identification and development of local concerns, communities and values and the nature of the communities involved. The strategy is also an example of the New Labour model in which *responsibility* is also dispersed to local partnerships, voluntary organisations, faith communities and tenants' organisations (Fairclough, 2000). Further, partnership working is a key element of New Labour's social policy strategy as a means of overcoming organisational and professional boundaries (Sullivan and Skelcher, 2003). At the national level, government agencies have also been formed or adapted to tackle and manage community cohesion policy. Bodies such as the Institute for Community Cohesion (iCoCo) and the Equalities and Human Rights Commission (EHRC) have the explicit concern with '...[the need] to have a deeper sense of commitment and mutual respect based on shared values with fairness at their core...' (EHRC, 2010), and are thus tightly bound with the aims of the community cohesion agenda.

In some ways, community cohesion policy is the most appropriate location for such a model, as this approach is reflective of the 'local' nature of communities. However, it is also reflective of the onus being placed on local government without sustained and comprehensive support or conceptual clarity. The devolution of responsibility to local organisations is problematic for the development of national identity. It does not reflect the other layer of community cohesion, that of shared identity at the national level. The evidence from three cases studied in this research suggests that whilst local interactions are understood and addressed in local policy, the notion of a wider Britishness remains either irrelevant (i.e. it is not discussed by participants) or impossible to address. Further, the ability to work closely with and to rely on local partners is dependent upon knowledge (or assumptions) of identities that categorise individuals and communities. In practice, this means that communities are being employed as a tool for government policy to manage the perceived social 'problems' associated with diversity. To use the notion of community in such as way requires a new understanding of their social role.

The responsibilisation of communities and New Labour communities policy

This devolution takes responsibility not only to regional organisations and the involvement of a large-scale adoption of 'arms-length management' of those services normally managed by the public sector directly. Community is employed as a means of 'refostering civic responsibility' (Flint, 2003) within the concept of the Third Way (Giddens, 1998, in Flint, 2003).

Responsibility is devolved to the individual citizen level as members of responsibilised communities. Following Foucault (1991) 'responsible citizens are expected to conduct themselves according to the dominant (and agreed) moral

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discourse (Flint, 2003). The concept of 'community' is thus crucial to the management approach of responsible communities in a fragmented state. In the case of community cohesion this means that the attempt to 'share values' may be construed as part of such a management approach that aims to control through responsibilisation. As a means of governance, agency is promoted through responsibility for individual actions and for the actions of other members of the community (Flint, 2003).

In terms of government strategy, this has led to the current community policy in which the 'community' under New Labour has been renewed as a focus for social cohesion (Raco and Imrie, 2003). In this understanding, 'community' is assigned a cultural structure that can be used to transmit moral and cultural norms (Garlan, 1996 in Flint, 2003). The community cohesion agenda forces local 'communities' to both take responsibility for their own interactions with others as well as being constructed as 'problems'. Community has thus developed new meaning under New Labour, assigning individuals responsibilities as well as rights (Fairclough, 2000).

There are difficulties with the use of 'community' within this strategy. Thus partnership working employs local 'communities' as tools with which government can access individual choice and participation and thus as a part of governance (Rose, 1996; 1999). Communities are used as a means of controlling populations through a discourse of empowerment by harnessing individuals to engage them with projects that ensure they take responsibility for their own health (Crawshaw et al., 2002; see also Clarke, 1996). Policy tools target particular groups within communities in order to implement initiatives and to foster participation (Crawshaw et al., 2002). A structural approach to the management of poverty and

social problems has been an historical preference; however, in latter decades a spatial understanding of the causes and effects of poverty have taken root in policy. It is argued that place is key within this as the neighbourhood is emphasised as the focus for community construction   (Rose, 1996). In line with this approach, New Labour policy has focussed on neighbourhood renewal and the recognition that regeneration policy had failed to harness the power of local communities and leaders (Raco and Imrie, 2003).

It is suggested that the New Labour strategy is to identify and highlight the differences between the new discourse and those it replaces. In the case of the community cohesion policy, it is possible to see how the values of multiculturalism have been placed in opposition to those of community cohesion. The language of community cohesion repeats words such as 'shared' and 'together', highlighting commonalities rather than valuing difference. The same divisions identified and celebrated by multiculturalism are to be drawn across by community cohesion through the recognition of the values, experiences and characteristics which different groups share. It is interesting that this research indicates certain dimensions in which ethnic groups share characteristics and others for which ethnic distinctions are corollaries for other differences. Thus, community cohesion ignores the evidence that certain ethnic groups have different experiences, although there are experiences which are shared by members of several or all ethnic groups. Although these are often negative experiences, they can lead to similar values and demonstrate how ethnicity is not necessarily an appropriate means of understanding local communities. In some cases it may be (for example, Bengali Muslims) but in others (Somali Muslims) it is not. Because in some social senses the values of bridging divides found in community cohesion are valid, perhaps what they really imply is that ethnic categories are not helpful and certainly not in all localities. Fairclough offers an explanation for the lack of clarity

of the identities and terms within community cohesion discourse. Such terms are rarely part of the discourse of my participants on either segregation or community cohesion. When local figures (within the case studies in my research) discuss community cohesion in their area it is rarely in terms of 'shared experiences', 'common goals' and 'place-shaping' but rather in terms of practicalities (housing, employment, youth boredom), structures and crime. Strategy and guidance documents for the community cohesion agenda follow some of the 'rules' of New Labour policy promotion with the use of summaries and the repeated employment of the bullet points of community cohesion definitions and objectives (Fairclough, 2000). The neat ideas of 'shared values', 'place-shaping' and 'common goals' conceal the complexity and the lack of clarity around what these may be in reality and how they may be achieved. It is also based on the assumption that individuals feel an affinity to an identifiable and bounded group of other individuals.

More positively perhaps we can argue that New Labour policy is an attempt to renew the social structures (such as the family) that produce bonds between both individuals and communities (Raco and Imrie, 2003). However, there are difficulties with such a strategy. This approach firstly conflicts with the expectation that local partner organisations can develop a common sense of local values and needs (Raco and Imrie, 2003). Further, the heterogeny of local areas poses a challenge to the identification of a consensus view and set of values.   Thus, the very nature of heterogeneous places means that it is erroneous for policy to focus on consensus building as a means to manage diversity.

The Research Aims

Previous research has already established the existence of spatial and structural inequalities. In the context of policy that sees diversity of all types of communities

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as a problem, this research integrates the four dimensions of place, ethnicity, community and deprivation through an analysis of residential segregation. These four features form the focus of this research that asks the following questions:

- To what degree are ethnic populations residentially segregated in England?
- Which ethnic communities are more spatially isolated than others?
- At what spatial scale is residential segregation present?
- Do the experiences and perceptions of members of the community reflect the measurement of segregation?
- What are the processes of residential segregation? How can we explain variation in segregation outcomes?
- If 'neighbourhood effects' exist, are they perpetuated by ethnic segregation?
- Is it appropriate to problematise segregation? Are more (or less) isolated communities socioeconomically disadvantaged by their situation?
- Is spatial diversity or isolation 'equal' or are some communities at an advantage?
- Is the community cohesion agenda a necessary response to current residential patterns and processes? Is there any evidence that concentrations of ethnic groups have a negative effect on community interactions?
- Are ABIs a necessary response to current residential patterns and processes? In the context of area-targeting in regeneration interventions and the recognition of structural inequalities, do neighbourhood communities also represent ethnic communities?

Understanding processes of segregation may help to establish whether high segregation is a negative outcome and thus has implications for policy in the areas of housing, community relations, equalities and social exclusion. This thesis argues that there has been limited change in the residential segregation of white from not-white groups between 1991 and 2001 and that it cannot be argued that segregation, as measured here, has been increasing. It does find quantitative evidence to support some associations between areas of greater socioeconomic deprivation and those in which white groups are more highly segregated from others. However, research at the national level only finds strong relationships between high segregation and high proportions of Pakistani and white groups. It also identifies a relationship between population density and segregation level and finds that patterns in this dimension in London do not reflect those outside the capital. The qualitative dimension of research partially sustains the association between concentrations of Pakistani communities and higher segregation. However, this research finds that the processes which lead to a high segregation outcome involve structural, economic and socio-cultural factors.

The Research Approach

Literature on residential segregation and the policy approach establishes residential segregation as an outcome and as a process. In order to achieve the research aims both of measuring segregation as an outcome and exploring the concept as a process, the research requires a multifaceted research strategy. Identifying variation in the levels of residential segregation nationally and the changes to this over time necessitates quantitative methods which can capture the outcome on a large scale. However, the exploration of the processes of segregation and its implications and effects cannot be achieved through quantitative data collection and analysis alone. Qualitative analysis enables a greater depth of understanding.

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Thus the research adopts a sequential mixed methods approach employing both quantitative and qualitative methods in two distinct phases. Each phase is conducted separately and holds independent value. However, the quantitative findings provide the baseline for qualitative exploration in greater depth at a smaller scale.

This is believed to be the most appropriate research strategy for the exploration of residential segregation, community cohesion and deprivation together. These are phenomena which differ in nature because they represent physical, social and economic dimensions which can be measured through qualitative and quantitative methods. The use of quantitative methods enables the analysis at the national level. It also aids policy development by providing clear benchmarks for comparison with previous and future research. Qualitative data collection adopts a case study approach. This is appropriate for policy work with communities as it focuses on the processes which are specific to local areas. As the community cohesion policy implementation has a fundamentally locally-based structure, in-depth local understanding is essential.

Thesis Structure

This thesis is structured in seven chapters which establish both the academic and policy concepts which motivate the research and present the findings of the quantitative and qualitative phases individually. Chapter Two (Understanding Segregation) is a conceptual chapter that establishes a working definition of segregation. It aims to present the current perception of segregation and to indicate the gaps in the evidence base. An analysis of academic understandings of residential segregation is provided and, using comparison with the USA, a description is given of the evidence of spatial arrangements in England. The

chapter also outlines current knowledge of the relationship between residential segregation and ethnicity and segregation and socioeconomic deprivation. It reviews evidence of the processes and effects of segregation.

In Chapter Three (Community Cohesion Policy) an argument is presented that integrates the issue of segregation with social or community-based problems. This discussion provides a historical review of the policy response to associations made between segregation and community relations and the development of the community cohesion agenda. The latter section explores the dimensions of the community cohesion agenda, its implementation and practical implications. It is suggested that the key challenges to cohesion are both as an outcome and as a process. Finally, this chapter addresses criticisms of the policy from within the academic community.

Methodological issues are addressed in Chapter Four, which describes the mixed methods research strategy employed in this research and explains the rationale behind the selection of specific methods. The precise challenges of each method and the details of their application are described separately, with reference to appropriate literature. The rationale for the selection of socioeconomic variables is also provided. In particular the chapter addresses issues concerning the availability of comparable data and the challenges of identifying suitable geographical units. With reference to the definitions presented in Chapter Three, Chapter Four also provides an in depth analysis of the measurement of segregation and justifies the adoption of the Index of Dissimilarity as the most appropriate measure in this context. It concludes with a consideration of the ethical issues arising in the research.

Chapter Five: Characteristics of Segregation in England is a statistical exploration of segregation levels across the country and the socioeconomic characteristics associated with variation in dissimilarity. This chapter presents the findings of the quantitative element of the research and is structured around the statistical tests employed. Using a sample of 90 English local authorities, segregation level is calculated for each area. The first section examines if and how segregation has changed between 1991 and 2001 and considers possible socioeconomic explanations for any change. This is followed by a description of clusters produced by cluster analysis in 1991 and 2001. Changes to these cluster patterns between the two dates are employed as additional explanation of characteristics associated with high segregation. Regression analysis of data from both 1991 and 2001 is then used to make a further exploration of these associations. Particular emphasis is placed upon the distinctive patterns identified in London in comparison to the rest of the country. The chapter concludes with a discussion of questions arising from the quantitative analysis and how certain factors can be explored within the qualitative phase.

The qualitative element of the research is presented in Chapters Six and Seven. This phase of the research is based on three case studies selected on the basis of quantitative findings and each representing a different level of segregation. The chapters analyse data from twenty unstructured interviews with participants from each case. Following short profiles of each case, the analysis in Chapter Six offers a thematic account of the type of segregation found in each authority, comparing the quantitative calculations with the degree to which participants perceive segregation to exist in their authority.

Chapter Seven (Local Processes of Segregation) addresses the understanding of historical, economic and social processes that are believed to have led to the

nature of segregation specific to each locality. Within this account there is an analysis of the perceived effects of segregation within each authority. The chapter concludes by comparing and contrasting the findings of the quantitative and qualitative phases and assessing the extent to which qualitative data has answered questions arising from the quantitative analysis.

The concluding chapter (Eight) examines how the research has answered questions about the nature, processes and effects of ethnic residential segregation in England. It examines the validity of the negative associations made between spatial separation of ethnic groups and low levels of community cohesion. This chapter pays particular attention to the similarities between the narratives provided by participants in each case study and attempts to explain why these differed from findings in the national statistical analysis. The latter part of the chapter proposes a number of recommendations for social policy in both community relations and housing. The chapter concludes with a discussion of the potential for further research into both segregation and community cohesion policy.

Chapter 2

Understanding Residential Segregation

Public policy on inequalities and community issues had a limited interest in residential segregation until the early 2000s when the physical separation of ethnic groups began to generate an increasing amount of interest. A number of qualitative studies suggested that the separation of ethnic groups in the housing sector was responsible, at least in part, for a growing social division between communities. Ethnic communities in England were described as living 'parallel lives', sharing cities but not space or community (Cantle, 2002). However, this is only one element of the story of segregation. It is apparent that social factors (at least in localised areas) also affect community interactions. By 2005 there was a perception that this process was deepening, leading to phrases such as a nation 'sleepwalking into segregation' used by the then head of the Commission for Racial Equality, Trevor Philips (2005). The suggestion that '*segregation is not being broken down and may be getting worse'* has been reinforced rather than broken down by multiculturalism (Cantle, 2002). However, some contradictions exist in understandings of the impact of segregated communities upon cross-community interactions. Reporting into the causes of the 2001 disturbances also indicated that physical mixing does not necessarily result in social contact. Thus, even residents of mixed neighbourhoods were likely to live separate lives from their ethnically distinct neighbours. Such contradictions are reflected in this research, reinforcing the complexity of the relationship between spatial and social separation. The impact of housing segregation on social separation may be mediated by variation in socio-economic, ethnic and cultural characteristics. Chapter Seven suggests that these factors are themselves likely to be affected by locally-specific characteristics.

Economic and ethnic residential patterns are also believed to have practical implications for policy approaches and resource allocation. Although structural inequalities and people-based interventions remain an important feature, regional

devolution and place-based initiatives became a key element of inequalities policy for the new Labour governments elected after 1997 and require an understanding of spatial inequalities and arrangements.

Thus residential segregation is important to economic concerns as well as community 'problems'. The separation of ethnic groups is thus problematic in terms of social relations and a part of processes of housing and deprivation. However, like community cohesion, segregation is a contested concept and as such requires a more comprehensive understanding of its processes (Finney and Simpson, 2009).

As the ethnic and cultural composition of the British population is a focus of social and economic concerns, references to 'diversity', 'segregation' and 'ethnic concentrations' litter policy, academic and media documents on ethnicity and multiculturalism. There is, however, little discussion of their definitions and little substantive evidence for the apparent problems these present. 'Diversity', for example, is usually employed as an unclear term that refers to ethnic mix but which has no statistical criteria. Equally, a measure and threshold of 'high segregation' has not been identified outside of academic research yet the term is a feature of discourse on ethnicity and housing. These terms require some clarification. In this research, a 'diverse neighbourhood' denotes one in which the ethnic composition is mixed, reflecting or extending that of the overall ethnic make-up of the whole authority. Where the term 'concentration' is used, it is understood that certain minority group groups are most likely to be found in one or a limited number of neighbourhoods in that authority. Thus what may appear to be 'segregation' may really only be ethnic 'diversity'. It is also likely that neighbourhoods that contain over-representations of minority ethnic populations will appear to be 'concentrations'. A 'segregated city' may be one with a high degree of spatial

separation of white and minority groups, whilst a 'segregated neighbourhood' within that city may refer to one with an abnormally high proportion of *one* particular ethnic group, either minority or majority. Where possible, these terms were clarified during interviews but it is acknowledged that without any statistical criteria for such references, difference in perceptions will exist.

This chapter will examine the evidence about residential patterns and demonstrate how the argument for ethnically mixed communities requires a greater understanding of the nature of residential segregation and how it relates to social policies in England. It will begin by establishing a working definition of the phenomenon and discussing possible conceptualisations of residential segregation. This will be followed by a brief discussion of the measures available for its study (these will be examined in greater depth in Chapter Four). The subsequent section examines the existing evidence of spatial forms of ethnic segregation in the UK and comparison will be made with patterns in the United States and elsewhere in the European Union. The chapter will conclude with an exploration of the processes and effects of segregation and with a brief consideration of models of integration.

Defining residential segregation

Academic and policy literature on residential segregation in Europe and North America takes four primary forms. Firstly, a group of studies that explore variation in the socio-economic experiences of ethnic groups in the UK, in particular with regard to the higher levels of negative conditions in fields of education, income and employment experienced by ethnic minority communities. A second set of literature examines national variation in the concentrations of ethnic groups, identifying broad regions that contain larger proportions of minority groups and explaining these patterns. A third body of studies has brought the socio-economic

and the spatial together in an explorations of the changing spatial dimensions of work poverty, education disparities and other socio-economic segregation (Meen et al, 2005, Gibbon et al 2005, Dorling and Rees, 2003, Berube, 2005b). The final set of studies is concerned with the segregation of ethnic groups at neighbourhood level, that is, at a smaller spatial scale.

These studies have usually adopted a case study approach, exploring spatial segregation in a selected city or groups of cities (for examples see Byrne, 1998, Cantle, 2002, Ouseley, 2001). Such case studies have been used to indicate a general trend towards residential segregation in the UK and a perceived need for policy promoting social and spatial integration. Each type of study connects the spatial with the socio-economic, reflecting similar connections present in current social policy. Further, evidence of the changing spatial nature of class, demographic variables and ethnic polarisation[1] has been explored but the format of census data for 1991 has prohibited a local-level chronological comparison (Dorling and Rees, 2005, Berube 2005).

In order to calculate segregation we need to establish understandings of the concept. Segregation can be understood as social or spatial. The former refers to a lack of social interaction, and the latter to unevenness in the physical distribution of the members of different groups (White, 2005). This distinction between the spatial and the social is interpreted by White (1983) as being of a sociological or a geographic sense. Whilst as a sociological concept it is concerned with isolation, referring to the absence of interaction between social groups and in a geographical sense 'unevenness in the distribution of social groups across space' (White, 1983:1008). Spatially, segregation is understood as a tendency for people of similar

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[1] The term 'polarisation' refers to a process of change towards separation rather than an outcome. It is based on the assumption that two extremes exist: complete spatial integration of ethnic communities and a situation in which ethnic groups live only amongst members of their own group. Polarisation is therefore the process of a population's movement towards separation.

status or type to concentrate in a common area (Meen et al, 2005). There is also evidence of interactions between the dimensions, for example between employment patterns and residential arrangements.

Although, some research indicates socio-economic consequences of spatial segregation, there is little agreement about the precise link between residential segregation and integration and it is argued that it is a two-way relationship (Bolt et al, 2009). Neighbourhoods as spatially distinct areas affect the socio-economic opportunities of local households and individuals, who are influenced by the social and ethnic composition of the neighbourhood (Friedrichs and Blasius, 2003). Thus the spatial, or residential, separation of households may further the social separation and, consequently, life opportunities of their members. It may be assumed that the residential separation of minority groups will result in fewer opportunities and a lesser degree of participation in society (Musterd, 2005). A high degree of concentration of similarly low socio-economically active households results in an absence of positive socio-economic role models.

However, spatial integration does not necessarily lead to social integration as, in some cases, there is evidence of very little interaction between social groups, even in neighbourhoods that are demographically mixed (Joseph et al, 2007, Bolt et al, 2009). The neutrality of neighbourhoods in terms of their effect on social segregation has also been observed elsewhere (Blokland and van Eijk 2010).
It may also be argued that spatial concentrations of ethnic groups facilitate integration by providing a supportive environment in which individuals can develop confidence. Further, although correlations exist between the two types of separation, question the link between social integration and spatial segregation on the basis of research that shows the effects of social mixing and dispersal policies are not significant (Bolt et al, 2009).

Residential segregation specifically refers to the separation of defined categories within the housing sector. Members of different communities may mix socially or within employment and education whilst occupying geographically distinct areas. This spatial understanding of segregation has been sub-classified, most notably by Massey and Denton, into the categories of unevenness, isolation (or exposure), clustering, concentration and centralisation (Massey and Denton, 1988). In this study residential segregation is understood as dissimilarity in the residential patterns of ethnic groups (unevenness) and is therefore concerned with variation in the distribution of different populations. There are a number of measures available to calculate the level of segregation in a given area, with techniques measuring particular dimensions of segregation. The measure selected as the baseline for this research is the Index of Dissimilarity (IoD) which is deemed appropriate for the analysis of unevenness and for studies occupied with the processes more so than with the effects of segregation. The advantages and disadvantages of each measure and the methodological debates for the appropriateness of each measure are addressed in detail in Chapter Four. In addition to this first conceptualisation of segregation as a measurable outcome that can be both quantified and qualitatively described, segregation is a process that may be captured through qualitative narratives. The recognition that segregation as a dynamic process is essential to the research aims in order to understand trajectories of change over time.

Segregation as problematic

Chapter One introduced the rationale behind the 'problem' of ethnic segregation and its relationship with regeneration and community cohesion policies. The reports into the disturbances in Bradford, Burnley and Oldham in 2001 generated debate around the consequences of the spatial isolation of ethnic groups. The interactions of disadvantage, ethnicity, place and social relations and the role that

residential arrangements may play in shaping these raises questions about the policy implications. Further, concerns about segregation present a number of challenges in terms of how we understand communities. Understanding processes of residential segregation may provide a means by which to understand cross-community interactions and the dynamics of deprivation and ethnicity. Chapter Three will address and present the case for research into the residential segregation of ethnic groups in the context of these two policy dimensions. Through an analysis of the literature on deprivation, ethnicity and place, this section explores the development of the perception of segregation as problematic. As seen in Chapter One, the processes and causes of inequalities can be understood as structural or locality based.

Structural Inequalities

The relationship between ethnicity and structural inequalities is evident in the persistent association between concentrations of certain minority ethnic communities and greater indicators of deprivation. Despite ongoing attempts to narrow these disparities inequalities persist in the realms of housing, employment, education and health. Wider improvements in health and education, for example, are seemingly qualified by the disparities in life chances apparent between white and BME populations and within minority ethnic communities (Home Office, 2005). Members of minority ethnic groups continue to experience greater disadvantage than white communities, with education and employment being key areas of concern. Only 36% of black Caribbean children achieved five or more higher grades in GCSE school exams in 2005 compared to 67% of Indians and 53% of white British children (Connolly and White, 2006). There are also disparities in employment outcomes with the unemployment rate for white men at 5% compared to 13% for black African and Bangladeshi men and 14% for black Caribbean men (Connolly and

White, 2006). The Stephen Lawrence Report (Macpherson, 1999) contributed further to the evidence on disparities in the educational performances of different ethnic.

Spatial Inequalities and 'Neighbourhood Effects'

The other side of debates in poverty and regeneration is the (albeit contested) relationship between locality and inequalities. The relationship between neighbourhood and deprivation is especially complex with regard to neighbourhood quality. Where the numbers of individuals living in poverty is high, neighbourhoods are very often of poor quality, often with the associated difficulties of inadequate public services to cope with such concentrations of poverty (Lupton, 2003, Kintrea, 2007, Andersen, 2002). A key feature of neighbourhood inequalities and one that has provided a framework for many area-based interventions is housing tenure. Specifically, the links between poor living conditions, deprivation and council housing are significant (Kintrea, 2007). In particular, the polarisation of rich and poor has been evident in terms of housing tenure with an increasing concentration of deprivation within social housing (Hills, 2007). People in social housing are twice as likely as others to be living in poverty and social housing is also likely to be found in areas of great deprivation. In 2001, forty percent of poor neighbourhoods were council built, twice the overall proportion of council-built neighbourhoods (EHCS).This residualisation of social housing as a tenure has led to concentrations of unemployment as deprived populations have less access to employment. Qualitative evidence also supports this with council tenants being more likely to be dissatisfied with their neighbourhood (Kearns and Parkes, 2003, see also Coulthard et al, 2002).

Further, those policies that were anticipated to increase tenure mix, such as Right to Buy, have been spatially uneven as popularity varied between estates (Kintrea,

2007). The impact of poor quality neighbourhoods on the outcomes of their residents are referred to as 'Neighbourhood Effects', taking social, physical and economic forms. There is evidence that concentrations of deprived households in one neighbourhood, have an impact on social and economic prosperity. Socially, such concentrations perpetuate 'negative' social norms that limit aspirations and economic success, particularly in terms of education and employment (see Atkinson and Kintrea, 2003, Forrest, 2004). Other social negative effects of neighbourhood concentrations are stigma associated with certain areas and a higher degree of social conflict. However, the concept of neighbourhood effects is contested and evidence of independent effects of neighbourhood is inconclusive (McCulloch, 2001, Smith, 1999).

There are thus two dimensions to understandings of poverty and inequalities, that which recognises wider structural disparities between members of certain communities and the second that identifies difference between outcomes in different localities. The relationship between structural inequalities, ethnicity and place is further complicated by the apparent relationship between minority ethnic communities and deprived *places* as well as individual levels of poverty. Due to its complex relationship with ethnicity, neighbourhood inequalities *and* certain regeneration interventions, tenure is explored as key feature of understandings of residential segregation in this thesis. Pairs of relationships have been established between ethnicity and tenure, ethnicity and deprivation, place or neighbourhood and deprivation and ethnicity and place. This thesis explores the interaction of these couplings and in doing so brings together the structural and the local. It asks how the spatial separation of ethnicity interacts with spatial inequalities and structural inequalities. The following section examines residential segregation as an outcome and the evidence base for positive and negative characteristics with which high segregation may be associated. The relationship between place and cross-

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community interactions and their implications for community cohesion and regeneration policies are addresses in Chapter Three.

Segregation as an Outcome

Firstly, there is evidence that spatial concentrations of particular ethnic communities can have positive outcomes. Qualitative studies suggest that practitioners in local government and regeneration are aware of the practical and social benefits of segregation (OPM, 2005). Evidence in the UK indicates that high proportions of particular groups do not necessarily present a negative phenomenon and negative neighbourhood labeling avoids the real social issues (Simpson, 2005b). The benefits cited included a greater cultural or social mix in cities, facilitation of common bonds, a sense of belonging, local support networks, the ability to participate in or benefit from other cultures because of the security of solid personal culture, more sharing of ideas with people in similar occupations, and young people defining themselves by reference to their peers (OPM, 2005, Daley, 1998,). A study by the OPM (2005) in which local government practitioners were interviewed about their experiences of community cohesion, revealed an awareness of the practical and social benefits of segregation.

Ethnically segregated areas specifically can also impact positively upon many aspects of communities such as the tailoring of specific services, protection against racism, a greater feeling of security and personal safety, retention of a sense of identity, and the development of social capital. The protection of identity can foster a sense of belonging (Harrison and Phillips, 2003), and a vibrant youth culture, and it may be easier to share interests without causing offence to those with different lifestyles (OPM, 2005).

Shared values and local support networks, the development of social capital and the existence of a critical mass to support culturally specific services can all be sustained by concentrations of ethnic communities (see Bolt et al, 2009). In her study based on the 1991 Census, Daley examines patterns of the spatial concentration of black Africans in Britain. She suggests that social networks within high concentrations of groups are beneficial in performing social welfare functions including child care (Daley, 1998). This can also apply to wider features such as the need for a critical mass to sustain services, especially schools. In particular, together with an emphasis on parental choice, faith based schools can be more easily supported through segregation. Language is also important as services and information can be more easily provided for high concentrations of minority language groups, although this may also serve to sustain social isolation.

Cantle proposes that rather than complete assimilation[2] a degree of clustering of communities is essential, as a critical mass is required for the support of churches and services. However, the report makes a distinction in recommending a greater sense of commonality at the political and community support level with a promotion of separation at the cultural level (Cantle, 2002). Specialised projects and services such as regeneration projects or health services for specific needs can be provided more efficiently. However, it is worth noting here that these positive aspects are qualities of *concentrations of similar communities* which may be an aspect of segregation and are not necessarily qualities of ethnic segregation per se. This suggests that whilst there are advantages to having similar people living in the same neighbourhood, it does not mean that the processes which lead to these

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[2] Assimilation is understood to mean as the active political pursuit of the transfer of local (host) customs to immigrant communities, with a view to immigrant populations becoming indistinguishable from members of the host community. This is the model pursued historically in European states like France, and in the United States in comparison with seeking to preserve cultural difference under multiculturalism pursued in the UK.

residential outcomes are positive. From the perspective of regeneration interventions, ease of accessing target populations may be achieved at the expense of higher levels of other symptoms. For community cohesion policy, sacrificing spatial integration may facilitate better economic outcomes for communities and individuals.

Nevertheless, there is evidence to support the current policy conceptualisation of ethnic segregation as problematic (OPM, 2005). This research suggested that segregation reinforces social divisions and in the case of ethnic minorities increases the risk of ghettoisation. Furthermore, ignorance, intolerance, crime and drug-taking amongst ethnic minority young men were believed to be associated with segregation. The OPM study also suggested that segregation creates the potential for a backlash against particular ethnic groups in the event of negative change in circumstance. In terms of other forms of segregation, negative consequences included reinforced social divisions, sub-optimal economic performance, reduced social cohesion (leading to alienation and risk of conflict), feelings of insecurity, reduced social mobility, increased levels of racism, a tendency to live apart, higher crime rates, a lack of role models for young people, and fewer life opportunities and expectations (income, education and social class segregation) (OPM, 2005).

The effects of segregation may be differential. Holmqvist's work in Sweden suggests that some populations experience greater negative impacts from segregation than others and it is generally assumed to produce a "lesser understanding of the 'Other'" (Holmqvist, 2005). It is also believed to have more practical consequences such as less use of service facilities in certain areas (SOU, 1975 in Holmqvist, 2005:1). Holmqvist also notes that poverty or concentrations of poverty are no less evident in mixed neighbourhoods than in socially homogenous neighbourhoods. The mix of advantages and disadvantages suggests that it is

perhaps not one single form of segregation but segregation in a number of dimensions that can cause deprivation and disadvantage. The relationship between place, community cohesion and social capital and their policy implications are addressed in greater depth in Chapter Three.

There is evidence of a positive relationship between ethnic residential segregation and high levels of deprivation in both the North American and European contexts (Massey and Denton, 1993). Although there has been little research into the specific nature of the interplay of ethnic segregation, poverty and poverty segregation in the UK, there is some evidence from the USA. In earlier studies of North America, associations between poverty and segregation have been found to be stronger for areas of very high and very low levels of segregation but weaker for areas with moderate segregation (Massey and Fischer, 2000). There was also variation in the associations between segregation and changes in economic outcomes: the groups that were highly segregated in terms of poverty and those that were not-segregated at all along economic lines both experienced income increases between 1970 and 1990 (Massey and Fischer, 2000). This contrasted with groups who were moderately segregated who experienced no significant change in income level during the same two decades (Massey and Fischer, 2000). Further, the only racial groups that experienced a sustained increase in the concentration of poverty were those who also experienced a degree of racial segregation. There are also negative practical and ideological implications such as an association with the enforced separation of ethnic groups by the state. Case studies of 'troubled' urban tracts have identified areas of extreme segregation and identified these as problematic (Massey and Fischer, 2000).

There is however, little substantive large scale evidence that residential ethnic segregation is associated with adverse conditions. Although studies of the USA are more numerous and have established associations between minority segregation

and poor household and neighbourhood conditions, no equivalent study has been conducted in the English context. Recent work in the UK presents evidence that ethnic concentrations do not necessarily lead to a higher degree of poverty and inequalities exist as strongly outside segregated areas (Finney and Simpson, 2009: 134). Further, it should be noted that the complexity of place, ethnicity and inequalities is not limited to a white-BME dichotomy as there is variation in patterns of different ethnic communities, for example, the correspondence between deprived areas and Caribbean populations is stronger than that with concentrations of Pakistani residents (Parkinson, 2006).   Despite this, the role of residential segregation in relation to these issues remains relatively poorly understood.

Existing understandings of segregation

Understandings of patterns of residential segregation in England already exist and are examined in the following section.   It begins with a discussion of the concept of the 'ghetto'. Although definitions and experiences of the 'ghetto' have been well developed in the North American context, they have not been extensively applied to regions of the UK. The term refers to a concentration of an ethnic group in a neighbourhood or group of neighbourhoods. To qualify as a ghetto, most members of a group must be found in this area. Developing the notion further, Johnston, Poulsen and Forrest describe such areas as 'a residential district which is almost exclusively the preserve of one ethnic or cultural group' (1994 in Peach 1995).

Table 2.1   Types of ethnic concentration

Type	Ethnic Description	Threshold
Polarised enclaves	Neighbourhood dominated by a single group	**>60% single group (any ethnicity**
Extreme polarised enclave	Single minority group dominates *and* is concentrated in this area	**Minority group = >66%. 30% of group located in this area**
Mixed minority enclave	More than one minority group	**Shared by two or more ethnic groups with no single majority. Host pop. = <30%**
Isolated	Host community dominates	**50% to 79% host population**
Non-Isolated	Host community dominates	**>80% host population**
Ghettos	Similar to 'polarised enclaves': concentration of an ethnic group in a limited number of neighbourhoods	**Neighbourhood that is the preserve of one single group. High proportion of a group live here.**

Johnston et al adopt Phillpott's understanding that cities are divided into areas of minority enclaves or of host communities. 'Minority enclaves' are sub-divided into 'mixed minority enclaves' home to more than one minority group, and 'ghettos' in which a high proportion of a group's population live in the area. In this understanding, enclaves can be 'polarised', in which a single group comprises more

than sixty percent of the population; 'extreme polarised' where the minority group not only dominates that area but whose total urban population is also concentrated in this area. In combining these two elements of local population and total urban population, this is similar to the notion of a 'ghetto'. Host community neighbourhoods are categorised as either 'non-isolated' where the host population equals 50-79% of the total neighbourhood population, or 'isolated' in which 80% plus of the total are host community members. Peach, however, argues that it is the conceptual aspect that is important rather than the statistical distinctions of segregation measures.

The American Context

The application of the term 'ghetto' was in use in North American cities long before it was applied in the UK context, providing a useful framework with which we can compare English residential patterns. There is a substantial body of literature on ethnic segregation in both European and North American contexts on the causes, processes and implications of racial segregation over the Twentieth Century (for example, Adelman, 2004, Timberlake, 2002, Freeman, 2000, Dawkins, 2004a, 2004b, Musterd, 1998, Ostendorf, 1998). The use of the term 'ghetto' and the focus of segregation as problematic in the USA, has been on white-black (African-American) segregation. Similarly to UK studies, much of this adopts a case-study approach, mapping changes in black-white segregation in specific urban areas. There is also exploration of the variables associated with black 'ghettos' in the USA, in particular, with regard to trajectories of concentrations of deprivation in urban areas (Quillian, 2002, Freeman, 2005). With regard to processes of segregation, a number of models have been developed in the USA and Europe to explain the

segregation and integration of ethnic groups. This section presents these for comparison with subsequent exploration of the empirical evidence in England.

A large proportion of studies in the USA have focused on changes in black-white segregation since the 1970s. Indications of some minor ghetto areas or enclaves in the UK contrast with evidence of considerable and persistent African American ghettos in the USA. It appears that the USA has experienced a decrease in residential segregation of this type over time. From the early 1990s onwards the term 'hyper-segregation' has been used in reference to certain black populations in the USA (Massey, 1995 in Andersen, 2003).   However, in most urban areas, it is believed to continue to exceed levels found in the most segregated cities of England (Goldberg 1998 in Johnston et al, 2003   There is mixed evidence of the relationship between economics and segregation in the USA. Neither the high levels of segregation nor its decrease over time seem to be a consequence only of socioeconomic differences. Traditionally, regardless of the level of income, segregation between blacks and whites has been very high (Farley, 1977, Massey and Denton, 1988 cited in Dawkins 2004b). It also appears to exist regardless of social class, with segregation of middle class blacks being maintained through the nineteen-eighties (Adelman, 2004). Despite similarity in individual economic positions, black middle classes live in neighbourhoods of greater poverty than those of white middle classes (Adelman and Dearden and Kamel, 2000 in Adelman, 2004). Indeed, in some areas in the 1990s, the black middle class households were as segregated as the black working classes (Pattilo-McCoy 1999 in Adelman, 2004). These spatial disparities appear to continue to the end of the twentieth century although there is evidence that *processes* of segregation have changed, for example the proportion of segregation attributable to variation in housing cost and tenure has decreased (Farley 1995 in Dawkins 2004b). However, although segregation is

shown by this evidence to be decreasing, for ethnic groups such as Hispanics and Asian communities, it has been increasing (Johnston et al, 2004).

The focus on economics is reinforced by evidence that educational attainment and familial composition also have little effect on black-white segregation (St John and Clymer 2000, Miller and Quigley, 1990). Other evidence indicates that it is the *interaction* of poverty and race that is associated with higher segregation. Since 1970, spatial segregation has declined for all groups except poor blacks for whom income inequality has increasing negative consequences (Fischer, 2003 in Dawkins, 2004b). Further, although there are strong links established between economic inequalities and ethnic segregation (Taeuber and Taeuber, 1965, Duncan and Lieberson, 1959), it is not income inequality which plays the greatest role. When variables such as region, population growth, housing market characteristics and socioeconomic factors are controlled for, segregation increases with decreasing black income but this increase is small (Farley and Frey 2004 in Dawkins, 2004b). Others extend the debate by arguing that old forms of segregation have merely been replaced by new forms of segregation and processes. Rather than minorities being 'locked out' of particular areas, they are 'locked in' to others (Johnston et al, 2003). This locking out is believed to be a consequence of three components – job markets, school catchment areas and housing markets, all of which are spatially structured. This is similar to the European case in which a number of studies have provided evidence of segregation (Huttman, Blauw and Saltman, 1992, Peach, 1997 and Musterd and Ostendorf, 1998) which sustains the relationship between economic and spatial inequalities.

Ethnic concentration in the UK

The following section presents existing evidence of segregation in England. Although there was some acknowledgement of positive aspects within Bradford and Oldham, both communities have been described as being both physically and socially segregated along ethnic lines (Cantle, 2002; Ouseley, 2001). Minority ethnic (and predominantly south Asian Muslims) have been repeatedly blamed for a perceived increasing and problematic ghettoisation of England's urban areas. Studies of English urban areas in the years after the 2001 disturbances indicated regional variation in segregation levels, with a higher degree of segregation found in the North West of the country in comparison with the South and East (Parkinson, 2006). There is no evidence that problematic residential segregation of ethnic groups exists in England, nor is there any statistical indication of increasing self-segregation of minority groups (Simpson and Lomax, 2005). On the contrary, although south Asian groups have a higher degree of segregation from whites than do black groups (Parkinson, 2006), studies show a pattern of dispersal for these minority ethnic groups traditionally living in greater isolation (Simpson and Finney, 2009). Studies of South Asian dispersal into suburban neighbourhoods suggest that this is the product, in part, of economic and social variation within these communities (McGarrigle and Kearns, 2008). The perception of isolated Asian 'ghettos', into which Muslim communities are retreating and from which white households flee to more 'British' neighbourhoods, is unsupported by any evidence. Measuring segregation at a different spatial scale but employing one the same methods, this thesis provides further evidence of minority ethnic dispersal.

A view of the overall ethnic composition of British society and its growth over time provides a context for more localised residential patterns. Due to a combination of

a growing minority ethnic population (a rise of 46% between 1991 to 2001) and a 470,000 decrease in the white population, the minority ethnic population rose between 1991 and 2001 (Parkinson, 2006). To this overall change in ethnic composition can be added the unevenness in the regional distribution of ethnicity across England (Peach, 1995). Proportions of certain groups are greater in particular cities, for example, four-fifths of the country's black African population and 25% of the Pakistani population lives in London (Parkinson, 2006). In particular, Bradford, Burnley, Rochdale, Leicester, Coventry and Bolton all have exceptionally high proportions of Pakistanis or Indians (Parkinson, 2006).

The impact of such concentrations makes the study of small areas particularly relevant. There is evidence of overall segregation of minority ethnic groups with concentrations in a minority of local authorities but this does not appear to be reflected in local-area concentrations. For example, almost half of the Pakistani population lives in only 13 of 459 local authority districts (Dorling and Thomas 2001 in Robinson 2006a). These areas of concentrations of minority groups rather than white groups tend to be urban authorities and minority communities are more often found in older inner cities rather than suburbs. This suggests a possible interaction with housing or economic patterns. It is partly this localised growth to which the perception of increasing segregation has been attributed (Simpson, 2005a). The relationship between differential population growth and perceptions gives rise to questions around what people perceive as ethnic 'diversity' or ethnic 'segregation'.

From 2002, qualitative evidence from the Cantle and Ouseley reports formed the baseline for a focus on segregation. However, other studies of residential segregation in the UK suggest that segregation is relatively low and that the UK

does not exhibit signs of ghettoisation[3] on a par with that of the USA. Wider
studies of residential patterns across the country have not mirrored this description
of the northern towns in question. For example, although rather dated now,
Johnston et al's (2002) study of eighteen of the largest urban areas in the UK
identified only three cities in the UK as containing what the authors describe as
'ghettos' (Johnston et al, 2002). These 'ghetto' areas were Bradford, Oldham and
Leicester, thus reflecting the localised nature of ghettos in England. There was also
little consistency in the ethnic groups concerned, suggesting that no single ethnic
group has a strong association with spatial separation. Whilst the dominant ghetto
group in Bradford was Pakistani, in Oldham it was predominantly the Bangladeshi
population. Leicester exhibited the greatest ghettoisation with 43% of the city's
Indians and significant proportions of Bangladeshis, Pakistanis and black Africans
found in such areas (Johnston et al, 2002). There has been evidence of
concentrations of certain minority ethnic groups in certain urban areas. A further
three areas (Kirklees, Sandwell and Blackburn) were identified as containing
'polarised enclaves'. Outside of these large cities, there was a persistent pattern of
minorities occupying areas where they are the majority group in that
neighbourhood whilst white residents are also more likely to live in areas where
they are the majority group with 90% of whites living in areas where they form
more than 80% of the population (Johnston et al, 2002). Living alongside other
white communities means that white communities are likely to experience
significantly lower levels of inter-ethnic contact.

Thus, across England, as in the USA, the more common pattern is of concentrations
of white (majority) groups rather than enclaves of minorities. In contrast, larger

[3] In this context, the term 'ghettoisation' refers to the increasing concentration of
minority ethnic groups within specific urban areas. The emphasis is on a process of
change rather than a fixed measureable outcome.

cities such as London, Birmingham and Leeds were identified as areas in which minority ethnic groups live alongside host communities. There is also little evidence of change in levels of segregation in the late twentieth century. That two of the towns identified as containing ghettos in 2001 were the same as those in 1991 (Johnston et al, 2004). Dorling and Rees identified some but not a lot of polarisation of Pakistani and Bangladeshi groups but a 41% increase in polarisation of white groups (Dorling and Rees, 2003). Even in London at that time, only a third of Bangladeshis lived in enumeration districts in which they formed 30% or more of the total population. Chinese communities were observed to be the most integrated into the host community.   Further, this trend is not consistent across all cities in the USA with a quarter of areas experiencing an increase in black segregation (Johnston et al, 2004). Evidence in UK studies indicates similar disparities between some minority ethnic groups (Peach, 1996). These studies of segregation also highlight the importance of segregation *within* the black and minority ethnic category.

Of all minority groups, Bangladeshis have the greatest proportion living in polarised enclaves, but this may be related to their relative size as where the proportion of Bangladeshis is small they are more likely to be integrated than where it is large (Johnston et al 2002).   There are further inter-ethnic differences with particular variation in the residential patterns of Indians in relationship to the size of the city. Unlike other south Asians, Indians in smaller towns are more likely to live with host communities (Johnston et al 2002 found an exception in Oldham, raising questions about the local nature of residential patterns) whilst Indian residents in larger cities are more segregated, living in mixed enclaves and be separate from south Asian - communities (Johnston et al 2002). In 1991 the segregation of Pakistanis was higher from Bangladeshis than from Indians (Peach, 1995). As with segregation from the host community, black Caribbean people had lower mean dissimilarity

scores than other groups. Peach also considered longer term segregation using birthplace data and found that segregation for Caribbean groups in Greater London had decreased over 30 years up to 1991 (Peach, 1995). Further, in terms of North American style ghettos, there were few wards with a minority ethnic majority population (Peach 1995).

Thus, in the English context there are regional concentrations of certain ethnic groups with black African and Caribbean populations found predominantly in the London area and Asian minority groups in Northern cities and towns. There is no evidence of problematic levels of segregation of any groups or that spatial segregation has increased over time. Some studies indicate that the reverse is the case, with growing dispersal of traditionally concentrated Asian populations. There is conflicting evidence regarding the association of Asian ethnic groups with residential concentrations with Pakistani communities identified as being more segregated in some areas but not overall. Further, where ethnic enclaves exist they are more likely to contain concentrations of white, host population households rather than minority ethnic households.

Evidence of segregation in the UK is as conflicting as that in the US context. Studies of earlier census data indicated that concentrations of black African groups exist but at low levels of segregation[4] (Peach and Rossiter, 1996 in Daley, 1998). Further, it is observed that black Africans are more likely to occupy the same areas as white. Perhaps a greater focus on south Asian communities than African or Caribbean communities can be justified by evidence that black Caribbean communities are less segregated and less concentrated than south Asian groups, (Johnston et al, 2002). However, this does not detract from the lack of attention paid to the isolation of white populations that was demonstrated in the earlier paragraph.

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[4] Earlier work used 'Country of Birth' to distinguish ethnic groups can cannot be easily compared with the current ethnic categories available in the Population Census.

There is also little evidence to support the focus of attention on south Asian (particularly Muslim) communities and a South Asian drift towards self-segregation (Robinson, 2006a). Using the city of Bradford as an example, Robinson suggests that the statistics compiled by the city council since the 1970s contradict Ouseley's claims. Other studies of Bradford (Simpson, 2004) support the picture of the physical integration of south Asian as not increasing over time, finding that by 2001 fewer mono-racial areas were found and both host and minority groups had dispersed. Any perceived increases in segregation can be explained as the product of a relative increase in the overall numbers of minority groups resulting from natural growth (Finney and Simpson, 2009). Evidence from 1991 does not suggest that this degree of integration is a new phenomenon (Johnston et al, 2002). In Leicester mapping indicated the presence of clusters of concentrations of Indian residents but little evidence of actual segregation. South Asians were identified as the most concentrated group but they rarely achieved the majority in a neighbourhood and thus do not meet the criteria for a ghetto (Peach, 1995). For example, two thirds of south Asian and black people lived in wards with fewer than 10% of their population so, in comparison to the USA, concentrations of minority ethnic communities were small (Peach, 1996). During the 1990s, in contrast to increasing polarisation of minority ethnic groups, evidence suggests that there has been an active dispersal of south Asian communities (Dorling and Thomas, 2004). Moreover, studies of change during this period identified increasing polarisation of white people whilst minority ethnic groups have become *more* ethnically integrated (Dorling and Rees, 2003). Although it is recognised that many comparisons between 1991 and 2001 are problematic due to difficulties with counting members of ethnic groups, on a large geographical scale, broad comparisons can be made.

Although at the national level there is regional variation in ethnic distribution, it is apparent that there is no evidence of increasing self-segregation of Asian groups or an increase in Muslim ghettos (Simpson and Lomax, 2005, Robinson, 2006a, Simpson, 2006). In contrast, there is evidence to suggest the reverse (Finney and Simpson, 2009). Further, the emphasis on minority concentrations is seemingly erroneous as white populations equally as likely to live in areas where they are the majority group (Johnston et al, 2002).

Existing evidence indicates that the geographical distribution of ethnicity in England is not one of segregation and a high degree of concentration of minority groups. It does suggest that there is variation in patterns for different minority groups and also that there may be some evidence that south Asian households may be more concentrated than black ones. However, that evidence is contested It is also apparent that the scale at which residential patterns are examined affects the degree of segregation identified. Further, it is apparent that a relationship exists between socio-economic factors, place and ethnicity. Although contested, spatial inequalities are a key feature of understandings of poverty and the following section addresses some of the evidence of socio-economic spatial segregation.

Segregation Scale

The scale at which analysis is conducted is relevant to calculations and perceptions of segregation. Some research has demonstrated an effect of the size of units used in small area analysis of segregation on the apparent degree of segregation identified. As the size of the area of analysis decreases, the degree of minority dominance will apparently increase, for example, Chinese communities had low levels of segregation at ward level but not at Enumeration District level, indicating

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that this group is evenly distributed across the city but in smaller-scale clusters (Woods, 1976 in Peach, 1995).

However, there is evidence that the relative size of minority populations in an area suggests that there may not be a relationship with segregation. For example, both the city with the largest Pakistani population (Bradford) and a city with one of the lowest (Leicester) had ghettos (Johnston et al, 2002). By contrast, evidence from Northern Ireland in the 1990s indicated that the increasing degree of isolation of Belfast Catholics correlated with their increasing population (Poole and Doherty, 1999 in Johnston et al, 2004). Although there is evidence that larger urban areas in the USA with larger proportions of black residents also have more segregation, there does not appear to be a relationship between an area's overall diversity and black segregation (Johnston et al, 2004).

The relationship between the size of a minority population, the size of an urban area and the level of racial segregation has been explored in the American context (Johnston et al, 2004). Using the index of isolation, this study identified a positive correlation between the size of minority populations and segregation and between larger areas and segregation. It is apparent that bigger cities in the USA experience higher concentrations of minority ethnic groups. There is a relationship in the USA between greater black segregation and high density housing as well as black segregation and larger black populations (Cutler et al 1999). Spatial patterns also tend to be reflections of social divisions in society (Musterd, 2003). The relationship between social and spatial differentiation is circular. Neighbourhoods vary in terms of physical characteristics (themselves the product of economic variation) and also in terms of image or relative social status (Soja 1980 in Andersen 2003). This 'socio-spatial dialectic' creates and is created by segregation.

There may also be a relationship between patterns of ethnic segregation and the size of the geographical area or population, with greater integration observed in larger cities than in relatively small urban areas (Johnston et al, 2002). As black residents have been shown to be more likely than Asians to live in white majority areas, this may be associated with the larger proportions of black than Asian residents in larger cities.

Non-ethnic Residential Segregation and Spatial Inequalities

Whilst the emphasis of this study is on the segregation of ethnic groups, other forms of separation such as housing markets and employment aid understandings of community relations and economic disparities. The evidence presented here connects structural inequalities with ethnic and economic residential patterns and suggests that neighbourhood homogeneity is more prevalent in English local authorities than ethnic concentrations. In particular, it suggests that economic characteristics of neighbourhoods have been increasing over time. Studies of the changing nature of English society between 1991 and 2001 suggest that the polarisation identified in the 1980s continued into the end of the twentieth century with an increase the 1990s (Dorling and Rees, 2003). Using the index of segregation, a number of areas were identified in which the UK is polarising along socioeconomic and demographic factors including that of ethnicity. In particular, ageing across Britain is uneven with young people becoming increasingly concentrated (Dorling and Rees, 2003). One section of society that appears to have polarised considerably during the decade is the most deprived becoming increasingly spatially marginalised (Dorling and Rees, 2003). There is however, conflicting evidence to suggest little change in the economic segregation of England over the last two decades of the Twentieth Century (Meen et al, 2005). This

conflict Earlier in this chapter the concept of 'neighbourhood effects' was introduced in the context of a relationship between place and poverty.

Regional segregation also exists within industry and occupation and within these there is a high level of polarisation of working age populations from other age groups. It has been argued that there is an increasing spatial separation of the most occupationally successful members of society (people who work long hours, professionals and degree educated people) from the rest of the population[5] (Dorling and Rees, 2005). There are also strong regional imbalances in employment that become more acute in the lower income and less qualified section of the market.   Spatial mobility in particular is restricted by level of qualification and nature of work (Gibbon, Green, Gregg and Machin, 2005). This last factor, they suggest, may be attributed to the prevalence of national advertising for professional but not semi-skilled sectors which prevents those in less-skilled occupations from moving to the security of a job. The more deprived are further disadvantaged by the inability to trade down in house size where housing costs are higher or by the structure of the social housing sector which restricts mobility between authorities. Areas of high and low employment continue to polarise rapidly, exacerbating problems of concentrations of poverty, especially for children (Gibbon et al, 2005). Changes in the spatial segregation of poor communities between 1991 and 2001 in the UK suggest that progress was made on several key issues such as work-poverty and qualification levels. The 3% most deprived wards in England made greater gains than others during the period (Berube, 2005B). As members of these wards were also likely to be minority ethnic, these gains may have significance for patterns of segregation.

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[5] The authors acknowledged that they would expect to find higher levels of polarisation at street level but were restricted by the available data.

Structural inequalities or variation between ethnicities add another layer to this regional economic variation. Although there is evidence of continuing ethnic disparities in occupation in the UK, there has been little small scale investigation of the relationship between workplace segregation and residential segregation. An interplay of employment and residency is evident in the USA where there is evidence that as well as residential segregation, physical segregation of work varies according to ethnic group, occupation and social class. The degree of contact between ethnic groups varies between different aspects of life and that this extends the availability of work in a particular residential area (Park, Wright and Ellis, 2004). The study of the ethnically diverse Los Angeles area identified differences in the geographical work areas of ethnic groups. Regardless of the level of residential segregation of either group, native born white people dispersed greatly for work purposes whilst African American employment remained concentrated around their neighbourhoods. However, dissimilarity figures indicated that residential segregation exceeds workplaces segregation especially for blacks (Parks et al, 2004). Whilst there is significant variation between minority groups, the greatest difference between workplace and home segregation levels was for native born blacks in Los Angeles.

Thus explanations for ethnic segregation in both the UK and the USA cite a relationship with economic residential arrangements. However, whilst the polarisation of income groups is apparent, the suggested increase in economic segregation in the UK does not appear as strong as that of the USA in the 1980s. Minority groups such as Africans and Hispanics experienced increasing economic segregation in part due to the mobility of some middle class blacks creating high poverty neighbourhoods (Jargowsky 1994, 1996 in Adelman, 2004).

Factors affecting household location

However, the analysis of socioeconomic and ethnic segregation and the relationship between ethnicity and disadvantage focuses on structural relationships and categories of people. It fails to acknowledge the individual within processes of residential arrangements and deprivation. A 'bottom-up' understanding of residential arrangements begins with an exploration of the factors that effect the location decisions of individual households. These factors may be understood in terms of push and pull factors which differentially effect ethnic groups. Minority ethnic groups experience greater personal and neighbourhood deprivation and poor living conditions are thus a particular motivating factor for dispersal to a more prosperous neighbourhood (Robinson, 2006a). 'Push' factors may also include dissatisfaction with key services, decline in quality of life or the population growing rapidly causing overcrowding (Robinson, 2006a). Robinson also identified generational differences in aspiration that detract from the idea that ethnicity is itself the key issue shaping choices, particularly for young people. This is particularly pertinent given the greater propensity and ability for young people rather than old, to move (Meen et al, 2005). One of the observations made in the Cantle report was the movement out of deprived neighbourhoods of those young people who could do so. Demographically, this had an impact in particular on the level of skills and educational level of an area (Cantle, 2002). Disparities also exist between those with aspirations who remain in their original neighbourhood and those who are able or to choose to move.

Restrictions on individuals such as scarce financial resources or a weak position in the labour market can limit the opportunities available to households (Robinson, 2006a). In order to move, households require intangible resources and these may be less available to black and minority ethnic (BME) communities. Such resources

include gatekeepers, political resources and knowledge of areas like the housing market, administration procedures or access points. The availability of appropriate employment opportunities and matching skills can also facilitate a move to a more desirable area. Robinson suggests that the continued concentration of minority groups in certain neighbourhoods is partly a result of the dominant income and labour market positions of their members. Yet it is also the status as members of certain communities that can affect mobility beyond the *actual* economics or networks. In the housing market, segmentation, racial steering, and discrimination amongst lenders and financial sources existed until the 1080s, however, the race relations legislation of the 1970s onwards means that this is today, not found to the same degree as during the 1960s and 1970s. There is evidence that current choices are affected by fear of harassment amongst minority groups (Cantle, 2001). Even state controlled areas such as social housing is tied to housing options and could therefore be employed to manage change in residential patterns (Robinson, 2006a). Minority ethnic groups are more affected as social housing allocation processes do not fully recognise the different needs of some minority groups or the impact of inequalities for black and minority ethnic communities (Meen et al, 2005). Whilst overt discrimination has been legislated against, there is still racial discrimination in the market in terms of attempts to 'sensitively' match minority ethnic households to areas of traditional settlement partly to avoid racial harassment in white areas (Robinson, 2006a). On a wider level, social housing allocations shape residential opportunities as movement across authority boundaries is often problematic. This can create not only segmentation within districts for minority ethnic communities but also an inability to cross boundaries (Gibbon et al, 2005).

Segregation as a Process

The degree to which England's ethnic groups are segregated has provided the basis for policy responses to community and economic problems and quantitative evidence has been established that explores segregation as a measurable outcome. However, residential segregation is also understood as a process that is an integral part of deprivation outcomes. This section discusses existing knowledge about processes and patterns of residential segregation and asks how distinct residential patterns come about.

Hypotheses regarding processes of segregation tend to concern racial, income, housing, and socioeconomic differences and discrimination (Quillian, 2002). In the 1950s, Shevky and Bell explained spatial segregation as resulting from family status, socioeconomic status and ethnicity (1955 in Andersen, 2003). More recently, Dawkins summaries five similar factors: racial income differences, racial differences in tastes for housing services, racial differences in housing market information, racial prejudice and housing market discrimination (Dawkins, 2004b). Johnston, Forrest and Poulsen's work in the USA suggests that whilst geographically, the ethnic composition of urban areas changes little over time, the reasons for these patterns do change (Johnston et al, 2004). They suggest three similar processes of segregation: discrimination, disadvantage and group preference and that four main influences affect ethnic concentration. These are the time of arrival in the host country, the level of economic participation, preferences for protecting cultural identity, and the attitudes of the host society (Johnston et al, 2002). There are further factors which affect segregation processes including preference, economics, discrimination and housing and although there is some agreement on the possible causes of ethnic residential segregation there is little consensus on the precise processes leading to segregation in the US and few studies of processes in Europe. Economic disparities, mobility differences, settlement histories, policy effects, the

operation of racial discrimination, directly and as a product of economic variation, are all undoubtedly associated with changing levels of ethnic segregation.

Existing models of processes of segregation include the choice/constraint model of the Chicago School. This argues that patterns result from internal self-ascriptive forces (choice) and external proscriptive forces (constraints) (Peach, 1975). The richest in society will always have the greatest choice so there will be ecological segregation along the lines of social class and income. Thus economics and structural inequalities are integral to processes of segregation. The spatial structuring of job markets, housing arrangements and school catchment areas means that, like the choice and constraint model, minorities are 'locked out' rather than being 'locked in' to certain neighbourhoods. In the European context there are competing models of segregation processes (McGarrigle and Kearns, 2007). The Choice and Constraint model dominates in which households are able to make choices that result in concentrations of similar populations.

The Chicago School captures the 'melting pot' model (Peach, 1999) through which immigrant groups progressively assimilate with the host population. In this model there is a simultaneous spatial integration (Duncan and Lieberson, 1959). Rex and Moore (1967) argue that within the choice and constraint model, spatial distribution is related to the relatively weak socio-economic position of certain groups and their position within the housing market. Others have linked the diversity of experience and the effects of structural factors in shaping residential patterns (Harrison, 2001). Phillips introduces the notion of 'bounded choices' in which households have the autonomy to make location choices but these are limited within the context of economic and social constraints (Phillips, 2007).

A second model suggests that segregation is the result of the individual decisions of agents (households) and that these moves are divided into four types which contribute to the production and reproduction of segregation patterns:

1   Segregation generating moves: households exit due to high levels of immigrants;
2   Segregation generated moves: the image and reputation of a particular area declines through stigmatization;
3   Institutionalised moves: the institutionalised framework linked to taxes, subsidies and politics or housing companies manipulates certain moves;
4   Network generated moves: immigrants move to neighbourhoods where they have relatives or friends of same origin.

(Andersson, 2001 in Holmes, 2006)

These types represent both agent-based moves (1, 2 and 4) and structural moves (3).

There are also possible ecological explanations for segregation in which individual communities attempt to dominate different neighbourhoods (Andersson, 2003). This would indicate a proactive agent-based process rather than a product of structural inequalities. A third model would suggest that segregation arises as a product of an interaction between social and spatial inequalities. Spatial variation is produced when the social, physical and functional structures of a city combine to create areas that not only have distinct physical or housing characteristics but also have distinctly different social conditions. This may be particularly relevant for employment groups which might have traditional patterns of location as the product of industrial patterns.

The final model of the segregation process is the classical ecological model of spatial competition. In this model different racial or ethnic groups are competitors for spatial resources within and possessing 'territories'. Groups invade other's territories and eventually gain dominance (Andersen, 2003). There is however, little evidence of a tipping point for succession of dominance (Goering 1978, Stahura and Hollinger 1987 in Galster 1990). Johnston et al (2004) maintain that all processes of segregation are spatially structured in some way. In employment, skills related employment constraints result in lower incomes which limited housing options whilst cheaper housing is frequently found in areas where the local job market is in decline. A connection is also made with education and intergenerational poverty as fewer resources for local schools may result in lower educational outcomes (Johnston et al, 2004) and thus entry into the same spatial-poverty cycle.

Preference

In the UK there is evidence to suggest that for some Pakistani households segregation in the 1980s and 1990s was a product of choice, rather than an enforced process (Dahya in Peach 1995). Specifically, in Oldham the Asian population was perceived to be residentially self-segregating in addition to having separate educational arrangements and community organisations (Cantle, 2002). However, academic debate is contentious with further evidence that this same group has a preference for culturally and ethnically mixed neighbourhoods (Phillips et al, 2007). It is thus argued that a combination of factors of family location, financial benefits and a shared religion and language make sharing neighbourhoods with co-ethnics more attractive. In the USA it is observed that the extent of spatial segregation is far greater than relative variation in affluence which indicates that it

perhaps individual household or community preferences that produce concentrations (Johnston et al., 2004).

The first of three theories proposed by Cutler et al focuses on the preferences on immigrants (1999 in Johnston et al., 2004). New migrants choose to live with co-ethnics, racial discrimination from host communities prevents integration, and economic differences enable whites to choose white neighbourhoods. Such preferences are not limited to minority groups. Other studies suggest that members of the host society in the USA also prefer to live alongside co-ethnics. Further, this preference appears to operate with economics to sustain segregation through fears that an increasingly mixed neighbourhood will decrease property prices (Ellen 2000, Cutler et al 1999, in Johnston et al., 2004). In the US experiences, ethnic preferences for own-ethnic neighbourhoods suggests that white residents express stronger sentiments than blacks (Farley et al 1978, Clark 1991 in Quillian 2002). This indicates that self-segregation on the part of minority groups is an unlikely general rule. Further, we should be wary of attributing ethnic preferences completely to racial prejudice (Quillian, 2002).   Ethnic preferences for segregated neighbourhoods in the USA appear to be influenced by childhood experiences. Studies suggest that intergenerational persistence may be explained by the level of interracial contact experienced during childhood (Dawkins, 2005 and Borjas 1998). This pattern is not restricted to minority ethnic groups but extends to white host households. However, intergenerational persistence has not been found to be strong in the US case and it is likely that it is the interaction of preferences with other factors such as discrimination which to creates and sustains segregation (Dawkins, 2005). It is also likely that intergenerational persistence of segregation is a product of the transmission of these attitudinal and economic differences (Dawkins, 2005).

Discrimination

Social processes of segregation are undoubtedly affected by ethnicity and racial discrimination has operated to create and sustain spatial segregation over the history of not-white settlement in England. Yet the racism hypothesis is complex. Discrimination may work to discourage not-white households from choosing 'white' areas due to fear of racism, limit access to certain areas through direct or indirect discrimination, or encourage white (or other groups) to employ economic advantage to prevent the development of mixed neighbourhoods. Fear of racial harassment has led some Asian households to remain in disadvantaged neighbourhoods whilst whites with similar income can leave (Kundnami, 2001). The resulting segregation is often exacerbated by neighbourhood effects as house prices fall and remaining in the area becomes a necessity rather than a choice. There is also some contested evidence that the phenomenon of 'white flight' may be only partly responsible for the development of some ethnically segregated neighbourhoods. Whilst evidence suggests that the phenomenon existed widely during these decades it is unclear whether these patterns continued into the late twentieth century. Again, earlier research form the North American context may offer some further explanation.

The level of white flight is affected by the specific racial context of the area and local integration policies (Galster, 1990). However, white out movement from mixed neighbourhoods is also affected by the tenure and demographic features and aspirations of individual white households.   Further, white racism appears greater than black racism, preference studies show that the latter are less likely to want to reside in an own race neighbourhood than are the former (Dawkins, 2005). Studies of white flight in the USA suggest there is a specific point at which the level of not-whites becomes unacceptable to white households. This is founded on

Schelling's tipping point model which proposes that small differences in the perceived desirability of living with other groups can create segregation (Schelling 1972 in Dawkins 2004). Schelling's model also suggests that racially motivated white turnover will not occur if the cumulative percentage of not-whites remains below the white actual percentage (Schelling 1972 in Galster, 1990). The point at which white flight takes off varies in relation to the level of racist sentiment in an area. However, it is also argued that the effect of the tipping point is not great and there is little acceleration of white flight after this point. Galster argues that racial discrimination by white communities had a greater impact on segregation in the 1970s than did economic factors (Galster 1990). There is conflicting evidence from the USA that levels of discrimination do not necessarily result in segregation (Yinger, 1995) and that high segregation cities *generally* have higher discrimination (Galster, 1986, 1991 in Quillian, 2002). Some studies identified *higher* rates of African Americans moving into white areas in cities with higher housing discrimination than those with lower rates of discrimination (South and Crowder, 1998 in Quillian 2002). Further, it should be recognised that studies of discrimination and segregation in the USA rarely focus on the large scale patterns. The lower levels of white flight since the 1970s may be attributed to the decline in the not-white population growth in comparison to the previous decades (Saltman 1978 in Galster, 1990).

Lower levels of white fear of mixed neighbourhoods may also be attributed to the increased relative desirability of mixed neighbourhoods with middle class blacks rather than working class. However, it is also argued that mixed communities do not always bring integration and that race hatred can be rife in white deprived areas (Amin, 2002). Mixed neighbourhoods can also have many problems. In his discussion of segregation in the contextual framework of multiculturalism, Amin argues that there are two types of neighbourhoods that experience visible racial

antagonism. The first are areas of working class whites with persistently high levels of deprivation and waves on non-white immigration and physical isolation (Alexander,1996, Back 1996, Mac an Ghaill 1999 in Amin, 2002). The second are white flight neighbourhoods in suburbs into which middle class white residents flee 'contamination' by foreign cultures (Black and Nayak 1990, Hewitt 1996 in Amin, 2002).

Amin argues that white flight is has a greater responsibility for segregation than the Asian retreat into urban area exaggerated by the press. In contrast, evidence that white flight contributes to recent changes in ethnic patterns suggests that it can be more accurately described as middle class flight from poor quality neighbourhoods. Households of any ethnic group contribute to minority ethnic dispersal patterns by moving outwards into more expensive neighbourhoods when possible (Finney and Simpson, 2009). Such a pattern negates suggestions of self-segregation of minority groups (Finney and Simpson, 2009). Studies of processes of segregation in the USA indicate that race is a significant factor in influencing location choices (Dawkins, 2004). The lesser ability of black middle class households to occupy more prosperous (and white) neighbourhoods despite their desire to do so indicates that economic disparities are not sufficient explanations for segregation.

Racism has also historically affected tenure opportunities in the UK and the USA (Daley, 1998). There is evidence indicating that racial prejudice is not as important in more recent decades (Johnston et al., 2004) but it has been suggested that that in some instances legal racism has been replaced with informal discrimination. In the USA it is apparent that traditional legal discrimination in the real estate sector has been replaced by informal white racism (Cutler et al, 1998 in Johnston et al., 2004). Certainly, it is likely that the relationship has become increasingly complex. Massey and Denton suggest that white preferences for white neighbourhoods is

not sufficient to maintain segregation and that discrimination must take place within the housing markets as well (1993).

The role of discrimination in processes of ethnic segregation also reflects the processes and development of relationships between the immigrant community and the host population. It highlights the relationship between social relations and spatial arrangements and the context in which community cohesion policy sits. At one end of the spectrum lies assimilation describing decreasing segregation and difference. At the other is the extreme segmentation in which certain groups are increasingly socially excluded and ghettos are formed reflecting wider, international divisions. Segmentation has distinct structural social and spatial divides with deteriorating ethnic relations and a single dominant group. Lying between these concepts is pluralism, maintaining and valuing cultural identity and difference and community boundaries without intentionally creating spatial divides (Boal, 1999 in Johnston et al., 2002). Assimilationist models might be regarded as divisive, conceptualising society as split into the host community and (minority) ethnic communities. The host community controls immigrant entry into the 'melting pot' using discriminatory practices (Johnston, Forrest and Poulsen, 2002). The degree of assimilation can negatively affect the extent of spatial concentration and its duration (Johnston et al, 2002). These are thus based on assumptions firstly of ethnic difference, and secondly of the ease of categorising communities ethnically. This may provide an artificial structure for understandings of residential patterns but also provide a structure for community cohesion policy.

Economics

Whilst economic segregation and its development in the UK has been widely studied (Meen et al 2005, Dorling and Rees, 2003, Gibbon et al, 2005), to date

there has been little exploration of its relationship with ethnic segregation. Much evidence in the USA suggests that ethnic segregation is in large measure a reflection of structural economic differences (Taeuber and Taeuber 1964 and Lieberson 1963). It is argued that income differences translate directly into housing variation and racial spatial segregation is created by combining with neighbourhood disparities in housing quality and type that creates (Dawkins, 2004). In addition, the spatial division of socio-economic class in the USA has grown and impacted on the spatial distribution of ethnic groups, especially blacks (Massey and Fischer, 2000). As in the UK, black communities are significantly more likely to live in areas of extreme deprivation. Some studies attribute this to the interaction between spatial segregation and income inequality (Massey and Fischer, 2000).

Although cases in Europe differ from the USA because the integration of the poor is relatively high, economic theories have also been employed to explain segregation in Europe (Musterd, 2003). The location of the poor predominantly in denser, inner city areas is a product of the location of industry and housing costs, but also a consequence of urban development (Andersen, 2003). Historical analysis suggested that in the UK, London's ethnic groups would have a lower segregation level if economic factors controlled their distribution (Taeuber and Taeuber, 1964). In addition, Europe's more segmented housing market and its relationship with economic patterns may have an impact upon segregation patterns and levels. An examination of social housing in Denmark suggests that the process of social housing allocation has meant that 25% is allocated to people with social problems. This contributes to concentrations of poverty in this tenure with marginalised communities disproportionately located in social housing (Andersen, 2003). Policy in Denmark has influenced both the demand for and availability of different housing tenures for different groups of people. Studies have also found that although less segregation is identified within tenures than between them,

(particularly in social housing) segregation is not limited to tenures (Andersen, 2003).

However in both the USA and the UK the relationship between economics and ethnic segregation is contested. As already noted, other studies propose that higher deprivation for minority ethnic groups cannot account for the high levels of segregation found in some urban areas in the USA (Massey and Denton, 1993, Jargowsky 1997, Peach 1997 in Johnston et al., 2004) and significant research has suggested that socioeconomic factors explain only eight per cent of segregation (Peach, 1995). Some evidence in the USA suggests that racial segregation exists despite income equalities (Massey and Denton 1988, Farley 1995, in Dawkins, 2004b). Regression studies of 1980s USA found that the role of income difference is weaker than many other factors (Alba and Logan, 1992 in Dawkins 2004b). There was also an apparent difference between minority ethnic groups. Less than a third of segregation between whites and blacks is explained by household characteristics compared to between 50% and 70% of that of Hispanics and Asians (Reubens, 2002).

Outside of racial factors, income is the most importance contributor to black segregation (Reubens, 2002). Yet the impact of class extends beyond variation in income. Historical analysis of the segregation of black middles classes in the USA suggested that black residents lacked the political and social advantages of the white middles classes (Landry 1987 in Adelman, 2004).   However, the relationship between class and segregation has not changed significantly over time. By 1990, black middle class neighbourhoods were still more deprived than their white equivalents (Alba, Logan and Stults 2000 in Adelman, 2004) and recent work in Chicago, Cleveland and Detroit identified a positive link between better socioeconomic status and entry into more white and more affluent

neighbourhoods for blacks (Alba, Logan and Stults, 2000 in Adelman, 2004). Wilson (1996 in Massey and Fischer, 2000) attributes rising concentrations of black poverty to increasing class segregation and income inequality.

In Europe segregation also appears to be affected by lifestyle differences between communities and demographics such as age (Andersen, 2003). The effects of socioeconomic changes are 'contingent on the level of segregation in which they occur' (Massey and Fischer, 2000). In the UK, segregation also goes beyond class boundaries and beyond black-white differences. Indians in London who share the socioeconomic profile of whites in the same area have an outer city distribution rather than inner, whilst groups sharing fewer characteristics with the white population such as the Bangladeshi population have different residential patterns. This may indicate variation in the importance of income and cultural differences in comparison with racial differences. The cyclical relationship between deprivation and place is reflected in segregation processes. Poverty results from income and racial segregation and segregation itself intensifies the effects of rising income inequality (Massey, 2000).

The majority of studies from the USA focus on individual or small groups of urban areas and do not address overall changes in segregation and its relationship with poverty. In the UK context there is considerable evidence of structural inequalities between ethnic groups on a national scale. Such studies point to little doubt that some ethnic groups experience far greater levels of poverty and decreased life chances than others. As discussed earlier in this chapter, it has also been established that some aspects, in particular levels of affluence, have become increasingly polarised (see Dorling and Rees, 2003). Although we can infer that spatial changes are in play, geographical polarisation across England as a whole does not necessarily imply polarisation at the local level. Berube (2003) compared

the progress made by the poorest wards in England between 1991 and 2001 and other wards. In some dimensions (such as work poverty and qualifications) they made much, in some ways (home ownership and car ownership), greater progress than more affluent areas. However, levels of vitality and children in lone-parent families and numbers with long-term limiting illness, rose faster than elsewhere, indicating increasing deprivation in these dimensions.

Housing

Housing segmentation and its processes may explain some variation in minority ethnic residential patterns. The spatial inequalities in the housing sector mean that the relative disadvantage of certain minority groups facilitates segregation through housing. White households traditionally have the means to move into better areas and also benefit from discriminative housing policy which limits the movement of minority households (Amin, 2002). These processes exacerbate neighbourhood disadvantage and force the segregation of minority households. It is even suggested that residential segregation is a parallel to segmentation of the housing market and vice versa (Andersen, 2003). Variation in the housing needs or preferences of different minority ethnic groups may also create segregation.

In the USA there are significant differences in the location choice of ethnic groups which cannot be explained by individual demographic characteristics. There appears to be a relationship between educational attainment and area characteristics, for example, educational attainment affects choices of both white and black home owners whilst black renters are not affected by their level of education (Dawkins, 2004b). In the UK, cultural factors appear to influence tenure choices and options for ethnic groups (Lindberg and Linden 1989 in Andersen, 2003).

Research in England suggests a link between social housing and black African households. For this group social housing not only has fewer stigmas than for other ethnic groups but there is a greater likelihood for such households to be allocated worse dwellings (Daley, 1998). Daley identified areas like Lambeth, Hackney and Southward as affected by concentrations of black communities in available social housing. Further, housing policy in the 1980s combined with economic constraints on black households contributed to some residential segregation. Black families were less able to benefit from Right-to-Buy thus allowing white residents to dominate such areas (Daley, 1998). Informal housing processes in the USA have been shown to facilitate latent white prejudice through pricing structures (Cutler et al 1999 in Johnston et al., 2003). A similar argument that there is a gap between minority ethnic housing aspirations and actual outcomes is proposed in the UK (Robinson, 2006a).

In the Swedish context it is argued that authorities have taken action against segregational forces through constructing social housing in high land price areas (Arnell-Gustafsson, 1983 in Andersson 2003). The effect of policy on spatial patterns is illustrated by the effect of public support for housing in Denmark. Here, higher incomes and tax payments have had much greater incentives and scope for buying a home than low-income groups. Housing benefit system encourages people with low incomes to settle in rented dwellings. The social sector can have high rents which make them unattractive to people not on housing benefits thus concentrating already marginalised groups further. In particular it is the role of housing as one dimension of multifaceted separation that is likely to be problematic. The racialisation of some neighbourhoods, for some minority ethnic communities and areas considered to be 'out-of-bounds' tend to be associated

with social housing estates (Phillips et al, 2005 in Bradford) and this is coupled with the disproportionate amount of some groups in social housing to sustain divisions.

Models of Segregation

There are a number of existing models that go some way to explaining segregation outcomes and processes in the UK context. The evidence also suggests that these processes have changed over time resulting in decreased segregation for minority groups, for example, in the US context, processes influencing segregation have changed over time resulting in variation in residential patterns. This has recently been attributed to a weaker association with housing cost and tenure in the US (Farley, 1995). Existing evidence recognises a likely role of factors such as race, income, housing, and socio-economic differences. Importantly, it is recognised that inequalities in these dimensions that produces variation in residential outcomes. *Relative* disadvantage, unequal economic participation and prejudice affect residential outcomes (Johnston et al, 2003). In particular, the role of housing is perceived to have an impact through several dimensions: housing markets, cultural preferences, spatial relationship with key industries. In the UK context, although income inequality and disadvantage is believed to be key and socio-economic variation is considered to have a role, evidence suggests that social class is not a structuring factor (Social class variation accounts for just 8% of Afro-Caribbean segregation from white communities and only 10% of Bangladeshi segregation from white populations (Peach, 1999)). Further, variation in experience (the period of early immigrant arrival) or cultural differences (such as preference for housing types or tenure) also contribute to variation in outcome (Johnston et al, 2002). For other households, it is the interaction of race with income, housing, cultures and discrimination which contributes to segregation, rather than these factors independently.

Existing models of residential segregation such as the choice-constraint model structure the interactions of these dimensions. However, it is argued that although these models contribute to our understandings of residential segregation outcomes and processes, this study offers a further dimension.   The community cohesion policy, its motivations and the language used suggests that the British government has not yet identified a policy for the management of diverse communities in the post-multicultural era. This is especially problematic with regard to the management of those communities which refuse, or are perceived to refuse to assimilate or to accept the multiculturalist values of tolerance of indifference. Some Muslim communities are perceived to Muslim communities fail to fit with the multiculturalist policy because it requires tolerance of difference by the minority groups. The development of diverse communities requires an understanding of the

The existing models of segregation, such as choice and constraint go some way to explaining and understanding the processes of residential segregation. However, there is a lack of literature that attempts to explain current processes of segregation in the English context their relationship with New Labour governance.

The challenge of governance in the Twenty-First century is the management of a super-diverse society containing a significant and growing population that, it is believed, had a moral and values structure that was perceived to conflict strongly with traditional 'British' values and norms. This culture is 'Islam', which presents difficulties within a multiculturalist stance. Attempts to manage a community that presents 'difficulties' have led to, initially, an emphasis on spatial segregation, then on sharing values and moral codes. This study demonstrates that spatial separation is not, necessarily a key issue for the management of a culturally or ethnically diverse population.

Thus, it is proposed that the development of the choice and constraint model to also include the impact of structural exclusion on patterns (McGarrigle and Kearns, Andersson, 1998, Harrison, 2001) serves to understand processes of segregation and exclusion in the English context. However, this thesis suggests a further extension to this model. It is argued that households make autonomous decisions within the constraints or structure of wider socio-economic restrictions but that both these decisions and these constraints are not uniform and are subject to *local* effects. Such wider socioeconomic constraints include (but are not exclusive of) the relationship between employment or industrial patterns and ethnicity, tenure preferences and income inequalities of ethnic groups. These constraints and dynamic and evolve over time to capture the increasing diversity and changing nature of both the population and the socioeconomic structure. In addition, variation in residential patterns exists despite wider constraints due to their interaction with local factors. This means that associations between ethnic groups and tenure, preference, inequalities and deprivation may play out differently according to the local history. For example, local housing allocations policy, industrial patterns and development, or community relations can mediate or mitigate the effects of national or associations. In particular, the spatial distribution of housing tenure, type, quality and cost mediates the relationship between ethnicity and socioeconomic inequalities and transforms this relationship into one with a spatial dimension. Further, it is argued that although both wider structural relationships and local effects produce certain spatial patterns, it is unhelpful to apply specific and structural assumptions or labels to all members of a 'community' without recognising the internal diversity of that 'community'. Thus, it is argued that structural inequalities or relationships produce particular spatial patterns but these relationships are mediated by local histories and within these two layers, 'communities' and ethnic categories themselves are diverse. The proposed model reflects the reasoning of the 'choice and constraint' school which

emphasises the interactions of both push and pull factors in affecting the residential processes of households. However, it extends this to capture both local and national layers and to acknowledge the internal variation of communities. Chapters Five and Seven address such factors in terms of the evidence collected in this study.

Conclusion

This chapter has presented evidence about spatial disparities in deprivation, individual poverty rates and ethnic distribution. The chapter has demonstrated how four dimensions of ethnicity, community, place and deprivation are brought together by understandings of residential segregation. In the context of policy interventions, understanding residential patterns is essential for the selection of an appropriate strategy and for resource allocation.

The literature suggests that segregation outcomes are the product of an interaction of individual agents' decisions and structural inequalities. Moreover, the nature of this interaction is dependent upon local conditions. The presence of disparities in employment and occupation highlight their relevance to inequalities and policy and indicate their place in this exploration of ethnicity. For the perceived problems associated with cross-community relations, segregation may have a causal role or a part to play in policy interventions.

Segregation as an outcome or a process is not fully understood. Through quantitative analysis my research aims to establish whether more and less segregated authorities have different socioeconomic characteristics and whether more segregated areas share enough characteristics to enable prediction of

segregation level. Further, residential segregation has been associated with spatial inequalities in poverty, particularly in the North American context, yet little has been established in the UK context. My research explores the complexity of the relationship between disadvantage, culture (community cohesion) and segregation and asks whether the inequalities discourse within current policy should return to a focus on structural inequalities. There are also key questions for public policy around the advantages of socio-economically mixed communities and what the factors are which create and support sustainable and successful communities.

The next chapter presents the policy context for this research and explores how residential segregation has been linked with concerns about community interactions.

Chapter 3

Community Cohesion Policy

As established in Chapter One, the policy framework for this thesis is twofold: dealing with regeneration strategies and the development of the community cohesion policy. Research questions relating to residential segregation and the nature of regeneration approaches were established in Chapter Two in the context of apparent ethnic conflict in parts of Britain. This last element presented issues that led to the second policy context of the community cohesion agenda. The 2001 street disturbances in the northern towns of Bradford, Burnley and Oldham sparked a debate about the cohesion of England's multi-ethnic urban areas. Inquiries into these events suggested that the lack of social and residential contact between different ethnic groups may have produced or exacerbated local social problems (Cantle, 2002, Ouseley, 2001). Official reports maintained that the media portrayal of the disturbances was an 'Asian problem' and in doing so linked the agenda with wider policies on diversity and multiculturalism (Robinson, 2005). This agenda aimed to bring together the diverse communities of England through the recognition of a shared sense of identity and values. Between the entry of the term 'community cohesion' into mainstream discourse in 2002 and the publication of the findings of the Commission on Integration and Cohesion in July 2007[1], a large number of strategy, guidance and critical documents were published that presented a range of definitions and descriptions of the concept.

Residential segregation connects these two policy areas by bringing together , creating a further two key issues. Firstly, the debates associated with place and anti-poverty measures link community cohesion policy with regeneration approaches through so-called 'neighbourhood effects'. Secondly, the geographical targeting of regeneration funding in areas that also experience high levels of

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[1] The Commission on Integration and Cohesion (CIC) was launched in August 2006 and published its findings in July 2007.

residential ethnic segregation creates community-based issues. Area Based Initiatives (ABIs) in neighbourhoods where certain groups dominate may stimulate hostility and inter-community resentment which itself promotes segregation (Office of Public Management, 2005). Early community cohesion policy was driven by and emphasised the importance of reducing inequalities, shown by the introduction of cross-cutting organisations such as the Social Exclusion Unit. It was clear from the language and recommendations of the IRT report that spatial segregation was a target (2002: 28-29). The policy interest was thus in narrowing structural inequalities and physical integration. However, these factors both as motivations and as goals became replaced by a greater interest in increasing cultural homogeneity.

The initial drive for the community cohesion agenda focussed on spatial separation as the cause of social separation. There has been a policy shift from a focus on structural ethnic inequalities to creating community cohesion yet the rationale for community cohesion policy itself has also changed since its conception. During the initial phase of community cohesion policy the focus was on the separation of minority groups. The new Labour agenda had an early emphasis on race and multiculturalism but this has developed over time into a greater emphasis on inequalities and exclusion (McGarrigle and Kearns, 2005). This policy shift from focussing on residential segregation as the key cause of social divisions was apparent by the time of the publication of the community cohesion interim report in 2007. This shift was, in part, due to the increasing evidence that such segregation was not nationally high nor was it increasing (Peach, 1999, Simpson, 2004) thus making such a basis impossible to sustain. Further, it had become apparent, from historical policy attempts, that communities cannot easily be created or divided according to government wishes. The evidence in this study and elsewhere (see Bolt et al, 2009 and Phillips, 2006, is that cultural ties and the

availability of services will retain many households within certain areas regardless of the economic opportunities available to them. Commission on Integration and Community Cohesion's attempted to distance itself from the segregation-oriented discourse of the early years of the agenda (McGhee, 2008). This move has been supported by the argument that the problematic of residential segregation in community cohesion policy was over-emphasised at the expense of the role of structural inequalities (McGhee, 2008). Further, it has been suggested that programmes to tackle the needs of disadvantaged and disaffected groups have at times institutionalised problems. This has fuelled divisiveness and the perception within some communities of unfair distribution of resources (Cantle, 2002).

This chapter describes the context of the development of the community cohesion agenda and the social problem that it challenges. It also discusses the value and potential impact of the agenda. The first section establishes the origins, definitions and key dimensions of community cohesion, and explains the social problems that it addresses. This is followed by the policy history and theoretical context of the agenda with analysis of the relationship between ethnicity and community cohesion. The aspect of 'place-shaping' is subsequently discussed, in terms of the role of regeneration policies and as a link between the key policy dimensions. The chapter then addresses the content of key policy documents and describes how community cohesion is promoted and implemented, the assumed association between residential segregation and difficulties in community cohesion, and the practical dimension and operationalisation of the agenda through an analysis of the key strategy documents. Finally, challenges to and critiques of the concept and agenda are considered. The chapter concludes by establishing the research questions arising from community cohesion policy.

Definitions

In order to understand the development of the policy as a response to a perceived social problem, we have to first establish what we mean by community cohesion. Definitions of community cohesion were developed from Forest and Kearns' five components of social cohesion (Forrest and Kearns, 2000).

1. *Common Values and Civic Culture*: common moral principles and codes of behaviour.
2. *Social Order and Social Control:* absence of general conflict within society, social cohesion being a by-product of the social routines, demands and reciprocities of everyday life.
3. *Social Solidarity and reductions in wealth disparities*
4. *Social networks and social capital*: high degree of social interaction within communities and families,
5. *Place attachment and identity*: identities and places are accepted as being intertwined and contributing to social cohesion through the reproduction of common values, norms and willingness to participate in social networks and build social capital.

(Forrest and Kearns, 2000)

There are thus three key dimensions to understandings of the agenda. The first is the idea of values, the second is based around the notion of safety and strength and the third is concerned with diversity. Action guides published by the Local Government Association (LGA) during the early years of the policy draw these three aspects together with the understanding that community cohesion incorporates and extends race equality and social inclusion, is at the heart of a safe and strong community, and that the emphasis is on local authorities to promote race equality.

The summer of 2007 brought the development of a re-evaluation of definitions of community cohesion: 'Community Cohesion is what must happen in all communities to enable different groups of people to get on well together. A key contributor to community cohesion is integration, which is what must happen to enable new residents and existing residents to adjust to one another' (Commission on Integration and Cohesion, 2007). The new vision of an integrated and cohesive community is based on three foundations:

1. people from different backgrounds having similar life opportunities;
2. people knowing their rights and responsibilities;
3. people trusting one another and trusting local institutions to act fairly.

And three key ways of living together that continued to reflect early academic definitions:

1. a shared future vision and sense of belonging;
2. a focus on what new and existing communities have in common, alongside a recognition of the value of diversity;
3. strong and positive relationships between people from different backgrounds.

More recently, the original definition has been extended into several facets that have a lesser emphasis on overall diversity than previous understandings. Interaction to promote trust and *common understanding*; active citizenship – *participation* in society; *equality* of access to the labour market, housing, education, healthcare, and social welfare; society *at ease with itself*; and *respect* for law and values (iCoCo, 2009). In this description, cohesion is concerned with the future of society and identity but also has an 'active' dimension, emphasising the need for

responsibility and participation. Community cohesion is understood both as an outcome (or source of division) and as a process.

The term 'community cohesion' is the cohesion of groups within the broader community (such as a regional or a metropolitan community. In contrast, social cohesion is understood to refer to the joining of individuals from different social groups including ethnicity, gender, class or education. There is a lack of clarity within government publications regarding the distinction between social and community cohesion (Worley, 2005). The ODPM report of 2004 attempted to define what it refers to as 'social cohesion' but to do so employs the terminology of 'community' cohesion. The report refers to 'engagement across communities' (2004:6) and the sharing of diverse communities yet also to government policy on 'social cohesion' (2004). In guidance to schools community cohesion is presented as the over-arching objective yet social cohesion is an aim to be promoted within schools.   For example, the 6th Report to the ODPM (2004 has the subheading '*Definition of Social Cohesion*' is followed by the strategic aim: '*4. There are diverging views on the definition of community cohesion*'.   Thus this appears to understand a cohesive community as a place-based community that is internally diverse but within which there are strong links between people of different groups (such as race, age and social background). In a cohesive community, these groups are also perceived to mix within educational contexts, housing and activities.   Thus 'community' is simultaneously conceived as a labelled group such as ethnicity and a place-based collective for which the agenda goal is connections between groups. This confusion captures the inadequacy of the community cohesion policy discourse. However, despite the language of commonality, it is also observed that such understandings are not in opposition to multiculturalism as a successful community is also perceived as one in which difference is celebrated. Community

cohesion is concerned with a common vision and belonging alongside the valuing of diversity and difference.

The Independent Review Team's investigation into the Oldham disturbances linked the agenda to concepts of social inclusion and exclusion, social capital and differentiation, community and neighbourhood (Cantle, 2002). This document appeared to associate the concept with policies and initiatives that were aimed at reducing social exclusion.

Because community cohesion developed from definitions of social cohesion there is a risk of confusing the two concepts. The key distinction as understood within this research is of the focus of social cohesion on the internal cohesion of communities and community cohesion on the relationships between different communities. Even within these understandings there remain some grey areas in relation to spatial communities and due to the multiple dimensions or structures of society. Although the internal cohesion of neighbourhoods may be referred to as 'social cohesion', this assumes some degree of shared experience or interests. It also raises questions around the relationship between place and communities and thus the consequences of segregation for this relationship.

There have been explicit attempts to ensure that the agenda is not established as purely ethnicity-oriented. However, the fact remains that ethnicity was a significant driver for the agenda and is a key feature of cohesion discourse. This relationship is addressed in greater depth later in this chapter. The concern with an increasingly diverse population was with ethnic diversity and equality. More specifically, it has been suggested that official reporting on the 2001 disturbances maintained the media portrayal of the disturbances as an 'Asian problem' (Robinson, 2005).

Although all initial definitions of community cohesion make it clear that race equality is not the only aspect of the agenda, later discussion and good practice focused on ethnicity and, at the centre of this, the Race Relations (Amendment) Act 2000. The 2005 strategy document *Improving Opportunities, Strengthening Society* highlighted the issue of racism and the anti-hatred driver of the agenda (Office of the Deputy Prime Minister).   In the foreword the then Home Secretary, Charles Clarke stated: '…[this] strategy is about getting much better at identifying and responding to the specific needs of different communities, in education, health, employment, housing, security […] the importance of strengthening society. This is not something that the Government can do alone but it is an issue on which we can give a lead: helping people come together from different backgrounds; supporting people to contribute to society; and taking a stand against racism and extremists who promote hatred..' (ODPM, 2005).

The 'problem' of diversity

The community cohesion agenda was developed in response to a perceived social problem. The key perceived challenge is the management of an increasingly diverse population in which a growing number of ethnic, religious and cultural identities, present a threat to social cohesion. In addition, the spatial separation of communities appeared to exacerbate the effects of this diversity. This in turn is set in the context of the increasing spatial separation of economic groups and a mixed policy approach to socio-economic interventions. The perception of the existence of minority ethnic ghettos described in Chapter Two meant that the spatial arrangements of members of this diverse population were believed to present further problems. These challenges became prominent in the aftermath of the street disturbances in Bradford, Oldham and Burnley in the summer of 2001, after

which previously concealed problems of identity, values and equality adopted a physical threat to social order. The physical threat of difference was seemingly exacerbated by subsequent terrorist attacks in the UK and the USA.

However, communities policy is not independent of strategies to tackle deprivation. The structure of the policy outlined below demonstrates how a large number of programmes have been developed within this broad area which acknowledge and employ the relationship between place, community and socio-economic success in order to combat these challenges. In order to understand the problem that the cohesion policy aims to tackle, we need to understand the context in which it developed. There are two primary dimensions to this. The first was the disturbances in Bradford, Oldham and Burnley, and the second inequality of life chances between different communities.

The apparent starting point for understanding the 'problem' at the heart of the agenda was the event that triggered the agenda in the summer of 2001: the disturbances in Oldham, Bradford and Burnley. Initially, it appeared the conflict was triggered by social problems that were a symptom of economic inequalities. However, these inequalities were seemingly exacerbated by structural ethnic economic inequalities and by divisions between communities in each town. These tensions apparently made prominent by the conflict captured the divisions that are central to the cohesion agenda: faith, intergenerational, ethnic and between newcomer and existing residents (ODPM, 2004). In addition, there was evidence of socio-economic disparities between social as well as ethnic groups and increasing geographical and cultural polarisation of these groups.

It was understood that structural inequalities contributed to community divisions by highlighting the greater relative disadvantage experienced by certain

populations in comparison with other local communities. Resource allocation along the lines of need was, in some cases, perceived as unfair by visibly targeting specific (ethnic) populations most in need. The spatial separation that is produced by neighbourhood effects also reflected and highlighted difference between ethnic groups. The primary strategy paper *Improving Opportunities, Strengthening Society* located community cohesion in the context of reducing disparities between different communities and improving life chances for all. The document highlights the improvements in health and education outcomes over recent years, for example in areas such as cancer and heart disease treatments and with unemployment at a twenty-nine year low (Home Office, 2005). These gains, however, had seemingly been offset by the disparities in life chances apparent between white and BME populations and within the BME category itself. The overall success story is present within these communities but not uniform, in areas such as education, the labour market, health, housing and the criminal justice system.

In the context of the Stephen Lawrence Report (1999) and notably poor educational performances from Bangladeshi and Pakistani boys, the overarching objective of the agenda is identified as reducing race inequalities. A number of policy elements sought to address these structural inequalities but also to contribute to community relations. The Public Service Agreement (PSA) 2005-2008 objective involved tackling disadvantage through programmes which met needs specific to certain communities. Further, the National Strategy for Neighbourhood Renewal (NSNR) discussed in Chapter Two was already committed to the enhancement of community cohesion through the development of community participation, community facilitation and conflict resolution. This was a long-term strategy for sustainable renewal at the heart of which was the establishment of Community Empowerment Networks to support 'effective participation to reduce

conflict and suspicion between communities' (NSNR, 2005). It was explicit that this facilitation programme was an immediate and direct response to the 2001 disturbances and aimed to reduce inter-ethnic conflict in areas considered high risk.

However, despite the immediate origins in the 2001 riots, community cohesion has been promoted as addressing the needs of whole areas rather than focusing only on tension and difference between different ethnic groups. Attempts to deal with spatial inequalities were themselves linked to increases in community conflict. The report into the Oldham disturbances suggested that previous and existing programmes to tackle the needs of disadvantaged and disaffected groups had institutionalised problems, ensuring divisiveness and a perception of unfairness between communities (Cantle, 2002). It was suggested that area-based regeneration schemes reinforced the separation of communities rather than employing thematic approaches which crossed borders.

Historical patterns, such as the slum clearances and housing developments of the 1960s and 1970s had a profound effect on the structure of communities (Commission for Integration and Cohesion, 2007). Increasing globalisation and better international communication links have also had a role in changing the identities and allegiances of communities, particularly immigrant communities (CIC, 2007). This sets local community differences in a global as well as a national context and demonstrates their effect on specific local interactions.

Although structural economic inequalities were closely linked with them, ethnic community divisions dominated the immediate response to these events. Subsequent community cohesion development and divisions between ethnicities and immigrants are linked to the development of the Race Relations (Amendment)

Act of 2000. The disturbances had been initially portrayed as white youths pitted against Asian youths, making it primarily a race issue in the tradition of urban riots in the early 1980s. Conflict between young men of different ethnic groups was not a new phenomenon, neither was their location within neighbourhoods with significant social inequalities a surprise. The community cohesion response was an explicit acknowledgement that the social and spatial separation of ethnic groups was problematic and thus an acceptable focus for proactive management.

These social divisions and problems were attributed to a number of factors. The Cantle report identified recurrent practices or themes which were present in areas without disturbances but absent from those with. These included pride in the community amongst local residents; diversity being seen as a positive thing; schools learning about different religions and cultures; and community and faith leaders holding regular meetings together. It was argued that a lack of cross-cultural contact as an end in itself had not been sufficiently valued. The Cantle report therefore promoted the aim of cohesion based on better knowledge and understanding with greater value being placed on cultural difference.

Thus the concept of community cohesion was identified as a means through which divisions between communities could be reduced and shared values and experiences recognised and made explicit. The conclusions of the CIC report were that cohesion and integration are complex, should be tackled along multiple facets and are significantly affected by local characteristics and issues. However, the initial focus on ethnic difference as the problem has become a challenge of identity and a lack of 'Britishness'. The key challenge is cultural or religious identities that are perceived to be at odds with 'Britishness', specifically Islam. Issues associated with Niqab wearing, educational requirements, separate schools and media presentation of issues such as honour killings have become increasingly prominent.

Thus it is not the BME community as a homogenous entity that community cohesion aims to tackle but the management of a culturally and religiously diverse population.

In the context of existing policy, these apparent threats to Britishness that difference posed were perceived to be signs of the failings of cohesion's precursor, multiculturalism. The sub-text appears to be that an excessive emphasis on diversity and the celebration of difference have led to a lack of shared values and a lack of understanding of British identity amongst minority (perhaps read 'Muslim') ethnic residents. A practical example of the implications of this is language difficulties within established and new 'immigrant' communities that have been recognised as sustaining problems in interaction and in broadening the generation gap within communities. A lack of language skills not only restricts the economic and social participation of certain sectors of the community, but may also have a detrimental effect on the perception of such groups by mainstream populations and lead to greater 'othering'. The example reflects the possibility that the problem at the centre of community cohesion can be developed further, in which the use of community cohesion discourse was described as a means of managing diversity, in particular ethnic or religious diversity. Whilst the government responded to the riots as a social problem related to social and ethnic inequalities exacerbated by spatial and social separation, what the community cohesion agenda appears to tackle is the problem of managing an increasingly diverse society. The 'super-diverse' society produced by immigrants of increasingly varied origins was emphasised in a perceived increase in spatial separation (addressed and challenged in Chapter Two). The Commission for Racial Equality (CRE, 2002) explicitly set the agenda against the background of an increasingly diverse nation with three-hundred different languages and fourteen faiths. This strand of the policy supports

diversity and is reinforced by repeated links to the Race Relations Amendment Act of 2000 (RRAA, 2000).

Residential segregation, specifically, is perceived to be problematic through the linking of spatial inequalities and reduced opportunities for cross-community contact. The post-riot reports also suggested that in areas where there were high levels of poverty and deprivation, it was unlikely that there would be any evidence of community cohesion. The authors argued that poverty and deprivation contributed to disaffection and unrest but that this correlation was not straightforward. The Cantle report emphasised a striking physical and organisational polarisation of the three towns involved, suggesting that 'Many communities operate on the basis of parallel lives' and that the resulting ignorance about other communities easily grows into fear which can be exploited by extremist groups (Cantle, 2002, p. ?). The report suggested that ethnically integrated schools are not sufficient to prevent the damaging effects of segregation, as residentially separate parents do not reflect the practices of their children. It also suggested that this separation is compounded as the ignorance about other communities resulting from residential segregation is exploited by extremist groups (Cantle, 2002).

However, other authors argue that there is no empirical evidence of such a pattern (Finney and Simpson, 2009). Poverty and racial problems are no less evident in mixed neighbourhoods than in homogenous neighbourhoods and parallel lives also exist in such areas (Holmqvist, 2006, Amin, 2002). Prior to the birth of the community cohesion agenda it was recognised that although greater social capital is evident in poorer neighbourhoods, such neighbourhoods can have a detrimental affect on the aspirations and mobility of their inhabitants (Healey, 1998 in Forrest and Kearns, 1999).

Thus, from an initial concern with ethnic community conflict, exacerbated by perceived spatial separation and made complex by socio-economic and spatial inequalities, the problem with which community cohesion is concerned became one of identity and challenge to a perceived 'Britishness'. This in turn has developed into concerns with the management of a culturally, ethnically and religiously diverse population.

The Theoretical Development of Community Cohesion

The community cohesion agenda is founded on the assumption that a level of day-to-day contact between communities provided by spatial integration leads to a higher level of cohesion (Allport, 1954)[2]. Both Home Secretaries David Blunkett and Jack Straw, pursued the policy move away from multiculturalism. The agenda also signifies a conceptual move from an emphasis on difference that dominated multiculturalism, to an interest in the bonds between and the shared understandings of different communities (Joppke, 2004). Multiculturalism and its place in a super-diverse society has been heavily criticised by academics including Ted Cantle and Yasmin Alibhai-Brown, Arun Kundami, Kenan Malik, Christian Joppke. Prior to 2001 and during the following years, multiculturalism as a policy stance was subject to criticism. Multiculturalism's weaknesses within policy and as a concept, are based on the observation that, under New Labour, multiculturalism as a policy has faltered (Bolt, 2004, Joppke, 2004), arguing that the concept no longer has a place within policy. Such criticisms focus on its inadequacy in dealing

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[2] Allport's contact hypothesis was developed in 1954 and presents the argument that inter-group prejudice can be significantly reduced through regular inter-personal contact between members of different groups. Although the relationship between segregation and community relations is complex, the key thesis is that greater contact between racial communities produces more positive social outcomes.

with the perceived level of diversity currently experienced by the UK (Prospect, July 2006). Trevor Phillips of the then Commission for Racial Equality (CRE) also criticised multiculturalism for its legitimisation of separateness and division (2004) Multiculturalism became problematic for the management of diversity for a number of reasons and policy responses to this were observed from 2001 , a focus on culture detracts from more important differences and discrimination such as inequality.

The key document marking the demise of multiculturalist policy is the IRT report of 2002 in which the authors criticised the absence of a 'meta-community' to hold together the diversity of communities. The report focussed on the common elements of different communities, the shared language and an emphasis on the non-white community to accept the majority institutions. The conclusions of the report observed localised problems of cultural ignorance and absence of shared moral values that resulted from a historical multiculturalist policy approach and the o observation that the liberal state was seeing its principles of tolerance undermined by cultures within its diversity (Kundnami, 2002). Kundnami also argues that there is no need for institutionalised multiculturalism as liberalism has always managed to accommodate religious difference without multiculturalist policies.

Within a welfare state citizens object to the redistribution of resources to those with whom they do not identify Goodhart (2004). As economic immigration expanded in 2002, it was recognised that, for public acceptance, it needed to be accompanied by assurances of strong shared identity (Joppke, 2004).
Finally, multiculturalist policy over-emphasises cultural difference to the extent of reinforcing inequality and separateness between communities as it encourages community members to think of culture in fixed terms (Phillips, 2004).

Although critiques of multiculturalism had already begun to find voice, it was under the first New Labour term in the late 1990s that it found itself undermined in policy (Kundnami, 2002). Both the official discursive response to the 2001 riots (IRT) and the policy response indicated a move away from the traditional celebration of diversity and difference (Kundnami, 2002, Pilkington, 2008). Community cohesion policy encapsulated and entrenched into legislation, a movement away from the emphasis on cultural difference and moral relativism (Kundnami, 2002). Alibhai-Brown (2003) has three criticisms of multiculturalism which she now believes to be a part of the process of our history. The first criticism is that it sustained ghettoisation; the second supports evidence produced by the Cantle report of the dislocation of different identities and the fight for resources; the third is the difficulty of embracing people who are 'utterly unlike ourselves and to whom we owe nothing' (2003). In this context and the current cohesion emphasis on Britishness, she now questions the call for minorities to 'share values' and the absence of any similar demand to white communities (Alibhai-Brown, 2006). It can be seen in the history of political management of diversity a move from the fight during the 1960s to 1970s for political and economic equality to a fight under multiculturalism in the 1980s and early 1990s for cultural recognition (see Phillips, 2004).   Trevor Phillips argues that multiculturalist policies have not responded to the needs of communities but have created these communities by imposing identities and ignoring internal conflicts. The impact of policy is that communities competing over resources that are managed according to ethnic identity then people will identify themselves in terms of those ethnicities (2004).

Therefore, such criticisms reinforce the purposes of the community cohesion agenda and its objectives of inclusion and understanding rather than difference. Multiculturalism has been acknowledged for its role in confronting racism and it is a

justification for a wide range of differences – political, cultural, economic, social and physical, rather than just racial. However, it is also argued that multiculturalism was damaging for the anti-racism movement (Kundnami, 2002) by its management of minorities through the use of un-elected 'community representatives'. He argues that such a strategy perpetuates existing patriarchies and prevents minority communities from developing or growing: cultural protectionism has thus stunted cultural development (2002:   Further, Cantle argues that multiculturalism conflates the concepts of nationality, national identity and group and personal affinities, suggesting that it has done little to promote a sense of commonality. He proposes that we should emphasise the ways in which we relate to each other, something fully supported by the community cohesion focus on interaction and understanding (Cantle, 2006). Cantle's argument in Prospects for Multiculturalism and Community Cohesion explicitly relates the development of cohesion policy to the decline of multiculturalism. He argues that the gradual integration and cohesion of society has been set back, with the new question focused on multiculturalism and its impact on society. The defence of all difference, regardless of whether attributes are worthy of such defence, is just one of Cantle's criticisms of proponents of multiculturalism. There is also an argument that it is the integration of multiculturalism into policy that is problematic for the operation in reality. Differences are often incommensurate (Malik, 2002). Malik argued that in institutionalising multiculturalist beliefs, society undermines the values on which the lived experience of multiculturalism is based and fragments society. The creation of bodies such as the Equalities and Human Rights Commission[3], which replaces the Commission for Racial Equality and its emphasis on racial difference, has been identified as recognition that multiculturalism has

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[3] The Equality and Human Rights Commission (EHRC) replaced the Commission for Racial Equality, the Equal Opportunities Commission and the Disability Rights Commission in October 2007. It was established in the Equality Act of 2006. (http://www.equalityhumanrights.com/our-job accessed 01/03/2010)

failed (Finney and Simpson, 2009). The inadequacy of multiculturalism for dealing with such problems and the criticism it has received appears to create a space for community cohesion.

The practical justifications for the move away from multiculturalism within policy are also reflected in a number of academic criticisms of multiculturalism as a concept. In particular, Joppke (2004) identified criticisms regarding 'cultural recognition' from Barry as early as 2001, arguing that cultures have 'propositional content' and therefore values of right and wrong that cannot be mutually confirmed.   Further, he suggests that in attributing equal value to all cultures, multiculturalism destroys the notion of value (Joppke, 2000:69).

The impact on policy is that otherwise political debates become cultural battles (Malik. 2002) as the focus is no longer upon structural inequalities but on valuing difference.   Finally, the notion of the lived experience of diversity in contrast with multiculturalism within social institutions is critiqued (Kundnani, 2002, Malik, 2002, Pilkington, 2008, Phillips, 2004). Institutionalising the concept means that the lived experience of diversity is obscured by 'celebrations' of cultural difference and inequalities are hidden behind the perceived need for political correctness. Community cohesion appears to offer a positive opportunity for individuals currently marginalised by their membership of multiple communities. The 'shared values' available through or promoted by the cohesion agenda may provide a structure for the identities of such people. Thus the development of the community cohesion agenda provided a solution to the heavy critiques of multiculturalism as a response to physical and social conflict and as a means of tackling social and economic disadvantage and inequalities.

The Current Policy Framework

As discussed above, the current policy framework associated with residential segregation is twofold. This section outlines the key features of strategies to combat economic inequalities and that of community cohesion.

Community cohesion

Community cohesion policy was originally located within the Home Office, under the direction of David Blunkett. Community cohesion policy and related programmes fall within the Department for Communities and Local Government (CLG), which brings together spatial, social, economic, and community policies. Social policy has increasingly been developed in terms of linking the dimensions of place, disadvantage and communities together, in recognition of the relationships between them. The cohesion agenda is thus situated within a number of related strategies. Policy discourse in this area both emphasises and brings together place, economic inequalities and community.

Deprivation and the National Strategy for Neighbourhood Renewal

Chapter Two examined some of the evidence of spatial inequalities and non-ethnic segregation and found concerns about the effects of place on the outcomes of individual households. There is a strong and growing local emphasis to many of the policies that have been developed to tackle these concerns. Among them is Neighbourhood Renewal, for which an important focus is deprivation and which targets geographical areas in which deprivation is concentrated (Social Exclusion Unit, 2001). This encompasses a number of strategies for tackling the most disadvantaged places. The overarching purpose of locality-based initiatives

captures both the economic and social dimensions in trying to help local people to 'create strong, attractive and economically thriving communities and neighbourhoods'. (CLG 2006). Along with other area based programmes, such as New Deal for Communities, Health Action Zones and Education Action Zones, these policy approaches operate on the understanding that overall socioeconomic conditions in different places affect the success of individual households.

Place-based initiatives have been a key feature of policy implementation since the 1970s but developed in scale under the Conservative Major government (including the Single Regeneration Budget) and subsequently New Labour. Key examples of early place-based schemes include the Priority Estates of the 1980s in which housing services were decentralised and intensified in problematic neighbourhoods. The rationale for area targeting is that some areas suffer greater deprivation than others and that such problems are exacerbated when they exist alongside others. They are primarily short-term strategies (Ball and Maginn, 2004) and enable the spatial targeting of resources where deprivation indices have shown them to be most needed.

Under the New Labour administration from 1997 there was an increase in place-based interventions (Smith, 1999). New Deal for Communities (NDC) was an early example, in operation between 1998 and 2008 and forming part of the National Strategy for Neighbourhood Renewal (NSNR). All NDC areas are also in the eighty-eight most deprived local authorities and are predominantly social housing areas. The focus of NDC is on inequalities and reducing the gap between the poorest areas and other local authorities, rather than on the most deprived individuals. At the end of the NDC period, it was claimed that such place-based policies were more effective than people-based ones alone (CLG, 2008). The NSNR (2001-2008) is perhaps the key place-based strategy of place-based regeneration, although the

emphasis was slightly more towards mainstreaming innovations than new projects alone, in particular in terms of skewing local services to where needs are greatest. Floor targets focused on inequality and difference rather than a threshold poverty line and strove to narrow the gap between the national average across a range of indicators and those areas in the lowest quintile. The National Strategy for Neighbourhood Renewal was replaced by the Working Neighbourhoods Fund in 2008, re-focusing on worklessness.

However, there is no clear cut case for area-based targeting. It can lead to unequal treatment for people in similar situations and so is unfair. Although the spatial distribution of poor individuals is uneven, the majority of people living in poverty do not live in deprived areas. Further, area strategies to tackle economic inequalities can have a detrimental effect on social relations, as the reports into the 2001 disturbances recognised, since targeting certain neighbourhoods before others can have a political impact (Cantle, 2002, Ouseley, 2001).   In practice, the regeneration of certain neighbourhoods, especially when associated with gentrification, can have the effect of displacing the problem elsewhere, creating an illusion of improvement. Finally, many socio-economic problems are generated at the national level and need to be treated as such; tackling them at the neighbourhood level may simply be dealing with the symptoms of structural inequalities.

It should also be noted that the empirical basis for ABIs is not comprehensive as neighbourhood effects on educational and employment outcomes are contested (Atkinson and Kintrea, 2003; see also Ball and Maginn, 2004). Further, the difficulties in quantifying neighbourhood effects make it difficult for policy interventions to be evidence-based (Ball and Maginn, 2004), especially to the degree to which they dominate regeneration policy. The dependence upon

partnership working and 'joined up' policies may not always be as successful as it could be, nor be supported by economic and political theory about the processes involved (Ball and Maginn, 2004: 757).

In practice, ABIs present their own challenges with regard to the diversity of neighbourhood populations. They are a means to ensure that initiatives access the people they intend to target by connecting national programmes with local implementation, yet this may not achieve the level or scale necessary to make a sustainable difference. The reality of operations in area-based initiatives does not always meet the objectives and intentions. Whilst the SRB was credited with improving partnership working, its effects on social inequalities have not been demonstrated (Kintrea, 2007). Place-based strategies cannot function through the actions of a small minority of residents or businesses, as neighbourhood effects are such that improvements need to be made by everyone in order to attract commerce or income. The broader structures through which initiatives operate have also had limited impact. Local Strategic Partnerships (LSPs) have played a central role in the functioning of poverty-focused initiatives but there is evidence that their collaborative role has not always been as successful as hoped (Communities and Local Government, 2007).

It is relatively clear how community cohesion ties in with regeneration through guidance to local strategic partnerships (LSPs) that are expected to encourage the involvement of local organisations and residents in solving deprivation. All area-based initiatives must be assessed against social cohesion advice, in particular in relation to the types of communities perceived to be targeted by specific initiatives. The structures of communities, disadvantage and regeneration policies are thus bound together by the concept of 'place'. Programmes such as the National Strategy for Neighbourhood Renewal (NSNR) have acknowledged and sustain the

relationship between place and the economic or social success of individuals. The NSNR brings together the concept of social disadvantage across employment, health, education, the environment and housing and the concept of 'deprived neighbourhoods', using organisational structures such as LSPs. The conceptual dimension of policies has also adopted a spatial quality regarding public involvement, with initiatives such as Community Empowerment[4] reinforcing the association between locality and community. The availability and structure of information resources also seem to maintain this spatial dimension, with the Indices of Multiple Deprivation providing information on localities and framing deprivation strongly in spatial terms, and recently established resources such as the Geography Publishing Services and 'Places Community' focuses on place as the basis for defining cases for data provision. Finally, the Sustainable Communities Plan (2003) addresses the physical and environmental aspects of locality, with an emphasis on local participation and empowerment of communities (ODPM, 2005).

As it often adopts a bottom-up approach, area-regeneration is intentionally dependent on the involvement of the communities in question. The input of local communities is used to identify priorities and appropriate methods to meet these challenges. Much of this is based on the idea of strengthening social capital, with the focus on bonding social capital (Putnam, 2007). This might be regarded as inward-looking, and neglecting the importance of bridging social capital, or relations across communities.

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[4] The Community Empowerment initiative (2007) aims to move greater decision-making power to local communities to ensure that services are appropriate to local priorities. Involving local people in local developments became a statutory duty in April 2009.

Ethnicity as a key feature of community cohesion

There appears to be some conflict within the policy discourse with regard to the degree to which ethnicity features. Although the social divisions identified by community cohesion discourse are not limited to race and faith, these take a central position in the policy. The Race, Cohesion and Faiths Directorate within the CLG uses these dimensions as the focus for reducing inequality and increasing a 'sense of belonging'. Local Government Association guidance places an explicit emphasis upon race and faith as the prevailing issues that local authorities have to face. Further, race and ethnicity feature in the operationalisation of the agenda. Despite the discussion around disadvantage and marginalised groups, throughout the guidance (LGA, 2002), the duty to promote race equality is a key feature of the guidance. Further, the Race Relations (Amendment) Act 2000 (RR(A)A, 2000) which is proposed as a management tool for the delivery of community cohesion.

In other parts of the discourse, ethnicity features as just one dimension of a number of features. It has been acknowledged that ethnicity and faith have been important in fuelling or creating tensions but it is apparent that such concerns can easily be applied to other social or community divisions (CIC, 2007). This highlights a contrast between community cohesion policy and its predecessor, multiculturalism. Multiculturalism had a particular interest in the cultural dimension of ethnic difference. In contrast, although community cohesion has its origins in ethnicity, the discourse is at pains to emphasise community divisions that exist along non-ethnic lines. Within community cohesion discourse, diversity is not defined in purely ethnic, gender and sexuality terms but also in terms of age, class and religion.

Although ethnicity is a feature of concerns around economic inequalities, in community cohesion the interest is in issues of cultural identity. It appears that these are perceived as correlating with ethnic categories, and ethnic difference is translated into cultural or moral difference. Concerns with ethnicity have previously been focussed on the multiple or confused identities of second and third generation 'immigrants'. It has been recognised that young minority ethnic people often struggle to identify with clearly defined cultural or ethnic communities in the way that their parents may have been able. They are subject to contrasting and sometimes irreconcilable pressures from different cultures. Multiculturalism emphasises and reinforces cultural difference, thus perpetuating conflict of identity for 'trans-cultural' or 'trans-ethnic' individuals. This presents problems for community cohesion discourse. The move away from a multiculturalist discourse means that difference and diversity is now presented as problematic (Kalra and Kapoor, 2008).

Place and 'place-shaping'

Through an association with the creation of shared place-based identities, 'place-shaping' is now a key phrase within discourses of community cohesion (Lyons, 2006). The initial reports into the 2001 disturbances addressed the concept of segregation at length but did not regard the segregation of housing or education as problematic in themselves, only as individual elements of multi-faceted separation. In order to promote positive relations, they suggested that more segregated communities should be balanced by action that fosters greater understanding in local areas. This appears to suggest that community cohesion is conceptualised at the neighbourhood level as a feature of 'place'. The emphasis on the concept of

'neighbourhood' was based on the assumption of a relationship between place and cohesive communities that had shared experiences because they shared space.

The importance of place to this thesis is, in part, related to concerns around spatial inequalities and the policy response to these. The integration of concerns around space, place, disadvantage and community relations, and findings from the Cantle and Ouseley reports of 2002, suggest a strong relationship between community relations and residential segregation. There was further evidence for attributing some of the social divisions and tensions to greater levels of residential segregation. Segregation is believed to increase the risk of ghettoisation, to reduce social cohesion and social mobility, to limit role models and expectations for young people and to increase racism and levels of crime (OPM, 2005).

However, in the latter half of 2007, the emphasis moved away from residential segregation as a direct cause of community divisions. The 2007 report *Our Shared Future* marked a move away from residential segregation as a widespread problem towards the concept of 'parallel lives' (CIC, 2007), emphasising the role of multi-faceted separation. The CLG stated that it no longer considered residential segregation to be problematic in itself (Kelly, 2006). Initiatives to tackle disadvantage have re-focused on the factors with which high segregation may be associated, especially a separation between ethnic groups in community activities and experiences such as schooling and recreation, rather than on any intention to 'de-segregate' residential patterns.

The education system, especially schools, was identified as a key focus for the development and building of community cohesion within the IRT report in 2001. The report identified education as key to the development of 'citizenship' that has a 'clear primary loyalty to this Nation' (IRT, 2001). The Oldham report (Ouseley,

2001) suggested that the local multiracial college is stronger because it facilitates the 'shifting of perceptions' about other groups. Schools are one locus where meaningful cross community contact can exist but spatial separation often leads to educational separation. The Select Committee report 6 (2004 on education emphasises the importance of schools to reaching cohesion goals: *'Schools provide an opportunity for different cultural groups to mix or at least for young people to gain the benefit of an awareness and understanding of different communities living in their areas and in the wider world.'* (2004: para 49. Other strategic aims capture the aims of the community cohesion agenda, with a focus on cultural diversity, mutual understanding, and common values. The focus is on developing understandings of other groups. Thus the focus of the strategic aims is both inequalities and community relations but the guidelines themselves attend almost uniquely to access and equalities targets, in particular in the representation of local groups and communities (Home Office, 2004). This is not a significant interest in cross community relations or on building and reinforcing bridging social capital between groups of pupils or their communities outside of schools.

It is explicit in this document that mono-cultural schools do not promote social cohesion (2004: para 60). The significance awarded to education can be observed in the rebuilding of new schools in new areas in order to reduce segregation. From 2004 schools were subject to community cohesion standards published by the Home Office (2004). Since 2006 schools have had a duty to promote community cohesion (Education and Inspections Act, 2006, guidance published July2007). One tool promoted is the Schools Linking Network which enables schools with concentrations of certain ethnicities or social groups to work with schools with different pupil compositions (Schools Linking Network, 2010)

This report places responsibility for schools that do not reflect the diversity of their geographical area on the parental choice, school quality (and perceived quality) and

the growth of faith schools (2004: para 61. Further, parents will choose to send their children to schools (often faith schools) that will promote their own cultural values and norms. Although schools provide an opportunity for greater contact between different groups and for this to be on a day-to-day basis, evidence that such contact persists outside of this context is not extensive.

Community cohesion standards are, in part, focussed on reducing inequalities and the language employed in the schools guidance makes this explicit. The first strategic aim of the standards is to 'Close the attainment and achievement gap' and goes on to describe objectives relating to equal opportunities for staff and students (Home Office 2004). There is conflict in the policy of encouraging faith schools (Education White Paper, 2001) whilst concurrently attempting to promote social cohesion by encouraging mixing within these. It is suggested that evidence from the Northern Ireland contexts indicates that faith schools do not contribute to social cohesion.

Operationalisation and Governance

This section explains the way in which the community cohesion agenda is operationalised in policy and the key processes of its implementation, including the role of partnerships in the operation of the cohesion agenda and the key organisations working to develop the concept and practice of the policy. In order to understand the agenda and its structures, the main strategy documents are analysed and in a reflection of the multi-faceted nature of the community cohesion agenda, some of the themes through which it is implemented are discussed.

Partnerships

Partnerships are recommended between institutions such as the police authority and local youth workers, racial harassment agencies and housing panels (www.renewal.net). The integration of most or all areas of cohesion and regeneration is central to the strategy and, in many cases, is expected to take the form of partnership working. The potential for housing and law enforcement agencies to work together is considered significant and could have a positive impact on the reduction of tensions. Advice relating to policing community cohesion suggests that partnership working is key (www.renewal.net). The police and criminal justice systems are encouraged to play a role in the interaction between regeneration and Neighbourhood Renewal projects and their work should be closely structured by the Race Equality Scheme. Thus the work of many if not all elements of community and public services bodies is tightly woven together to support community cohesion. LGA guidance also highlights the need for partnership at the local level to integrate cohesion within the Community Strategy[5]. LSPs in the eighty-eight most deprived areas were allocated NSNR status to assist in narrowing the gap in key indicators and were required to have a Local Neighbourhood Renewal Strategy (LNRS) implemented through the Local Strategic Partnership. It was increasingly recognised during the lifetime of the NRS that although the strategy was targeted on deprived neighbourhoods, without improved outcomes for BME groups it would be impossible for the strategy to meet its targets of narrowing gaps in key employment, education and health outcomes (Blackman, 2006).

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[5] The 'Community Strategy' was established in Part I of the Local Government Act of 2000. Local authorities (including county councils, district councils, Metropolitan District Councils and Unitary District Councils) and London Borough Councils have a duty to prepare community strategies that promote or improve the social, economic or environmental well-being of the area. They should also 'aim to enhance the quality of life of local communities and contribute to the achievement of sustainable development in the UK' (DCLG, 2002). This part of the Act came into force on 1st October 2000.

Development Bodies

Among the government and not-for profit bodies developing the policy and practice of community cohesion are the Institute for Community Cohesion (iCoCo) and the Commission for Integration and Cohesion (CIC). The Institute for Community Cohesion (iCoCo) was established in 2005 and designed to work in the fields of diversity, ethnicity and multiculturalism and to develop evidence-based practice in community interactions. The purpose of the CIC was to examine how local organisations and local government can serve and benefit from their diverse communities. The Commission's final report, published in June 2007, emphasised the need to recognise and build on shared community characteristics rather than differences (CIC, 2007).

At the outset, one of the aims of the Commission was to '[examine] the issues that raise tensions between different groups in different areas, and that lead to segregation and conflict' (CIC, 2007: 17). An explicit association was thus made between spatial separation and negative social phenomena. However, this description of the relationship is in conflict with the perceptions that developed from the original Cantle report, referring to segregation as a *product* rather than a cause of social tensions.

Spatial integration has historically been a feature of housing and social policy althoughhousing policy throughout recent history of both leading political parties has been described as suffering from 'short-termism' (Williams, 1997). This has taken the form of proactive measures to encourage the movement of groups to non-traditional areas and of preventative legislation to reduce the impact of institutional and informal prejudice. Housing has historically been used as a tool to influence both economic and social outcomes and this has been developed under the New Labour government. Policy relating to residential segregation in the UK

has developed over time but retains some features of the post-war period. Across Europe, there is variation in approaches to the residential patterns of ethnic groups.

In social policy around housing since the 1960s, segregation has been present as a specific facet of wider discourse on race but strategies to combat this have changed over time. During the post-war period there was little prospect of extensive investment in the private rental sector but socially mixed neighbourhoods were already an objective (Goodchild and Cole, 2001). In 1957 access to the private rented sector was affected by deregulation discouraging the exit of landlords from the sector. The post war period also saw clearances and demolition in some urban areas. This was partly an attempt to integrate very poor communities and to disperse concentrations of poverty and poor quality housing that were found in inner city areas. In the following decade the White paper of 1965 welcomed the growth of home ownership (Malpass, 2007). In the 1970s the policy solution was the dispersal of black tenants in a similar way to that seen in the United States such as the Moving to Opportunity Programme (Kalra and Kapoor, 2009).

Policy discourse of the 1970s onwards focused on the regeneration of 'communities' as a means to (Raco and Imrie, 2003).   By this decade the role of local councils in the management of social housing had reduced. Further, the relative role of social housing as a sector itself had weakened and the government policy approach during this period assumed that the social rented sector would eventually be residualised (Harloe, 1977 and Murie, 1977). As such, it is argued that the UK is now seeing a crisis of the social housing sector (Malpass, 2007) with social housing becoming the tenure of the very poor only. However, such residualisation had already begun before this point withindirect consequences for residential segregation. Social housing has more recently had localised variation in policy approaches within the UK, for example, in Birmingham has adopted quota

systems aimed at preventing increases in minority presence in areas already home to high concentrations (Bolt, 2004). This indicates as interventionist approach through existing management tools. In contrast, other housing providers have begun strategies of creating 'settlement nodes' or clusters of certain communities, in areas outside traditional concentrations. However, there have been changes in the nature of housing associations and BME housing now represents 1.5% of all housing association activity.

In more recent years, attempts have been made to combine housing management and renewal strategies, for example, the Mixed Communities Initiative (in place since January 2005) adopts an area-based approach to tackling disadvantage. This strategy actively seeks to encourage the physical integration of households of different incomes and tenure types through the mixing of affordable private and social housing in the same neighbourhoods. More recently, the Sustainable Communities Act (2007) has aimed at the development of neighbourhoods that are 'thriving, vibrant and sustainable' (ref). The approach is based on the principle that local residents have the best understanding of requirements in the area and thus have a key role in their development (ref).

Change in the perceived reasons for residential patterns has affected housing policy, especially with regard to race and ethnicity. Public policy discourse on housing, segregation has been present as a specific facet of wider discourse on race since the 1960s (Kalra and Kapoor, 2009). During the 1990s ethnic segregation did not receive housing policy attention. The discourse of the past decade has been one of perceived self-segregation of (minority) groups. Due to the relationship between tenure type and ethnic group, tenure diversification is an indirect means of limiting the effects of ethnic separation. Thus, in a response to super diversity and evidence of (apparent) cultural conflicts, there has been a new focus upon assimilation in place of multiculturalism. Community cohesion captures the policy

move from an emphasis on cultural diversity to one closer to assimilationist stances (Bolt et al, 2009). This conflicts with attempt to combat racial inequality (Robinson, 2005) over the past decade. The policy response to ethnic polarisation has been to attempt to engineer residentially mixed neighbourhoods. However, a concurrent emphasis on Choice Based Lettings (CBL) appears to contradict this and presents a different approach in the social housing sector to that in the private sector. The Hills report provided a re-evaluation of social housing in the current housing market.

Themes of the Community Cohesion Agenda

This section presents some of the themes through which community cohesion policy manages inter-community relations. The policy has several dimensions, many of which have their foundations in the reports on the northern disturbances and in subsequent research into segregation and social exclusion. That they also reflect the dimensions of processes of segregation sustains the dynamic between the two. The Cantle report emphasised the preventative and causative role of housing in the fragmentation of communities and also the role of the perceptions and strategies of those involved in the criminal justice system in creating and resolving neighbourhood tensions. In addition, reviews suggested that cultural understanding could be tackled through initiatives such as sports projects, offering a number of examples of successful practice in bringing ethnic groups together through these activities.

The relationship between disadvantage, particularly unequal disadvantage and neighbourhood tensions, was raised by several of the 2001 reports. This included the function of regeneration programmes in fuelling tensions and the potential for re-evaluating their ways of working in order to prevent it.

This section considers the role of each of these aspects to the strategy.

Housing

Housing policy and practice was identified as a key influence in creating physical and social divisions within and between neighbourhoods and there is much reference to the role of housing agencies in promoting community cohesion and in partnership roles. *Housing and Community Cohesion: the contribution of NDC Pathfinders Research Report* explicitly recognises housing and regeneration as key themes. New Deal Communities (NDCs) were engaged with the delivery of a range of housing programmes, although the report finds little evidence that cohesion as an outcome was considered during the design and implementation of housing activities, and NDCs were not major players in local cohesion partnerships. It recognised that refurbishment of the housing stock can open up the constrained housing choices of traditionally disadvantaged groups. Further, tenancy management and support was argued as vital to the promotion of community cohesion.

Housing is an important feature of all of the four dimensions with which this thesis is concerned: segregation; ethnicity; disadvantage; and community relations. Historical changes to access through policy and economics have had an impact on the ethnic shape of housing tenures in England. An emphasis on the development of the owner-occupier tenure under the Conservative Party led to a doubling of owner-occupied dwellings, fundamentally changing inequalities associated with housing, especially by polarising the social rented sector (Lash and Urry, 1987:102). Although changing, tenure differences between ethnic groups remain significant with distinctions more complex than the white-BME dichotomy. Owner-occupation exhibits particularly complex patterns with similarities between Indian (the group

most likely to be found in this tenure) Pakistani (70% of households live in owner-occupation) and white populations in contrast to very low ownership amongst black African households (CIH, 2008). This latter group (together with black Caribbean households) are more likely to be found in the social rented sector. Despite similarities in socio-economic status, expected similarities between Pakistani and Bangladeshi tenure choices are not exhibited. Bangladeshi communities are more likely to be found in social housing (50% of Bangladeshi households live in this sector) than their Pakistani counterparts CIH, 2008). It is possible that this is a product of the period of arrival for these different ethnic communities. The arrival of many Bangladeshi household coincided with overall difficulty in accessing the housing market and easier access to social housing in comparison with conditions during the arrival of Pakistani immigrants in the 1960s. These tenure difference themselves are likely to be related to labour-market differences (Markkalen et al, 2008). The geographical patterns in variation in access to owner-occupation (predominantly suburban rather than inner-city) as well as the ethnic dimension, has had long term effects upon both spatial arrangements and cross-community interactions. Similarly, council estates in the inner cities and the outer edges of cities concentrated deprivation (Lash and Urry, 1987: 102). Regeneration policy developed an interest in housing patterns as a result of an increase in area based initiatives and neighbourhood based funding, in which virtually all social housing areas became 'deprived neighbourhoods'.

Policing and the criminal justice system

'By seeking to improve and build relationships and enable different sections of the community to work together to achieve common goals, the police have a central role in the promotion of community cohesion' (*Community Cohesion: the police*, www.renewal.net). As this quote illustrates, community cohesion is a policy

seeking to manage diverse populations and there is thus a role for the criminal justice system. Strained relations between the police force and BME communities were acknowledged prior to and during the 'colour blind' approach taken throughout the 1990s. Most recently, the level of tension was brought to the fore with the 1999 investigation into the murder of Stephen Lawrence and, for some, inappropriate and discriminatory policing was partially to blame for the 2001 disturbances. The Cantle report specifically found that in the areas not disturbed in 2001, the role of the police was one of strong engagement.

An appropriate policing strategy and personal relationships with all elements of a community are therefore considered key to the promotion of sustainable cohesive communities. Guidance for authorities from www.renewal.net suggests a range of measures that can be taken to forge closer links between local forces and their communities. The National Policing Plan recognises that the 'promotion of Community Cohesion should be central to the work of the police' and, as such, it is advised that police forces actively seek to improve relations with disaffected groups in particular in order to dissolve distrust and suspicion both within communities and between the force and the community.

The advice takes a step away from the 'colour blind' policing of previous years and focuses on the notion of difference. It is recommended that forces acknowledge that differing communities may perceive incidents in different ways and that it is the responsibility of the local police force to change these attitudes. Sensitivity to tensions that may develop within a community can be to the result of expectations of what constitutes a 'low level of crime' and the resulting response from the police. If they are judged to have responded inappropriately, this perception may aggravate tension and disorder. Like local authorities, Community Support Officers are advised to focus on communication and the development of understanding of

general perceptions and specific current levels of tension between gangs, ethnic groups, schools and cultural groups. Like local authorities, there is an emphasis on the police measurement and monitoring of outcomes, such as neighbourhood tensions. Indicators of such tensions are given as: a rise in racist attacks; a rise in racist graffiti; rise in racist activity on the internet; or the rise in the activities of the far right. The police need to liaise closely with other agencies. Again, the focus on race illustrates the importance of ethnicity and equality to the policy.

Sporting and cultural initiatives

In addition to the practicalities of housing, policing and education, there is a role for leisure in the promotion of community cohesion. Sports and cultural activities are both suggested as opportunities to promote positive interaction between different communities, particularly for children and young people. Guidance documents describe a number of successful case studies. Sports based initiatives are considered important in bringing together different groups and for highlighting similarities rather than differences. In one example, sport is valued as a vehicle for developing personal, social and cultural skills. The aim of the project Sports Participation and Cultural Diversity (SPACE) was to minimise social inequality and promote cultural equality and was contextualised in the high social inequalities found within BME concentrated wards such as tensions in communities and with the police, a lack of motivation in young people and no community ownership. The last aspect is particularly interesting, as it illustrates the need for cohesion promotion not only to be supported by but also created by those in the communities themselves rather than national or even local authorities.

Strategy Documents

This section discusses the implementation of policy (good practice) and those with the responsibility for its promotion and implementation. Central to this discussion is the question of whether certain communities are more important to the cohesion agenda as a process or an outcome. The primary policy document, *Improving Opportunity, Strengthening Communities* was published in 2005 and is the key strategy paper outlining not only the justification for the policy but offering an overview of the proposed and envisaged agenda.

Improving Opportunity, Strengthening Communities, 2005

This paper discusses community cohesion in terms of improving opportunities for disadvantaged and BME groups. The focus for the three years following publication is to embed the promotion of cohesion through the assessment of public bodies' progress and a closer partnership between the CRE and the public sector inspectorates. This dual approach reflects two of the key aspects of policy implementation discussed below: the role of local authorities and of partnerships. The policy also includes legislation against discrimination in the provision of goods, services and facilities on the grounds of religion or belief. This fresh approach to faiths is reflective of the importance of cultural rather than racial difference and equality in communities. The establishment of a new Commission for Equality and Human Rights is also highlighted as a key tool.

It is important to note the particular focus on service providers (in the form of local authorities, and public and private sector groups) as fundamental to the promotion of cohesion. Although it is made clear that the alleged fracturing of society is the result of a complex set of factors, it is also apparent that a large element of responsibility is placed on these bodies and their operating systems.

The ODPM Report on Social Cohesion, published in 2004, proposed a significant number of recommendations. These recommendations and the Government's response demonstrate its key objectives and illustrate the devolved approach to implementation. Perhaps key to an understanding of the policy is Recommendation Five: 'all decisions should assess the impact on social cohesion'. This not only highlights the importance of mainstreaming cohesion but supports the proposed devolution of policy implementation. That is to say that it is every decision made by local authorities which should be accountable for the positive or negative impact upon cohesion in their particular area. Responsibility for implementation is discussed in Recommendation 1, which requests examples of how the government will create the context for cohesion to flourish. Examples of such programmes include: the Pathfinders Programme; the Neighbourhood Renewal Fund; and Anti-Social Behaviour Initiatives. Of particular interest is the inclusion of community cohesion criteria for local government in the Comprehensive Performance Assessment of 2005. The emphasis on local authorities lies in Recommendation Two, the need to clarify what race equality strategies should comprise, because of the danger that new initiatives would be poorly coordinated and fragmented. It was therefore recommended that local authorities be given overall responsibility.

The government response made a point of reinforcing that community cohesion is not only concerned with racial equality but that it is important to achieving cohesion. Specifically, authorities should produce a Race Equality Scheme (RES) that should clearly outline where race equality is relevant to the functions of that public body. The CRE has also published non-statutory guidance and has responsibility for enforcing the RR(A)A. It is made clear that local authorities

should not be pandering to sectarianism, (Recommendation Three) despite the persistent references to the RR(A)A and racial equality requirements. Achieving a balance between the two will be a major challenge for local government bodies. The Community Strategy is considered central to the promotion of Community Cohesion.

LGA Community Cohesion Action Guide, 2004

The framework for implementation of the Community Cohesion Strategy was initially laid out in the action guide published by the LGA for its members in 2004. Again, the nature of the guide reinforces the onus placed on local authorities for the implementation and promotion of cohesion. Local leaders are required to drive cohesion, through embedding and mainstreaming in all public services. As in other documents, specialist cohesion projects are expected to exist, but it is made explicit that these should not be the focus of cohesion implementation.

Paramount to cohesion implementation is the creation of a 'vision' and extensive advice for achieving this is offered by all LGA guidance documents. In particular, it is advised that a local vision should always be rooted in the values and ideas which local people understand. Further, authorities are advised to encourage local communities to take responsibility for the vision, especially those not normally involved in such processes and decisions. For example, engagement should be sought from groups such as travellers, asylum seekers, refuges, young people, gypsies etc. This promotion of engagement of and interaction with marginalised groups features highly in all government documents and may reflect the need to identify shared values and the notion of equality central to successful cohesion. For example, the paper states that 'Mutual respect and equality or opportunity between different groups, faiths, cultures and ages should be one of the

fundamental tenets of civic and social behaviour and working to achieve this is one of the hallmarks of an enlightened and mature society'. Further, 'Disadvantage in all its forms represents the principle barrier to community cohesion, especially when it is experienced more by one group than another. Overcoming disadvantage is therefore a fundamental goal of the network and its members.'

There are a number of other good practice guides published by agencies, such as the Local Government Association and the Commission for Racial Equality. (These include: *Building Community Cohesion into Area Based Initiatives; Community Cohesion Action Guide; Working together: co-operation between government and faith communities; Working Together: LGA Guidance on Community Cohesion; Leading Cohesive Communities; Progress Report; Community Cohesion from www.renewal.net; Seven Steps to Community Cohesion; Developing a Community Cohesion Baseline*). However, the content, approach and terminology employed in these papers reflect that of the documents discussed above and do not add anything new to this analysis, so they have not been included in full here.

Promotion and implementation of policy

This chapter has highlighted the realms of policy and society in which community cohesion is integrated both conceptually and practically. The practical process of implementing community cohesion and achieving specific outcomes adds another layer to its structures. It is anticipated that the promotion and implementation of the agenda would take place through conflict resolution, partnerships, mainstreaming, thematic projects and performance indicators. The partners and bodies identified as particularly important to implementation of the agenda reflect its dimensions and illustrate the multiple facets of the policy and the extent to which it is entwined with numerous other strategies.

Conflict resolution is considered crucial to the development of community cohesion and the Neighbourhood Renewal Unit sought to make both cohesion and conflict resolution mainstream across neighbourhood renewal. In fact, mainstreaming was considered important to all aspects of community cohesion, such as this statement for the police: 'Forces should look to embed good practice for promoting community cohesion into all aspects of their work.'(www.renewal.net). The emphasis is not on individual and specific community cohesion projects, rather on making cohesion part of everything that is done. Strategy and guidance documents emphasise the development of thematic programmes rather than area-based programmes, although there is discussion elsewhere of the potential to develop cohesion within ABIs despite the acknowledgement that geographically-focused programmes may be partially responsible for rising tensions. The onus for implementation is on local authorities and their partners regarding strategy decisions. However, the joint devolvement of implementation and the (conceptually necessary) locally-specific nature of appropriate cohesion practice mean that precise understandings of shared values and identities are elusive.

Challenges and critiques

Community Cohesion Policy is the subject of a number of criticisms, in particular from Robinson (2005) and Kalra and Kapoor (2008). This section discusses a number of issues that are linked with community cohesion and the potential problems which may arise from the agenda. Concerns include how we identify shared values that can endure rapid population and socioeconomic changes, the management and labelling of multiple identities, overcoming structural inequalities and balancing the conflicting needs of multiple communities in a super-diverse population.

With a focus on the evidence base and legitimacy of the policy, the key critique of the early years of the community cohesion agenda came from Robinson (2005). He argued that the evidence-based narrative denies the conceptual complexities and contested interpretations of notions such as 'community' and 'multiculturalism'. In addition, he disputes the emphasis on housing which the report into the situation in Oldham identified too simply as a cause and a cure for segregation. Robinson refers to Forrest and Kearns' discussion of an element that is fundamental to cohesion: tensions can still exist between socially cohesive neighbourhoods. This again raises the confusion between the notions of social cohesion and community cohesion: 'There may be within some neighbourhoods the social cohesion of restrictive covenants and withdrawal from and defence against the world' (Forrest and Kearns, 2000:1013). It is suggested that the stronger these ties become, the greater the conflict between them with the result being possibly socially cohesive but increasingly divided neighbourhoods (Forest and Kearns, 2000).

Segregation is also problematised in some of the policy discourse as producing communities that assert moral commitments considered to be at odds with the dominant moral order. This in turn problematises community cohesion with its emphasis on shared values and concept of citizenship, presenting the second difficulty with the narrative of community cohesion. Robinson suggests that the events of 2001 prompted a shift in New Labour policy with a return to the assimilationist language of the 1960s, with the proposed citizenship tests and oath of allegiance for new immigrants. Robinson also criticises the premising of multiculturalism on the notion of public and private domains. Diversity is tolerated under multiculturalism as long as it does not impinge on the public sphere, which is seen as an arena of neutrality and individual citizenship rather than celebrated difference. Robinson claims that too little is said about the race proclivities and

ethnic cultures of white households. He also criticises community cohesion for considering the segregation of the white population as largely unproblematic, whilst Asian populations in Bradford and Oldham are problematised for allowing identities, principles and values that lie outside the boundaries of the imagined national culture to encroach upon the public cultural domain (2005). Although the policy refers to such groups and makes it clear that it is the responsibility of all communities to integrate, the apparent relationship with requirements of new immigrants suggests that the onus appears to be on minority groups to make greater efforts. It is suggested that the cohesion agenda exaggerates ethnic differences over others and its stance in maintaining that the problem lies with minority communities is unwarranted.

Such criticisms relate to further difficulties with the role of identity within the cohesion discourse. The Cantle report identified a rise in inter-ethnic conflict based on separate identities which are claimed to be more readily reinforced by diasporic affinities (Robinson, 2005). However, it may be argued that the threat to identity is a result of community cohesion policy itself. Robinson agrees that growing diversity brings a sense of identity being at risk and under pressure, so that populations subsequently require a greater sense of nationality. However, there are dangers in a focus on ethnicity or faith rather than on the practice of building bridges through investment in education programmes (Robinson, 2005). One of the aims of the agenda is to come to terms with increasing diversity and this should not involve the dismissal of negative opinions as being racist. Within the context of identity and concerns about labelling, the individual appears absent from both conceptual and practical understandings of the agenda. This absence of recognition or discussion around the individual has implications for how individuals can attain security of identity or manage their own status within communities.

The second of the priorities of community cohesion is 'vision' and may also present some problems. The development of a community 'vision' is meant to be specific to each locality yet fit with broader notions of national identity and be created with the full engagement of all local groups, including those often marginalised. It is assumed that shared local experience can lead to common identities. However, it is also recognised that sharing experience is not sufficient if there is no shared sense of purpose for local communities (Cantle, 2002). To be sustainable, local communities need to be working towards the same social outcomes, merely living alongside each other will not serve to achieve this. One criticism is that the Cantle report failed to offer an alternative working approach to the current policy stance of multiculturalism (Robinson, 2005).

Other criticisms of cohesion relate to the relationship between community cohesion and segregation. For example, the current rationale for the perception of segregation as problematic focuses on cultural difference rather than economic inequalities. In particular, it is argued that it is Asian Muslim communities whose separation is deemed more problematic than non-white groups in general (Kalra and Kapoor, 2008). Similarly, it is also argued that the association between the community cohesion agenda and segregation has led to a movement away from a discourse that focuses on social exclusion (Kalra and Kapoor, 2008).

Conclusions

This chapter has described the context of policy on community cohesion and established the rationale for concerns about community and residential segregation. It presents evidence indicating possible relationships between disadvantage, spatial isolation and conflict between communities. One of the key issues to arise from the often confused approaches of policy is whether segregation

is itself a problem for society, either as a process or an outcome. As a process, an important question is whether we can discern any increase in segregation. As an outcome, it is important to ask whether residential segregation itself is problematic or whether the problem lies with an association between segregated communities and negative characteristics. This research explores these questions at a macro level using census data and at a more micro level in explorations of processes of segregation experienced by authorities with different spatial patterns as revealed by the census data analysis. Chapter Four addresses the methodological approach adopted for this project and considers the benefits and shortcomings of the methods for application in this context.

Chapter 4

Methodology

A number of questions have arisen from the responses to issues of diversity, deprivation and cross-community relations. The previous two chapters presented the academic and policy contexts in which this research is situated. In the context of policies on the neighbourhood regeneration and community cohesion, this research was concerned with the degree and nature of residential segregation in England. As such, it required a methodological approach that enabled and exploration of the phenomenon as both outcome and process. The previous two chapters outlined and problematised the policy approach to community cohesion and demonstrated the observed links between segregation and deprivation in both European and North American contexts. It was apparent in Chapter Two that a comprehensive understanding of the processes of residential separation and the nature of change in the degree of segregation in England between 1991 and 2001 was largely absent from existing literature. Chapter Two also established the current conceptual understandings of segregation but observed the need for a greater understanding of the processes and effects of residential segregation. The research objectives outlined in Chapter One were therefore multiple: to identify the degree to which ethnic populations residentially segregated in England and those which ethnic communities that are more spatially isolated than others; to identify at what spatial scale residential segregation is present and whether the experiences and perceptions of members of the community reflect the measurement of segregation; to identify the processes of residential segregation and how we can explain variation in segregation outcomes; it aims to establish whether, if 'neighbourhood effects' exist, they are perpetuated by ethnic segregation; to establish whether it is appropriate to problematise segregation and whether more (or less) isolated communities are socioeconomically disadvantaged by their situation: is spatial diversity or isolation 'equal' or are some communities at an advantage?

It goes on to ask whether the community cohesion agenda is a necessary response to current residential patterns and processes and if local descriptions suggest that concentrations of ethnic groups have a negative effect on community interactions; finally, in terms of policy, it discusses if ABIs a necessary response to current residential patterns and processes and, specifically with regard to area-targeting in regeneration interventions and the recognition of structural inequalities, do neighbourhood communities also represent ethnic communities?   Attempts are also made to explore the associations between factors and the features of segregation processes. Thus the purpose of the research was not only to establish the calculated and perceived levels of segregation but also to explore the multiple dimensions of the characteristics with which high segregation is associated. Establishing the scale of segregation at the national level demanded quantitative methods whilst accessing the experience of segregation required a qualitative approach. Although both quantitative and qualitative methods individually offer the opportunity to explore the level and nature of segregation, it is the comparison of these narratives which has the potential to provide a more comprehensive understanding. Thus a key challenge was to identify a methodological strategy that could capture both measured and perceived segregation. Further, the nature of the research questions was such that they required exploration within both the national and local contexts and at different geographical scales.

Traditional associations between methods and epistemology are not deemed problematic as the measurement of patterns and the subjective experiences of participants offer informative narratives of the different dimensions of the phenomenon. These differing accounts may be mutually reinforcing or explanatory.   For these reasons this study adopted a sequential mixed methods research strategy in which a quantitative exploration at the national level provided a comparable measurement of segregation within local authorities and a picture of

the key associations between segregation level and socio-economic characteristics. Firstly, a calculation of dissimilarity in order to establish the degree of residential segregation between white and black and minority ethnic (hereafter 'BME') residents in a sample of local authorities in 1991 and in 2001. Using cluster analysis, the research sought to address the aims relating to the socio-economic or demographic characteristics with which variation in segregation was associated. This aimed to identify similarities between cases. Research aims relating to the spatial scale of segregation and the possible causes of segregation were discussed by multiple regression analysis to establish which socio-economic variables had a direct effect on the segregation outcomes of authorities. The dependent, or outcome variable was the segregation score at the local authority level and the predictors entered were scale variables that indicated the percentage of each characteristic found in each authority. Findings from the cluster analysis provided some theoretical guidance for entry of predictors into regression and a number of models were identified. All quantitative findings are presented in Chapter five. The fourth set of aims set out in chapter 1 related to local perceptions of segregation. Thus, the subsequent qualitative phase adopted a case study approach which explored and developed the key findings of the national picture by creating a narrative of segregation processes in three localities. In this phase, data was collected using interviews with individuals from each authority. Participants' perceptions of the segregation in their authority were identified and are presented in Chapter Six and are compared and contrasted with the degree of segregation calculated quantitatively in Chapter Five. Participants' understandings of the processes and effects of segregation were then analysed and are discussed in Chapter Seven. A justification for such an approach using the available literature is provided in this chapter.

The purpose of this chapter is to enhance understanding of the statistical processes involved in this research and to provide details of key methodological decisions made during data collection and analysis.

This chapter aims to explain the rationale for the selection of the overall research strategy and individual methods and to address any challenges associated with the methodological approach, measurement and methods employed. The chapter begins with a comparative discussion of quantitative and qualitative research methods and the traditional and contemporary relationships between these methods and their epistemological stances. With reference to the literature, the first section explains the rationale for the use of mixed methods and how this combination is suited to the research aims. There follows a summary of the methods employed and the interactions of quantitative and qualitative methods. The subsequent section describes the quantitative element of the research, beginning with an explanation of the indicators selected with particular regard to issues around scale, temporality and variation in geographical unit. The sampling strategy for the quantitative phase follows. This section will then discuss the rationale for the selection of the Index of Dissimilarity (referred to as IoD) as the baseline measure of segregation, including an analysis of the alternative measures available and an acknowledgement of the limitations of the Index of Dissimilarity. The section concludes with an explanation for the statistical tests employed and the advantages of these to this research. The next section of this chapter addresses the qualitative element of the methodological approach, beginning with an explanation of the advantages of this element for the research. This is followed by a description of the qualitative sampling strategy and the methods of data collection employed. This section concludes by explaining the analytical process of the qualitative data. The final section considers the ethical issues associated with the research.

Research Strategy

A number of assumptions within policy guidance and previous research have suggested certain associations and processes within residential segregation. In particular, close ties with neighbourhoods containing high deprivation have been observed. Localised qualitative studies have also suggested a link with larger percentages of South Asian residents in an authority (Cantle, 2002, Ouseley, 2001). Such claims form the basis of variable selection and statistical testing in this study. Further, Chapter Two indicated that a wider investigation of patterns within English authorities was necessary to reveal the dynamics of the relationships between segregation and socio-economic conditions. Thus the methodology employed was primarily quantitative and aimed to provide a non-causal picture of residential segregation.   However, in order to explore the *processes* of segregation in a way that captured the complexity of the relationships between socio-economic indicators, a second, qualitative approach was required. This presented a potential problem: traditional stances with regard to the relationship between epistemological positions and research methods regard quantitative and qualitative approaches as incompatible. The value-free scientific epistemology in which the social world could be accurately measured and categorised was incommensurable with understandings of the social world as subjective. Just as the epistemological stances were separated, methods were also tied to their relevant stance, '*every research tool or procedure is inextricably embedded in commitments to particular versions of the world and to knowing that world. To use a questionnaire, to use an attitude scale, to take the role of participant observer, to select a random sample, to measure rates of population growth, and so on, is to be involved in conceptions of the world which allow these instruments to be used for the purposes conceived.*' (Hughes, 1990:11), rendering impossible the combination of quantitative and

qualitative methods. The rationale for this division offers a number of advantages to social research, for example, qualitative research allows access to the subjective nature of social relationships and the subject perception through which people view others: *"The empiricist position was illustrated through textbook presentations about 'value-free science' and those which assume a dualism of qualitative epistemology versus quantitative epistemology (Silverman, 1993)."* (in Olsen, 2004). However, it is essentially problematic due to the traditional conflict between the ontological and epistemological assumptions of quantitative and qualitative methods. The approach adopted here rejected this division, choosing instead to approach methods as individual research tools that can be employed to meet the requirements of specific research questions. This permits the use of quantitative tools that measure social and residential patterns and qualitative tools that capture how people experience those patterns and understand the tools of measurement themselves. The conflict between quantitative and qualitative schools that existed in the 1980s no longer holds the same strength and mixed methods is not anti-thetical (Olsen, 2004). Although there are differences in the assumptions of each research strategy they are not irreconcilable and epistemological differences no longer have the same consequences for methods (Bryman, 2004:453). Therefore, despite traditional conflict between the approaches, there are strong arguments that combining methods within a single research project is both feasible and beneficial in terms of the quality and breadth of findings. These include enabling a wider perspective on topics and a greater confidence in the accuracy of findings (Olsen, 2004) and adding complexity to the research by working back and forth between the inductive and deductive models of thinking (Creswell, 1994). Further, mixing methods produces more neutral analysis by minimising the bias within many data sources and within the individual researcher (Jick, 1979, in Creswell, 1994:174). The notion of employing more than one method in a single research project is not new (Campbell and Fisk, 1959). Bryman uses the term *multi-strategy*

research to indicate any research that employs methods from both the quantitative and qualitative strategies (2004:452). Although causal processes can also be examined within the positivist methodology (Creswell, 1994:116) and this project does not aim to explore causal processes, quantitative methods enable the research to capture the descriptive narratives of segregation characteristics. It is also argued that we cannot fulfil all ten of the characteristics of good research design concurrently: plenitude, boundedness, comparability, independence, representativeness, variation, analytic utility, replicability, independence, representativeness, mechanism, causal comparison (Gerring, 2001). In this context, this means that varying dimensions of segregation can be explored in a way which enables different *types* of representation of the phenomenon. Finally, within the pluralist approach described by Olsen, mixing methods prevents over-simplification and provides a more holistic analysis of the subject. In particular, triangulated research design offers greater opportunity for interdisciplinary research by crossing the divides between disciplines, in policy research specifically (Olsen, 2004). As discussed below, in this case, the modified triangulation technique provides a sequential mixed methods approach in which the second, qualitative, phase is both driven by quantitative findings and develops them.

This research is structured in two-phases (Creswell, 1994). The quantitative phase informed the secondary qualitative phase in terms of sampling and discussion by providing a structure for the identification of suitable authorities for qualitative exploration. Data collection and analysis of the quantitative and qualitative elements were conducted separately. The use of quantitative methods provided a large scale picture of national patterns and it identified the key relationships between segregation and socio-economic characteristics nationally. These subsequently formed the basis for a thematic approach to data collection in qualitative interviews. Although interviews were participant-led, these themes were introduced in the latter stages of interviews to address responses to their role

in residential patterns. The quantitative methods are not employed purely as a foundation for subsequent qualitative work but retain independent value. Likewise, the qualitative methods form a independent element of the research. Decisions about qualitative sampling and themes are led and influenced by quantitative results and discussion may refer to statistical analysis for comparison. The quantitative findings provide a broad picture of patterns of the level of segregation and the characteristics associated with it across local authorities nationally. It allows an understanding of which attributes are more strongly linked to high segregation. Although much of the statistical analysis is theory-led, it does not test hypotheses and is not a deductive strategy.

The most common form of combining methods from the different strategies, data sources and observers is triangulation, a term first used by Denzin in 1970 (Creswell, 1994). Triangulation can be employed for a number of reasons including to verify the findings of one method, as validation, a wider understanding of phenomena and to prevent over-simplification. However, combining methodologies extends beyond triangulation. Greene et al argue that there are five purposes for combining methods in a single study: convergence of results; complementary (to enable the different facets of a phenomenon to emerge); developmentally (first method is used sequentially to help inform the second); initiation (contradictions and fresh perspectives emerge); expansion (mixed methods add scope and breadth to a study) (Greene et al., 1989, in Creswell, 1994:175). In this study, the dual method approach is employed developmentally and for the expansion of the depth of understanding of segregation as the qualitative analysis enables explanation of some of the more complex relationships between variables. The interviews are not intended to corroborate quantitative findings but to complement them through the development and exploration of the relationships and processes initially identified. This is a multi-method approach

rather than triangulation in its strictest sense (Hammersley, 1996) as it is intended that the multiple measures build upon each other rather than being used to verify one another's findings. It is a developmental approach to determine more accurately, the processes and effects involved in residential segregation. Therefore triangulation is employed in this project in the sense developed by Deacon *et al* (1998), by which quantitative findings are cross-checked and elaborated by qualitative methods.

Mixed method strategy within this research

Research into the process of segregation is suited to a mixed methodology partly due to its reliance on some form of objective measurement of residential integration yet possessing a dynamic nature which requires qualitative exploration. Further, due to the close association with policy, a mixed strategy enables the collection of findings more useful to policy frameworks and decisions. Weaknesses and flaws in quantitative work[1] are recognised but policy decision-making needs to be based upon measureable phenomena. Qualitative findings provide a basis for a more holistic policy approach and by retaining the human dimension, this approach enables conclusions that are more appropriate to policy research.

In this research methods are employed as tools selected on the basis of their appropriateness to the research objectives. Quantitative tools provide a measureable dimension for comparison and ease of communication, particularly for the purposes of policy development, and semi-structured interviews permit greater depth of exploration of process. A purely statistical method would raise a number of questions relating to the processes of segregation and would be

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[1] Weaknesses such as the unwieldiness of ethnic categories arose from the data and are discussed in Chapters Five and Six. Other concerns such as over-simplification of processes by quantitative analysis and the potential for manipulation of relationships are also recognised.

inadequate for the explanation of residential development. Thus a key reason for adopting a multi-method approach here was the ability to explore processes and dynamics as well as a static picture of segregation. Although change over time is explored in Chapter Five, it is not able to move beyond a 'static' snapshot of each time period and is limited to comparison and associations rather than process (Bryman, 2004). Rather than being inductive or deductive, this research approach is 'retroductive' and as such seeks to identify the causes of observations within quantitative and qualitative data (Olsen, 2004:15). Further the difference between the uses of qualitative and quantitative methods can be described as a focus on 'micro' and 'macro' phenomena (Bryman, 2004). This is a distinction that is suited to application to the phenomenon of residential segregation partly due to the importance of scale to variation in observations and experiences. It is recognised that a mixed methods strategy has flaws in terms of the depth attainable when the qualitative element is given a subsidiary role. However, there are flaws common to all methods and approaches and limiting the qualitative dimension to a secondary role enables the development of a wider narrative context. A uniquely qualitative method would have not established overall levels of segregation in England or the presence of dominant associations and patterns. The selection of representative case studies on the basis of segregation level would not have been possible and the experiences of a limited number of case studies would lack wider relevance.

The findings of the two methods are broadly consistent. Where inconsistency is identified, there is evidence indicating the specific methodological technicalities responsible. Most significant of these is discrepancy in the calculated dissimilarity level and the perceived level of segregation in the qualitative cases studies.   This is attributed to the scale at which segregation was measured in Chapter Five rather than an inaccuracy in the initial calculation. A more detailed qualitative exploration of these discrepancies is included in Chapter Six. This project draws upon the strengths of both methods and the enhanced conclusions drawn from such a

fusion. The qualitative analysis is used to explore the conclusions drawn from statistical analysis of Chapter Three and Four enabling a broader understanding of processes of segregation.

The Quantitative Phase

Quantitative methods were selected on the basis of their capacity to access information appropriate to the research questions. The purpose was to address the research questions through a statistical representation of residential arrangements rather than the identification of causality and the empirical challenge was to capture the complexity at this scale. The key quantitative tool that formed the basis of analysis was the statistical measure of segregation. It is employed to provide an objective representation of segregation over a relatively large sample. The measure selected was the Index of Dissimilarity (IoD). This provides a percentage score indicating the proportion of a group's population which would need to move neighbourhood in order for the composition of each neighbourhood to represent that of the entire authority. The two groups used in this calculation were 'white' (an aggregate of 'white British', 'white Irish' and 'other white') residents in comparison with 'Not white' (all other ethnic groups including 'mixed race') residents. It is recognised that a single measurement which combines all 'non-white' residents together is likely to conceal the complexity of inter-group (and intra-group) spatial patterns. However, this dichotomy is considered to be adequate as a benchmark for the identification of associations between *general* spatial concentrations and socio-economic characteristics.   Exploratory analysis of inter-ethnic segregation was also conducted on a limited number of cases and is discussed in chapter five).   This dichotomy creates a single measure that permits a general benchmark for future analysis. The use of multiple measures at this stage would have created complex picture.   It moves some emphasis from the

separation of minority groups to the majority white group. Such complexities could be unpacked at a later stage using multiple regression and qualitative analysis.

There is potential for research in the future using multi-group measures which combine or compare dissimilarity scores between individual ethnic categories. Although this would offer a broader picture of the complexity of residential patterns, it is intended that this complexity be accessed using qualitative methods in the subsequent phase.

Data and Indicators

A number of indicators were identified to represent the socio-economic characteristics of local authorities. Table 4.1 shows the variables, their sources and the characteristic each has been selected to represent. The variables adopted were restricted by a number of factors, each addressed individually below. These limitations include the geographical unit of analysis available and the year of data collection. A key element of the study is the relationship between segregation level and the nature and level of deprivation. A number of variables were selected for analysis loosely based on the six Floor Targets employed by the Neighbourhood Renewal Unit (2006) which are associated with the Index of Multiple Deprivation. These are health, education, crime, housing & environment, employment and liveability. Because the last is the most difficult to define or measure and because it lacked the links with segregation existing for the other factors, it has been omitted from the study.

Table 4.1   Indicator variables and sources[2]

Variable Name	Source	Representing characteristic
% White	Census	All residents identifying as 'White British', 'White Irish' and 'White Other'
% African		All residents identifying as black African
% Caribbean		All residents identifying as black Caribbean
% Pakistani		All residents identifying as Pakistani
% Bangladeshi		All residents identifying as Bangladeshi
% Indian		All residents identifying as Indian
% Chinese		All residents identifying as Chinese
% BME		All residents identifying as any of the above ethnic groups other than 'White'
% Social housing (households)		Index of Multiple Deprivation Housing Domain, 2004
% Private rental (households)		Percentage of households within the Private rental tenure
% Owner occupied (households)		Percentage of households within the LA in the Owner occupied tenure
% Terraced (dwellings)		Percentage of dwellings in the LA that are classified as 'terraced'
% Detached (dwellings)		Percentage of dwellings in the LA that are classified as 'detached'
% Semi-detached (dwellings)		Percentage of dwellings in the LA that are classified as 'semi-detached'
Population density (persons per km^2)		Local Authority population density
% Limiting Long-Term Illness		Index of Multiple Deprivation Health Domain, 2004
Male Life Expectancy		Index of Multiple Deprivation Health Domain, 2004
% Higher Education		Index of Multiple Deprivation Education Domain, 2004

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[2] Full details of each variable are available in Appendix 2.

Qualification		
% No or Low Qualifications		Index of Multiple Deprivation Education Domain, 2004. Indicating overall degree of low education level
Employment Rate		Index of Multiple Deprivation Employment Domain, 2004
% Manual Occupation		Heads of households in Social Economic Class groups:
% Non-manual Occupation		Heads of household in Social Economic Class groups:
% Households with No Car		Index of Multiple Deprivation Income Domain, 2004
% Overcrowding (households)		Households with more than 1.5 persons per rooms

*Unless otherwise stated, each figure represents the percentage of residents within an individual local authority. ** Unless otherwise stated, the source for all data was the Census of Population for England and Wales, 1991 and 2001.

Figures for the Index of Deprivation are available for 2000 and 2004 but as data from 2000 was not available at the level of Local Authority, the overall scores for 2004 were used as an indicator of general deprivation. In addition to the six domains of deprivation, a number of other variables were adopted to create a full picture of the conditions in ethnically segregated areas. The proportion of residents in 'Local Authority Rented' properties was included as a further indicator of deprivation. It was also recognised that housing tenure often has spatial patterns and may be segregated and that this segregation may be closely linked to social and ethnic segregation.   Data relating to ethnicity presented a particular challenge for several reasons. Firstly the classifications of groups changed between 1991 and 2001, increasing the number of possible groups from nine to sixteen. For this reason classifications such as 'mixed' were absent from the analysis. Secondly, ethnic group membership in the census is self-assigned and therefore not a fixed classification. This leads to the final issue, that once changes in the ethnic categories available have been accommodated, it is not possible to accommodate the effects of 'ethnic switching'. This refers to the possibility of individuals

changing their ethnic affiliation between population census', sometimes influenced by political, educational or cultural pressures (Aspinall, 2008). This is difficult to identify such changes, in part, due to the extra classifications introduced in 2001 (Large and Ghosh, 2006b). It is assumed that change in ethnic group affiliation did not have a significant effect upon analysis here, particularly since one group likely to 'switch' (mixed race) was not included in the analysis.

The following table indicates the ethnic classifications included in the analysis and adjustments made to accommodate changes to the classifications between 1991 and 2001.

Table 4.2   Ethnic Classifications included and excluded from analysis

2001 Ethnic classification	Included	Nature of Inclusion
White British	Yes	Combined
White Irish	Yes	
White Other	Yes	
Black or Black British: Caribbean	Yes	Individual
Black or Black British: African	Yes	Individual
Black Other		
Asian or British Asian: Indian	Yes	Individual
Asian or British Asian: Pakistani	Yes	Individual
Asian or British Asian: Bangladeshi	Yes	Individual
Other Asian	No	
Chinese	Yes	Individual
Mixed: White/African	No	
Mixed: White/Asian	No	
Mixed: White Caribbean	No	
Mixed: other mixed	No	
Chinese or other ethnic group: other	No	

A more extensive explanation of variables selected can be found in Appendix 2.

Rationale for the selection of variables in the quantitative phase

In addition to the suitability of the variables, there were a number of factors challenges which restricted the use of variables in the quantitative phase. These included the availability of certain types of data from both time points (Indices of Multiple Deprivation), the comparability of existing data over time in terms of sample and definitions (changes to the available response categories for several Census questions) and changes to the geographical unit at which data was available (non-census data not always available the local authority level). In some cases these limitations meant that the data could not be included in any analysis of change over time whilst for others a solution was found in the identification of proxy variables to represent data not available in 1991. This was the case for the Indices of Multiple Deprivation which were not available in 1991. The likely extent of the impact of such differences was assessed and where necessary small adjustments to data were made. The following section addresses these challenges and solutions.

Indicators of Deprivation

Policy approaches initially problematised segregation in terms of a strong perceived association with deprivation. Thus indicators of deprivation play a significant role in the quantitative aspect of the analysis. Neighbourhood deprivation is measured by aggregate indicators in six domains of the Index of Multiple Deprivation (2007). A pilot study of segregation in 2001 used the Index of Multiple Deprivation (IMD)

individual domain scores as indicators of deprivation[3]. However, whilst this provided the most policy-relevant set of indicators, comparison cannot be made with patterns in 1991 as the IMD was first constructed in 2000. For this reason proxy indicators were identified based on data contributing to the IMD domains. The validity of employing these variables as proxy indicators for the IMD was confirmed by the correlation coefficients shown in Table 4.3. Those with a correlation greater than .300 were deemed suitable.

Table 4.3   Correlation coefficients for IMD proxy variables

Indicator Variables	IMD Health	IMD Housing	IMD Crime*	IMD Education	IMD Employment	IMD Income
Male Life Expectancy	-0.918					
% Residents with Limiting Long-Term Illness	0.761					
% Social Housing						.754*
% Non-manual					-0.711	
% No car						**0.875***
% No qualifications				0.867		
% > 1.5 persons per room		0.744**				
Population Density		0.705				
Employment Rate					-0.768	
BCS Comparator			0.891			

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[3] The composition of each of the IMD domains is discussed in greater depth in Appendix 3. Further details of the domains and their application to current policy can also be found at www.nrf.gov.uk

It was not possible to identify suitable variables to represent all domains of the IMD so the domain of liveability was not represented. However, data collected from the qualitative phase went some way in addressing this domain. A second consideration for the selection of variables was the availability of data comparable between 1991 and 2001. Although the BCS comparator variable had a high correlation coefficient with the crime domain of the IMD, a suitable proxy variable was not available for both time points. No indicator of level of crime was available for use in b00oth 1991 and 2001 so this domain was excluded from the analysis. No IMD data was used in the final analysis as it was not available for comparison with 1991 patterns. In its place, only proxy variables for each of the domains were used. Variables which posed particular problems were those relating to education level[4], social class[5] and ethnic group[6]. An extended explanation is provided in Appendix 3.

Census data

The primary data source on which the segregation was calculated was the 2001 Census of Population for England and Wales (Office for Population Censuses and Surveys, 1991 Census: Small Area Statistics (England and Wales)). For certain

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[4] The education variables in the census were based on slightly different age groups. The pilot study had indicated that education level had an association with segregation level and was believed to be an important factor in residential processes.   The qualification level responses are not comparable between 1991 and 2001 due to changes to the age group category from '18+' in 1991 to '16-74' in 2001. Therefore, each percentage score was adapted to account for different age groups in the local authority in 1991. Later qualitative analysis suggested that education was relevant, thus validating the inclusion of these variables.

[5] The Social Class categories available in the Census changed between 1991 and 2001, thus making direct comparison impossible. Representative variables were produced for data in 1991 through the conversion of occupational categories.

[6] Categories of ethnicity were expanded in 2001 from a total of nine in 1991 to sixteen in 2001. To enable comparison between the two dates, the categories available were restricted to the original nine. Qualitative data later suggested that variation within these categories existed.

variables sourced from the Office of National Statistics, the figures were produced from aggregates of the previous two to three years (in the case of life expectancy figures) so the data selected was that which included the census year. An extensive literature exists on difficulties around measurement and the shortfall in both the 1991 and the 2001 Censuses of England and Wales (Office for Population Censuses and Surveys, 1991 and 2001: Small Area Statistics) count.   In particular, there are issues relating to undercount in the 2001 Census Office of National Statistics, 2001).

The compatibility of the 1991 and 2001 censuses presents a number of challenges for researchers. The first difficulty relates to the definition and categories of certain variables in the two censuses presented in the previous section. With regard to ethnicity, there are concerns regarding 'ethnic switching' between 1991 and 2001(Large and Ghosh, 2006). However, it is not believed that the effect of ethnic switching on proportions of ethnic groups is significant. A comparative analysis that included the relationship with population migration was not possible as the variable was not asked in both censuses. There are also inconsistencies in the geography of the Census between 1991 and 2001 and in administrative boundaries, these are addressed below.

There are a limited number of studies of the *process* rather than snapshot studies of segregation over time in the UK context. Inconsistencies within national datasets of national statistics and administrative geographical boundaries mean that these are not conducive to comparison over time.   Consequently, the scope of the quantitative comparative analysis was limited by a number of obstacles.   These related primarily to changes in the shape of local authority boundaries and the populations included in these. The following section acknowledges the impact of these considerations and explains how these were addressed.

Geographical Units

The scale at which segregation is calculated is important in terms of the effect on the dissimilarity score itself and the social representation of neighbourhoods. Middle Level Super Output Areas (MSOA) were selected because they account for population size, mutual proximity and the social homogeneity of each area. The minimum population of an (M)SOA is 5000 or 2 000 households and a maximum of with the mean population across all at 7000. (M)SOAs were first employed in for the 2004 IMD and are formed from Lower level SOAs (LSOA). As they are constrained by 2001 local authority boundaries, they are suitable for use within the local authority dataset. All Output Areas (OA) contained above threshold populations and their boundaries were integrated with the postcode and higher area lookup tables. Output Areas for 2001 were based on tenure and dwelling type in adjacent postcode areas and were often constrained by obvious boundaries such as major roads (Martin, 2002). The minimum size of OAs was forty households or one hundred people. However, it is recognised that although they are partially based on Super Output Areas (SOA), they do not represent neighbourhoods or communities and cannot be regarded as socially distinct (Martin, 2002). Electoral Wards were dismissed due to the significant variation in population size and the scale and scope of changes to their boundaries. Finally, it is anticipated that future ONS calculations will be published at SOA scale so their use in this research will ease comparative work. Census data from 2001 is available at the MSOA level and conversion software exists for data available at ED or SOA level[7].

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[7] Conversion software has been developed by the University of Manchester.

Communal Establishments

The conversion of 1991 data to Middle Level Super Output Areas ((M)SOAs) led to the absence of around 10% of Enumeration Districts (EDs) from the converted dataset. These EDs were communal establishments rather than distinct geographical units and as such were managed separately in the census dataset. As a result, many residents who were included in the analysis of 2001 data were absent from the 1991 data. Removing residents in communal establishments from the 2001 Census data would render invalid most 2001 and 1991 indictor variables at the local authority level as these include all communal establishment residents (CERs). Tests were conducted on twenty authorities (22% of the sample) using 2001 census data. All of which were authorities whose boundaries did not change between the Censuses. It is recognised that boundary changes tend to be around London authorities and that this may affect analysis. The proportion of areas whose populations were affected by CERs was identified and whether there was a relationship with the ethnic composition of the authorities.

Because most (M)SOAs contain some CERs, 2001 Census data was accessible without CERs present. Further, between 1% and 5% of residents in each authority are CERs[8]. Although one existed, there did not appear to be a strong relationship between the proportion of white CERs and the proportion of all residents who are white[9]. An awareness of the relationship between ethnicity and CERs is important as one of the key features in the analysis is ethnic group but it was deemed unnecessary to compensate for the difference. Although this raises some concerns, it was not possible to compensate for the differences. Identifying the individual

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[8] The authority in the sample with the greatest number was Exeter.
[9] White people are most often under-represented in CERS whilst black residents tend to be over-represented, Pakistani people are over-represented in some cases but under in others, and Indians tend to be under-represented.

groups affected by this problem in each LAD would have required an amount of work disproportionate to the anticipated effect on the findings.

This issue was further complicated by changes to the definition of 'Communal Establishment Resident' between the 1991 and 2001 Censuses (Office for National Statistics, 1991). Although it was possible to recalculate all figures along the new lines, this would be a significant undertaking and the anticipated effect on conclusions did not justify this.

Sampling

Explorations of the residential patterns of ethnic groups across England would be most valid if every local authority were included. As this was not feasible due to the scale of the calculations required, a representative sample was selected. The sampling strategy enables the findings of analysis on a small number of cases to be applied to an entire population. A sample is a small-scale representation of the population from which it was selected and needs to resemble the entirety of the population closely. Middle Level Super Output Areas were used in preference to Lower Level Super Output Areas because in terms of size, they reflect wards. The analysis indicated that, outside the London area measurement at this scale was adequate in capturing the level of segregation. However, it is likely that within the capital, calculating dissimilarity at the LSOA level may have provided a more accurate picture of segregation.

A number of samples were required for different stages of the analysis. The first was of those cases for which dissimilarity between white and not-white residents would be calculated. These were selected from an alpha list of all local authorities at a particular administrative level in the hierarchy: local authorities, London

Boroughs, Unitary Authorities, Districts (all are referred to here as local authorities, Districts or (London) Boroughs). This was identified using a systematic sampling strategy of every second case. The second sample was narrowed from these for use in further statistical exploration, in this sample N=91 (25% of all authorities). This sample was from within the original sampling frame of 180 authorities, using stratified sampling of every fourth case. A systematic sampling strategy, beginning from the most segregated case, was employed using a sampling interval of four in order to include a quarter (N=91) of 360 local authorities. The interval is calculated by dividing the total number of locations on the list by the required sample size. For this second stage, the key sampling criteria was the level of segregation because this is the dependent variable and the central concept of the research. To enable comparison of the characteristics associated with segregation and of processes of segregation, cases from all levels of segregation (according to their dissimilarity scores) were required. Across local authorities in England, early analysis showed a relationship between the proportion of BME residents and the level of segregation in an authority. It was therefore deemed important to include cases from all levels of BME population. A larger sample was selected from the higher proportions . The criteria suggested that a sample representative of not-white levels was not necessary, only of segregation levels with representation from across the breadth of not-white proportions. Cases were selected according to ethnic data from the 2001 Census data as this is the most up to date. Data from 1991 would be employed later to enable comparison over time.

Local Authority boundaries

A number of local authority boundaries underwent major changes between 1991 and 2001, impacting upon the population of certain authorities. Those changes that affected a net population change of less than 100 individuals are not available.

However, half of the sample (44) has had changes over 100 and twenty-seven of these (30% of the sample) had a change of between 101 and 499. Sixteen local authorities have a net change in excess of 1000 and this is 18% of the sample. Unfortunately, the details of the changes to boundaries are unavailable[10] so the option of combining this with enumeration districts to compensate was not feasible.   Because the impact of these changes was minimal, it was decided that this was not sufficiently significant to merit removal of these authorities.

Measuring Segregation

Segregation is the spatial separation of population groups, and implies a limitation on the interaction between population groups (Wong, 1993). Conceptually, segregation can be perceived sociologically as the absence of interaction among social groups or geographically as unevenness in spatial distribution (White, 1983). It is recognised that there are five key aspects to spatial segregation: unevenness, isolation, clustering, concentration and centralisation (Massey and Denton, 1988). A more comprehensive discussion of the conceptualisation used here can be found in Chapter Two.

There are recognised difficulties with quantitative calculations of segregation, in particular with regard to the number of dimensions that a single measure can capture. It is argued that all measures have important deficiencies (White, 2001) and measuring multiple dimensions is complex and therefore cannot be achieved with a single calculation (Wong, 2005, Voas and Williamson, 2000).

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[10] It was hoped that appropriate adjustments could be made to local authority figures buts The Boundaries Commission was unable to provide details of the precise nature of changes to local authority boundaries during this period.

A number of criteria have been developed for the measurement of segregation. Of these Winship captures the key elements:

1) Should be *"expressed as a single quantitative value so as to facilitate such statistical procedures as comparison, classification and correlation."* (John et al in Winship, 1975)

2) Should be easy to compute

3) Should not be distorted by the size of the total population or the areas.

4) Should be generally applicable to all cities

5) Should differentiate degrees of separation in such a way that the distribution of intermediate scores covers most of the range between 0 and 100.

(Winship, 1975)

The four criteria for indices to satisfy may also be summarized in terms of being unaffected by the size of the area of study (i.e. national and local pictures) or by adjustments to the number of units within the area (organizational equivalence); it should be affected by the movement of one individual/household, should be unaffected by scaling which leaves the proportions unchanged (James & Taeuber, 1985).

Measures that conceptualise segregation differently may also present apparently conflicting evidence. Such differences are shown in debate over changes in segregation level in Bradford. Using dissimilarity scores, Ludi Simpson argued that claims of South Asian self-segregation in Bradford in 2001 were incorrect, and presented evidence that this group had been dispersing (Simpson, 2004). In

contrast, Johnston et al. argue that conceptualising segregation in terms of likely contact between members of different groups and thus using the Index of Isolation, in Simpson's example of South Asians living in Bradford, once the growth of the (ethnic minority) population has been accounted for, the index of Isolation is differs from the IoD index. They suggest that Simpson's Dissimilarity scores in Bradford do not change when group size increases over time, provided the distribution remains the same whilst the index of Isolation takes account of changes in group size over time. Thus showing that the probability of meeting someone from another ethnic group increased as because the relative size of the group has increased. Johnston et al. argue that the Index of Isolation (IoI) is therefore preferable because contact is the central feature of segregation. This follows the work of Phillpott (1978) and more recently, Peach (1996). The Index of Isolation measures the degree to which a population dominates a neighbourhood rather than how it shares those areas with other groups. Johnston et al use the example of Bradford to show this: as it is growing, the South Asian population here is more residentially isolated (Johnston et al., June 2005)

The Index of Dissimilarity

The Index of Dissimilarity is identified as the most appropriate measure for the purposes of this study. This measures the level of unevenness in an authority by calculating: "*…the ratio of the number that must be moved from cells of excess to cells of deficit to achieve even distribution*" (Sakoda, 1981). It is acknowledged that there are a number of criticisms of the dissimilarity index and an overview of the criticisms follows.

The Exchange Principle

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The Index of Dissimilarity fails to satisfy the Exchange Principle. This refers to the statistical effect of moving individuals between neighbourhoods being the same for neighbourhoods that have compositions close to the city-wide percentages as for units in which the composition differs greatly from that ratio (White, 1983). Dissimilarity does not satisfy the exchange principle as the index will only change if exchanges are between families who are in units that are disproportionately composed of their own race (Winship, 1975). This means that the households that move neighbourhoods must be of a different ethnic group and is thus important as it is fundamental to any notion of what it means to reduce segregation. Further, Dissimilarity is equally sensitive to all exchanges that lower the index. Thus introducing blacks and whites into a neighbourhood that previously had none is considerably more significant that making two neighbourhoods that are nearly integrated completely so. The index should be capable of being affected by the movement of one individual from sub-area to sub-area. Dissimilarity is normally sufficiently affected by the movement of one individual.

Modifiable Areal Unit Problem (MAUP)

Further criticisms of Dissimilarity relate to the Modifiable Areal Unit Problem (MAUP). MAUP includes the scale effect and the zonal or aggregation problem which relate to the possibility of a number of different patterns at the same level of dissimilarity. This is of concern due to variation in the actual level of spatial contact between groups where neighbourhood boundaries. (Wong, Lazus, Falk, 1999: 507-508). The scale effect (Wong, 1997, Voas and Williamson, 2000) is the product of data at different scale levels or resolutions which yield inconsistent results. Specifically, the effect when the IoD is used is that smaller neighbourhoods and smaller minority percentages produce larger scores (White, 1983). The zoning (aggregation effect) effect results from areas being partitioned by different spatial configurations schemes: the smaller the areal units are, the more homogenous is

the population within the areal units in general. Smaller areal units will yield a higher dissimilarity score (Wong, 2004, and White, 1983). Further tests (spearman's rank coefficients) comparing the dissimilarity values of block groups and census tracts in the US indicate that the rankings of areas according to dissimilarity values at two levels do not significantly vary(Wong, 2004). Thus, although there are differences between the dissimilarity scores for larger and smaller areas, if the study is interested in the rank of districts then this is less problematic. Because this study is interested in the relative segregation level, the MAUP poses less of a problem.

It is recognised that most segregation measures have a direct relationship with the internal homogeneity of the population within areal units. This results in smaller enumeration units producing a higher level of segregation. If the 'not-white' group constitutes 2.5% of the whole and areas each contain 100 individuals, then the least segregated position will still involve an element of spatial IoD because some areas will have two black persons and others three. If there are more units than minority individuals, the minimum value of the IoD rises very rapidly (and will exceed 0.500 if there are two times as many areas as persons with the characteristic) thus having consequences at enumeration district level. As the areal unit selected has relatively large minority populations internal homogeneity is less likely. Further, the sample limited the proportion of cases with very low levels of not-white populations by selecting a stratified sample of one in twenty cases with BME proportions below 3%.   Such cases would contain a very high number of neighbourhoods (or MSOAs) with homogenous white populations. Finally, small subdivisions are also a problem as it is impossible to achieve a completely even distribution when the entities are discrete.

Checkerboard Problem

The checkerboard problem refers to the fact that areas may have the same dissimilarity score yet have entirely different spatial arrangements of ethnic groups, and that dissimilarity calculations ignore the ethnic composition of nearby parcels.

A number of alternatives to the Index of Dissimilarity have been produced that measure different dimensions and definitions of segregation. These are outlined in Appendix 5.

Selection of the Index of Dissimilarity[11]

Despite these criticisms the IoD remains the most commonly used measure of segregation and was selected as the most appropriate measure of segregation for the following reasons. Firstly, the IoD meets the Winship's criteria for a measure of segregation by being 0-1 bounded and producing a single figure that is simple to compute. It is applicable to all cities and has a spread across the full range of possible scores. Dissimilarity is also invariant to proportionate increases in each ethnic groups. This means that if the proportion of white people in an authority decreases but the proportion of white in each MSOA remains the same then the

[11]A number of modifications or adjustments to the original D index have been proposed. Morill (1991) suggested to modify IoD with a term to compare ethnic mixes of neighbouring units (D adj). Wong (2005) further modified this by incorporating the length of shared boundaries to derive D (w). The D (s) index was introduced to incorporate the compactness measure. However, Cutler and Noden argue that D should be corrected to take into account the relative size of the ethnic group as larger degree of inconsistency is found when spatial measures are used. When Spearman's rank tests are conducted those areas sensitive to scale change according to the IoD are also quite sensitive according to spatial measures. The IoD and all similar measures are only designed to quantify the extent to which neighbourhood racial compositions are more or less similar to the average racial composition (Dawkins, 2004). Voas and Williamson argue that where concentration is modest, dissimilarity needs greater adjustment when the raw index is not much greater than chance whilst larger areas will tend to have more heterogeneity (i.e. a lower D). Little adjustment is necessary when segregation is high but random effects can be substantial where concentration is less marked. Taeuber and Taeuber (1965 :22): alter the D score by arbitrarily shifting the parcel grid, thus, D is maximised when gridlines coincide with boundaries between residential areas.

index will remain the same. Further, the IoD is also a useful tool as it has received heavy use through history and can therefore be used in comparative study. Parkinson et al (2006) use the IoD in the State of the English Cities report. Despite the large number of criticisms outlined above, in most cases: *'problems with D can be ignored without undue violence to the results'* (Voas and Williamson, 2000) and the possibility of comparison with other work was deemed key to this study. Although the segregation index was an important foundation of this research, the mixed methods approach meant that it was subsequent qualitative analysis which provided depth and complexity. Further, the IoD meets one of the key criteria of being easy to compute and requiring very little data, making it useful for comparison of large numbers of cases (White, 1983). This is particularly useful as in this research; the segregation index forms the baseline for further analysis rather than being the key focus of the study.

Finally, the IoD is appropriate for the measurement of unevenness. The selection of a measure of segregation is dependent on the definition of segregation being used. The selection of an appropriate index depends on what aspect of segregation the research aims to capture (Johnston et al., 2001). The nature of this research is such that it is interested in unevenness or isolation. The creators of the five aspects of segregation recognise that IoD is the most appropriate option for measuring unevenness, or the opportunity for intra-zonal interaction between racial groups (Massey and Denton, 1988). Massey and Denton (1988) compared measures of segregation and found that the dimensions of unevenness and exposure accounted for two-thirds of variation between areas. Further, this research is interested in the *effects* of segregation thus it is appropriate to measure segregation as a deviation from complete segregation (Winship, 1975). In contrast, research into the causal process of segregation would aim to identify deviation from random segregation (Winship, 1075). Random segregation may affect not-white populations in terms of

availability of jobs and schooling. What is important is the degree of their isolation and not the mechanisms underlying it. In this case D is appropriate because this study is interested in both the process and effects of segregation. The adjusted IoD would be appropriate if the research was examining the causes because we would need to know what random segregation would be without the presence of causal variables (Winship, 1975).

Cluster Analysis

The second research objective outlined in the introduction was to understand which characteristics are associated with different levels of segregation. The purpose of cluster analysis is to categorise cases according to selected characteristics on the basis of similarities between cases. Cluster analysis is an exploratory form of statistical analysis and was employed to identify the general similarities, if any, between particular cases. It was not employed as an inferential framework. Cluster analysis compares the similarity of objects (cases) in terms of the variables entered and groups them according to the greatest proximity with each other.   The aim is to minimise variance within each cluster and maximise that between clusters, resulting in clusters that are as homogenous as possible. In this case, this aids an understanding of characteristics shared by cases with similar levels of segregation. The creation of categories allows for the investigation of a few 'classes' of cases rather than a large number of individual cases. The process also identifies outlying cases which do not share characteristics with other cases. Profiling clusters involves calculating the mean values for each variable within each cluster. These can then be compared with the means of variables across the whole population.

Cluster analysis is useful in the investigation of residential segregation as it forms a connection between the 'objective' measurement using the Dissimilarity calculation and the qualitative exploration of process. The presence and nature of shared characteristics are identified by the levels of variables within different clusters and these form the basis of semi-structured interviews in the second phase. However, it does not permit any causal conclusions.

This section of the analysis was conducted on the sample of 91 cases from within the original sampling frame of 180 authorities. All variables were standardised but not weighted as this would require intuitive judgements which were likely to simply reflect existing knowledge or classifications of authorities (Everitt, 1993). As this was an exploratory analysis it would have been detrimental to have selected certain variables to carry greater weight. Agglomorative hierarchical clustering was used first to identify the appropriate number of clusters. This method groups cases in a series of partitions and the dendograms produced indicated the divisions at each stage. Non-hierarchical two-step cluster analysis was subsequently employed to identify the nature of each cluster. This was due to the risks in applying hierarchical methods to data that does not have a hierarchical structure.   The nature of each cluster was described with summary statistics in the form of variable means within each cluster.

Regression Analysis

Following exploratory cluster analysis, multiple regression analysis was employed in order to identify specific effects of variables on segregation. The dissimilarity score of each case was identified as the dependent variable. Multiple regression analysis enables the prediction of the dependent variable (in this case segregation level) from the value of another or others. The method of least squares identifies the

'line of best fit' which goes through or is as close to as many data points (or cases) as possible (Field, 2005). This means that we are able to predict the level of segregation (outcome) depending on the values of the independent predictors (socioeconomic characteristics) in the cases.

The predictors were selected based on existing research. Certain variables were excluded due to high correlations coefficients with other variables. Greater accuracy is attained when fewer predictors are entered and due to the number of cases (n = 91) only six variables could be entered simultaneously[12]. These were selected on the basis of how strongly they clustered in the earlier analysis. Different methods of entering predictor variables are possible depending on existing knowledge about the research question[13]. As little is currently known about relationships with any great confidence backward stepwise method was employed. The stepwise method does not identify an order in which predictors are entered. The software finds the predictor that best predicts the outcome (highest simple correlation), then adds predictors to the model from that point. As each new predictor is added, a removal test is made of the least useful predictor. There are two types of stepwise methods: the backward stepwise method enters all predictors simultaneously then removes each gradually. This backward method is preferable to the forward method because suppressor effects mean that a predictor might only have a significant effect when another variable is held constant. '*The forward method is more likely to exclude predictors involved in suppressor effects and as such, the forward method runs a higher risk of making a type II error and missing a predictor that does in fact predict the outcome*' (Field, 2005: 161). Although stepwise methods are best avoided except for exploratory

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[12] One predictor variable was entered for every fifteen cases.

[13] Hierarchical entry methods are based on theoretical knowledge of which predictors will have the most effect. This was not appropriate in this study. The theory available in existing literature was not considered sufficiently strong for the use of forced entry methods.

model building (Field, 2005), this was the most suitable for this initial exploration. In the initial analysis each predictor was entered individually, subsequently, those variables that were not statistically significant were excluded.

It was not possible to use logistic regression to explore the impact of the interaction of variables on segregation as this requires categorical variables. An attempt was made to categorise each variable but the nature of most variables was such that they were too complex to categorise sufficiently[14]. It is also recognised that multiple regression is limited by the inability to explore other dimensions or to indicate causality in the relationship with the predictors.

Qualitative Analysis

The second phase took the form of semi-structured interviews with community leaders from three cases. It aimed to access the qualitative narratives of the experiences or processes and outcomes of residential segregation and to identify variation in such experiences in localities with different levels of segregation. For this reason and to enable comparison, the cases were selected primarily on the basis of the level of segregation. In contrast to quantitative research, in qualitative analysis, theory emerges inductively from the data. Naturally, certain themes were anticipated from the quantitative data, but the analysis did not take a deductive approach. However, the policy dimension to this research is such that there are a number of known likely processes and it is it has been argued that qualitative data can have a role in testing such theories (Bryman, 2004). In particular, because it is a mixed methods approach, there is a risk of the interviews being led by understandings and expectations drawn from the quantitative phase.

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[14] Scatterplots of variables were created in order to visually assess the distribution of each variable.

However, the advantage of using dual methodology such as this is that the case selection was 'intentionally' based upon the statistical findings.

Sampling

In order to enable greater depth of analysis, only three cases were selected. Two were selected from the non-London authorities in the quantitative sample to represent the two extremes of segregation. A third was selected to represent inner London where both the level of segregation and the characteristics of such areas differed to low segregation areas outside the Greater London Authority. The key observation that high proportions of minority populations were associated with high segregation outside London but not in London indicated a need for exploration for comparison. A purposive sampling strategy was employed and participants were identified according to the following inclusion criteria: 1) local government officers or elected representatives working within or having experience in the key policy areas of community cohesion, deprivation, housing and community safety, 2) Individuals from the community with a key role in community relations or housing, 3) individuals identified by other participants or in local literature as likely offer an insight into housing patterns and community relations in the area. These criteria were determined by the initial research questions, literature review and the findings of the statistical investigation. Individuals were identified from local government employee and representatives listings and from local publications identifying active individuals in the areas of community relations and housing. An additional four participants were accessed in two cases via other participants. In one such case, the additional participant arrived at the interview with a colleague and offered to participate. Participants were recruited through a personalised letter of invitation with an information sheet about the research enclosed. A total of twenty-five letters of invitation were issued across the three cases. These were followed by a telephone call seven to ten days later. Two invitees failed to respond

altogether and a further five declined interview on the basis of time commitments. Two of these suggested appropriate alternative participants (both of whom had already been invited to interview and had agreed to participate). The sample was not intended to be representative of the local lay population, rather was intended to capture participants with local knowledge in the relevant fields. Most participants expressed a reluctance to participate without assurances that neither they nor the local authority be identified in any reporting of the research.

Table 4.4   Details of Interview Respondents

	Case 1	Case 2	Case 3
Age (approximate except where provided)	Minimum age: 28 Average age: late 30s	Above 30. Maximum age: 84*	Above 30, no respondents above retirement age Average: 40-50
Duration of stay in locality*	Between 7 years and 84 (whole life). Average of 20 years for elected representatives and 10 years for un-elected officers.	All durations in excess of 10 years. X 1 exception (<6 years)	Averages slightly lower in the London borough. All in excess of 7 years.
Ethnic profile*	X2 African/Caribbean X3 white British X1 Pakistani origin	X3 Pakistani/Mirpiri* X3 white British	X2 African/Caribbean X2 Bangladeshi British X2 white British
Position and status: Elected representatives	X1 conservative X2 Labour Incl. x1 Community Cohesion lead	X1 Conservative X1 Labour Incl. x1 Community Cohesion lead	X1 Labour X1 conservative
Unelected Officers	Community cohesion officer	Community cohesion officer (non-elected)	Community cohesion officer (non-elected)
Other roles		Housing not-for profit	X2 minority relations local charity leads

* Self-reported on request

Semi-Structured Interviews

The data collection took the form of eighteen semi-structured interviews, six participants from each case. In two instances two participants were interviewed together. The first at their request and the second because the additional participant volunteered on the day of the interview. No payment was offered or requested. Interviews were electronically recorded and transcribed. It is recognised that the subjective nature of qualitative research means that the researcher's preconceptions may impact upon the interpretations of data. Specifically, the nature of a mixed methodology means that the objective findings of the quantitative phase may influence both the data collection and analysis of the qualitative phase. This is because this is the intention of using a dual-phase approach and therefore cannot be avoided. The case study method employed allowed the research to explore the different dimensions of phenomena shown to be complex by the earlier quantitative phase.

Consideration was given to possible ethical issues, particularly in terms of the cases studied in the qualitative phase. The ethical concerns that arose prior to and during the research process, were primarily in terms of confidentiality. Access to participants was significantly facilitated by the guarantee of complete anonymity for both the individual respondents and the local authority under study. Such a guarantee placed restrictions (some foreseen, others arising during data collection, analysis and report writing) on both the content of analysis and the presentation of findings. This guarantee has resulted in a limited profiling of the cases in Chapter Six. It has also meant that certain points for discussion have lost detail and elaboration. For the same reasons, these cannot be discussed here. Despite this, the benefits (in terms of access to particular and vital respondents and in terms of the quality of data) greatly enhanced and in some cases, actually enabled, the

qualitative phase to continue. Further, efforts were made to include issues deemed important to the findings without including information that would reveal the identity of the participants or authorities. As participants were not considered to fall into vulnerable categories, ethical concerns were not extensive. Some participants were accessed through a snowball technique and were therefore known to at least one other respondent. However, the identities of most participants were unknown to others within the authority. The process of informed consent and anonymity were explained on agreement to participate and each respondent was given the opportunity to ask questions regarding this process prior to the interview date. Written informed consent for participation and quotation was obtained at the start of interviews (copies of the consent form are provided in Appendix 8). The greatest challenges to access were with regard to confidentiality and anonymity – this was anticipated so measures were put in place to guarantee this in before invitations were issued. As most participants held some degree of status within their authority, issues regarding potential for harm to individuals were associated with potential damage to their public or professional status. This was ensured by providing complete anonymity for the cases as well as the individuals. The nature of the employment of the participants meant that there were significant restrictions on availability and time. As a result all interviews except two were strictly limited to one hour. Respondent validation was considered but deemed too difficult to achieve because accessing respondents for initial interviews was often very challenging as many have busy schedules and were reluctant to spare the time. Further contact was therefore more difficult. However, a number of participants requested some sort of formal or informal feedback in return for their time. All records were stored in accordance with the 2001 Data Protection act.

Data compilation and analysis

The qualitative interviews employed here were in-depth, semi-structured forms of interviewing. They aimed to access participants' perceptions and experiences of residential segregation and its effects in their specific locality. Qualitative interviews permit access to unanticipated types of data. There are few guidelines to the structure of conduct of such interviews. The purpose is to produce data from participant-led 'conversations with a purpose' (Burgess, 1984:102). During data analysis comparisons and contrasts are made between the perceptions of individual participants and categories of experiences were developed. The interviews adopted an unstructured approach with a thematic, topic-centred prompt list of potential areas for discussion. However, the purpose of interviews was to permit participants to produce their own narratives and to identify the themes most appropriate to their understandings of segregation within their area.

Although some evidence and theory regarding the processes and outcomes of segregation in the UK already exists, the analysis adopts a broadly grounded theory framework in which data is gathered systematically and from which theory is developed and categories are identified. This is in contrast to a development of existing theory (Glaser and Strauss, 1967). The outcome of this approach takes the form of a number of conclusions relating to understandings of processes and their complexity but it is not theory-generating. Although a coding frame was employed during the analysis of interview data, there is no quantitative presentation of the data in Chapters Six and Seven. The analysis took a thematic approach that sought to identify the dominant themes of segregation and cohesion. Some of these themes had a theoretical basis or were anticipated from the findings of the quantitative analysis. The interviews introduced new and unexpected relationships between themes and revealed emergent connections that supported the contextual nature of patterns and narratives.

Thematic analysis was selected as it reflected the nature of quantitative findings and provided a means of exploring and explaining the complexity of these findings. Thematic analysis provides a way of 'observing' the phenomenon, recognising important elements and understanding their significance (Boysatzis, 1998). Recurring messages across the narratives of different participants indicate dominant features (whether they are relationships or individual characteristics) of the phenomenon. This permits the identification of 'difference' related to contextual variation. Each interview was transcribed in full and an initial exploratory analysis was conducted to identify key categories of description relating to each research question. Within these categories a number of themes were identified and a coding structure developed. Taking an iterative approach to analysis, nodes or categories of description were identified and revised. Sets of transcripts from each case were analysed separately enabling comparison of types of description between the areas. Similarities and variation of the narratives and language within or between the cases were identified, producing a complex picture of participants' descriptions of segregation in their area.

Conclusion

The research aims to identify patterns and processes of residential segregation through a combination of quantitative and qualitative research methods. Although methodological approach is mixed, this does not mean that it lacks epistemological structure. A quarter of local authorities were selected using random stratified sampling techniques and quantitative investigation of two, static pictures of patterns and conditions at two times points were produced. Using the Index of dissimilarity as the baseline indicator of residential segregation, the degree of

segregation across the representative sample was established for 1991 and 2001. Cluster analysis was then employed to identify if different levels of segregation shared specific socioeconomic characteristics. Using these findings as a guide, the study employed multiple regression analysis to explore the precise nature of the relationship between these characteristics and segregation outcomes. A number of conclusions were drawn from this investigation and from the sample, three cases were selected and qualitative methods were used to explore processes relating to these conclusions. It is recognised that there are limitations to this study and the attributes and methods selected. However, the methodological approach is appropriate for the purposes of the research and enables the project to meet the key objectives.

Chapter 5

Patterns of Segregation in English Districts: a quantitative analysis

Chapters One to Three documented current understandings of segregation and the problematisation of ethnic residential segregation within English social policy. Chapter Two provided evidence of strong relationships between ethnic segregation and many indicators of deprivation in both North American and European contexts. It also presented existing evidence that challenges the popular conception of residential segregation in the UK as high and increasing over time. However, the literature lacks a precise understanding of how more and less segregated localities differ socio-economically in England. Questions also remain regarding the drivers of segregation and its processes and their operation in different geographical regions. This chapter asks to what degree English local authorities are segregated and whether authorities with a greater degree of segregation can be distinguished from those that are more integrated.

Chapter Four presented the research's sequential mixed methods strategy and explained the role of the quantitative phase therein. This chapter will present the results of the quantitative analysis, providing a statistical representation of segregation and its associated characteristics. Using the Index of Dissimilarity (IoD) as the baseline measure of segregation, cluster analysis and multiple regression analysis enable us to identify the nature of relatively segregated areas and the likely drivers of segregation. This offers an understanding of the stability of segregation between 1991 and 2001 and demonstrates the complexity of relationships between segregation and socioeconomic or demographic characteristics. Finally, the chapter examines the extent to which we can predict segregation outcomes on the basis of an authority's socio-economic or demographic nature, demonstrating how variation in local characteristics is associated with different levels of segregation.

The focus of Chapter Five is on the associations between segregation levels and socio-economic characteristics, whilst change over time and regional variation are

explored as explanatory factors. As detailed in Chapter Four, the sample is composed of ninety-one local authorities from the full range of BME representation within each population. Chapter Four detailed the sampling strategy for this level of analysis. Details of the variables entered in these analyses are also provided in Chapter Four and in Appendix 2.

The first section of this chapter establishes the level of segregation calculated for cases within the 2001 sample and provides a comparison with the same cases in 1991. This section also considers possible explanations for any changes in relation to region and to socio-economic and demographic characteristics. The subsequent section builds on these understandings to demonstrate how authorities with similar levels of segregation also share certain characteristics. This was conducted through cluster analysis, which grouped cases according to similarities in terms of the variables entered[1]. Separate cluster analysis was conducted for data from 1991 and 2001 and a distinction was made between authorities in London and those elsewhere. Differences in the nature of London boroughs from other areas were then employed to explain variation in segregation levels.

The key findings from these initial groupings provided the basis for the multiple regression analyses presented in the subsequent section. Again, separate multiple regression analysis was conducted for data from the two time points and for cases inside and outside the Greater London Authority. Analysis in 2001 is compared with that of 1991 and observed changes in patterns over time are discussed. Findings from the regression analyses are presented in the subsequent section through a thematic discussion of the relationships between segregation and housing, deprivation, social class and ethnicity. Dissimilarity scores between individual ethnic groups were then calculated from a small sample of authorities in order to

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[1] A more extensive discussion of this method was provided in Chapter Four.

identify more precisely those groups that were most segregated. The final section uses these findings to take the analysis beyond the white-BME dichotomy and addresses levels of inter-ethnic segregation. It concludes with a discussion of the possible explanations for associations identified by the analysis.

Segregation levels and their stability

The first research aim was to establish the degree to which English authorities are ethnically segregated. Using data from 2001, the initial analysis calculated actual dissimilarity (hereafter referred to as IoD) levels across the full sample. Dissimilarity ranged from 6.51 to 66.33 with a mean of 27.81 (Table 5.1 below). Although segregation in each region appeared to have decreased over time, t-tests for independent samples indicated that the changes to the mean scores were not statistically significant. However, significant variation was observed between cases in London and those elsewhere. In 2001 the mean dissimilarity score outside the Greater London Area (GLA) was 29.83 in comparison with 23.91 within London, indicating a lower level of segregation overall in the capital. Further, the range and standard deviation of scores in London were considerably smaller than those outside (Table 5.1). Thus, although the mean level of segregation London remained stable over time, this was likely a product of homogenising of segregation levels across London. Both more extremely high scoring and low scoring authorities became more similar to the mean over time.

Table 5.1   Segregation statistics 1991 and 2001: indicating the key statistics for all

cases, London and Authorities outside of London at both time points

	1991- all	Not GLA	GLA	2001- all	Not GLA	GLA
Mean	29.98	33.17	23.51	27.81	29.83	23.91
Range	72.44	71.84	32.09	59.82	59.82	34.27
Min	7.52	8.12	7.52	6.51	6.51	7.22
Max	79.96	79.96	39.61	66.33	66.33	41.49
St. Dev.	15.96	17.85	8.13	13.91	15.78	8.16
N =	91	61	30	91	61	30

Although there was no significant change in the mean segregation values for either

group between 1991 and 2001, reflecting other evidence that British ethnic

segregation is generally moderate and decreasing (Peach, 1999). Changes were

observed for certain cases.

Lower segregation levels and a narrower range of scores were observed in

boroughs in the GLA compared with the rest of England. In addition, although

significant increases and decreases were experienced by some individual local

authorities, there was no significant change overall to the degree of segregation

inside or outside the Greater London Area between 1991 and 2001. Although

outlying exceptions were present, segregation has remained stable over this time

period and does not appear to have experienced a particularly high degree of

increase for any individual cases. As presented in chapter two, the degree of

dissimilarity identified in this English context compares relatively favourably with

that elsewhere in Europe and in the United States. Although, when compared with

the USA, Europe as a whole has a lower level of segregation, (Musterd, 2005,

Peach, 1999, Johnston et al, 2007), levels of segregation identified here confirms

England's relatively low levels.

he following section presents the findings of cluster analysis exploring the nature of segregated authorities outside London in 1991 and 2001.

Characteristics of segregation

The research aimed to establish whether authorities with similar levels of segregation also shared demographic or socioeconomic characteristics, and this was explored using the cluster analysis presented here. Cluster analysis provides a descriptive picture of the nature of segregated areas in England and also creates the foundation for extending the explanatory analysis using multiple regression analysis.   The following section provides an overview of the clusters created within all cases, firstly in 1991 and secondly in 2001, and discusses how these have changed over the decade. Further analysis takes into account the distinction identified between the degree of segregation found in the GLA and in other authorities.

The selection of variables for inclusion in this analysis and the methodological process were presented in Chapter Four and will not be repeated at length here. As a descriptive tool, cluster analysis identifies those authorities (if any) with similar characteristics within a multivariate dataset. The groups created are exclusive and the similarity in terms of the variables included is maximised within each group and minimised between groups. Clusters which differ only in their mean segregation values would indicate little patterning of segregation with other characteristics of the areas, while those that differ in segregation scores in addition to at least some other characteristics suggest some possibly important inter-relationships. The initial cluster patterns are provided for descriptive purposes and will not be analysed in depth.

The first analysis was concerned with data from all cases in the sample in 2001. Two clusters of similar cases were produced and the following description indicates the socioeconomic nature of each cluster according to the mean values of each variable included.

In comparison with the second cluster, the first can be described as slightly more deprived, with higher proportions of minority groups: having a population with fewer white and more black (both African and Caribbean) and Chinese residents, a relatively high population density, containing more (social and private) rental properties, containing households with relatively low incomes but with higher qualifications and having a slightly lower degree of segregation.   In contrast, the second cluster may be briefly described as more affluent, with more white residents and a slightly higher degree of segregation.   However, it was apparent that cases from the Greater London Area and those elsewhere tended, at both time points, to fall into separate clusters. For this reason, separate analysis was conducted on the two groups separately. A detailed description of the cluster patterns of all cases can be found in Appendix 11.

The London Distinction

It was apparent from initial cluster analysis that cases in London were predominantly clustered together, indicating similarities between London boroughs distinguishing them from other authorities. Clustering of cases from both groups was likely to be obscuring the complexity of patterns in either area, suggesting that separate analyses would offer greater clarity. The similarities between London boroughs and their differences from other boroughs may be stronger than distinctions amongst authorities in each region. Further, the cluster patterns of all

cases in England revealed that since 1991 London had become increasingly distinct in nature from other parts of the country. Over the decade, there was less change within London than in the rest of the country, as GLA cases in 1991 had more in common with GLA cases in 2001 than they did with cases outside the region in the same year. Separate cluster analysis was conducted for each group of authorities. The cluster patterns of the separate groups are presented and compared and followed by a thematic exploration of the impact of region on segregation levels within each of the dimensions. The first analysis was conducted using 1991 and 2001 data for cases only from outside the Greater London Area.

Outside London, 2001

It was apparent that cases that shared a similar level of segregation outside of London were more homogenous than they were across the whole sample. Using data from 2001, two clusters were produced for authorities with distinct differences in average segregation and with distinct socioeconomic characteristics.

Cluster 1 had considerably greater mean segregation and a higher population density than cluster 2. In terms of ethnicity, this cluster had lower mean white proportions and considerably higher Caribbean, Bangladeshi, Indian and Pakistani proportions and slightly higher means of Chinese and African proportions. Housing variables also differed in size, though less strongly. Cluster 1 had slightly lower mean owner-occupation percentages and relatively higher mean percentages of both private and social rental. It contained a set of cases with lower educational levels in terms of both mean percentages of higher educational qualifications and no qualifications. There were considerably higher proportions of households with no car, percentages of terraces and residents with a limiting long-term illness. Thus, cluster 1 can be described as containing cases with 'high segregation, high population density, more BME residents and greater levels of social housing

poverty'. The mean values of each of these variables were higher in relation to both the full sample mean and cluster 2. The following table (5.2) shows the number and identities of cases within each cluster in 2001.

Table 5.2   Number and Identities of authorities in each cluster

Cluster 1 = x 41 authorities		Cluster 2 = x 20 authorities
Bedford	Oxford	Birmingham
Blaby	Poole UA	Blackburn
Bournemouth	Reading	Bradford
Brentwood	Rugby	Coventry
Bromsgrove	Sefton	Kirklees
Broxtowe	Shrewsbury	Leeds
Bury	South Derbyshire	Leicester
Charnwood	St Albans	Luton
Chesterfield	Suffolk	Manchester
Craven	Tewkesbury	Nottingham
Crewe and Nantwich	Thurrock	Oldham
Erewash	Tunbridge	Pendle
Exeter	Wakefield	Portsmouth
Gosport	Watford	Preston
Guildford	Wealden	Rochdale
Harlow	West Berkshire	Salford
Hastings	West Lancashire	Sandwell
Hertsmere	Wycombe	Slough
Ipswich		Walsall
Lewes		Wolverhampton
North Warwickshire		
Nuneaton		
Oadby and Wigston		

Table 5.3 shows the mean percentage of each variable within each cluster. The mean scores for each variable are included for comparison. It indicates that cases in cluster 2 contained considerably lower mean segregation and lower population density. In contrast to cluster 1, black and minority ethnic proportions were considerably lower, particularly those of Caribbean, Indian, Pakistani, Bangladeshi groups. It was a group of cases containing more home ownership and lower mean

percentages of private and social rental. There were also fewer terraced properties overall in cases in this cluster than in the other. The cluster can be briefly described as follows: 'Predominantly white with low segregation, greater affluence, lower population density and slightly better health.'

Table 5.3   Clusters of cases outside London showing the mean % for each variable within clusters in 2001

	Cluster 1	Cluster 2	Overall Mean
BMEIoD	43.61	23.30	29.63
Density	27.11	12.49	17.05
No quals.	34.24	27.65	29.70
HE quals.	17.91	19.62	19.09
LLTI	18.77	17.28	17.74
No car	33.71	21.90	25.58
Non manual	36.41	45.59	42.73
Overcrowding	0.80	0.28	0.45
Terraced	35.00	23.05	26.77
BME	19.77	4.56	9.29
Social housing	17.26	10.88	12.87
African	0.65	0.22	0.35
Caribbean	1.86	0.37	0.84
Chinese	0.49	0.38	0.41
White	80.08	95.46	90.67
Indian	6.28	1.26	2.82
Bangladeshi	1.03	0.22	0.48
Pakistani	6.17	0.59	2.33
Private rental	9.23	7.70	8.17
Ownership	64.03	73.09	70.26

Outside London, 1991

The same analysis was conducted using data from 1991, enabling comparison of clusters of cases outside London in 1991 and in 2001. In 1991 the first cluster could

be broadly described as being relatively white, wealthy and educated to a high level.   The cluster also had a significantly lower segregation mean and considerably lower population density. Specifically, Caribbean, Indian, Pakistani and Bangladeshi populations were again much smaller than those in cluster 2. The lower mean percentage in cluster 1 indicates that these cases contained half the proportion of overcrowding as cases in cluster 2 and had much smaller proportions of households with no car, indicating greater affluence. The percentages of social housing in these cases were relatively low and of home ownership slightly higher, whilst private rental was broadly similar in each cluster. It had higher mean educational levels and a particularly low mean percentage of terraces relative to cases in the second cluster.

This can be compared with cluster 2 in which cases were predominantly poorer, more segregated, with more terraces and higher proportions of many not-white groups.   Little or no change was identified in the overall characteristics clustered together between 1991 and 2001, although by the latter year the 'deprived' cluster saw more intense deprivation than in 1991, a result of the fact that in 2001 authorities grouped more strongly according to the percentage of households with no car relative to other variables than they had done in 1991. The direction of change (increases as opposed to decreases) in segregation level in authorities between 1991 and 2001 did not affect the level of deprivation in 2001. Areas that had become more segregated between 1991 and 2001 were no more likely to be deprived than those that had become less segregated over time. Any changes in segregation level occurred independently of the increasing socio-economic polarisation evident between 1991 and 2001.

There were some minor exceptions to this overall stability. Although the variables associated with segregation remained stable between 1991 and 2001, in 1991,

cases with larger Pakistani communities were associated with authorities that had lower segregation and greater deprivation.   This apparent association between such characteristics corroborated structural associations between poverty and Pakistani households. However, a decade later the means for variables in opposing clusters had changed. The cluster with a higher mean percentage of Pakistani residents also had a higher mean for segregation and indicating affluence. This may suggest that authorities with larger Pakistani populations were increasingly segregated, regardless of the degree of deprivation in the authority. Alternatively, as areas became more affluent, it was possible that the dispersal of more wealthy white households increased the concentration of Pakistani households. Although this appeared to suggest an increasing link between authorities with larger Pakistani populations and areas of higher segregation, the dichotomous segregation calculation combining all non-white residents in a single category may have concealed variation in patterns of ethnic minority groups. In order to establish whether certain communities were more segregated than others, further analysis is required of the segregation of individual ethnic groups.

Table 5.4   Clusters of cases outside of London showing the mean % for each variable within clusters in 1991

Variable	Cluster 1 (More affluent)	Cluster 2 (More deprived)
BME IoD	24.62	48.32
Density	11.44	23.83
Caribbean	.45	1.47
African	.12	.18
Indian	.99	4.67
Pakistani	.45	3.62
Bangladeshi	.14	.57
Chinese	.23	.29
BME	3.23	12.27
LLTI	11.23	13.79
Overcrowding	.36	.62
No car	26.11	40.73
White	96.77	87.73
Ownership	25.27	20.85
Private rental	6.97	6.29
Social housing	16.36	28.63
No quals (Over 18)	85.17	90.24
HE quals (Over 18)	7.88	4.78
Non-manual	52.61	39.99
Terraces	24.35	40.68

In terms of the dominant characteristics, the nature of the 'more affluent' or 'more deprived' clusters outside London did not change over time, though the degree of similarity of cases in terms of certain characteristics did change between 1991 and 2001. Table 5.5 shows the effect sizes[2] of the clustering on each variable in each year and rank of each variable within that year. It indicates that in 1991, cases in each cluster were most similar in terms of households with no car, population density, non-manual workers social housing, terraced dwellings and no

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[2] 'Effect size' refers to the standardised measure of the difference in the observed effect. Using Pearson's correlation coefficient, r, lying between 0.0 and 1.0, variables with a coefficient over 0.5 are considered to have a 'large' effect, over 0.3 a 'medium' effect, and those of 0.1, a 'small' effect. Thus, tables 5.3 and 5.6 show the importance of each variable on the clustering of authorities.

qualifications (all variables with effect sizes over 0.6). However, whilst relatively lower, the effect sizes of most other variables were also high. Clusters were only dissimilar in terms of the Chinese and the social rental variables although there was variation in the segregation level of cases in each cluster.

By 2001, cases were most similar in terms of their white proportions, the proportion of overcrowded households, percentages of Pakistani residents and households with no car. The similarity of cases within each cluster in terms of Pakistani proportions had increased over time relative to other variables. Decreases in their effect sizes indicated that levels of population density, proportions of social housing, and residents with no qualifications no longer characterised the two clusters to the same extent, both relative to other variables in that year and in comparison with 1991 clusters.

The most important increases in relative importance were for the segregation variable (increased to 8th greatest effect size), white (and by association, BME), and overcrowding (increased to 3rd greatest effect size). However, the actual changes in effect size for these variables were very similar. The percentage Pakistani variable had an equivalent increase in effect size but a lesser change in ranking. Key changes in rank were also observed for the Limiting Long Term Illness, social housing, no qualifications, BME, household overcrowding and Pakistani variables. It was observed that the effect size of the segregation variable had increased between 1991 and 2001, indicating that segregation became more strongly clustered over time.

Cases with similar levels of segregation became progressively more alike. However, the actual effect of segregation level on cluster patterns remained low, so that local authorities that could be classified according to ethnicity, housing tenure and

affluence with non associations with particular levels of segregation. Although it initially appeared that cases had become increasingly similar in terms of segregation level, it was possible that this apparent increase in the effect of segregation on cluster formation was the product of an increase in proportions of other variables rather than an independent effect.

In contrast, the effect size of population density decreased considerably, particularly in relation to other variables. The effect size of the '% Pakistani residents' variable was low in both 1991 and 2001, suggesting that the clustering of authorities with high percentages was not particularly strong. This may suggest that the nature of more segregated authorities had become increasingly distinct from less segregated areas over time and increasingly associated with larger Pakistani communities. It should also be recognised that such clustering did not necessarily indicate that larger Pakistani communities were the same residents who directly experienced more affluence or more segregation.

Table 5.5   Effect size and ranking of variables within clusters in 1991 and 2001: Cases from outside London only

Variable	1991 Effect Size	1991 Rank	2001 Effect Size	2001 Rank
No car	**-0.786**	1	-0.636	5
Density	**-0.704**	2	-0.483	14
Non-manual	-0.691	3	-0.608	6
Social housing	-0.674	4	-0.413	15
Terraced	-0.663	5	-0.536	9
No quals.	-0.615	6	-0.489	13
Pakistani	-0.598	7	**-0.732**	4
BME	-0.588	8	**-0.761**	2
White	-0.588	9	**-0.765**	1
LLTI	-0.585	10	*-0.297*	*17*
Overcrowding	-0.576	11	**-0.740**	3
HE Quals	-0.569	12	*-0.253*	*18*
Owned	-0.558	13	-0.510	11
Bangladeshi	-0.496	*14*	-0.497	12
African	-0.442	*15*	-0.355	16
Caribbean	-0.431	*16*	-0.514	10
Indian	-0.382	*17*	-0.547	7
BME IoD	-0.368	*18*	-0.544	8
Chinese	-0.285	*19*	*-0.035*	20
Private rent	-0.128	*20*	*-0.211*	19

* Figures in bold indicate those variables ranked in the top ten greatest effect sizes in 1991

Clustering in London

Subsequent cluster analysis was conducted using cases from the GLA only. This analysis produced a single cluster in 2001, indicating either that cases with similar levels of segregation were socioeconomically diverse or that the complexity could not be captured by cluster analysis.

Thematic Discussion of Regression Analysis

Cluster analysis indicated that outside of London, authorities with higher levels of segregation also shared a number of other characteristics but that no such conclusions could be drawn for cases within the GLA.

The anticipated association between higher levels of deprivation and greater segregation and between greater segregation and larger BME populations was evident outside of London. Using findings from multiple regression analysis, this section demonstrates how specific characteristics can be used to predict segregation levels, how it is likely that certain effects are the product of a relationship with other factors and lastly how region may affect such relationships. It became apparent that in London, factors existed to create a different effect from that elsewhere.

All analysis was conducted on data from 2001, with 1991 data discussed only as an illustration of change over time when appropriate. A thematic approach briefly addresses variables individually, concluding with ethnicity, which will also address the role of interactions between themes. This is followed by an exploration of the key regression models in London and elsewhere. The first section presents the regression models in each area. During analysis each predictor was first entered individually before models were produced in which multiple predictors were entered through the step-wise methods. Each table presents a number of regression models, indicating the coefficients, the R^2 value representing the proportion of variation in segregation that is explained by the variables in the model, and the t values for each predictor variable. All variables are significant to 99% (indicated by **) or 95% (shown by *). All coefficients shown are standardised coefficients.

It was anticipated from cluster analysis that patterns in London would be distinct from those elsewhere, yet this had not been apparent from separate analysis of the two groups. Table 5.7 shows that in London in 2001 only 38% of the variation in segregation could be explained - by a combination of lower population density and larger Pakistani communities. The greater effect was of population density which had a coefficient of -.457. No other variables had a significant predictive effect on the segregation outcome. When population density was held constant the effect of the percentage Pakistani was reduced slightly indicating that some apparent effects of Pakistani proportions were due to lower population density in high segregation boroughs in London (Table 5.7). This was a different picture from that in 1991 when the only variables that significantly contributed to change in segregation level in London were the percentage of terraced properties and the percentage of residents with no qualifications (Table 5.6). Although other variables initially appeared to contribute to variation in the segregation outcome in 1991, controlling for Pakistani and population density in the same model indicated that this explanatory value was not independent of the Pakistani and population density variables.

Table 5.6   Regression model for local authorities in London in 1991

	Unstandardised coefficients				
	B	SE B	St. B	R^2	t
(Constant)	21.728	1.978		.060	10.983
% Pakistani	1.321	.988	.245		1.338
(Constant)	-24.284	16.844		.224	-1.442
% No quals.	.583	.205	.474**		2.846
(Constant)	14.570	3.209		.249	4.541
% Terraces	.293	.096	.499**		3.050
(Constant)	29.699	3.593		.112	8.266
Population density	-.106	.057	-.334		-1.877

*indicates 95% significance; ** indicates 99% significance. These indicators apply to all tables.

Table 5.7   Regression model for local authorities in London in 2001

	Unstandardised coefficients				
	B	St. Error B	St. B	R^2	t
Model 1					
(Constant)	20.830	1.903		.185	10.944
% Pakistani	1.627	.647	.430**		2.517
Step 1					
(Constant)	33.525	3.151		.277	10.640
Population density	-.147	.045	-.526**		-3.272
Step 2					
(Constant)	29.710	3.443		.384	8.628
% Pakistani	1.269	.585	.335**		2.170
Population density	-.128	.043	-.457**		-2.957
Model					
(Constant)	15.199	3.470		.281	4.381
% Pakistani	.908	.724	.240**		1.253
% Terraces	.270	.142	.364*		1.906
(Constant)	24.933	5.899		.347	4.226
% Terraces	.266	.133	.304**		1.701
Population	-.105	.050	-.376**		-2.104

density					

In contrast, outside of London in 1991 two models were apparent. In the first a combination of non-manual-worker percentages and Pakistani percentages and in the second a combination of larger Pakistani and Indian communities explained 44% of increased segregation (Table 5.9). In both models, the effect of the percentage Pakistani variable was the greater of the two. These associations persisted in 2001, with the addition of lower population density and fewer non-manual workers to the factors contributing to greater segregation. By this time, the combination of these variables explained 61% of variation in segregation with percentage Pakistani, population density and socioeconomic class having the greatest effects. Table 5.8 below demonstrates that only percentage white, employment rate, male life expectancy, percentage terraces and percentage Caribbean variables had an individual effect. Although the percentage terraces variable initially appeared to affect the segregation outcome, this was not independent of the effect of Pakistani proportions in 2001.

Table 5.8   Regression model for local authorities outside of London in 1991

	Unstandardised coefficients				
	B	St.Error B	St. B	R²	t
(Constant)	6.773	7.266		.196	.932
% No car	.841	.222	.442		3.789
(Constant)	69.349	11.090		.158	6.253
% Non-manual	-.753	.227	-.397		-3.323
Step 1					
(Constant)	26.547	2.208		.391	12.022
% Pakistani	4.161	.744	.589**		5.594
Step 2					
(Constant)	24.101	2.215		.438	10.881
% Pakistani	3.564	.723	.504**		4.930
% Indian	1.466	.478	.313**		3.065
Enter Method					
(Constant)	36.713	11.047		.451	3.323
% Pakistani	3.338	.746	.5472**		4.473
% Non-manual	*-.245*	*.210*	*-.129*		-1.165
% Indian	1.263	.507	.270*		2.490
(Constant)	19.389	5.933		.096	3.268
% Terraces	.456	.182	.309*		2.499

Stepwise method excluded either the Indian or the Non-manual variables from the model.

Table 5.9   Regression model for local authorities outside of London in 2001

Model 1	Unstandardised Coefficients				
	B	St. Error B	St. B	R^2	t
Step 1					
(Constant)	**22.960**	1.808		**.440**	12.700
% Pakistani	**2.860**	.420	**.663****		6.811
Step 2					
(Constant)	**77.790**	19.157	**.000**		4.061
% Pakistani	**2.340**	.436	**.542****	**.510**	5.362
Employment rate	**-.708**	.246	**-.291***		-2.874
Model 2					
(Constant)	**94.259**	28.677			3.287
% Pakistani	**1.870**	.608	**.434****		3.077
% White	**-.709**	.290	**-.398***	**.501**	-2.439
Population density	**-.278**	.179	**-.254***		-2.195
Step 1					
(Constant)	22.960	1.808		**.440**	12.700
% Pakistani	**2.862**	.420	**.663****		6.811
Step 2					
(Constant)	49.328	9.380			5.259
% Pakistani	**2.468**	.420	**.572****	**.509**	5.875
% non-manual	**-.596**	.208	**-.278****		-2.859
Step 3					
(Constant)	63.589	10.597			6.001
% Pakistani	**2.560**	.403	**.593****		6.345
% Non-manual	**-.825**	.219	**-.386****	**.559**	-3.768
Population density	**-.275**	.109	**-.251***		-2.529
Step 4					
(Constant)	57.449	10.327			5.563
% Pakistani	**2.435**	.386	**.564****		6.304
% Non-manual	**-.703**	.213	**-.329****	**.609**	-3.302
Population	**-.349**	.107	**-.319****		-3.266

density					
% Indian	**.887**	.332	**.253****		2.672

F = 46.389 (step 1); 30.101 (step 2); 24.066 (step 3); 21.778 (step 4)
Model 1 : Stepwise: F = 46.389 (step 1), F = 30.177 (Step 2);
Model 1: Stepwise method: White and Density = excluded variables; Enter method: F = 19.079.

Segregation both across England and in London were affected by the ethnic composition and affluence of individual authorities.   Regression analysis built a picture of deprived areas with high concentrations of certain South Asian communities occupying areas in which certain ethnic communities lived apart. In contrast it also told a story of relatively affluent districts in which middle class white and more affluent minority residents lived alongside each other. In London, this relationship between affluence and integration was the opposite with affluent areas having the greater association with segregation, retaining only the association between Pakistani communities and spatial separation.   Here it was likely that the local nature of individual groups changed from place to place, producing different residential outcomes. These variations and the differences in the way they interacted with other factors affected the level of segregation in an authority. Whilst the authorities themselves were not identified, such descriptions were likely to suggest historically or industrially specific types of towns in England.

Table 5.10   Regression coefficients for individual variables outside London in 2001

	Unstandardised coefficients			R^2	t
	B	**St.Error B**	**St. B**		
(Constant)	122.341	17.300		.329	7.066
% White	**-1.021**	.190	**-.574****		-5.378
(Constant)	349.299	83.873		.198	4.165
MLE	**-4.213**	1.105	**-.445**		-3.812
(Constant)	494.435	108.641		.237	4.551
FLE	**-5.774**	1.349	**-.487****		-4.279
(Constant)	26.601	2.433		.069	10.935
% Caribbean	**3.618**	1.724	**.264***		2.099

(Constant)	21.221	3.121		.160	6.800
% Overcrowded	18.851	5.618	.400**		3.356
(Constant)	10.215	2.964		.166	1.703
% No car	.759	.222	.407**		3.425
(Constant)	-7.124	8.669		.241	-.822
% No quals.	1.237	.286	.491**		4.331
(Constant)	124.952	20.636		.267	6.055
Empl'ment rate	-1.259	.272	-.517**		-4.636
(Constant)	14.436	4.999		.154	2.888
% Terraces	.567	.173	.392**		3.277
(Constant)	72.245	10.682		.217	6.673
% Non-manual	-.997	.246	-.466		-4.047

Class and occupation

Two variables indicating household head membership of either manual or non-manual socio-economic class were initially entered into the cluster analysis. Pearson scores indicating the degree of correlation between these variables ('percentage manual'[3] and 'percentage non-manual'[4]) were near perfect in both the London region and within other authorities (Appendix 3). Owing to the statistical effect of correlation on coefficients in regression models, socio-economic class was represented by the 'percentage non-manual' predictor only, and broadly interpreted to represent greater affluence and status.

In the London region, the analysis showed no significant effect of socio-economic class on segregation outcomes. The 'percentage non-manual' predictor remained non-significant even when Pakistani proportions were held constant, suggesting that class status had no relationship with residential patterns in the capital

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[3] Percentage of heads of households in manual occupations per authority.
[4] Percentage of heads of households in non-manual occupations per authority.

regardless of the size of the local Pakistani population. If we consider London's relatively low segregation levels, this supports the apparent spatial characteristics of class. In contrast, outside London, authorities with a smaller percentage of non-manual households were more likely to have higher segregation. Tables 5.9 and 5.11 show that this effect had become more pronounced between 1991 and 2001. The coefficient for the non-manual predictor increased from -.397 to -.466, indicating that the proportion of non-manual residents had a predictive and negative effect. Further, Table 5.9 indicates that when the percentage Pakistani variable is added to the model, the coefficient of the class variable changes to -.278 but retains its negative effect, suggesting that outside of the Pakistani community, authorities with more residents in professional occupations were more spatially integrated. In authorities with large Pakistani communities class status had a negative impact on segregation[5].

Table 5.11   Regression models for individual variables in London in 2001

	Unstandardised coefficients				
	B	St.Error B	St. B	R^2	t
(Constant)	24.375	1.641		.006	
% Bangladeshi	-.099	.252	-.074*		14.850
(Constant)	*28.625*	*11.264*		.006	*-.394*
% Non-manual	*-.088*	*.220*	*.076*		
(Constant)	35.210	4.551		.189	7.736
% No car	-.287	.112	-.435		-2.553
(Constant)				.239	
% Terraces			-.489*		
(Constant)	18.502	4.077		.312	4.538
% Terraces	.354	.119	.478**		2.990
% Social housing	*-.203*	*.120*	*-.270*		*-1.688*
Enter Method					

(Constant)	14.813	11.720			1.264
% Non-Manual	.133	.217	.097	.193	.520
% Pakistani	1.764	.706	.466**		2.500

Stepwise method for terraces and social housing variables excluded the social housing variable from the second model. The model shown here is the Enter method. Stepwise method for the Pakistani and non-manual variables excluded the non-manual variable from the second model.

Education

Cluster analysis indicated that outside of London there was an association between boroughs with higher proportions of more educated residents (as indicated by the variables 'percentage no qualifications' and 'percentage higher educational qualifications') and lower levels of segregation. For the purposes of regression analysis, the level of education in authorities was represented by the variable 'percentage no qualifications' only. Owing to the high correlation of 'percentage higher educational qualifications' and 'percentage no qualifications' these variables could not be entered into the regression analysis simultaneously. In regional models a non-significant model showed that this positive[6] relationship exists only outside of London (shown in Table 5.10). It was not possible to enter a class variable in the same model as the education variable, since the variables correlated too highly and it is unsurprising that the relationship between education and segregation corroborates that of class and segregation.

Housing

Analysis of the theme of housing included several variables: 'Percentage terraces', 'percentage social housing', 'percentage private rental', 'population density', and 'percentage overcrowded households'. These were selected because they

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[6] A 'positive effect' indicates that an increase in the predictor variable results in an increase in the dependent variable (segregation level). Predictor variables that have a 'negative effect' on segregation levels are those for which an increase in percentage results in a *decrease* in segregation. The terms have no implications of the subjective nature of such effects.

demonstrated a strong relationship with segregation levels in the cluster analysis. Owing to high correlation with these variables, others were excluded from the model.

Terraces

The percentage of terraced dwellings in an authority had a positive relationship with segregation, with similar effects identified both in London and elsewhere. Tables 5.10 and 5.11 show that the presence of a high proportion of terraced properties in an authority is likely to be key to predicting a high level of segregation. In both London and elsewhere, comparison of the % terraces coefficients in Tables 5.8 and 5.9 shows that outside London the effect of the proportion of terraces on segregation increased slightly between 1991 and 2001. In contrast, the effect in London was relatively higher but remained stable over time (the coefficients in Table 5.6 compare with those in Table 5.7). However, it is likely that in London the apparent impact of the 'proportion of terraces' variable resulted from the negative effect of population density in similar areas: boroughs with a high proportion of terraces often had a low population density[7]. This is supported by a change in the predictive effect of proportions of terraces from one independent of population density in 1991 to no independent effect in 2001. The apparent positive effect of terraces was due to the higher proportions of Pakistani residents found in the same areas – they correlated outside London at .501** (sig .000). The mutually exclusive presence of these two factors in London was thus replaced by a greater impact of the percentage Pakistani residents.

When the percentage Pakistani variable and the percentage terraces variable are simultaneously entered into a regression analysis in London, neither has any independent predictive impact on segregation levels. The contrast with the model

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[7] Correlations for the variables are given in Appendix 4

outside London was shown by the reduction of the strong independent effect of terraces when the proportion of Pakistani residents was held constant but with the retention of a predictive effect of the Pakistani variable. The apparent predictive effect of terraced proportions was seemingly in part a result of high numbers of Pakistani residents located in those authorities with large proportions of terraces. These relationships are explored in greater depth under the 'Ethnicity' theme.

Social Housing

The percentage of households in social housing in each authority connects the themes of housing and deprivation. In 1991, clusters suggested a strong relationship between higher segregation and larger proportions of social housing outside of London and although this had lessened by 2001 it was anticipated that the variable would retain a predictive effect on segregation outcomes.

However, the significance values for this variable indicated that the percentage of socially rented dwellings had no active relationship with segregation levels in any region of England in 2001.   In 1991, a positive but weak relationship appeared to exist outside of the Greater London Area, but this relationship was likely to be the result of a similar positive effect of the proportion of terraces in the London area. Table 5.11 shows that when the proportion of terraces was held constant in the Greater London Area the percentage of social housing had no independent effect on the segregation outcome.

The absence of a relationship between segregation outcomes and tenure was reinforced by the non-significant effect of the percentage of privately rented dwellings in authorities. Despite exhibiting a certain amount of clustering (private rental was the seventh most important variable in cluster in both years outside London), this variable had no significant predictive effect on segregation outcomes.

Further, when the percentage of Pakistani residents variable and the social housing variable were entered into a model simultaneously, the tenure variable had no independent effect. As these variables did not correlate, the conclusion might be, not that areas with large Pakistani populations often contained a high percentage of social housing, but that increases in Pakistani percentages were responsible for the higher levels of segregation found in some authorities that also had a high percentage of social housing.

Overcrowding

The percentage of overcrowded households within authorities was only demonstrated to be important in predicting segregation levels outside of the GLA; there was no significant relationship within the capital. Table 5.10 shows that the coefficient of this variable outside of London was .40, indicating a positive relationship with segregation outcomes. In London, other variables suggested that segregation was associated with greater affluence - thus the absence of an association with overcrowding fell in line with these patterns. The strong correlation between overcrowding and households with no car (.793**) confirmed this. The following section explores indicators of deprivation in greater depth.

Deprivation and segregation

Cluster analysis indicated a complex association between variables, indicating deprivation and segregation level and also a distinction between patterns in the London region and elsewhere. These associations were shown to have become more important over time, and indicators of deprivation had a particularly complex relationship with segregation. The theme of deprivation encompassed a number of

variables: population density, percentage of households with no car and employment rate[8]. They are addressed individually.

Population density

With an effect size of -0.483, population density was one of the characteristics most strongly clustered with areas of lower segregation outside of London in 2001. It was also one of only five predictors that had a significant impact on segregation outcomes when entered individually in either London or elsewhere. However, in London population density had a strong negative effect on segregation (-.526), in contrast to no effect outside London (Table 5.6). Exploration of the interactions between this variable and other predictive characteristics indicated that in 1991 in London the effect of population density on segregation level was not significant when the proportion of terraces was held constant. This suggested that otherwise apparent effects of low population density were due to such areas typically having high proportions of terraces. Further, the models in which population density and ethnic group variables were entered together indicated additional complexity in the relationships between these variables and segregation outcomes.

These models are discussed in greater depth in the analysis of ethnicity below, though of special interest is the difference between the relationship indicated by multiple regression analysis and that suggested by cluster analysis. No clusters emerged in the analysis of London cases, yet population density had a significant and negative effect on segregation outcomes in regression analysis. In contrast,

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[8] Health deprivation was represented by the variables Limiting Long Term Illness and Life Expectancy. *Male life expectancy (MLE):* Life expectancy was not included in cluster analysis due to the absence of comparable data for 1991. It was included in some regression analysis and had a negative effect on segregation outside of London but no predictive effect in the capital. This reflects the lack of correlation between segregation and MLE in London. Outside London: correlated with IoD at -.445**. Regression analysis entering this variable only showed a negative relationship: R^2adj .184, coefficient = -.445**. Population movement (net migration) was also included in initial regression analysis but was demonstrated to have no significant impact on the segregation level of local authorities in 2001. No comparative data was available for 1991.

outside of London cluster analysis suggested a strong positive relationship between density and segregation that was absent in regression analysis. The correlation coefficients for the two variables showed that density did not correlate with segregation level either in London or elsewhere.

Households with no car

The proxy indicator for household deprivation or household income was the percentage of households with no car. This variable had a strong positive relationship with higher segregation in the cluster analysis. It was initially demonstrated to be a strong predictor of segregation outside of London and had a positive effect -on outcomes, although this effect had decreased marginally since 1991 (Table 5.9 and Table 5.11). In London this variable appeared to have a similar degree of effect on segregation but was negative: the lower the percentage of households with no car in an authority, the more likely the authority would be highly segregated. The relationship between other variables and the degree of car ownership is addressed under the 'Ethnicity' theme.

Employment rate

With a comparatively low coefficient of -.225 and an R^2 of just .04, employment rate appeared to have a negative but exceptionally weak effect on segregation outcomes across all cases. Separate regional models indicated that this weak relationship resulted from a non-significant correlation in the London area. In contrast, the employment rate outside of London initially appeared to explain 28% of the variation with a relatively high beta coefficient of -.517. Authorities with a low employment rate outside of London seem more likely to experience high segregation. This reinforced the understanding that more deprived areas experienced greater spatial segregation. However, the percentage of Pakistani

residents appeared to have an effect on this relationship. Model 1 in Table 5.10 shows that although the employment rate had an independent effect on the segregation level outside of London, it contributed only an additional .06 to the R^2. A lower employment rate and a relatively high percentage of Pakistani residents meant that segregation levels would be higher, with a combined R^2 of .510 and coefficients of -.291 and .542 respectively (model 1, Table 5.10), suggesting that the apparent positive effect of high unemployment on segregation resulted predominantly from the presence of relatively large proportions of Pakistani residents in areas of low employment.

Ethnicity

This section examines the relationship between ethnicity and other variables and then addresses the question of residential segregation beyond the white-BME dichotomy. Cluster analysis in 2001 indicated a relationship between higher segregation and all minority ethnic groups except for Chinese[9]. In particular, there was a strong relationship between higher segregation and larger Pakistani populations in both years and which had increased since 1991, so it was anticipated that the percentage of Pakistani residents would have a significant predictive effect on segregation level. The section addresses key relationships between segregation and ethnicity in all cases and presents the possible models for these relationships. Separate exploration of the effect of the Pakistani variable is included. Following this, individual models for cases in the GLA and elsewhere are used to explore the

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[9] Because the cluster analysis had indicated only a limited association between Chinese populations and segregation level, it was not anticipated that regression analysis would reveal a significant relationship. Indeed this was the case in analysis of all cases in the sample. However, outside of London a small independent effect was observed when both the % Pakistani and the residents with no qualifications variables were held constant. This suggests that the effect of the percentage of Chinese on higher segregation authorities may be due to the presence also of large % of Pakistani residents and more people with no qualifications, rather than the Chinese presence itself.

relationships between ethnicity, segregation and socio-economic variables. Unless otherwise stated, all models are based on data from 2001.

Percentages of Pakistani residents

Regression models in all cases show the proportion of Pakistani residents had a positive effect on segregation levels and explained a high percentage of variation in segregation. However, because this effect across all cases was considerably lower than that of population density, it appeared likely that this model was concealing regional variation. Subsequent separate analysis suggested that the key distinction between processes of segregation in London and elsewhere may be the greater (negative) effect of population density in the GLA.

In regression models outside of London, the positive effect of the percentage of Pakistani residents was independent of any other variable, including population density and was the most important predictor variable. Table 5.9 shows that the percentage of Pakistani residents explained 44% of variation in segregation with a very high coefficient of .663, a slight increase since 1991. This variable explains the effect of all ethnic variables other than the percentage Indian residents. A high correlation of the Pakistani variable with the percentage white variable (p = -.699**) prevented them from being entered simultaneously, but this correlation did indicate that local authorities with high proportions of Pakistani residents were very likely to have relatively low proportions of white residents.   Even in the final model (Table 5.7), the percentage Pakistani variable retains its large coefficient, although when the regression models for GLA cases and other cases are compared we observe considerable difference in the regression line. At 0.185, the R^2 value for this model in London is considerably lower than elsewhere, indicating that the role of the percentage of Pakistani residents was considerably greater outside London

than within. In London the effect of the percentage Pakistani residents retained its positive effect but was comparatively weaker with a coefficient of only .430 (Table 5.6). Although Table 5.7) also indicates that this was an increase from no predictive value at all in the 1991 model. The strong negative effect of population density on segregation outcomes in London was reinforced by the relationship between the percentage of terraced dwellings variable and the percentage Pakistani variable. Each variable appeared to have a positive effect on the segregation outcome, though when they were entered into a regression model simultaneously neither had an independent effect in the London area. When the percentage Pakistani variable was held constant, the effect of the Bangladeshi variable on segregation was no longer significant. This may be attributed to the common presence of high percentages of Pakistani residents in authorities with relatively large percentages of Bangladeshi residents. Secondly, it had been observed that the percentage of white residents in authorities had no significant effect on segregation outcomes in London. However, the apparent negative effect of 'percentage white' variable on segregation was increased because of the larger Pakistani percentage in these areas, suggesting it was a product of conflicting relationships in the two regions. When the regression model entered both percentage Indian and percentage Pakistani variables simultaneously, both retained their independent effects on the outcome. However, the predominance of variation in Pakistani percentages persisted in this relationship, as the coefficient for the Indian variable indicated was smaller than in earlier models. Some of the effect apparent in earlier models would appear to be the product of the presence of larger percentages of Pakistani residents, although the combined variation of both variables has a positive effect on segregation outcomes.

The relationship between population density and the percentage of Pakistani residents was significant, revealing more about variation in segregation than did the initial cluster analysis. As in London, population density elsewhere had

a negative effect on segregation outcomes, but its relationship with the percentage of Pakistani residents was very different. When population density was held constant, the positive effect of the proportion of Pakistani residents decreased slightly to .434, though the effect of population density on segregation was not independent of the effect of changes to Pakistani proportions.   It appears that if population density were to remain the same, an increase in the percentage of Pakistani residents would increase segregation to an even greater extent than without this constant. Only when the percentage non-manual and the percentage Indian variables were also held constant did both the percentage Pakistani and the population density variables retain independent effects. This model offered the greatest explanatory value for variation in segregation outcomes. Although the variables in the models remained the same, the effect of each combination had increased.   Larger Pakistani communities, smaller proportions of residents in non-manual occupations, lower population density and larger Indian populations explained 61% of segregation variation (Table 5.10). Variation in the percentage of Pakistani residents retained its status as the most important factor with a coefficient of .564 compared to the relatively low coefficients of the other three variables, which is comparable to the analysis in 1991 when two models were possible. Firstly, 44% of variation segregation was explained by larger Pakistani populations and larger Indian populations and 38% by a combination of larger Pakistani proportions and non-manual worker proportions (Table 5.9).

It is assumed that this weaker relationship between segregation and proportions of Pakistani residents in London results from the effects of other variables. The dynamics of this regional variation and the relationship between the percentage of Pakistani residents and the effects of other variables are explored separately below.

Regression models in London: an overview of key differences

The following section addresses key differences between models of cases within and outside London.   Two models were produced that showed that certain combinations of variables could explain variation in segregation outcomes in the GLA.

The first model shown in table 5.6 indicated that (in 2001) in London, 38% of variation in segregation could be explained by a combination of population density and the relative size of Pakistani communities. Population density had a negative effect independent of the proportion of Pakistani residents in the area. (With a coefficient of -.457 compared to .335 for the Pakistani predictor) it had a greater impact on segregation outcomes. The analysis of 1991 data demonstrated that although a similar model existed prior to 2001, it had become stronger over time with density coefficients increasing from -.334 to -.526.

When entered into the same model in London, the variation in population density explained the otherwise apparent effects of many predictor variables. One such variable was the percentage of terraced dwellings. In 1991 the proportion of terraced dwellings in a London borough retained a positive effect independent of population density with a coefficient of .499* and standard error of .096. When population density and percentage of terraces were entered into the model simultaneously, the dwellings variable had no independent effect. We can therefore conclude that although areas with smaller proportions of terraces have in the past tended to be less segregated, this is no longer the case in the GLA.

The data in London was then modelled using ethnic group predictors only and exhibited a number of features including the relationship between Bangladeshis and Pakistani proportions.

Regression models outside of London

The key features of models outside of London differed slightly. Outside of London, more of the predictor variables could be used to explain variation in segregation in 2001. Table 5.11 shows the coefficients for those variables that had a significant effect on segregation outcomes when modelled individually. Particularly high coefficients were observed for the percentage of residents with no qualifications and the employment rate. In addition to these socio-economic variables, all ethnic group predictors in particular the percentage white variable, appeared to have an effect upon segregation outcomes when entered individually.

As indicated above, with a coefficient of .663 (R^2 = .440), the proportion of Pakistani residents had a positive effect on segregation. This coefficient had increased slightly from .589 in 1991.

These models indicated that outside of the Greater London Authority, if the Pakistani proportion was held constant, variation in only three other variables had an effect on segregation outcomes.   It was apparent that two factors remained consistent in both regions: greater segregation levels were associated with larger Pakistani communities and lower population density.   The distinction between the GLA and other authorities was evident in the relationship between the positive effect of percentages of Pakistani residents and the negative effect of population density. The role of the percentage of Pakistani and of Indian residents in predicting white-BME segregation outcomes raises questions regarding the extent to which individual ethnic groups are implicated in white segregation and whether this measure conceals more complex arrangements, requiring an understanding of residential segregation between individual groups. The following section extends

the dichotomous measure to an analysis of inter-ethnic group segregation within a small sub-set of the sample.

Inter-ethnic segregation

Despite the apparent complexity of patterns identified, it is possible that calculating segregation using the white-BME dichotomy concealed variation in separation patterns between minority ethnic groups. Furthermore, the importance of minority group size in the prediction of segregation suggested that the relationships between individual groups had a distinct role in residential patterns. A small scale analysis was conducted to explore the level of segregation between individual minority groups in an attempt to identify the most segregated groups. The mean dissimilarity scores between pairs of ethnicities were calculated independently for London boroughs and other authorities. This section identifies certain pairs of ethnicities as particularly segregated from each other.

A stratified sample of eighteen authorities (20% of the total sample) was selected to explore patterns of ethnic segregation that extended the white/not-white dichotomy analysed above. Seven London boroughs and eleven authorities from outside the GLA werecluster sampled to represent twenty percent of the total sample of ninety-one. In order to capture potential relationship between inter-ethnic segregation and BME/white segregation, this was a stratified sample representing all levels of overall dissimilarity scores including the highest scoring authority. Dissimilarity scores were calculated between each ethnic category of white, African, Caribbean, Indian, Bangladeshi, Pakistani, other Asian, Chinese and 'other black'. First, the relative scores were compared to identify those groups most separated. Subsequently, multiple regression analysis was conducted adopting individual segregation scores as the dependent variable. It is recognised

that this sample is small and that the following analysis should be regarded as exploratory only.

All eighteen cases

In 1991 across the sample of eighteen cases, the highest mean dissimilarity scores were registered for white communities from Bangladeshi populations, white from Pakistani communities, and Bangladeshi populations from each of the other ethnic groups individually. The populations that were most spatially integrated were white with Chinese and Caribbean with African. A comparison was then made between mean scores in 1991 and 2001 across all eighteen cases. Significant changes in relationships were identified only between Indian-Other Asian groups, (where the mean segregation decreased over time). Bangladeshi-Other Asian (scores also decreased over time), and Pakistani-Other Asian groups (IoD scores decreased considerably over time from 38.26 to 24.61). Changes in segregation level between minority communities broadly reflected the relatively low degree of change indicated by the dichotomous white-BME dissimilarity scores.

Outside London

Mean dissimilarity scores were subsequently compared between cases in London and those elsewhere. Outside the Greater London Area, the greatest spatial segregation was between white and Bangladeshi communities. With a mean score of 66.76, this pair of populations alone was as highly segregated as the authority with the greatest dichotomous score, followed by Bangladeshi from Chinese, white residents from Pakistani, Bangladeshi from other Black and Pakistani from Chinese although their mean scores reduced over time. Only one case experienced greater segregation between Bangladeshi and white communities. It was observed that despite the very strong predictive role of Pakistani proportions in the regression models above, Pakistani was not identified as the ethnicity most segregated from

other individual groups. These segregation patterns in 2001 had changed little since 1991 when the groups most segregated from each other were also Bangladeshis from Chinese, Indian and African communities but also white populations from Pakistani residents. In contrast, Chinese and African and white communities were highly integrated.

London

Differences between the relationships between ethnic groups in London were distinct from those found elsewhere. Here, segregation was greatest between Pakistani and white communities rather than white from Bangladeshi communities and little had changed in terms of overall spatial arrangements over time. In 1991, the mean dissimilarity for this pair of ethnicities was 37.33. Table 5.9s illustrates how, in 1991, white communities were particularly segregated from Pakistani and Bangladeshi groups but Bangladeshi groups were also segregated from almost all other ethnic groups. These results suggested that the higher BME-white segregation observed in certain authorities might be explained in part by the segregation of white communities from Pakistani households. In London relationships may have existed between certain local characteristics and the degree of separation of Pakistani and white communities. This analysis provided some indication of features that were explored and corroborated in qualitative analysis.

Can different patterns in London be explained by variation in its socio-economic nature?

Throughout analysis it has been evident that London boroughs were distinct in terms of both outcome and process. T-tests for independent samples comparing the relative size of variables in London and other regions indicated a distinction between their socio-economic natures. This research asked why the distinction existed and whether such differences could be explained by socio-economic or

demographic variation. The following section aims to answer these questions by bringing together related findings from each type of analysis.

Looking back to 1991, evidence could be seen of a number of differences between London and other authorities. The most significant of these was the larger proportions of African, Caribbean, Bangladeshi and Chinese residents, the higher levels of overcrowding, private rental properties and residents with higher education qualifications present in London. Population density was also greater in the capital than elsewhere in England. By 2001, the rank of variable difference between London and other areas had not altered for African proportions, population density, households overcrowding, (detached properties)[10], Chinese, white, Caribbean, higher education qualifications, no car or private rent (other effect sizes were only medium[11]). However, there was some variation in the actual effect sizes. The difference in actual levels of overcrowding between London and elsewhere increased from 1991 to 2001, decreased for Chinese populations and for proportions with higher education qualifications. This suggests that there was little change in the relationship between London and other areas in terms of their general attributes. Although relationships (as indicated by correlation coefficients) between certain characteristics and higher or lower segregation existed, the interaction was more complex and developments in cluster patterns and segregation level were unlikely to be the product of the changing nature of boroughs.

In contrast, outside London (2001) there was no correlation between population density and segregation level, yet cases that shared relatively high segregation were in the same cluster as those with high population density. It is likely that this

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[10] Variables in brackets indicate larger proportions found in London than elsewhere, all others indicate the reverse.

[11] Effect sizes above .6 were interpreted to indicate a high degree of difference

concealment of the complexity of relationships was a weakness of the classification method. In London it was possible that the relatively high segregation found in boroughs containing relatively high proportions of both Pakistani and white residents might be a product of the specific relationship between these ethnic groups. The particular high mean dissimilarity score between this pair also suggested a relationship that extended beyond patterns of deprivation. The relationship between other pairs of ethnicities might also have begun to explain segregation patterns. In particular, the level of segregation of Bangladeshi residents from both white and Indian communities was greater in areas of lower population density, possibly explaining some variation. Any apparent relationships between terraces and segregation level outside of London could be attributed to a correlation with Pakistani proportions. Other patterns indicated a link between deprivation, concentrations of minority ethnic communities and greater segregation although this was neither universal or causal.

Although there was no change in mean segregation levels across England between 1991 and 2001, we can identify variation in the stability of the three cases studied here. Whilst being a relatively lower segregation case, case one had experienced an increase of 6.02 in contrast to a decrease or 4.5 in case two. Authorities outside of London were more likely to have decreased over time (74% of cases) than to have increased. This makes case two typical of cases in this region. Case three in London also experienced an increase of 4.56 during this period. Again, although there was no significant change in the mean level of segregation in the capital, around half of London cases in the sample experienced a slight increase in segregation level. The cases with lower segregation in 2001 had experienced an increase over time whilst the most segregated had experienced a decrease.

How have the natures of London and other areas changed over time?

Independent t-tests and Wilcoxon rank-sum tests were used to compare the means of each variable between the two years. All variables decreased in size over time except for higher educational qualifications, limiting long-term illness, overcrowding, not-white residents, African, Chinese, white, Indian, Bangladeshi, Pakistani and density, which all experienced an increase. Where cluster analysis is discussed, some changes in cluster means can be accounted for by these overall changes.

Table 5.16   Effect of change between 1991 and 2001 in order of effect size

Variable	Size of change	Rank of change
Overcrowding	0.864	1
No quals	-0.863	2
HE quals	0.761	3
Non manual	-0.755	4
LLTI	0.751	5
Social housing	-0.462	6
Manual	-0.247	7
Chinese	0.238	8
No car	-0.223	9
African	0.218	10
White	0.186	11
BME	0.186	12
Terraces	-0.152	13
Bangladeshi	0.149	14
Pakistani	0.129	15
Indian	0.084	16
BMEID	-0.058	17
Caribbean	-0.028	18

The difference between London and other authorities

Independent t-tests indicated that in 1991 the greatest differences in variable size between GLA and the rest of England were for African, Chinese, population density,

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white/BME, overcrowding, Caribbean, private rent, Bangladeshi, higher educational qualifications and owned properties (effect sizes for other variables were only medium). By 2001 these had barely changed in ranking. African, population density, overcrowding, (detached[12]), Chinese, white, Caribbean, HE qualifications, (net migration), no car, or private rent (other effect sizes only medium). However, there was some difference in actual effect sizes. The difference between actual levels of overcrowding between London and elsewhere increased between 1991 and 2001 and decreased for Chinese populations and for HE qualifications. This suggests that there was little change in the relationship between London and other areas in terms of their general attributes.

Correlations

There was some change in the relationship between variables over the decade. Some variables had become correlated in 2001. They suggested that Chinese communities were becoming better qualified (or at least living in areas with better overall qualifications). There was an increasingly strong association between certain indicators of deprivation. Overall, there seemed to be less correlation of minority groups with each other and more correlation of white with individual minority groups. There was less correlation of minority groups with high overcrowding and more correlation of white groups with overcrowding.

Conclusion

The quantitative analysis presented in this chapter was designed to establish the level of segregation found in a sample of English authorities and changes between 1991 and 2001. It then aimed to explore the nature of characteristics of high segregation through cluster analysis to identify shared characteristics and regression analysis to establish independent effects of characteristics on

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[12] Variables shown in brackets were not studied in 1991.

segregation as an outcome. Segregation at both time points was demonstrated to be relatively low overall but spread across a wide range of scores, and it has not been shown to have increased or decreased at all during the decade examined. These findings can be compared with those published in 2006. Although calculated at a different spatial scale, these findings broadly reflect those of the 2006 ODPM report *The State of the English Cities* presented the degree of English segregation in fifty-six English urban areas. Dissimilarity was used to measure segregation at the lower level super output area between white and not-white residents and also between white and Asian, and white and black individually. Dissimilarity scores under forty were considered to be low, forty to fifty-nine moderately high, sixty to sixty-nine high, and seventy and above seventy very high (2006:146). Whilst the analysis grouped all Asian populations together making direct comparison problematic, the scores do reflect the findings in this study. In particular, higher segregation of Pakistani residents from white households was identified in comparison to that between white and black households.

The chapter also establishes a broad relationship between high segregation and certain dimensions of deprivation and also with higher proportions of minority ethnic groups, showing that these relationships can be more specifically described as an association between segregation, population density and concentrations of Pakistani residents. A distinction is also indicated between authorities in London and those elsewhere.

Whilst cluster analysis concealed the complexity of patterns, regression analysis demonstrated that the segregation level has specific and limited relationships with ethnic composition in London, particularly relative to relationships elsewhere. The variable most strongly associated with higher segregation outside of London was the percentage of the population that was Pakistani. This was followed by the

population density. The regression analysis conducted on the two regions separately suggested a strong relationship in both areas between higher segregation and larger proportions of Pakistani households and lower population density. Table 5.14 shows the key factors associated with higher segregation in each year and the two regions. Although several variables initially appeared to be associated with higher segregation, it was apparent that population density and percentages of Pakistani residents account for much of this change in segregation.

Table 5.14   Regression analysis: main statistical effects

	London	% of variation in segregation explained	Outside London	% of variation in segregation explained
2001	Population density: the most important factor, coefficient of -.457 *% Pakistani*	38%	Population density *% Pakistani* % Non-manual *% Indian*	61%
1991	*% Pakistani* Population density		*% Pakistani* *% Indian*	44%

*Indicates a positive (increasing) effect upon segregation outcomes

When exploratory analysis was conducted on the segregation of individual ethnic groups, the percentage Pakistani variable was again identified as one of the most segregated, not only from white populations but from other minority ethnic groups. It became apparent that south Asian households were relatively highly segregated from other ethnic groups whilst Afro-Caribbean (there were some

differences between African and Caribbean groups) communities were relatively well integrated with white populations but not with south Asian groups. In contrast, because of their significantly larger population over all, white communities were relatively highly segregated from all minority groups. In contrast, in London the variable most strongly associated with higher segregation was low population density. Finally, this analysis finds that the relative stability of segregation within local authorities has not been demonstrated to be associated with particular characteristics. Areas that are more deprived are no more prone to increases or decreases in segregation than are others.

The conclusions drawn from exploring associations in these national patterns provided the framework for a qualitative study seeking local understandings of residential arrangements. The complexity of the interaction between proportions of Pakistani residents and housing characteristics will be explored within three relevant but different local contexts. The qualitative results of Chapter Six consider specific processes within different local contexts that may lead to variation in segregation despite broadly similar socioeconomic and demographic characteristics.

Chapter 6

Outcomes of residential segregation in three English authorities: a qualitative analysis

The existence of high and increasing segregation of ethnic groups has been presented as a feature of English urban areas in the discourse of community cohesion policy. Further, a (contested) claim that highly segregated neighbourhoods present social and economic challenges is present in the structural fabric of community cohesion policy and in the nature of regeneration interventions. This thesis explores whether such understandings are justified and appropriate. In Chapter Five, statistical analyses provided a picture of the residential separation of white from black and minority ethnic residents at the national level. It demonstrated that there was a broad range of segregation levels across English authorities and that that there had been no significant change to these between 1991 and 2001.

The analysis identified a relationship between higher proportions of minority ethnic groups and higher segregation. In particular, areas with larger Pakistani or Indian populations and with lower population density were more likely to experience higher segregation than those with smaller such populations or higher density. It was also apparent that a relationship between higher segregation and greater deprivation exists across most of England except within the London boroughs.

Whilst this analysis provided a picture of segregation that enabled an exploration of characteristics, it had a limited capacity in five areas. Firstly, the findings were restricted by the scale at which segregation was calculated. A focus on one geographical level may conceal housing patterns that exist at a different scale. The second area was discussed in Chapter Four which described how the findings were restricted by the type of measure used. Thus scale and measurement type had the capacity to capture certain types of residential arrangements but also the potential to conceal others. Thirdly, quantitative analysis of this type was restricted to processes or patterns associated with the variables available for comparison

between the two time points. The lack of significance of many of the variables in regression analysis also exposed some of the dangers of working with secondary data from sources such as the Census. For example, the analysis was unable to consider variation in understandings of ethnicity or to explore the reasons why certain patterns are present. Further, the quantitative analysis did not address why areas with larger proportions of certain populations such as Pakistani groups are more likely to be highly segregated. Nor did it tell us which ethnic groups contribute to segregation levels by living in neighbourhood concentrations, as its capacity was limited to information that where there are more Pakistani or Indian residents, white people are more likely to be living in ethnically isolated communities. The fourth limitation is that quantitative analysis at the national level provides no information about the lived experience of residential separation or of whether such a calculation reflects the perceptions of the residents concerned. Do those people living and working in apparently segregated authorities see their neighbourhoods as ethnically isolated? Which communities do they perceive to be most isolated?   It is also not possible to establish the relative importance of individual variables to local experiences. The final limitation concerns the importance of locality to residential patterns and cross-community interactions. Both the policy contexts in which this research is framed emphasise the neighbourhood as the locus for interventions and any understandings of the utility of such interventions require localised exploration. Quantitative analysis at this scale was unable to capture the impact of local factors on outcomes and processes. The relevance of locality to discourse and funding strategies makes this the most compelling driver for a localised qualitative exploration of residential patterns.

The purpose of a mixed research strategy in this research was to access different narratives of segregation, partly to identify differences in the narratives and to see

if they are mutually reinforcing. Qualitative data concerning segregation as an outcome provides a local perspective and presents the lived experiences of ethnic separation. It enables the research to capture the complexity, to identify dimensions not explored in quantitative analysis and to provide a picture of segregation at different scales to that measured quantitatively.

However, it is in answering questions concerned with process that qualitative research offers depth and complexity. The purpose of the qualitative research was thus to identify what makes areas different and why some authorities achieve higher segregation outcomes than others. It aims to compare the histories and processes of authorities with varying degrees of segregation. With a view to providing the basis for analysis of difference in process, this chapter examines authorities that share some characteristics to show in what ways these cases differ. Thus, the primary purpose of this chapter is to identify differences between quantitative segregation levels and qualitative perceptions of housing patterns, asking whether local perceptions of ethnic separation reflect dissimilarity scores. It provides a quantitative profile of each area and then addresses segregation as an outcome in each case, firstly by describing how and where each case fits the quantitative analysis of Chapter Five, then by comparing this with qualitative descriptions of segregation level. Segregation as a process is subsequently explored thematically in Chapter Seven.

As Chapter Four addressed the methodological approach relating to qualitative data collection this will not be addressed in depth in this chapter. Participants were primarily elected representatives and council officers from the local area and were selected partly on the basis of their public or professional association with housing and community issues in the area. Each interview aimed to explore the participant's understandings of housing arrangements in the authority and allowed

them to discuss any aspects of this that they felt were relevant. The interviews also sought to identify whether local community leaders perceived the housing arrangements in their area to be problematic. This element is addressed in Chapter Seven. All participants interviewed were 'community leaders: elected representatives, paid council officers or leaders of key community groups within the authority. The purpose of this was to access *perceptions* of the nature of residential patterns both as a process and as an outcome. Such descriptions do not aim to provide an objective set of evidence, rather a layer of understanding offering context and possible explanations for statistical patterns. Limiting the sample to this group allowed access to individuals who employed the language of the concepts and policies discussed and who had considered the nature of residential patterns *or* cross-community relations within the authority. In particular, provided by those responsible for the implantation of policy in these areas meant that their understandings were framed with knowledge of the policy context. There would have no guarantee that lay citizens would have an understanding of the policy context and therefore understanding their perceptions would have required a larger sample size. Further, although able to offer more objective evidence, ordinary 'lay' citizens would be no better placed to provide objective 'evidence' of the nature of segregation in the areas.

In order to build a reliable and valid picture of evidence of residential patterns and community relations, interviewing lay residents only would have required a larger sample size. All the individuals interviewed were selected for their activity in the realms of community relations, and, as such, were considered well placed to provide their perceptions of patterns. All had direct experience of policy in the area. However, the focus of each interview was, partly, dependent upon each respondent's greater areaof knowledge.   Whilst this was not an 'expert' sample, it was one that could provide an 'informed' perception within the appropriate policy framework.

Had the purpose of the analysis been to provide evidence of segregation processes, a sample of lay persons would have been more appropriate. Thus, the effect of limiting the sample to this group is that the focus of analysis is on exploratory descriptions of patterns rather than explanatory 'evidence'.

Thus, this chapter will present a discussion of local perceptions of segregation processes within each case. It presents local perceptions of residential patterns, adding depth to the quantitative analysis but not as objective evidence of segregation. Chapter Seven discusses segregation as processes of residential patterns as a result of interacting socio-economic, cultural and industrial developments. The term 'outcomes of segregation' is understood in the context of the presentation of high segregation as problematic within policy discourse. It refers to the socio-economic and demographic factors which such spatial patterns are associated. It is recognised that this suggests it is not a causal relationship, it is not the intention to do this, rather to present associations. Therefore, this is compared with 'processes' discussed in Chapter Seven, which considers the dynamic development of residential patterns and the potential role that these factors play.

Key Findings

This chapter finds that perceptions of residential segregation in three local authorities differ from their quantitative measurements. Despite their relatively low dissimilarity figures, a high degree of segregation was described in the London borough (case three) and also, for certain ethnicities, in case one. Key to these understandings appeared to be the presence of ethnic segregation at a smaller geographical scale than the (M)SOA at which dissimilarity was calculated in chapter

five. Further, these qualitative descriptions provided a more complex picture of which communities were more spatially isolated, suggesting that African and Caribbean communities were more likely to be spatially integrated with white groups than their Pakistani or Bengali Muslim peers. More deprived white communities were especially isolated in cases one and two whilst more affluent white communities in case three live alongside Arab or European communities. Finally, participants offered an understanding of the spatial arrangements of other social, cultural and economic groups in their area.

This chapter thus bridges the gap between the quantitative and qualitative understandings of segregation. Qualitative data collection focused on three local authorities from the sample of ninety-one, selected primarily to represent a distinct level of residential segregation as measured in Chapter Five. Secondly, due to the strong relationship between the size of minority ethnic populations and dissimilarity scores demonstrated in Chapter Five, cases were identified that contained similar proportions of minority ethnic populations. Chapter Four provided further details of the selection of the case studies. The socio-economic and demographic profile of each case is firstly summarised and compared with other cases to provide a background on which residential processes can be projected.

All participants fitted the selection criteria described in Chapter Four. Access to participants was strongly influenced by guarantees of anonymity for *both* the case study sites and for the individual participants interviewed. In several cases, consent to participate was only given providing complete anonymity was offered. Many participants appeared reluctant to discuss policy regarding community cohesion and race, citing potential subsequent political difficulties as reasons to maintain anonymity. In certain cases, there was a high degree of suspicion

expressed of the purpose of the research itself. This was particularly so in case two due (according to participants) to its similarities with areas that attracted attention in 2001.   This reluctance to participate openly was expressed by participants of all ethnicities and from all political parties. Although, as discussed in Chapter Four, this limits the ability to provide details or visual aids to illustrate segregation patterns, it was a significant factor in enabling the research to be conducted. Thus for the purposes of maintaining anonymity, it is not possible to provide the exact figures. In their place, descriptions of the relative characteristics are given which provide the basis for comparison. This is deemed adequate for the purposes of reaching a broad understanding of the relationship between the general characteristics of an area and its processes of segregation.

This section begins by explaining the selection of each case and presenting a quantitative socioeconomic and demographic profile of each. This is followed by a brief consideration of the key similarities and differences between the cases. The quantitative level of segregation of each case then forms the basis for descriptions of the degree of segregation perceived by participants in each case separately. The chapter concludes with a comparison of the quantitative and qualitative narratives of segregation outcomes.

Case selection

Three cases were selected, two from outside of London. As a basis for comparison, the first had a relatively low dissimilarity score and the second a very high score. 'High' scores refer to those in the top deciles of the cases studied, in contrast to 'low' scoring cases in the lowest quartile. The selection needed to account for the effects of the large percentage of BME residents in order to control for the strong relationship between the proportion of BME residents and segregation levels. This

facilitated a comparison of the real and perceived levels of segregation in the authorities. Quantitative analysis had indicated that distinct patterns were present in London so a third case was selected from London boroughs in the sample. Both cases one and two were drawn from the same cluster in the cluster analysis.   This cluster (cluster two shown in Table 5.3) contained cases with relatively high levels of deprivation and minority ethnic proportions. Although this cluster also had a relatively high mean dissimilarity score, it included cases with lower scores thus enabling the selection of case one. It was probable that the very low scores identified in cases in cluster two would have been the product of their low not-white percentages. Selecting two cases from the same cluster served two purposes. Firstly, it provided two authorities with similar proportions of minority ethnic residents. This is important due to the statistical relationship between the proportion of minority ethnic residents and segregation levels. Had cases with very different BME proportions been selected, it is likely that segregation differences would have been attributed to this distinction. A key area of interest was socio-economic variation between areas with similar levels of not-white populations but different segregation levels. Of the three authorities, case two has the smallest BME proportion but the highest degree of segregation. This makes it an especially interesting comparison as we would expect a case with more not-white residents to have greater segregation. The second reason for selecting two cases from the same cluster was that the nature of the association between dissimilarity level and cluster patterns was such that this cluster contained cases with a wide range of dissimilarity scores. Useful comparison was also provided by the selection of localities of similar population size and without other immediately apparent significant differences[1].

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[1] As discussed in Chapter Four, it is recognised that all relevant differences could not be anticipated prior to case selection.

Case profiles

This section provides a socio-economic and demographic profile of each case and, within the limitations of anonymity requirements, describes the industrial and immigration history of each authority. This is followed by a brief thematic comparison of the three cases.

Case one (low segregation, located outside the Greater London Area)

With a dissimilarity score of 28.48, case one has relatively low segregation for its size and is a case that has experienced an actually increase of 6.02. It is a borough of approximately 300,000 residents, of whom around 15%[2] identified themselves as 'not white' (British, Irish or 'Other') in the 2001 Population Census (Office for Population Censuses and Surveys, 2001: SAS). Although slightly above the national average, this figure is broadly similar to that of its comparator, case two but indicates an increase of approximately 40% since 1991 Minority ethnic residents in this city are predominantly of Afro-Caribbean origin although, like many areas, there has been significant recent economic immigration from the 2004 European Union accession states and asylum seekers and refugees of other ethnic origins. Pakistani (almost 4%) and Indian (2%) communities also have a significant presence in the area although this is not equal to the proportions found in case two. 'Afro-Caribbean and white' mixed ethnicity residents are a relatively significant population, constituting over one percent of the total population (and over seven percent of the BME population). The largest relative increases between 1991 and 2001 were within the Chinese and the Bangladeshi populations but, due to the relative small size of these groups, these did not translate into significant changes.

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[2] To protect the identity of the authorities involved, all ethnicity and tenure figures given are approximate.

Early immigration to the city followed patterns typical of the post-war period. They began with groups of young men, recruited from the same region (initially the Caribbean, subsequently from south Asia), followed by their dependents from the same regions. Historically, employment has been in both heavy and light industry, including a few dominant employers, although since the early 1990s case one has followed the route of many urban areas in developing its service sector and making a name in the international business sector. In 2006 it was labelled a 'Centre with Industry' in the Area Classifications produced by the Office of National Statistics, which describes it as having above average proportions of terraces, dwellings without central heating and south Asian residents (ONS, 2004). There is a substantial and long term history of social housing in the city with the local authority currently a key landlord. Although social housing stock has declined considerably since its 1960s hey day, with Registered Social Landlords (RSL) now managing almost eight percent of stock, council housing remains important with one quarter of all households falling within this tenure group (April 2006, ONS Neighbourhood Statistics). Social housing has largely taken the form of geographically extensive estates developed in the 1950s and 1960s but tenure changes resulting from the Right-to-Buy programme[3] and new management systems have led to an increase in street properties[4] and smaller estates (details provided by participant 6). In the private sector both owner occupation and rental play a role, constituting around 60% and 13% of dwellings respectively (UK Census, 2001). The quality of private rented accommodation varies but is geographically relatively homogenous. Many properties are deck access or Radburn layout but areas of older terraces also exist. Even compared to other urban areas, case one contains high levels of deprivation, reaching an average score of 38 (declined by

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[3] The Right-to-Buy programme was introduced in 1980.
[4] The term 'street properties' refers to council dwellings located on streets with privately rented properties as distinct from social housing sited on council estates.

several points since 2004) in the 2007 Index of Multiple Deprivation (IMD, 2007).

An overall IMD score of 38 places the authority in the top decile of authorities and

is the highest of the three case studies. This gives it an overall position in the top

5% of authorities when ranked (Communities and Local Government, 2009). In

particular, it faces challenges regarding educational achievement. Geographical

shape is believed to be an issue in the city as physical boundaries restrict its

administrative borders and shape the spatial structure of socio-economic groups.

Case two (high segregation, located outside the Greater London Area)

Case two shares a number of characteristics with case one but has a dissimilarity

score of almost sixty placing it in the top 5% of the sample analysed in Chapter Five.

This is an actual decrease of 4.53. The population is also predominantly white with

almost twelve percent of residents within other ethnic categories (UK Census,

2001). Similarly to case one, this represents an overall minority increase of 45%.

The city differs from case one as its dominant minority groups are Pakistani (eight

percent) and Bangladeshi (around one percent). Only a small proportion of

residents identified themselves as African or Caribbean (less than one percent) or

of mixed origin (one percent) in the 2001 census (UK Census, 2001). The

proportion of not-white populations had grown by around fifty percent between

1991 and 2001 (UK Census, 2001 and 1991). Although the city has a long history of

economic migration, the key periods of relatively large-scale immigration occurred

in the post-war period followed by the arrival of dependents in the 1960s. Industry

has traditionally been heavy to moderate and mill-based but the city has not

benefited from development of the service industry equivalent to that of case one.

Like case one, it was also classified as a 'Centre with Industry' by the 2006 Area

Classifications. Housing in the borough is composed of two thirds owner

occupation, one quarter social rental, and nine percent private rental (ONS

Neighbourhood Statistics, 2001). Stock quality is again variable but the city lacks geographical homogeneity of the scale of case one. Deprivation is a concern within the borough as it also contains Neighbourhood Renewal Fund areas. In the 2004 IMD the district had an overall score of 35 thus placing it in the top decile of authorities with both the other cases. When all authorities are ranked this places the authority in the top 10% The district does not face the same physical challenges as case two with most boundaries being administratively or socially structured rather than physically.

Case three (London borough, low segregation)

The third case is a London borough. Analysis in Chapter Five indicated that even accounting for the proportion of minority ethnic residents, and acknowledging a slight increase since 1991 (an actual increase of 4.56), the dissimilarity scores for these boroughs are significantly lower. The inclusion of an inner London borough was intended to enable exploration of the processes and challenges specific to the capital in contrast cases elsewhere which have a similar ethnic profile yet experience higher segregation. It aims to explore the effects of the particular nature of London on spatial arrangements and the interaction of these specific spatial patterns with community relations. London's demography made it difficult to identify and select boroughs with BME populations close to the national average so this case was selected for having a low BME presence *relative* to other inner London boroughs but with a typically low dissimilarity score. Case three has a white (identifying as British white, Irish and Other in the 2001 Census of England and Wales) majority but a BME population in excess of one quarter, an increase of 50% (the largest of the three cases) since 1991. This population is composed of six percent African, two percent Caribbean and six percent Bangladeshi (Population Census 2001). Relative to the total population, these populations have increased

significantly since 1991, in particular the African and Caribbean groups. The

borough has a history of Western European (other than British) residents, many of

whom are settled but amongst others there is significant churn. Participants

indicated that since the 2001 Census there has been a clear growth in 'other white'

groups from Eastern Europe and in specific African groups arriving as asylum

seekers and refugees (participant 17). However, there is currently little or no

quantitative evidence of the size and movements of such populations. Further, as

in other cases, it is likely that data from the UK Census conceals variation within the

ethnic categories available (Dorling and Rees, 2005, Peach, 2002). Although council

housing does not have a presence equal to that of case one, almost two fifths of

households are socially rented (Population Census of England and Wales, 2001).

There is a significant polarisation of housing cost and therefore tenure in the

borough which is not present in the comparison cases. The borough 'suffers' from

high housing costs and a housing market beyond local control. The borough also

contains Neighbourhood Renewal Areas with an average IMD score of 34 (Office of

National Statistics, 2004). This places it also in the top decile of authorities

However, relative to all other local authorities, the authority is ranked only within

the top 20%. Relative to the other cases it has a high population density of

91p/Km². This is a characteristic common to authorities in London.

How do these cases differ? Some key points

Socio-economic and demographic variation between these areas provide a

structure for understandings of variation in segregation outcomes. Key differences

between the cases are in population density, housing tenure, educational level,

ethnic group proportions and income levels. Table 6.1 below provides an overview

of these key differences, in particular those with regard to the socioeconomic

nature of the cases. The two cases outside of London share similar proportions of

residents with no qualifications; this contrasts with the very small proportion of residents with no qualifications in case three. Equally, whilst case one had a slightly higher proportion of residents with higher education qualifications in comparison with case two, both scores were exceptionally low in comparison with the London case (three). Relative to case two, case one represents a poorer borough (as represented by car ownership levels), and has more manual workers, more social housing, a lower employment rate, more privately rented accommodation and lower home ownership. In terms of ethnic composition, case one differs from case two. It has greater proportions of African, Caribbean (the latter group particularly), Chinese and Indian residents but considerably smaller populations of Pakistani and Bangladeshi groups. Case one represented a relatively high density area (35.78) in comparison with case two (12.99). Regression analysis and cluster analysis both indicated that higher density was associated with lower segregation. Equally, in London case three had very high density and very low segregation levels. The higher density of case one is due to it geographical nature as a city. This was different to the suburban elements or neighbourhoods that are found in case two.

Table 6.1   Key socio-economic and demographic features of each case study

	Case One	Case Two	Case Three
Population (n)	Approx. 300 000	Approx 100 000	Approx 200 000
Segregation BME:White	<30	~60	<30
% white	85%	88.57%	73%
% Pakistani	3.6	8%	<1%
% African	<1%	<1%	6%
% Caribbean	3.5%	<1%	1.8%
% Bangladeshi	<1%	1.3%	6.4%
% Indian	2.3%	<1%	2.3%
Area Classification	Centre with Industry	Centre with Industry	London Centre
IMD 2007	38	35	34
Population density Persons/km²	36	13	90.6
% of properties social housing	26.9%	19.54%	26%

Comparison of the two boroughs with relatively low segregation (case three and case one) may provide a context for descriptions of their segregation outcomes in comparison with the highly segregated case. A key similarity between these authorities is their larger proportions of social housing, percentage of Indian residents (higher than that found in case two), and relatively similar employment rates. Migration statistics could not be analysed in Chapter Five as comparable

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data was not available between 1991 and 2001. Mean net migration in the London area in 2001 was -.77, this was slightly higher than the London average but also a negative net migration score. In comparison, net migration outside of London was also negative and case two reflects this average score. Thus these profiles prompt questions relating to segregation processes: why are larger proportions of Pakistani residents associated with high segregation? Why is lower populationdensity so strongly associated with higher segregation? And why should this be particularly the case in London? The following sections describe the level of segregation in each authority using quantitative and qualitative data.

The quantitative level of segregation as an outcome

As a foundation for comparison with local perceptions of residential arrangements, this section describes the segregation calculated in each case study. Although it had a slightly lower score, case three was broadly representative of the mean segregation level in London boroughs and was representative of inner London boroughs which tend to have lower segregation than those in the outer London area. In terms of segregation level, its comparator case was case one.

Qualitative perceptions of residential arrangements

Participants provided detailed descriptions of their understandings of the residential arrangements in their authority. The following section addresses the descriptions of the types of ethnic groups and other characteristics believed to be segregated in each case. These can also be analysed in relation to the patterns indicated in the quantitative analysis. In each locality these descriptions were only a limited reflection of the calculations of dissimilarity discussed in Chapter Five.

The section concludes with a comparison of the perceived nature of characteristics in each case.

Case one (low segregation, located outside the Greater London Area)

Case one was selected to represent authorities outside the capital that had relatively low segregation despite their comparatively high minority ethnic populations. Although the city's dissimilarity index was only 28.48, a number of participants identified segregation in the authority in terms of neighbourhoods in which certain groups were concentrated: *"The African Caribbean communities live in 'GH', the Muslim community live in 'MB'.* Another participant identified elements of the Asian population as being slightly concentrated: *"Probably I would guess slightly more concentration of Pakistani-Kashmiri communities than other communities".* Although this showed similar perceptions to those in cases two and three that Asian communities were the most concentrated group, the overall perception was not that concentrations were extremely high.. Further, both religious and ethnic boundaries were perceived to be spatially represented here. The spatial arrangement of the Afro-Caribbean population was identified as internally complex; other participants observed that settlers and their descendants from different Caribbean islands were located in distinct neighbourhoods spread across otherwise predominantly white estates, especially within the social housing sector. A single participant identified other divisions within the Afro-Caribbean population that have taken on spatial dimensions in the authority. Such distinctions indicated a level and type of segregation not captured by quantitative measurement:

"However, we have pockets where we have large Caribbean community … those areas where the first settlers of the Caribbean people came. So you find that the

older generation still remain in those areas whereas the younger generation has actually moved on" (Case one: participant 11)

This adds a temporal dimension to residential patterns of Afro-Caribbean populations: although separation from white groups is low, settler origins shape divisions within the Afro-Caribbean population and these divisions themselves are affected by generational differences. The lower segregation of white from Afro-Caribbean is thus associated with younger generations. The same participant also highlighted concerns regarding the assumptions made about this population which are not made about Asian communities:

"...the mistakes that are made around the Caribbean community is that they think that the Caribbean community is a monoculture. But they're wrong because within the Caribbean community you've got the French colonies, you have English speakers, you have Dutch speakers and if you're from different parts of the Caribbean you cannot understand what other people are saying...It's more disparate... within the Muslim community you can have Bangladeshi, Gujerati ...all that, it's quite clearly defined but within the Caribbean community, because it's a mainly Christian community, it's a complex as British culture.... And often we talk about differences within other communities. But we don't talk about the African Caribbean community, it's a community but obviously there are communities within it and the inter-island politics they're as important in Case one now as the politics in India and Pakistani and Kashmiri. But sometimes we don't give them the same amount of value, recognition if you like ..." (Case one: participant 11)

This was a similar picture to that observed in London in the late 1990s where ethnic segregation was also relatively low but where concentrations of Afro-Caribbean households could be found (Peach, 1998). Such observations imply that the low

dissimilarity figures conceal alternative dimensions of spatial diversity found specifically within the Afro-Caribbean community.

The precise narrative of understandings of segregation in case one was not consistent. Although some participants considered the residential picture to be extreme with *all* ethnic groups occupying broadly separate neighbourhoods, others identified specific groups as particularly segregated from white populations: *"I think you've got different patterns there, I would say the West Indian population was fairly well dispersed by the early 80s. We've got one or two interesting phenomena with the Asian community."* (case one: participant 3). Such difference in perceptions may reflect experiences of different ethnic communities. It was also recognised that white communities occupy separate residential space: *"Up in the NW of the city, we're talking up around BP and BS, around there. Although there's relatively high, probably 50 odd per cent right-to-buy, **it's still mono-cultural. It's predominantly white,** [I think, an enormous amount of worklessness and dependency on benefits and no turnover to speak of]."* (case one: participant 12). The divisions within 'white' groups mentioned here are economic rather than the cultural divisions observed above within the Afro-Caribbean community. Although Chapter Five identified a statistical association between high segregation and larger Pakistani communities at the national level, even in case one where this population is small and segregation proportionately so, the qualitative association between segregation and the Pakistani community remained. Further, in this case, the proportionately larger Afro-Caribbean community was also associated with segregation.

We can address observations of ethnic concentrations in case one with reference to the quantitative picture. Inter-minority group dissimilarity scores reflected the

qualitative descriptions of Pakistani-Kashmiri[5] and Afro-Caribbean communities living separately. These scores indicated that the Pakistani population was the most segregated group, sharing the same space only with the Bangladeshi community (IoD = 29.94) and the 'other Asian' group (IoD = 20.1) and living separately from the Caribbean and African populations. The relative residential integration of Indian and (labelled as middle class) white residents was observed, a perception that matched the statistical separation of Indian from white populations of 36.44. The calculated segregation of white from Afro-Caribbean groups (33.2) reflected the perceived separation but was not able to capture the intra-group divisions identified in the qualitative narrative.

Despite the recognition of specific concentrations in the city, segregation was observed to have decreased over time. Although participants were not specific regarding the time frame, they referred to 'very recent' years that were understood to be the post-2001 period. This process was attributed principally to the dispersal of Asian (identified as specifically Pakistani or Kashmiri origin) households moving to more popular areas as discussed later in this chapter. Although Afro-Caribbean, white and Pakistani communities were all identified as occupying separate residential space to some extent, none of these changes were attributed to the household movement of any ethnic or social group other than Pakistani. This attributes responsibility of local residential arrangements to (specifically Muslim) south Asians even within an area of relatively low segregation. However, statements that integration had not occurred for all groups (*"Some communities have come and changed and integrated and others have not integrated"*) suggested that either the role of different groups or local perceptions of these were inconsistent here. Although quantified segregation in case 1 was relatively low,

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[5] Most participants in case one referred to the 'Pakistani-Kashmiri' community in the authority. This was intended to refer to both communities together whilst explicitly identifying 'Kashmiri' as an important ethnic or cultural group.

certain ethnic, cultural and religious groups were identified as living separately from each other. The residential segregation of communities in case one appears to be more complex than the white/not-white dichotomy.

Case two (high segregation, located outside London)

Case two appears to be a typical example representing national understandings of south Asians in inner city terraced properties as a product of early settlement patterns, the more recent trend of social and economic mobility leading to dispersal to suburbs, as well as the tendency of many families to remain in poorer, traditional areas for a number of social reasons. The segregation calculated in case two indicated that (with dissimilarity scores of 57 and 28.48 respectively) the city had twice the level of ethnic segregation than that of case one. However, the perception of participants was of relatively low spatial segregation of white from not-white residents in the city: "*So I don't think there is very much physical segregation nowadays, no.*" (Case two: participant 7). The language of segregation and an awareness of the public image of the city were explicitly acknowledged and refuted: "*It isn't a ghetto area, it's wrong to say that, but this perception that we've got ghettos has just become a perception that's evolved.*" (Case two: participant 6). This description was particularly interesting in contrast with the perceived segregation in both case one and three that had not been captured by quantitative measurement. Although they did not employ the term 'segregation' and there was no reference to any homogenous 'not white' geographical unit participants described the area as having '*concentrations*' of certain BME communities. 'Asians' (identified as Kashmiri, Pakistani or Bangladeshi independently) were recognised as groups that occupied separate spaces: "*…like the Bangladeshi community is living in one part while the Pakistani community is living in another part whilst the Indian community are scattered*" (Case two: participant 4). Thus, as in case one, there was

a perception of relative integration of the Indian community not only with the white population but with other minority groups also. If Pakistani neighbourhoods exist then areas of predominantly white residents must also be present but participants did not describe these.

In this case the national level quantitative association between larger Pakistani populations and higher segregation was borne out in the qualitative narrative. There was a specific focus by all participants on the separation of Pakistani from white residents whilst the spatial relationship between Pakistani and Afro-Caribbean communities was given very little emphasis. This latter absence may be explained by observations by one participant that the size of the Afro-Caribbean population in the authority was negligible. This element of the picture also may conflict with the relatively high dissimilarity scores produced in Chapter Five (Pakistani from Caribbean, 58.37, Pakistani from African, 53.25 and Bangladeshi communities from all black groups in the 70s). This may be a reflection of the small size of the Afro-Caribbean population in the borough but was also a possible indication of irrelevance to current housing and social concerns in the town. Analysis in Chapter Five indicated some strong positive correlations between concentrations of terraced dwellings, Pakistani populations, privately rented properties and high dissimilarity scores and an interaction between Pakistani proportions and terraced properties. The experiences of participants in case two strongly supported this association: *"For some reason, Asians generally don't want to live out in that [semi-detached estate] area. They either stay in places like the terraced properties that they're in or they do well and they go out to places like 'N' and 'B' where there are big houses. But they don't seem to move out to kind of middle of the road areas like mine."* (Case two: participant 6*).

The third dimension of residential patterns in case two was deprivation. This was often discussed with reference to either spatially isolated white or concentrated Asian communities. Participant 5 explicitly identified an association between social housing and ethnic residential arrangements in the area, observing that: "*There are also some social housing in CB, JT and …so many of them. And mainly occupied by people from the white community. You'll hardly find any people from black and minority communities*." Participants believed that change in the level of segregation in the authority over time was related to changes in the spatial arrangement of income groups. Although the overall process of residential patterns was one of ethnic dispersal, participants observed that this may represent the gradual replacement of ethnic separation by increasing income (or class) separation. Further, the perception that class separation was explicitly associated with Asian rather than white residents, suggested a greater emphasis on the development of the Asian community in terms of income. It was not implied that the lack of increase in white class division was due to historically higher levels within this community. Furthermore, the separation and polarisation of white communities was not presented as problematic despite their notable absence from inner terraced wards. This theme is addressed in greater depth in the last section of this chapter.

Case three (London borough, low segregation)

In Chapter Five segregation at MSOA level in the London borough was calculated at a very low level. However, as in case one, the qualitative story portrayed relatively high spatial concentrations of certain ethnic groups. Bengali and Pakistani communities were considered to be the most separated from other ethnicities, particularly from white groups. This took the form of concentration in one neighbourhood of the borough rather than several clusters of segregated

neighbourhoods: "*You'll see the majority of the south Asian communities, people from the south Asian communities, are living in inner Case three.*" (Case three: participant 4). Those groups which were observed as living in concentrations were also identified as choosing not to share their social lives with other ethnic groups: "*My sense is that with the Bangladeshi community, I think people get one well with their neighbours but they don't necessarily share a lot of their lives*". This suggests that the nature of social separation reflected spatial separation in this case. In contrast, as observed in cases one and two, Chinese and Afro-Caribbean communities were perceived as being highly residentially integrated with white communities and therefore segregated from south Asian groups.

The religious dimension of understandings of patterns in this case was distinct from those in cases one and two. The observed patterns extended the capacity of census categories by identifying those ethnicities *within* faith groups, which live in concentrations. One group that featured in many descriptions was Somali Muslims. Although this group was considered to contribute a great deal to spatial patterns, this was in terms of its (both current and increasing) integration into white (and therefore also Afro-Caribbean) areas of the borough: "*Somali community came to the south and has already started mobilising into other areas of Case three. I think that is definitely a cultural thing and also the people that have come in*" (Case three: participant 15). Further, a distinction was made between the patterns of Somali Muslims and Bangladeshi Muslims: "*Neither is KT but the Somali community has decided to disperse across Case three as opposed to the Bangladeshi community that has not decided to do so. So there is an element of choice by the ethnic groups as to where they are concentrated within the Borough.*" (Case three: participant15*).* The same participant also implied possible causal processes: "*Whereas the Somali community that came to Case three, although they're refugees, a lot of them were middle class, they were professionals back in*

*Somaliland so they have a different way of settling into a community and you can already see that they are beginning to mobilise upwards whereas the Bangladeshi community has stayed at the lower socio-economic level in Case three." (*Case three: participant15). These causal processes are discussed below. Of seemingly greater importance to patterns in the borough was the spatial segregation of employment groups. Professional and business related classes were perceived to inhabit a specific geographical area, distinct from non-professional classes. However, the relationship between this and ethnicity was not emphasised.

In contrast to the cases outside London, residential patterns in case three were thought to have remained stable over time and the dispersal of south Asian residents such as that observed in cases one and two was not believed to be significant. It is possible that this was due to very low existing dissimilarity levels and thus little scope for further decreases but this contradicts qualitative descriptions of segregation. This contradiction was reinforced by one participant who observed that ethnic concentrations have become and continue to become more extreme: *"They're becoming more extreme. And the main function of that of course is cost of housing. So as that gets higher, what that is doing is starting to hollow out the middle. Very crudely, we are in danger of becoming a borough of the poor who live in social housing."* (Case three: participant14).

Summary

As in the quantitative analysis, concerns around variation of spatial patterns in these cases focused on variation in the types and proportions of ethnic groups in each city. The perception of all participants in all cases was that the similar ethnic groups were spatially separate in each area, albeit at varying levels. It was apparent that the association of concentrations of Pakistani, Bangladeshi and white

communities with authorities with higher segregation indicated by quantitative analysis were also supported by the qualitative story. The specific concern within almost all qualitative understandings was the proportion and location of Pakistani communities which were consistently identified as being associated with greater segregation. Repeated discussion of an association between segregation and Pakistani and Bangladeshi communities in the otherwise low segregation case reinforced this. The key finding of segregation associated with concentrations of Pakistani, Bangladeshi and white residents within the structure of economic separation is very similar to traditional analysis of segregation in the UK (Peach 1998, Simpson 2004)

The patterns described by participants were of ethnic segregation closely entwined with class and income characteristics. The spatial homogeneity of class and/or income groups was a recurring theme for all participants. In particular, this was expressed strongly in the relatively less segregated case one, whilst in case three it was understood through the language of employment segregation. Residential patterns were also described in all cases in terms of increasing income disparities *within* minority ethnic groups. The perception of class and income as dimensions of segregation at the local level, including between and within minority ethnic categories, was expressed. Specifically, outside of London, the spatial division of ethnic groups along income or professional lines was applied to Pakistani and white groups especially and a connection may be made between this and the dynamics of wealth or class within these groups. Notably, the spatial and class polarisation between households identified as Pakistani was perceived to be increasing outside of London. In comparison with other areas, variation in experiences in London was also expressed with regard to changes in segregation. The income polarisation in London was considered to be more prominent for households which participants identify as 'Bengali'. Although there was a consensus of a decrease in segregation

associated predominantly with the dispersal of Asian residents into more affluent neighbourhoods, the exception was the inner London borough in which segregation and housing patterns, ethnic or otherwise, were perceived to be fairly stable.

These qualitative descriptions of local residential patterns presented a number of preliminary conclusions.   Firstly, local perceptions show that the ethnic categories available in the 2001 UK Census do not provide an adequate picture of the reality of residential patterns in individual cities. There are disparities both within ethnic categories and between non-white groups, signifying perceptions of patterns that extend beyond the white/not-white dichotomy. Secondly, there was also anecdotal evidence to support the association between deprivation and segregation that was initially identified in the quantitative analysis. The perception that an interaction of income and space exists in all three cases will be explored below. Thirdly, variation in segregation patterns was observed at a lower spatial scale than that measured in the quantitative analysis. This 'micro segregation' was particularly apparent in the inner London borough, indicating that the scale initially employed to calculate dissimilarity concealed the type of segregation in that locality. However, there was also evidence of greater segregation at a smaller scale in case one, for example: *"Although with **fairly tight boundaries you could find**...I know quite a few Ghanaians who live in or around the city."* (case one: participant 3*).*

Finally, the descriptions supported the conclusion that Kashmiri and Bengali households are key to residential segregation at all levels as well as to national patterns. Such descriptions offer a picture of dynamic residential patterns that are perceived to exist in the three case studies. They suggest that whilst the calculated level of segregation may differ considerably, both perceptions of segregation and the characteristics with which it is associated are broadly similar. A number of

historical and socio-economic factors that appear to interact to create specific spatial arrangements are addressed thematically in the latter section of this chapter. However, descriptions in all cases showed that key to an understanding of spatial arrangements and the processes behind them is an understanding of the decision-making of individual households. Regardless of the ecological factors at play, all residential patterns are a product of individual decisions. Chapter Seven addresses the decision-making processes apparent in each case.

How do qualitative narratives compare to quantitative descriptions?

This chapter has addressed residential segregation as an outcome. It initially provided an overview of the socio-economic and demographic profiles of each case. Through the subsequent examination of three local authorities, it has established whether and in what ways local understandings of segregation reflect the statistical calculation. It has not, though, been able to examine how these differences have affected the processes of segregation and led to such different outcomes. This chapter aimed to describe the nature of each authority in preparation for subsequent analysis of processes operating in the authorities. It aimed to identify understandings of segregation in three case studies and to establish whether these reflected the degree of segregation calculated by the Index of Dissimilarity in Chapter Five. Although participants initially appeared to agree with the dissimilarity calculation for their authorities, their descriptions of residential arrangements painted different pictures.

The nature of the segregation described by participants was more complex than the dissimilarity calculation permitted. This was in terms of the groups involved and the scale at which it was perceived. Most notably, segregation was described in the London case that was not indicated by the very low dissimilarity score. This

took two dimensions. Firstly it was described on a smaller scale, that of street-by-street or postcode level segregation perhaps indicating that the MSOA level calculation conceals patterns in London. The second aspect was the description of the ethnic groups involved. These were more complex than those described in cases one and two and included references to many individual ethno-religious groups and nationalities.

These profiles of the cases lead to the question: why has one case achieved such higher levels of segregation than the other? Focussing only on the qualitative data, the following chapter will consider the narratives of segregation processes in an attempt to explain this difference. The following chapter addresses the qualitative narratives of residential segregation and considers the processes leading to variation in spatial arrangements.

Chapter 7

Processes of Residential Segregation in Three English Authorities

Focusing on segregation as an outcome, Chapter Six bridged the gap between the study's quantitative and qualitative data. The chapter profiled the three cases selected for qualitative study, highlighting their key similarities and differences. It then presented the qualitative descriptions of segregation outcomes provided by participants in each case and offered some comparison between quantitative and qualitative measures of residential segregation. However, the analysis in Chapter Six did not consider segregation as a process or the perceived associations between socio-economic conditions.

Quantitative analysis of residential segregation provided a broad picture of key factors relating to the level of residential segregation across England. The variation in the socio-economic characteristics of more and less integrated[6] cities was apparent from cluster analysis and regression analysis, as were possible explanatory processes. The key relationship between high levels of segregation and larger proportions of Pakistani and Bangladeshi residents supported earlier findings from both London and some northern towns (Peach, 1998; Simpson, 2004).   However, this quantitative study was inadequate for the exploration of the experiences of individual communities and for the identification of localised processes associated with segregation. National level analysis of quantitative data highlighted the complexity of multi-dimensional patterns and the likely importance of 'locality' in shaping these. This chapter tells the qualitative story of how segregation, housing, ethnic proportions and poverty have interacted in three English authorities.

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[6] Unless otherwise stated (for example, 'social integration') the term 'integration' is used to indicate *residential* integration and 'segregation', residential patterns only.

This chapter explores segregation as a process, extending firstly the regression analysis of Chapter Five. Secondly, using the qualitative understandings of segregation given in Chapter Six, it considers variation in processes described in areas of differently perceived degrees of segregation. The chapter asks whether areas of greater segregation are perceived by local community leaders to have particular socio-economic characteristics and whether there is validity in policy representations of high segregation as a negative phenomenon. This qualitative analysis suggests that it is neither helpful nor adequate to consider ethnic groups as cohesive, homogenous categories. The chapter also argues that structural factors such as ethnic or social inequalities impact upon the processes of residential arrangements in local areas but these factors interact with locally-specific factors. The result of this is a differential effect on how and which residential arrangements are produced.

Using a qualitative approach

Qualitative data collection and analysis provides an alternative view of segregation and cohesion in terms of their economic, housing and social dimensions. It describes how the housing process and household movements are played out within cities with very different levels of residential segregation and how such processes interact with other socio-economic characteristics. The analysis was based primarily upon the understandings and perspectives of community representatives and council leaders. Their descriptions of local populations and histories provided a picture of processes of spatial separation, but do not intend to present these as empirical dataAs well as the characteristics and experiences associated with variation in segregation, the analysis sought to identify the extent to which some residential patterns are perceived to be problematic.

A second motivation was that whilst statistical analysis provided an overview of residential patterns, it did not indicate whether segregation is a negative experience for cities and their communities.

This qualitative aspect of the study thus asks the following:

- Do the experiences and perceptions of members of the community reflect the measurement of segregation?
- What are the local processes of residential segregation in three areas of different degrees of statistical segregation? Can the perceptions of local leaders help us to explain variation in segregation outcomes?
- If 'neighbourhood effects' exist, does it appear that they are locally perpetuated by ethnic segregation?
- Do local community leaders feel that the community cohesion agenda a necessary response to current residential patterns and processes? Is there any evidence that concentrations of ethnic groups have a negative effect on community interactions?
- In the context of area-targeting in regeneration interventions and the recognition of structural inequalities, do neighbourhood communities also represent ethnic communities?

The qualitative data gave rise to a number of issues associated with ethnicity. In Chapter Five the quantitative story indicated a complexity in residential segregation that suggested an extension of the dichotomy of white versus not-white groups. In this qualitative analysis local participants presented a picture of ethnic residential arrangements that both reflected and expanded this complexity and that also observed variation within ethnic and social categories. This variation highlighted

the inadequacy and unwieldiness of the ethnic categories currently available for statistical analysis. It also demonstrated how the settlement of immigrant groups of different origins in specific cities has been important to the structure of local spatial and social relations. The final section of this chapter addresses the notion that spatial separation is problematic and examines the qualitative evidence from the case studies.

Thirdly, Chapter Three demonstrated how the interaction of community, space, place and socioeconomic factors structures public policy in these areas.   The well evidenced statistical association between deprivation and segregation indicated in both Chapter Five and previous research would also require an understanding of processes in order to play a substantial part in the activities of the cohesion agenda. , Agreater understanding of the effects of spatial separation would be required if housing were to have a significant role in community policies. In order to develop in a sustainable way, the community cohesion policy needs to understand the interaction of people and space that extends beyond quantitative ecological factors. It is not sufficient to establish an association between various dimensions of deprivation and segregation.

Thirdly, the interviews provided a qualitative understanding of those neighbourhoods *within* each case-study that were believed to be more segregated, including neighbourhoods within the authority that has very low overall dissimilarity. In particular, this analysis at a smaller scale, explored the apparent relationship between poverty and high proportions of minority ethnic populations. The data offered a comparison of variation in residential patterns in London and cases elsewhere. This regional effect is employed to explain variation in local understandings of segregation processes and outcomes. The distinct processes active in the London region were evident both from the analysis in Chapter Five and

earlier studies (Hamnett, 1991; Peach, 1998). sThe evidence here indicates a cyclical process of the formation and perpetuation of residential patterns. However, in order to understand the drivers of residential arrangements, this analysis begins with the individual household unit and the factors affecting neighbourhood 'selection'.

The chapter begins with a brief discussion of the processes of residential or neighbourhood decision-making present in the selected cases. It makes particular reference to economic, housing and socio-cultural preference. The dynamic issues around these household location decisions indicated that a number of other factors are at play in shaping local spatial arrangements. Following similar themes, this is followed by a discussion of wider residential processes exploring the roles of language, education, culture, poverty and housing with particular emphasis on the local narratives. Without attempting to identify causal processes, the chapter goes on to develop a narrative of more and less segregated cases through exploration of their differing characteristics and concluding with a discussion of whether high segregation can be conceived as socio-economically problematic.

The qualitative analysis explored the locally specific patterns of segregation found in each case and how these have developed over time, emphasising the processes occurring since 1991[7]. These patterns form the basis of an examination of variation in experience. Comparison is made between the separate experiences of each authority in terms of the historical development of its demographic profile and the

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[7] The intention was to access qualitative data regarding the period since 1991 which could be compared with the statistical analysis of change between 1991and 2001. Although this was achieved, this was within certain limitations as it became apparent during data collection that understanding recent change in and processes of segregation required an analysis of more long-term developments.

nature of the spatial arrangements of ethnic groups and socio-economic characteristics.

The themes of income, class, ethnicity and housing at the borough level were present in all descriptions of residential patterns and processes. However, whilst neighbourhood demographics are affected by such local and national level factors, they are the product of the decisions made by individual households. Decision-making in the housing sector is thus central to understanding the processes leading to variation in residential segregation. Further, the broader impact of characteristics such as income, housing tenure and ethnicity on segregation level cannot be usefully analysed if we do not first establish their role at the household level.   There follows a thematic discussion addressing the differing impact of these factors on segregation processes in each case. Each theme is explored briefly here in relation to its interaction with spatial arrangements and ethnicity but more extensively in the latter section. It was apparent that most participants had similar experiences of the processes in their areas although there were some effects specific to each authority.

Housing and employment

The factors perceived to influence decisions of housing location were consistent across all three cases, suggesting that segregation is a product of variation in household preference combining with localised conditions and structural inequalities. Despite difference in their quantitative levels of segregation, case one (the case outside of London with a low segregation score) appeared to have more processes in common with case two (selected from outside London but with a very high segregation score) than with the London borough (low segregation). . There

was greater emphasis in all cases on minority or recent immigrant groups rather than white or long-term residents.

However, the location of employment was identified as having a significant long-term influence on accommodation choices. In both cases outside of London it was believed that residential choices were largely influenced by the need to live close to work, especially for the significantly large population occupied in shift work. This had greater implications both for poorer or manual workers and for most immigrant groups during their early settlement period. The following table (7.4) compares the factors affecting settlement in each case.

Table 7.1 Factors affecting settlement patterns in each case

Factors	Case 1	Case 2	Case 3
Industry	Housing is found in certain areas. History of shift work	Location of key industry: inner wards	Historical locations of immigrant industries
Employment	Employment	One industry dominated (mills) and one immigrant group also dominated	
Preference	Cultural preferences	Household preference for dwelling types and neighbourhoods	Preference even within social housing
Early Settlement	Later groups of settlers arrives from different place and in different job types/sectors		Kinship networks attracted new immigrants to same areas (for housing, support and security)
Prejudice and Social confidence	Social prejudice. Racism in housing allocations historically.	Social confidence: lack of has limited south Asian locations.	

		Increased confidence now leading to dispersal	
Transport	Availability of public transport to employment	Transport: available from town centre	
	Clearances and rebuilds in 1050s: wholesale relocation of communities		
	Social housing: allocations policy: historically racist		Access to social housing in the first place has been limited. Not related to racist allocations policy. Low churn. Poor social housing stock.
Housing and Cost	Housing access: ease of access to private housing for new immigrant arrivals Housing stock.	Housing cost: town centre private housing was and remains cheaper than the suburbs	Nature of housing market very specific

In case one many new immigrants worked in factories or hospitals and consequently settled in housing around these locations or from which there was adequate public transport. The combination of this need with the arrival of immigrants from different origins in large groups and employed in different occupations, led to the settlement of neighbourhoods with very specific ethnic (and social) characteristics. These had implications for the long-term characteristics and demographic profile of each neighbourhood and consequently the available

services and acted as a draw to ethnicity or culturally specific future household types.

Employment patterns in case two appear to have exhibited a similar pattern in relation to the historical location of industry:

> *"If you look at settlement of the South Asian communities, you could say 'non-white' communities in Case two, they are living in inner wards and I assume for historical reasons. One because there were employment opportunities – cotton mills and so on, and also access to transport."* (Case two: participant 4).

The way in which the effect of employment patterns on household location was perceived to be as dynamic as the work itself is discussed below. Although, the evidence here indicates that it is likely the effect of employment location has decreased as transport, in particular access to private transport, improved, the benefits of the central location persisted:

> *"Later it possibly also to do with, well, my perception, possibly to do with economic reasons as well. Because there were employment opportunities and, again, access to transport, surrounding the town centre."* (Case 2: participant 7).

The historical role of employment as a determinant of housing location was also observed strongly in the London borough. Here two participants specifically attributed contemporary housing patterns to past employment locations and the similarly structured kinship networks but not to contemporary employment patterns:

"You know, people went where the jobs were. You want to live closer. If you look at employment patterns, a lot of it was shift work, you don't want to be living too far out and travelling at all times of the night or day. So I think that too determined where people were living or what borough or area they lived in." (Case one: participant14)

"In terms of settlement, I think it was a lot to do with initially where the jobs were, where your kinsmen were or had settled. So people went there because there was somebody there that you knew, whether it was family or somebody from your village or your town. So I think that in many ways determined your residential patterns and whether you call them segregation or integration or whatever." (Case three: participant 14).

However, other recent evidence has suggested that in the London context, transport may continue to be relevant to recent residential arrangements:

"A person living in Central London can probably carry out his or her daily travel activities for a lower monetary cost than someone living in Outer London where development densities are much lower and services and facilities more scattered." (Church, Frost and Sullivan, 2000:197).

Even in terms of distinguishing between London and other areas, the impact of transport capacity was attributed less significance than other factors.

Housing tenure

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Housing tenure plays a critical role in households' choice of and ability to access different geographical areas. Its role is complex and brings together preference, access, property availability and geographical distribution.

Earlier research had indicated an historical experience of denying access by certain ethnic or social groups to private and social housing through racist practices (Ginsburg and Watson, 1992). Participants here provided additional anecdotal evidence that the practices of housing agencies affected the decision-making process of individual households. Discriminatory institutional practices regarding access to council housing are particularly well documented (Henderson and Karn, 1990, Ravetz, 2001, Phillips, 1986, Simpson, 1981), as are non-deliberate discriminatory practices within social housing systems. Participants acknowledged that these have and in certain cases continue to exist in their cities today, for example:

> *"The allocations policy was creating a sort of ghetto… not a pleasant word but…and that was severely challenged… major debate in the city"* (Case one: participant 1).

However in London, the practice of social housing allocations itself was not perceived to structure the location of households but one participant believed that the nature of initial access to the social housing system was important:

> *"And I personally don't think you'd find much of an explanation about the profile of our population from how our allocations system has worked. It's more about who gets social housing in the first place rather than how Case three have prioritised them, if that makes any sense. So the people who get*

housing in the national system are those who are least able to afford to rent or buy privately." (Case three: participant 13).

Household decisions about location in this case were thus likely to be affected by the nature of the wider social housing system.

In all three authorities, such non-discriminatory restrictions to access to social housing was also identified by participants as affecting household location decisions. In case one the basic requirements for access to social housing, whilst not intentionally discriminatory, forced new populations into private housing:

> *"Again because of the type of housing and the ease of accessing the housing, areas where there's available space in private houses it's easier for somebody visiting or coming to the city, initially to get into. Rather than going through and getting onto the council list and so on. So those areas will always be transient and the ones that attract people."* (Case one: participant 2).

The last phrase of this transcript excerpt illustrates how this restriction sustains churn in certain neighbourhoods. Although changes to housing structures have meant that this is predominantly in a historical rather than contemporary context, its long term impact on residential patterns was observed in the perpetuation of ethnic concentrations. The implications of the housing system for processes of residential arrangements which indicate that failure to access a particular tenure often leads to an inability to access particular geographical areas are addressed below.

Once access to the social housing system has been attained, habits, practices or discrimination can continue to affect dwelling locations. However, it should be noted that the effect of differential access and allocations practices was not believed to be limited to ethnicity; practitioners in all three cases highlighted the impact on the housing options of households who were socially diverse or who were involved in anti-social behaviour:

> *"actually, there was a similar need at some point in that era - when I represented SB estate - to re-house a lesbian couple as well. So it wasn't purely ethnicity, it was just about different-ness. So it has been a struggle on some outer estates to get a… to get more of a mix of those sort of reasons."* (Case one: participant 3).

Access to social housing was associated with the relationship between affordability and tenure which affect the location options available to households. Affordability alone limits the opportunities available and this also interacts with geographical patterns:

> *"As well as houses near the town centre were cheaper, so these were affordable in contrast with houses in the outside wards which were very expensive."* (Case two: participant 7).

The relationship between cost and residential opportunities location has a specific effect on housing in London:

> *"It's [social housing] got noticeably lower, it's basically got silted up so less being built, the cost of alternatives, the kind of housing sort of stops working… the gulf between being able to afford council rent and being able*

to afford the mortgage to buy one is a chasm. So people stay in it longer, so
you don't get turnover." (Case three: participant 13).

The relationship in London was also particular because the nature of the housing
market in inner London is such that, beyond allocations for those already within the
social sector, households are forced into housing of certain quality or type as a
result of income:

> *"They're [housing conditions] becoming more extreme. And the main*
> *function of that of course is cost of housing. So as that gets higher, what*
> *that is doing is starting to hollow out the middle. Very crudely, we are in*
> *danger of becoming a borough of the poor who live in social housing" (*case
> 3, Participant 14)*.*

This means that whilst minority groups have access to social housing here, it is the
very poor among them only. In contrast, such differential access was seemingly
less polarised in cases one and two (although it was acknowledged that it did exist)
and this was likely to create different spatial arrangements of ethnicity and income.
This has meant that tenure-related housing decisions have not had the same
impact on ethnic arrangements as they have in London because social housing is
already very limited in the city Despite this, case one has had a different experience
of social housing than other areas. The timing of the construction of large social
housing estates has meant that this tenure has had a historically significant effect
on location choice:

> *"Prior to the First World War and obviously that carried on after the war,*
> *Case one had the worst quality housing for working class people in rented*
> *accommodation in Europe. In 'AS' it used to be rows and rows of terraced*

houses without basic amenities. A very close-knit community. When the African Caribbean community arrived… I mean in numbers because for a long period time there have been Afro-Caribbean communities in Case one, but in post Second World War when they came to Case one in numbers, many of them settled in 'SA'. So you've got this very close-knit white community – incidentally some of them have been enticed to move to 'C' because 'C' was an estate that was first built…people were starting to move to 'C' around about 1950. So you started to get people being encouraged to move to 'C' from areas like 'SA'. So obviously their properties became adopted and taken over by the African Caribbean community. So you've got building this new estate, inducements for people to go out, or very old Victorian terraced properties where the African Caribbean communities were moving into." (Case one: participant 2).

 The three cases have differing experiences of social housing and consequently, differing results in terms of the local spatial distribution of ethnic groups.   Case one has a history of racism within its allocations policy. Some participants suggested that historically the local application of allocations policy had created ghettos. However, access to the tenure is also relevant in this case through historical restrictions on access for new arrivals in the city. In earlier decades this lead to prority being given to local and therefore white, residents over more recently arrived minority households. Geographically, this case is also affected by the nature and size of social housing estates that housed communities. In case two, the role of social housing is affected by the dominant minority population   The key contrast is thus between these two cases and the London borough. In the London case, social housing has a different role due to the unique nature of this tenure in the capital. Low churn and a small housing stock in the borough with a consequent limited access to the tenure. Racism is not believed to be a significant element

here due to the residualisation of the social housing tenure. The impact of social housing on residential segregation is, in this area, due to the limiting of access to the tenure rather than the spatial distribution of households within it. Only the very poor within the minority population here are now able to access social housing although this means that in terms of ethnicity, there is less polarisation between white and non white in this tenure.

Household location is also affected by class or ethnic group, partly in terms of tenure. It was indicated that many household-level decisions were partly or wholly determined by voluntary or involuntary 'preferences' for certain tenures. In case three this was presented as differential choice according to ethnic group:

> "*So there is an element of choice by the ethnic groups as to where they are concentrated within the Borough.*" (Case three, participant 15*)*.

Variation in access to tenure extends beyond economics and institutional practice and individual preference because tenure choices are seemingly also a product of cultural preferences or habits that extend beyond the decisions of household units. The key finding of segregation associated with concentrations of Pakistani, Bangladeshi and white residents within the structure of economic separation is very similar to traditional analysis of segregation in the UK (Peach 1998, Simpson 2004). Dwelling type and size are inevitably key elements in location choice, particularly within cities in which housing stock is more spatially homogenous. The nature of different ethnic groups may affect their dwelling requirements, as observed in Case two:

> "*It is because Asian families are large families and they need large houses.*" (Case two: participant 7).

Where such houses are located in specific neighbourhoods ethnicity may find itself concentrated. The later sections of this chapter addresses the impact of culturally specific habits on residential patterns in each area.

Access to shops and services

Access to shops and services, especially culturally specific services or (perceived) higher quality public services in education and health care, was a further key theme in the interviews. This includes informal services such as social networks or care and support systems that were present in concentrations of ethnic, cultural, faith or social groups. Services relating to faith and ethnicity dominated participants' understandings of household movements in all cases, especially case two:

> *"Now people are educated and more professionals, they are moving into other areas because they can afford it. In the 1960s towards the 1980s, people can't afford it. And the older generation don't want to move because there are plenty of facilities, community facilities like Mosques, community centres, town centres."* (Case two: participant 7).

This may be related to personal preference and in all cases it was expected that decisions included a preference for particular types of neighbours. In particular, decisions may be influenced by the wish to live alongside people of similar social, religious or ethnic backgrounds and other less tangible requirements:

> *"It's a factor more than to get to services. If you look at 'W', they're not as well provided for as other areas of the city because they're seen as being more prosperous. If you looked at the allocation of resources in the city it's*

definitely directed towards the less prosperous areas. So, other services
they've got less access to but you still get quite a lot of people who
physically move to, Pakistani-Kashmiri people who move to the West side
who still come back to the Pakistan centre which is in the inner city. As their
community focal point." (Case one: participant 2).

Arguing that the terms Pakistani/Bangladeshi and Muslim are wrongly used interchangeably in the UK context, Brice suggests that religion has a significant effect on the distribution of ethnic groups (2007) that is distinguishes the ethnic and religious dimensions. In his analysis of the residential distribution of British Muslims at the level of regions, LA and ward, Brice considered the difference in distribution between white Muslims and non-white Muslims. Brice also considers segregation in terms of factors influencing households' choice of location for Muslims (white and not-white). The role of community and the provision of associated services such as Mosque, schools, halal food, and child care is especially important to Muslim households (Brice, 2007). Thus it may be argued that the integral nature of such services with the religious aspect of community life, and the greater demands that the religion places on members explains higher levels of segregation of Muslim households in the three case studies. More recently, there is evidence that Muslims are moving out of traditional areas (McGarrigle, 2009, Phillips et al, 2007) in a similar way to that described by participants in case two. The limited extent of this dispersal identified in this case may support the argument that this community chooses to remain within a reasonable distance of religious and cultural services (Brice, 2007).

However, as demonstrated by this quote from case one, access to services did not necessarily lead to ethnic or cultural concentrations.

Regardless of the calculated or perceived level of segregation in the authority, the factors believed to influence decisions about housing location were broadly similar in all three cases. Where variation existed it was seemingly the product of localised differences or histories rather than the inherent nature of the factors themselves and thus has implications for processes of ethnic segregation. The interaction of socio-economic structures and locality are explored thematically in the following section.

Although the choices made by individual households are the fundamental drivers of segregation, they are subject to national and local influences. The interviewees identified English language ability, community engagement, education, age or generation, employment opportunities, economics, the availability of appropriate housing opportunities in terms of tenure and property type, and personal, social, ethnic and cultural preferences as relevant to the development of residential arrangements. Further, all understandings emphasised a dynamic *process* of spatial movement and socio-economic mobility rather than a fixed relationship between ethnic concentrations and local characteristics. Although it was clear that the key to residential patterns was the specific relationship between these structural factors within a particular locality, this section explores the interaction of segregation with each theme individually. Within each theme comparison of each case provides evidence for the processes of segregation.

Language and cross-community engagement

In all cases English language ability was identified as playing a role in the processes or products of residential arrangements. Language difficulties were identified in the cases with very different degrees of segregation. In London, the complexity of the socio-spatial relationship was apparent. Language difficulties were explicitly

recognised as a product of spatial segregation but were simultaneously believed to be the result of social separation, itself resulting from both cultural and spatial factors:

> *"… they don't need to have that interaction because everything is there. They're not in employment and they might not even be using services so there is no need for them to integrate. There is an issue with that in that there are a lot of people in Case three that don't speak English, don't read English, can't understand English at all. And I think that is an issue because they are concentrated in that area. They don't need to because there are always people in the family that do speak English and they'll always get a translation and if they're maybe using their GP's surgery they will always take someone along with them. So they never actually have to need to learn English and never have to integrate into the wider community. So I think that is a problem."* (Case three: participant 15).

The historical presence of social networks and services in certain neighbourhoods discourages both dispersal and the need to develop language skills for some residents. The possible causal association with segregation was deemed more complex by participants in case three who observed a problem around limited language ability. In this London borough it was understood that language difficulties were perpetuated by younger family members communicating on behalf of the older generation. Further, the observed interaction between language and housing patterns was reinforced but believed to be possible to manipulate. Here social housing allocations were perceived to perpetuate separation because different minority groups demonstrate different habits within the social housig tenure, for example, Somali and Bangladeshi Muslims. They could therefore be employed as a tool to promote English language ability and, by consequence, social

integration.   However, the relationship between residential integration and language development is complex. In the case with very high segregation the perception was that language difficulties could not be easily resolved through residential integration. Here language barriers were presented as problematic for cross-community engagement and for the ability of minority (non-white) individuals to mix with the white, host population. However, English language difficulties were associated only with certain elements of the Pakistani and Bangladeshi populations:

> *"There isn't the same sense of community spirit that there was thirty years ago, there's no doubt about it and the Asian issue's bound to have been a problem, because there's a problem of language…"* (Case 2, participant 6).

The implications for the cohesion agenda offer some support to the decision in 2007 to disregard the association between residential segregation and low inter-community interaction. This is addressed in greater depth later in this chapter. There are similarities in language difficulties experienced by cases with very different segregation levels yet no such problems appear to present themselves in case one. No participants here, where segregation is low, identified language difficulties as a problem for either ethnic or community relations or for employment and economic participation. Language was also not cited as a current area of difficulty for asylum seekers and refugees in the city. This ease may be in part related to the presence of predominantly black African and black Caribbean rather than south Asian minorities in that area and differences in the long-term migration patterns of these groups. The origin of the early settlers of different communities thus appeared to impact upon their ability to integrate regardless of the spatial patterns eventually produced.

Education

The relationship between education, housing patterns and community interactions was introduced by all participants. A cyclical relationship was observed between school ethnic demographics and geographical housing arrangements and the resulting ethnic diversity was attributed varying levels of importance. The relationship between education and cross-community (including class, income and ethnic) interaction has been brought to the fore in recent years. Controversy over parental choice and the polarisation brought about by more wealthy families employing their greater cultural or economic means to access more popular schools has been subject to public debate (Finney and Simpson, 2009). In case one participants made links between housing and schooling, in which changes to the social housing allocations system over time have created more ethnically mixed neighbourhoods leading to greater integration of ethnic minorities children at school.   In case two also school demographics were believed to be a product of residential separation but participants appeared reluctant to acknowledge an explicit link between ethnic concentrations and mono-cultural schools.

All participants were aware of the duality of the relationship between housing patterns and the social or ethnic composition of schools. However, opinions regarding the level of segregation in schools were inconsistent; one participant remarked, *"Our schools are situated so that we do not have many segregated schools"* whilst another acknowledged that several primary schools were described as virtually mono-ethnic[8], but most secondary schools were relatively mixed.

Yet the relationship between residential and educational segregation is not clear. In case one where residential segregation was lower, certain inner city schools

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[8] He explained that by this he was referring to schools which were either entirely white or 90-100% Pakistani.

were still described as having concentrations of minority ethnic groups. It was suggested that the probable cause in this instance was related to concentrations of minority communities in poorer quality housing in such areas.

This relationship between deprivation, education and ethnicity was present to a lesser extent in cases one and three, with similar segregation levels and one in five schools with more than 60% not-white. However, *"Ethnic groups don't loom large in Case three. I think that's partly one of our virtues. And we do have very good mix in our schools. I think if you were to look at some of our least attractive schools – there's one that's turned itself around, that's right in the middle of a white working class, one of our biggest concentrations of social housing."* (Case three: participant 13). This last statement suggested that concerns in the borough are with predominantly white schools rather than those with larger minority populations.

There is also evidence of a relationship between spatial concentrations and the widely observed relationship between educational achievement and ethnicity. This was particularly evident in case three where Bangladeshi children are linked with lower achievement and are also the most concentrated group. It is not apparent if this is a causal relationship but it was attributed by some to the presence of mono-cultural primary education that sustaining English language difficulties amongst this group. However, greater complexity is added by the likely relationship between deprivation and low educational achievement rather than a simple ethnic dimension[9]. Low educational achievement in the borough was not perceived to be limited to the Bangladeshi community but was also high amongst working class white children.

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[9] Further useful analysis could be conducted on schools data to establish to what extent residential patterns reflect school intake.

There are differences in the ethnic composition of schools in the three cases. Almost eighty percent of all schools in case three (London) have less than 40% white British pupils (DfES, 2006). This contrasts with only 12.6% of all schools in case two and 20% of in case one. In case two where residential segregation is very high, 12.6% (11/87) of schools have less than 40% white British pupils and this drops to 7.1% (only one of fourteen) in the state secondary sector (DfES, 2006). In the context of the overall proportion of not-white residents in the authority is only (~15%) at secondary level, there is relatively high educational segregation. In considering the relationship between deprivation and ethnicity in children we can take eligibility for free school meals as an indicator of household income level for pupil intake. Only in case two is there any significant correlation between the proportion of minority ethnic pupils in schools and the percentage of children eligible for free school meals. The percentage of non-British born white pupils has a positive relationship with the percentage of pupils eligible for free school meals (p = .435), indicating that schools that have more non-British white pupils often have a more deprived pupil intake. One dimension of school segregation is its relationship with language. Language was identified as an important dimension segregation outcomes in all cases but especially so in the least segregated case three. School statistics indicate that in schools in this case, the mean percentage of pupils for whom English is not the first language is 51%. This compares with means of only 17% in both of the other cases. This suggests firstly that the nature of residents and their origins in London is more diverse and places greater strain on the system, also explains the concerns expressed by participants in this case with regard to language. It is interesting that the apparently least segregated cases in this qualitative study has the greatest potential difficulties in terms of language and diversity whilst the cases with very contrasting segregation levels share some characteristics. In conjunction with the free school meals data this demonstrates the differences between London and other areas of the country.

Socio-cultural confidence

The decision-making process of household units was described as influenced by the level of social confidence. It is linked here to aspiration. Confidence and aspiration were issues of concern to most participants in all cases and were often believed to be tied to the availability of culturally specific services. It was apparent that through the greater opportunities available in neighbourhoods where there was a concentration of similar residents, access to culturally specific services and networks may be financially beneficial to communities. Access to cultural services such as religious facilities, commodities and leisure activities promotes the confidence believed in turn to encourage and enable dispersal. Pakistani groups were highlighted in case one and case two and Bengali communities in case three as they appeared to be the groups most strongly influenced by the need for social and personal confidence and security. There was greater concern about social networks and support structures than there was around other ethnic groups.

However, it is possible that this concern was associated more strongly with the economic or social class of Pakistani communities than with their ethnicity. Moreover, there was little or no evidence within the data which explains why Pakistani and Bangladeshi groups are less socially or culturally confident in comparison with Afro-Caribbean communities. A feature of importance in these cases was the role of social confidence, for example: *"The investment in community development with those communities has I think helped because what it enabled to happen was for people to continue to enjoy their cultural identity within their new surroundings. And to build up their confidence to be able to integrate"* (Case one: participant 1).

Cultural or social influences were also believed to affect location choice due to a relationship with to social confidence. Participants portrayed living among one's own cultural or ethnic group as a means of gaining personal and social 'confidence' for members of minority ethnic groups:

> *"And I do think it doesn't bother me because if you can come home and have good sleep and have comfort and confidence then you can go out with confidence and try to talk to other people. If you do have sleepless night, you possibly would not get on with your neighbour. That sort of settled communities, you feel at home, you feel that you are confident, you feel that you are not going to be disturbed. It's the feeling it."* (Case two: participant 7).

In case two, this was also partly connected with language difficulties, at least in previous eras:

> *"There is something to do with the confidence as well, because at that time people did not have a good command of English so language barriers was something. And that is why they felt that if they lived together they could communicate well."* (Case two: participant 7*).*

The area of social confidence assumed an overwhelmingly ethnic dimension. Although one participant made a connection with recent Eastern European, specifically Polish, immigrants, confidence was not attributed an equal level of importance for white or 'host' residents. In case two, the confidence gained from living among similar communities seemed to be important as part of a long term process of integration, both social and residential, a process deemed necessary in

order to achieve integration and cohesion. One participant who recognised that ethnic residential segregation has been beneficial for certain generations suggested that it was a means to a final end product of dispersal:

"*When people develop, or have confidence, they do move on. So it's to do with confidence and affordability.*" (Case two: participant 4).

The same participant explained why she believed confidence is often greater in concentrations:

"Definitely in, like I say it's personal confidence and … obviously if you want to move to a different area you do need to be in a position that you can afford to buy a house. And when you move there you do also look at other amenities, say Mosque, shopping centre and so on. And also, as I said previously people didn't speak English so they wanted to stay with their own community. Nowadays, in a family both partners work, even within a south Asian community, they can speak good English, have a car, so it's not an issue for them to move out. And people are moving out you know. Because they have the income, they have the money to buy the houses and they can communicate, they can get on easily, well with the neighbours." (Case two: participant 4)

Faith

A religious dimension was present in most narratives. However, religion was only addressed in reference to residential arrangements in cases one and three and in these cases Muslims were the only group believed to be relevant: *"So we do have*

ethnic groups that are poorer in the south. So the south really is mostly
Bangladeshi and mostly Muslim Bangladeshi." (Case three: participant15*)* and:
"In that areas of concentration of Muslim Asians are in owner-occupied areas. But
generally more run-down, cheaper property" (Case one, participant 3).

In contrast, within the most segregated case (two) faith was not identified as
having a relationship with spatial segregation. In case one, Muslims were identified
as having specific tenure preferences and tendencies but also as being particularly
negatively affected by affordability in comparison with other groups. Within the
owner occupied sector there was an apparent division between deprived
neighbourhoods or poor quality private housing and better quality, more expensive
owned housing. Muslim populations in case one were found in cheaper, inner city
areas in contrast with other groups in the wealthier suburbs, thus separating the
community along financial lines from white owner occupiers: *"People in the Muslim*
community tend to be owner occupiers but they don't tend to live in areas where it's
nice…but around the inner city areas." (Case one: participant 11).

In case three the distinction between wealthy and poor Muslim communities was
more explicit even within ethnic categories. Concentrations of deprived Bengali
residents were created in part by the exit from the borough of affluent Muslim
households. Wealthier Muslims, whether they were Somali, Bengali or Pakistani,
were observed to move to the more affluent parts of the neighbouring borough.
This was believed to be a direct consequence of the invisibility of borough
boundaries in London. This allows people to move between districts with little
awareness that they are doing so. In contrast, in cases one and three, authority
boundaries were more apparent. Although Muslims were not explicitly described
as more segregated, it was noted in case two that the most concentrated ethnic
community was one which has a strong cohesive religion. Participants here still

believed that the nature of the Muslim faith and its emphasis on both regular expression and Mosque attendance encourage greater concentration of social groups.

Generation

Although age was not examined in the quantitative analysis, there was a generational dynamic to qualitative understandings of residential patterns at all levels of segregation. Further, in all cases this generational dynamic was observed *within* ethnic groups but transcending ethnic boundaries in a similar way to that of deprivation. This was especially so in case one where many older Afro-Caribbean residents were described as living in concentrations within predominantly white areas but as less integrated with the younger generation within the Afro-Caribbean community:

> *"However, we have pockets where we have large Caribbean community… those areas where the first settlers of the Caribbean people came. So you find that the older generation still remain in those areas whereas the younger generation has actually moved on."* (Case one: participant 11).

This dynamic appeared to exist at a lower level in case two where families of some ethnic minority groups live alongside each other. There is separation of the generations for most ethnic groups and at all levels of segregation.

There was also a social dimension to issues of integration in case three that was specific to older generations who wanted separate community activities and services provided along ethnic lines:

"There used to be one [community centre] for African-Caribbean elders but that closed down. I think they want to be amongst their own. And it's not just about providing a luncheon club – they want their own activities. They want a worker form their own community to work with them" (Case three: participant 14).

However, the implications of social requirements for residential patterns were not considered important; even those who were spatially integrated with other ethnic groups were prepared to travel in order to socialise with their own community. In the less segregated locality Asian households had social problems relating to intergenerational differences:

"Underneath that, there's lots of issues where that can be improved. There's issues around, within all communities – white …often we focus on some of the issues that Pakistani-Kashmiri or Indian communities are facing around inter-generational issues but they're just as apparent in the white communities as they are within those communities as well. So in generational issues a lot of work can be done around cohesion." (Case one: participant 2)*.*

Employment, Industry and Social Class

The section above indicated that for many households, the location of employment influenced location choices. However, it was difficult to establish a relationship between the extent of segregation and patterns of employment or industry in a locality. It was apparent that the location of industry in each area affected the settlement patterns of early immigrants:

"I think it's the usual thing that when Asians came to live here they were working in the mills, which were all based around those areas. And bought houses in that area from white people who got better off." (Case two, participant 6).

The effect of employment was not discussed in reference to host or white populations in any of the cases. This reinforced the association between the effect of minority ethnic groups on residential arrangements rather than *all* populations. An interaction between local employment patterns and the types of ethnic groups present in each area appeared to have created enduring concentrations of certain groups and to have affected the long-term nature of housing and services in different places. One participant explicitly linked the diversity of employment and its spatial arrangement with long-term residential patterns of ethnic groups:

"I don't know whether I'd apply that same argument about the skills people came with, semi-professional etc, to the Pakistani community particularly, but what we don't seem to have done and perhaps because we've had more of a diversity of industry, is not have the ghettoisation of employment in that sense. So that people in other cities perhaps people are in a particular area because they are, because members of their community are setting up their own businesses, textiles, or whatever and therefore a huge concentration in a particular area. I think that has got something to do with it. So I would see employment as being a key to that." (Case one: participant 3).

The precise nature of industry in each case differed but the relationship between people, location and employment did not. As employment was not ghettoised in case one, it did not interact with the ethnic patterns of work or with the need to live close to employment. Consequently, there was lower housing segregation in

comparison with case two where employment was less spatially diverse. In this latter case, the industry occupied by immigrant communities in the 1950s and 1960s was often located in the inner city areas.

The dominant ethnicities present in each case were, at least in part, a product of the type of employment available at the period of initial generation of settlers. This therefore requires an analysis of the interaction between the employment patterns and ethnicity, a topic discussed by participants in cases at all levels of segregation. In case one, variation in employment patterns were described as Asian Muslims running private taxi companies, Africans having a strong connection with the local universities and Indian residents working in the IT industry:

> *"Though my knowledge of African people is limited but of those I know, there is an awfully big connection to the university. If there is a connection to the university, that geographically sort of skews it a bit. You wouldn't choose to live way out that way and have to commute"* (Case 1, participant 3)

The relationship between ethnicity and industry was also perceived to effect change in segregation patterns over time. This was particularly evident in the least segregated case where the more integrated Indian community was so as a product of its historical and continuing professional employment base. This had enabled their entry into the British middle classes and thus not only the financial means to access more popular and predominantly white neighbourhoods (owner occupied) but also the social means to integrate with this stratum of the host population. This again emphasised the distinct patterns of Pakistani and Indian communities present within even the least segregated locality. The fact that such patterns occur

even in authorities of less segregation demonstrates the importance of ethnicity to residential integration.

One participant commented how class was believed to transcend race as affecting the lives of residents:

> *"What's happened there is that when the first generation of people from the different Indian communities came to the city they would be in the service industries like shop-keeping and so on. But the next generation of them because they placed great emphasis on educational qualifications within the families and the community, a lot of the next generation are professional people. What that does is weaken the interest of the second generation in taking over the businesses and the interests of the first generation, so economically there's that issue but they're upwardly mobile and they're moving into the area to live in the areas where you've got your white middle class. You get your white middle class and your Indian middle class happily living side by side. So there's no segregation at all there."* (Case one: participant 2)

Household profession has had a long relationship with ethnicity in part as a product of the nature and origins of early immigrant settlers. For example, many of the Indian community are descendants of displaced business people from Kenya and this compares to Pakistani residents who originate from poor agricultural areas of Kashmir. In terms of integration, this implies that Indian households possess not only the financial means to occupy more middle-class neighbourhoods but they are also affected by the level of social contact enabled by employment and education. Employment patterns mean that Indian households have a greater likelihood of

contact with (middle-class) white households through work even if they are not able or have not chosen to live alongside them.

However, the complexity of the relationship between class and income means that it was not always apparent from the data which participants consider to be more relevant. The impact of social class was mostly observed upon mobility and was thus linked with changes in the level of segregation, for example, in case one:

> "*One of the most upwardly mobile communities, and these are all sweeping generalisations, is the Indian community*". (case 1, participant 2)

Middle class or professional households experienced greater social mobility as a consequence of more substantial economic strength; this in turn provided the opportunity for contact with more positive role models and thus enhanced aspiration.

Households in more professional socio-economic groups are described as living alongside other households from similar groups. In other words, they are highly segregated from members of other social groups. For some, this results in a high degree of segregation from other ethnic groups also. However, the structural patterns of ethnicity and occupation or class shape these residential patterns. Many middle class Pakistani households in case two live alongside middle class white (or in rare cases, black) families but not alongside less professional Pakistani households. However, the nature of their social networks is such that these 'dispersed' households maintain a high degree of contact with their ethnic community. As discussed in chapter five, social class also affects household location, especially in terms of tenure preferences or access. The established differences between Indian populations and other South Asian groups in terms of

education outcomes and profession are shown to have an impact up housing patterns. Although there was a statistical relationship between Indian populations and segregation, the qualitative descriptions understand Indian households to be more middle class and thus more likely to be living alongside other white middle class households.

Deprivation

Both quantitative analysis and local perceptions indicated that high levels of deprivation were located in areas with higher residential segregation. Areas that were more mono-cultural experienced heightened crime levels, lower house prices, greater unemployment, larger numbers of benefits claimants, lower educational achievement and lower economic class. This indicates that it is not merely the presence of high concentrations of (certain) minority groups in such areas but the particular nature of the types of *social* groups which live there. It would be unhelpful to separate issues of affluence from the housing dimension, however there were specific effects of poverty on residential patterns.

The majority of households that are financially able to move from a deprived area into more wealthy neighbourhoods will do so at the earliest possible stage. The perception in boroughs at all levels of segregation was that this was generally the case:

> *"And the young generation, professionals like doctors, IT people, they can afford it on good wages, they can move and they cam live in any area."* (Case two: participant 7).

Where segregation was statistically low but qualitatively observed in case three, one participant directly attributed the lack of dispersal for the Bangladeshi population to disparities in economic success:

> *"So far you can't really see the signs of big success in the Bangladeshi community that mean that they disperse into the suburbs."* (Case three: participant14).

However, there was evidence indicating that although likely, movement out of poverty was not always the case for all ethnic groups and that, in part, it was this failure to move which increased segregation. Thus, the effect of household income on mobility was not consistent.   Participants suggested that the role of personal preference was also relevant; although they are given the opportunity to move within the social housing system, there is no dispersal pattern for that group:

> *"Well not quite, because it is a matter of choice. The Bangladeshi community has chosen to stay in these areas. They could move to HO, they could move to TK but they prefer not to…The interesting thing about the whole ethnicity and faith is that we also have Somali Muslim people but they are more geographically scattered. And the interesting pattern for me is that the Bangladeshi community has acted very differently from the Somali community in that the Bangladeshi community came to the South, stayed in the South."* (Case three: participant 15).

It was apparent that in London, for the Bangladeshi community, cultural preference *transcended* the effect of economic factors. However, this also relied on the assumption that the Bangladeshi community in London was culturally and ethnically similar to that in case two:

"A comment made by the leader of the council last week that we now have estates in the borough that are 95% Bangladeshi. And that's because the community has chosen to stay where the community is and there is no dispersal pattern for that community" (Case three, participant 15).

Similarly, where segregation was high in case 2, only some Bangladeshi families were believed to be living in inner city concentrations due to poverty:

"But even those who can afford, they're moving, also some of them decided to stay. They feel comfortable where they are, even though they can afford to go outside, to move outside." (Case two: participant 7*).*

The similar observed patterns for Bangladeshi communities in both the high and low segregation cases indicated an ethnic dimension to the effects of economics. Dispersal (and the consequent integration) was quantitatively associated with boroughs containing larger proportions of those ethnic groups such as Indian, African and Chinese, for whom mobility is more likely. In case one this enabled such households from such communities to integrate residentially with affluent white residents. This contrasted with perceptions of Pakistani and Bangladeshi communities who lived in concentrations:

"Yes, again like the Bangladeshi community is living in one part while the Pakistani community is living in another part whilst the Indian community are scattered. Chinese communities are scattered." (Case two: participant 7).

The reasons for greater mobility related primarily with financial difference in case one:

"Indians and people who came over from some part of Africa. They tend to go to affluent areas because they've got the financial contributions to do that." (Case one: participant 11).

The economic dimension was explicitly related to the ability to access sectors of the housing market that were otherwise dominated by white groups. This introduced a spatial dimension as a product of variation in the housing characteristics of neighbourhoods. The dispersal of Indian communities was a direct consequence of the combination of affordability and housing tenure:

"So amongst the inward immigration by Indian communities, and most of those were displaced Kenyan Asians and so on, you would probably see with the Indian community a very broad distribution of house ownership including in some of the more richer suburbs around the city itself." (Case one, participant 1).

However, it was also a result of shared household characteristics: in the same locality, the observation that poor black areas and poor white areas have a lot in common suggested that socio-economic factors play a big part in creating segregation. Further, the picture was more complex when broader spatial limitations were considered. The design of the administrative boundaries of districts has a seemingly important effect on the segregation calculations. In case one, the more wealthy areas were segregated by the city boundaries resulting in more wealthy residents leaving the city borders altogether to live. This is shown by the proportion of properties in high council tax bands:

"There are only eighty houses in this city in the highest tax band. There are over 90%, well over 90% of the houses in this city are less than the average tax band, Band D and well over 60%, probably 65% are in tax band A. So the real segregation is around the housing offer, as I see it." (case 1, participant 12)

In other words, this leaves only the poor in the calculation. This is evidenced by the percentage of council tax band D and upwards in the city: only eighty properties are in Band E (claim made by participant 1).

The geographical shape of poverty itself in each locality was also believed to be important in shaping ethnic residential patterns. In case one deprivation was described as being widespread in contrast to the pockets of poverty within affluent areas observed to case three (to an extent, case two also). Case three also had a distinct geographical layout with one half predominantly very wealthy (with pockets of deprivation associated with housing tenure patterns) and the other predominantly (although not exclusively) very poor. Deprivation within these areas had a number of dimensions, including housing tenure, housing costs and health (participant 14 made the claim that male life expectancy varies by eleven years over a distance of only two miles in case three). In case three the more deprived area was described as economically homogenous and housing large numbers of Bengali, Somali and white communities. This would suggest that the lower ethnic segregation experienced in this locality was the consequence of shared levels of poverty, an association that supports the quantitative association between high deprivation and low segregation in London. Yet this fails to explain why this relationship exists only in London. Further, the description of deprived areas as housing Somali, Bengali and white populations together gives a possibly false

impression of diversity; other minorities in such areas were relatively small and the 'feel' of the areas were predominantly white working class. One participant describes an estate in case three:

> "*Economically TS is one of our more homogeneous areas. It's got quite a large Bangladeshi and Somali communities. That gives it the impression that it's diverse but I think what you get past Bangladeshis and Somali, the other minorities are probably quite small. But it's got... the feel of the place is predominantly white working class but of people who for generations have been used to living alongside white people, mostly people from Indian subcontinent. There is something that you don't get in many parts of Case three, which is the streets where there are predominantly Asian traders, D Street's quite famous for Indian restaurants, some of the schools in the area are mixed.*" (Case three: participant 13).

It is possible that the likelihood of dispersal into 'white' areas was increased when economic (better job and higher income), social factors and aspiration combined; for example, in case two the families that were most likely to move out of poor areas with high proportions of Pakistani residents and into wealthier, predominantly white neighbourhoods, were those both with more income and who have *two* parents who speak good English. When there was only one, participants suggested that residents are more likely to remain in their original neighbourhood, despite having the financial means to leave.

The quantitative relationship between localities of greater deprivation and higher levels of residential segregation has been broadly born out by qualitative descriptions of processes. However, these local narratives have demonstrated the complexity of the relationship between ethnic group, deprivation, segregation and

housing. Deprivation had both an ecological and an individual effect on segregation and an interaction between the two. By attracting similar households, thse presence of more affluent households in otherwise poor neighbourhoods may have positive effects on the area and encourage other, prosperous households from other ethnic groups. This 'neighbourhood effect' Further, high demand for properties by Asians in the predominantly Asian areas of case two and 'white flight' from these areas has led to increasing house prices. This in consequence has led to some but significant, movement into other areas. In all of the cases it was recognised that for certain ethnic groups, affordability transcends ethnic boundaries:

> *"Yes, I would say there is more segregation linked to income than there is on race. Obviously, there is an issue around. Obviously you want to be close to people, your family and friends, your community culture so you get that support. So there's that element to why certain people live in certain areas. I think incomes a major factor of people's ability to buy better quality housing."* (Case one: participant 2).

Housing and segregation

The housing sector was said to be important to residential integration in terms of individual household decisions and ecological effects on neighbourhoods, but its effect varied by ethnicity:

> *"Caribbeans tend to live in the inner city areas but they also live in some housing, in the council housing sector or housing association. They're more flexible so they'd live in different parts of the city."* (Case one: participant 11).

Case one in particular has felt the effect of ethnicity-related tenure differences in terms of owner occupation and private rental:

> *"So amongst the inward immigration by Indian communities, and most of those were displaced Kenyan Asians and so on, you would probably see with the Indian community a very broad distribution of house ownership including in some of the more richer suburbs around the city itself … Whereas I guess with some of the other communities, the Afro-Caribbean community I think were more dispersed… would be more because of the impact of the housing policy. Pakistani-Kashmiri community probably more related to housing opportunities within the rented sector as well as the local authority rented sector. Probably I would guess slightly more concentration of Pakistani-Kashmiri communities than other communities. So I think housing has been a major factor in all of that."* (Case one: participant 1)

These processes interact with institutional practices:

> *"The other parts of the city where it goes back to this triangle that Dave's talking about, where the Pakistani Kashmiri community have settled was in 'S' and 'L'. I suppose the characteristic between 'FF', 'L' and 'S' is that they're private rented properties, or there's opportunities there for people to rent privately and get into houses far quicker than going through the council's allocation process"* (Case one, participant 2)

Earlier work has indicated a preference among certain ethnic groups for social rather than owner occupation. A PSI survey in the 1990s found that Bangladeshis

were the least likely ethnic groups to aspire to owner occupation (Modood et al, 1997). This was reflected in case one:

> *"People in the Muslim community tend to be owner occupiers but they don't tend to live in areas where… around the inner city areas… whereas the other south Asians like maybe Indians and people who came over from some part of Africa. They tend to go to affluent areas because they've got the financial contributions to do that … It's aspiration and money that drives where you live."* (Case one: participant 11).

Further, the evidence above indicated that where possible, almost all households will move out of deprived housing or neighbourhoods as soon as they are able. To a limited extent, participants in case two upheld this, referring to both 'black' (specifically Asian) and white 'flight'. The pattern of south Asian class mobility identified by participants is very similar to that described by Simpson (2004) in similar northern mill towns.   Further, the role of industry in shaping early and current residential patterns adds contemporary weight to earlier analysis of patterns in the 1960s and the role of industry in the post-war period (Engstrong, 1997, Peach, 1998). It is interesting to note that although Afro-Caribbean populations were acknowledged as well socially and spatially integrated, they were not associated with the process of 'flight':

> *"Sometimes white people do move out and some people do use the phrase 'white flight' and I would not blame them. There is unease. Because south Asian communities, they want to live together, for example, for many reasons."* (Case two: participant 7).

This may be because this integration is often within more deprived areas and such households are therefore not able to make the same 'positive' transition into wealthier neighbourhoods. A temporal dimension to this was indicated by some experiences as changing fortunes over the generations have meant that recent younger households are able to make different housing location decisions to those of their parents. Discussions of deprivation above highlighted that one key issue in housing patterns was the relationship between tenure and ethnicity. This was in part due to economic reasons but there were also cultural and practical relationships between tenure and ethnicity. For black Caribbean groups:

> *"That is because, when our generation came to this country … towards 1960s, at that time…. Was mostly proud of … and the people cannot apply for council houses when they come because there is a twelve month period where you have to be resident for twelve months before you apply for council houses. So, in that sense, people look for cheap terrace house, two up two down. And they bought the houses near the town centre and used to live twelve, fourteen people in the house. That started in 1950s, 60s. And it's hard enough living. Same pattern has been adopted, the BME community feels safe near the town centre and the facilities as well."* (Case two: participant 7).

In case two there is also evidence that preference has meant that some poor areas have retained some affluent families when they would have otherwise left. Such areas have therefore become more economically mixed. This also has a physical dimension with certain type of properties being more suitable for or preferred by different ethnic of religious groups. This feature takes on a spatial dimension in areas where neighbourhoods have particular dwelling type characteristics. Where dwelling size was geographically limited, this impacted upon location. In some

areas this appeared to interact with housing tenure, especially so in the case of social housing as it is frequently based around estates.   This spatial homogeneity combines with local allocations processes and with the type of properties remaining in the housing stock.

Case one is distinguished by the presence of monolithic social housing estates which created broad areas of mono-tenure neighbourhoods that have never existed in the other cases. Although the Right-to-Buy programme has broken up the tenure structure of these large estates to an extent, much of the social housing tenure remains homogenous across broad geographical areas. This may be attributed to the selling of properties from long-term owner occupiers to similar households or, alternatively, due to consistency in the level of poverty across the area:

> *"I would say swathes [of deprivation] rather than pockets! Huge parts of the outer estates, in the northern and the north eastern private estates are hugely disadvantaged as are the most inner city bordering areas. You've got the rivalry within them and then you've got the different ethnicity make-up compared to the outer estates. Huge problems…I'd say just within the city boundary, the city centre flats, SD, CCT and some of the northern private estates like 'W' are the areas that you would say are middle class or have a degree of affluence. And that's very small areas for a city the size of case one. The suburbs are outside the city council boundary."* (Case one: participant2).

Whole communities in case one have been able to move from local authority to private rental or owner occupation. It is suggested that the housing decisions of Pakistani households have been related to opportunities (cost and availability) in

the private market as well as the social sector, leading to greater concentrations of Pakistani-Kashmiri populations than other groups. Case three presents contrasting effects of the same policy development, as Right-to-Buy was effective in breaking down mono-tenure and as a result brought role models and aspiration to the area:

Residential arrangements were constructed as a product of individual households' ability to access certain tenures through both economics and institutional or local practice:

> *"I think that when you look at the housing stock in case one, there's a larger proportion of council houses than there are in other cities. And to be able to get a council house, there's been different allocation criteria over the years, but you needed to be able to attain the necessary requirements to be able to obtain a council house. You start in a council flat and eventually you get into a council house. This favours people that's been in the city for longer periods of time. By the criteria for houses, this was altered on large council house estates with people who would have had the necessary requirements to obtain those, to meet that criteria, so they're living in the council house estates in certain parts of the city."* (Case one: participant 2).

Ethnic and/or income related variation in access to tenure was not deemed problematic in itself, rather because residential patterns are produced by the geographical arrangement of tenures specific to the locality. This may have produced a local effect particularly with regard to social housing as both local issues and national structures have a significant effect on the social housing sector: *"You have a situation where communities have been able to move from local authority rented to either private rented or privately owned as being an easier transition."* (Case one: participant 1). Variation in the level of historical enthusiasm

for programmes such as Right-to-Buy or the nature of the local Registered Social Landlord impacts upon the availability, quality and nature of social housing.   The presence of social housing in case three is important because turnover is quite low in these properties:

> *"But it's not kind of cosmopolitan melting pot with people of all different nationalities. It's a sort of coexistence of the indigenous community that, through waves of immigration, others were kind of welded onto them, they've learnt to live together. Actually I reckon if you researched this, they're probably quite stable communities as in, they wouldn't be the Urban Intelligent people coming in and out, lots of people – there's very little Buy to Let. A lot of social housing there and the turnover in social housing is quite low. So it's diversity, if you had a diversity index, might not be that high but (and there's a lot of perception in this) I think it's based on quite established communities that coexist rather than a dynamic that – you know they talk about NY, people from all over the world come in, Chinese, Italians, it doesn't feel like that."* (Case three: participant 13).

Typical tenure relationships are present in case one where Indians, in particular Kenyan Asians, are broadly distributed across owner occupied neighbourhoods including the more wealthy suburbs. In the less segregated case, Caribbean residents are located in inner city wards, a common pattern for minority ethnic populations in urban areas due to the cost of housing in these areas historically (Peach, 1998). As well as working class white residents, a significant proportion of Bangladeshi residents are found in social housing in case three. Yet the effect on segregation of their presence on social estates here is not only due to the localised nature of council properties but also due to a reluctance to leave *specific* council estates and disperse across the area. These differences may be a product of

boundary difference. In case three the boundaries of council estates are very clear and council estates generally cover a small area. In addition, case three includes pockets of social housing in wider neighbourhoods of low quality private housing or more wealthy private housing:

> "*It [deprivation] is pocketed but I would say the affluent areas of the Borough and I don't know if this about the way areas were planned, but even the affluent areas of the borough, there tend to be one area where there is social housing. So segregation, so even though we have a lot of – let's pick up H and F – a lot of affluent people up there. There is still the occasionally social housing. I'm not saying that in that case there would necessarily be an ethnic minority person in that housing. But in that lot, it is a lot more likely that people will not be 100% segregated white and non-white. I think there will always be in case three at least, because we are inner London, you would still have the occasional BME person in an affluent area anyway. And also the ethnic minority population – we do have certain groups that are wealthier than others and those people from those groups would be in those areas as well.*" (Case three, participant 15)

The nature of the private housing market in London appeared to create further challenges for the social housing market in case three. Within the social sector, the dynamic was believed to be associated with who is able to access it in the first place rather than the practice of allocations. Because much social housing has been sold off and there is little physical scope to increase stock, access is limited to the very poor and it becomes the tenure of last resort for *"the most marginalised in society"* (participant 15). As the borough also has more of their housing stock remaining than do most other inner London boroughs, it attracts the very poor. As one participant explains: "*We are in danger of becoming a borough of the poor who*

live in social housing" (case three). Thus those who do access social housing are the very poor, there is a high level of worklessness, and those who can afford the private sector are inevitably the especially rich. The Hills Report highlighted the reduction in diversity of tenants in social housing (Hills, 2007).

The concentration of poverty in case three is similar to that in case one, although the latter also has cheap private accommodation available. Because the borough of case three is part not only of the London housing market but also the global one, the local authority has very little influence over it:

> *"And our influence on the housing market is so low. We're not running the housing market and it's not a case three market, it's a London and a global market."* (Case three: participant 14).

The smaller scale at which housing patterns were observed in London may be explained by the relative overall (in contrast with borough-level) density and commercial spatial arrangements in the city:

> "*In London…complex social and economic conditions mean that most individuals are unlikely to be able to carry out all their activities within their immediate local area*." (Church et al, 2000:199).

The geographical shape of housing and other physical factors also shape segregation. In case one it is apparent that the administrative boundaries may have affected the dissimilarity score. In case three the boundaries of social housing are very clear as the nature of the properties changes dramatically and there are smaller number of street stock. The 'poor half' of the borough has pockets of affluence created through gentrification. Although both Pakistani and white

populations in case two live in inner city areas, white residents were in social housing on one estate of predominantly low quality houses and flats whilst Pakistani households of similar economic class occupied private housing on the other side of the town centre. More wealthy white residents live outside the town centre. In contrast, the housing market in case three has never reduced the cost of private housing to a level at which Asian communities could access them.   They have therefore been forced into the same social housing sector as poor white communities in a way that they have not in case one. Shared tenure enables greater spatial integration, if not necessarily social cohesion Further discussion of the degree to which living alongside households from different communities leads to meaningful day to day contact is in the following section. It may be this which has led to them being more integrated as they share tenures. The segregation exists in this borough on a smaller scale because they have still been able to stick together within the boundaries of the geographically restricted social housing estates that were found in pockets rather than above the Super Output Area level:

> *"Even in blocks that were predominantly Asian but not broadly Asian people who were living there. I think there's a lot to do with tenure, size of property comes into all this as well…. In that areas of concentration of Muslim Asians are in owner-occupied areas. But generally more run-down, cheaper property. In HK there was some substantial properties that Asian families have bought up over the years and so on. Though it might be interesting to see where Asian families have invested in properties but then actually rent them out. Because of course they increasingly rent them out, in non-student areas, they're increasingly renting them out to eastern Europeans."* (Case one, participant 3).

In contrast, many other young families in case two are unable to move directly into better quality accommodation, choosing instead to access owner occupation in areas of lower quality housing. This may also be the result of a relationship between certain ethnicities and owner occupation.   We can distinguish variation in descriptions of the cost of housing between London and the other cases as all participants indicated that the cost of housing is most pertinent to the London borough. The nature of the impact is also different as the extremely high cost of private housing (in both the rented and owner occupied sectors) moderates initially who is able to move into the borough itself and subsequently which neighbourhoods are accessible. These issues of affordability operate in conjunction with the considerations around tenure to influence location decisions.

There were other specific events or processes that affected housing patterns in individual cases. In case one residential arrangements were significantly affected by clearances; different communities or neighbourhoods were moved wholesale into separate neighbourhoods as slum clearances were conducted:

> *"[clearance] broke up communities. Communities who stayed in solidarity was [sic] solid in the 1950s. We had a new migration of kids coming over, south Asian people settled in the late 50s and 60s. There was a new migration of people…"* (Case one: participant 11).

This divided some existing (and inevitably, poor) communities from the city centres whilst maintaining others. As a result some original communities in case one were moved out of their neighbourhoods of original settlement thus limiting the long term effects of early segregation patterns:

"…just the area 'PT' that I mentioned earlier being cleared of its slum housing, to put in new council housing in the 60s a lot of the residents of 'C' from 'PT' were moved wholesale across to 'C' so that took the white community from 'PT' to 'C'. A higher, well a significant proportion of people who then move in 'PT' are from BME groups so that's a complete change in the nature of 'PT'." (Case one: participant 2).

Housing clearance was a process that did not occur in other cases and was believed by some participants to explain some of the integration in the authority. In contrast, case three did not experience the widespread slum clearances that occurred in case one and therefore the variation in resettlement of ethnic communities.

Case one has smaller proportions of Muslim South Asian residents than case two but the majority lived in owner-occupied properties. Common to these properties is their low quality. There is little qualitative evidence here to indicate whether it is the availability of cheap housing within this tenure that draws this group to a single area or whether low prices and a plentiful housing market are the result of the presence of relatively deprived south Asian households. Participants suggested that, certainly in the past, it has been the former but they were unsure about current patterns.

Quantitative analysis indicated a strong positive relationship between terraced properties and segregation, with the implication that this was likely to be a product of a relationship between terraced neighbourhoods and Pakistani communities (Chapter Five). Indians were more likely to occupy semi-detached or detached properties in owner-occupation in contrast to Pakistanis who were significantly more likely to live in terraced housing, although also in the owner-occupied sector

(Peach, 1998). Consequently, they often lived in different locations in urban areas. In the highly segregated case study this relationship was upheld as the Asian 'ghettos' were in (though not exclusively) terraced neighbourhoods. However, there was also a significant white presence in a separate terraced neighbourhood. Although there was a preponderance of Pakistani-Kashmiri households, terraces in case one were home to a mixture of (often poor) communities within the private sector including white, Afro-Caribbean, Pakistani and, more recently, Eastern European:

> *"I think you probably would find that in reality. But in that same terraced housing you've probably also got some eastern European communities, poor white communities, African-Caribbean communities"*. (case 1, participant 1)

In addition to these deprived areas, case one contained higher quality terraced property, some of which had been gentrified. So it is not only that there is an ethnic mix of poor people in rundown terraces but that it differs from case two because there is also a mix of quality of terraced dwellings.

Why does variation in segregation level exist?

Participants considered a number of factors to be influential in the production of differing degrees of segregation. Variation in the residential patterns of ethnic groups exists as a product of historical immigration of people from the same regions in a short period, in combination with housing, employment and social structures specific to the local area. These affect the development of social structures and the capacity for different social or ethnic groups to occupy particular spaces in each city.

However, these processes manifest differently depending on spatial scale (discussed in Chapter Four). The 'negative' socioeconomic characteristics that are present in the London authority may be associated with micro segregation rather than low segregation at the scale measured in my quantitative analysis. This offers some explanation for the opposing statistical relationship between deprivation and segregation in London in comparison with the rest of England.

The perceptions of participants interviewed broadly reinforced the picture created by cluster analysis and regression analysis in Chapter Four. Further, they identified certain ethnic groups as more strongly associated with segregation than others. In particular, segregated areas were characterised by concentrations of certain Pakistani communities more so than 'Bengali' or Bangladeshi. Even in the cases where overall segregation is low, participants identified the same communities (poor Pakistani or Bangladeshi and poor white) as living in concentrated areas and therefore associated with any segregation that was perceived to exist in the city. Such areas appear to contain specific and frequently isolated neighbourhoods or particular tenures and/or dwelling types.

Regression analysis had indicated a strong association between concentrations of Pakistani residents and neighbourhoods of terraced properties in more segregated authorities. This was supported by descriptions of the highly segregated case two in which participants identified the presence of Pakistani communities in neighbourhoods of terraces and concentrations of white residents in different neighbourhoods, even when both groups were equally deprived.

The overall relationship between more deprived authorities and higher segregation was only partially reflected by the qualitative narratives. Segregated neighbourhoods were frequently, (although not exclusively as London provides an

exception) poor with relatively, and in some cases predominantly, high levels of social housing. A relatively high proportion of substandard housing was also described in more segregated neighbourhoods.

Interviews also revealed the understanding that white communities often live in isolated concentrations away from Pakistani and Bangladeshi communities. In case two, two participants observed that:

> "*My area is more affluent. There are still quite a lot of terraced properties in my area of older white people. For some reason, Asians generally don't want to live out in that area.*" (case two: participant 6).

> "*I think I'm not that clear on the council houses. But I think there are areas where there's quite a lot but there are equally areas where there're white. They are very separate. The freehold around that area, yes there's quite a lot of Asians but there's not in places like 'KH' and that estate.*" (Case two: participant 5).

This enhanced the recognition that the white 'host' population has a role as key as that of BME groups in creating residential segregation. However, interview evidence suggests that the association between concentrations of South Asian residents and greater segregation is complex: observations by participants in case one showed that even where there is lower segregation, it is again South Asian communities that are identified as linked with concentrations.

Participants in the more segregated case two observed that although some quasi mono-cultural primary schools exist and at secondary level, the situation is not problematic:

"Our schools are situated so that we do not have many segregated schools … our secondary schools are situated in a way that people from all communities can have access. So for example, you probably, possibly have one school here [points at table], you have Pakistani community here [one side], Bangladeshi community here [other side], white community here, so all communities are accessing the same school. It's not that bad but in some school you have white only. You can't do anything about it." (case 1, participant 4)

Participant perceptions of school demographics differed with a couple of participants being insistent that there is no segregation within the city's schools. (It is also interesting that integration within education in case two was not considered by all participants to produce inter-ethnic contact: one participant observes that people mix with similar communities even when given the opportunity to mix with others). In the local college, Asian children socialised with other Asians, white with white and Afro-Caribbean with Afro-Caribbean:

"Sharing space is one thing but having interaction with their own people… but you can see that in the town centre and also college as well Asian people are in one group, white people in another group and afro-Caribbean people in another group." (case 2, participant 4)

Areas of case two were more highly segregated along social lines than in case one which had deprivation across the board. However, the lower dissimilarity index found in case one is due to both deprived black and deprived white communities being located everywhere. Participants in cases three and two broadly supported the notion of choice within a contemporary context. Some Pakistanis in case two

and Bangladeshis in case three were believed to have made a rational choice to remain in poor quality accommodation due to the social security and availability of services within these areas.

The evidence from all three cases may indicate that an element of choice continues to operate today, albeit within a constrained framework. Further it seems that that the constraints in all three cases were significant but differed slightly in nature. Constraints in case three were distinguished by the more powerful wider impact of the housing market and the nature of London, whilst decisions in case two were apparently constrained by greater hostility from white groups, the availability of opportunities within preferred tenure and the location of important services. In case one it was implied that there was greater choice but that this also lies within the constraints of tenure options and, to an extent, affordability:

> *"The reason perhaps the Caribbean might have settled in better and easier is because there was more set patterns as to where they lived in the city… come and settle and are joined by families and families…. So having that, then you have the X families who are slightly different, who come from middle class strata. So because of the financial aspirations they have in terms of pattern of work and economic endeavours, they were able to choose different areas in the city to settle."* (Case one: participant 11).

Some ethnic communities were perceived to be segregated as a product of decisions associated with social, cultural and individual preferences whilst other ethnic communities were segregated as a product of financial constraints. They cannot afford to occupy more popular neighbourhoods even if the property in such areas is appropriate for the household. Further, it was clear that the spatial arrangement or distribution of more deprived areas had been affected by

allocations in the housing market (both private and social) over time. Other ethnic communities live in concentrations as a result of a complex set of requirements around housing types and local geographical arrangements.

Some of the concentration of Pakistani communities in case two was attributed to 'White flight'. This conflicted with research by Simpson (2004) in which increasing concentrations of South Asian communities in inner cities was attributed to high birth-rates and increasing life expectancy. Yet it was seemingly not a purely economic decision with some white households leaving inner neighbourhoods for cultural reasons:

> "…*I do not think that Bangladeshi people are living in an area because of poverty. It is a factor but not actually the whole. Sometimes people can't afford to buy houses outside where they are staying because they do not have the option. But it's not all, because people do have money*." (Case two: participant 4).

However, it was apparent from other participants in the city that white flight was in fact middle class or economics-related movement, with minority ethnic households also choosing to leave if financially feasible. There was some agreement that social integration is improved in areas that are more ethnically mixed but that the emphasis should be and is on social and economic mix through tenure arrangements rather than purposefully moving towards ethnic diversity. In particular it was explicit that there was too great an emphasis on minority households moving into white areas to increase mix rather than the reverse:

"I think, and again, my experiences, that public bodies are not doing enough to encourage white families to stay where they are. Or encouraging housing to move to different areas." (case two, participant 4*)*.

In case three, despite the low level of segregation at the MSOA scale, it was perceived that social groups are living in social isolation as a direct outcome of spatial segregation:

"You have communities that don't need to mix with the wider community because they have everything they need in that small area. So when you talk about ethnic minorities – there are some ethnic minorities that have very little interaction with the white community." (Case 3, participant 15)

This was in relation to Bengali and Jewish communities in particular as these were described as the more concentrated groups in this borough. The decision to disperse (if it can be deemed a decision as such) is one that also varies within faith groups. For example in case three, Somali Muslims have moved away from traditional areas of settlement whilst Bengali Muslims have elected to remain in the original neighbourhoods. This has occurred within the social housing sector.

The London Difference

Many characteristics of the most segregated case (two) were also described in London and were seemingly associated with neighbourhoods containing concentrations of certain minority groups. London has seemingly adopted the appearance of low segregation because micro-segregation was concealed by the particularly high population density found in inner London. The story presented here by local people is one of apparently high levels of segregation of specific

groups but at a smaller scale than that found elsewhere. In addition, further reasoning attributed it to the greater variety of ethnic categories present, or at least those that were explicitly discussed, in London in comparison with other cities. It was recognised that there were more minority groups, many of whom were more spatially integrated (for a variety of cultural and economic reasons addressed above) than they are elsewhere. This may mean that the white from BME dissimilarity score and the scores between individual ethnic categories conceal other socio-economic relationships. This can be contrasted with case two in which there is a single dominant minority community of Pakistani residents. Further, the spatial arrangement of tenure, in particular social housing, appears to affect integration in inner London and combines with the presence of relatively extreme housing costs in the capital. Finally, the spatial arrangements of poverty were described differently to elsewhere and are affected in part by the apparent irrelevance of administrative boundaries in the city. Specifically, differences in segregation in the London borough are perceived to be partially attributed to the extreme poverty found on social housing estates in comparison to private housing in London. The pockets of deprivation that are identified in case three (London) not only distinguish its geography from that of the other cities but may also contribute to lower social cohesion (See Forrest and Kearns, 1999).

Discussion

It is clear that the patterns of segregation in each case are distinct regardless of certain shared characteristics. Community cohesion discourse has problematised residential segregation as contributing to and causing social distance between ethnic communities. Each case contains a number of neighbourhoods, some of significant geographical area, with concentrated disadvantage in almost every dimension of the IMD. As such, each city has been the focus of one of a number of

social and commercial regeneration programmes and includes wards in receipt of neighbourhood renewal funds.

In order to understand the processes of segregation we need to clarify what we mean by 'diversity'. It was apparent from this qualitative data that local understandings of 'diversity' and 'segregated' are themselves varied, suggesting that we should be wary of employing such terms carelessly. It is inevitable that the nature of a 'diverse' neighbourhood in case two will differ from a similarly described locality in either case one or three due to the nature of the overall population.   Thus, a description of a 'diverse' neighbourhood is one that contains a certain proportion of both white and Asian residents. In contrast, in cases one and three, 'diversity' at the neighbourhood level would require a mix of black, white and Asian, rather than only the two key ethnic groups. Case two contains distinctly white neighbourhoods and Asian neighbourhoods, suggesting that both white and Asian populations are likely to be equally isolated from each other. This contrasts with patterns in case one where black populations are unlikely to experience ethnic isolation whilst certain white communities are likely to be isolated from all other groups. This is partly a statistical effect due to their significantly larger population numbers. Further, south Asian residents are likely to be isolated from all other ethnic groups.

These descriptions demonstrate the complexity of the relationship between population size, locality and segregation. Despite this complexity a number of features were consistently associated with areas of higher segregation, in particular:

- places with larger percentages of populations that have been demonstrated to have strong tenure preference patterns (Pakistani and

Bangladeshi), have a history of racism (Pakistani, Bangladeshi and black), or are more deprived (white, Pakistani and Bangladeshi)

- places that have retained a large social housing stock, have particular social housing geographies (small estates rather than street level pockets of stock), have relatively low population density, have spatial concentrations of private sector cheap housing and others of private sector more expensive housing.

Without attempting to demonstrate causation, the qualitative narratives provide a picture of the processes leading to residential arrangements in these cases. Variation in residential segregation is a product of a number of interacting factors, of which two key features are housing and economics and which also relate to the decision making process of individual households. The layered effect of influential factors on residential outcomes can be illustrated in the following model: Structural ethnic economic inequalities (that validate the use of ethnic categories in policy discourse) such as life chances and housing patterns affect the opportunities of members of different ethnic groups across England. In addition, variation in local patterns exists as a product of locally-specific histories and variation in the ethnic composition of the population. Within these layers are the effects of individual households' choices that are influences by factors such as language difficulties, service requirements and social confidence. These four factors are then imposed upon the existing spatial arrangements of housing and affordability which lend them a physical dimension.

Thus it is apparent that a key feature of residential outcomes is the structural relationship between ethnicity and economics and/or housing, which in turn have a differential effect on residential outcomes in different localities. Location choice is

limited by income, which has recognised ethnic patterns, but also by wider cultural preferences for tenure and/or property types. These case studies show evidence of traditional associations between minority ethnic populations and terraced properties, inner urban areas and a low quality physical environment that suggest that variation in the location of different ethnic groups may be a reflection of variation in tenure preferences. Pakistani communities are predominantly owner-occupiers, often in poor quality housing (Chahal, 2000) whilst Bangladeshi households are more likely to be found in social housing. This may offer some explanation for variation in segregation levels in different cases. The patterns identified here reflect those found in previous research (Burgess et al, 2007, Ratcliffe, 1998).

Existing demographics in an area have been statistically shown to be associated with housing patterns The presence of concentrations of certain populations was apparent in neighbourhoods with greater concentrations and in the case that had an overall higher segregation level. In particular, these qualitative descriptions reinforced the association between larger Pakistani populations and higher segregation, corroborating previous evidence described in Chapter Five (Dahya, 1974). Although other factors are clearly relevant and interact with this, the higher segregation found in case two is likely to be partly a product of its ethnic composition.

These structural relations interaction with local factors such as the availability of types of housing, the local history of discrimination, the types of industry, or the nature of allocations policy.

Such relationships may also explain some variation in the patterns in London and elsewhere. For example, ethnic minority groups are less likely outside of London to live in social housing than are white groups (Lee and Murie, 1997; see also Peach and Chahal, 2000) and a closer correlation between levels of deprivation and social housing in London than there is elsewhere (Smith, 1999).

A further dimension is added by evidence that minority ethnic groups are more likely to live in poor quality inner city private rental accommodation or owner-occupied properties (Smith, 1999). Such patterns are corroborated by the data from the cases analysed in this thesis. Further, the associations between social housing and concentrations of deprivation such as unemployment and overcrowding (Taylor, 2008, Hills, 2007, Modood et al, 1997) may explain some of the statistical relationship between Bangladeshi populations and overcrowding.

Housing location is predominantly a product of economic opportunity. Poor African and Caribbean households are generally integrated into otherwise poor white neighbourhoods. This is a product, according to the local stories, of tenure and housing type. This also helps to explain why case one was less segregated than case two despite both containing neighbourhood renewal areas and experiencing a high degree of poverty. In case two, the inner city ward in which there is a concentration of Pakistani and Bangladeshi residents is considered to be generally more deprived than other wards. However, participants also recognised that many South Asian residents remain in this neighbourhood because the terraced houses, once very deprived, have been extensively adapted to accommodate larger and predominantly Muslim families. This means firstly that loft space has been developed to allow expanding households to remain in the same place and, secondly, provision for separate gender rooms has been made. Such adaptations discourage families from dispersing. In some cases, houses have been knocked

through to enable extended family to live next door. As a result, although the neighbourhood has been an NSNR area and is recognised as containing high deprivation it has a great deal to offer to the similar types of families, social capital and in terms of qualities that make it more 'affluent' for certain populations. This neighbourhood therefore may have high place-related deprivation but variation in priorities may mean that the perception of residents does not reflect this.

Thus structural relationships between ethnicity, income, cultural preferences and other socio-economic factors are likely to play a role in shaping local patterns, particularly in terms of access to housing. However these are influenced by *individual* households' decisions. Within such decisions, descriptions from all cases suggest that social confidence, difficulties with English language, and access to services play a key role. Whilst there are important structural or cultural patterns such as the stronger tendency of Muslim households to emphasise access to religious services, these are shown to be individual choices. The relationship between residential choice and these factors is not linear as households may integrate due to greater social confidence (for example) but also greater integration is likely to improve social confidence and language skills.   The impact of English language ability on residential patterns is more complex and significant but likely to be cyclical.

It is also argued that in all three cases that access to shops and services influences household location choice and, as a consequence, residential patterns. There is a religious dimension to this factor that can be understood in terms of limited localised work on Muslim residential patterns in Bradford, Birmingham and Leicester (Brice, 2007). Although these preferences did not necessarily lead to ethnic or religious concentrations, it should be incorporated into our understandings of residential patterns. Access to services as a 'pull' factor is relatively weak for most households outside the Muslim community and it appears likely that, other that schools access, will be mediated by economic factors. Thus

individual economic factors are a stronger structuring feature of ethnic segregation and integration.

The notion that all those who are able to leave a deprived area will do so as soon as possible is usually, but not always the case (Bailey and Livingston, 2007 in Taylor, 2008). Although there is increasing access to more desirable areas, there are fewer socioeconomic spatial divisions within the Asian community. This is because in areas where there is middle class Asian dispersal, greater social contact is retained through religious or cultural means. This results in members of this ethnic group living in the same neighbourhoods whilst, in contrast, white communities may be more physically divided by economic disparities.

Finally, existing spatial arrangements of housing tenure and dwelling type are important to segregation patterns due to variation in the physical patterns of cities. This means that neighbourhoods that are homogenous in terms of tenure or dwelling type can translate into spatial representations of ethnic or economic difference. Likewise, cities in which tenure is spatially diverse may have greater ethnic (or economic) integration. Because the factors that influence household location decisions are generally consistent and each case varies in its ethnic composition, the associated location preferences, needs and accessibility that are ethnically structured combine to produce variation in ethnic residential arrangements. A high degree of population turnover is also observed in areas of lower segregation. It is possible that residentially stable areas may engender mono-characteristics or reputations which discourage certain populations from moving into the neighbourhoods. Further, rented housing and more affordable housing are associated with greater churn in part because they attract migrant populations. In certain cases these migrant populations may contribute to higher concentrations of minority groups in these neighbourhoods and thus to the segregation experienced by the city.

Population turnover was demonstrated to be greater in neighbourhoods with greater minority ethnic concentrations. Population stability is associated with greater social cohesion (Kasarda and Janovitz 1994 in Forrest and Kearns, 1999), so it follows that such segregated areas may experience lower social cohesion. However, this conflicts with the strength of cohesion within ethnic concentrations that was described by participants. Thus high concentrations of ethnicities may offer social cohesion through the networks and support structures that they sustain but low community cohesion between ethnic and economic categories. This may indicate a tension between the community cohesion agenda and the definition of social cohesion as discussed in relation to the neighbourhoods on which it is based. Population turnover is of greater consequence in poorer neighbourhoods in which social capital is low and for whose inhabitants there are fewer opportunities for contact and the development of social networks (on a larger geographical scale). There is also evidence that ethnic diversity is associated with greater stability and consequently greater social cohesion through stronger and wider social networks (Chahal, 2000). However, deprived areas are not necessarily unstable areas (CLG, 2008 and Bailey and Livingston, 2007 in Taylor, 2008).

Conclusion

A key feature of the research aims was to identify whether localities with high segregation were characteristically distinct from those with low segregation levels. An initial difficulty with this question arose from the qualitative data that indicated

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firstly that qualitative understandings of local segregation differed to quantitative ones and secondly that the geographical scale at which segregation was calculated differed to the scale at which it was present in qualitative descriptions. This means that whilst we can establish the characteristics associated with calculated dissimilarity, this is not necessarily an accurate reflection of segregation qualitatively experienced with localities.

There is evidence that the physical separation of ethnic groups is associated with a number of negative outcomes. However, the relationships are complex and the evidence provided here does not suggest that such outcomes are the product of high segregation. Further, where segregation does appear to increase specific negative outcomes, the causal direction is not always in the same direction and variation in the direction of such effects is evident between different localities. Concerns expressed by participants about segregation are predominantly associated with ethnic structural inequalities rather than with their spatial separation. However, participants expressed concerns about language difficulties, educational disparities, aspiration and deprivation.

Difficulties with English language skills were identified amongst certain sections of particular ethnic groups. Lower levels of language ability were identified for members of older generations of Bangladeshi or Pakistani populations in London and in case two. Segregation was believed to perpetuate poor English skills but this appears to be a cyclical relationship that is integrated in the process of segregation. Dispersal is discouraged for households with lower English language skills even where their financial position enables it. Further, although spatial separation perpetuates poor language skills through a lack of day-to-day contact, it was also argued that physical integration does not necessarily facilitate or encourage improved skills.

There is some association between high residential segregation and ethnic concentrations in schools, in some cases leading to quasi-monoethnic student populations. However, the focus for most participants was on school populations that were predominantly non-white. School segregation is a complex phenomenon and strongly related to economic (for example, the location of affordable housing) or class boundaries and territories. The conceptualisation of school segregation itself as problematic was also contested as many participants believed that divisions can be overcome via extracurricular sport, social or cultural programmes and events. Conversely, mixed schools with a high degree of pupil contact did not necessarily facilitate inter-ethnic pupil interaction and where this did occur this often ended at the school gates, especially so in the more segregated case with a large South Asian population.

Although there may be a small degree of effect of segregation on deprivation level (in terms of the greater availability of employment opportunities and support structures), it is that residents living in greater spatial isolation are more likely to be deprived rather than deprivation that is produced by greater segregation. In areas where ethnic concentrations (of white or of minority groups) combine with concentrations of deprivation, the effects of both may be exacerbated, in part due to reduced opportunity for cross-community engagement via employment or leisure activities. However, it is the geographical housing arrangements (of tenure and quality or cost) that create spatial disparities in deprivation.

The final dimension of the impact of residential patterns is their relationship with community interactions. It is likely that residential segregation or rather, residential isolation can perpetuate and sustain social separation for certain sections of society. However, this separation may not be ethnic in all cases, but

economic instead. This separation may adopt an ethnic dimension as a product of (a) the local ethnic composition (high proportion of Pakistani and white residents), (b) ethnic variation in housing patterns and (c) the spatial arrangement of housing tenure in the area.

The descriptions of participants from these localities indicated that community relations depend both on the physical opportunity for contact between *individuals* (i.e. not only recognised communities or ethnic categories) and cross-community interaction, and also on the localised (and global) socio-economic conditions within which communities operate. Competition for resources including public and private services, housing and employment combines with competition for direct 'regeneration' style opportunities and funding. Lower cross-community interaction that appears to result from high segregation may also be a feature of the higher levels of deprivation associated with highly segregated neighbourhoods or people.

It was apparent that residential integration does not necessarily facilitate cross-community interactions. Concerns about cross-community interactions were also observed where segregation was generally very low. These may be dependent upon the types of community involved: Bangladeshi and white or Afro-Caribbean communities do not always mix with neighbours of a different ethnic group, and it was observed that daily passing contact does not translate into 'meaningful contact' for all ethnic groups perhaps because of cultural or individual preference. Some participants believed that a high degree of neighbourhood segregation discourages community interactions. This puts into question the argument that interaction with neighbours always contributes to cohesive society: "daily interactions in and around the home remain significant building blocks in the creation of social glue" (Forrest and Kearns, 1999:8). Social distance can be

maintained even where rich and poor live alongside one another as is the case in London (Fitzpatrick, 2004).

Segregation was explicitly understood not only as a product of concentrations of minority ethnic groups but also the absence of such groups. It is important to note that white mono-ethnic estates were considered to be as segregated as those with predominantly black residents. The notion of 'ethnic concentration' appeared to apply to neighbourhoods in which most of a minority group lived even if they did not form a majority in the area.

It is important to recognise that the 'negative' social effects of segregation are not limited to ethnicity.   Cross-community interactions (of lack thereof) can equally apply to socio-economic groups that do not have opportunity for contact with other groups from whom they are living apart. Further, territorial separation and conflict is considered more problematic than ethnic separation in London. However, ethnic boundaries sometimes aligned with neighbourhood ones to create an apparently negative association and the presence of ethnic 'no-go' areas. In the London case, gang-style conflicts between physical territories containing a high degree of internal cohesion present greater challenges than ethnic divisions and prioritise place over ethnic group in this case.

The following concluding chapter addresses the policy implications of these findings and presents the case for future avenues of research in this field.

Chapter 8

Conclusion

Ethnic residential segregation has been largely problematised by New Labour discourse as an issue of community cohesion, and at times presented as a direct cause of some social ills, especially at neighbourhood level. Place-based regeneration programmes of the later twentieth and early twenty-first centuries have reinforced the role of neighbourhood intervention as a means to tackle socio-economic problems. Meanwhile, policy discourse has retained an emphasis on ethnicity and categorisation, with community cohesion policy focusing on the interactions *between ethnic communities* (amongst other broadly defined 'communities'). Thus policy discourse is both constructs the issues as spatial and frames them within certain categories: not just ethnic categories but also notions of 'good' and 'bad' outcomes.

Through an exploration of ethnic residential segregation, the research presented in this thesis questions these constructions. It set out to explore the processes and outcomes of segregation with particular reference to its relationship with community cohesion outcomes. It first asked to what degree ethnic groups occupy separate spaces in English local authority areas and whether residential arrangements have remained stable over time.   It then aimed to establish explanations for variation in residential outcomes and sought empirical evidence to support the conceptualisation of segregation as a positive or negative phenomenon. Data analysis prompted further conceptual questions relating to the use of ethnicity as a baseline for the analysis of housing arrangements and as a structuring notion for community cohesion policy. Carter's (2000) realist theory of race was identified as a framework within which these conceptual questions could be understood. Questions concerning the formation and usefulness of community cohesion as a policy concept could be understood in terms of Fairclough's deconstruction of New Labour discourse (2007).

Limitations

Before reflecting on the findings, some limitations of the study need to be considered. The research questions were concerned primarily with the relationship between spatial segregation and socioeconomic and demographic characteristics measurable by using census data. The research aimed to establish the level of segregation present in English districts at the level of the MSOA and its stability between 1991 and 2001. Segregation was approached firstly as an outcome, by quantitatively measuring levels present in English authorities, and secondly as a process. The second approach explored whether variation in ethnic segregation correlates with variation in socio-economic, demographic or housing characteristics. It asked whether relatively high levels of segregation could be regarded as socially or economically problematic. Thirdly, the purpose was to explore the dynamic processes of segregation, especially in relation to cross-community interactions. Finally, the study considered whether the policy and academic focus on ethnicity as a category for understanding residential arrangements or 'social problems' is appropriate or helpful.

There are a number of limitations to the scope of this research that arise from qualitative and quantitative methodological challenges. It is acknowledged that in some instances alternative approaches could be employed to overcome these limitations but it is believed that this study was successful in meeting the research aims. The initial research aimed to explore ethnic segregation over a longer time period, enabling a more comprehensive understanding of stability and processes. However, the availability of ethnicity data in the period prior to 1991 restricts useful analysis before this time. Similarly, methodological limitations were also encountered in relation to the capacity to access the complexity of residential segregation beyond that of white from all other groups (although the role of ethnic group as an independent variable was explored).

The qualitative data indicated clearly that the separation of certain individual groups is more significant and more relevant than that of white from other ethnicities as a single categorisation. Ethnic categorisation presented further challenges regarding unwieldiness and over-simplification and the concealment of relationships with other dimensions and characteristics such as faith.

The capacity of this research to capture all dimensions of spatial segregation was limited by the measure employed to calculate the baseline level. Alternative measures would capture segregation in terms of isolation or clustering rather than unevenness, and the dissimilarity index as a single figure index does not permit analysis of segregation as a process, only as an outcome. As explored in Chapter Four, it is recognised that other measures or scales of analysis may indicate variation in segregation or a higher degree of change over time. Although the study provides baseline measures of segregation of white groups, it is also recognised that a more comprehensive understanding of ethnic segregation requires analysis of the patterns of ethnic groups individually. It is also understood that adequate analysis would require ethnic groups to be subdivided according to social and religious differences. Perceptions of segregation in the local authorities examined as case studies suggested that segregation may exist at the postcode level below that of MSOA calculated here. This may imply that the segregation of some groups is present at one level and others at a sub-level.

The local patterns discovered were interesting, but the research does not explain why some areas experienced increases and other decreases during this period. Quantitative analysis indicated that such variation does not appear to be related to the level of deprivation in the authorities concerned, but further investigation is required to fully understand the processes present in local areas. Although one of the cases studied here

did experience a slight increase in the degree of segregation between white and BME groups, there was no qualitative evidence from my fieldwork that could explain this increase. In contrast, there was some possible explanation for the decrease in segregation experienced by one of the other authorities. Thus for regeneration and social policy, the focus should be on *both* neighbourhood and group but there is no overarching rule to guide which is more important or appropriate, since neighbourhood and group dynamics seem to interact differently in different local contexts.

There are also some limitations with regard to the capacity of this research to meet the research objectives. These are predominantly related to the qualitative research phase. Firstly, the data provided insufficient evidence to explain why residential patterns in London are, to an extent, the reverse of those found elsewhere. The qualitative phase aimed to identify specific interactions in the capital but was unable to do so. There was also little empirical evidence so indicate why some areas have experienced increases rather than decreases in segregation between 1991 and 2001.

There were difficulties in accessing understandings about historical patterns in the three case studies. The research had aimed to identify how residential arrangements had changed over time but it became apparent that participants were unable to offer in-depth understandings of this. It may have been possible to do so through larger scale data collection using historical documentary analysis and mapping tools but this was beyond the scope of this project. Further, although interviews with a greater number of participants with different sampling criteria may have provided more appropriate data, it is also a difficulty associated with qualitative data collection. Such analysis was again beyond this study.

The final limitation concerns the relationship between community cohesion and segregation. Although processes of segregation have been explored both quantitatively and qualitatively, the research has not established the implications of high residential segregation for community cohesion. It is possible that further development of existing quantitative measures of cohesion would contribute to such an aim.

However, regardless of these limitations, this research offers a detailed analysis of the processes and outcomes of ethnic segregation in England, but needs to be interpreted with caution. The key findings are reviewed in the following section.

Reflections on key findings

The key findings of this research can be summarised in terms of outcome and process. Quantitative and qualitative descriptions of segregation differ in some aspects but this appears to be because the qualitative findings reveal a localised complexity in processes of segregation that was not accessible through statistical analysis. The implications of these findings in the context of policy discourses and approach are addressed in the subsequent section.

The thesis aimed to determine the level of residential segregation in English authorities and found that:

- Segregation of white from black and minority ethnic (BME) populations in England in 2001 was not especially high overall
- There is a wide range of segregation levels across authorities, suggesting considerable variation in the segregation processes in operation

- There is no evidence that segregation increased between 1991 and 2001 or that there was an overall increase in white-BME segregation in the three authorities examined qualitatively
- Local perceptions of segregation do not always reflect the level calculated by the Index of Dissimilarity

In establishing the characteristics associated with high segregation, the thesis concludes that:

- A positive relationship exists between the general degree of deprivation in an area and the level of segregation
- Population density is strongly and negatively related to the level of residential segregation found in an authority. This is the most important factor in predicting segregation in the Greater London Authority
- In all cases, one ethnic population is strongly associated with high segregation: the presence of a relatively large percentage of residents identifying as Pakistani is likely to contribute to higher levels of segregation. Outside of London the percentage of Pakistani residents is the most important predictor of segregation
- Even where segregation is quantitatively low, local perceptions identify a positive association between Pakistani residents and relatively higher segregation. This association is apparent in all three case studies and is deemed to be a key feature of the process of segregation
- The relationship between concentrations of Pakistani residents and segregation is the product of a complex pattern of socioeconomic factors which create and sustain the residential patterns of all ethnic groups
- As a process, residential segregation is strongly related to the overall ethnic composition of the population. However, at the local level, this extends beyond

the black-white dichotomy as there is variation in the relationship of individual groups. Although only white and Pakistani populations have a strong relationship when examined quantitatively, local participants include 'Bengali' communities in their qualitative descriptions of segregated populations

Finally, this research aimed to explore the perceived links between high segregation and low cross-community interactions. It finds that:

- High levels of segregation have implications for social contact but this relationship is complex and social contact can be minimal *despite* high levels of spatial integration

This thesis indicates that the relationship between levels of deprivation, segregation and social interaction is complex and as such cannot be understood in a uniquely quantitative or qualitative way. In particular, it highlights the local nature of segregation and the value of understanding interactions between factors in each locality. To a certain degree, the quantitative findings were substantiated by qualitative descriptions of process; for example, the association of segregation with Pakistani populations and indicators of deprivation was present in both qualitative and quantitative findings. Further, although regression analysis did not always reinforce the associations found in cluster patterns, qualitative narratives often did. Participants provided explanations for the relationship between social housing, segregation and ethnicity (especially Pakistani communities) that was not adequately revealed by the quantitative analysis.

However, there were difficulties in understanding the relationship between subjective perceptions of segregation and quantitatively measured segregation. The key area of difficulty was the degree of segregation identified. Qualitative findings appeared to

suggest greater segregation (at least for certain groups) than the dissimilarity measures had indicated. This was especially the case for the London borough in which the very low dissimilarity figure was contradicted by descriptions of a high degree of concentration for 'Bengali' residents. This also explains their relative statistical absence from quantitative effects. Their effect would be concealed by the aggregate calculations. This was attributed partly to scale effects in which the qualitatively observed segregation was at a smaller spatial scale than the dissimilarity calculation. However, it may also be that local perceptions of the area and its communities offers a more comprehensive way of understanding the urban experience.

This thesis thus identifies some methodological concerns regarding the appropriate tools for assessing spatial arrangements as the contradictions in the perceived and calculated degree of segregation may have policy implications. It is important to identify the most appropriate indicator for policy development and implementation, especially if there is variation in outcomes between different methods. The measures are appropriate for national policy development may not be suitable for evaluating advances in community relations at the local level. This is because methodological concerns and statistical effects present in the quantitative analysis suggest that local perceptions of processes of segregation may offer a more useful assessment of residential patterns whilst quantitative tools permit assessment of structural relationships and variation. Through both conflicting and mutually reinforcing evidence, this thesis demonstrates the importance of combining both methods and the potential dangers of depending on a single form of evaluation.

Although qualitative responses and quantitative answers can conflict, both have validity in the exploration of segregation. For example, national quantitative measures show that segregation is only partly associated with negative characteristics but qualitative

studies indicate the role of these structural factors and locally specific factors, indicating that segregation is not always a product of deprivation. This thesis has demonstrated firstly the importance of scale to understanding segregation and secondly the value of combining both qualitative and quantitative research tools.

Thus this research has identified a number of key features of segregation. The use of a combined methods strategy has enabled the research to identify features of residential patterns nationally but also to capture variation between apparent socioeconomic associations and the local experiences of segregation. These apparent contradictions have revealed complexity in the processes of segregation.

Processes of segregation

Segregation has been established as a dynamic process, and to understand the importance of residential patterns to policy requires an understanding of segregation as a process. It is likely that residential arrangements are a product of variation in the localised interactions of housing characteristics, ethnic histories and local economies. Historical housing, industry and early immigrant settlement patterns are often enduring and continue to shape segregation levels for subsequent decades. Although there was no quantitative analysis of industrial patterns in this research, it was apparent in qualitative narratives that industry had a significant effect on the shape of ethnic residential arrangements. Participants in all three cases but, especially in those outside London, described the tendency for new arrivals to settle in areas convenient for the type and location of their industry. This has been especially relevant during the post-war period in the UK when immigrants began to arrive in larger numbers than previously and settled as communities. This reflects the findings of other statistical studies (see Peach, 1987 and Engstrong, 1997) that have attributed regional variation in housing patterns to the long-term development of economic forces and industrial patterns. In

these cases, the consequent concentrations in specific locations has seemingly both persisted (as in case two) and also been affected by the decline of such industries in the 1960s (Engstrong, 1997). However, the enduring effect of industrial patterns is also cultural as concentrations persist as a consequence of localised culturally specific services. Although cultural (or faith related) services do not always sustain ethnic concentrations, these patterns may perpetuate concentrations of more deprived households.

Effects are also often cyclical as initial patterns may have been the involuntary product of racism, industry and economics and these factors may persist in some circumstances. Neighbourhood concentrations of ethnic groups occur because some neighbourhoods attract certain communities through the provision of services (both informal cultural services or public service provision), the types of properties available, the cost of housing available or the nature of existing residents (related to preference and social confidence). These factors are often the product of historical patterns of industrial location and housing access or allocations (within the social sector). Neighbourhoods become more segregated because they are more deprived or because they have very specific physical arrangements of housing tenure. Thus segregation cannot be understood in purely ethnic terms.

However, many relationships are likely to be associated with the ethnic composition of an area, for example, some authorities experience greater segregation due to relatively large Pakistani or Bengali populations. When such combinations occur in the London context the product appears to be similar but at a smaller, more fine-grained spatial scale. Local factors and demographics interact with national concerns or structures; for example, the ethnic composition of an authority will affect some of the socio-economic patterns present in the area but these may be modified by the history of settlement or

by the local housing market. The qualitative analysis argued that wider structural factors affect residential outcomes but that these may have differential effects due to locally-specific dimensions. The following section presents these findings in the context of the discourses linking residential segregation and community cohesion policy. Notwithstanding methodological limitations, there is no quantitative evidence here to support the notion that Britain has been 'sleepwalking into segregation'. The perception that Britain is increasingly becoming a nation of separate ethnic communities in which minorities live in enclaves that are similar to the ghetto arrangements of the United States is not upheld by this research. Further, in most authorities, levels of segregation are relatively low with only a minority of areas experiencing very high segregation. These processes, in particular the emphasis on settlement and extended families, reflect the findings of Finney and Simpson (2009). Further, descriptions of dispersal identified by participants in the more segregated case study add weight to Finney and Simpson's statistical evidence of suburban dispersal from city centre concentrations.

In Chapter One the policy 'problem' of segregation was shown have developed into one of identity and the management of diversity. The 'sleepwalking into segregation' and 'parallel lives' discourses present ethnic residential segregation as problematic. However, evidence here indicates that the justification for this problematisation and consequent policy response is limited. Although the quantitative analysis indicates an association between high segregation and certain indicators of deprivation, this thesis argues that there is little evidence to support the presentation of segregation per se, as problematic. Rather than the ethnic homogeneity of certain neighbourhoods, the key challenge may lie in the fact that more segregated areas are not socioeconomically diverse. Although the national picture broadly suggests that segregation tends to be greater in more deprived authorities and for more deprived groups or neighbourhoods, the notion that poor areas are more segregated as a product of their higher proportions

of minority communities is only partially accurate. However, there is evidence that difficulties arise from spatial and social separation combined. Descriptions suggest that separation leads to an exacerbation of language problems that already exist. It is possible that this separation only presents difficulties if other means of contact, such as through employment, leisure or education, cannot be achieved. Further, there is no reason that spatial integration *encourages* language gain.

As a consequence of the structural relationship between South Asian groups and greater deprivation, where these groups are concentrated, such neighbourhoods are more likely to be deprived. However, it is inaccurate to suggest that minority concentrations render segregation problematic as many very deprived estates house concentrations of white populations or of white and Afro-Caribbean populations.

A return to the research questions identified in Chapter One contextualises these findings, in particular the focus on segregation as problematic and the relationship between place, ethnicity, deprivation and community relations. The thesis began by presenting a case for an exploration of ethnicity in the spatial domain of residential segregation and the policy domain of community cohesion strategies. Chapter One described a policy concern with the relationship between physical separation and cross-community interactions that had developed in the aftermath of social disturbance in northern England. This concern was based on the argument that the increasing isolation of ethnic groups contributed both to a decline in cross-community relationships and increasing economic polarisation. Further, the chapter argued that the concern with a breakdown of local, religious or cultural communities relates to fears about national identity. These concerns in both policy and academic discourse are, however, made more complex by interactions with economic context and structural inequalities, and by the geographical polarisation of income, employment and related domains. The context

of a media and governmental preoccupation with immigration makes this more complex.

It is also argued that there may be a growing gap between the degree of residential integration of the rich and the poor and of some social or ethnic groups more so than others. This gap is the product partly of the historical processes that have produced residential arrangements but also of the ongoing changes to those arrangements and their differential effects on ethnic or social groups.

Dispersal

Although certain authorities experienced an increase in the degree of white from BME segregation, there is no evidence here that residential segregation between any groups has increased between 1991 and 2001.   In contrast, there is qualitative evidence that the gradual dispersal of Pakistani households is leading to greater integration by this group into the white population. However, as this dispersal tends to be into more affluent neighbourhoods, it impacts only on these specific socio-ethnic communities and is unlikely to reduce the isolation of more deprived white estates. Thus more affluent white populations that already experience a higher level of integration (with African and Indian households) than their more deprived white counterparts, experience further integration with the arrival of Pakistani households.

Assuming that spatial integration is a positive goal, the end product may therefore be considered positive in terms of the broader measurement and for the experience of specific populations. However, because increases in integration appear to be the result of economic-related dispersal, they are associated with more affluent households and younger generations, and they could equally be perceived as *increasing* the 'integration gap' between the affluent and the poor (the notion of an 'integration gap' is examined

below).   The notion of an 'integration gap' suggests that spatial integration is a positive goal. However, there is little evidence to justify a policy concern with the ethnic residential segregation per se as although the characteristics with which it is associated are negative, they do not appear to be a direct consequence of segregation. Although it is possible, there is little empirical evidence here that structural inequalities are sustained by segregation. However, there are concerns regarding language and education for some members of minority communities, that should not be dismissed. Qualitative descriptions, whilst a little mixed, indicate that the English language ability of some south Asian women in all three cases is limited by their lack of contact with other parts of society. Equally, it is argued that limited English language ability also restricts further interaction with wider society. Thus language and segregation (both spatial and social) are bound together with negative consequences so whilst residential segregation should not be held solely responsible, it has a likely, negative role in language development.

Community Cohesion and the discourse of 'Parallel Lives'

Chapter Three presented the policy context and examined the growth of concern with residential segregation. It suggested that current policy on community interactions integrates initiatives to tackle disadvantage and community conflict with a focus on place or neighbourhood.

The discourse of 'parallel lives' and the notion of 'sleepwalking into segregation' assumed firstly an increase in the level of segregation in England and a positive relationship between residential integration and cross-community contact. Both of these are contested in this thesis. More ethnically-homogenous neighbourhoods also tend to be economically homogenous (suggesting that neighbourhood based

regeneration programmes are appropriate). Some social conflict is geographically structured but does not necessarily reflect ethnic divisions or spatial separation which reflects ethnic variation. There are, for instance, indications of the existence of gang-style turf-wars in low segregation areas. This may suggest that although a community may be residentially dispersed, space-based social issues remain through territorial conflict at a street-level scale. Further, the level of conflict in a neighbourhood means that those who are financially able to do so move out of the area altogether. Despite these relatively low levels of segregation, the existence of white 'No-Go' areas in one highly segregated authority explored here are considered to affect community relations. Although the experiences of participants in the case study interviews support this discourse to some extent, it is apparent that social integration cannot be assumed in areas of residential integration. The evidence suggests that separation persists in areas where different communities live alongside each other yet there is an absence of social contact and integration between these groups. For example, in London, although the Bangladeshi population may get on with neighbours from different ethnic groups, there is little sharing of each others' lives. However, this 'problem' (of ethnic interactions or lack of) is not always evident and forcing people together does not always help.

There is some evidence from participants that residential segregation is not necessarily the solution to poor cross-community interactions. However, the availability of role models where communities are spatially mixed facilitates greater aspiration. These accounts also demonstrate how housing, ethnicity and disadvantage combine differently in specific locations to produce different outcomes. Place and space should remain key dimensions of initiatives to improve community relations, partly due to the complexity of the relationship between neighbourhood and ethnicity, but the relationship between the processes of residential segregation and community cohesion is entwined with processes and dimensions of disadvantage and inequality.

How can we understand these conclusions conceptually in constructions of community cohesion policy? Community cohesion discourse has adopted ethnicity as a focus and a key structuring concept. The notion of 'parallel lives' suggests that community cohesion policy should be concerned with the spatial arrangements of ethnic groups. When considered in the context of governance, these conclusions reflect Fairclough's deconstruction of New Labour policy discourse (2007) and his argument that community cohesion is an example of how this discourse has created a social problem from the combination of conflict, ethnicity, housing and deprivation. That there is little evidence to support this problematic suggests that community cohesion discourse is a response to a largely constructed problem.

It is argued that community cohesion policy interventions should be aware of residential patterns but should also be wary of attributing excess significance to this relationship. There is qualitative evidence of some implications for community cohesion in certain localities but it is recognised that, by its very nature, extrapolation to other localities presents difficulties. The notion of 'parallel lives' suggests that areas of high spatial integration should assist cross-cultural contact and there is a great deal of consistency in understandings of the importance of space to the functioning of community relations.

Whilst there are inconsistencies, the picture painted by respondents is a positive one in which interactions between ethnic communities are largely good. Community cohesion as described here is not an area of crisis (although it is of some concern and there are worries in certain areas) in these authorities. Further, where serious concerns exist, they were expressed equally by participants in both segregated and integrated authorities. Where described, difficulties are more often associated with cross-class/status interactions rather than ethnic ones. There is also evidence of considerable

efforts (both formal and informal) to address the social separation of ethnic groups. These efforts exist in the acknowledgement that spatial separation does not help interactions but they also do not consider spatial separation to be the primary concern.

Although there is debate around these causal processes, some have an unavoidable ethnic dimension and for some members of minority communities, ethnic isolation is *probably* not beneficial to their economic or social integration into wider society. For example, qualitative evidence from these case studies indicated that groups living in deprived isolation are likely to have difficulties with English language, a lack of employment opportunities and to experience cultural isolation at school. In addition there is also evidence that the relationship between spatial separation and social separation is a dual one. In contrast, for some groups, ethnic concentrations offer support structures for community members and thus may have implications for public spending in terms of a supplementary support structure and the way in which funding is allocated, focusing in community groups rather than areas. Moreover, the emphasis on spatial contact may be misplaced as it is merely one element of a multitude of combining separations which divide. Thus sociological interest should be with socioeconomic differences and residential arrangements rather than ethnic patterns.

Ethnicity and renewal

In Chapter One this research asked whether ethnicity is an appropriate baseline for calculating segregation through which to inform social policy. It is argued that ethnic categories are *useful* structures with which to understand residential arrangements and social patterns but are *not adequate* for a comprehensive understanding. Rather than focusing on ethnic groups, attempts to reverse or address segregation need to be holistic, focusing on housing, economic disparities and services. Although dynamic and

constantly changing, residential patterns remain the product of historical processes, thus addressing segregation should not be simply targeting the minority communities that currently live in concentrations. In contrast, the policy focus should perhaps be on white communities for whom cultural support structures may not be present. Understanding spatial arrangements as 'ethnic patterns' may also result in the problematisation of ethnicity rather than of poverty or economic polarisation. Policy strategies such as these also risk problematising minority ethnic isolation over white isolation and understanding spatial patterns only through 'ethnic glasses' may conceal other patterns present in some cases. It may mean that we fail to recognise more consequential divisions of economics or housing tenure or to acknowledge diversity *within* ethnic categories. The use of a single ethnic label for either the purposes of social research or as a means of channelling public spending is likely to be inadequate and often inappropriate.

Regeneration: neighbourhood renewal and its successors

Public policy has adopted locality as a structuring concept in regeneration programmes. This research was partly rooted in the relationship between ethnicity, place and regeneration policy interventions. Through the exploration of processes and outcomes of spatial segregation, it considered the relationship between ethnic categories and spatial disparities and asked whether place-based policy interventions or social ethnic group-based interventions are more appropriate. Within Carter's realist framework that contests the concept of ethnicity, this thesis argues that regeneration policy should retain the use of ethnic categories. However, it should not employ these as fundamental structuring concepts but should use them in conjunction with socio-economic categories. And in addition to these conceptual understanding and structures, policy interventions need to take into account local conditions.

However, even targeting specific ethnic groups in specific neighbourhoods does not necessarily capture the most needy – there was evidence that more affluent households in the Pakistani community may continue to choose to live in poorer, mono-ethnic neighbourhoods rather than disperse into areas with economically similar households. Further, regeneration in London may require a different approach as otherwise very wealthy neighbourhoods can house pockets of high poverty and/or of ethnically different deprived households. As suggested by local community leaders and further research (such as the Hills Report of 2007), the housing market in London is significantly different to that elsewhere. The housing market experiences greater pressure and thus inflated prices due to the intensity of the labour market in the south east of England. High demand and little opportunity for an increase in the number of properties means that the housing market has taken on very different shape to that in cities with lower availability of jobs and consequent in-migration and that, often, have greater opportunity to expand both private and public housing stock. Targeting whole neighbourhoods in such areas would not always be successful whilst ethnic targeting may fail to capture the socio-economic diversity present within these categories. It also needs to be recognised that spatial divisions in London appear to be on a smaller scale than those in other urban areas, perhaps because neighbourhoods here have greater population density.

The evidence suggests that although ethnic segregation exists in England, there is little cause for concern about a nation drifting into an arrangement of ethnic ghettos. Residential segregation as a foundation for a policy response to 'diversity' is thus not supported. Spatial patterns extend the complexity of existing recognised structural inequalities and their ethnic and socioeconomic dimensions. Further, as a consequence, policy interventions need to adopt a neighbourhood approach that also *takes into*

account local demographics.   Secondly, it is argued that because spatial disparities and separation are complex and related to socio-economics, the community cohesion emphasis on ethnicity is missing the key issues. Community cohesion policy is justified in its concerns with place and in many cases spatial disparities correlate with ethnic ones, but this is not always the case.

The thesis thus offers an understanding of the residential patterns of ethnicity and deprivation. It contributes to understandings of the related policy areas: regeneration and community cohesion. These areas are connected through a mutual (though contested) concern with 'place' and with the concept of ethnicity.
The thesis argues:

- That there is no empirical justification for the suggestion that ethnic communities are occupying increasingly separate spaces.
- That although ethnic categories are *useful tools,* a focus on the concept of ethnicity as a means to understand spatial arrangements is unhelpful and conceals more important socio-economic variation
- That regeneration policies need to consider both national structures and local patterns when engaging with socio-economic challenges

There are two areas that present some concerns. Local authority areas exist in which *some* white communities and *some* minority populations live in ethnically homogenous or quasi mono-ethnic neighbourhoods. These authorities tend to be those with a relatively high degree of deprivation (often containing former Neighbourhood Renewal areas) and that have a relatively large percentage of Pakistani residents. Further, the more ethnically homogenous neighbourhoods within these boroughs also tend to be those containing higher concentrations of deprived white residents or more deprived

Pakistani or Bangladeshi households. In examining the empirical literature, this thesis has discussed the spatial dimension of ethnicity, situating this in current policy approaches to regeneration. It argued for the existence of an association between segregation and deprivation that is also indicated by empirical evidence from the North American context. It has added to and corroborated existing quantitative knowledge of segregation in England and has extended such understandings with an exploration of the qualitative dimensions of segregation processes and their perception. Existing understandings of residential segregation in England focused either on regional differences in ethnic group concentrations or single case studies. In addition, this research captured both the processes and outcomes of segregation at the local and national level and demonstrated how residential processes are integrated with the specific nature of the locality. A distinction was identified between patterns in London boroughs and authorities elsewhere. In the former, a general association between more affluent areas and relatively high segregation was identified whilst the opposite effect was present outside London.

This thesis has explored the notions of residential segregation and community cohesion and their relationships. It has corroborated existing evidence of relative stability in segregation levels in English districts and has extended such understandings through local analysis and qualitative exploration of processes of segregation. It is argued that the apparent association between higher levels of deprivation and high segregation was likely to be related to the ethnic composition of the local authority area, especially the concentration of South Asian residents. In contrast, qualitative analysis presented here suggests that the relationship between deprivation and segregation was not simply reflecting this phenomenon. It indicates that the degree of segregation perceived by those living in particular areas was higher than that calculated by the dissimilarity score. Measurement, therefore, is one reality, but local perception is another. The 'facts' of

segregation at a macro-level suggest little of concern about ethnicity as such but the 'facts' at a local level may be different. Policy responses therefore need to do more than measure phenomena, important though that is to understanding broader processes; they need to understand local perceptions and the histories and inter-relationships of local contexts.

References

Adelman, R.M., (2004), *Neighbourhood Opportunities Race and Class: The Black Middle Class and Residential Segregation,* City and Community 3: 43-63.

Ager, A. and Strang, A. (2004) *Indicators of Integration: final report*, RDS, Home Office, HMSO

Alibhai-Brown, Y. (2003) *Sikh Separatism is a problem, not a solution*, The Independent, 15/09/2003. http://www.independent.co.uk/opinion/commentators/yasmin-alibhai-brown/sikh-separatism-is-a-problem-not-a-solution-579934.htmlAccessed online, 15/05/2010

Alibhai-Brown, Y. (2006) Prospect; July 2006

Allport, G., (1954) *The Nature of Prejudice,* Addison-Wesley Printing Company Ltd.

Amin, A., (2002), *Ethnicity and the multicultural city: living with diversity,* Environment and Planning A 34:6,pp. 959-80

Amin, A., (2004), *Local Community on Trial*, Economy and Society, 2005;34:612-633.

Andersen, H.S., (2003), *Urban Sores: on the interaction between segregation urban decay and deprived neighbourhoods,* Adgate Publishing Ltd

Andersson, R., and Molina I, (2003) *Racialization and migration in urban segregation processes: key issues for critical geographers*, Environment and Planning A,

Arthur, C.N., (2004), *The Effect of Urban Containment and Mandatory Housing Elements on Racial Segregation in US Metropolitan Areas,1990-2000*, Journal of Urban Affairs 26: 339-350.

Aspinall, P.J., (2007) *Speaker's corner: Is it time to abandon colour categories for ethnic groups?* Journal of Epidemiology and Community Health, 61 (2). p. 91

Aspinal, P.J., Hashern, F., and Song, M. (2008) *The Ethic options of 'mixed race' people in Britain: Full Research Report* ESRC End of Award Report, RES-000-23-1507. Swindon: ESRC

Atkinson, R., Flint, J., (2004) *Fortress UK? Gated communities: the spatial revolt of the elites and time-space trajectories of segregation,* Housing Studies 19: 875-892.

Atkinson, R. and Kintrea, K. (2001) "*Disentangling area effects: evidence from deprived and non-deprived neighbourhoods",* Urban Studies 38 2277-2298

Audit Commission (2002) *Neighbourhood Renewal: policy focus*, The Audit Commission

Ball, M., and Maginn, P., (2004), *The contradictions of urban policy: the case of the Single Regeneration Budget in London,* Environment and Planning C, Vol. 22, pp.739-765.

Beider, H., (2007) *Community engagement in the US and UK,* Oxford: Blackwell Publishing

Berube, A., (2005a), Mixed Communities in England: a US perspective on evidence and policy prospects, York: Joseph Rowntree Foundation

Berube, A., (2005b), *Narrowing the gap? The trajectory of England's poor neighbourhoods, 1991 -2001* (Case-Brookings census briefs), London: Economic and Social Research Council: London School of Economics

Bjorvatn, (2003*) ,Inequality, Segregation and redistribution*, Journal of Public Economics 87: 1657-1679.

Blackman, T., (1995), *Urban Policy in Practice*, London: Routledge
Blackman, T. (2006) *Placing Health: Neighbourhood renewal, health improvement and complexity*, Bristol: Policy Press.

Blaikie, N., (2007), *Approaches to Social Enquiry,* 2nd Edition, Polity Press: Cambridge

Blokland, T., (2003), *Urban Bonds: Social Relationships in an Inner City Neighbourhood,* Cambridge: Polity Press

Boal, W.F., (1982), *Integration and division: geographical perspectives on the Northern Ireland Problem*

Bolster, A., Burgess, S., Johnston, R., Jones, K., Propper, C. and Sarker, R. (2004) *Neighbourhoods, Households and Income Dynamics: a semi-parametric investigation of Neighbourhood Effects*, CMPO Working Paper Series No. 04/106, Bristol: CMPO

Bond Huie, S.A., (2000) *The components of density and the dimensions of residential segregation,* Population Research and Policy Review 19: 505-524.

Borjas, J.G., (1998), *To Ghetto or Not to Ghetto: Ethnicity and Residential Segregatio*n, Journal of Urban Economics 44: 228-253.

Bowes, A., Dar, N., Sim, D (1997) *Tenure preference and housing strategy: An exploration of Pakistani experiences*, Housing studies, 12: 1, pp 63-84

Boyle, P., (2004), *Guest editorial: the 2001 UK census: remarkable resource or bygone legacy of the `pencil and paper era'?* Area 36: 101-110

Brice, K. (2007) *Sleepwalking to segregation or wide-awake separation: investigating factors influencing choices of location among White British converts to Islam*, Global Built Environment Review, Volume 6, Issue 2, pp18-27, 2007

Bryman, A. (2008) *Social Research Methods*, Oxford: Oxford University Press

Bulmer, M. (1996) "The ethnic group question in the 1991 Census of Population", Ethnicity in the 1991 Census of Population, Eds. Coleman, D. and J. Salt. HMSO,.

Burgess, S., Wilson, D., and Lupton., R., (2005), *Parallel Lives? Ethnic Segregation in schools and neighbourhoods*, Centre for Analysis of Social Exclusion, London School of Economics

Burnley, I., (1999), *Levels of Immigrant Residential Concentration in Sydney and their Relationship with Disadvantage*, Urban Studies 36: 1295-1315.

Byrne, D. (1089) *Beyond the Inner City*, Open University Press

Byrne, D., (1998), *Class and Ethnicity in Complex Cities: the cases of Leicester and Bradford,* Environment and Planning A 30: 17.

Byrne, D. (2001) *Understanding the Urban*, New York: Palgrave

Byrne, D., (2005), *Social Exclusion*, Oxford University Press

Cabinet Office (2000) *Minority Ethnic issues in Social Exclusion and Neighbourhood Renewal*: *A guide to the work of the Social Exclusion Unit and the Policy Action Team so far*, HMSO

Cabinet Office (2003) *Ethnic Minorities and the Labour Market*: final report, Strategy Unit, HMSO

Camille, X.C., (2004) *The Continuing Consequences of Segregation: Family Stress and College Academic Performance,* Social Science Quarterly 85: 1353-1373.

Cantle, T., (Chair) (2001)*: Community Cohesion: A report of the Independent Review Team,* London: Home Office

Cantle, T., (2004) *The end of Parallel Lives? : Final report of the community cohesion panel*, London: Home Office

Cantle, T., (2006) *Challenging local communities to change Oldham*, Institute of Community Cohesion

Cantle, T.(2008) *Community Cohesion: A New Framework for Race and Diversity*, London: Palgrave Macmillan

Cantle, T., (1998) *Prospects for Multiculturalism and Community*, Prospect,

Carter, B., (2000) *Realism and Racism: Concepts of race in sociological research*, London: Routledge.

Casciani, D., (2006), *The UK's ties that bind,* BBC News Community Affairs. Retrieved 24/08/2006

Cassen, R. and Kingdon, G (2007) *Tackling low educational achievement¸* Joseph Rowntree Foundation and LSE

Census and Advisory Working Groups, (1999) *Advisory Group Paper (99) 04: Population Definitions for the 2001 Census*, Office for National Statistics

Chahal, K. (2000), *Ethnic diversity, neighbourhoods and housing,* JRF Foundation

Charron, M., (2005), *La segregation economique comme un phenomene complexe : une analyse spatio-temporelle du cas montrealais*, The Canadian Geographer 49: 332-351.

Chen, K., Irwin, E., Jayaprakasj, C., Warren, K., (2005), *The Emergence of Racial Segregation in an Agent-Based Model of Residential Location: The Role of Competing Preferences,* Computational 38; Mathematical Organization Theory 11: 333-338.

Cheshire, P. (2007) *Segregated neighbourhoods and mixed communities : a critical analysis*, Joseph Rowntree Foundation and LSE

Church, A., Frost, M. and Sullivan, K., (2000) *Transport and Social Exclusion in London*, Transport Policy, 7:3, July 2000 pp195-205

Clark, K and Drinkwater, S., (2000) *Pushed in or Pulled out? Self-employment among ethnic minorities in England and Wales*, Labour Economics, Vol 7, pp. 603- 628

Clarke, T., *Burnley Speaks, Who Listens? Burnley Task Force Report* (Burnley: Burnley Task Force, 2001).

Collins, W.J. and Margo, R.A., (2003), *Race and the value of owner-occupied housing, 1940-1990*, Regional Science and Urban Economics 33: 255-286.

Commission for Integration and Cohesion, (2007), *Our Shared Future*, London: CIC

Commission for Racial Equality, (2002), *A place for us all: learning from Bradford, Oldham and Burnley*   London: Commission for Racial Equality

Commission for Racial Equality (2002) *Community Cohesion: our responsibility*, Belmont Press

Communities and Local Government (2008) *Communities in Power: real people, real power*, White Paper: HMSO

Communities and Local Government (2005) *Improving Opportunity, Strengthening Society*, London, DCLG, HMSO

Communities and Local Government (2008) *Race Equality Scheme: progress report and 2008 Forward look*, London: DCLG

Communities and Local Government (2007) *What works in Community Cohesion*, London: DCLG

Crawshaw, P., Bunton, R., Gillen, K., (2002) *Health Action Zones and the problem of community*, Health and Social Care in the Community 11(1), 36-44. Blackwell.

Creswell, J. (1994), *Research Design: Qualitative and Quantitative Approaches*, Sage Publications, Inc, London

Dabinett, G., Lawless, P., Rhodes, J. and Tyler, P., () *A review of the evidence base for regeneration policy and practice*

Daley, P.O., (1998), *Black Africans in Great Britain: Spatial Concentration and Segregation*, Urban Studies 35(10): 1703-1724.

Darden, J.T., (2000), *Black Residential Segregation in the City and Suburbs of Detroit: Does Socioeconomic Status Matter*?, Journal of Urban Affairs 22: 1-13
Dawkins, C., (2004a), *Measuring the spatial pattern of residential segregation*, Urban Studies 41: 833-851.

Dawkins, C., (2004b), *Recent Evidence on the Continuing Causes of Black-White Residential Segregation,* Journal of Urban Affairs 26: 379-400.

Dawkins, C., (2005), *Evidence on the intergenerational persistence of residential segregation by race,* Urban Studies 42: 545-555.

Denham, J., *(2001) Building Cohesive Communities: a report of the Ministerial Group on Public Order and Community Cohesion ,* (London: Home Office (Community Cohesion Unit), 2001

Department for Education and Schools (2006) *English Schools Dataset,* DfES, Home Office

Dorling, S. and Rees, P., (2005), *A Nation Still Dividing: the British census and social polarisation 1971-2001,* Environment and Planning A 35.

Dorling, D., (2001), *The geography of poverty: A political map of poverty under New Labour*, New Economy 8: 87-91.

Dorling, D., (2002a), *The Geographical Structure of Epidemics*, International Journal of Epidemiology 31: 269-270.

Dorling, D., (2002b), *Geographies of the agenda: public policy, the discipline and its (re)'turns'*, Progress in Human Geography 26: 629-646.

Dorling, D., (2002c), *Poverty: A Study of Town Life*, Centennial edition, B. Seebohm Rowntree (ed), Bristol: The Policy Press, 2000, pp.436-1699, International Journal of Epidemiology 31: 505-506.

Dorling, D., (2004), *People and Places: A 2001 census atlas of the UK*, Bristol: The Policy Press

Dorling, D., Rigby, J., Wheeler, B., Ballas, D., Thomas, B., Fahmy, E., Gordon D., and Lupton, R., (2007) *Poverty and Wealth across Britain 1968 – 2005*, Joseph Rowntree Foundation

Duncan, O. D., and Lieberson, S., (1959) *Ethnic segregation and assimilation*, American Journal of Sociology, 64: 364-374

Edin, O., Fredricksson, P., and Aslund, O., (2003), *Ethnic Enclaves and the economic success of immigrants: evidence from a natural experiment*, Quarterly Journal of Economics 113 329-357

Easterly, W., (2004) *Empirics of Strategic Independence: The Case of the Racial Tipping Point*, New York University

Egan, Anderton et al,(1998), *Relative Spatial Concentration among Minorities addressing errors in measurement*, Social Forces 76(3).

Ellis, M., Wright, and Parks, (2004), *Work Together, Live Apart? Geographies of Racial and Ethnic Segregation at Home and at Work,* Annals of the Association of American Geographers 94: 620-637.

Engstrom, E.M., (1997), *The Economic Determinants of Ethnic Segregation in Post-War Britain,* Oxford Economic and Social History Working Papers

Equality and Human Rights Commission at www.equalityhumanrights.com accessed 10/5/2010

Everitt, B.S. (1983) *Cluster Analysis,* in McKay, D., Schofield, N. and Whitely (Eds). *Data Analysis and the Social Sciences,* London: Frances Pinter

Fairclough, N. (2000) *New Labour, New Language?* London: Routledge

Farley, J.E., (2005), *Residential interracial Exposure and Isolation Indices: Mean versus Median Indices and the Difference It Makes*, The Sociological Quarterly 46: 19-45.

Field, A., (2005) *Discovering Statistics Using SPSS*, Sage

Finney, N. and Simpson, L (2007) *Internal migration and ethnic groups: evidence for the UK from the 2001 Census*, CCSR Working paper 2007-04

Finney, N. and Simpson, L., (2009) *'Sleepwalking to segregation? Challenging myths about race and immigration*, Bristol: The Policy Press.

Fitzpatrick, G., (2005) *Poverty of Place,* Centre for housing Policy, York: Joseph Rowntree Foundation

Flint, J. (2003) *Housing and ethnopolitics: constructing identities of active consumption and responsible community*, Economy and Society, 32: 4, 611 — 629

Flippen, C.A., (2001), *Residential Segregation and Minority Home Ownership*, Social Science Research 30: 337-362.

Fong, E., (2004), *Racial and Ethnic Residential Patterns in Canada,* Sociological Forum 18: 577-602.

Forrest, R., and Kearns, A. 'Social Cohesion, Social Capital and the Neighbourhood' in *Urban Studies,* (Vol. 38, No. 12, 2001) pp.2125-2143

Forrest, R and Kearns, A., (1999), *Joined-up places? Social cohesion and neighbourhood regeneration*, York: Joseph Rowntree Foundation

Fossett, M., (2005), *Overlooked implications of ethnic preferences for residential segregation in agent-based models,* Urban Studies 42: 1893-1917.

Francis, J., (2005), *Let's Stick Together,* Local Government Chronicle,
Freeman, L., (2000), *Minority Housing Segregation: A Test of Three Perspectives,* Journal of Urban Affairs 22: 15-35.

Freeman, L., (2002), *Does Spatial Assimilation Work for Black Immigrants in the US?,* Urban Studies 39: 1983-2003

Freeman, L., (2005), *Black Homeownership: The Role of Temporal Changes and Residential Segregation at the End of the 20th Century*, Social Science Quarterly 86: 403-426.

Furbey, R., 'Beyond "social glue"? "Faith" and community cohesion', in J. Flint and D. Robinson (eds.), *Community Cohesion in Crisis: New Dimensions of Diversity and Difference',* Bristol, The Policy Press, 2008

Galster, G.C, (1990), *White Flight from Racially Integrated Neighbourhoods in the 1970s: the Cleveland Experience,* Urban Studies 27(3): pp. 385-399

Galster, K., and Waite, R., (1999), *Neighbourhood Opportunity Structure and Immigrants: socioeconomic advancement*, Journal of Housing Research, 10 95-127
Gerring, J., (2001), *Social Science Methodology: A Criterial Framework,* Cambridge University Press: Cambridge

Gibbons, S., Green, A., Gregg, P. and Machin, S., (2005), *Is Britain Pulling Apart? Area disparities in employment*, Chapter in *Going Places: Neighbourhood, ethnicity and social mobility,* Ed. Delorenzi, S. IPPR

Gibson, S., (2005), *Is London Sleepwalking towards segregation?,* London Housing 117(Dec): 8-9

Glennerster, H., Lupton, R., Noden, P., and Power, A (1999) *Poverty, Social Exclusion and Neighbourhood: Studying the area bases of social exclusion,* Casepaper 22, London: Centre for Analysis of Social Exclusion

Green, S. and Robinson, D., (2004*) Housing and Community Cohesion: the contribution of the New Deal for Communities: Research Report 43*, CRESR, Sheffield Hallam

Green, G., Grimsley, M. Stafford, B., (2005) *The Dynamics of Neighbourhood Sustainability*, York: Joseph Rowntree Foundation

Gregory, I.N., (2001), *A century of inequality in England and Wales using standardized geographical units,* Area 33: 297-311.

Hammersley, M., (1996) *The relationship between qualitative and quantitative research: Paradigm loyalty versus methodological eclecticism.* In: Handbook of research methods for psychology and the social sciences. Leicester: BPS

Harries, B., Richardson, L, Soteri-Proctor, A. (2008) *Housing aspirations of white and second generation south Asian British women*, Joseph Rowntree Foundation/Chartered Institute of Housing

Harrison, M., Phillips, D, Chahal, K, and Perry, L., (2005), *Housing, Race and Community Cohesion*, Coventry: CIH

Harrison and Phillips, Housing Research Summary, ODPM, no. 180, 2003

Henderson, J. and Karn, V. (1987) *Race, class and state housing: Inequality and the allocation of public housing in Britiain*, Gower Publishing Co Ltd. (HMSO)

Hickman, M., Crowley, H., and Mai, N (2008) *Immigration and social cohesion in the UK: the rhythms and realities of everyday life*, Joseph Rowntree Foundation

Higgs, G., Williams, C., and Dorling, D., (2004), *Use of the census of population to discern trends in the Welsh language: an aggregate analysis* Area 36: 187-201.

Hills, J., (2007), *Ends and Means: The future roles of social housing in England,* Economic and Social Research Council, CASE Report 34.

Holloway, S.R., (2000), *Identity, contingency and the urban geography of 'race',* Social & Cultural Geography 1: 197-208.
Holmes, C. (2006) *Mixed Communities,* Joseph Rowntree Foundation Foundations Paper, March 2006

Holmqvist, E. (2005) *Social mix, a strategy to counteract segregation?,* Institute for Housing and Urban Research

House of Commons (2004) *Housing, Planning, Local Government and the Regions Committee Sixth report: Social Cohesion*, Office of the Deputy Prime Minister, HMSO

Home Office, (2003) *Ethnic Minorities in the Labour Market: Final Report,* Strategy Unit: Cabinet Office

Home Office (2003) *Community Cohesion Pathfinder Programme: The first six months,* HMSO

Home Office, *Building a Picture of Community Cohesion: A Guide for Local Authorities and their Partners,* (London: Community Cohesion Unit, Home Office, 2003).
Downloaded on 30/06/2005
fromhttp://www.homeoffice.gov.uk/docs2/buildpicturecomcohesion.html

Howley, P., (2009) *New residential neighbourhoods within the inner city: an examination of neighbouring*, Irish Geography, vol 42 (1), 1 March 2009: 327-356

Hughes, (1990) *the Philosophy of Social Research*, 2nd Edition, Harlow, Longman

Huttman, E.D., Blauw, W., and Saltman, J., (1992) *Urban Housing Segregation of Minorities in Western Europe and the United States*, Duke University Press: London and Durham

Institute for Community Cohesion, (2009), www.cohesioninstitute.org.uk

Jargowsky, P.A. (1997). *Poverty and place: ghettos, barrios, and the American city.* Russell Sage Foundation, New York.

Johnston, R., Forrest, J. and Poulsen, M., (2004) *The comparative study of ethnic residential segregation in the USA: 1980-2000*, Tijdschrift voor Economische en Sociale Geografie 95: 550-569.

Johnston, R., Forrest, J. and Poulsen, M., (2005a), *Ethnic Residential Segregation Across an Urban System: The Maori in New Zealand, 1991-2001,* The Professional Geographer 57: 115-129.

Johnston, R., Forrest, J. and Poulsen, M., (2005b*) On the measurement and meaning of residential segregation: A response to Simpson*, Urban Studies 42: 1221-1227.

Johnston, R., Forrest, J. and Poulsen, M., (2001) *Sydney's Ethnic Geography: new approaches to analysing patterns of residential concentration,* Australian Geographer 32.2, 142-162.

Johnston, R., Forrest, J. and Poulsen, M., (2002) *Are there Ethnic Enclaves/Ghettos in English Cities?*, Urban Studies 39: 591-618

Johnston, R., Forrest, J. and Poulsen, M., (2003) *And Did the Walls Come Tumbling Down? Ethnic Residential Segregation in Four U S Metropolitan Areas 1980-2000*, Urban Geography 24: 560-581.

Joppke, C., (2004) *The retreat of multiculturalism in the liberal state: theory and policy,* The British Journal of sociology, Vol. 55: 2

Kapoor,V., and Kalra, N., (2008) I*nterrogating Segregation, Integration and the Community Cohesion Agenda*, CCSR Working Paper, Manchester University

Kawachi, I, and Berkman, L.F. (2003) *Neighbourhoods and Health,* Oxford University Press

Kazempiur, A and Sitall Halli, S, (2000) *Neighbourhood Poverty in Canadian Cities*, Canadian Journal of Sociology, 25:3, 369-381

Kearns, A.P., (2001) *The Significance of Neighbourhood*, Urban Studies 38(12): 7.

Kearns, A. and Parkes, A. (2003) *Living In and Leaving Poor Neighbourhood Conditions in England*, Housing Studies, 18(6), pp.827-851

Kearns, A., and Turok, I., (2004) *Sustainable Communities: Dimensions and Challenges*, ESRC/ODPM Postgraduate Research Programme, Working Paper 1

Kelly, R, (2006) Speech launching the Commission for Integration and Cohesion, 24/08/2006, full text published by Guardianunlimited.co.uk. Accessed on 03/09/2006

Kintrea, K., Bannister, J., Pickering, J., Reid, M., and Suzuki, N (2008) *Young people and territoriality in British Cities*, Joseph Rowntree Foundation

Kintrea, K., (2007) *Policies and Programmes for Disadvantaged Neighbourhoods: Recent English Experience*, Housing Studies, Vol. 22:2, pp261-282. London: Routledge.

Kitchen, S., Michaelson, J., and Wood, N. (2006) *2005 Citizenship Survey: Community Cohesion Topic Report*, DCLG, HMSO

Kundnani, A. (2001) *In a foreign land: the new popular racism*, *Race and Class.* 43(2): 41-60

Kundnani, A,. (2002) *The Death of Multiculturalism*, Essay in The Institute for Race Relations, 1/4/2002, http://www.irr.org.uk/2002/april/ak000001.html. Accessed 10/05/2010

Lall, M., and Gillborn, D., () *Beyond a colour blind approach: Addressing Black and Minority Ethnic Inclusion in the Education Strand of New Deal for Communities*, New Deal for Communities: the national evaluation, Research report 49, Sheffield Hallam University

Large, P., Ghosh, K., and Fry, R., (2006a) *Population Estimates by Ethnic Group Methodology Paper*, Office for National Statistics

Large, P and Ghosh, K. (2006b) *A methodology for estimating the population by ethnic group for areas within England,* Population and Demography Division, ONS: Population Trends

Lash, S., and Urry, J., (1987) *The End of Organised Capitalism*, London: Polity Press

Lewis, J., and Randolph-Horn, ., (2001) *Faiths, Hope and Participation, Celebrating faith groups' role in neighbourhood renewal,* The new Economics Foundation and Church Urban Fund

Livingston, M., Bailey, M and Kearns, A., (2008) *People's attachment to place: The influence of neighbourhood deprivation*¸ Coventry: Chartered Institute of Housing

Local Government Association, (2004) *Community Cohesion Action Guide*, Local Government Association

Lupton, R. (2003) *'Neighbourhood Effects': Can we measure them and does it matter?* Paper No' CASE 073

Lupton, R. (2005) *Changing Neighbourhoods? Mapping the geography of poverty and worklessness using the 1991 and 2001 census,* Case Paper 3, ODPM, LSE

Lyons, M. (2006) *National Prosperity, Local Choice and Civic Engagement*, London: HMSO.

Macpherson, W., (1999) *The Stephen Lawrence Inquiry*, HMSO

Malik, K

Martin, D., (2002) *Linking censuses through time: problems and solutions*, Area 34: 82-91.

Mason, J. (1996) *Qualitative Researching*, London: Sage

Massey, D.S. and N.A. Denton (1988). The dimensions of residential segregation. *Social Forces,* 67:281-315*.*

Massey, D.S. and N. A. Denton (1993). *American apartheid: Segregation and the making of the underclass.* Harvard University Press, Cambridge, Mass.

Massey, D., and Fischer, J.,(2000) *How Segregation Concentrates Poverty,* Ethnic and Racial Studies 23: 670-691.

McCulloch, A. (2001) *Teenaged childbearing in Great Britain and the spatial concentration of poverty households,* Journal of Epidemiol Community Health, 55: 16-23

McGhee, D. (2003) *Moving to 'our' common ground – a critical examination of community cohesion discourse in twenty-first century Britain*, The Sociological Review, Oxford: Blackwell

Meen, G., Gibb, K., Goody, J. Mcgrath, T and Mackinnon, J. (2005) *Economic Segregation in England: causes, consequences and policy,* Policy Press
Minton, A., (2002) *Building balanced communities: the US and UK compared¸* RICS

Mitchell, R., Dorling, D and Martin, D., (2001) *Making Sense of the Census: A new means to access census data from 1971-1991 and on to 2001,* Research Matters(16).

Modood, T., (2001) *their Liberalism and our multicutluralism?* British Journal of Politics and International Relations, Vol. 3: 2, June, pp. 245-257

Modood, T. and Berthoud, R. (1997) *Ethnic Minorities in Britain,* The Fourth National Survey of Ethnic Minorities, London, Policy Studies Institute

Mohan, J.T.L., Twigg, L., Barnard, S., and Jones, K., (2005) *Social capital, Geography and Health: a small-area analysis for England*, Social Science and Medicine, no. 60

Musterd, S. and W. Ostendorf (eds.) (1998a) *Urban Segregation and the WelfareState. Inequality and Exclusion in Western Cities*. London: Routledge.

Musterd, S., (2003) *Segregation and integration: a contested relationship*, Journal of Ethnic and Migration Studies 29: 623-641.

Musterd, S. Anderson, R., Galster, G., and Kauppinen, T., (2008) *Are immigrants' earnings influenced by the characteristics of their neighbours?* Environment and Planning A, Vol. 40, pp. 785- 805

Neighbourhood Renewal Unit (2005) *Race Equality Action Plan 2005*, Office of the Deputy Prime Minister, HMSO

Neighbourhood Renewal Unit (2002) *Changing neighbourhoods, changing lives: the vision for neighbourhood renewal*, London: DTLGR

Neighbourhood Renewal Unit (2004) *Housing and Community Cohesion: The Contribution of NDC Pathfinders*, Research report 43, Sheffield Hallam University

Neighbourhood Renewal Unit (2003) *New Deal for Communities: the national evaluation Annual Report*, London: Neighbourhood Renewal Unit

Noble, M., Smith, G.A.N., Penhale, B.**,** Wright, G., Dibben, C., Owen, T. & Lloyd, M**.** (2000) *Measuring Multiple Deprivation at the Small Area Level: The Indices of Deprivation 2000* DETR, Regeneration Research Summary No. 37, 2000

Office of the Deputy Prime Minister, (2003) *Factsheet 15: Community cohesion and neighbourhood renewal*, HMSO

Office of the Deputy Prime Minister, (2004) *Social Cohesion: sixth report of session 2003-04: vol.I* House of Commons

Office of the Deputy Prime Minister (2004) *Government Response to the ODPM Report on Community Cohesion*, HMSO

Office of the Deputy Prime Minister (2004) *Making it happen: Urban renaissance and prosperity in our Core Cities, A Tale of Eight Cities*, HMSO

Office of the Deputy Prime Minister, (2004) *Sustainable Communities: People, Places and Prosperity*, HMSO

Office of the Deputy Prime Minister (2005) *Local Strategic Partnerships: Shaping their Future, Consultation Document*, HMSO

Office for National Statistics (2001) *Mid-2000 Population Estimates,* HMSO

Olsen, W., (2004) *Triangulation in Social Research: Qualitative and Quantitative Methods Can Really Be Mixed*, Developments in Sociology, ed. M. Holborn, Ormskirk: Causeway Press"

Office for Public Management, (2005), *New Horizons: an exploration of the challenges posed by future trends in segregation and polarisation,* Office for Public Management: London

Ostendorf, W. (1998) *Urban Segregation and the Welfare State. Inequality and exclusion in western cities*, (Editor with Sako Musterd), Routledge, London and New York

O'Sullivan, D. (2005) *Impacts of Neighbourhood Scale on the Dynamics of Segregation*, Paper presented at the Annual Colloquium of the Spatial Information Research Centre, University of Otago, Dunedin, November 24th-25th 2005

Ouseley, H., (2001) *Community Pride not prejudice; (Bradford Vision 2001)*

Ouseley, H., (2002), *Report of the Burnley Task Force*, Clarke

Palmer, G, Kenway, P and Wilcox, S, (2006) *Monitoring housing and neighbourhood trends 2006,* New Policy Institute: Joseph Rowntree Foundation

Park, V, Wright, R., and Ellis, M., (2004), *Work Together, Live Apart? Geographies of Racial and Ethnic Segregation at Home and at Work,* Annals of the Association of American Geographers, 94 (3) pp. 620-637, Oxford: Blackwell

Parkinson, M. et al., (2006) *The State of English Cities*, The Office of the Deputy Prime Minister, HMSO

Parks, V., (2004) *The Gendered Connection Between Ethnic Residential and Labor-Market Segregation in Los Angeles*, Urban Geography 25: 589-630.

Patel, A., (2004), *Regeneration can bridge the race divide – Community Cohesion*, *Regeneration and Renewal*, 2004 (20/08/2004)

Patel, M., (2004) H*ousing patterns of young south Asians in Birmingham*, ESRC/OPDM Working Paper 11,

Pawson, H and Kintrea, K., (2002) *Part of the Problem or Part of the Solution? Social Housing Allocation Policies and Social Exclusion in Britain*, Journal of Social Policy 31(4): 24.

Peach, C. (ed.)*, (1996), Ethnicity in the 1991 Census*, London: HMSO

Peach, C., (1975) *Urban Social Segregation*, New York: Longman Group Ltd
Peach, C., (1996) *Does Britain have ghettos*? Transactions of the Institute of British Geographers 21: 216-235

Peach, C. and Rossiter, D. (1996) Level and nature of spatial concentration and segregation of minority ethnic population in Great Britain, 1991. In, Ratcliffe, P. (ed.) *Social Geography and Ethnicity in Britain: Geographical spread, spatial concentration*

and internal migration, Vol. 3 of Ethnicity in the 1991 Census, Office for National Statistics, London, HMSO. pp. 111-134.

Peach, C (1998) *South Asian and Caribbean Ethnic Minority Housing Choice in Britain,* Urban Studies, 35, p1657, Sage Publications Ltd

Pennant, R. (2005) *Diversity, trust and community participation in England*, RSD, Home Office

Perry, J. (2003) *Providing a safe haven: housing asylum seekers and refugees,* Chartered Institute of Housing

Phillips, D., (1998) *Black minority ethnic concentration, segregation and dispersal in Britain,* Urban Studies 35(10): 21.

Phillips, D. (2007) Ethnic and Racial Segregation: a critical perspective. Geography Compass, 1 (5) pp.1138-1159

Phillips, T., (2004) *Interview in the The Times, 3/4/2004*. Accessed online 1/3/2010 at http://www.timesonline.co.uk/tol/news/uk/article1055221.ece

Phillips, T., (2005) *Sleepwalking to segregation*, Transcript of speech given on 22 September 2005 to the Manchester Council for Community Relations, www.cre.gov.uk

Pilkington, A, (2008) *From Institutional Racism to Community Cohesion: The Changing Nature of Racial Discourse in Britain*, Sociological Research Online 13 (3)6

Poulsen, M., (2004) *Is Sydney a Divided City Ethnically?* Australian Geographical Studies 42: 356-377

Putnam, R.D., (1995) *Bowling Alone: America's Declining Social Capital,* Journal of Democracy, 6:1, 65-75

Quillian, L., (2002) *Why Is Black-White Residential Segregation So Persistent?: Evidence on Three Theories from Migration Data*, Social Science Research 31: 197-229.

Raco, M and Imrie, R (2003) *Urban Renaissance: New Labour, community and Urban Policy* Bristol: Policy Press.

Ratcliffe, P., (1999), *Housing inequality and 'race': some critical reflections on the concept of 'social exclusion"*, Ethnic and Racial Studies 22: 1-22.

Ratcliffe, P., (1996) *Social geography and ethnicity in Britain: Geographical spread, Spatial Concentration and Internal Migration*, Ethnicity in the 1991 Census: Vol 3. London: HMSO

Rees, P., (2003) *Are socioeconomic inequalities in mortality decreasing or increasing within some British regions? An observational study*, *1990-1998,* Journal of Public Health Medicine 25: 208-214.

Rueben, K., Bayer, P., and McMillan, R. (2002) *What Drives Racial Segregation? New evidence using Census microdata*, Journal of Urban Economics, Elsevier, 56:3, 514-535

Robertson, D., Smyth, J., and McIntosh, I, (2008) *Neighbourhood Identity: people, time and place*, Joseph Rowntree Foundation

Robinson, D and Reeve, K., (2006b) *Neighbourhood Experience of New Migration,* Joseph Rowntree Foundation

Robinson, D., (2005) *The search for community cohesion: Key themes and dominant concepts of the public policy agenda*, Urban Studies 42: 1411-1427.

Robinson, D., (2006a) *Living Parallel Lives? Housing, Residential Segregation and Community Cohesion in England*, Neighbourhood Renewal and Housing Markets:

Rogers (2005) *Towards a Strong Urban Renaissance*, Urban Task Force

Rose, N., (1996) *Reconfiguring the Social? Re-figuring the territory of governance*, Economy and Society, vol. 25:3, August 1996: 327-356

Sakoda, J.M., (1981) *A Generalised Index of Dissimilarity,* Demography, 18:2, (May 1981) pp245-250

Silverman, D (ed.) (1997) *Qualitative Research: Theory, Method and Practice*, London: Sage

Simpson L, Akinwale B, 2007, "Quantifying stability and change in ethnic group" *Journal of Official Statistics* 23 185 – 208

Simpson, L. & Lomax, S. (2007) Population, migration and fertility for ethnic groups from the 1991and 2001 Census Leicestershire County, Districts and Leicester UA. Manchester: CCSR

Simpson, L., (2004) *Statistics of Racial Segregation: Measures, Evidence and Policy*, Urban Studies, Vol. 41: 3, March 2004, pp. 661-681

Simpson, L., (2005a) *On the Measurement and Meaning of Residential Segregation: A Reply to Johnston, Poulsen and Forrest,* Urban Studies 42: 1229-1230.

Simpson, L., (2005b) *Population Dynamics in Rochdale and Oldham: Population household and social change*, Cathie Marsh Centre for Census and Survey Research

Simpson, L., (2007), *Ghettos of the mind: the empirical behaviour of indices of segregation and diversity,* Journal of the Royal Statistical Society A, 170, Part 2, pp. 405-424

Skelcher, C. 2000, 'Changing images of the State: overloaded, hollowed-out, congested', *Public Policy and Administration*, Vol. 15 No. 3.

Smith, G.R., (1999) *Area-based Initiatives: the rationale and options for area targeting*, CASEpaper2, Centre for Analysis of Social Exclusion, London School of Economics

Social Exclusion Unit, (2001) *A New Commitment to Neighbourhood Renewal: National Strategy Action Plan*, London: SEU

Social Exclusion Taskforce (2006) *Reaching Out: an action plan on social exclusion*, Cabinet Office, HMSO

Spence, L. (2007) *A profile of Londoners by housing tenure*: *analysis of Annual Population Survey and Labour Force Survey data,* Data Management and Analysis Group, Greater London Authority

Steines, D.M., (1977) *Alternative Models of Neighbourhood Change*, Social Forces 55(4): 14

Sullivan, H, and Skelcher, C, (2003) *Working Across Boundaries: collaboration in public services¸* Palgrave Macmillan

Sundstrom, R., (2004) *Racial politics in residential segregation studies* Philosophy and Geography 7: 61-78.

Taeuber ,Karl E. and Taeuber, Alma F. *(1965) Negroes in Cities: Residential Segregation and Neighborhood Change*, Chicago: Aldine Publishing Company,

Taeuber, J and Taeuber, A. F. (1964) *White Migration and Socioeconomic Differences between Cities and suburbs*, American Sociological Review, 29:718-729
Taylor, M., (2008), *Transforming disadvantaged places: effective strategies for places and people*, York: Joseph Rowntree Foundation.

Thomas, B. and Dorling, D. (2004). Endpiece: mapping changes and the 2001 census for the UK. *Area*, 36(2).

Thomas (2004) *Advances in the Human Cartography of the UK*, Cartographic Journal, The 41: 109-115.

Thomas, P., (2007) *Moving on from 'Anti-racism'? Understandings of 'Community Cohesion' held by youth workers*, Journal and Social Policy, 36: 3, pp. 435-455

Timberlake, J.M., (2002) *Separate But How Unequal? Ethnic Residential Stratification, 1980 to 1990*, City & Community 1: 251-266.

Townsend, (1990) *Deprivation and Ill-health: New Scientific evidence and the implications for policy,* Institute for Health Policy Studies
Troy, C.B., (2004) *Multiple Meanings of Minority Concentration: Incorporating Contextual Explanations into the Analysis of Individual-Level US Black Mortality Outcomes*, Population Research and Policy Review 23: 309-326.

Tunstall, R., and Lupton, R. (2003) *Is Targeting Deprived Areas: an Effective Means to Reach Poor People? An assessment of one rationale for area-based funding programmes,* CASE paper70, Centre for Analysis of Social Exclusion

Vains, O., (2003) *Stubborn identities and the construction of socio-spatial boundaries: ultra-orthodox Jews living in contemporary Britain*, Transactions of the Institute of British Geographers 28: 158-175.

Vertovec, S., (2007) *Super-Diversity and its implications,* Ethnic and Racial Studies 30 (6), Routledge

Voas, D. and Williamson, (2000) *The scale of dissimilarity: concepts, measurement and an application to socio-economic variation across England and Wales*, Transactions of the Institute of British Geographers 25: 465-481.

Webster, C., (2003) *Race, and Fear: Imagine geographies of racism, crime, violence and disorder in Northern England*, Capital and Class (June): 95-121.

Weinberg, B.A., (2000) *Black Residential Centralization and the Spatial Mismatch Hypothesis*, Journal of Urban Economics 48: 110-134.

White, M.J., (1983) *The Measurement of Spatial Segregation*, The American Journal of Sociology 88(5): 1008-1018.

White, M.J., Kim, A.H., and Glick, J.E. (2005) *Mapping Social Distance: Ethnic Residential Segregation in a Multiethnic Metro,* Sociological Methods and Research, 34:2, 173-203

Winship, D., (1975) *The Desirability of Using the Index of Dissimilarity or Any Adjustment of it for Measuring Segregation: A reply to Falk, Cortese and Cohen*, National Opinion Research Centre

Wong, D.W.S., (2005) *Formulating a General Spatial Segregation Measure*, The Professional Geographer 57: 285-294.

Wong, D.W.S., (1993) *Spatial Indices of Segregation*, Urban Studies 30:3 559-572.

Wong, D.W.S., (2002) *Modelling Local Segregation: a Spatial Interaction Approach,* Geographical and Environmental Modelling 6: 81-97.

Wong, D.W.S., (2004), *Comparing Traditional and Spatial Segregation Measures: A Spatial Scale Perspective,* Urban Geography 25: 66-82.

Wong, E.O., (2003) *Intergroup Prejudice in Multiethnic Settings*, American Journal of Political Science 47: 567-582.

Wright, R., Ellis, M. and Parks, V, (2005), *Re-Placing Whiteness in Spatial Assimilation Research,* City and Community 4: 111-135.

Young, I.M., (2002) *Residential Segregation and Regional Democracy, Inclusion and Democracy* 1: 196-236

Yuval-Davis, N., Anthias, F., and Kofman, E (2005) *Secure borders and safe haven and the gendered politics of belonging: Beyond social cohesion*, Ethnic and Racial Studies, Vol 28: 3, pp. 513-535

Zhang, J., (2004) *A Dynamic model of Residential segregation,* Journal of Mathematical Sociology 28: 147-170.

List of Appendices

Appendix 1   Government Documents Analysed in Chapter Three

Community Cohesion: the police role

Neighbourhood ethnic concentration and discrimination

Government Response to the ODPM Report into Social Cohesion

Race Relations (Amendment) Act 2000

Seven Steps to Community Cohesion: a practitioner's toolkit, Cohesion and Faiths Unit, ODPM

Building Community Cohesion into Area Based Initiatives, Community Cohesion Unit, October, 2004

Community Cohesion Action Guide, Local Government Association, 2004

Working Together: co-operation between government and faith communities

Leading Cohesive Communities: a guide for local authority leaders and chief executives, LGA, 2006

Progress Report

Developing a Community Cohesion Baseline

Strong and Prosperous Communities, Vol. II (2006) DCLG White Paper

Appendix 2   **Selection of predictor variables including rejected variables**

Variable	Source	Problems arising	Adjustments made	
Employment Rate	Office of National Statistics, Neighbourhood Statistics	The IMD 2004 overall score includes aggregate figures for the variables in the employment domain.	None	
Population Density	Census of Population 1991 and 2001	It is acknowledged that a more accurate reflection of the nature of an area would be achieved through taking non-residential areas (e.g. national parks, 'other land uses' etc.) into account.		Resident population per ha
Crime		British Crime Survey data: not available at the level of Local Authority, only in Standard Regions and Police Force Areas, neither of which match local authority boundaries.	Rejected due to lack of comparable data in 1991.	

Ethnic groups: **% White** **% Bangladeshi** **% Pakistani** **% Indian** **% Black Caribbean** **% Black African** **% Chinese**	Census of Population Key Statistics 1991 and 2001	Categories available in 2001 differed to those available in the 1991 census. In 2001 sixteen categories were available for self-selection. In 1991 only nine.	To enable comparison between the two censuses, the categories in 2001 were condensed and superfluous categories removed.	Other categories were rejected due to non-significance in the pilot study.
Tenure: **% Social housing** **% Owner Occupied**	Census of Population Key Statistics	None.	Combined % for 'Owned outright' and 'Shared Ownership'	
Dwelling types: **% Detached;** **% Terraced;** **% Semi-detached;** **% Flat;** **(other).**	Census of Population Key Statistics	None. Comparison of 1991 and 2001 censuses possible without adjustments.		% of dwellings within each category.
% No car	Census of Population Key Statistics	None. Data comparable over time at the local authority level	None	% of households with no car
% Overcrowding	Census of Population, Key Statistics	None. It is recognised that alternative measures of household overcrowding now exist but these are not comparable with the 1991 census		% of households with more than 1.5 persons per room

Socio-Economic Group: % Manual; % Non-manual.			Reclassified to enable comparison between 1991 and 2001 censuses.	% of heads of household in Manual (IIIm, IV, V and unskilled groups) and Non-manual (I, II, IIIn groups).
% Residents with Limiting Long-Term Illness (LLTI)	Census of Population Key Statistics			
Education: % No qualifications; % Higher Education qualifications	Census of Population Key Statistics	Data collected in the 2001		Percentage of residents within age range with 'No or low qualifications' and percentage of same group of residents with qualifications at Level 5 (degree or higher degree).
% Net migration	Office of National Statistics, Neighbourhood statistics.	Comparable data not available in 1991.	Employed only on 2001 to provide extra depth of analysis.	Percentage of movement in or out of local authority in past twelve months.

All data were accessed between June 2006 and June 2007

Appendix 3   **Variable Correlations**

3.1   **Variable Correlations: 2001, all cases**

	Density	% 18-74 No Quals	% 18-74 HE Quals	% No car	% Non Manual	% Manual	% More than 1.5 ppr	% Terraced	% Detached	% Social Housing	% Black African	% Black Caribbean	% Chinese	% White	% Indian	% Bangladeshi	% Pakistani	% privately rented	% Owned all
Density	1.00	-0.28	0.65	0.84	0.21	-0.53	0.82	-0.05	-0.75	0.51	0.74	0.69	0.75	-0.69	0.18	0.37	0.01	0.74	-0.79
		0.01	0.00	0.00	0.05	0.00	0.00	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.96	0.00	0.00
% 18-74 No Quals	-0.28	1.00	-0.81	0.09	-0.91	0.85	-0.19	0.39	0.02	0.38	-0.23	-0.15	-0.49	0.07	0.09	0.11	0.31	-0.54	0.05
	0.01		0.00	0.41	0.00	0.00	0.08	0.00	0.89	0.00	0.03	0.16	0.00	0.53	0.41	0.30	0.00	0.00	0.66
% 18-74 HE Quals	0.65	-0.81	1.00	0.42	0.72	-0.90	0.56	-0.34	-0.38	0.06	0.52	0.44	0.75	-0.42	0.05	0.15	-0.16	0.79	-0.50
	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.65	0.16	0.13	0.00	0.00
% No car	0.84	0.09	0.42	1.00	-0.19	-0.25	0.73	0.13	-0.78	0.72	0.66	0.61	0.62	-0.63	0.11	0.41	0.16	0.64	-0.90
	0.00	0.41	0.00		0.06	0.02	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.13	0.00	0.00
% Non Manual	0.21	-0.91	0.72	-0.19	1.00	-0.82	0.13	-0.39	0.02	-0.39	0.17	0.11	0.36	-0.02	-0.11	-0.09	-0.31	0.36	0.06
	0.05	0.00	0.00	0.06		0.00	0.23	0.00	0.88	0.00	0.10	0.29	0.00	0.87	0.30	0.38	0.00	0.00	0.56
% Manual	-0.53	0.85	-0.90	-0.25	-0.82	1.00	-0.48	0.35	0.29	0.09	-0.46	-0.37	-0.70	0.37	-0.03	-0.15	0.18	-0.67	0.34
	0.00	0.00	0.00	0.02	0.00		0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.78	0.16	0.08	0.00	0.00
% More than 1.5 ppr	0.82	-0.19	0.56	0.73	0.13	-0.48	1.00	-0.04	-0.64	0.48	0.80	0.70	0.68	-0.86	0.32	0.62	0.19	0.64	-0.74
	0.00	0.08	0.00	0.00	0.23	0.00		0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00
% Terraced	-0.05	0.39	-0.34	0.13	-0.39	0.35	-0.04	1.00	-0.45	0.18	0.01	0.05	-0.16	-0.14	0.13	-0.08	0.50	-0.15	0.01
	0.61	0.00	0.00	0.22	0.00	0.00	0.71		0.00	0.09	0.91	0.64	0.12	0.17	0.23	0.44	0.00	0.16	0.96
% Detached	-0.75	0.02	-0.38	-0.78	0.02	0.29	-0.64	-0.45	1.00	-0.55	-0.59	-0.57	-0.61	0.69	-0.31	-0.27	-0.29	-0.54	0.67
	0.00	0.89	0.00	0.00	0.88	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00
% Social Housing	0.51	0.38	0.06	0.72	-0.39	0.09	0.48	0.18	-0.55	1.00	0.53	0.44	0.37	-0.42	0.01	0.37	0.08	0.13	-0.71
	0.00	0.00	0.60	0.00	0.00	0.38	0.00	0.09	0.00		0.00	0.00	0.00	0.00	0.90	0.00	0.45	0.23	0.00
% Black African	0.74	-0.23	0.52	0.66	0.17	-0.46	0.80	0.01	-0.59	0.53	1.00	0.85	0.63	-0.74	0.19	0.22	0.04	0.51	-0.65
	0.00	0.03	0.00	0.00	0.10	0.00	0.00	0.91	0.00	0.00		0.00	0.00	0.00	0.06	0.04	0.73	0.00	0.00
% Black Caribbean	0.69	-0.15	0.44	0.61	0.11	-0.37	0.70	0.05	-0.57	0.44	0.85	1.00	0.49	-0.77	0.27	0.14	0.15	0.45	
	0.00	0.16	0.00	0.00	0.29	0.00	0.00	0.64	0.00	0.00	0.00		0.00	0.00	0.01	0.18	0.14	0.00	
% Chinese	0.75	-0.49	0.75	0.62	0.36	-0.70	0.68	-0.16	-0.61	0.37	0.63	0.49	1.00	-0.59	0.17	0.35	-0.12	0.71	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00		0.00	0.11	0.00	0.25	0.00	

% White	-0.69	0.07	-0.42	-0.63	-0.02	0.37	-0.86	-0.14	0.69	-0.42	-0.74	-0.77	-0.59	1.00	-0.66	-0.41	-0.42	-0.51	
	0.00	0.53	0.00	0.00	0.87	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	
% Indian	0.18	0.09	0.05	0.11	-0.11	-0.03	0.32	0.13	-0.31	0.01	0.19	0.27	0.17	-0.66	1.00	0.00	0.28	0.12	
	0.09	0.41	0.65	0.29	0.30	0.78	0.00	0.23	0.00	0.90	0.06	0.01	0.11	0.00		0.97	0.01	0.26	
% Bangladeshi	0.37	0.11	0.15	0.41	-0.09	-0.15	0.62	-0.08	-0.27	0.37	0.22	0.14	0.35	-0.41	0.00	1.00	0.06	0.23	
	0.00	0.30	0.16	0.00	0.38	0.16	0.00	0.44	0.01	0.00	0.04	0.18	0.00	0.00	0.97		0.55	0.03	
% Pakistani	0.01	0.31	-0.16	0.16	-0.31	0.18	0.19	0.50	-0.29	0.08	0.04	0.15	-0.12	-0.42	0.28	0.06	1.00	0.02	
	0.96	0.00	0.13	0.13	0.00	0.08	0.07	0.00	0.01	0.45	0.73	0.14	0.25	0.00	0.01	0.55		0.89	
% privately rented	0.74	-0.54	0.79	0.64	0.36	-0.67	0.64	-0.15	-0.54	0.13	0.51	0.45	0.71	-0.51	0.12	0.23	0.02	1.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.23	0.00	0.00	0.00	0.00	0.26	0.03	0.89		
% Owned all	-0.79	0.05	-0.50	-0.90	0.06	0.34	-0.74	0.01	0.67	-0.71	-0.65	-0.53	-0.65	0.57	-0.06	-0.43	-0.05	-0.70	
	0.00	0.66	0.00	0.00	0.56	0.00	0.00	0.96	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.00	0.67	0.00	

3.2   Variable Correlations: 2001, cases outside London only

	Density	% 18-74 No Quals	% 18-74 HE Quals	% No car	% Non Manual	% Manual	% More than 1.5 ppr	% Terraced	% Detached	% Social Housing	% Black African	% Black Caribbean	% Chinese	% White	% Indian	% Bangladeshi	% Pakistani	% privately rented	% Owned all
Density	1.00	0.28	-0.18	0.62	-0.45	0.20	0.53	0.38	-0.67	0.40	0.57	0.57	0.43	-0.54	0.40	0.31	0.23	0.44	-0.52
		0.03	0.17	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.08	0.00	0.00
% 18-74 No Quals	0.28	1.00	-0.83	0.67	-0.87	0.83	0.20	0.36	-0.47	0.64	-0.06	0.30	-0.29	-0.39	0.38	0.25	0.34	-0.25	-0.37
	0.03		0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.63	0.02	0.02	0.00	0.00	0.05	0.01	0.05	0.00
% 18-74 HE Quals	-0.18	-0.83	1.00	-0.37	0.68	-0.86	0.04	-0.27	0.27	-0.39	0.24	-0.03	0.49	0.08	-0.16	-0.12	-0.15	0.36	0.09
	0.17	0.00		0.00	0.00	0.00	0.78	0.04	0.04	0.00	0.06	0.84	0.00	0.55	0.21	0.35	0.25	0.00	0.47
% LLTI	0.19	0.77	-0.67	0.68	-0.77	0.58	-0.10	0.22	-0.31	0.49	-0.27	0.00	-0.27	-0.03	0.05	0.05	0.12	-0.01	-0.41
	0.14	0.00	0.00	0.00	0.00	0.00	0.42	0.09	0.02	0.00	0.04	0.99	0.04	0.83	0.68	0.71	0.37	0.97	0.00
% No car	0.62	0.67	-0.37	1.00	-0.83	0.42	0.41	0.55	-0.79	0.68	0.28	0.45	0.27	-0.50	0.30	0.32	0.39	0.37	-0.80
	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.04	0.00	0.02	0.01	0.00	0.00	0.00
% Non Manual	-0.45	-0.87	0.68	-0.83	1.00	-0.77	-0.25	-0.45	0.56	-0.64	-0.05	-0.33	0.01	0.43	-0.38	-0.25	-0.33	-0.08	0.54
	0.00	0.00	0.00	0.00		0.00	0.05	0.00	0.00	0.00	0.71	0.01	0.94	0.00	0.00	0.05	0.01	0.53	0.00
% Manual	0.20	0.83	-0.86	0.42	-0.77	1.00	0.07	0.37	-0.33	0.48	-0.16	0.10	-0.39	-0.18	0.27	0.13	0.18	-0.30	-0.15
	0.13	0.00	0.00	0.00	0.00		0.61	0.00	0.01	0.00	0.21	0.43	0.00	0.16	0.04	0.32	0.17	0.02	0.25
% More than 1.5 ppr	0.53	0.20	0.04	0.41	-0.25	0.07	1.00	0.41	-0.57	0.27	0.78	0.67	0.23	-0.89	0.55	0.53	0.74	0.31	-0.39
	0.00	0.13	0.78	0.00	0.05	0.61		0.00	0.00	0.03	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.01	0.00
% Terraced	0.38	0.36	-0.27	0.55	-0.45	0.37	0.41	1.00	-0.79	0.37	0.24	0.11	0.16	-0.39	0.17	0.27	0.51	0.13	-0.40
	0.00	0.00	0.04	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.07	0.41	0.22	0.00	0.20	0.03	0.00	0.32	0.00
% BME	0.54	0.40	-0.10	0.50	-0.44	0.20	0.89	0.39	-0.56	0.34	0.65	0.75	0.19	-1.00	0.78	0.45	0.72	0.17	-0.37
	0.00	0.00	0.44	0.00	0.00	0.13	0.00	0.00	0.00	0.01	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.19	0.00
% Detached	-0.67	-0.47	0.27	-0.79	0.56	-0.33	-0.57	-0.79	1.00	-0.60	-0.48	-0.42	-0.33	0.56	-0.31	-0.37	-0.47	-0.26	0.63
	0.00	0.00	0.04	0.00	0.00	0.01	0.00	0.00		0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.04	0.00
% Social Housing	0.40	0.64	-0.39	0.68	-0.64	0.48	0.27	0.37	-0.60	1.00	0.24	0.41	0.22	-0.34	0.21	0.19	0.21	-0.07	-0.66
	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00		0.06	0.00	0.09	0.01	0.11	0.14	0.10	0.61	0.00
% Black African	0.57	-0.06	0.24	0.28	-0.05	-0.16	0.78	0.24	-0.48	0.24	1.00	0.61	0.56	-0.66	0.39	0.30	0.37	0.45	-0.42
	0.00	0.63	0.06	0.03	0.71	0.21	0.00	0.07	0.00	0.06		0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
% Black Caribbean	0.57	0.30	-0.03	0.45	-0.33	0.10	0.67	0.11	-0.42	0.41	0.61	1.00	0.25	-0.75	0.45	0.42	0.46	0.19	-0.45
	0.00	0.02	0.84	0.00	0.01	0.43	0.00	0.41	0.00	0.00	0.00		0.05	0.00	0.00	0.00	0.00	0.13	0.00

% Chinese	0.43	-0.29	0.49	0.27	0.01	-0.39	0.23	0.16	-0.33	0.22	0.56	0.25	1.00	-0.21	0.04	0.13	-0.06	0.50	-0.45
	0.00	0.02	0.00	0.04	0.94	0.00	0.07	0.22	0.01	0.09	0.00	0.05		0.10	0.75	0.31	0.66	0.00	0.00
% White	-0.54	-0.39	0.08	-0.50	0.43	-0.18	-0.89	-0.39	0.56	-0.34	-0.66	-0.75	-0.21	1.00	-0.78	-0.45	-0.72	-0.18	0.38
	0.00	0.00	0.55	0.00	0.00	0.16	0.00	0.00	0.00	0.01	0.00	0.00	0.10		0.00	0.00	0.00	0.16	0.00
% Indian	0.40	0.38	-0.16	0.30	-0.38	0.27	0.55	0.17	-0.31	0.21	0.39	0.45	0.04	-0.78	1.00	0.10	0.25	0.00	-0.18
	0.00	0.00	0.21	0.02	0.00	0.04	0.00	0.20	0.01	0.11	0.00	0.00	0.75	0.00		0.45	0.05	0.98	0.17
% Bangladeshi	0.31	0.25	-0.12	0.32	-0.25	0.13	0.53	0.27	-0.37	0.19	0.30	0.42	0.13	-0.45	0.10	1.00	0.42	0.06	-0.21
	0.02	0.05	0.35	0.01	0.05	0.32	0.00	0.03	0.00	0.14	0.02	0.00	0.31	0.00	0.45		0.00	0.62	0.11
% Pakistani	0.23	0.34	-0.15	0.39	-0.33	0.18	0.74	0.51	-0.47	0.21	0.37	0.46	-0.06	-0.72	0.25	0.42	1.00	0.08	-0.20

3.3 Variable Correlations: 2001, London cases only

	Density	% 18-74 No Quals	% 18-74 HE Quals	% No car	% Non Manual	% Manual	% More than 1.5 ppr	% Terraced	% Detached	% Social Housing	% Black African	% Black Caribbean	% Chinese	% White	% Indian	% Bangladeshi	% Pakistani	% privately rented	% Owned all
Density	1.00	-0.15	0.61	0.90	-0.02	-0.40	0.66	-0.49	-0.76	0.54	0.47	0.38	0.52	-0.26	-0.40	0.31	-0.21	0.62	-0.82
		0.44	0.00	0.00	0.91	0.03	0.00	0.01	0.00	0.00	0.01	0.04	0.00	0.16	0.03	0.09	0.27	0.00	0.00
% 18-74 No Quals	-0.15	1.00	-0.80	0.08	-0.92	0.87	0.26	0.54	-0.15	0.49	0.28	0.16	-0.31	-0.31	0.05	0.37	0.30	-0.59	-0.07
	0.44		0.00	0.67	0.00	0.00	0.16	0.00	0.42	0.01	0.14	0.40	0.09	0.09	0.79	0.04	0.11	0.00	0.72
% 18-74 HE Quals	0.61	-0.80	1.00	0.47	0.64	-0.90	0.23	-0.63	-0.36	0.00	0.06	0.06	0.57	0.02	-0.23	-0.01	-0.30	0.85	-0.48
	0.00	0.00		0.01	0.00	0.00	0.22	0.00	0.05	0.98	0.75	0.77	0.00	0.91	0.23	0.95	0.11	0.00	0.01
% LLTI	0.16	0.87	-0.53	0.38	-0.86	0.65	0.35	0.35	-0.40	0.65	0.39	0.21	-0.08	-0.30	-0.03	0.29	0.19	-0.34	-0.34
	0.39	0.00	0.00	0.04	0.00	0.00	0.06	0.06	0.03	0.00	0.03	0.26	0.67	0.10	0.86	0.11	0.31	0.07	0.07
% No car	0.90	0.08	0.47	1.00	-0.28	-0.20	0.74	-0.36	-0.84	0.73	0.62	0.44	0.53	-0.37	-0.43	0.41	-0.13	0.58	-0.93
	0.00	0.67	0.01		0.14	0.29	0.00	0.05	0.00	0.00	0.00	0.01	0.00	0.04	0.02	0.02	0.51	0.00	0.00
% Non Manual	-0.02	-0.92	0.64	-0.28	1.00	-0.80	-0.51	-0.40	0.26	-0.58	-0.51	-0.32	0.11	0.55	-0.15	-0.38	-0.37	0.38	0.26
	0.91	0.00	0.00	0.14		0.00	0.00	0.03	0.16	0.00	0.00	0.09	0.56	0.00	0.44	0.04	0.04	0.04	0.17
% Manual	-0.40	0.87	-0.90	-0.20	-0.80	1.00	-0.03	0.65	0.07	0.28	0.20	0.14	-0.51	-0.18	0.19	0.01	0.34	-0.73	0.21
	0.03	0.00	0.00	0.29	0.00		0.89	0.00	0.73	0.13	0.29	0.45	0.00	0.34	0.31	0.94	0.07	0.00	0.27
% More than 1.5 ppr	0.66	0.26	0.23	0.74	-0.51	-0.03	1.00	-0.27	-0.57	0.54	0.58	0.43	0.43	-0.78	0.05	0.66	0.22	0.45	-0.73
	0.00	0.16	0.22	0.00	0.00	0.89		0.15	0.00	0.00	0.00	0.02	0.02	0.00	0.81	0.00	0.25	0.01	0.00
% Terraced	-0.49	0.54	-0.63	-0.36	-0.40	0.65	-0.27	1.00	0.07	-0.04	0.02	0.09	-0.69	0.01	0.11	-0.22	0.52	-0.54	0.42
	0.01	0.00	0.00	0.05	0.03	0.00	0.15		0.72	0.82	0.92	0.63	0.00	0.97	0.57	0.25	0.00	0.00	0.02
%	0.26	0.31	-0.02	0.37	-0.55	0.18	0.78	-0.01	-0.26	0.32	0.58	0.59	0.20	-1.00	0.52	0.40	0.56	0.19	-0.35

BME																			
	0.16	0.10	0.91	0.04	0.00	0.34	0.00	0.96	0.17	0.09	0.00	0.00	0.28	0.00	0.00	0.03	0.00	0.32	0.06
% Detached	-0.76	-0.15	-0.36	-0.84	0.26	0.07	-0.57	0.07	1.00	-0.62	-0.48	-0.36	-0.29	0.26	0.37	-0.27	0.01	-0.44	0.74
	0.00	0.42	0.05	0.00	0.16	0.73	0.00	0.72		0.00	0.01	0.05	0.13	0.17	0.04	0.14	0.97	0.02	0.00
% Social Housing	0.54	0.49	0.00	0.73	-0.58	0.28	0.54	-0.04	-0.62	1.00	0.67	0.38	0.30	-0.32	-0.37	0.42	-0.15	-0.02	-0.72
	0.00	0.01	0.98	0.00	0.00	0.13	0.00	0.82	0.00		0.00	0.04	0.11	0.09	0.05	0.02	0.43	0.90	0.00
% Black African	0.47	0.28	0.06	0.62	-0.51	0.20	0.58	0.02	-0.48	0.67	1.00	0.77	0.23	-0.58	-0.12	0.04	0.12	0.11	-0.57
	0.01	0.14	0.75	0.00	0.00	0.29	0.00	0.92	0.01	0.00		0.00	0.23	0.00	0.53	0.84	0.52	0.57	0.00
% Black Caribbean	0.38	0.16	0.06	0.44	-0.32	0.14	0.43	0.09	-0.36	0.38	0.77	1.00	-0.01	-0.59	-0.04	-0.07	0.18	0.09	-0.28
	0.04	0.40	0.77	0.01	0.09	0.45	0.02	0.63	0.05	0.04	0.00		0.95	0.00	0.81	0.72	0.35	0.63	0.13
% Chinese	0.52	-0.31	0.57	0.53	0.11	-0.51	0.43	-0.69	-0.29	0.30	0.23	-0.01	1.00	-0.20	-0.15	0.32	-0.33	0.53	-0.52
	0.00	0.09	0.00	0.00	0.56	0.00	0.02	0.00	0.13	0.11	0.23	0.95		0.28	0.43	0.08	0.07	0.00	0.00
% White	-0.26	-0.31	0.02	-0.37	0.55	-0.18	-0.78	0.01	0.26	-0.32	-0.58	-0.59	-0.20	1.00	-0.52	-0.40	-0.56	-0.19	0.35
	0.16	0.09	0.91	0.04	0.00	0.34	0.00	0.97	0.17	0.09	0.00	0.00	0.28		0.00	0.03	0.00	0.32	0.06
% Indian	-0.40	0.05	-0.23	-0.43	-0.15	0.19	0.05	0.11	0.37	-0.37	-0.12	-0.04	-0.15	-0.52	1.00	-0.13	0.54	-0.13	0.34
	0.03	0.79	0.23	0.02	0.44	0.31	0.81	0.57	0.04	0.05	0.53	0.81	0.43	0.00		0.48	0.00	0.49	0.06
% Bangladeshi	0.31	0.37	-0.01	0.41	-0.38	0.01	0.66	-0.22	-0.27	0.42	0.04	-0.07	0.32	-0.40	-0.13	1.00	0.00	0.13	-0.43
	0.09	0.04	0.95	0.02	0.04	0.94	0.00	0.25	0.14	0.02	0.84	0.72	0.08	0.03	0.48		0.99	0.49	0.02
% Pakistani	-0.21	0.30	-0.30	-0.13	-0.37	0.34	0.22	0.52	0.01	-0.15	0.12	0.18	-0.33	-0.56	0.54	0.00	1.00	0.01	0.12
	0.27	0.11	0.11	0.51	0.04	0.07	0.25	0.00	0.97	0.43	0.52	0.35	0.07	0.00	0.00	0.99		0.96	0.52
% privately	0.62	-0.59	0.85	0.58	0.38	-0.73	0.45	-0.54	-0.44	-0.02	0.11	0.09	0.53	-0.19	-0.13	0.13	0.01	1.00	-0.60

rented																			
	0.00	0.00	0.00	0.00	0.04	0.00	0.01	0.00	0.02	0.90	0.57	0.63	0.00	0.32	0.49	0.49	0.96		0.00
% Owned all	-0.82	-0.07	-0.48	-0.93	0.26	0.21	-0.73	0.42	0.74	-0.72	-0.57	-0.28	-0.52	0.35	0.34	-0.43	0.12	-0.60	1.00
	0.00	0.72	0.01	0.00	0.17	0.27	0.00	0.02	0.00	0.00	0.00	0.13	0.00	0.06	0.06	0.02	0.52	0.00	
Density	1.00	-0.15	0.61	0.90	-0.02	-0.40	0.66	-0.49	-0.76	0.54	0.47	0.38	0.52	-0.26	-0.40	0.31	-0.21	0.62	-0.82
		0.44	0.00	0.00	0.91	0.03	0.00	0.01	0.00	0.00	0.01	0.04	0.00	0.16	0.03	0.09	0.27	0.00	0.00

Appendix 4 **Variable Correlations 1991**

4.1 **Variable Correlations: 1991, All cases in sample**

	No quals	HE quals	LLTI	No car	Manual	Non manual	Overcrowding	Terraced	BME	Social housing	African	CAribbean	Chinese	White	Indian	Bangladeshi	Pakistani	Density
No quals	1.00	-0.97	0.37	-0.01	-0.85	0.90	-0.35	0.42	-0.14	0.11	-0.33	-0.21	-0.52	0.14	0.10	0.02	0.24	-0.36
		0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.20	0.28	0.00	0.04	0.00	0.20	0.36	0.86	0.02	0.00
HE quals	-0.97	1.00	-0.23	0.20	0.76	-0.83	0.50	-0.35	0.29	0.07	0.46	0.35	0.66	-0.29	-0.02	0.07	-0.19	0.53
	0.00		0.03	0.05	0.00	0.00	0.00	0.00	0.01	0.51	0.00	0.00	0.00	0.01	0.84	0.54	0.07	0.00
LLTI	0.37	-0.23	1.00	0.78	-0.60	0.50	0.24	0.27	0.23	0.65	0.28	0.27	0.14	-0.23	-0.01	0.19	0.21	0.33
	0.00	0.03		0.00	0.00	0.00	0.02	0.01	0.03	0.00	0.01	0.01	0.20	0.03	0.90	0.07	0.04	0.00
No car	-0.01	0.20	0.78	1.00	-0.34	0.16	0.69	0.19	0.63	0.83	0.66	0.63	0.60	-0.63	0.15	0.38	0.23	0.78
	0.92	0.05	0.00		0.00	0.14	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.03	0.00
Manual	-0.85	0.76	-0.60	-0.34	1.00	-0.95	0.07	-0.45	-0.08	-0.43	0.10	-0.01	0.31	0.08	-0.12	-0.18	-0.31	0.08
	0.00	0.00	0.00	0.00		0.00	0.49	0.00	0.47	0.00	0.33	0.96	0.00	0.47	0.24	0.08	0.00	0.43
Non manual	0.90	-0.83	0.50	0.16	-0.95	1.00	-0.26	0.45	-0.08	0.26	-0.29	-0.16	-0.47	0.08	0.10	0.07	0.30	-0.28
	0.00	0.00	0.00	0.14	0.00		0.01	0.00	0.46	0.01	0.01	0.12	0.00	0.46	0.34	0.53	0.00	0.01
Overcrowding	-0.35	0.50	0.24	0.69	0.07	-0.26	1.00	-0.10	0.77	0.58	0.72	0.66	0.77	-0.77	0.21	0.66	0.16	0.81
	0.00	0.00	0.02	0.00	0.49	0.01		0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.13	0.00
Terraced	0.42	-0.35	0.27	0.19	-0.45	0.45	-0.10	1.00	0.16	0.13	-0.04	0.05	-0.11	-0.16	0.20	-0.11	0.50	-0.04
	0.00	0.00	0.01	0.06	0.00	0.00	0.33		0.13	0.24	0.73	0.63	0.32	0.13	0.06	0.31	0.00	0.72
BME	-0.14	0.29	0.23	0.63	-0.08	-0.08	0.77	0.16	1.00	0.49	0.74	0.80	0.66	-1.00	0.69	0.39	0.42	0.70
	0.20	0.01	0.03	0.00	0.47	0.46	0.00	0.13		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Social housing	0.11	0.07	0.65	0.83	-0.43	0.26	0.58	0.13	0.49	1.00	0.59	0.55	0.53	-0.49	0.04	0.45	0.06	0.63
	0.28	0.51	0.00	0.00	0.00	0.01	0.00	0.24	0.00		0.00	0.00	0.00	0.00	0.68	0.00	0.57	0.00
African	-0.33	0.46	0.28	0.66	0.10	-0.29	0.72	-0.04	0.74	0.59	1.00	0.89	0.78	-0.74	0.18	0.24	0.03	0.78
	0.00	0.00	0.01	0.00	0.33	0.01	0.00	0.73	0.00	0.00		0.00	0.00	0.00	0.08	0.02	0.81	0.00
CAribbean	-0.21	0.35	0.27	0.63	-0.01	-0.16	0.66	0.05	0.80	0.55	0.89	1.00	0.64	-0.80	0.30	0.18	0.16	0.74
	0.04	0.00	0.01	0.00	0.96	0.12	0.00	0.63	0.00	0.00	0.00		0.00	0.00	0.00	0.09	0.13	0.00

Chinese	-0.52	0.66	0.14	0.60	0.31	-0.47	0.77	-0.11	0.66	0.53	0.78	0.64	1.00	-0.66	0.20	0.32	-0.07	0.83
	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.00		0.00	0.06	0.00	0.53	0.00
White	0.14	-0.29	-0.23	-0.63	0.08	0.08	-0.77	-0.16	-1.00	-0.49	-0.74	-0.80	-0.66	1.00	-0.69	-0.39	-0.42	-0.70
	0.20	0.01	0.03	0.00	0.47	0.46	0.00	0.13	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
Indian	0.10	-0.02	-0.01	0.15	-0.12	0.10	0.21	0.20	0.69	0.04	0.18	0.30	0.20	-0.69	1.00	0.00	0.29	0.20
	0.36	0.84	0.90	0.16	0.24	0.34	0.04	0.06	0.00	0.68	0.08	0.00	0.06	0.00		0.97	0.00	0.05
Bangladeshi	0.02	0.07	0.19	0.38	-0.18	0.07	0.66	-0.11	0.39	0.45	0.24	0.18	0.32	-0.39	0.00	1.00	0.05	0.34
	0.86	0.54	0.07	0.00	0.08	0.53	0.00	0.31	0.00	0.00	0.02	0.09	0.00	0.00	0.97		0.64	0.00
Pakistani	0.24	-0.19	0.21	0.23	-0.31	0.30	0.16	0.50	0.42	0.06	0.03	0.16	-0.07	-0.42	0.29	0.05	1.00	0.03
	0.02	0.07	0.04	0.03	0.00	0.00	0.13	0.00	0.00	0.57	0.81	0.13	0.53	0.00	0.00	0.64		0.81
Density	-0.36	0.53	0.33	0.78	0.08	-0.28	0.81	-0.04	0.70	0.63	0.78	0.74	0.83	-0.70	0.20	0.34	0.03	1.00
	0.00	0.00	0.00	0.00	0.43	0.01	0.00	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.81	

4.2   Variable Correlations: 1991, cases outside London only

	No quals	HE quals	LLTI	No car	Manual	Non manual	Overcrowding	Terraced	BME	Social housing	African	Caribbean	Chinese	White	Indian	Bangladeshi	Pakistani	Density
No quals	1.00	-0.96	0.59	0.55	-0.85	0.84	0.00	0.39	0.28	0.51	-0.17	0.17	-0.16	-0.28	0.30	0.14	0.23	0.41
		0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.03	0.00	0.19	0.20	0.22	0.03	0.02	0.29	0.07	0.00
HE quals	-0.96	1.00	-0.51	-0.40	0.74	-0.73	0.12	-0.29	-0.15	-0.35	0.34	-0.02	0.31	0.15	-0.20	-0.07	-0.17	-0.26
	0.00		0.00	0.00	0.00	0.00	0.35	0.02	0.26	0.01	0.01	0.89	0.01	0.26	0.12	0.59	0.19	0.04
LLTI	0.59	-0.51	1.00	0.86	-0.67	0.66	0.05	0.42	0.19	0.60	0.09	0.13	-0.03	-0.19	0.10	0.07	0.25	0.36
	0.00	0.00		0.00	0.00	0.00	0.72	0.00	0.15	0.00	0.50	0.34	0.83	0.15	0.43	0.59	0.05	0.00
No car	0.55	-0.40	0.86	1.00	-0.73	0.68	0.32	0.59	0.49	0.75	0.37	0.42	0.22	-0.49	0.32	0.30	0.40	0.62
	0.00	0.00	0.00		0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.01	0.02	0.00	0.00
Manual	-0.85	0.74	-0.67	-0.73	1.00	-0.95	-0.16	-0.55	-0.46	-0.65	-0.09	-0.36	0.00	0.46	-0.40	-0.21	-0.34	-0.54
	0.00	0.00	0.00	0.00		0.00	0.22	0.00	0.00	0.00	0.50	0.00	0.99	0.00	0.00	0.10	0.01	0.00
Non manual	0.84	-0.73	0.66	0.68	-0.95	1.00	0.15	0.50	0.43	0.62	0.03	0.31	-0.04	-0.43	0.40	0.19	0.33	0.44
	0.00	0.00	0.00	0.00	0.00		0.25	0.00	0.00	0.00	0.82	0.01	0.78	0.00	0.00	0.13	0.01	0.00
Overcrowding	0.00	0.12	0.05	0.32	-0.16	0.15	1.00	0.42	0.63	0.23	0.57	0.49	0.39	-0.63	0.33	0.43	0.63	0.52
	0.98	0.35	0.72	0.01	0.22	0.25		0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Terraced	0.39	-0.29	0.42	0.59	-0.55	0.50	0.42	1.00	0.42	0.50	0.26	0.18	0.32	-0.42	0.21	0.26	0.52	0.38
	0.00	0.02	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.04	0.17	0.01	0.00	0.10	0.04	0.00	0.00
BME	0.28	-0.15	0.19	0.49	-0.46	0.43	0.63	0.42	1.00	0.39	0.50	0.75	0.17	-1.00	0.83	0.44	0.70	0.54
	0.03	0.26	0.15	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00
Social housing	0.51	-0.35	0.60	0.75	-0.65	0.62	0.23	0.50	0.39	1.00	0.33	0.44	0.43	-0.39	0.29	0.19	0.21	0.48
	0.00	0.01	0.00	0.00	0.00	0.00	0.08	0.00	0.00		0.01	0.00	0.00	0.00	0.02	0.15	0.11	0.00
African	-0.17	0.34	0.09	0.37	-0.09	0.03	0.57	0.26	0.50	0.33	1.00	0.59	0.66	-0.50	0.22	0.25	0.33	0.49
	0.19	0.01	0.50	0.00	0.50	0.82	0.00	0.04	0.00	0.01		0.00	0.00	0.00	0.09	0.05	0.01	0.00
CAribbean	0.17	-0.02	0.13	0.42	-0.36	0.31	0.49	0.18	0.75	0.44	0.59	1.00	0.26	-0.75	0.48	0.43	0.45	0.60
	0.20	0.89	0.34	0.00	0.00	0.01	0.00	0.17	0.00	0.00	0.00		0.05	0.00	0.00	0.00	0.00	0.00
Chine	-0.16	0.31	-0.03	0.22	0.00	-0.04	0.39	0.32	0.17	0.43	0.66	0.26	1.00	-0.17	-0.01	0.17	0.04	0.42

se																		
	0.22	0.01	0.83	0.09	0.99	0.78	0.00	0.01	0.20	0.00	0.00	0.05		0.20	0.94	0.19	0.76	0.00
White	-0.28	0.15	-0.19	-0.49	0.46	-0.43	-0.63	-0.42	-1.00	-0.39	-0.50	-0.75	-0.17	1.00	-0.83	-0.44	-0.70	-0.54
	0.03	0.26	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20		0.00	0.00	0.00	0.00
Indian	0.30	-0.20	0.10	0.32	-0.40	0.40	0.33	0.21	0.83	0.29	0.22	0.48	-0.01	-0.83	1.00	0.15	0.27	0.41
	0.02	0.12	0.43	0.01	0.00	0.00	0.01	0.10	0.00	0.02	0.09	0.00	0.94	0.00		0.25	0.04	0.00
Bangladeshi	0.14	-0.07	0.07	0.30	-0.21	0.19	0.43	0.26	0.44	0.19	0.25	0.43	0.17	-0.44	0.15	1.00	0.42	0.33
	0.29	0.59	0.59	0.02	0.10	0.13	0.00	0.04	0.00	0.15	0.05	0.00	0.19	0.00	0.25		0.00	0.01
Pakistani	0.23	-0.17	0.25	0.40	-0.34	0.33	0.63	0.52	0.70	0.21	0.33	0.45	0.04	-0.70	0.27	0.42	1.00	0.25
	0.07	0.19	0.05	0.00	0.01	0.01	0.00	0.00	0.00	0.11	0.01	0.00	0.76	0.00	0.04	0.00		0.05
Density	0.41	-0.26	0.36	0.62	-0.54	0.44	0.52	0.38	0.54	0.48	0.49	0.60	0.42	-0.54	0.41	0.33	0.25	1.00
	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	

4.3 Variable Correlations: 1991, cases in London only

	No quals	HE quals	LLTI	No car	Manual	Non manual	Overcrowding	Terraced	BME	Social housing	African	CAribbean	Chinese	White	Indian	Bangladeshi	Pakistani	Density
No quals	1.00	-0.98	0.18	-0.13	-0.83	0.93	-0.19	0.57	0.12	0.13	-0.05	0.02	-0.45	-0.12	0.21	0.17	0.33	-0.39
		0.00	0.33	0.49	0.00	0.00	0.31	0.00	0.52	0.48	0.81	0.90	0.01	0.52	0.26	0.36	0.08	0.03
HE quals	-0.98	1.00	-0.03	0.28	0.73	-0.87	0.30	-0.57	-0.05	0.01	0.15	0.05	0.53	0.05	-0.25	-0.10	-0.31	0.52
	0.00		0.88	0.14	0.00	0.00	0.10	0.00	0.80	0.96	0.44	0.77	0.00	0.80	0.18	0.61	0.09	0.00
LLTI	0.18	-0.03	1.00	0.91	-0.63	0.43	0.59	-0.05	0.45	0.92	0.72	0.60	0.47	-0.45	-0.28	0.36	0.07	0.69
	0.33	0.88		0.00	0.00	0.02	0.00	0.78	0.01	0.00	0.00	0.00	0.01	0.01	0.14	0.05	0.72	0.00
No car	-0.13	0.28	0.91	1.00	-0.40	0.14	0.80	-0.31	0.51	0.88	0.77	0.62	0.68	-0.51	-0.32	0.42	0.01	0.88
	0.49	0.14	0.00		0.03	0.47	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.02	0.94	0.00
Manual	-0.83	0.73	-0.63	-0.40	1.00	-0.95	-0.27	-0.39	-0.40	-0.61	-0.35	-0.32	0.11	0.40	-0.06	-0.44	-0.30	-0.08
	0.00	0.00	0.00	0.03		0.00	0.15	0.03	0.03	0.00	0.06	0.08	0.58	0.03	0.77	0.01	0.11	0.68
Non manual	0.93	-0.87	0.43	0.14	-0.95	1.00	0.02	0.55	0.23	0.39	0.11	0.14	-0.34	-0.23	0.12	0.31	0.32	-0.17
	0.00	0.00	0.02	0.47	0.00		0.92	0.00	0.23	0.03	0.56	0.46	0.07	0.23	0.52	0.10	0.09	0.38
Overcrowding	-0.19	0.30	0.59	0.80	-0.27	0.02	1.00	-0.48	0.64	0.64	0.52	0.44	0.65	-0.64	-0.09	0.72	0.05	0.73
	0.31	0.10	0.00	0.00	0.15	0.92		0.01	0.00	0.00	0.00	0.02	0.00	0.00	0.63	0.00	0.80	0.00
Terraced	0.57	-0.57	-0.05	-0.31	-0.39	0.55	-0.48	1.00	-0.05	-0.24	-0.14	0.00	-0.66	0.05	0.20	-0.24	0.50	-0.48
	0.00	0.00	0.78	0.10	0.03	0.00	0.01		0.80	0.19	0.47	0.99	0.00	0.80	0.30	0.20	0.00	0.01
BME	0.12	-0.05	0.45	0.51	-0.40	0.23	0.64	-0.05	1.00	0.37	0.66	0.69	0.42	-1.00	0.54	0.35	0.54	0.36
	0.52	0.80	0.01	0.00	0.03	0.23	0.00	0.80		0.05	0.00	0.00	0.02	0.00	0.00	0.06	0.00	0.05
BMEID	0.47	-0.48	-0.10	-0.25	-0.30	0.42	-0.20	0.50	-0.03	-0.18	-0.31	-0.17	-0.37	0.03	0.23	0.02	0.25	-0.33
	0.01	0.01	0.59	0.17	0.10	0.02	0.30	0.00	0.87	0.34	0.10	0.38	0.04	0.87	0.23	0.93	0.19	0.07
Social housing	0.13	0.01	0.92	0.88	-0.61	0.39	0.64	-0.24	0.37	1.00	0.66	0.49	0.50	-0.37	-0.36	0.50	-0.13	0.69
	0.48	0.96	0.00	0.00	0.00	0.03	0.00	0.19	0.05		0.00	0.01	0.00	0.05	0.05	0.00	0.51	0.00
African	-0.05	0.15	0.72	0.77	-0.35	0.11	0.52	-0.14	0.66	0.66	1.00	0.88	0.57	-0.66	-0.08	0.10	0.15	0.63
	0.81	0.44	0.00	0.00	0.06	0.56	0.00	0.47	0.00	0.00		0.00	0.00	0.00	0.67	0.62	0.44	0.00
CAribbean	0.02	0.05	0.60	0.62	-0.32	0.14	0.44	0.00	0.69	0.49	0.88	1.00	0.36	-0.69	0.01	0.01	0.22	0.53
	0.90	0.77	0.00	0.00	0.08	0.46	0.02	0.99	0.00	0.01	0.00		0.05	0.00	0.95	0.96	0.25	0.00

Chinese	-0.45	0.53	0.47	0.68	0.11	-0.34	0.65	-0.66	0.42	0.50	0.57	0.36	1.00	-0.42	-0.11	0.25	-0.21	0.66
	0.01	0.00	0.01	0.00	0.58	0.07	0.00	0.00	0.02	0.00	0.00	0.05		0.02	0.57	0.19	0.28	0.00
White	-0.12	0.05	-0.45	-0.51	0.40	-0.23	-0.64	0.05	-1.00	-0.37	-0.66	-0.69	-0.42	1.00	-0.54	-0.35	-0.54	-0.36
	0.52	0.80	0.01	0.00	0.03	0.23	0.00	0.80	0.00	0.05	0.00	0.00	0.02		0.00	0.06	0.00	0.05
Indian	0.21	-0.25	-0.28	-0.32	-0.06	0.12	-0.09	0.20	0.54	-0.36	-0.08	0.01	-0.11	-0.54	1.00	-0.15	0.54	-0.36
	0.26	0.18	0.14	0.08	0.77	0.52	0.63	0.30	0.00	0.05	0.67	0.95	0.57	0.00		0.43	0.00	0.05
Bangladeshi	0.17	-0.10	0.36	0.42	-0.44	0.31	0.72	-0.24	0.35	0.50	0.10	0.01	0.25	-0.35	-0.15	1.00	-0.01	0.26
	0.36	0.61	0.05	0.02	0.01	0.10	0.00	0.20	0.06	0.00	0.62	0.96	0.19	0.06	0.43		0.95	0.17
Pakistani	0.33	-0.31	0.07	0.01	-0.30	0.32	0.05	0.50	0.54	-0.13	0.15	0.22	-0.21	-0.54	0.54	-0.01	1.00	-0.12
	0.08	0.09	0.72	0.94	0.11	0.09	0.80	0.00	0.00	0.51	0.44	0.25	0.28	0.00	0.00	0.95		0.54
Density	-0.39	0.52	0.69	0.88	-0.08	-0.17	0.73	-0.48	0.36	0.69	0.63	0.53	0.66	-0.36	-0.36	0.26	-0.12	1.00
	0.03	0.00	0.00	0.00	0.68	0.38	0.00	0.01	0.05	0.00	0.00	0.00	0.00	0.05	0.05	0.17	0.54	

Appendix 5　　　　　　　　**Alternative measures of segregation**

Index	Dimension Measured	Score
Isolation Index (*P*)	The degree of contact between a member of one ethnic group and members of the same group	Score between 0.0 (No segregation) and 1.0 (total segregation)
Concentration Index (*C*)	The space (relative) that one group occupies in a particular area. high concentration is said to occur is the group occupies a small share of the area.	
Centralization	The closeness of a group to the centre of a metropolitan area. Originating in the USA context, this is less relevant in the UK due to differences in the geographical arrangements of urban areas.	Score between -1.0 and +1.0 where negative values indicate tendency to live away from the centre.
Index of Spatial Proximity (SP)	The tendency of areal units (SOAs) containing minority group members to cluster in adjoining areas.	Equals 1.0 where no clustering exists and >1.0 when clustering exists.
Gini Index		

Massey and Denton (1998)

Appendix 6   Variable Effect Sizes
6.1   Variable Effect Sizes for clusters of all cases

Variable	1991	Rank	2001	Rank
Density	-0.59	10	**-0.65**	**1**
Overcrowding	-0.62	**5**	**-0.65**	**2**
African	-0.65	**2**	**-0.62**	**3**
No car	-0.18	18	**-0.62**	**4**
Caribbean	-0.60	8	**-0.59**	**5**
HE quals	-0.65	3	-0.57	6
Private rent	-0.16	19	-0.57	7
White	-0.61	7	-0.56	8
BME	-0.15	20	-0.56	9
Chinese	-0.62	**4**	-0.55	10
Owned	-0.66	**1**	-0.55	11
Bangladeshi	-0.37	14	-0.46	12
Social housing	-0.30	15	-0.38	13
No quals	-0.62	6	-0.31	14
Non manual	-0.50	11	-0.26	15
LTTI	-0.22	17	-0.23	16
BME IoD	-0.24	16	-0.19	17
Indian	-0.48	12	-0.19	18
Terraced	-0.59	9	-0.17	19
Pakistani	-0.48	13	-0.15	20

6.2 Variable Effect Sizes for clusters of cases outside of London only

Variable	1991	Rank	2001	Rank
No car	-0.7858	1	-0.63609	5
Density	-0.7037	2	-0.48257	14
Non manual	-0.6908	3	-0.60818	6
Social housing	-0.6742	4	-0.41279	15
Terraced	-0.6631	5	-0.53635	9
No quals	-0.615	6	-0.48859	13
Pakistani	-0.598	7	-0.73224	4
BME	-0.5883	8	-0.76067	2
White	-0.588	9	-0.76476	1
LLTI	-0.5846	10	-0.29717	17
Overcrowding	-0.5755	11	-0.74005	3
HE quals	-0.5689	12	-0.25326	18
Owned	-0.5578	13	-0.51048	11
Bangladeshi	-0.496	14	-0.49704	12
African	-0.4423	15	-0.35517	16
Caribbean	-0.4305	16	-0.51368	10
Indian	-0.3824	17	-0.54749	7
BMEID	-0.3684	18	-0.54441	8
Chinese	-0.2847	19	-0.03495	20
Private rent	-0.128	20	-0.21139	19

Appendix 7   Table of dichotomous IoD scores for the subsample and their inter-ethnic scores

7.1   All cases

2001			1991		
White	Bangladeshi	46.64	White	Bangladeshi	55.04
White	Pakistani	45.8	White	Pakistani	51.18
Bangladeshi	Chinese	44.37	Bangladeshi	Chinese	49.57
Bangladeshi	Other Black	41.28	Bangladeshi	Other Black	48.94

7.2   Cases outside of London

2001			1991		
White	Bangladeshi	57.39	White	Bangladeshi	66.76
Bangladeshi	Chinese	54.72	White	Pakistani	60.01
White	Pakistani	54.32	Bangladeshi	Chinese	59.43
Bangladeshi	Other Black	52.75	Indian	Bangladeshi	58.52
Pakistani	Chinese	51.25	Bangladeshi	Other Black	57.87
Pakistani	Other Black	49.39	Bangladeshi	African	57.23

7.3   Cases in London

2001			1991		
White	Pakistani	32.42	White	Pakistani	32.67
Indian	Other Asian	31.36	White	Pakistani	32.67
Indian	African	31.06	Bangladeshi	Other Black	32.67
White	Bangladeshi	29.74	Bangladeshi	Caribbean	32.67
White	Indian	28.08	Pakistani	Bangladeshi	32.67
Pakistani	African	28.85	Indian	Bangladeshi	32.67
Caribbean	Chinese	28.32	Pakistani	Caribbean	32.67
Bangladeshi	Chinese	28.12			

Appendix 8   Participant Consent Form

Exploring Trajectories of Ethnic Residential Segregation in English Districts
Consent Form for interview participants

Thank you for agreeing to participate in this study. This form provides a description of your involvement and rights as a participant and asks you to agree to participate in the study. This project, including all interviews, is being conducted by Katherine Farley at Durham University.

I understand and agree to the interview being audio-recorded and transcribed by the researcher.

I understand that my recording will only be used for the purposes outlined in the summary sheet provided and will not be used for any other purpose. I understand that on request a copy of my interview transcript will be provided, free of charge.

I understand that all data will be treated as personal under the 1998 Data Protection Act and will be stored securely.

I have received a summary of the study's aims. I have been given the opportunity to ask questions about the study and I have had my questions answered satisfactorily.

I understand that my participation in this research is voluntary and that I may withdraw from the study at any time without having to give an explanation. If I do withdraw I shall inform the researcher.

I understand that if requested the researcher will ensure my anonymity and that further permission will be requested at a later date for the use of quotations.

I have read and understand this consent form and I consent to taking part in this study.

Please circle as appropriate:

I would like my name acknowledged in the report (without linking it to content or quotation)
Yes / No

If you consent to being interviewed and to any data gathered being processed as outlined

above, please print and sign your name, and date the form, in the spaces provided.

Name (printed) _____

Signature _____ Date_____

Feel free to contact me if you have any further questions.

Katherine Farley, Sociology Department, Durham University
Email: k.l.farley@durham.ac.uk
Telephone: 07989 571516 or 0191 3849175

Appendix 9   Project summary sent to invited participants at time of invitation.

Exploring the causes of the residential segregation of ethnic groups among English districts: project summary

This project aims to understand the causes of the segregation of ethnic communities in England. It is jointly funded by the Economic and Social Research Council and the Department for Communities and Local Government (DCLG). It is a three year project comprising two phases: the first a statistical exploration of the national picture and trends over time, the second phase being a study of the housing, education, social and policy backgrounds and the actual experiences of a small sample of local authorities.

The project is situated in the aftermath of the 2001 street disturbances in the northern towns of Bradford, Oldham and Burnley. The subsequent Cantle (2002) report highlighted how unrest could be an unintended consequence of areas that are geographically divided by ethnic or social composition. It has been suggested that this was also associated with a perception of winners and losers in how resources are geographically targeted. The promotion of community cohesion as a means of elevating integration remains a key element of DCLG work. It is hoped that the study will contribute to understandings of the 'drivers' of residential segregation across ethnic and social groups.

Local Authority Case Studies

Three authorities have been selected for further study. This aims to explore the causes of segregation with particular examination of the relationship with deprivation and minority communities. It aims to understand why some areas with larger minority populations remain integrated whilst others experience significantly higher rates of segregation. Interviews with practitioners and councillors will provide an invaluable local perspective from those people with a deeper understanding of the nature of their authority. They will offer the expertise and personal experience not available from policy documents or statistical study. The information collected in interviews will be used alongside a study of the housing, education, employment and settlement backgrounds of the area.

Dissemination and Confidentiality

The work will be disseminated through publication in academic and practitioner journals, a report for the DCLG and a PhD thesis together with conference presentations for academic and policy audiences. Participants are assured of anonymity throughout the process and are free to withdraw from the project at any time. Interviewees will be asked to sign a consent form informing them of their right to confidentiality. All data will be held in accordance with the 1998 Data Protection Act. The interviewee's permission will be obtained before any information they have provided is published.

If you have any questions about the project or the research process please contact Kate Farley through the contact details overleaf.

Researcher contact details

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Appendix 10   Interview Topic Guide

Experiences of residential segregation in authority:

- Is there much knowledge about residential patterns in the authority?
- What is understood by residential segregation in the authority?
- Is there a perception that residential segregation or integration exists in the authority?
- Along what lines is any segregation? Ethnic? Age? Occupation? Affluence?
- How extensive is the segregation?
- Which groups are most strongly affected?
- With what is residential segregation associated?/Nature of areas with more/less segregation: Affluence/deprivation level of authority?
- Are particular housing types and tenures associated with segregation or integration?
- Have there been observed changes to residential patterns and segregation over time?
- Use of maps to identify perceived boundaries? Geographical – major roads?

Causation:

- What contributes to segregation in the authority?

- Is there a relationship with the affluence of an area?
- Relationship with the proportions of different ethnic groups in an area?
- Are there cultural or social factors involved?
- Settlement patterns?
- Linked to the availability of services and amenities? Health, religious, educational?
- Housing patterns and availability- tenure and housing types?
- Industry patterns – affect housing patterns or availability?
- Self-segregation playing a part? White flight? Middle class flight? Suburbanisation?
- Is there any relationship with local policy? Housing policy? Have there been deliberate attempts to shape residential patterns? For educational reasons?

- Why has the authority not experienced residential segregation (along ethnic lines)?

Effect:

- Is the experience of segregation or integration in the authority considered problematic in any way?
- Is it considered beneficial?
- Are there any observed effects on services? For example in terms of housing, education or health services?
- What are the effects, if any, on communities or neighbourhoods? Community or social cohesion? Crime?
- Housing markets?

Manipulation of residential patterns:

- Are there any policy attempts to actively influence segregation in the authority?
- Are these formal or informal?
- In what terms? – housing based? Through social housing, education?
- In terms of informal influences? Does it ever form part of other policy?
- Is there any relationship with equality policy in the authority?
- What about the role of community cohesion policy and implementation?
- How 'successful' have such moves been so far?

Appendix 11

The precise nature of each cluster and the degree to which their cases share characteristics is more complex. Although the mean segregation of cluster 1 is lower than that of cluster 2, the difference is not particularly great. The former value was only 21.26 and the latter 29.21, suggesting that although cases in each cluster shared a number of characteristics they did not necessarily share segregation scores. The variables that exhibited greater difference in mean score between the clusters are shown in Table A1, which indicates the mean scores for each variable within each cluster. The greatest difference in scores was observed for the variables of population density, household overcrowding, percentage of African residents and the proportion of households with no car.

Segregation level in the two clusters differs, but is not an important factor in their formation. The key variables relate to BME representation, deprivation and high density, all of which are found in larger proportions in the first cluster.

Table A1   Mean values for variables in clusters of all cases in 2001

Variable	Cluster 1	Cluster 2	Full Sample Mean
BME ID	**21.26**	**29.21**	**27.82**
Density	85.85	21.03	32.43
No quals	22.94	28.62	27.62
HE quals	38.17	20.58	23.67
LTTI	15.69	17.27	16.99
No car	48.19	25.98	29.88
Non manual	49.86	44.44	45.39
Overcrowding	3.05	0.58	1.01
Terraced	22.62	27.44	26.59
Social housing	22.87	12.81	14.58
African	7.49	0.86	2.03
Caribbean	6.73	1.16	2.14
Chinese	1.34	0.52	0.66
White	64.49	88.16	84.00
Indian	4.83	3.67	3.88
Bangladeshi	4.03	0.50	1.12
Pakistani	2.18	2.24	2.23
Private rental	18.01	8.69	10.33
Owned	44.80	69.91	65.49
BME	35.51	11.81	15.98

Changes between 1991 and 2001

Between 1991 and 2001, the mean level of segregation remained stable. If we compare 2001 cluster patterns with those of 1991, limited changes in socio-economic characteristics are identifiable. The overall socio-economic nature of clusters remained the same between the two time points. However, there were some alterations to the types of cases and similarities found within each cluster.

Tables A1 and A2 show the mean value for each variable in each of the clusters with the mean value for the whole sample included for comparison. Table A2 indicates that two clusters were formed in 1991 that broadly matched those of 2001, allowing comparison of the nature of clusters in 2001 with their 'pair' in 1991. The cases in matching clusters shared similar characteristics in terms of population density (Appendix 4 shows that this variable had greatest effect size).   Similarly, cases within each cluster shared proportions of overcrowded households and African residents in the way that continued from 1991 to 2001. Cases within each cluster were relatively similar in terms of variables such as the proportion of Caribbean residents, percentage private rental, percentage not-white, proportion white and percentage Bangladeshi.

Table A2   Mean values for variables in clusters of all cases in 1991

Variable	Cluster 1	Cluster 2	Full Sample Mean
BME ID	**31.72**	**21.823**	**29.98**
Density	1968	7773	2988.9
No quals	86.4	80.25	85.33
HE quals	7.39	14.5	8.64
LTTI	11.96	13.37	12.21
No car	31.32	51.09	34.94
Non manual	49.91	53.94	50.62
Overcrowding	0.51	2.18	0.80
Terraced	31.16	26.49	30.34
Social housing	20.5	37.32	23.43
African	0.31	3.93	0.95
Caribbean	0.99	6.80	2.02
Chinese	0.33	1.08	0.46
White	92.11	73.06	88.76
Indian	2.95	4.57	3.23
Bangladeshi	0.30	2.65	0.71
Pakistani	1.48	1.65	1.51
Private rental	7.1	15.12	8.52

Owned	23.34	11.15	21.19
BME	7.89	26.94	11.24

Authorities with similar ethnic characteristics, population density and levels of household overcrowding became more diverse in terms of the proportion of home owners but more homogenous in term of income (indicated by the variable 'percentage of households with no car'). However, despite sharing a number of socio-economic characteristics, cases grouped within the same cluster in 1991 were not similar in terms of segregation level. The mean dissimilarity scores did not differ strongly between clusters and the range of scores within each cluster was relatively wide. Similarity in segregation level amongst cases that grouped together declined slightly between 1991 and 2001. In relative terms, the difference in the mean percentage of BME and Private rental variables in each cluster is greater than the difference between the mean percentage of households with no car in each cluster.

Although segregation levels were clustered with similar characteristics in both years, there were a few key changes in patterns between 1991 and 2001, particularly in terms of the variables found in areas of higher segregation. By 2001, larger proportions of Pakistani residents were beginning to be found in the more segregated cluster rather than in the less segregated cluster. This indicates that concentrations of Pakistani communities had an increasing association with more segregated areas but does not necessarily imply that Pakistani residents were increasingly segregated, only that those authorities with a higher proportion of Pakistani residents have become more segregated over time.

The relative role of each variable in the creation of clusters was compared employing a t-test comparison of independent means, which suggested that cases
had become more strongly grouped according to certain variables over time. Table A4 presents the effect sizes of each variable in the clusters in both 1991 and 2001, ranking them according to their relative importance. In 1991 the variables with the greatest difference in means between clusters were population density, overcrowded households, proportions of African, Chinese, Caribbean and households in owner occupation. In contrast, there was very little difference in the mean values for proportions of terraces, non-manual workers, and Pakistani or Indian residents. There was also little difference (actual or relative to other variables) in the mean segregation scores in each cluster.

Analysis of variable effect sizes also offered greater clarity for comparisons between 1991 and 2001. There were generally no changes to actual effect sizes between 1991 and 2001, indicating that the groupings of characteristics remained stable over the

decade. The proportion of Chinese residents, households with no car and residents with higher education qualifications had become less important in shaping cluster patterns by 2001 (the actual increase observed was slight but was a particularly strong increase relative to that of other variables). There was greater similarity in the mean values of segregation in each cluster by 2001 but this variable was no more important relative to other variables, retaining its 16/17th ranking. In contrast, the difference in the mean car ownership within clusters and proportion of residents with higher education qualifications in 2001 was greater than in 1991.

Table A4   Effect sizes and rank of variable means between clusters. All cases in 1991 and 2001

Variable	1991 Effect Size	1991 Rank	2001 Effect Size	2001 Rank
Density	-0.66	**1**	-0.65	**1**
Overcrowding	-0.65	**2**	-0.65	**2**
African	-0.65	**3**	-0.62	**3**
Owned	-0.62	**4**	-0.55	**11**
Chinese	-0.62	**5**	-0.55	**10**
Caribbean	-0.62	**6**	-0.59	**5**
Private rent	-0.61	**7**	-0.57	**7**
No car	-0.60	**8**	-0.62	**4**
BME	-0.59	**9**	-0.56	**8**
White	-0.59	**10**	-0.56	**9**
Bangladeshi	-0.50	11	-0.46	12
Social housing	-0.48	12	-0.38	13
HE quals	-0.48	13	-0.57	**6**
No quals	-0.37	14	-0.31	14
LLTI	-0.30	15	-0.23	16
BMEID	-0.24	16	-0.19	17
Indian	-0.22	17	-0.19	18
Pakistani	-0.18	18	-0.15	20
Non manual	-0.16	19	-0.26	15
Terraced	-0.15	20	-0.17	19

* Figures in bold indicate those variables ranked as the ten greatest effect sizes.

In both years, it is noted that in these cluster patterns the variables of percentage Pakistani, percentage non-manual, percentage Indian and segregation level did not have strong effects on clustering. Table A4 shows the effect sizes of between -0.15 (Pakistani) and -0.26 (non-manual) for these variables. The effect size for the Pakistani variable decreased (albeit very slightly) between 1991 and 2001. However, subsequent

multiple regression analysis indicated that these variables were significant independent predictors of segregation level, suggesting that the cluster analysis had concealed the complexity of the relationships between these groups and segregation. Qualitative exploration also contributed to greater clarity of understanding of these relationships.

The identification of the cases present in each cluster suggested that by 2001 London boroughs were more likely to fall into a separate cluster than those elsewhere in England than was the case in 1991. There was a strengthening 'London effect' over the decade and cases from the GLA dominated a single cluster more strongly in 2001 than in the previous ten years.

The only significant exception to the consistency of cluster patterns over time was the larger mean percentage of residents with higher educational qualifications observed in the more deprived cluster, possibly related to the distinct characteristics identified in GLA cases in contrast to others. London has a higher percentage of people with higher education qualifications as well as containing areas of relatively high deprivation. This apparent contradiction adds a complexity to the interactions of ethnicity, deprivation and residential patterns considered in later qualitative analysis.

Regression analysis on all cases

Although broad links existed between segregation level and certain socioeconomic characteristics, the attributes which appeared to actively contribute to greater segregation were more specific. The R^2 value in the first model in Table A6 shows that 53% of variation in segregation across all cases in 2001 could be 'explained' by a combination of larger percentage of Pakistani and Indian residents, lower population density and a larger percentage of households with no car. Authorities that had considerably higher Pakistani percentages, slightly higher Indian percentages, more households with car but which *also* had lower population density were more likely to have high segregation. No other socioeconomic characteristics had a statistical effect on the level of segregation.
Initial tests suggested that the indicators included explained more variation in segregation in 2001 than they did in 1991. It is possible that this was because the variables were initially identified on the basis of correlations with the 2004 Index of Multiple Deprivation (IMD) and are therefore more likely to share characteristics with these than in 1991.

Table A5   Regression models for all local authorities in 1991

	Unstandardised coefficients			
	B	SE B	St. B	t

(Constant)	48.469	7.234			6.700
% Pakistani	3.312	.622	.464**		5.323
Population Density	-.130	.049	-.219*		-2.637
% Non-manual	-.387	.133	-.254**		-2.902

Table A6   **Regression model for all local authorities in 2001**

	Unstandardised coefficients				
	B	SE B	St. B	R^2	t
(Constant)	13.572	3.580			3.791
% Pakistani	2.128**	.351	.493**		6.064
Population Density	-.304**	.066	-.655**	.531	-4.599
Indian	.580**	.212	.217**		2.723
% No car	.572**	.170	.479**		3.366
(Constant)	3.463	5.470			.633
% No quals.	.882	.192	.437	.191	4.587
(Constant)	7.692	4.531			1.694
% No quals.	.539	.166	.267	.460	3.239
% Pakistani	2.353	.356	.545		6.615
(Constant)	57.307	13.587			4.218
Empl'mt rate	-.401	.184	-.225	.051	-2.183

R^2 = .531, Enter method, F = 24.333, ** ps<0.001, *ps<0.05;

The first analysis was conducted on all cases in the sample producing two regression models. Initial tests of data in 1991 showed that all variables had an apparent effect on segregation outcomes, but for many this effect was demonstrated to be dependent upon other variables.   In 1991, the model indicated that the combined effects of the percentage Pakistani (positive), population density (positive) and the percentage of people in non-manual occupations (negative) explained 41% of variation in segregation outcomes (A5). The largest coefficient was for the percentage Pakistani variable (with a

coefficient of .464) with the effects of population density (coefficient of -.219) and the percentage non-manual (-.254) both half that strength. A larger proportion of variation could be explained by the available variables in 2001, and both population density and proportions of Pakistani residents were most significant.

In the first model (Table A6), 53% of positive variation in segregation (adj. R^2 .51) could be explained by the combined effects of a higher population density, a higher percentage of Pakistani residents, a higher percentage of households with no car and a higher percentage of Indian residents. The largest coefficient was for the population density variable, indicating a considerable increase in the negative relationship between population density and segregation outcomes between 1991 and 2001. There was little actual change to the effect of the percentage of Pakistani residents although it has less effect relative to population density.

In the second model, we can observe (Table A6) that a combination of larger percentages of Pakistani residents and of residents with no qualifications would have a positive effect on the segregation outcome. The significant negative effect of the percentage of white residents on segregation levels anticipated by cluster analysis was absent from multiple regression analysis of all cases. These models are provided as a starting point for a separate analysis of cases in the Greater London Area.