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An Intensifying and Elite City: New Geographies of Social Class and Inequality in Contemporary London

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ABSTRACT

This paper contributes to the debate on London's social class structure at the start of the twenty-first century. That debate has focussed on the use of census metrics to argue the case for whether or not the capital has become more or less middle class in composition between 2001 and 2011. We contend that the definition of the middle class has become confused in the course of this debate and is of less critical importance for an understanding of the city's contemporary class structure than is a focus on London's elite. We make use of data from the BBC's *Great British Class Survey (GBCS)* to shed light on the social, cultural and economic resources of this group, in addition to their spatial location. We then return to the census data for 2001 and 2011 and posit that belying the image of stability in London's class structure these data suggest clear and localised patterns of intensification in class geographies across the capital, an intensification characterised by a growing cleavage between inner and outer London.

KEYWORDS

social class, London, census, cultural capital, Great British Class Survey, elites

CONTEXTS

Since the early geographical information systems (GIS) attempts of Charles Booth to map London's social class structure in the late-nineteenth century, there has been an enduring fascination with the geography of inequality in the capital and beyond (Savage et al. 2015: 32). The terms of the debate surrounding this interest have changed and reflected broader social and economic shifts away from the explicitly moral encoding of Victorian philanthropists like Booth and Rowntree towards a concern with the spatial implications of urban de-industrialisation and new working patterns and structures in the post-war period. Starting with Ruth Glass' (1964) identification of 'gentrification' to describe the social shifts taking place in the inner North London district of Islington, the preeminent concern of urban sociologists and geographers has been on the middle classes and their relentless colonisation of previously working class areas of our major cities (Atkinson and Bridge 2005: 3-4). Given developments since then, and specifically the emergence of a transnational "super-gentrification" in precisely such areas as Islington (Lees 2003; Butler and Lees 2006), it now seems somewhat quaint that we should still alight on the middle classes as the primary agents of urban social change in a time in which research shows they are increasingly eclipsed by just such a transnational elite (Atkinson 2015; Webber and Burrows 2015; Burrows et al. 2016). Yet it is precisely this topic which has provided the focus in recent years for a lively debate about the structure of London's class geographies, and in particular on the extent to which the capital is becoming more or less middle class.

This particular debate can be seen to have originated with a paper by Butler et al. (2008) arguing that London in the late-twentieth century was experiencing an ongoing trend towards 'social upgrading' ahead of the rest of the country which was in turn driving gentrification, a process in turn partly fuelled by an expansion of the middle classes within the city to incorporate greater numbers from lower professional and intermediate non-manual groups. Davidson and Wylie (2012) used detailed census data from 2001 and 2011 along with factor analysis to present an empirical critique of Butler et al.'s middle class expansion thesis, whilst conceptually unpacking this thesis within a post-political and neoliberal framework of urban governance which they argued had the dangerous potential to neuter the city as a site of class antagonism (Rancière 2004, 2010; Davison and Wylie 2012: 405; Swyngedouw 2005). Their contribution interrogates and challenges statutory class descriptors and opens the way for a fuller consideration of how we might understand class structures beyond occupation alone (Savage et al. 1992, 2013, 2015). Manley and Johnston (2014) have sought to draw the debate back to a very specific empirical focus on the question of whether the middle class has expanded at the expense of the working class. They do this through a spatial analysis of the London census data for occupational class at the detailed output area level, arguing that such analysis presents an image of stability across the decade within the class fragments they have defined as lying within the middle, service and working classes.

Although these are all important and valuable contributions, they analyse social class using conventional occupational class categories, although Davidson and Wylie (2012) have sought to enrich their analysis by drawing on a range of other census variables in their factor analysis. We argue that these traditional class measures fail to fully register the full implications of urban social change in London because of their lack of attention towards the top levels of the social class structure. Increasing evidence is showing that on a variety of economic, cultural, political and social dimensions the higher end of the professional and managerial service classes are 'pulling away' from the rest of the middle class (see e.g. Bennett et al., 2009; Laurison and Friedman 2016; Laurison, 2015; Savage, 2015; Savage et al., 2015) and we need to more effectively use the scant resources at

our disposal to analyse this cadre. At a methodological level, some of this research (Savage and Burrows 2007; Atkinson 2015; Savage et al. 2013, 2015; Webber and Burrows 2015; Burrows et al. 2016) points towards the growing significance of research going on beyond academia in the form of 'public sociology' and the need to go beyond the traditional data sources available to us as social scientists if our disciplines are to remain relevant (Burrow and Savage 2007, 2014). As Davidson and Wylie rightly identify, we are perpetually engaged in a losing battle against the clock in this regard (Davidson and Wylie 2012: 404).

The important role of this elite has been obscured or absented in the previous contributions partly because the conventional class categories used by Manley and Johnston (2014) generally place elite occupations alongside others in a broader professional and managerial 'service class' so that it can be difficult to disentangle the distinctive role of the elite from a wider penumbra of relatively advantaged occupations. Our contribution addresses this issue using the Great British Class Survey (GBCS) which emphasises that the growth of an urban elite class will be increasingly powerful and pervasive in Britain (Savage et al. 2015). We will use our analysis of the GBCS to reflect on the role of the elite in the capital's class structure at multiple scales.

Our argument will use a two pronged approach. We begin by using the GBCS dataset itself to unravel the significance of the elite in London. Because of its sample size and skew, the GBCS is a remarkable tool with which to dissect class formation at the top and middle levels of the class structure (Savage et al. 2015). We show that to truly understand the subtle changes in the capital's class geography we need to look beyond coarse definitions to understand the intra-stratal divisions and distinctions that exist within the city's upper and middle classes, and which are not adequately captured by standard class categories. Building on the arguments of Savage et al. (1992), Bennett et al. (2009) and Savage et al. (2013, 2015) which point to clear divisions between the professional and managerial wings of the middle classes, we show important geographical fractures between different elements of the elite in London. This debate intersects with the recent public debate on the decline of traditional

middle class sectors such as academia and accountancy as these professions are increasingly eclipsed by the dominance of the financial services sector (Boyle 2013; Neville 2014). The difference in incomes between those working in established middle class professions and those in finance, medicine and the upper echelons of the legal sector is leading to spatial strains and stresses which it is possible to analyse using the GBCS data.

Having established the significance of the elites we consider their implications for the arguments put forward in this journal. We utilise the standard decennial census mechanism for 2001 and 2011. Agreeing largely with aspects of Hamnett's (2015) critique of Manley and Johnston (2014), we revisit and reinterpret the census data at output area level for 2001 and 2011 to address the contentious issue of whether the capital's social class geography is more accurately characterised by stability or change in that period. Emphasising the rather peculiar ways in which Manley and Johnston identify class divisions, we will show that using the approach – championed in *Social Class in the 21st Century* (Savage et al., 2015) - which is more attentive to class differentiation at the 'top end' of the class structure we can demonstrate an intensification of class differences at this end of the social spectrum within London and suggest an increase in socio-spatial separation in specific localised contexts. Manley and Johnston's (2014) characterisation of stability within their defined tripartite schema across the period 2001 to 2011 is indeed helpful and accurate, but this image of tranquillity belies what actually appears to be a rather turbulent social landscape when we dig into the representative census data.

1: Dissecting the London Elite

The *GBCS* was a major internet-based survey conducted by the BBC between 2011 and 2013 under the direction of Mike Savage and Fiona Devine. The *GBCS* builds on a longer term body of work which re-asserts the centrality of social class and to place it firmly at the centre of our understanding

of inequality in the UK. There has been a flowering of literature on inequality at national and global levels in recent years (Clark with Heath 2014; Dorling 2011, 2014a; Piketty 2014; Sayer 2015; Wilkinson & Pickett 2009). Yet in all of these cases the notion of social class has either been elided or received no or peripheral attention. In part this can be seen as the legacy of sociological in-fighting over the nature and relevance of class since the 1980s, but ironically, it might also be read as the enduring success of political discourses from both left and right to steer the polity at large away from a clearer apprehension of the issue. Thus we can observe the spectacle of opposing Conservative and Labour leaders at either end of the 1990s rallying around the notion that class was dead or dying. At least for the Conservative John Major such a claim was couched in aspirational terms, as he strived in 1990 for 'a classless society' (Turner 2013: 1-2) Evidently this had been achieved just nine years later as his Labour successor Tony Blair proudly proclaimed that 'the class war is over' (BBC, 1999). During the 2000s it could be argued that the turn from social class intensified against the rise of individual and collective identities increasingly defined by consumerism and consumption (Bauman, 2007).

So in a context in which a perfect storm of political, intellectual and economic forces had converged over the previous few decades to challenge the very concept of social class as a tool for understanding the UK's social structure (Savage et al. 2015), the BBC was anxious to make sense of how class was being reconfigured. The survey, which benefitted from high profile publicity from the national broadcaster, drew an unprecedented response from the public, with 325,000 people responding to it over the course of two years. Analysis of the data resulted in the development of a 'New Model of Social Class' (Savage et al. 2013) which promulgated a radically different conception of social class, not based on occupation and employment relations towards one based on stocks of economic, cultural and social 'capitals' along the lines advanced by the French sociologist Pierre Bourdieu (1984). Analytically, the main focus of this work is to draw attention to the pulling away of an elite class at the top of the class structure from a more internally differentiated middle class (see especially Savage et al. 2015).

Figure 1 HERE: GBCS geographical skew in participation in relation to underlying working-age populations from the 2011 census at unitary authority level

Table 1 HERE: Social skew within the GBCS web survey in comparison to a nationally-representative sample

Whilst extensive and unprecedented in both the scale of the response and the scope of questions asked, the GBCS is not a nationally representative dataset and is thus skewed towards those inclined and able to complete such an instrument (Savage et al., 2015). This skew has rightly been seen by critics as indicating limitations with the GBCS (e.g. Mills 2014)¹. Nonetheless, this imbalance towards the well-educated and well off enhances the power of the GBCS to focus on the relationships and resources at the top end of the class structure (Savage et al. 2015). This is neatly revealed by **Figure 1**, which presents a map showing the skew in terms of where people responded to the BBC's online class survey by UK local authorities and demonstrates how many areas of London feature amongst those areas which replied to the survey in disproportionately high numbers relative to their underlying populations. It is clear that in London these areas map onto the most expensive and affluent boroughs in the capital, running from the inner city along a south-west transect to the Surrey border. **Table 1** displays the socio-economic skew within the data in terms of the sort of people who took part in the GBCS and reveals a large over-representation of the senior managers and professionals. This shortcoming is a virtue in presenting us with a dataset of unique scale and scope for analysing the economic, social and cultural resources of the middle class, with nearly 19,000 respondents in London alone falling within this (NS-SEC 1) category. No other source of data allows us such rich individual level data to provide a critical anatomy of those at the very top of the capital's social structure.

Figure 2 HERE: Spatial distributions of the business & finance (top) and cultural (bottom) elites in London

¹ The 'new model' produced by Savage et al. (2013) has been extensively debated and criticised (e.g. Mills 2014; Bradley 2014, as well as defended (Savage et al. 2015). The arguments in this paper use standard occupational National Statistics Socio-economic Classification (NS-SEC) class categories also available from within the GBCS dataset and do not depend on the 'New Class' model.

We begin by breaking down the Senior Manager and Professional class into different occupational wings, to establish the extent of geographical clustering and separation between them². We can contrast the business and finance with the cultural elite (**Figure 2**), which shows a very neat separation. The grey polygons indicate the upper quartile while the black shading shows the extents of the 90th percentile of the given population, thus providing a clear picture of where these groups reside in the greatest concentrations. The business and finance elite are disproportionately located in a central belt of northern London running up from the city, and then in a series of enclaves, several of which are in south-west London. By contrast, the cultural elite is much more closely affiliated to the inner northern and eastern districts of Camden in the north-west, through to Islington, Hackney and Whitechapel in the east.

Figure 3 HERE: Spatial distributions of the medical (top) and legal (bottom) elites in London

Having shown this difference, we can also see an overriding focus of both groups on the central areas of London. It is the central zones of the city which are now marked by the disproportionate presence of elite occupations. This pattern is generally evident too when we look at the geography of the medical and legal professions (**Figure 3**). The legal profession is the most centrally located of any of the occupational groups within NS-SEC 1. It is overwhelmingly focussed in central London near to the centres of the legal profession, but also in the City, Finsbury and extending north again to Islington. By contrast, medical practitioners largely eschew the most central zones of London, and are found in the relatively desirable and exclusive zone of gentrification north and south of the Thames.

² The Appendix contains a listing of the names and counts of the constituent occupations in each of the six categories used in this paper. The occupational titles supplied by individual GBCS respondents were standardised and classified according to the CASCOT (Computer Assisted Structured Coding Tool), hosted by the University of Warwick's Institute for Employment Research. More information about CASCOT is available via their website: <http://www2.warwick.ac.uk/fac/soc/ier/software/cascot/> (accessed 23 January 2016).

Figure 4 HERE: Spatial distributions of the public sector (top) and Technical (bottom) elites in London

The final two groups, the public sector and the technical occupations (**Figure 4**) are also relatively dispersed from the centre of London. The public sector overlaps reasonably well with the medical practitioners (who will also tend to be public sector employees), whereas the technical occupations are mainly in a series of enclaves north of the Thames and south in Kennington, Clapham and Balham.

A number of important findings can be gleaned from these six maps. Firstly, we can see a strong central London pull: this group lives in the high ground of the most exclusive and expensive areas in the middle of the city, underscoring the arguments of Cunningham and Savage (2015), and Savage et al. (2015), that the contemporary elite is fundamentally a central urban elite. Secondly, however, there are a series of enclaves which are also significant, though these vary according to the specific occupation being examined: for the business elite this tends to be the urban villages of south west London such as Richmond and Wimbledon; for the cultural elite it is areas such as Hackney, Bethnal Green and Hoxton. We can thus see a fascinating and complex elite occupational geography. Thirdly, there is an epicentre of the senior managerial and professional class as a whole, which is around Islington in North London. This part of London is over-represented for all six of the occupational profiles which comprise this NS-SEC 1 category. Yet it is interesting to note that the truly expensive areas of West London (such as Kensington and Chelsea) do not generally show up as clusters for any of our groups, with the exception of a few small enclaves. As research by others has identified (Atkinson 2015; Burrows 2013), it is precisely these areas of west London which are now becoming the playground of an absentee and socially-disengaged global 'super-rich'. One of the implications of much of this revealing research is that much of west London is not so much a site of super-elite *residence* as it is a site of financial *investment* and generator/reflector of international social *cachet* for the sort of global super-rich who will not be represented in the GBCS. There is therefore an

implicit suggestion of a powerful east-west split at the heart of the capital which distinguishes the 'working' elite, mainly oriented towards the north and east of London, with enclaves elsewhere, from the 'silent' super-elite and their real estate investments in the west of the city.

Figure 5 HERE: Reference map of Greater London disaggregated by 2.5 kilometre bands centred on the Bank of England

Figure 6 HERE: Percentage difference in observed versus expected distributions of the six elite occupational groups by distance from the Bank of England

We can summarise these trends in **Figure 6**, which considers which of the six occupational groups were over or under represented at different distances from the centre of London. This is calculated by working out the difference in percentage terms between the observed distribution of each of the six occupational groups and what we would expect were each of those groups to conform to the distribution for NS-SEC 1 as a whole. **Figure 5** is a reference map which provides a spatial context for these analyses.

The legal elite stands out as clearly the most centrally located, with 80% more than we would expect within a 2.5 kilometre radius of the Bank of England in the heart of London's financial district, but this drops precipitately and these groups are massively under-represented at the outskirts. By contrast, technical and public sector occupations are considerably under-represented in these central arenas, but their share increases considerably in the more suburban locations towards the periphery of London.

These maps appear to indicate, fairly clearly and directly, that the most elite occupations are focused in the central-north-eastern sector of London, so that we can usefully identify London as a central site for elite *formation*. We choose this particular word quite deliberately because we believe that location is not simply incidental to these occupational identities, but that space can become integral to their very conception. This is an idea that has been elaborated by Savage et al. (2005: 45) in their

work on the Manchester middle class through the concept of 'elective belonging'. For people of means, property allows them the freedom to live alongside people with whom they share much more than a favourable income; they also frequently share common cultural practises and tastes, social networks, and as we see here – occupations. The breadth of the GBCS data enables us to look well beyond occupation however, to address the complex and contingent interplay of economic, cultural and social capitals (Bourdieu 1984) between these different elite groups. The findings are below and are very revealing.

Figure 7 HERE: Mean household income for each of the six occupational groups by distance from the Bank of England

Figure 7 shows how the household income of these six groups varies, again according to how far they live from the centre of London, and reveal an intriguing distinction between the legal and business elite, on the one hand, and the other occupations. For those working in the public sector, technical occupations and in the cultural elite, income levels are broadly similar regardless of how far you live from central London. By contrast, the business & finance and legal elites who live in the centre tend to earn much more than those who live further away. This slope is especially apparent for the legal elite, who earn over £100k if they live in the centre, but earn on average under £70k when living some 25 kilometres away, out near the Greater London boundary. The medical profession is intriguing also, in that it tends to earn the most about 15km from the centre, in the established enclaves of suburban London which we have already seen it tends to prefer (see **Figure 3**).

Figure 7 demonstrates further that in central London, income differences between the legal, business and financial elite and the other senior managerial and professional occupations are huge: lawyers earn nearly double the household income of the public sector occupations. By contrast, some 25 kilometres out, these differences are much less marked and there is a distinctive convergence of these different occupational profiles. Here again we see the subtle stamping of

central London as marked fundamentally by the economic power of particular configurations of the elite middle class: the imprint of business, finance, and the law.

Figure 8 HERE: Mean highbrow cultural capital score for each of the six occupational groups by distance from the Bank of England

This point about the distinctiveness of London's central zones is underscored by **Figure 8** which shows how the 'high' cultural capital (Savage et al. 2013) of the different occupational groups varies as they move away from central London. High cultural capital refers to an engagement with traditional 'legitimate' forms of cultural engagement such as attending theatre and opera performances, art galleries, museums and so on. Such a measure may appear clichéd and anachronistic at face value, but in fact is anything but. Engagement with these sorts of activities endow benefits which can ultimately translate into other forms of capital accumulation as a familiarity with these legitimate and canonical forms of culture can help the children of middle-class parents navigate through an educational system which is still focussed on an appreciation of them (Savage et al. 2015: 95-96). It is also becoming evident that even amongst graduates with similar levels of educational attainment, barriers appear to exist for working-class young people in attaining access to the most prestigious and competitive roles in the business, media and cultural sectors, barriers which appear to map very precisely onto Bourdieusian notions of cultural capital (SMCPC 2015).

Again, the trends here are clear, and fascinating. The only group which is an outlier by this measure are the technical occupations, where are in general less attracted to highbrow cultural capital than the rest. And for all the six occupational groups, there is a compelling trend which sees the trendy inner-city neighbourhoods of Camden, Islington and Hackney at the apex of highbrow cultural capital in London, after which there is a steady distance decay effect towards the city stopline and the distant fringes of Croydon, Kingston, Uxbridge and the like. This marker of cultural engagement

provides the first quantitative evidence for a long-established reading of London's purlieus which stretches from *The Waste Land* to *The Buddha of Suburbia* (Pope 2015).

London's Intensifying Class Geographies

Having clarified the significance of elite formation, let us now return to the debate in these pages, which has largely focused on the issue as to whether London is becoming more 'middle class' or not. This issue has been confounded by the fact that as Hamnett (2015) notes, Manley and Johnston (2014) present an alternative vision of the 'service class' to that traditionally understood by the term. Manley and Johnston (2014) identify three classes: a 'middle class' (of professionals and managers, which would normally be identified as the 'service class'), a 'service class' composed of occupations in the middle of the occupational structure (which would normally be identified as 'intermediate'), and a working class.

Figure 9 HERE: Intensification of the social class structure of London between 2001 and 2011 for: a) NS-SEC 1, b) NS-SEC 2, c) NS-SEC 3-5, and d) NS-SEC 6 & 7

The GBCS cannot be used to examine trends over time, but we can use census data to examine this question. The census has been used also by Manley and Johnston and by Hamnett, however we will be using a categorisation informed by our concern to examine how elite formation also intersects with the wider middle and working classes. In **Figure 9** we therefore provide four maps which present a more sociologically nuanced analysis of change between 2001 and 2011 and which do not use the confusing class terms deployed by Manley and Johnston. Instead, we differentiate between NS-SEC 1, the high professional and managerial class, and the most elite of the NS-SEC occupational classes (which has been the focus of our analysis above), and NS-SEC 2, the lower professional and managerial service class. It is important to distinguish between NS-SEC 1 and NS-SEC 2 since the former, as the most 'elite' occupational grouping is by general agreement, becoming increasingly

segregated from the rest of the population not only in terms of income and social advantages more generally (see Savage 2015) but potentially also in terms of space. To contrast with these two most advantaged groups, we then focus on a broad 'middle class' of NS-SEC 3-5, and a working class of NS-SEC 6 & 7 which is the poorest and least advantaged. This allows a more consistent and sociologically robust way of examining trends over time, using official NS-SEC measures whilst also being attentive to our key assertion as to the significance of the elite pulling away from the rest of the middle classes.

If we use these numbers to examine the overall class structure of London in the first decade of the 21st century, we find some evidence of the stability than Manley and Johnston (2014) have identified, but the picture is also more complex. **Figure 9 (a-d)** employs the same Getis-Ord G_i^* technique used by Manley and Johnston (2014) in their analyses. However, we have adapted the method slightly. The maps identify output areas which existed as either positive (shades of red) or negative (shades of blue) clusters of for each class population in 2001 but that then witnessed varying gradations of intensification in those clusters as measured by changes in their Z scores in the decade to 2011. So, in essence, we are highlighting those parts of the city that were disproportionately populated by one of the four class groups in 2001 and where those groups became even more dominant over the course of the following ten years.

Figure 9a thus shows the changing distribution of higher professionals and managers between 2001 and 2011, with the red areas showing over-representation and greater concentration, and bluer areas showing under-representation compounded by declining concentration. In general, the yellow and red areas are towards the centre of London, whilst the bluer areas are towards the outside, so indicating how the relationship between elites and central London locations is growing more intense over time, although taken in isolation the pattern appears relatively moderate. Most of the city does not fall within this bracket. There are also two contrasting outliers in north-west and north east London which are worthy of note.

Figure 9b provides an equivalent map for NS-SEC 2, the lower professional and managerial service class. This shows an even more marked shift of locations towards the centre of London, and a distinctive weakening of their presence in the outer areas of the city. We can also detect something of a shift from east to west. It is perhaps surprising that it is NS-SEC 2, rather than NS-SEC1 which sees the most dramatic concentration in Central London, given our earlier findings from the GBCS about the predominance of NS-SEC1 in the central areas. This partly reflects the fact that the NS-SEC 1 occupations were already highly concentrated in central districts in 2001. Taken together, NS-SEC 1 and 2, the broad professional and managerial service class, clearly tightened their grip on inner London between 2001 and 2011. The picture changes radically when we examine the spatial distribution of the ‘middle’ or ‘intermediate’ class’ (**Figure 9c**). Here the centre of London saw an exodus in the first decade of the 21st century hand-in-glove with a clear and marked intensification in the cheaper and less desirable eastern and southern suburbs. Such a trend is also evident in the patterns of intensification and de-intensification for the working class (**Figure 9d**), albeit more modest in scale.

Figure 10 HERE: Intensification of the class structure of London between 2001 and 2011 for all NS-SEC classes I - VII

Figure 11 HERE: Percentage share of polarising output areas for each NS-SEC category in Inner and Outer London

Table 2 HERE: Percentage share of stable positive and negative cluster cells further polarising

Table 3 HERE: Percentage share of stable non-cluster cells for all four NS-SeC categories

Table 2 shows the percentage of all output areas across London that were positive (over-representative) or negative (under-representative) clusters for each of our four classes and which further polarised over the following decade. So for NS-SEC 2 for example, 21 percent of all output areas in London became further polarised over the years between 2001 and 2011. Whilst, this might appear modest in isolation, let us put the figure in some context. In comparison to this figure, **Table 3** tells us that only five percent of all output areas in London in 2001 could be described as truly

balanced in representing an equilibrium between the four class groups and not existing as positive or negative clusters for any of the them. This figure dropped slightly in the decade to 2011.

It is only by drawing the patterns together in **Figure 10** that we can grasp the true magnitude of social class intensification across London as whole. This presents the absolute sum of changes in standard deviations in output areas that represented positive or negative clusters for one of the four groups in 2001 and which became progressively more dominated by that group by 2011. So rather than a picture of stability we are presented with an image of a city in a state of considerable social flux in class terms, a picture which we would argue presents an altogether more realistic, if rather less harmonious representation of the state of affairs in our uneven capital. Such an interpretation is further underlined in **Figure 11** which shows the distribution in polarising output areas by location in either Inner or Outer London.³ There is clearly a pronounced geography to where certain class groups are becoming more concentrated, and for the middle class (NS-SEC 1 and 2), this is clearly within the ring of Inner London boroughs. For the service (NS-SEC 3-5) and working classes (NS-SEC 6&7), polarisation is occurring overwhelmingly on the margins of the capital.

We conclude our analyses by drawing on the use of segregation indices to graphically underline our point. We have deployed the dissimilarity index, which Peach (2009) argues remains one of the most authoritative techniques in the social sciences. The dissimilarity index is a measure of evenness of a given group within the population as whole, and can be expressed thus,

$$\frac{1}{2}D_{ab} = \sum_{i=1}^N \left| 100 \frac{P_a^i}{P_a^*} - 100 \frac{P_b^i}{P_b^*} \right|$$

³ We use the Office of National Statistics' definition of Inner and Outer London, available online at: <http://www.ons.gov.uk/ons/guide-method/geography/beginner-s-guide/administrative/england/greater-london-and-the-london-boroughs/map-of-greater-london.pdf> (accessed 1 February 2016).

where, for example, D_{ab} is the dissimilarity index for NS-SEC 1; P_a^i is the NS-SEC 1 population, a in output area, i ; b is the rest of the working-age population and * indicates the entire Greater London area. Using the above formula will provide a percentage figure of the entire NS-SEC 1 population that would need to move in order for there to be a perfectly even distribution across all output areas. Applying the dissimilarity index to the four NS-SEC groupings we have used in this paper from the 2001 and 2011 censuses provides the results in **Figure 12**. The tables show a pronounced upward shift in levels of unevenness across London's social class structure and that the groups which have become most segregated within the city are those with, quite literally, the least purchase in an increasingly unsustainable and unfair housing market (Dorling 2014). We should also remember that such an increase has come against a backdrop of what all authors in this debate agree has been a broad stable increase in the city's class structure in absolute terms. However, it is important to also acknowledge the limitations of measures such as the dissimilarity index, in potentially providing a misleading image of segregation in the city. Such a conclusion would be unwise, particularly over such a limited timescale. Manley et al. (2015) have conducted detailed analyses of these patterns using a range of different measures and conclude that the picture between 2001 and 2011 is indeed, largely one of stasis. It is likely therefore that this is more representative of the sort of widespread and complex patterns of localised social re-organisation suggested by **Figure 10**. So whilst we should be cautious of reading too much into this figure alone, with Poulsen and Johnston (2006: 2195) rightly questioning the value of single metrics in shedding light on the 'everyday experience' of group membership and residence, we would conclude by arguing that in this paper we have nonetheless presented a multi-dimensional portrait of a city pulling apart across a number of different domains: the economic, cultural, social and residential. The evidence drawn from very different datasets suggests subtle cleavage over convergence.

Figure 12 HERE: Dissimilarity indices for the four NS-SEC classifications in 2001 and 2011

Conclusions

This paper has used differing and complimentary data sources to show that there have been major changes within London's class structure over recent years, and that elite formation lies at the heart of this. In this conception of social class, space is not simply the empty vessel in which action occurs but rather has an instrumental role in explaining and driving patterns of residential concentration. The recent debate within this journal around the nature of London's class geography has importantly directed our attention to the need to understand social change within the capital, but it has infuriatingly focused on the middle levels of the class structure, rather than on the more fundamental changes taking place at the higher levels. We have addressed this by using the GBCS to focus on the distinctive features of London's elite geography in the years 2001 to 2011, which powerfully shows how central London is a very distinctive elite space, characterised by a profound over-representation of those in legal, business and financial occupations. Their resources are mappable through the GBCS dataset and this shows that those resources extend beyond the economic and into the realm of cultural capital. These analyses point to clear patterns of intra-stratal spatial segmentation within the middle classes have been overlooked in previous contributions.

We have also used our classification of the NS-SEC, which pulls out the 'elite' NS-SEC 1 category from the rest of the middle classes to localised patterns of intensification taking place in the capital across the entire class structure. In place of the traditional or conventional understanding of central urban space as somewhat disreputable, we now see the consolidation of elite centrality, with the less advantaged social classes increasingly moving to the outskirts. While these competing centripetal forces can throw elites together in complex social-cultural configurations in the core opposing centrifugal dynamics have the potential to push those lower down the social hierarchy ever closer to the edge. We would argue that these stark trends need to be placed at the heart of our understanding of social change in London at the start of the twenty-first century.

Word Count: 6,180

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Figures

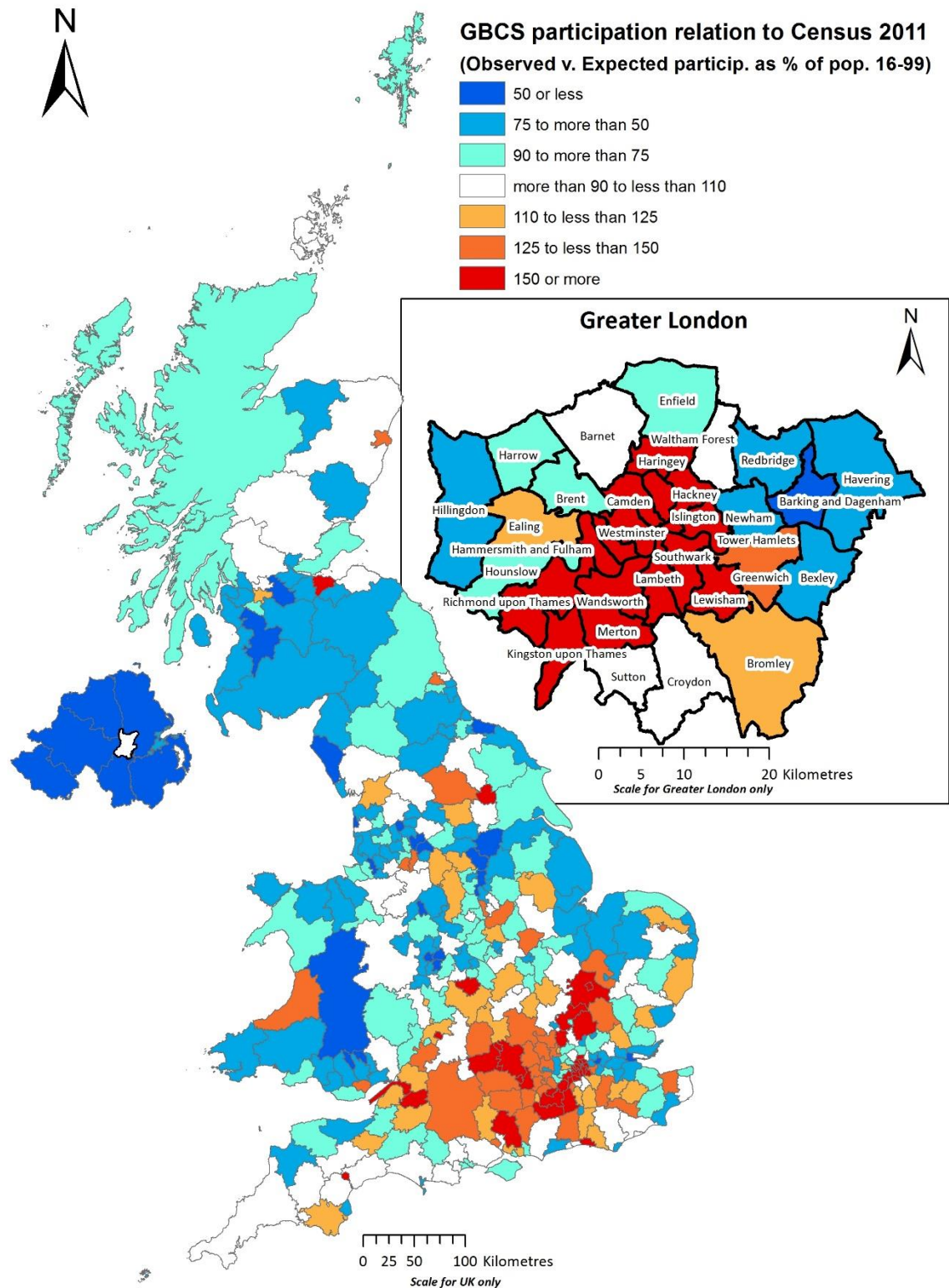


Figure 1: GBCS geographical skew in participation in relation to underlying working-age populations from the 2011 census at unitary authority level

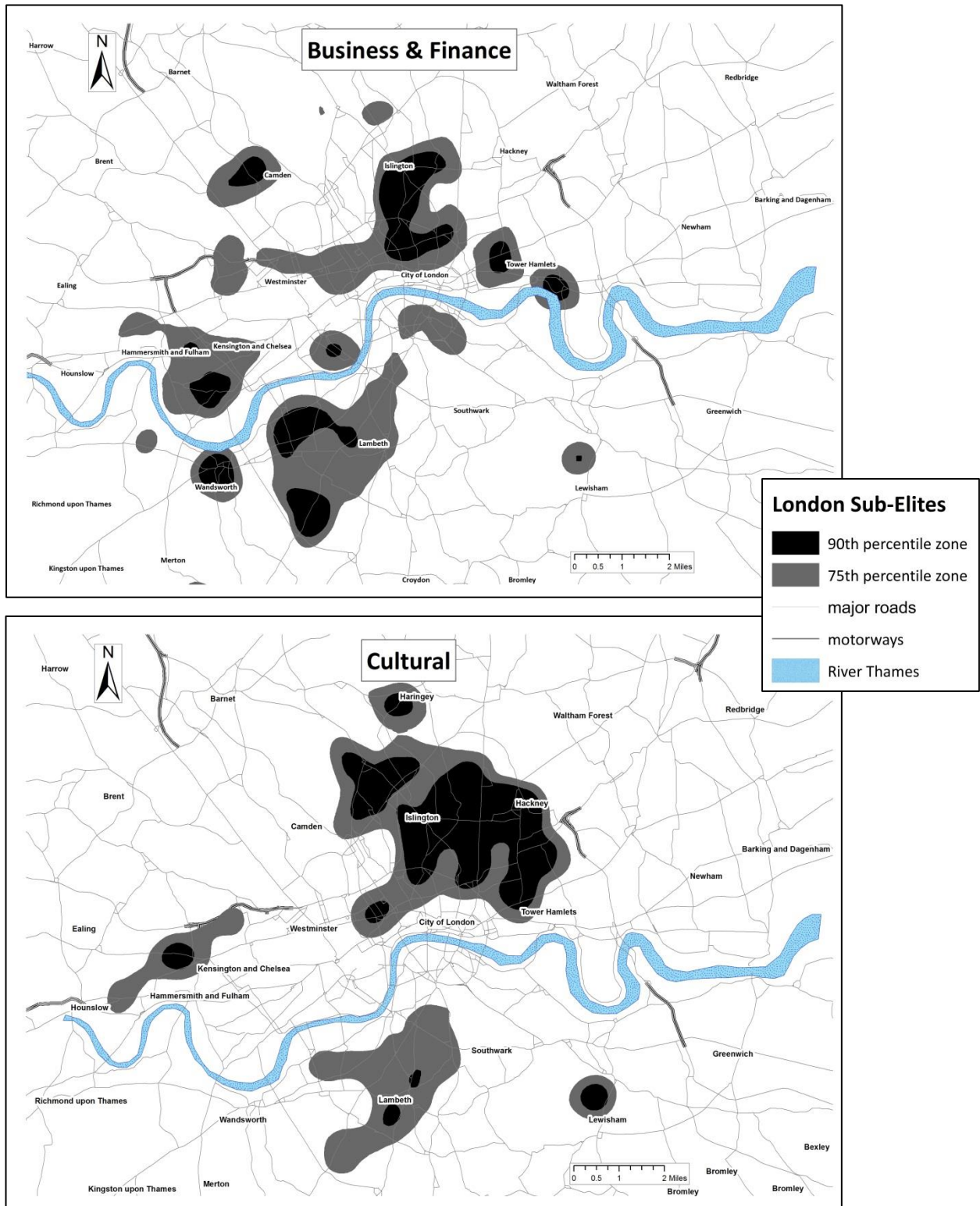


Figure 2: Spatial distributions of the business & finance (top) and cultural (bottom) elites in London

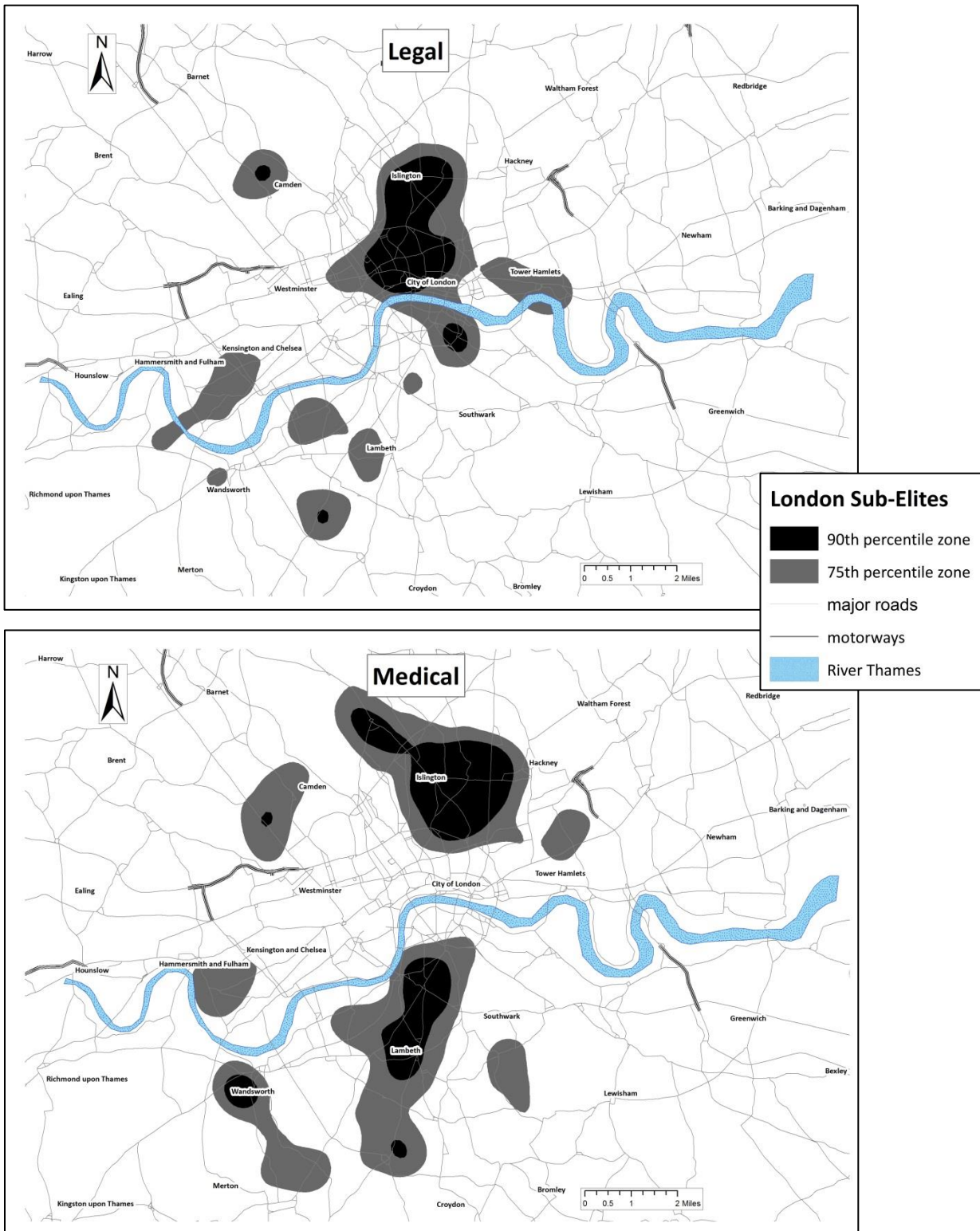


Figure 3: Spatial distributions of the medical (top) and legal (bottom) elites in London

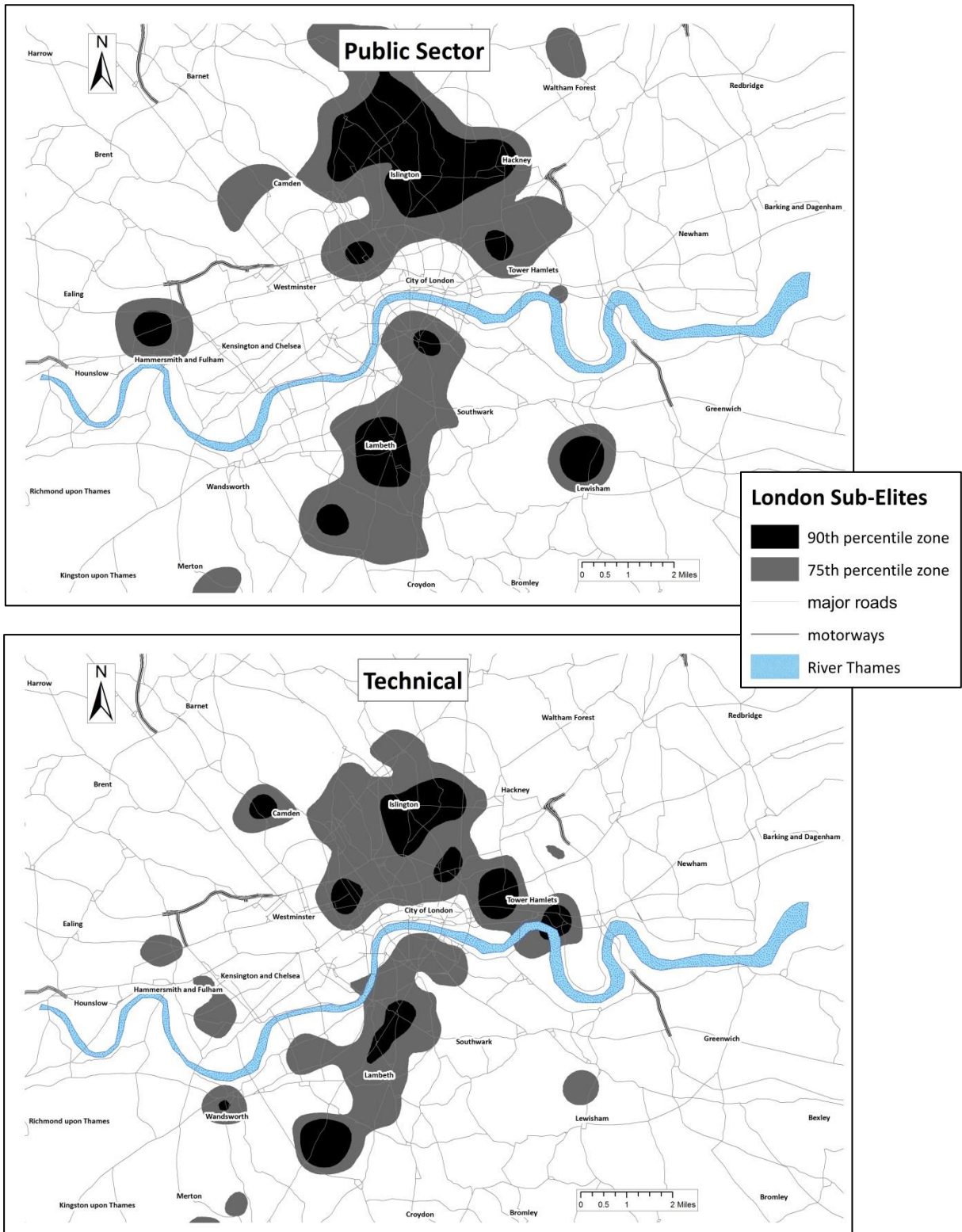


Figure 4: Spatial distributions of the public sector (top) and Technical (bottom) elites in London

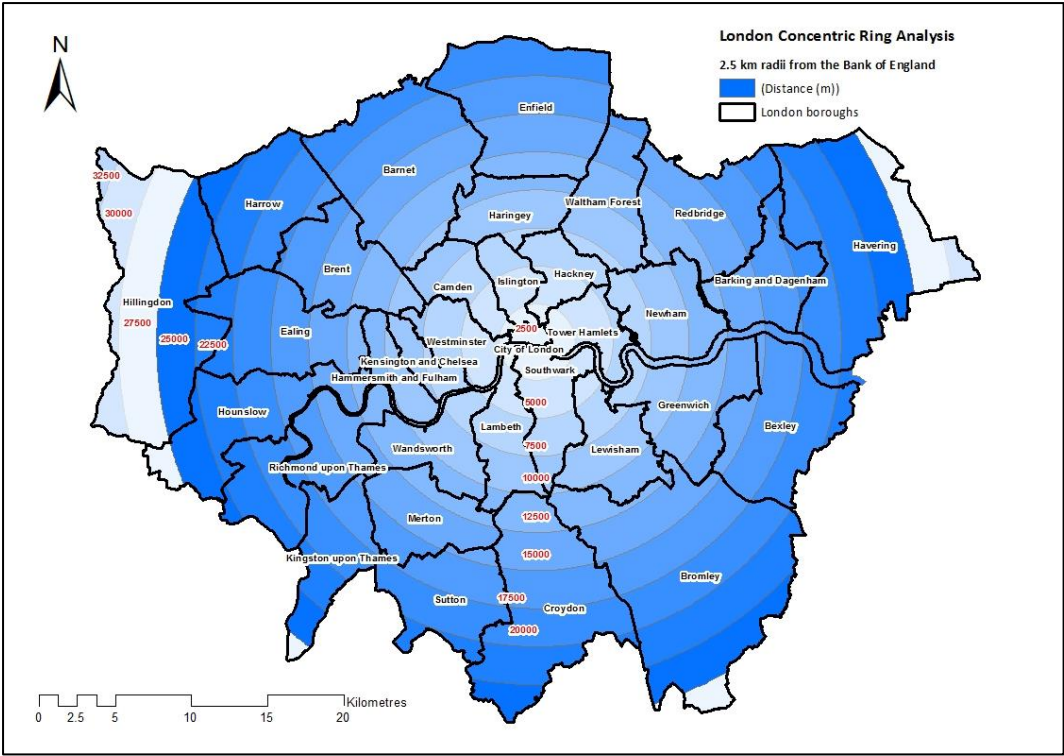


Figure 5: Reference map of Greater London disaggregated by 2.5 kilometre bands centred on the Bank of England

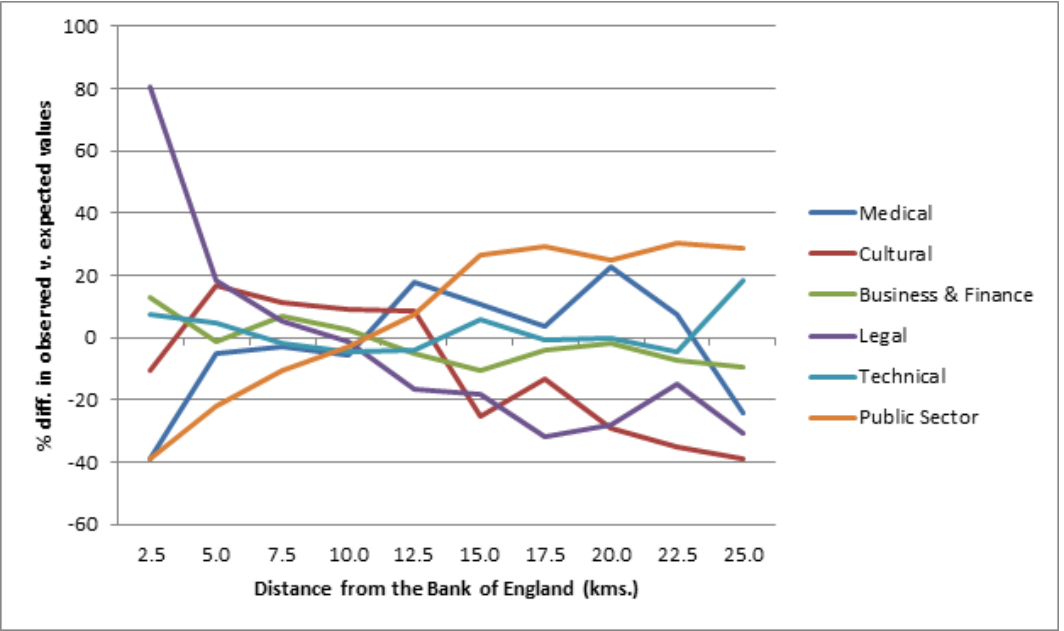


Figure 6: Percentage difference in observed versus expected distributions of the six elite occupational groups by distance from the Bank of England

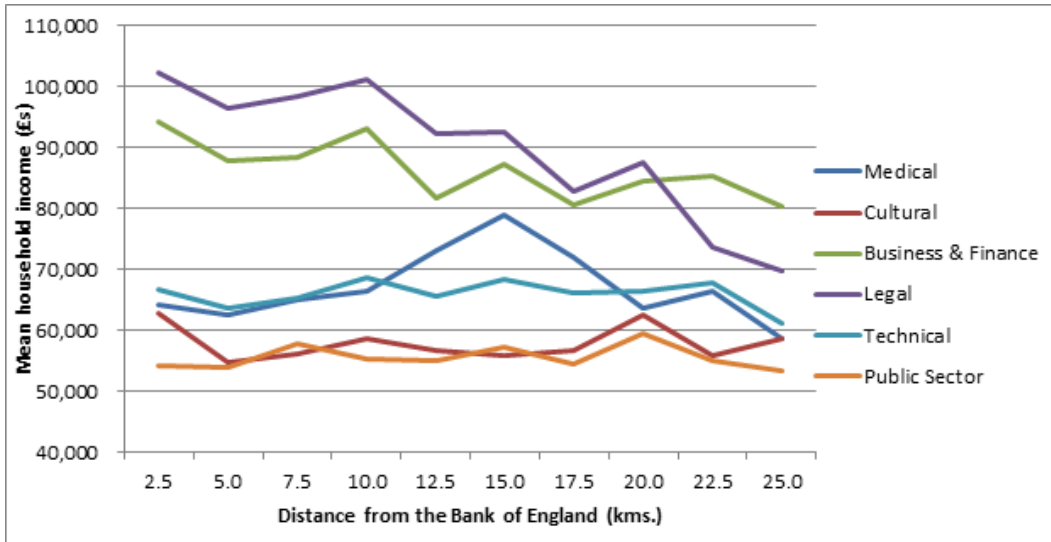


Figure 7: Mean household income for each of the six occupational groups by distance from the Bank of England

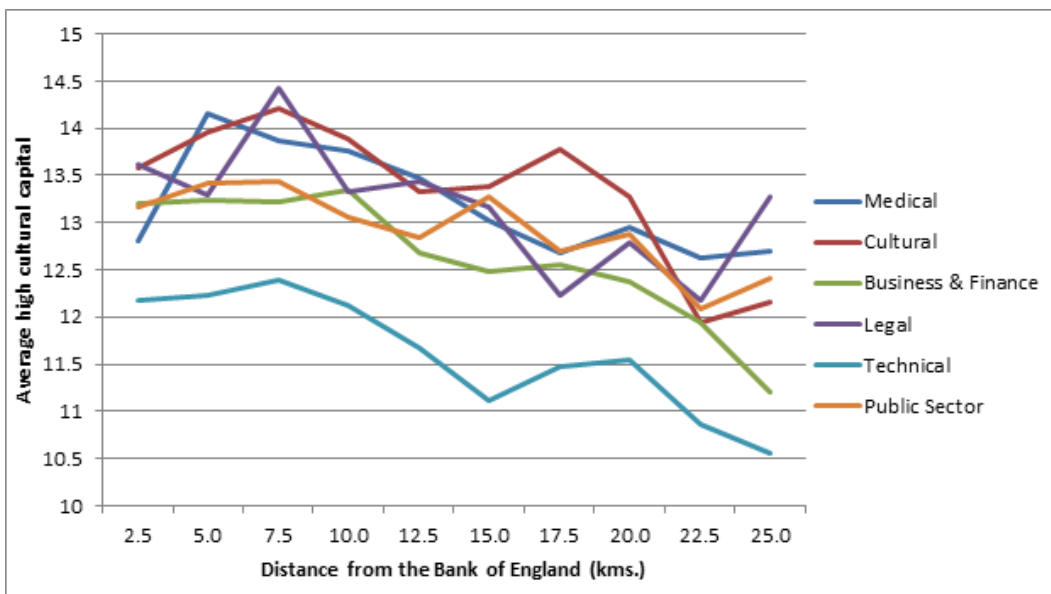


Figure 8: Mean highbrow cultural capital score for each of the six occupational groups by distance from the Bank of England

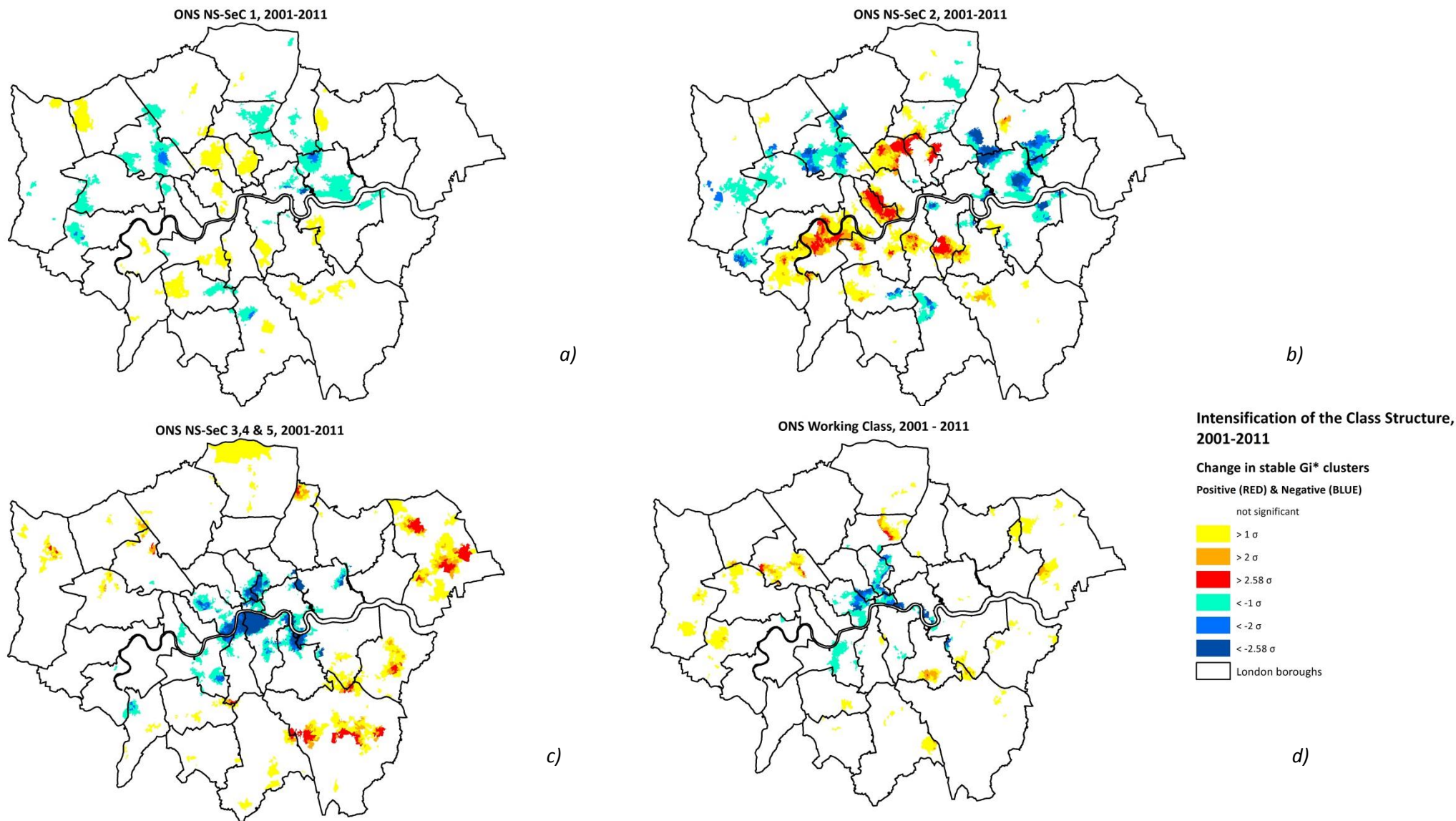


Figure 9: Intensification of the social class structure of London between 2001 and 2011 for: a) NS-SeC I, b) NS-SeC II, c) NS-SeC III-V, and d) NS-SeC VI & VII

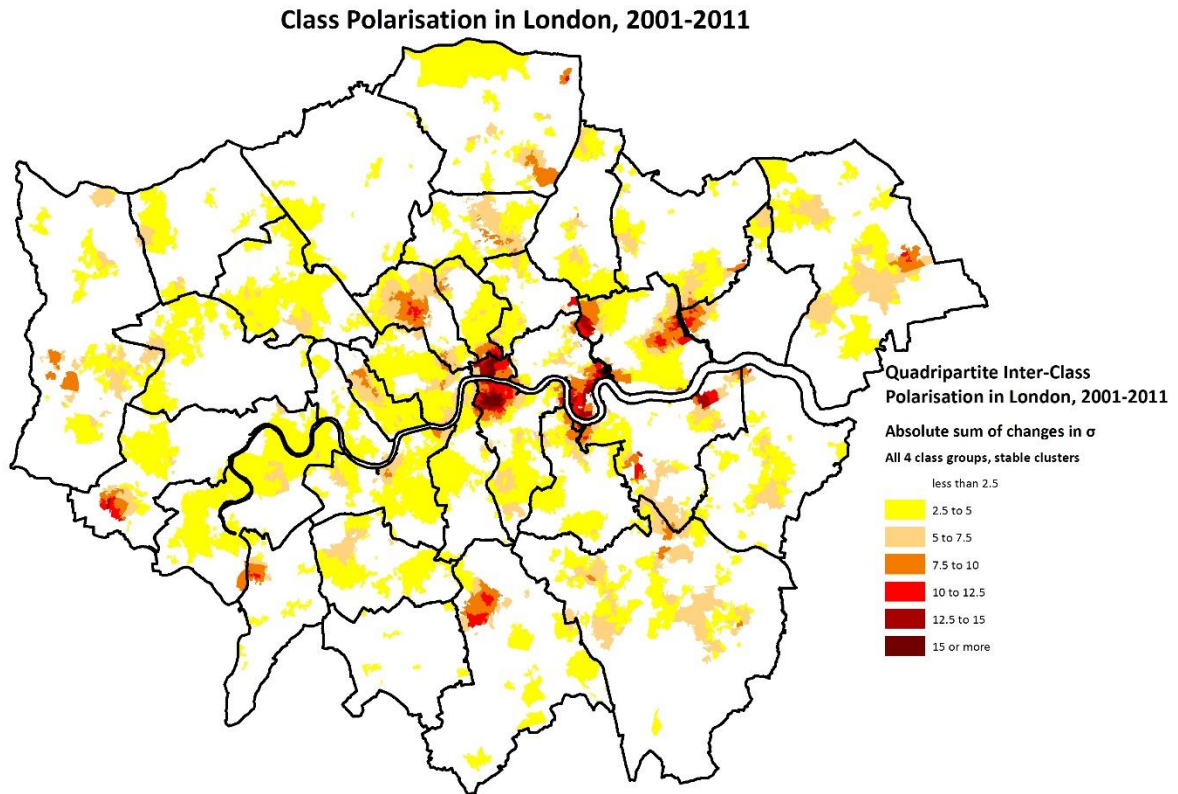


Figure 10: Intensification of the class structure of London between 2001 and 2011 for all NS-SeC classes I – VII

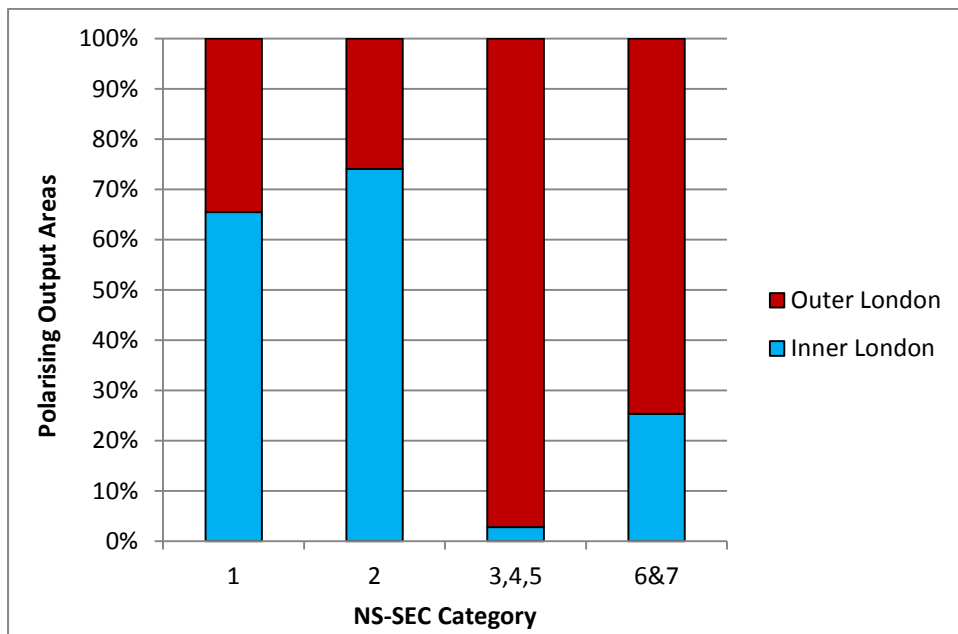


Figure 11: Percentage shares of positively polarising output areas for each NS-SEC category in Inner and Outer London

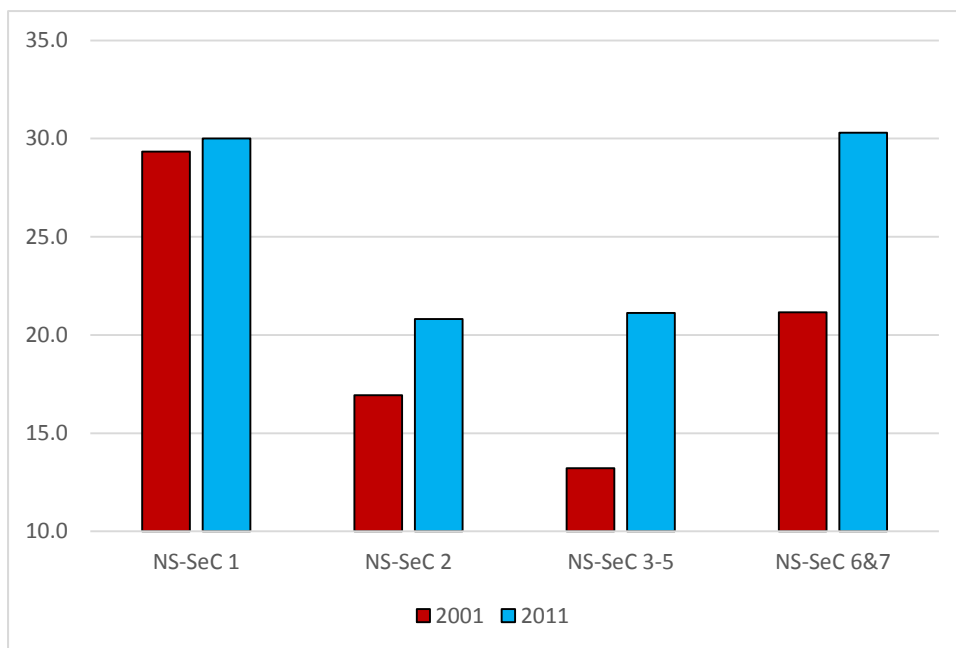


Figure 12: Dissimilarity indices for the four NS-SeC classifications in 2001 and 2011

Tables

Category/group in %	Web sample	National sample	Ratio
Senior manager	13	6.3	2.1
Traditional professional	17.9	4.8	3.7
Modern professional	31.5	18.1	1.7
Middle/junior manager	8.1	6.7	1.2
Intermediate	11	14.7	0.7
Technical & craft worker	2.4	10.6	0.2
Semi-routine worker	4.9	15.3	0.3
Routine worker	3.2	14.5	0.2
Never worked	7.8	8.3	0.9

Table 1: Social skew within the GBCS web survey in comparison to a nationally-representative sample

POSITIVE & NEGATIVE CLUSTERS		
NS-SEC	Polarising	
	n	%
1	2,860	11.8
2	5,081	21.0
3,4,5	3,070	12.7
6,7	1,874	7.8

Table 2: Percentage share of stable positive and negative cluster cells further polarising

NON-CLUSTER CELLS			
2001		2011	
n	%	n	%
1,245	5.2	1,179	4.9

Table 3: Percentage share of stable non-cluster cells for all four NS-SeC categories

Appendix

MEDICAL	n	%	% (cum.)
Dental practitioners	42	4.7	4.7
Health associate professionals n.e.c.	1	.1	4.8
Health professionals n.e.c.	17	1.9	6.7
Medical practitioners	651	73.1	79.8
Medical radiographers	3	.3	80.1
Midwives	5	.6	80.7
Nurses	16	1.8	82.5
Occupational therapists	1	.1	82.6
Pharmacists	49	5.5	88.1
Psychologists	66	7.4	95.5
Speech and language therapists	1	.1	95.6
Therapy professionals n.e.c.	16	1.8	97.4
Veterinarians	23	2.6	100.0
Total	891	100.0	

CULTURAL	n	%	% (cum.)
Actors, entertainers and presenters	6	.9	.9
Advertising accounts managers and creative directors	36	5.6	6.6
Advertising and public relations directors	58	9.0	15.6
Archivists and curators	11	1.7	17.3
Artists	3	.5	17.8
Arts officers, producers and directors	119	18.6	36.3
Authors, writers and translators	49	7.6	44.0
Conference and exhibition managers and organisers	76	11.9	55.9
Dancers and choreographers	2	.3	56.2
Fitness instructors	1	.2	56.3
Graphic designers	10	1.6	57.9
IT engineers	1	.2	58.0
Journalists, newspaper and periodical editors	167	26.1	84.1
Musicians	3	.5	84.6
Nursery nurses and assistants	5	.8	85.3
Photographers, audio-visual and broadcasting equipment operators	4	.6	86.0
Product, clothing and related designers	16	2.5	88.5
Public relations professionals	74	11.5	100.0
Total	641	100.0	

BUSINESS & FINANCE	n	%	% (cum.)
Brokers	134	2.0	2.0
Business and financial project management professionals	610	9.1	11.1
Business and related associate professionals n.e.c.	257	3.8	14.9
Business sales executives	80	1.2	16.1
Buyers and procurement officers	35	.5	16.6
Chief executives and senior officials	725	10.8	27.4
Estate agents and auctioneers	12	.2	27.6
Estimators, valuers and assessors	46	.7	28.3
Finance and investment analysts and advisers	299	4.4	32.7
Financial accounts managers	257	3.8	36.5
Financial and accounting technicians	59	.9	37.4
Financial institution managers and directors	63	.9	38.3
Financial managers and directors	397	5.9	44.2
Functional managers and directors n.e.c.	251	3.7	48.0
Human resource managers and directors	198	2.9	50.9
Insurance underwriters	73	1.1	52.0
Management consultants and business analysts	596	8.9	60.9
Managers and directors in transport and distribution	14	.2	61.1
Marketing and sales directors	1318	19.6	80.7
Marketing associate professionals	173	2.6	83.3
Office managers	50	.7	84.0
Office supervisors	38	.6	84.6
Personal assistants and other secretaries	47	.7	85.3
Production managers and directors in manufacturing	331	4.9	90.2
Purchasing managers and directors	48	.7	90.9
Sales accounts and business development managers	453	6.7	97.6
Taxation experts	158	2.4	100.0
Total	6722	100.0	

LEGAL	n	%	% (cum.)
Barristers and judges	314	13.4	13.4
Chartered and certified accountants	451	19.2	32.7
Legal associate professionals	114	4.9	37.5
Legal professionals n.e.c.	228	9.7	47.2
Solicitors	1236	52.8	100.0
Total	2343	100.0	

TECHNICAL	n	%	% (cum.)
Actuaries, economists and statisticians	269	8.6	8.6
Architects	234	7.5	16.2
Architectural and town planning technicians	45	1.4	17.6
Business and related research professionals	309	9.9	27.5
Business, research and administrative professionals n.e.c.	201	6.5	34.0
Chartered surveyors	145	4.7	38.7
Civil engineers	99	3.2	41.9
Construction and building trades n.e.c.	18	.6	42.4
Design and development engineers	28	.9	43.3
Draughtspersons	16	.5	43.8
Electrical and electronic trades n.e.c.	16	.5	44.4
Electricians and electrical fitters	21	.7	45.0
Engineering professionals n.e.c.	152	4.9	49.9
Environment professionals	28	.9	50.8
Information technology and telecommunications directors	63	2.0	52.8
Information technology and telecommunications professionals n.e.c.	160	5.1	58.0
IT business analysts, architects and systems designers	123	4.0	61.9
IT operations technicians	57	1.8	63.8
IT project and programme managers	32	1.0	64.8
IT specialist managers	194	6.2	71.0
IT user support technicians	24	.8	71.8
Laboratory technicians	20	.6	72.5
Mechanical engineers	53	1.7	74.2
Metal working production and maintenance fitters	84	2.7	76.9
Other skilled trades n.e.c.	8	.3	77.1
Planning, process and production technicians	12	.4	77.5
Production and process engineers	41	1.3	78.8
Programmers and software development professionals	276	8.9	87.7
Quality assurance and regulatory professionals	113	3.6	91.3
Quality control and planning engineers	16	.5	91.8
Quantity surveyors	41	1.3	93.2
Research and development managers	120	3.9	97.0
Science, engineering and production technicians n.e.c.	18	.6	97.6
Telecommunications engineers	19	.6	98.2
Town planning officers	46	1.5	99.7
Web design and development professionals	10	.3	100.0
Total	3111	100.0	

PUBLIC SECTOR	n	%	% (cum.)
Biological scientists and biochemists	94	8.1	8.1
Education advisers and school inspectors	14	1.2	9.3
Further education teaching professionals	151	13.0	22.2
Health services and public health managers and directors	28	2.4	24.6
Higher education teaching professionals	156	13.4	38.0
Housing officers	6	.5	38.5
Librarians	31	2.7	41.2
National government administrative occupations	125	10.7	51.9
Natural and social science professionals n.e.c.	208	17.8	69.7
Officers in armed forces	41	3.5	73.2
Physical scientists	50	4.3	77.5
Police officers (sergeant and below)	3	.3	77.8
Primary and nursery education teaching professionals	25	2.1	79.9
Protective service associate professionals n.e.c.	16	1.4	81.3
Public services associate professionals	52	4.5	85.8
Secondary education teaching professionals	35	3.0	88.8
Senior professionals of educational establishments	66	5.7	94.4
Social and humanities scientists	16	1.4	95.8
Social workers	2	.2	96.0
Special needs education teaching professionals	2	.2	96.1
Teaching and other educational professionals n.e.c.	12	1.0	97.2
Welfare and housing associate professionals n.e.c.	28	2.4	99.6
Welfare professionals n.e.c.	2	.2	99.7
Youth and community workers	3	.3	100.0
Total	1166	100.0	