

Migration to London and the development of the north-south divide, 1851-1911

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Abstract

This article uses census data for England and Wales covering the period 1851-1911 to provide new insights into patterns of migration to London. It examines several related themes including the role migration played in London's growth during this period, age and gender differentials, and distance travelled. Calculating net migration rates, the article demonstrates that after age 30, of those born outside of London, more left the Capital than came, yet over time an increasing proportion of the migrant population was retained. The proportion of family migrants fluctuated over the period, yet compared to others tended to travel shorter distances, a feature which increased over time with suburbanisation. Turning to the geographical origins of migrants, London drew migrants from across the entirety of England and Wales. However, the data suggest that the migrant sex ratio became more homogeneous over time, with distinct pockets of male dominated migration that were visible in 1851 disappearing by 1911. Lastly, the article investigates migration from the perspective of place of departure rather than destination, as is traditionally the case. This reveals a distinct regional geography, suggesting that the present-day north-south divide was already evident in 1851, and became increasingly distinct over time.

Keywords

London; migration, north-south divide; nineteenth-century; regionalism; mobility; urban growth.

Young men and women in the country fix their eye on London as the last stage of their hopes; they enter into service in the country for little else but to raise money enough to go to London, which was no such easy matter when a stage coach was four or five days creeping an hundred miles; and the fare and the expenses ran high. But now! A country fellow one hundred miles from London jumps onto a coach-box in the morning, and for eight or ten shillings gets to town by night.....besides rendering the going up and down so easy that the numbers who have seen London are increased tenfold and of course ten times the boasts are sounded in the ears of country fools, to induce them to quit their healthy clean fields for a region of dirt, stink and noise. And the number of young women that fly thither is almost incredible.

Arthur Young, *The Farmer's Letters to the People of England* (1771).¹

Arthur Young had little enthusiasm for London. The Capital offered little attraction for him. Yet he recognised its draw upon others, how developments in transportation were making significant differences in the relationship between the metropolis and its surrounding countryside, and moreover, how its influence was ever-increasing in terms of distance. Whilst Young had no way of quantifying the extent to which London was drawing-in population, Wrigley in his classic paper on the importance of London to the country's economy calculated that during the period 1650–1750—just preceding when Young was writing, and prior also to the revolutions in transportation and population growth that were

¹ Arthur Young, *The Farmer's Letters to the People of England*, Vol. 1 (London, 1771), 353-4.

yet to come—on average one in six of the country's population lived at one time or another in London.²

Some of the many individuals in Wrigley's calculation might have measured their stay in London in weeks only, whilst for others the count would have been in years, yet despite this range of experiences, the overall impact of some 17% of the population having had not just contact with the Capital but having established ties of work and residence, leisure and entertainment—networks both social and economic—is something that does not appear to have been considered fully.³ Indeed, despite the fact that migration was an important factor in fuelling London's growth, not just in the second half of the eighteenth century but through the nineteenth as well, migration to—let alone from—the Capital has attracted relatively little attention. Much has been written about the City of Cities⁴—the first in Europe to break the million size threshold; largest urban conglomeration outside of Asia throughout the nineteenth century; financial and cultural engine; political heart of Empire—yet within this literature, the role of migration, upon which the extraordinary

² E. A Wrigley, 'A simple model of London's importance in changing English society and economy 1650-1750', *Past & Present*, 37 (1967), 44-70, here 49.

³ J. Fergus, 'Provincial servants' reading in the late eighteenth century' in J. Raven, H. Small, and N. Tadmor (eds), *The Practice and Representation of Reading in England*, (Cambridge, 1996), 202-25 has shown that in the case of domestic servants such social and economic networks could outlast subsequent moves and migration.

⁴ The phrase is from S. Inwood, *City of Cities. The birth of modern London* (London, 2005).

growth of London was built, is rarely mentioned.⁵ Much of the writing on migration to London has focused on immigrations from abroad, in particular the Irish, Jewish and other European migrants.⁶ Yet whilst culturally important, overseas migrants were always a small minority of London's population, never accounting to more than 7% (see Table 1).

<INSERT Table 1 here>

This article draws upon a newly-created source of digitised census data in an attempt to address the role which migration played in the growth of London, focusing on the second half of the nineteenth and the early twentieth centuries. Working with a commercial partner,⁷ the Integrated **C**ensus **M**icrodata (I-CeM) project produced a coded and standardised version of six complete or near-complete count censuses for England and

⁵ One early exception is H. A. Shannon, 'Migration and the growth of London 1841-1891', *Economic History Review*, 5 (1935), 78-86.

⁶ L. H. Lees, *Exiles of Erin: Irish migrants in Victorian London* (Cornell, 1979); D. Englander, 'Booth's Jews: the presentation of Jews and Judaism in "Life and Labour of the People in London"', *Victorian Studies*, 32 (1989), 551-71; D. Feldman, 'Migration' in M. Daunton (ed.), *The Cambridge Urban History of Britain*, vol. 3 (Cambridge, 2000), 185-206; P. Panayi, 'German immigrants in Britain, 1815-1914' in P. Panayi (ed.), *Germans in Britain since 1500* (1996), 73-112; L. Sponza, *Italian Immigrants in Nineteenth Century Britain: reality and images* (Leicester, 1988) and C. Holmes, *John Bull's Island: immigration and British society, 1871-1971* (Basingstoke, 1988).

⁷ BrightSolid, formally DC Thomson Family History, see www.findmypast.com/company.

Wales for the period 1851–1911, encompassing over 182 million person records.⁸ Given the coverage of these data, new insights can be gained not only on the Capital's migration flows but also on the development of the north-south divide and London's role within it. Within the analyses using the I-CeM census data which follow, London is defined from the viewpoint of the census administration, being the metropolitan area covered by the Registration County of London in the censuses of 1851-1911. This included the cities of London and Westminster and the registration sub-districts of Paddington, Kensington, Hammersmith, Fulham, Chelsea, St George Hanover Square, St Marylebone, Hampstead, St Pancras, Islington, Hackney, St Giles, Strand, Holborn, Shoreditch, Bethnal Green,

⁸ K. Schürer, and E. Higgs, *Integrated Census Microdata (I-CeM); 1851-1911* [computer file]. Colchester, Essex: UK Data Archive [distributor], April 2014. SN: 7481; E. Higgs, C. Jones, K. Schürer and A. Wilkinson, *The Integrated Census Microdata (I-CeM) Guide* (Colchester, 2013). For further details on the I-CeM project and data access see <https://www.essex.ac.uk/history/research/icem/>. The creation of the I-CeM database was made possible through funding from the UK Economic and Social Research Council (ESRC), grant number RES-062-23-1629. The six censuses for England and Wales included in the I-CeM database are 1851-1861 and 1881-1911. Whilst data for 1871 have been supplied, the transcription does not contain information on place of birth and thus is of little value for the analyses presented in this article. The census data for Scotland (1851-1901) within I-CeM have also not been used. The version of the I-CeM data used here has been enhanced as the result of work by Schürer, H. Jaadla and A. Reid as part of the ESRC-funded An Atlas of Victorian Fertility Decline project (ES/L015463/1) at the Cambridge Group for the History of Population and Social Structure, Department of Geography, University of Cambridge.

Whitechapel, St George in the East, Stepney, Mile End, Poplar, Southwark, Bermondsey, Lambeth, Wandsworth, Camberwell, Greenwich, Lewisham and Woolwich. This was co-terminus with County of London, established in 1889 under the powers of the Local Government Act, 1888. As such, it should be noted that London as defined here includes not only the central areas of London, what might be called 'inner London', but also the largely residential areas of 'outer' London which experienced relatively fast growth in the last two decades of the study period. In relation to this definition, it is also important to clarify what is meant by the terms migrant and migration in the I-CeM-based analyses which follow. Since the main underlying sources are the census enumerators' books for 1851 to 1901 and the census householder schedules for 1911, out of necessity, migration is defined simply as life-time migration, where an individual's recorded place of birth differs from their place of enumeration in the census. However, again for pragmatic reasons, London is treated as a single entity. Thus, the study does not consider intra-London moves, focusing instead on those moving to the nation's capital from elsewhere. By definition, the decennial censuses capture those residing in a given place on one night of the year, regardless of whether this residence was temporary, medium-term or permanent. Thus the many sojourners who came and went between censuses would go unrecorded. Yet this does not mean that the census pages fail to capture such temporary and short-term moves. Given that this transient population was constant through the year, the cross-section of it that was captured on census nights—in boarding and doss-houses, lodgings and on the street—is representative of that sector of the population at that moment in time.

The growth of London

For Young, writing in 1771, the major transportation advance was the improvement of roads and the carriages which used them. Yet in terms of the time/cost travel ratio the introduction of railways would make travel to London dramatically quicker and cheaper.⁹ In the era of the stagecoach (1750–1830) travel times to London improved fourfold, yet with the coming of the railway they shrank dramatically.¹⁰ On average the journey from London–Manchester took between 25–30 hours by coach; by the mid-nineteenth century, steam trains reduced this to just 6–8 hours.¹¹ The relative costs of travel continued to decline further, if less sharply, in the second half of the century as the railway network matured and expanded. In 1851, London was at the heart of a railway infrastructure extending to about 6,800 miles of track. Twenty years later this figure had increased to around 10,800, and by 1891 stood at 14,000, after which the pace of growth began to slow, reaching around 16,000 miles of track in 1911. As track mileage increased, passenger journeys mushroomed. It is estimated that in 1861 just under 15,000 passenger journeys were made, doubling to reach nearly 33,000 by 1871, then trebling to reach just over 102,000 by 1901. More importantly for would-be migrants, the relative cost of train journeys fell in the latter half of the nineteenth century. In 1871 costs were roughly 69% of what they had been a decade

⁹ While travel time/costs declined generally across Britain in the period, the relative declines between places, of course, were not equitable.

¹⁰ R. Porter, *London: a social history* (London, 2000).

¹¹ M. Freeman, 'Transport', in J. Langton and R.J. Morris (eds), *Atlas of Industrializing Britain 1780-1914* (London and New York, 1986), 90.

earlier, and relative costs continued to fall—by 1881 they were 54% of the 1861 cost, and by 1901 half.¹²

In this new railway age London mushroomed to become by far the largest metropolis in Europe. In the mid-eighteenth century London was not significantly larger than a number of other European cities. Paris, for example, numbered somewhere in the region of 5-600,000 in 1750 against London's population of around 700,000.¹³ Yet by the beginning of the nineteenth century London had pulled away from the pack, passing the million mark by 1800 and accounting for one in 10 of the country's population, whilst revolution-torn Paris had barely grown from its position in 1750. Around the commencement of Queen Victoria's reign in 1837, London's population was expanding rapidly, reaching some 1.75 million people. By the time of her golden jubilee in 1887 London was not only the capital of

¹² J. Simmons, *The railway in England and Wales, 1830-1914* (Leicester, 1978), 276-77.

¹³ See A. Lees and L. H. Lees, *Cities and the Making of Modern Europe, 1750-1914* (Cambridge, 2004), Appendix A 'The growth of selected large cities in Europe, 1750-1910', 287-8. For discussion of London's growth in comparison to continental European cities see, J. De Vries, 'Patterns of urbanization in pre-industrial Europe', 1500-1800', in H. Schmal (ed.), *Patterns of European urbanization since 1500* (London, 1981), 77-109 and E. A. Wrigley, 'Urban growth and agricultural change: England and the continent in the early modern period', *Journal of Interdisciplinary History*, 15 (1985), 685-728. A. Gordon, *A Modern History of Japan: from Tokugawa times to the present* (Oxford, 2003), Table 2.1, 21 assigns Edo (now Tokyo) a population of 1 million by c.1720. Lees and Lees, *ibid.* (p.21) however claim that Beijing, with its 900,000 population was the largest city in the world in 1750.

her Empire, but one of the most populated urban environments that the world had ever seen, having passed the figure of five million just a few years earlier—and was still growing. In the two decades between 1881 and 1901, London expanded by almost a million each decade, in absolute terms the greatest growth spurt of its 2000 year history.

Although some, such as Lees, have argued that London's relative importance in demographic, political and economic terms shrank during the course of the nineteenth century, this fails to place London in its longer-term demographic, social and economic trajectory.¹⁴ Whilst one can point to the fact that the rank size ratio—the ratio between the size of London and the size of the second ranked city over time—declined from roughly 10:1 in 1801, to 6:1 in 1851, and 5:1 by 1901, such figures naturally depend on how 'London' is defined and how its influence over the rest of the country is measured. In stark contrast to a diminished national role, mapping the 2001 census data for the UK, Dorling and Thomas paint a picture in which the monster of London is consuming more and more of the country, so much so that they argue that the UK is becoming increasingly divided into a dichotomy between London and the rest, what they call 'London and the Archipelago'. London and its region, they suggest, now effectively dominates the area south of an imaginary line running from the river Severn to the river Humber. Within the London core, population is more densely concentrated, and increasingly becoming younger. To the north of the line within the archipelago, are numerous centres each with their outer areas and remoter edges. Essentially, the archipelago is an amalgam of places in which population is generally less concentrated, often reducing in numbers, becoming older, and with a focus on industries

¹⁴ L. H. Lees, 'Urban networks', in M. Dauntton, *op. cit.*, 81.

that have died or are dying.¹⁵ Whilst not all may agree with Dorling and Thomas's interpretation of the modern census data, it points to the importance of London in driving, if not defining, the current much-debated north-south divide, a feature which will be further explored towards the end of this article.

From the second half of the nineteenth century, London, like other large urban centres, experienced natural population growth—with a surplus of births over deaths—yet migration continued to be a major element in fuelling the capital's growth.¹⁶ Of the 3.5 million recorded living in London in the 1881 census just over a third stated that they had been born elsewhere within England and Wales (Table 1). From this point on the proportion of non-London born living in London declined steadily. Yet this decline was, as one might expect, unevenly distributed across the capital. Many of the traditional poorer parts of

¹⁵ D. Dorling and B. Thomas, *People and Places. A 2001 census atlas of the UK* (Bristol, 2004).

This view of London's expanding reach is foretold in D. Friedlander, 'London's urban transition, 1851-1951', *Urban Studies*, 11 (1974), 127-141, in which he shows that within a 'London area' covering much of the south-east, south-west and east Anglia, in the twentieth-century the migration flows for the outer most concentric ring zones switched to urban-rural, signalling widespread suburban growth. He adds at the end: 'When an analysis of migration is made for the 1950s, 1960s and 1970s it will no doubt be necessary to add a fifth concentric zone to London so that this expansion process may be more clearly examined' (140-1).

¹⁶ Due to the age-specific nature of most urban migration, migration will in itself impact upon natural increase. See J. G. Williamson, *Coping with City Growth During the British Industrial Revolution* (Cambridge, 1990) for a detailed discussion.

London declined quite sharply, such as Bethnal Green and Stepney in the east for which the proportions of non-London born fell from 15.5% to 6.9% and from 22.9% to 8.6%, respectively in the period 1881–1921. Conversely, several outer districts of London, especially in the west and south, retained higher percentages of non-London born due to suburban growth made possible by the ability and desire to commute longer distances to work.¹⁷ Several other large urban centres also grew as a result of migration in mid-nineteenth century Britain. This was not a feature of London alone. Indeed, in the case of several rapidly growing industrial, especially textile centres, the percentage of non-local born would have surpassed that of London, but in terms of absolute numbers and magnitude, London dwarfed them all, attracting migrants disproportionately than all other major towns and cities. For the period 1841–1911 Cairncross calculated that London attracted nearly as many migrants as the second eight largest industrial towns and the coalfields combined.¹⁸

Much of what is known about migration from the second half of the nineteenth century—at both a macro and micro scale—is based on census data. The census returns from 1851 onwards provide us with much to feed on. The published census returns enable a sketch to be made of the scale and outline geography of the migration flows. Indeed, these

¹⁷ A. L. Bowley, 'Area and population', in H. Llewellyn Smith (ed.), *The new survey of London Life and Labour. Volume 1 Forty years of change* (London, 1930), 69. On the development of commuting see C. G. Pooley, J. Turnbull and M. Adams, *A Mobile Century? Changes in everyday mobility in Britain in the twentieth century* (Routledge, 2017), especially 111-37.

¹⁸ A. K. Cairncross, 'Internal migration in Victorian England', *Manchester School*, 17 (1949), 82-6.

aggregate counts underpinned Ravenstein's hugely influential examination of migration: his 'laws of migration'.¹⁹ In short, Ravenstein put forward the idea that the great majority of movements resulted from the imbalances between population and economic opportunities, which in turn produced a wave-like response outwards from the area seen as lacking in opportunity, with only a small proportion of migrants moving over long distances directly to a large centre of attraction, with females and single adults predominating as migrants. Despite an initial luke-warm, if not hostile, reception, Ravenstein is given credit as being the

¹⁹ E. G. Ravenstein, 'Census of the British Isles, 1871: birthplaces and migration', *Geographical Magazine*, 3 (1876), 173-7 and 201-6; E. G. Ravenstein, 'Laws of migration: counties and general', *Geographical Magazine*, 3 (1876), 229-33; E. G. Ravenstein, 'The laws of migration', *Journal of the Statistical Society*, 48 (1885), 167-227; E. G. Ravenstein, 'The laws of migration', *Journal of the Royal Statistical Society*, 52 (1889), 214-301. The essays of 1885 and 1889 are the most quoted, yet most of Ravenstein's ideas had been formulated by the time of the publication of the 1876 essays. The number of laws attributed to Ravenstein sometimes varies because of changes that were made between the various essays. In addition, in his 1889 essay Ravenstein included a discussion on the reasons for migration and it has been suggested by Lee that this be included as a 'law'. E. G. Lee, 'A theory of migration', *Demography*, 3 (1966), 47-57. Realising the importance of age upon migration, in his first paper of 1876 Ravenstein stated as one of his laws that most migrants were adults (p.230). However, due to the census data at his disposal, which only split birthplace information into those under 20 and those aged 20 plus, Ravenstein was unconvinced about his findings and dropped this 'law' from the 1885 and 1889 essays.

earliest and perhaps the greatest theorist of migration.²⁰ The pioneering work of Redford, focusing on assisted pauper labour, generally endorsed the notion that migration was predominantly short distance, wave-like in motion and economically governed, while more recently, a host of localised case studies, have tended to support one or more of Ravenstein's laws.²¹ From the point of view of London, using published aggregate census data, as Ravenstein had done earlier, writing in Booth's *Life and Labour of the People of London*, Llewellyn Smith essentially verified the work of Ravenstein. He argued that there was an inverse relationship between distance (travelled from place of birth) and the proportion of migrants in London, suggesting that the home counties were the greatest 'source' of migrants, and beyond these, large numbers came from the western counties, and smaller numbers from midland counties, due to competing manufacturing towns; that

²⁰ Some 25 years earlier writing on Lancashire and Cheshire and also using published census data, Danson and Welton described the features of migration into those counties in much the same way as Ravenstein did later. J. T. Danson and T. A. Welton, 'On the population of Lancashire and Cheshire and its local distribution during the fifty years 1801-51: Part third', *Transactions of the Historic Society of Lancashire and Cheshire*, 11 (1859), 31-70.

²¹ D. R. Mills and C. G. Pearce, *People and Places in the Victorian Census. A review and bibliography of publications based substantially on the manuscript census enumerators' books* (Historical Geography Research Series, 23, Institute of British Geographers, 1989); K. Schürer and D. R. Mills (eds), *Local Communities in the Victorian Census Enumerators' Books* (Oxford, 1996). See, in particular, the summary provided by D. B. Grigg, 'E.G. Ravenstein and the "laws of migration"', *Journal of Historical Geography*, 3 (1977), 41-54.

migration was greatest from agricultural counties, and occurred usually between ages 15–30.²²

Moving from aggregated census data tabulated for the published census reports to the analysis of the individual-level person census records on which the tables are based has added to the overall picture. Analysing the 2% national sample of nominal census data for 1851 Anderson has argued in support of a basic gravity model in which the larger the town the further a migrant might be prepared to travel to it, with larger towns attracting relatively more migrants from greater distances. He estimates that some 60% of migrants in urban areas in 1851 were living more than 26 kilometres (16.2 miles) from their place of birth, compared to around a third in the case of rural parishes. For London, the comparable figure was some 80% of life-time migrants having been born 26 kilometres away or greater.²³ Using the same source, yet splitting the migrant inhabitants of London in the 1851 sample into birth cohorts, van Lottum has argued that the Capital's migration field remained relatively stable over time.²⁴ For migrants he calculates the average distance from London to place of birth as 136 kilometres. Breaking the results down by age and sex provides a

²² C. Booth, *Life and Labour of the People in London*, vol. 3 (London, 1902).

²³ M. Anderson, 'The social significance of demographic change: Britain 1750-1950', in F.M.L. Thompson (ed.), *The Cambridge Social History of Britain*, vol. 2 (Cambridge, 1990), 1-71, (p.11); M. Anderson, 'Urban migration in Victorian Britain: problems of assimilation?' in E. François (ed.), *Immigration et Société Urbaine en Europe Occidentale: XV^e-XX^e Siècles* (Editions Recherche sur les Civilisations, Paris, 1985), 79-91.

²⁴ J. van Lottum, 'Labour migration and economic performance: London and the Randstad, c.1600-1800', *Economic History Review*, 64 (2011), 531-70.

range of between 145 kilometres (those born before 1791) and 137 kilometres (those born between 1791-1810) for males and between 141 kilometres (those born before 1791) and 126 kilometres (those born between 1811-1830) for females.²⁵ Interestingly, the average figure of 136 kilometres travelled by London's migrants resident there in 1851 is not dissimilar to a figure calculated by Wareing using the origin of London apprentices in the eighteenth century. Although examining a longer time period, Wareing argues that as a destination for apprentices London became less important over the course of the eighteenth century.²⁶

New data, new perspectives

The I-CeM database of complete or near complete census data for England and Wales, covering the period 1851–1911, allows the findings based on the 1851 census to be placed

²⁵ *Ibid.*, Table 2, 550. These figures are based on approximate distances since he measures birthplace not by parish but by registration district. Given that he fails to provide any n. values it is also not known if these figures include all those in the two% national samples or just a subset. It is also not known how Scots, Irish and others from overseas are treated. It is assumed that the 136 km average is for the English and Welsh only.

²⁶ J. Wareing, 'Changes in the geographical distribution of the recruitment of apprentices to the London companies, 1486-1750', *Journal of Historical Geography*, 6 (1980), 241-9; J. Wareing, 'Migration to London and transatlantic emigration of indentured servants, 1683-1775', *Journal of Historical Geography*, 7 (1981), 356-78; J. Wareing, *Indentured Migration and the Servant Trade from London to America, 1618-1718: 'There is a great want of servants'* (Oxford, 2017).

within a longer timeframe and, given the volume of the data available, a richer context.

Unlike the data used by both Anderson and van Lottum, the I-CeM data are not samples but rather transcriptions of the complete census records which survive for the period. As a result, the English and Welsh elements of the I-CeM data collection currently extend to 38,662,750 households and 187,720,820 individuals, over 15,000 times the amount available from the 1851 sample.²⁷ Unfortunately, the transcription available of the 1871 census for England and Wales does not contain information on place of birth, therefore it is excluded from the analyses presented here. Notwithstanding the lack of data for 1871, the sheer size of the I-CeM data collection brings its own complexities. One such complexity is the need to standardise the birthplace strings recorded in the various years of the census data as part of the process of generating distances between places of residence and the recorded places of birth. Details on the approach taken to this problem are provided in the appendix. In short, in order to analyse and map migration by birthplace from the censuses of 1851–1911 it has been necessary to first standardise each of the seven million plus unique birthplace strings in the raw census data and then link the standardisations to one of some 12,000 standardised *places* of birth for England and Wales. A Euclidean distance was then calculated between the centroid of the place of birth and the parish of enumeration. Such distances could only be calculated for those born within England and Wales and with

²⁷ In fact Anderson (1985) *op. cit.* only uses a sub-set of the 1851 census sample. It should be noted that no census in the period 1851 to 1911 has survived completely intact. In particular some 3.7% of the individual records are missing for 1861 and 2% for 1851. The other years under consideration have fared significantly better: just 0.35% of individuals are missing from 1871; 0.08% from 1881; 0.34% from 1891; 0.65% from 1901; 0.11% from 1911.

sufficient detail in the census place of birth response to allow a sub-county birthplace to be identified. As shown in Table 2, this results in the following analyses being restricted to between 89-93% of the populations of England and Wales, 1851–1911, with regard to calculating a distance between place of birth and enumeration or mapping places of birth.²⁸ Where relevant, those born within England and Wales for whom only a county of birth is known are included in the tabulations and analyses which follow, increasing the proportion of the population in observation to between 96–98%.

<INSERT Table 2 & Figures 1-3 about here>

Taking all these qualifications into consideration, the distance decay curves for London, in comparison with the next four largest cities in England—Birmingham, Leeds, Liverpool and Manchester—and urban and rural residues are produced in Figures 1–3 for the census years 1851, 1881 and 1911, respectively. These confirm that distance from place of birth is inversely related to the proportion of migrants, with the number of migrants drawn to a place decreasing with distance. Reassuringly, for 1851 (Figure 1) the percentages are remarkably close to those calculated from the sample data for that year—84% of female migrants and 85% of male migrants to London having been born in places 26 kilometres

²⁸ Whilst it is the case that some of those living in England or Wales and born in Scotland, Ireland or elsewhere overseas provided details of the specific place in which they were born, the vast majority did not, for the simple reason that they were not required to do so. Because of this distances are not calculated for any of those recorded as born in Scotland, Ireland or overseas.

away or further, with 32% and 33% respectively for rural areas. Yet Figures 1–3 also reveal that distance decay differed between places, over time and between men and women, although in the case of the latter, the differences are very slight. London clearly attracted migrants from further afield than the other major cities of England and Wales, although the degree of difference between London and Liverpool—the only other port in the top five cities—was slight in comparison to the other three major cities, and diminished over time.²⁹ In 1851, 75% of the male and 73% of the female migrants in London had been born 50 kilometres away or further. For those from over a 100 kilometres the percentages were 54% and 51% respectively, indicating that, on average, males came from slightly further afield than females. In this year London had a higher proportion of longer distant migrants than the other great cities, especially so in comparison with Manchester, Birmingham and Leeds. The last of these—perhaps a feature of the relative proximity of other urban settlements in close proximity—had a relatively ‘local’ migration field with just 32% of male migrant being born in places 50 kilometres away or further, and 14% from 100 kilometres or more (11% of male migrants in the combined rural areas had been born in places 100 kilometres distant or more in 1851). The comparable figures for male migrants in Liverpool were 63% and 44%. After 1881, the proportion of migrants born from further afield in London decreased, shown by the curves for the Capital in Figure 3 moving further to the right, relative to those in Figures 1 and 2. This would suggest that moving from the nineteenth to the twentieth centuries, the numbers of migrants in London from longer distances diminished *pro rata*, a feature which will be further examined later. Whilst this trend can be seen in the other cities

²⁹ It is also the case that London and Liverpool had higher proportions of Scots and Irish (for whom distances cannot be calculated) than the other cities.

too, it was more pronounced in the case of London, and for Liverpool barely changed, with the result that by 1911 (Figure 3) the distance decay curves for London and Liverpool were remarkably similar. Interestingly, the curves for rural areas actually move in the opposite direction between 1881 and 1911—from right to left—indicating that migrants from greater distances accounted for a higher proportion of all migrants than they had previously. This may have been the result of suburbanisation in the early years of the twentieth century.

<INSERT Tables 3 & 4 about here>

Examining these basic trends in greater detail, Table 3 extends the analysis of van Lottum, outlined above, in which he calculated mean distances for life-time migrants to London by birth cohort. Whilst the general trends in mean distances by birth cohort for 1851 reported by van Lottum are comparable to the I-CeM data, the distances calculated from the latter are slightly shorter—his overall mean distance is 136 kilometres, compared to means of 132 kilometres for males and 126 kilometres for females calculated from the I-CeM data.³⁰ These relatively small differences are entirely plausible, if not to be expected, given that he matches the birthplaces in the 1851 sample to a Registration District and then calculates the distance from the centroid of this district. Given that I-CeM includes data for various successive census years (unfortunately 1871, as mentioned, cannot be used in this

³⁰ van Lottum, *op. cit.*, Table 2, 550. See also C. G. Pooley and J. Turnball, *Migration and Mobility in Britain Since the Eighteenth Century* (London, 1998), 120-3, who whilst using rather different data estimate an overall figure of 149 kilometres for the period 1750-1879 and 135 kilometres for 1880-1994.

exercise), the number and mean distance from place of birth of life-time migrants living in London can be calculated by cohort of birth, census year by census year (Table 3). In interpreting this information, it needs to be stressed that the I-CeM database is not longitudinal, but rather a series of period cross-sectional data. Thus, to illustrate this point, whilst it is highly likely that some of the 10,098 migrant women born before 1791 recorded in the 1861 census are included in the count of 30,064 in the same birth cohort in 1851, it is impossible to say how many individuals appear in both counts since, in addition to those women who died between the two censuses, some will undoubtedly have moved away from London, possibly back to their place of birth or 'home', and more women born prior to 1791 could potentially have moved into London. Before this point is explored further, a number of general observations need to be noted concerning the information in Table 3. In so doing it is useful to refer also to Table 4, which shows the approximate ages of those included in the various cells of Table 3. Since the 1851 census was held on Sunday 30 March, those recorded as being less than age one, could have been born at any time between 31 March 1850 and census day itself 1851, yet are all included in the birth cohort 1851–1860. A similar issue exists for all others recorded in the census with a 'zero' age (10, 20, 30 and so on).

The first general point that should be made in relation to Table 3 is that for every census year, the number of female migrants in London out-number males. The rate is remarkably constant over time varying from 1.21 to 1.29 female migrants per male migrant, increasing very slightly in the twentieth century. This is entirely consistent with the existing secondary literature on internal nineteenth and early twentieth-century migration which

emphasises the importance of female domestic service.³¹ However, despite the greater numbers of female migrants, for virtually every birth cohort by census year, the mean distance between place of birth and London is greater for men than women.³² This fits with the pattern already shown by the distance decay curves of Figures 1–3. The differences are slight, rarely more than six kilometres, and generally reduce over time. This trend towards decreased mean distance travelled started primarily after 1861 (and in this regard it is particularly unfortunate that the 1871 data are not useable) but seems particularly marked between 1901 and 1911. For example, female migrants aged (approximately) 11–20 in 1901

³¹ For example, in his detailed study of migration from selected parts of Essex, Hill reports that in the period 1840–1901 there was a large and steady flow of migrants from rural areas, resulting in a dearth of young men aged 17–35 and young women aged 12–30 in rural areas, mirroring the excess in London of individuals of these ages; 61% of the 204 migrant females examined in detail entered domestic service. A. B. Hill, *Internal Migration and its Effect upon Death-Rates: with special reference to the County of Essex* (HMSO, 1926). On domestic service generally see: L. Delap, *Knowing Their Place: domestic service in twentieth-century Britain* (Oxford, 2011); E. Higgs, 'Domestic servants and households in Victorian England', *Social History*, 8, 2 (1983), 201–10; P. Horn, *The Rise and Fall of the Victorian Servant* (Macmillan, 1975); S. Pooley, 'Domestic servants and their urban employers: a case study of Lancaster 1880–1914', *Economic History Review*, 62, 2 (2009), 405–29; J. Rennie, *Every other Sunday: the autobiography of a kitchenmaid* (London, 1981); S. Todd, 'Domestic service and class relations in Britain 1900–1950', *Past & Present*, 203 (2009), 181–204.

³² Again, this is mirrored in Hill, *ibid.*

had a mean distance of 94 kilometres, and those aged 21-30 a mean of 106. Ten years later those women in the same two age groups recorded mean distances of just 64 and 90 kilometres. A similar situation is true also of male migrants, suggesting that the young individuals who moved into the capital in the early twentieth century were born closer to the capital than their counterparts had been 50 plus years earlier. Given the growth of London over this period and the pace of suburbanization in the early twentieth century in areas of 'outer' London, especially to the south and the west, the metropolitan county was, in effect, spreading out to its potential pool of migrants, so a reduction in mean distance travelled is perhaps not unexpected.³³ Viewing Table 3 in conjunction with Table 4, it is clear that in all census years available, London was home to a number of individuals aged less than one who had been born elsewhere. Considering all those in London yet born elsewhere aged 10 or under—those for whom the process of leaving the parental home had yet to be a major factor in this period³⁴—would suggest that whilst not the experience of the majority, family migration to London was an important factor, and one which may have changed over

³³ The importance of suburban growth as a factor of London's overall population growth from the end of the nineteenth century is demonstrated visually in the maps contained in K. G. Grytzell, *County of London. Population changes, 1801-1901* (Lund Studies in Geography, Series B, Human Geography, 33, 1969).

³⁴ K. Schürer, 'Leaving home in England and Wales, 1850-1920', in F. van Poppel, M. Oris and J. Lee (eds), *The Road to Independence. Leaving home in Eastern and Western societies, 16th-20th centuries* (Bern-Bruxelles, 2003), 33-84.

time.³⁵ Those aged under 10 accounted for 8.3% of all non-natives living in London in 1851, rising to 10.1% in 1861 and peaking at 12.5% in 1881, thereafter declining to 8.7% in 1891, 6.8% in 1901, before rising again to reach 9.7% in 1911. These figures do not equate to the levels of family migration *per se* since they are dependent on the levels of migration in and out of London and differential mortality over time of those older than them, as well as the fact that family migration can and would have involved families without children aged 10 or under, in particular childless couples. 'Single' migrations can equally be family-orientated, with individuals migrating to join (if only temporarily) family at the point of destination, or

³⁵ See C. Pooley and J. Turnbull, *Migration and Mobility in Britain since the Eighteenth Century* (London, 1998), especially chapter 6 which emphasises family migration; K. Schürer, 'The role of the family in the process of migration', in C. G. Pooley and I. D. Whyte (eds), *Migrants, Emigrants and Immigrants: a social history of migration* (Oxford, 1991), 106-142; C. Pooley and J. C. Doherty, 'The longitudinal study of migration: Welsh migration to English towns in the nineteenth century', in Pooley and Whyte, *ibid.*, 143-73; J. Robin, *Elmdon: continuity and change in a north-western Essex village, 1861-1964* (Cambridge, 1980), 193-9; M. B. White, 'Family migration in Victorian Britain: the case of Grantham and Scunthorpe', in D. R. Mills and K. Schürer (eds), *Local Communities in the Victorian Census Enumerators' Books* (Oxford, 1996), 267-79; and specifically in the case of the transient urban poor, K. D. M. Snell, *Annals of the Labouring Poor: social change and agrarian England, 1660-1900* (Cambridge, 1985), 364-5; T. Sokoll, 'Negotiating a living: Essex pauper letters from London, 1800-1834', *International Review of Social History*, 45 (2000), 19-46; S. King, 'Friendship, kinship and belonging in the letters of urban paupers 1800-1840', *Historical Social Research*, 33 (2008), 249-77.

migrating ahead of other family members.³⁶ Indeed, given that many of the non-natives aged over 10 in each census year, progressively with increased age, will have migrated prior to the 10-year period immediately before the census point, as a proportion of all inter-censal migrants, one would expect the overall levels of family migration to be rather higher than the figures cited earlier. However, given that the shortest migration distances are consistently recorded in each census year for those aged under one, it would seem reasonable to conclude that families with young families migrated to London from places closer to London than others, and, potentially facilitated by railway expansion and the ability to commute, increasingly did so over time. This will be further investigated later.

<INSERT Table 5 about here>

As mentioned previously, the birth cohort information on the London non-native born presented in Table 3 is not longitudinal but rather a series of period data. Extending the data in this table to include those born outside of London, but whose distance to their place of birth cannot be measured (basically those born overseas, together with Scots, Irish and those born in England or Wales but whose exact place of birth is unknown), Table 5

³⁶ Pooley and Turnball, *op. cit.*, chapters 6 and 8; M. Anderson, *Family structure in nineteenth-century Lancashire* (Cambridge, 1972), 160; W. M. Brayshay, 'The demography of three west Cornwall mining communities: a society in decline' (Ph.D., Exeter, 1977), 256, 264-6; S. Beadle, 'Economic changes and the population of coalfield in the early 19th century, with special reference to the Somerset and St. Helens coalfield' (Ph.D., Liverpool, 1984), 224.

produces estimates of net migration by birth cohort of a five-year age span for those under 50. The rates given are calculated by applying gender-specific survival rates for the various cohorts between censuses estimated from period life-tables.³⁷ This technique has previously been applied to aggregate data to estimate net migration rates, but not to non-native individual level data for London.³⁸ The resulting rates shown in Table 5 are subject to a number of caveats. In particular, the life tables used are produced from national data. As such they may under-estimate mortality rates prevalent in London and as a consequence over-estimate the relative chances of survival. In addition, mortality levels varied geographically across London during the period 1851-1911. In general there was a mortality gradient from the west (low mortality) to the east (high) which, whilst becoming less marked over time, persisted throughout the period in question.³⁹ It may also be the case that migrants to London experienced differential mortality rates to non-migrants—better or

³⁷ The life tables used in this exercise were taken from the *Human Mortality Database* developed by the University of California, Berkeley (USA) and the Max Planck Institute for Demographic Research (Germany), available at www.mortality.org (accessed 22 May 2017).

³⁸ R. Lawton, 'Population changes in England and Wales in the later nineteenth century: an analysis of trends by registration districts', *Transactions, Institute of British Geographers*, 44 (1968), 55-74; D. Friedlander and R. J. Roshier, 'A study of internal migration in England and Wales, Part 1', *Population Studies*, 19 (1966), pp.239-279; D. Baines, *Migration in a Mature Economy: emigration and internal migration in England and Wales 1861-1900* (Cambridge, 1985).

³⁹ R. Woods, *The Demography of Victorian England and Wales* (Cambridge, 2000), 60-1 and figures 5.17-5.19.

worse. Either way, it is impossible to know. Despite these reservations, the indicative rates in Table 5 are still instructive. In all years for which inter-censal rates can be calculated,⁴⁰ in the case of both males and females, the highest net in-migration rates occurred for those aged between approximately 10 in the first census year and 25 in the subsequent census year, suggesting that levels of in-migration to London were greatest for those aged in their late-teens and early twenties (slightly younger than suggested by Llewellyn Smith mentioned earlier). Whilst the net migration balance for those of the next age group up (those in their early to mid-twenties) is positive, the rate was significantly reduced, more so for women than men. For all older age groups, the balance in migration switched to a net outflow. In essence this suggests that from around the age of 30 more non-London born were moving back out of London than moving in, *pro rata*. The rate of exodus—maybe returning to a place they had lived prior to moving to London—was greater for men than women in later age (those in their late forties and older), perhaps reflecting an inability to earn a living wage in relation to the costs of raising a family in London. Conversely, for women aged in their thirties and forties, the net out-migration rate was greater than men—maybe servants and others in service related occupations returning to their home parish. Interestingly, for both men and women, the rate of exodus peaks in the period 1881–1891, and thereafter reduces, so much so that by the last period for which data are available (1901–1911) the out-migration rates for the over thirties were half what they were 20 years

⁴⁰ Whilst it is possible to calculate rates for 1861–81, they are excluded since the 20-year period makes them incompatible with the other 10-year migration figures.

earlier. In short, London in the early twentieth century seemed to be retaining more of its elderly migrant population.⁴¹

At the other end of the age spectrum, the experience of the youngest age group under consideration (those aged one to five at the time of the first of the two census years) is worthy of note. In the case of both boys and girls, the rates dropped markedly between 1851/61 and 1881/91, then gradually rose again, with the rates for 1901/11 being broadly similar to those of 1851/61. The rise in rates in the latter part of the period under investigation would suggest a gradual rise in the importance of family migration in terms of those moving into London. While the decline in the child net migration rate in the earlier part of the period may indicate the reverse, it also potentially signals a decline in the numbers of young children (with a median age of around 10) coming to the Capital unaccompanied by family.⁴² The fact that in the age group above this (those aged approximately 5–10 at the time of the first to the two census years) the in-migration rate for girls was much greater than that for boys, especially between 1881–1901, confirms that the migration of young single girls into London was greater than it was for boys, and persisted longer.

⁴¹ This would seem to run counter to the figures for net migration figures calculated for London, albeit using a rather different method, in D. Baines, *op. cit.*, 285.

⁴² Generally, throughout this period, the mean age at leaving the parental home was rising, see Schürer, *op. cit.*

Geographic origins of migrants

The distance decay curves discussed previously indicate that distance between place of birth and London was an important factor influencing migrants, yet neither they nor the mean distance data previously discussed provide information on the geographic origins of migrants to the Capital. Geo-referencing the I-CeM, both in terms of an individual's parish of enumeration and place of birth, enables patterns of migration into London to be mapped completely for the first time at a sub-county level.⁴³ Figure 4 shows the birthplaces of those living in London yet born elsewhere for the census years 1851–61 and 1881–1911. Two things are immediately striking. First, despite the mean distance figures, throughout the second half of the nineteenth and early twentieth centuries, London drew in migrants from across the whole of England and Wales. Indeed, given the number of other countries from which migrants were drawn, London could claim to be the first global metropolis.⁴⁴ In each census year individuals from between 85 and 90% of all the parishes in England and Wales—rural and urban alike—could be found living in London. Second, the general rule of distance decay was not straight forward. Whilst the Home Counties were an important place of origin for migrants to London, the large industrial and manufacturing towns and cities of the north-west and the west Midlands were a key source of migrants in overall numeric terms,

⁴³ The creation of the underlying GIS was undertaken in collaboration with Dr Max Satchell and Dr Corinne Roughley, both of the University of Cambridge. It is largely based on the consistent parish-level census geography developed by Tony Wrigley as an extension of E.A. Wrigley, *The Early English Censuses* (Oxford, 2011), 122-154.

⁴⁴ In 1851 individuals from 108 foreign countries were enumerated in London, rising to 127 by 1911.

indicating that there was significant movement between urban places in addition to rural-urban moves. In this sense, whilst drawing migrants from across the country, the gradually changing spatial distributions shown in Figure 4 in part mirror the changing distribution of the population nationally (outside of the Home Counties). This said, it was also the case that there were some areas of the country that were over-represented in the number of London migrants *pro rata* to population size and distance—in particular certain parts of the Fens and central west Wales, as well as places in Cumbria in the far north-west, parts of East Anglia and the south-west too.

Figure 4 includes information for both males and females combined. Whilst males and females were generally both drawn to London from across England and Wales, there was a marked difference in the geographical origin of women and girls moving to London. As has been mentioned—due largely to the draw of service—females were more migratory than males, especially at younger ages, yet the ‘surplus’ of women was not drawn evenly from across the country. This point is demonstrated by the maps for 1851, 1881 and 1911 in Figure 5 which each show the sex ratio, by place of birth, of migrants in London. Male migration to London dominated in relatively few places—unsurprising given the aggregate net-migration rates presented earlier. In 1851 male migrants in London out-numbered females from a scattering of places in central England, Northumbria, as well as from parts of Cumbria and south-west Wales. By 1881, of those in London, the places from which males out-numbered females were restricted mainly to the latter two areas but also parts of industrial south Lancashire. This pattern becomes yet more concentrated by 1911. Of course, all of those mapped in each of these three census years would have moved to London some time before the year in question. Thus, in comparing the changing geographical distribution of sex ratios, the apparent decline in male dominated migration

from certain parts of the country could most simply be explained by migrant males from those places not being replaced by other males from the same place over time. It would also suggest that gender-specific migration to London was more heterogeneous pre-1851 than post. Whereas the 'surplus' female migrants who were living in London in 1851 had their origins mainly in the south-east, East Anglia, the west Midlands and Welsh Marches—what might be seen as mainly traditional low-wage arable areas compared to pastoral—by 1911 the birthplaces of female migrants out-numbering their male counterparts extended across almost all of England south of Lincolnshire, and much of Wales too.

The aggregated net-migration information discussed earlier indicated that family migration was an important yet changing component of movement into the Capital. Following up this finding, Figure 6 maps the birthplaces of those aged 10 and under living in London in 1851, 1881 and 1911. There are clear similarities to the maps relating to all non-London born (Figure 4). South Lancashire, together with the coalfield areas of Durham and south Wales became increasingly important as places from which young children (most as part of a family group) moved to London, reflecting the large and rapid population increases in each of these areas between the mid-nineteenth and early-twentieth century.⁴⁵ Yet in relation to population size, disproportionate numbers of the young were drawn from close to London, and more so over time. However, the distribution of places where these young migrants had been born was not an even concentric ring surrounding the capital. Towards the end of the nineteenth century places immediately to the north of London saw more young children going there than from the south. By the early twentieth century the western

⁴⁵ In 1851 94% of those aged 10 or less living in London yet born elsewhere were living with parents or other kin. In 1911 this figure was 95%.

outskirts of the capital in particular was, *pro rata*, the place of origin for many families moving to London. Places to the south and south-east had grown in relative importance too, while in comparison the east, especially the county of Essex, provided little in terms of inward family migration. From Figure 6 it can also be noted that contrary to the general migration theories of distance decay and gravity models, a number of parishes in the Fens, as with overall migration, were the points of departure for a disproportionate number of families moving to London throughout the period under observation. The same is also true of parishes in southern Hampshire, including in the period 1901 to 1911, the Isle of Wight, as well as a number of parishes scattered across England and Wales. These apparent anomalies would all seem to point to the fact that personal, often family-based, networks were critically important in aiding and assisting the migration process through support in finding work, accommodation and simply providing familiarity in a sea of the unknown and uncertain. The importance of such networks has previously been suggested by migration scholars working on local communities, but here we can perhaps glimpse it operating on a national scale.⁴⁶

A north-south divide

All census-based migration studies, from Ravenstein onwards, share one thing in common. Regardless of whether the data are aggregated or nominal, they all effectively study and measure migration from the perspective of the place to which the migrants moved, as has also been the case in this article so far. In this regard, migration statistics, like most demographic measures, are essentially place-specific. They enumerate and examine

⁴⁶ See references in note 34 above.

migrants and non-migrants for a specific place, where the place is used as the denominator. This is a result of the simple fact that this is how the data—whether they be individuals captured in the census or the registrations of births or deaths—were collected, collated and compiled. However, given that I-CeM is complete (or near complete) count data, the equation and dominator can—for the first time on a large-scale—be turned around.

This point can be illustrated by a simple example. In 1851 there were 62 females living in London who had been born in the Devonshire parish of Colyton, some 260 kilometres/160 miles to the south-west of the Capital. The same year a similar number of females (61) born in Wivenhoe (Essex), close to the ancient town of Colchester (the Roman capital prior to London), were also living in London, despite it being much closer to London than Colyton (130 kilometres/80 miles). By 1901, these numbers stood at 129 and 168 respectively. All four figures are little more than drops in the London migration bucket, accounting for a tiny fraction of the entire migrant population of the metropolis. They are so small that they are all but invisible. Yet, looking neither at London, nor at the parishes of Wivenhoe or Colyton *per se*, but instead at all those *born* in Wivenhoe or Colyton and resident in England or Wales in 1851 and 1901 *regardless* of wherever they might be living, we find that, in 1851, 4.1% of all Colyton-born females and 6.1% of all Wivenhoe-born females were living in London. By 1901 these figures had jumped to 15.8% and 10.6% respectively. In turning the telescope the other way around, the perspective significantly changes. In the totality of the sea of London migrants, those from Wivenhoe and Colyton (plus the numerous parishes like them) mattered not, yet in the case of both these small communities, London was not only firmly on their radar but an important part of their social and economic hinterland.

<INSERT Figure 7 about here>

Utilising the potential of the I-CeM database and shifting the migration focus from place of *destination* to place of *origin* provides a number of fresh insights. Figure 7 maps the proportion of individuals living in London by place of birth as a proportion of all individuals (in England and Wales) from that place of birth, regardless of residence. A number of observations are striking. As noted already in relation to the more conventional destination –orientated maps of Figure 4, whilst distance from London was important, the general model of distance decay is not totally borne out. In all the census years a number of seemingly isolated places some distance from the capital—sometimes the same places over time—in central-west Wales, in Cumbria and Northumbria, but also elsewhere, record a high proportion of natives who found their way to London. This scattered pattern reinforces the point made earlier that in addition to distance, travel time and costs, a critical factor in the process of migration was undoubtedly the operation of social networks, perhaps based on place and what might be termed ‘belonging’ together with localised economic factors: for example, in the case of the latter, Figure 7 suggests that de-industrialisation in the lead industry may have prompted disproportional migration to London.⁴⁷ Equally in terms of

⁴⁷ On ‘belonging’ see K. D. M. Snell, *Parish and Belonging. Community, identity and welfare in England and Wales 1700-1950* (Cambridge 2006); King, *op. cit.*; P. Howell, ‘Industry and identity: the north-south divide and the geography of belonging, 1830-1918’, in A. R. H. Baker and M. Billinge (eds), *Geographies of England. The north-south divide, material and imagined* (Cambridge, 2004), 64-87.

distance travelled, even in 1851 (top left), whilst London was clearly an important destination for many of those born in the Home Counties, the capital was relatively more important for those born in mid-distance surrounding places to the west and north-east compared to the north, and to an extent, the south. For those born in the eastern Counties (parts of Suffolk, Norfolk, Cambridgeshire, Hertfordshire and Northamptonshire) London appears to have been more important than places of equal distance to the west (parts of Somerset, Dorset and Gloucestershire). The picture from the 1851 census suggests that London was seemingly unattractive or unimportant as a place to move to for those from a number of areas including parts of north Yorkshire, Northumbria, Cumbria, and especially the industrial heartlands of south Lancashire and west Yorkshire, as well as almost all of Wales. Competing and intervening opportunities offered by other growing industrial areas can explain some, but not all of this pattern. Over time this general pattern intensifies, so much so that by the time of the last available census data (1911, bottom right), a geographical dichotomy had evolved. With a number of minor exceptions—primarily Cornwall and parts of the far south-west—for those born to the south of a line running approximately from the southern part of the Wash diagonally across England to the mouth of the River Seven and the Bristol Channel, London was a significant and important element of their lives. Proportionally an increasing number of those with whom they had grown up, been schooled with—friends and family alike—would have experienced moving to London. A number of these, as the migrant-specific net-migration figures presented earlier suggest, would have returned with news and stories from the ‘Great Wen’, of its attractions and, no

doubt, of it horrors too.⁴⁸ For those born north of this imaginary yet all important cultural line, over time the situation was increasingly quite different. Whilst, as shown by Figure 5, sizeable numbers of individuals did move to London, especially from the populous areas of south Lancashire, Durham and south Wales, their numbers were small in proportion to those that did not.⁴⁹ They were very much the exception than the rule, and unlike their counterparts south of the line, did not form what might be seen as a critical mass. Moving into the twentieth century, for those born north of the line, London was increasingly a remote and distant place. The reverse was also true—the industrial ‘north’, already in decline in some places, was increasingly isolated.

The so-called north-south divide is much talked about. It has been used to illustrate regional disparities across England and Wales across a wide range of factors: the distribution of wealth, income, economic investment, deprivation, political power, dialect, voting patterns, religion, as well as measures of health and well-being.⁵⁰ Commentators may not

⁴⁸ The term ‘Great Wen’ is attributed to W. Cobbett, *Rural Rides*, Vol. 1 (1830). A wen is a cyst.

⁴⁹ This point, is illustrated by C. G. Pooley and J. Turnbull, ‘Migration and urbanization in north-west England: a reassessment of the role of towns in the migration process’, in D. J. Siddle (ed.), *Migration, Mobility and Modernization* (Liverpool, 2000), 186-214. Using a sample of migration histories obtained for 2,252 individuals from Cheshire and Lancashire, born between 1750 and 1930, whilst London was the most popular individual destination outside of the north-west, it accounted for less than 1% of all destinations (pp. 192-3).

⁵⁰ For example N. Boberg-Fazlić and P. Sharp, ‘North and south: long-run social mobility in England and attitudes toward welfare’, *Cliometrica* (2017), 1–26; T. Doran, F. Drever and

always be sure exactly where the divide between north and south lies or what caused it, but most agree that it exists in one form or another: economic, social and/or cultural.⁵¹ Given the importance that this divide now occupies in political and economic terms, relatively little is known of its roots or origin.⁵² From the evidence of migration patterns to London in the period 1851–1911, and in particular from the perspective of those moving to London as a proportion of the population of those born in the same place as themselves, it is proposed that the foundations of the present-day north-south divide were already clearly laid by the mid-nineteenth century. For example, applying clustering techniques across a range of household structure and occupational variables has provided evidence of a developed north-south divide by 1881.⁵³ Equally, indications of a north/south divide can be seen in the

M. Whitehead, 'Is there a north-south divide in social class inequalities in health in Great Britain? Cross sectional study using data from the 2001 census', *British Medical Journal*, 328 (2004), 1043-5; R. L. Martin, 'The contemporary debate over the north-south divide: images and realities of regional inequality in late-twentieth-century Britain', in Baker and Billinge, *op. cit.*, 15-43 and <https://www.theguardian.com/business/2016/dec/15/economic-output-of-london-more-than-double-rest-of-uk> (accessed 22 May 2017).

⁵¹ See C. Montgomery, 'Borders and boundaries in the North of England', in R. Hickley (ed.), *Researching Northern English* (Amsterdam, 2015), 345-68, especially Figures 1, 4 and 9.

⁵² J. Langton, 'South, north and nation: regional differences and consciousness in an integrating realm, 1550-1750', in Baker and Billinge, *op. cit.*, 112-44; H. M. Jewell, *The North-South divide: the origins of northern consciousness in England* (Manchester, 1994).

⁵³ K. Schürer and T. Penkova, 'Creating a typology of parishes in England and Wales: mining 1881 census data', *Historical Life Course Studies*, 2 (2015), 38-57.

geographies of Church of England and non-conformist religious worship in the 1851 Census of Religion.⁵⁴ Such a divide was also clearly in the minds of mid-nineteenth century novelists such as Gaskell and the novel-writing politician Disraeli.⁵⁵ The evidence from the census birthplace data strongly suggest that gradually from 1851 onwards the delineation between north and south became clearer and the divisions between the two intensified. In some respects this would support the notion proposed by Langton and others that regional culture intensified as a result of industrialisation, yet perhaps ironically, as far as north versus south is concerned, it crystallised further in the industrial (rather than industrialising) era and more so as the economic balance between the two shifted again in favour of the south.⁵⁶ In this regard, it is noticeable that the chronology of the intensification of the delineation between south and north as shown in Figure 7 roughly parallels the regional shift in economic performance in terms of GDP per capita.⁵⁷

⁵⁴ K. D. M. Snell and P. S. Ell, *Rival Jerusalems: the geography of Victorian religion* (Cambridge, 2000).

⁵⁵ E. Gaskell, *North and South* (London, 1855) —the title of which was imposed by Charles Dickens; B. Disraeli, *Coningsby, or The New Generation* (London, 1844); B. Disraeli, *Sybil, or the Two Nations* (London, 1845).

⁵⁶ J. Langton, 'The industrial revolution and the regional geography of England', *Transactions, Institute of British Geographers*, 9, 2 (1984), 145-67; R. Williams, *Country and the City* (London, 1973).

⁵⁷ P. Scott, *Triumph of the South. A regional economic history of early twentieth century Britain* (Aldershot, 2007).

Giles, a fictional farmhand from rural Norfolk created by James Spilling in 1872, visited London for the first time via the Great Eastern Railway running from Norwich to Liverpool Street station.⁵⁸ Despite the fact that the London he visited was in many respects alien to him—its endless streets and houses, the noise, the crowded pavements—it was at the same time, on one level familiar too: from stories told by fellow parishioners, and especially from the letters written to him by Sarah Tippens, a fellow parishioner who would become his future wife yet at the time of his visit was working as a domestic servant in Kensington. Whilst a work of fiction, the story it tells would have been one that resonated with many born and raised south of that imaginary cultural line running between the Wash and the Seven. Staying south of that line and returning to the women of Colyton mentioned earlier, in 1888 one of their number, Florence (otherwise known as Flora) Baker, married William Murphy in Islington, London. Born in 1860 in the same south Devonshire parish as her mother Eliza had been 27 years earlier, by 1871 Flora and her parents had moved to Enfield where her father, William, worked as a boot and shoemaker. Following marriage to her Hackney Cab driver husband—who was five years her senior and was a Londoner by birth, born in the parish of St. Luke's, just north of the City and south of Islington—Flora's life became relatively stable. The newly-married family lived at 21 Upper North Street (what is now Northdown Street) at the back of King's Cross station. They stayed there for at least 10 years before moving to 20 Wharfedale Road, less than a quarter of a mile away. Her five children, all born between 1890 and 1898 in Islington, possibly at home, still lived at home

⁵⁸ J. Spilling, *Giles's Trip to London: a farm labourer's first peep at the world. Edited [or rather written] by the village schoolmaster*, (London, 1872).

with their parents in 1911, engaged in a range of occupations including chocolate packer, box maker and French polisher.

Fanny Davenport was two years older than Flora. Born in the Cheshire parish of Odd Roke in 1858, a parish virtually the same distance from London as is Colyton, Fanny left her parental home quite early and by the age of 13 was working and living as a domestic servant in another part of her native parish.⁵⁹ Exactly when and why Fanny moved to London is unknown, but in 1882, like Flora, she also married in London, just south of the river in Wandsworth, to a London man, Edward Brown, who had been born in Hoxton (by Shoreditch) in 1854. Not long after her marriage she must have returned home to Odd Roke, since that was where her first child, Edward, was born in 1883. Two years later she was back in London, in Pimlico just north of the river, where her second child, Ernest, was born. In another two years she was in Ealing, to the east, where her third child Daisy was born in 1887. The family stayed in Ealing for at least a further fourteen years where they ran and lived in a general shop and tobacconist. Two more daughters were born there and it was where the family was recorded in the census of 1901. Yet by 1911 all of the children had left the parental home and Fanny and Edward had moved to Cowlinge, Suffolk, where Edward was as a butler at the age of 57.

Flora and Fanny shared a number of things in common. They had both been born some 160-170 miles from the nation's capital six years apart from one another. Both married a Londoner and lived and worked there whilst raising a family, both having had five children. Yes despite these similarities they had been born in places which displayed

⁵⁹ The parish of Odd Rode is comprised of six small yet distinct settlements: Scholar Green, Mow Cop, Mount Pleasant, Rode Health, Thurlwood and The Bank.

separate and distinct cultural geographies. Fanny from Cheshire was one of only two women born in Odd Rode who were recorded in the 1891 census as having married a Londoner, and one of three in 1911—in both years accounting for less than 0.5% of all married women previously born in the parish and recorded in the census. In contrast, Flora was one of 19 Colytonian women who are recorded as living with a London-born husband in the 1891 census, some 3% of all married women in that year who had been born in Colyton. Twenty years later in the census of 1911 Flora was one of 38 such women, with some 6% of married women from Colyton having married a Londoner. The draw of London for those women from south Devon was of a significantly different level to that of Fanny and her sister parishioners from Cheshire, despite the two communities being almost equidistant from the Capital. However true the graphic and emotive picture painted by Dorling and Thomas of an increasingly bloated London-centric south, consuming the south-west and east of England and starving the rest of the country of investment and jobs maybe, it is certainly not a new or recent phenomena. As illustrated by the life stories of Flora Baker and Fanny Davenport, taking migration as a proxy of connectivity between places, the different relationships that the north and the south had with London, and *vice versa*, were already evident by the mid-nineteenth century, possibly even earlier, after which point it developed gradually to become very clearly delineated by the early-twentieth century.

Appendix The standardisation of the census birthplace data

In the censuses of England and Wales 1851-1911 birthplace was enumerated for most individuals essentially in a three-level hierarchy: parish, county, and country of birth. Those born and resident within England and Wales were expected to provide information on their parish and county of birth, whilst those born elsewhere were required to record only their native country. However, the reality did not match this relatively simple rubric. This is indicated by the fact that in censuses of 1851-1911 the approximate 16,000 ancient parishes of England and Wales were recorded by over 6.5 million unique birthplace strings—on average over 400 variations for every single birthplace. The problems encountered in trying to unravel the recorded birthplace information are essentially seven-fold:

- 1) the order expected of <parish|county|country> was switched;
- 2) information on county is missing, or (a particular problem) parish name is not unique across different counties;
- 3) information is totally lacking, some individuals recording their birthplace as simply as 'unknown';
- 4) the information within the string is internally inconsistent, e.g. the stated parish does not exist in the given county;
- 5) non-standard entries caused by a combination of transcription or enumeration errors, which are by far the most numerous problem type;
- 6) redundant words or phrases such as 'resident of ...' or 'in the parish of ...' ;
- 7) information given at either *sub*-parish or *extra*-parish levels. Whilst the nineteenth-century census authorities perceived the collection of information on birthplace as an exercise in administrative geography, the reality was rather different. Some responded

by stating a *place* rather than a *parish*. This could be either at an extra-parish level, as in the case of the names of towns or cities being given rather than the parishes that they were comprised of, or at the sub-parish level, in the case of hamlets or townships within parishes (such as the composite settlements of Odd Rode, Cheshire).

With the exception of (3) which has no solution *per se*, different solutions were implemented for each problem. For the I-CeM data, the some 7 million birthplace strings were first separated into foreign born and native born using a combination of manual and semi-automatic approaches. Then, for the native strings, where possible, a county code was assigned using county-based lookup tables constructed manually and semi-automatically. As a final step, a fully automated programme was devised to standardise the strings at the parish level applying different rules according to the nature of the problem. For further details of this see K. Schürer, T. Penkova, T. and Y. Shi, Standardising and coding birthplace strings and occupational titles in the British censuses of 1851 to 1911', *Historical Methods*, 48 (2015), 195-213. Whilst this process successfully standardised the vast majority of raw birthplace strings, in the early analyses for this research a number of additional problems in relation to the way the program had allocated birthplace strings to parishes was discovered and rectified manually. In relation to problem (7), and specifically the recording of birthplaces as extra-parochial places, this meant that in analysing birth*places* rather than birth *parishes* it was necessary to aggregate the underlying raw birthplaces strings into meaningful units of place rather than parish. Thus the 16,000 plus ancient *parishes* of England and Wales were linked to some 12,000 separate places for the purpose of mapping.

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