

The Geography of Poverty, Inequality and Wealth in the UK and Abroad: Because Enough is Never Enough

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Abstract This paper considers the temporal changes in levels of recorded poverty in Britain distinguishing between times of anecdotal reporting (1845–1901); the first national counts and geographical distribution descriptions (1895–1965); to the current era of an industry dedicated to poverty counting and cartography (1968–2008). The persistence to the geography of poverty over time is remarked upon and speculated over. In conclusion it is argued that it is important to understand the distribution of wealth to better understand poverty.

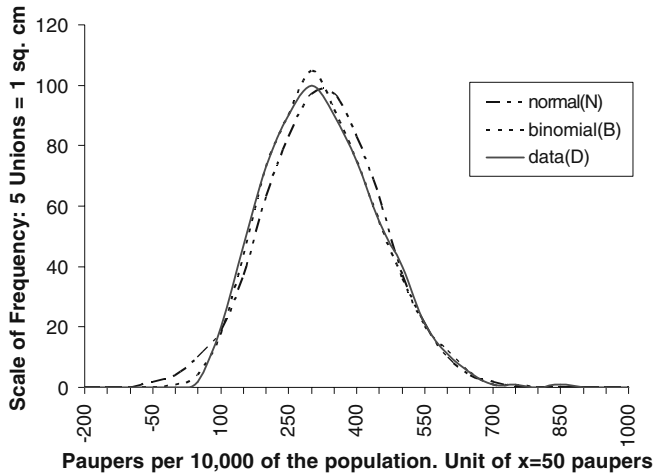
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The Origins of the Statistics and Cartography of Poverty in England and Wales (1845–1901)

At the very centres of the twin hearts of the world economy, in London and New York, great wealth and miserable poverty are located only a stones throw apart. We now know how unequal we are in great detail. But how did we get to know this detail so well? There are many stories that give an answer. This particular story goes back a century and more to the four hundredth odd page of the 186th volume of the Philosophical Transactions of London. London is the most unequal part of the United Kingdom, a city of even greater social contrasts now than it was then.

At the foot of page 404 of Volume 186 of the Philosophical Transactions of the Royal Society of London, Series A (Mathematical), is a reference to an obscure diagram labelled “Plate 14, Fig. 17: Statistics of Pauperism in England and Wales, distribution of 632 Unions, 1891.” The diagram shows several curves and is reproduced as Fig. 1 here. The curves describe the probability distribution for paupers by Poor Law Union (area), ranging from 1% up to almost 8.5% of the

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population of some areas of England and Wales, but with a mean about 3.5% and: “the observations are at once seen to give a markedly skew distribution” (Pearson 1895, p. 404–405). This is the first description of the national geography of poverty on these islands, but that is not what this graph is remembered for. It is remembered as the first example of a graph of chance, and of the suggestion that poverty is somehow inherited.

Squeezed between pages on the latent heat of evaporation of fluids and the specific heat of water, Series *A of the Transactions* appears now to be an odd home for one of the first scientific papers to describe the geographical distribution of poverty in England and Wales. The paper was written by Karl Pearson (MacKenzie 1999) who later founded the first university Statistics department in the world. His paper is mainly referred to today as containing one of the first examples of the curve of a probability distribution. However, amongst social scientists Pearson's work is now remembered as one of the early attempts to apply Charles Darwin's theory of evolution to people and to suggest that the poor have children often destined to be poor by dint of some biological mechanism (Dorling 2010, Sections 4.2 and 4.3).

The curve Pearson drew shows how many Poor Law Union Areas contained just a few paupers and how many areas were home to far more poor people. Paupers were folk who were forced to rely on relief from the poor law and included those who lived in the workhouse in late nineteenth century England and Wales (Scotland was not included in this work). Paupers were the poorest of the poor of those times. To try to understand why there might be more poor folk in some areas than others Pearson fitted various models to the basic curve that described the data. He concluded that the point-binomial distribution fitted particularly well and that "the suggestiveness of such results for social problems needs no emphasising" (*ibid* page 405). Pearson went on to speculate that "if the statistical curve of pauperism for 1881 be compared with that of 1891 [the] curve is sliding across from right to left." (*ibid* page 406). In other words, poverty breeds poverty, and the result of that breeding is ever growing concentrations of the poor.

For Pearson and most other progressive learned folk of his time, poverty breeding poverty was a literal belief. This was the key influence of Darwin's work on those who study people. The *Origin of Species* (or *The Preservation of Favoured Races in the Struggle for Life*, to give it its poorly remembered alternative title; Darwin 1859) had been published shortly after Pearson was born, and *Hereditary Genius* just a decade later (by Galton 1869). Galton was Darwin's half cousin and Pearson's mentor. Karl Pearson drew the curve to help establish part of his Mathematical Theory of Evolution (in "homogeneous material"). He saw pauperism as a biological outcome (the opposite of the "inherited genius") and the rise and geographic concentration of paupers as a great social problem clearly requiring eugenic solutions (although even in 1895 the language was coded as "social problems"). Pearson used the pauperism statistics to add supposed-weight to his discussion on heredity that began, if you look up the 1895 paper, on the frequency of the emergence of blossom in white clover and ended with discussions of skull shape, school-girl height, and school-boy short-slightness.

Karl Pearson's data came from Appendix I of Charles Booth's 'Aged Poor' study (Booth 1894). Booth was a contemporary of Pearson and drew the first detailed maps of poverty and wealth in London around this time; an example is shown in Fig. 2. Thus the very first poverty statistics in England and Wales, and the first poverty maps (of London) were closely related. A few short years later, in 1901, (Benjamin) Seebohm Rowntree, partly influenced also by Booth, drew his map of poverty and wealth in York (shown here as Fig. 3). A just a couple of years after that a young man called William Beveridge wrote that there was a class that were unemployable, and that "they include those habituated to the workhouse and to the casual ward, and the many regular inmates of shelters who are paupers in all but

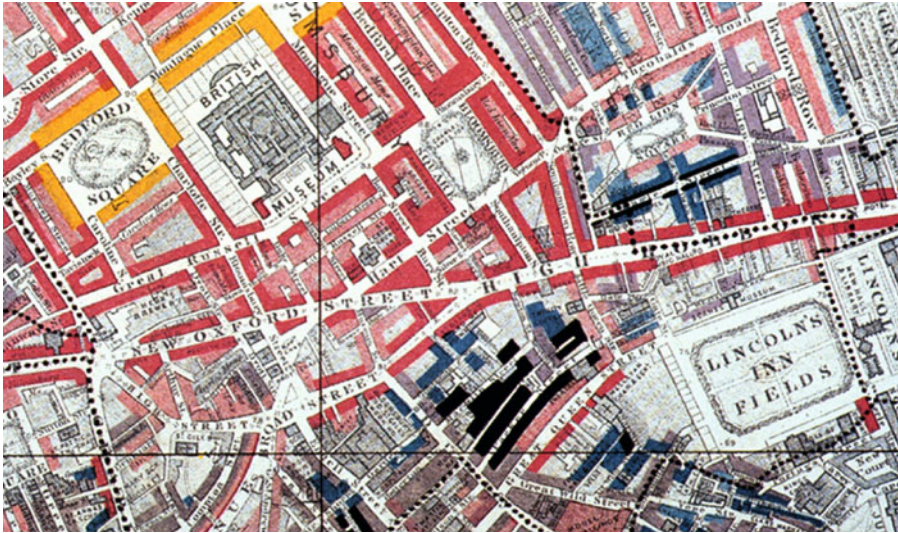
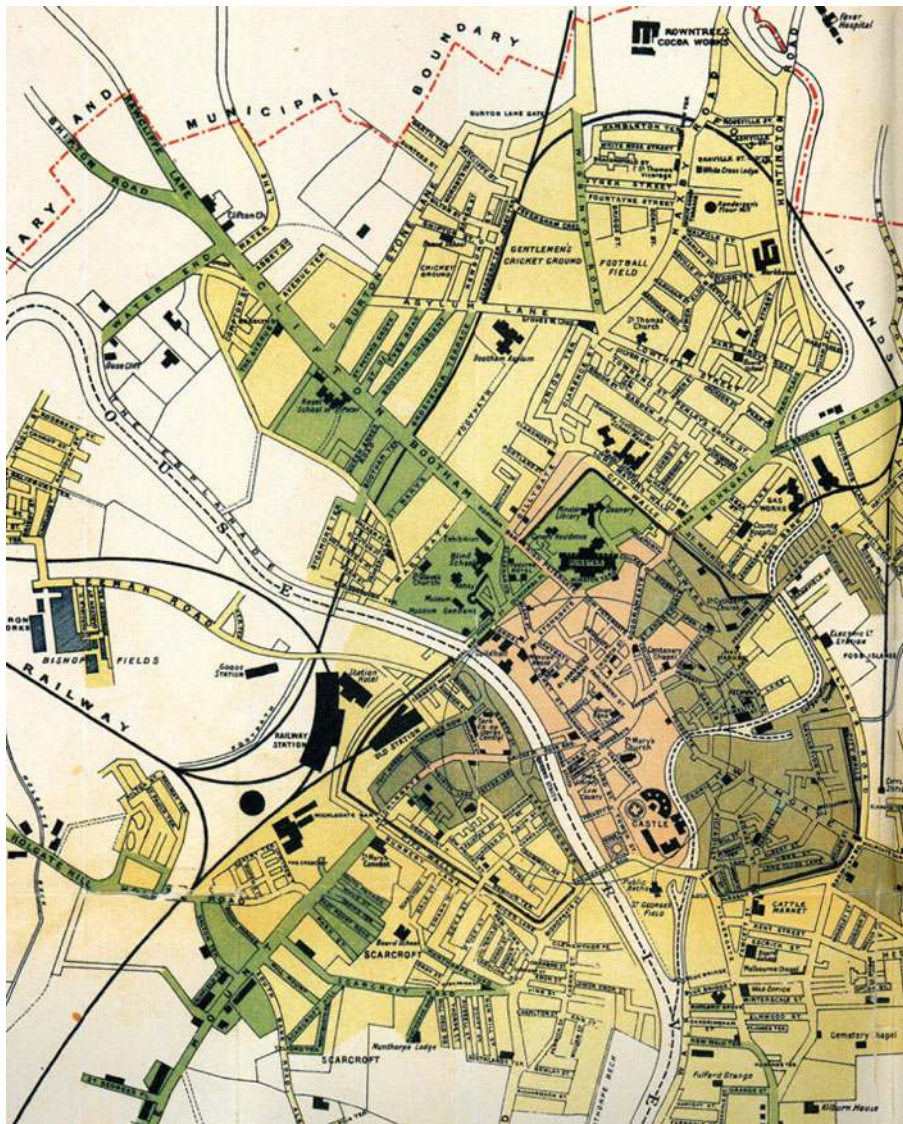


Fig. 2 A fragment of Booth's Descriptive Map of London Poverty. Source: Dorling et al. 2000, *Figure 1*. Detail of one of Booth's maps. Key: Yellow: Upper-middle and Upper classes. Wealthy, Red: Well-to-do. Middle-class, Pink: Fairly comfortable. Good ordinary earning, Purple: Mixed. Some comfortable, others poor, Pale Blue: Poor. 18s. to 21s. a week for moderate family, Dark blue: Very poor, casual. Chronic want, Black: Lowest class. Vicious, semi-criminal

name. For these, long periods of regular work and discipline in compulsory labour colonies are essential". (Beveridge and Maynard 1904, quoted in Welshman 2006, page 591). Welshman argues eloquently that our current debates over the poor and their claiming of incapacity benefit for worklessness are now as "shaped as much by ideological and political factors as by broader economic trends" (ibid page 604) as they were at the times of Rowntree, Beveridge and Booth. And that is just one of the reasons why this history needs to be told in contemporary analysis.

To bring this short story of the origins of the statistics and cartography of poverty in Britain to a close, Seeborn's father, Joseph Rowntree, had written a pamphlet on the very same subject as mentioned in Pearson's paper: "Pauperism in England and Wales", but thirty years earlier: in 1865. Joseph went on to give his name to the Foundation, Charitable Trust and Reform Trusts that have been so influential in British poverty politics during the last century and decade. However, not that much has changed in the intervening 150 years as to how we construct and then view the statistics and cartography of poverty (today). We still draw maps that label streets in particular ways—even if now through the geodemographics industry—and we still have a tendency to consider geographical distribution of poverty as if they are about people not like us—objects to be studied—paupers in all but name. To understand why it may be a good time to change some of the fundamental ways in which we look at poverty today—and in particular why it makes sense to simultaneously consider wealth—it is worth looking back at why most of these men who first studied poverty did not look in that direction.

All of these folk were connected—not just by similar social background but much more. Pearson was brought up a Quaker, his father was brought up by Quakers in



Key:

- =The poorest districts of the city, comprising the slum areas. Some of the main streets in these districts are, however, of a better class.
- =Districts inhabited by the working classes, but comprising a few houses where servants are kept.
- =The main business streets, consisting of shops and offices. Between these principal streets are many old and narrow lanes and courts.
- =Districts inhabited by the servant-keeping class.

Note.—The circle is drawn to represent a radius of a quarter of a mile from the centre of the old town.

Fig. 3 Plan of the city of York—slum areas to servant keeping classes. Source: B. Seebom Rowntree 2000 (1901), Poverty: a study of town life, Bristol: The Policy Press

York (as was Joseph Rowntree), and his mother's family were involved in shipping from Hull. Charles Booth was similarly born into a Liverpool ship-owning family. The Galtons were Quaker gun-manufactures (presumably they did not use their own weapons given Quaker beliefs in non-violence). The Galtons were also bankers, from the city of Birmingham (those bankers had a lot to answer for even then!). Wealth, provincialism and puritanism came together in the early study and mapping of poverty. This mix may also have obscured the views a little (or a lot) of those from these background. These men were not operating in a knowledge vacuum, but they had collectively decided to ignore much previously published work. Most obviously they ignored the writing of an immigrant (albeit a wealthy immigrant), who twenty years prior to Joseph Rowntree's pamphlet publication, and exactly fifty years before Pearson's graphs were drawn, had these words on poverty published:

Society, composed wholly of atoms, does not trouble itself about them; leaves them to care for themselves and their families, yet supplies them no means of doing this in an efficient and permanent manner. Every working man, even the best, is therefore constantly exposed to loss of work and food, that is to death by starvation, and many perish in this way. The dwellings of the workers are everywhere badly planned, badly built, and kept in the worst condition, badly ventilated, damp, and unwholesome. The inhabitants are confined to the smallest possible space, and at least one family usually sleeps in each room. The interior arrangement of the dwellings is poverty-stricken in various degrees, down to the utter absence of even the most necessary furniture. The clothing of the workers, too, is generally scanty, and that of great multitudes is in rags. The food is, in general, had; often almost unfit for use, and in many cases, at least at times, insufficient in quantity, so that, in extreme cases, death by starvation results. Thus the working class of the great cities offers a graduated scale of conditions in life, in the best cases a temporarily endurable existence for hard work and good wages, good and endurable, that is, from the worker's standpoint; in the worst cases, bitter want, reaching even homelessness and death by starvation. The average is much nearer the worst case than the best. And this series does not fall into fixed classes, so that one might say, this fraction of the working class is well off, has always been so, and remains so.

(Engels 1845, p. 109)

Thus the first maps and statistics of poverty in Britain were drawn by folk who were rediscovering what had been written about in detail years earlier. But they were also ignoring one of the key discoveries of 1845, that the poor do not fall into fixed classes, but that each individual, families and community circulates between various degrees of destitution and coping over time. Poverty was rediscovered just over a century ago as still existing and affecting a huge proportion of the population (around a third according to both Rowntree and Booth), and this despite the absolute dominance and unimaginable wealth of the British Empire. Poverty in the midst of plenty and the constant rediscovering of endemic poverty are themes that arise again and again in the study of poverty in Britain.

From the First National Counts to the First National Surveys (1895–1965)

The story of poverty into the twentieth century was a continuation of the story of a hobby. Poverty studies were something that well-meaning capitalists conducted in their spare time. And these were studies mostly for the otherwise idle but not without-conscience rich. Poverty was rife a long time before Friedrich Engels wrote on Manchester (King 2000; Tomkins and King 2003; Tomkins 2006) and is rife in our times (see below). It also continues to be a concern for the paternalistic rich today. Worldwide the best example of this concern of the unbelievably rich for the plight of the extremely poor is given by the actions of Bill and Melinda Gates. They are not shy about their actions and their Foundation so it is not hard to find out about just how charitable they have been. Back in Britain it does not take many jumps of historical figures to go from the interest in poverty amongst those who helped create the Labour party in Britain back then, to those who helped turn it into something “new” in 1997, as the next two paragraphs show. The year 2009 marked the centenary in Britain of the key Royal Commission on the Poor Laws, which continued the story of the interest of the rich and famous into the early years of the last century, although now for the first significant time there are women involved too.

These women were Helen Bosanquet and Beatrice Webb—key figures in the majority and minority reports respectively of the 1909 Royal Commission on the Poor Laws. Helen was the daughter of a Manchester business man, and had clashed publicly with Seebohm Rowntree in 1902. Beatrice was the daughter of a Wigan railway entrepreneur. Neither Beatrice nor Helen needed to work due to the wealth of their husband and father respectively. Beatrice was influential in the early work of the Fabian Society, and fledging Labour party, and had worked for Charles Booth, helped establish the London School of Economics, and the weekly publication *New Statesmen*. In contrast, Helen Bosanquet, arguing on the less progressive side of the debate has left little impact. But both were establishment figures and neither was responsible for there being a Royal Commission in the first place.

The Royal Commission came about due to the interest of another immigrant (to England at least): David Lloyd George (initially not wealthy) who in turn influenced greatly William Beveridge (born wealthy), who was appointed director of Labour exchanges in 1909—the geographical heirs of Poor Law Union Areas. Following the implementation of much of what Beveridge and his colleagues suggested in a later report (now best known by his name), an aging Seebohm Rowntree, with George Russell Lavers, suggested that poverty had mostly disappeared in Britain by 1951 (Rowntree and Lavers 1951). What happened next has been neatly summarised by Howard Glennerster, in an extract from his essay on “One hundred years of poverty and policy” selected, in theory, to help Tony Blair think better about poverty in 2000. Glennerster wrote this:

Abel-Smith and Townsend (1965) used the national sample provided by the Family Expenditure Survey and updated Rowntree’s poverty line in line with prices as a check on their own findings for 1953/54 (see below). They found 5.4% of households in poverty. When Atkinson et al. (1981) reanalysed Rowntree’s data using the then National Assistance Board scales as the poverty

line they found that 14.4% of working class households would have been judged poor. More recently Hatton and Bailey (2000) have reanalysed the same material to test Rowntree and Lavers' claim that poverty had fallen so dramatically because of the impact of post-war social policy. They found it did fall, but by nothing like as much as the earlier study claimed. Rowntree and Lavers claimed that the fall in poverty had been 20 percentage points. Hatton and Bailey suggest it was about 10 percentage points and much of that was the result of food subsidies: 'It is unfortunate that, in the absence of other comparable studies for the 1950s, this produced a somewhat distorted picture of poverty in the early post war period, an impression which took two decades to counteract' (2000, p. 537).

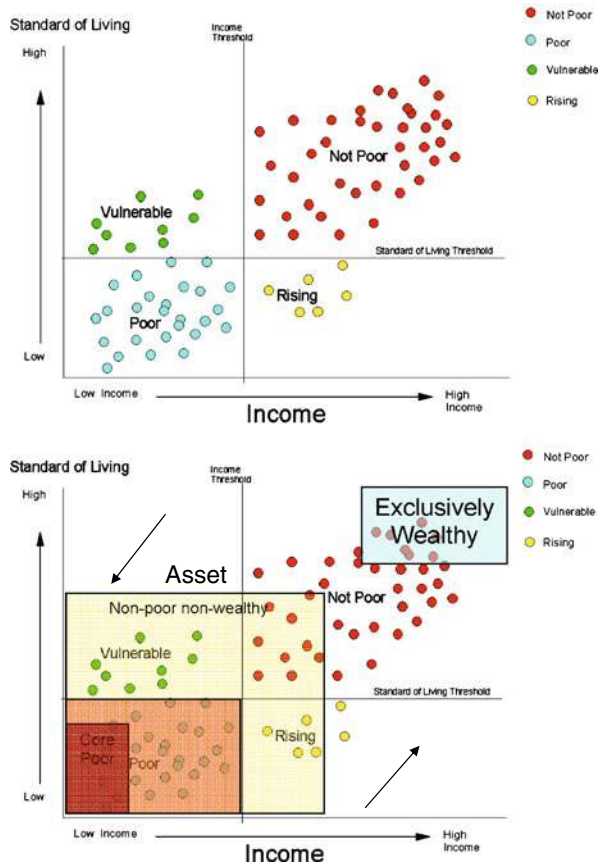
Peter Townsend, as a new young researcher at the Institute for Community Studies, was asked to review Rowntree and Lavers and was not convinced. It led him to a lifetime of work that has changed the way we think about poverty in most developed economies, with the exception of the United States (Glennerster 2002).

His central point was that we cannot determine a level of adequacy simply by virtue of some expert calculation of dietary or health needs. Social custom requires that we share cups of tea with neighbours or buy presents for our children at Christmas, even have the occasional pint. (see also Glennerster et al. 2004 pp. 86–87).

Peter Townsend, who died in 2009, and those who worked with him changed fundamentally the way that poverty was thought of and mapped in Britain, in Europe and now in much of the world outside of the United States. His ideas of poverty have been further developed by David Gordon and colleagues as illustrated in Fig. 4 (Gordon and Townsend 2000; Gordon et al. 2000). And, ironically, just as Townsend, Atkins, and Hatton and their colleagues all referred to above found more poverty in York than Rowntree and Lavers' 1951 publication had suggested at the time; so too has contemporary re-analysis of Townsend's work of the 1960s found levels of poverty to have been higher than was previously thought to have been the case (Dorling et al. 2007).

In Figure 4 a dynamic model of poverty is drawn to illustrate Friedrich Engels' assertion referenced above that: "The average is much nearer the worst case than the best. And this series does not fall into fixed classes, so that one might say, this fraction of the working class is well off, has always been so, and remains so". Each circle in the figure represents a hypothetical household. Poverty is defined using a relative poverty line—defined theoretically by Townsend (1979) as the resource level which is so low that people living below it are excluded from participating in the norms of society. This resource level can be determined using the Breadline Britain Index which is detailed in Gordon and Pantazis (1997). In practice those people living in households with a standard of living measured by the index to be below the crucial level, and with an income below that needed to raise this standard of living above that level are the "breadline poor", and are labelled as poor in the lower left hand box in the graph at the top of Fig. 4. If and when their household incomes rise they move rightwards, and later increase their spending and are no

Fig. 4 A model of the dynamics of poverty and five categories of household. Source: Adapted from David Gordon's original (personal communication)



longer poor (now being in the top right hand corner of the top diagram). For those in that corner whose income falls substantially, they move leftwards, but tend to attempt to maintain their standards of living despite falling incomes. They are thus “vulnerable”. It is then only when they can no longer maintain living standards, often nowadays when debts are too high, that their standard of living falls too, the circles representing them fall downwards on the graph, and they are (in many cases *again*) poor.

The version of the model at the bottom of Fig. 4 is the same as that at the top of Fig. 4, other than now new subsets of the population have been defined from the poorest of the poor to the rich, and exclusively rich in the more elaborate version of this illustrative figure. These are not fixed classes. Households do move between them and lie on the borders of them, but they are a useful way of thinking about what people fall into a climb over the backs of others to get out of. These new categories have been defined as follows.

- Core poor: people who are income poor, materially deprived and subjectively poor
- Breadline poor: people living below a relative poverty line, and as such excluded from participating in the norms of society

- Non-poor, non-wealthy: the remainder of the population classified as neither poor nor wealthy
- Asset wealthy: estimated using the relationship between housing wealth and the contemporary inheritance tax threshold
- Exclusive wealthy: people with sufficient wealth to exclude themselves from the norms of society

Note that the core poor and exclusive wealthy households are subsets of the Breadline Poor and Asset Wealthy respectively. Reanalysis of Townsend's 1968 poverty survey finds that just under a quarter of households were breadline poor around then, around 1 in 7 were core poor and only 1 in 14 were exclusively rich (see Dorling et al. 2007 for more details, the text that follows, and Fig. 7 for the 2001 distribution).

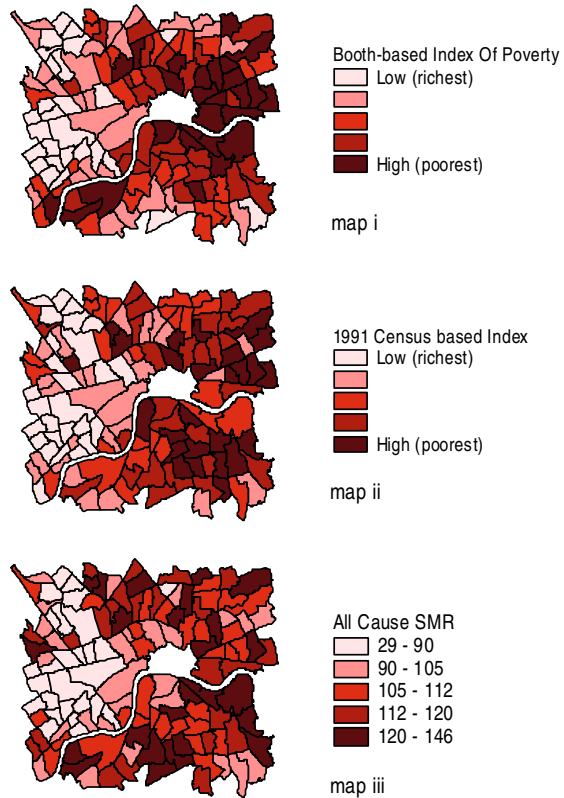
Thus, in moving from 1895 to a reanalysis of work first started in 1951, we no longer have folk simply labelled as 'paupers'; but those who are extremely poor; functionally poor; neither either poor nor wealthy; asset wealthy; and a subset of them so wealthy that they can exclude themselves from the norms of society through their access to wealth. In this way the statistical categories begin to resemble the colour keys to the early maps of poverty (Figs. 2 and 3)—where the rich had to be included because there is nowhere to hide on a map. It has taken over a century for the statistics of poverty to catch up with its cartography.

Current Era and the Persistence of Poverty Over Time (1968–2008)

The reassessment of Rowntree's work of the late 1940s and Townsend's in the late 1960s (and their colleagues) suggests that the general level of poverty in Britain has had a persistence that is stronger than we thought during much of the middle of the last century. If a longer perspective is taken then, as Fig. 5 illustrates, the map of poverty in London and elsewhere in Britain (Dorling et al. 2000; Dorling 2003, 2004, 2006; Gregory et al. 2001) has not changed greatly. In fact the map of 1890 is slightly more closely linked to mortality outcomes in the 1990s than the poverty map of 1991! The persistence is so strong that two of the towns (Salford and Oldham) that Engels identified as having the highest mortality rates in England in 1845 were the two with the highest standardized rates by 1995. And conveniently for those who do not believe that either poverty (or much else that affects life expectancy) is inherited—population turnover in these towns over those 150 years has been such that the great grandparents of many dying there today grew up in what is now Pakistan; areas inherit disadvantage and advantage more than do people.

Poverty and Wealth are fractal in their geographies. Similar to the pattern in London and in Britain more widely, there is still gross poverty within the city of York (see Fig. 6), that area which was studied and became a catalyst of social change at the start of the last century and which is now often seen as a rich town (and which Helen Bosanquet labelled as rich also when Seeböhm wrote on it!). In fact, there is no town or city within the United Kingdom where neither poverty nor affluence is found. The forces which operate to both maintain and transform places are in operation across the country, varying little (see Dorling 2010, Chapter 6). The forces are also extremely resistant to intervention. Over time when a town or city fares well

Fig. 5 Poverty in London, 1896, 1991 and mortality (1990s). Source: Dorling et al. 2000, Figure 3. London poverty (1896 and 1991) and mortality (1990s)



its poorer areas contract compared to the spreading seen elsewhere, and affluent suburbs expand in area. Thus, in comparison to most towns and cities in the North of England there are fewer poor enclaves in York than elsewhere, but nevertheless poor enclaves remain and have spread since 1901 (Fig. 7).

The persistence of poverty is of course not just an issue for research in Britain, it is the subject of much current debate in America too. There, the Brookings Institute (Jargowsky 2003) suggests that despite the numbers of (extremely) poor people in the US rising from 31.7 million to 33.9 million between 1990 and 2000, the number of high-poverty neighbourhoods where over 40% of the population were poor declined by a quarter. This, if true would be a reversal of the rises in concentrated poverty seen in the United States between 1970 and 1990. The US poverty line is set notoriously low, raised only by inflation, and thus the proportion of the population who fell beneath it reduced from 13.1% to 12.4% over the 1990s (the absolute numbers only rose because the population in total rose). Nevertheless, this change in the spatial concentration of the poor is dramatic if it turns out to have happened. In the poorest parts of the US, disproportionate numbers of residents saw their incomes increase by just enough to raise them over the poverty line in the 1990s, more than for the poor elsewhere. The effect on cities such as Detroit is, at first glance, stunning (see Fig. 8):

There are themes that re-emerge and repeat, across times and places. From the 1840s Manchester that Engels described in the first long quotation above, to twenty-

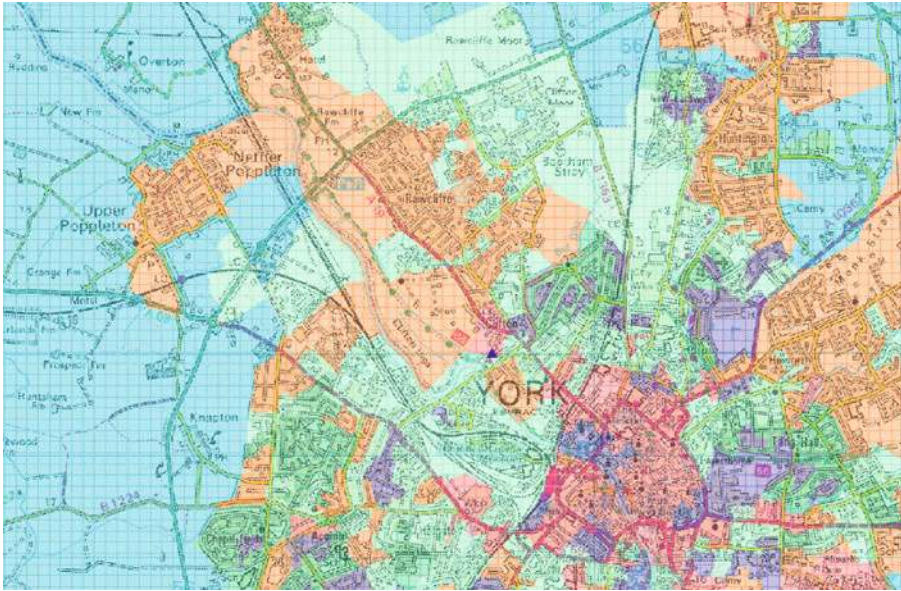


Fig. 6 Vickers's map: York 2001. Key: Blue: "Idyllic Countryside"; Orange: "Comfortable Estates"; Light Green: "Typical Traits"; Brown: Inner City Multi Cultural (not found in York); Dark Green: "Blue Collar"; Red: "Melting Pot"; Purple: "Constrained by Circumstances". Source: Map supplied by Dan Vickers, when PhD student, University of Leeds. Based on analysis of the 2001 census jointly with the Office for National Statistics, unpublished at that time

first century America—extreme rates of poverty were and are tolerated—there are no immune groups, and the spectra of hunger (or malnutrition) is ever present. That hunger and desperation may be hidden away from the main streets, whereas the rich parade their wealth around the squares (see Fig. 2), but it was and is there nevertheless, and has been for some time. There is a tendency to assume progress in reducing poverty and then to be shocked when it does not materialise. Charles

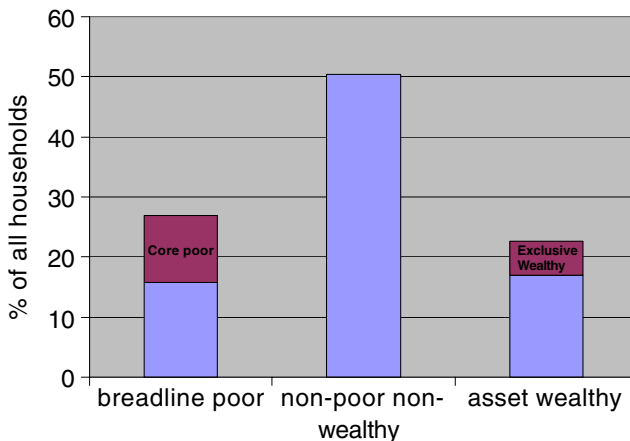


Fig. 7 Distribution of households by poverty and wealth in Britain in 2000. Source: Dorling et al. 2007

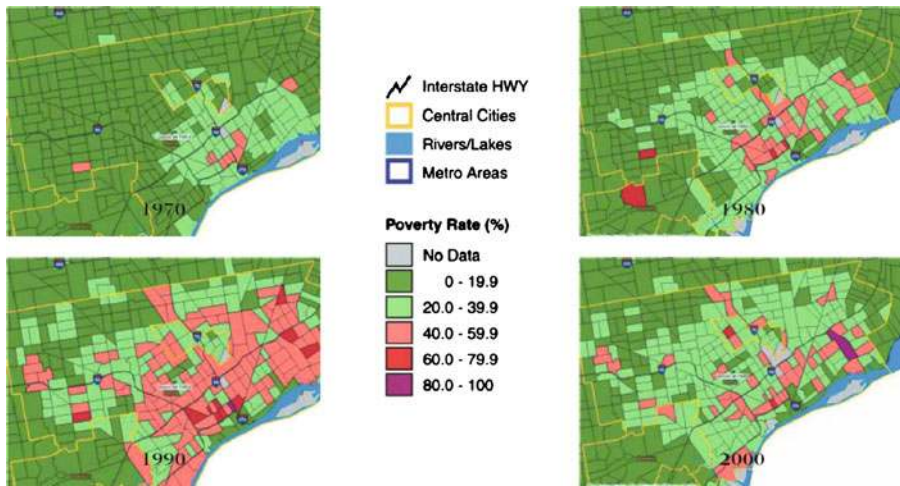


Fig. 8 Highest poverty neighbourhoods in Detroit, 1970–2000. Source : Jargowsky 2003, Figure 5

Booth's maps of 1880s and 1890s London were drawn as its author tried to disprove that poverty was still rife in the capital of that country half a century after Friedrich Engels had documented the excess in newly industrialised Manchester, and following decades of supposed reform between 1845 and 1895. In Fig. 9 we show changing poverty rates in and around Manchester in the decades over a century later;

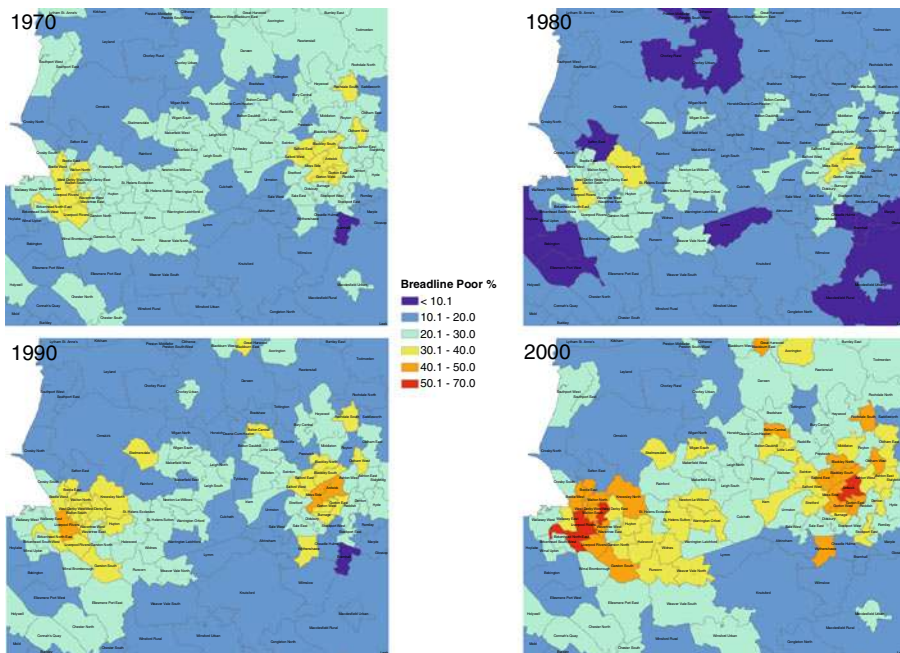


Fig. 9 Breadline poor households across the Liverpool/Manchester area, 1970 to 2000. Source: Figure 2. Dorling et al. 2007

decades which again were supposed to include huge social reforms, including the demolishing and rebuilding of entire estates within Manchester.

The labels we give areas and people change (contrast the keys to Figs. 2 and 6 for instance), but the inequalities persist, as does their importance. It is hard to resist the conclusion that because so much else of our means of production, distribution, reward and threat is similar now to what was common in the 1840s, that we should not be surprised to find rates of relative poverty that are similar over time. Thus an unimaginable change in absolute levels of material wellbeing can coincide with so little change in the relative ranking of people and areas. Levels of income inequality and even murder rates with Britain have now returned to their Victorian highs despite increases in overall material wealth. When poverty in London measured by house to house visits in the 1880s and 1890s is compared to that estimated from a survey and a census taken in 1991 it is evident that the map changes ever so slowly. Compare maps i and ii of Fig. 5. There are differences—but many areas that changed—went downhill for instance since Victorian Times—have since reverted back to their former socio-geographical positions: the Notting Hills of London (as opposed to its ‘Notting Dales’—the first ever ‘special area’). When change has happened in as packed an area as London it has not been as a result of new transportation systems being introduced (the train, tram and car), or cataclysmic events such as war and the blitz. Instead it was the arrival of a few darker skinned people from the West Indies and where they could find to call home that is most closely associated with visible differences between these maps that separate a century.

Figures 10, 11, 12 and 13 show how there is change over time, decade by decade, that is often of an extent that matters. Currently the pendulum is swinging away from

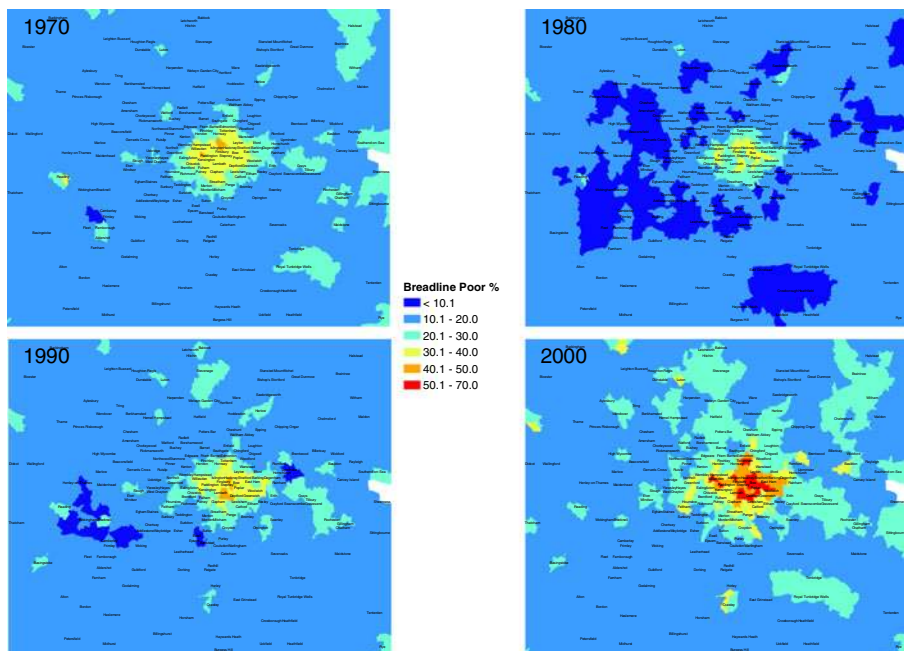


Fig. 10 Breadline poor households across the Home Counties (including London), 1970 to 2000

slight equality and so for the first time in at least 60 years, by the year 2000 in many parts of inner London over half the population were poor. In similar parts of the capital in 1980 just a third of households were deemed to be poor. In contrast, Fig. 11 shows how, outside of London, in the better-off parts of the Home Counties over half the population of many neighbourhoods were asset wealthy by the year 2000 and that in only three places over the same broad sweep of southern England was the same true in the 1980s. Thus in one sense as the numbers of asset wealthy rise, so to do those living nearby (but elsewhere) that have the least. (Dorling et al. 2007)

Figure 12 first shows the spatial concentration of the poor in 2001 using local authority rather than neighbourhood geography and upon a cartogram rather than on a conventional map. Glasgow and Northern Ireland are included here and the averaging effect of using slightly larger areas, especially boroughs in London, results in no area having half its population poor. The map uses a slightly earlier definition of poverty (Dorling and Thomas 2004). The second map in Fig. 12 is of the change in the proportion of households living in poverty 1991 to 2000 by these areas and shows how across almost all of Britain rates rose, even in generally wealthy areas—and how very different things were occurring in London (not commented on elsewhere here, see Dorling 2010 for speculation).

Figure 13 highlights how the exclusive wealthy are concentrated in a far narrower group of areas, and returns to the large neighbourhood scale for mapping their proportions in contrast with the homes of the poorest of the poor—who never exceed more than about 1 in 6 of the households of any large neighbourhood. These geographies of where the extremely rich and poor live, in contrast to the rest, should

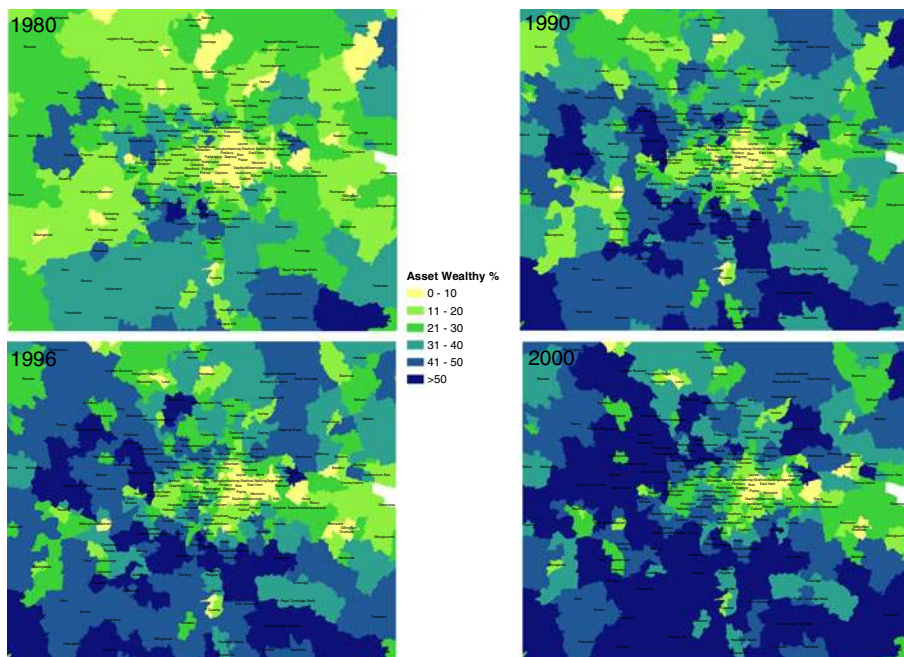


Fig. 11 Asset wealthy households across the Home Counties (including London), 1980 to 2000

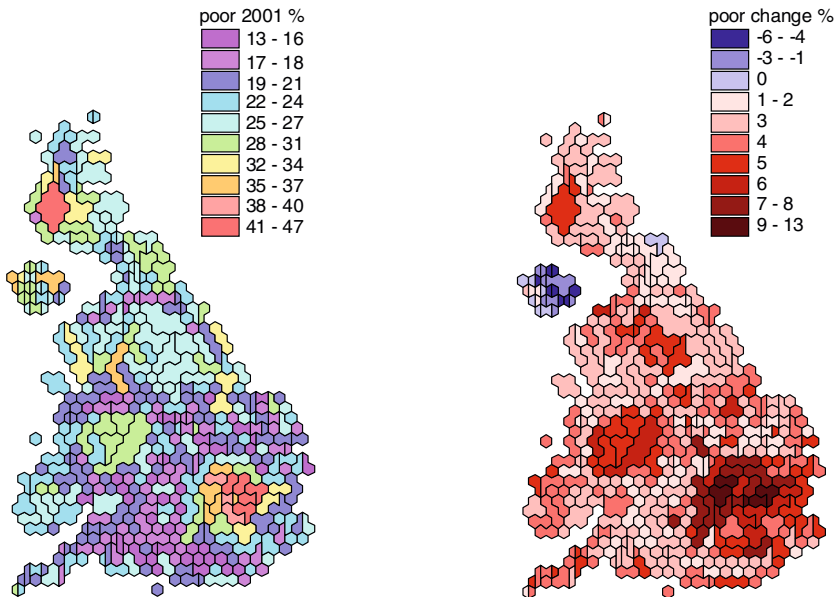


Fig. 12 Distributions of the breadline poor in 2001 and the change in their numbers 1991–2001 by constituency. Source: Dorling and Thomas 2004, People and Places a 2001 census atlas, Bristol: Policy Press

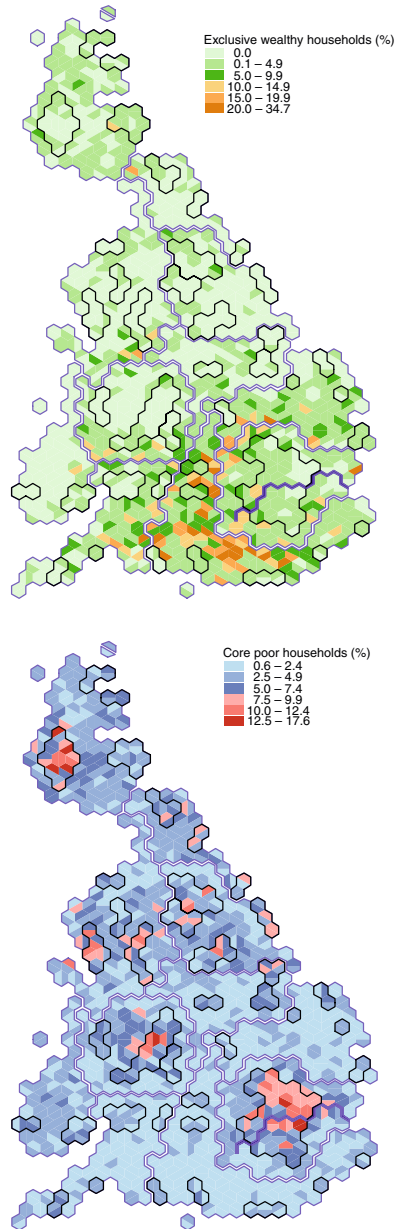
be born in mind when considering the terrible position the United Kingdom has when compared internationally, as the graphs in Figs. 14 and 15 demonstrate.

Poverty, Inequality and Wealth and Why Enough is Never Enough

Income inequality is just a part of the picture of poverty and wealth, both worldwide and closer to home. Neither the very poor nor the very rich have conventional incomes: salaries, wages, or some other relatively steady inflow of monies (Scott 1994; Clark 2002). The very poor beg and die in poor countries and live only on welfare in rich countries. The very rich could not imagine what it is to work, let alone be poor. Nevertheless, for most people their steady income matters and it matters also for the most, on the face of it, intangible of things. Take for instance the subjective well-being of children in some of the richest nations on earth, mainly found in Europe (but also North America, and although not shown here, Japan). Figure 14 shows the propensity of children in these nations to report subjective indicators of well being with the average for the countries set to 100.

Why should the Netherlands lead the table of subjective well-being amongst young folk of the rich nations and the United Kingdom be at its tail? Elsewhere in the *Innocenti* Report (Adamson 2007), from which this figure was drawn, the United States was shown to closely mirror the United Kingdom, with the UK only pipping the US at the post for being the worst performing rich nation in terms of the well-being of its children because children in the UK are a little more sanguine when asked whether they are happy in comparison with their US counterparts. Children in

Fig. 13 Distributions of the 6% exclusive wealthy and the 11% core poor around the year 2000. Source: Thomas and Dorling (2007) *Identity in Britain: a cradle-to-grave atlas*. Bristol: Policy Press



the US are perhaps a little more socialised, taught and brought up to sound “up-beat” even if their circumstances do not warrant it.

As with any statistics that matter, those concerning poverty and wealth are much contested. This is especially true when considering worldwide estimates. Nevertheless there are some basic truths to the extents of poverty, inequality and wealth that is born out almost everywhere, repeatedly and which has been true for some considerable time (although hardly forever):

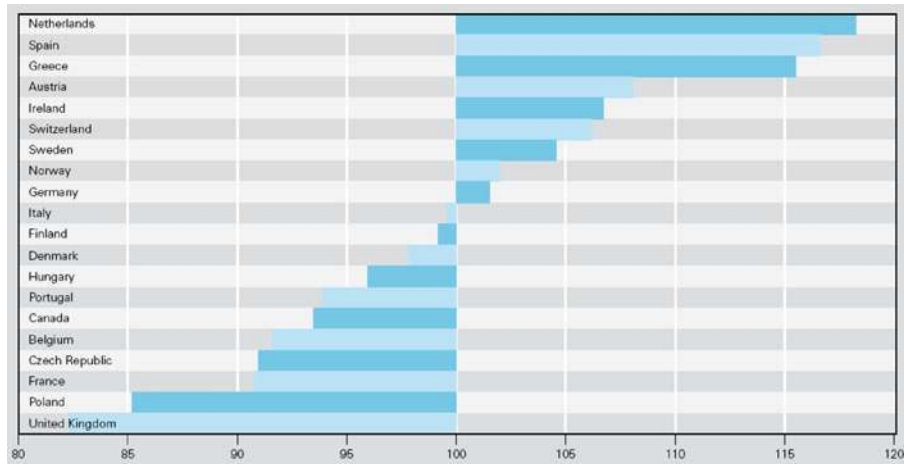
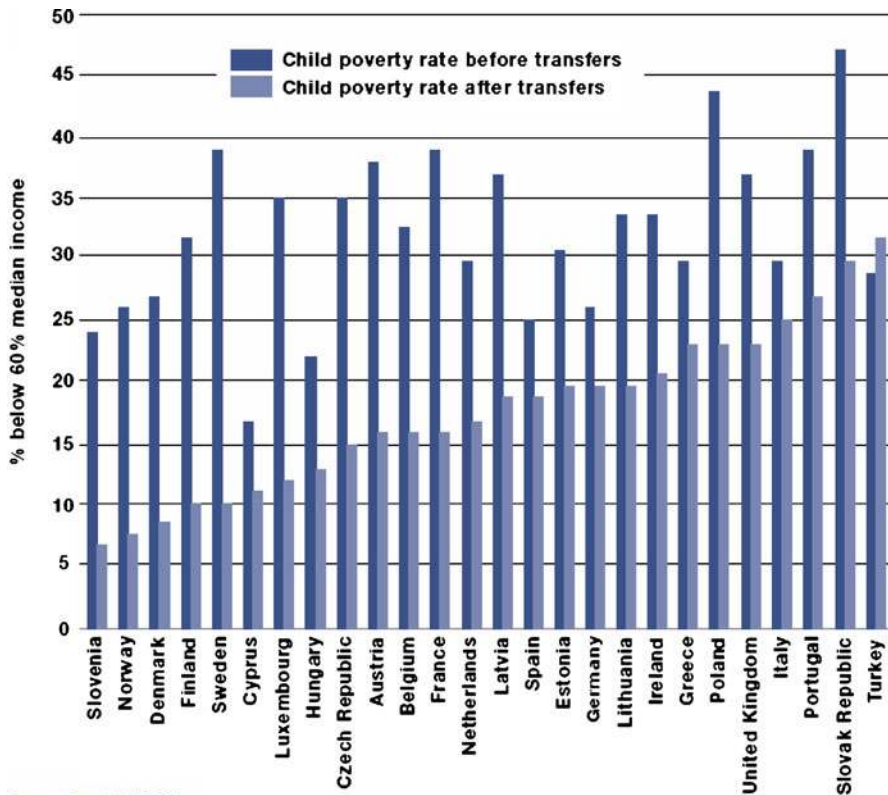


Fig. 14 The rich nation league table of child well being 2007. Source: Figure 6.0 Subjective well-being of young people, an OECD overview, Innocenti Report (Adamson 2007), page 34

Large numbers of people are poor; a few are rich; fewer still are truly wealthy; and, for the truly wealthy—enough is never enough. For the poor it makes no sense to talk of assets, only income, spent almost as soon as it is received. For the truly wealthy it makes no sense to work for an income, nor to talk of one, their assets are self-replicating—in fact it is very hard to dispose of them, as until recently they have grown faster than they could be spent. This was part of the problem for the super rich as Bill and Melinda had discovered. The economic crash of 2008, by reducing the wealth of people like Bill and Melinda so greatly, relieved a little of their problems of what to do with their money, but it may well not as yet have reduced overall global inequalities. At exactly the same time that the Gate's were losing billions of dollars, billions of the poorest people on earth saw their meagre relative incomes also fall as the price of food rose. Almost everyone became poorer, it is just that for the very rich that meant they suffered by being able to give a little less to charity than before, and that too hurt the very poorest, but perhaps not for the long term. The poor in countries like Britain used to have to rely on charity hospitals and charity for clothes and food and for schools for their children. There are better ways to live than relying on charity. In Britain the rich were helped to part with their money through taxes rather than as gifts to pay for things like hospitals for all. The British now live longer than do people in the United States. In the US they are still arguing in 2009 about the merits of state funded health care!

Around the year 2002, over a billion people were living on an income of less than one dollar a day. The world when shaped by their bodies is shown at the top of Fig. 16. By definition their collective annual income is less than \$365 US billion. It is in fact much less, not just because many are surviving on less than the wretched dollar a day, but because these are not real US dollars that their income is being counted in, but local currency converted into dollars on the basis of local prices. A real US dollar would buy far more rice in all of the places drawn large at the top of Fig. 16 than would that that fictional “PPP” dollar used to calibrate the incomes of



Source: Eurostat (2005)

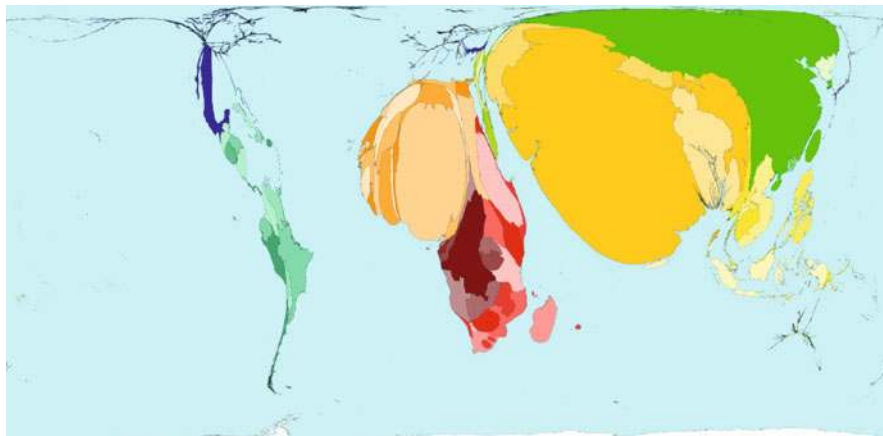
Fig. 15 The European union league table of child poverty 2005. Source: <http://www.hirsch.demon.co.uk/endchildpoverty.pdf>. Donald Hirsch—what will it take to end child poverty? York: Joseph Rowntree Foundation 2006: Figure 5: Child Poverty rate before and after cash benefits

the poor. A further one and a half billion survive on between 1 and 2 of these adjusted dollars a day, and another billion on more than two but less than ten.

The wealth of the richest people on earth is similarly hard to nail down precisely. Estimates of the wealth of Mr Gates vary. Even in early 2009 after the big write-downs of the crash, according to Forbes his value was estimated at \$40 billion (Kroll et al. 2009). But again these are not the same kinds of dollars as the incomes of the poor are measured in, or even American dollars. This money is mostly held in the form of investments, stock options, trusts or charities—it grows by itself, it avoids taxation, and if even a fraction of it had been enough he'd have stopped amassing it by now. It is wealth that falls at times, precariously in 1929 and 2008, but in most years it is wealth that grows quickly. The wealth of this one man would save the labours of the poorest billion for a year, if converted into the same kind of money and goods the poorest billion receive. But it is not the same kind of money—it is not convertible, because it is never enough.

Money is not liquid, it is not like water. The money in your pocket is not the same kind of stuff as the money in your bank account. You almost certainly have both kinds if you are reading this. It is not the same as a salary you can expect to continue

living on under 1\$ a day:



...over 200\$ a day:

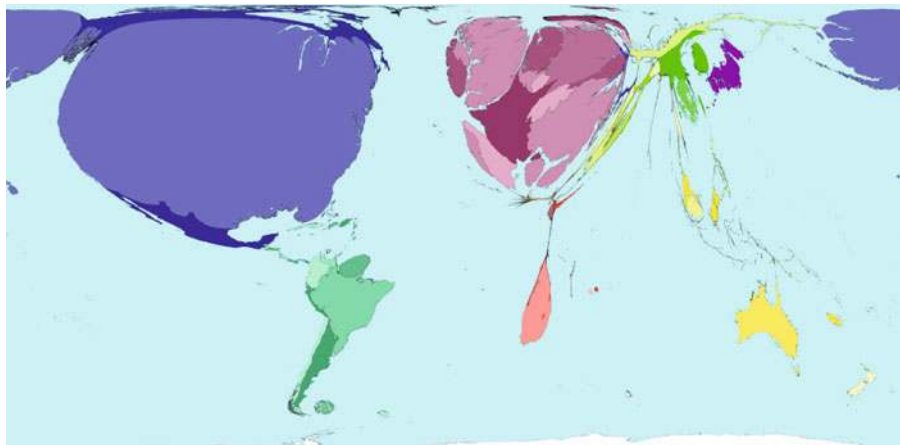


Fig. 16 Worldmapper maps of the lowest and highest incomes living on under 1\$ a day:...over 200\$ a day: source: www.worldmapper.org

to receive, or the less certain wages of others who work where you work. It is not the same kind of money as the assets of your extended family, as the reserves or debts held by the company or university you might work for. It is not the same kind of money that is awarded in research grants; matched by development grants; doubled by some other scheme; reported in company and then national accounts; sent spinning around the world by wire; or represented by a few copper coins in the pocket of a child working in a mine excavating copper worth less itself than were those coins to be melted down. This is not the same kind of money as £175 billion that the government in Britain had ‘borrowed’ to bail out banks by Autumn 2009, the billions more it was “quantitatively easing” out of the Bank of England as recovery stalled, or the trillions of dollars the United States had ‘made’ appear when needed. Money is not money is not money. This makes calculations of inequalities difficult.

Money might be slippery but location is more solid. What is obvious is that the highest earners worldwide no longer live anywhere near the poorest, other than in the hearts of our financial capitals (London and New York). The map in the bottom half of Fig. 16 is of the world shaped to show with equal importance the homes of the best rewarded one percent of people. International estimates are only made for the very poor, not for the rich and so this map is based on an income model described in the note to Table 1. This map is the antithesis of the map above it.

Most studies of global income inequalities argue over the precise magnitude of those inequalities, the extent to which they are manifest between nation states as well as within them and what the trends in all those aspects of these inequalities are. Recently estimates have also been made of global wealth inequalities (Davies et al. 2006). More important than all of this, though, is the staggering extent of those inequalities. There is no easy way to even draw a graph of the 221 numbers in Table 1 (192 of which are not totals). All these numbers show are estimates of how many million people in each household fall into each of 16 income bands and into each of the 12 regions used as the primary shades in Fig. 16. Each income band is twice as wide as that above it in the table and half as wide as that beneath it.

Figure 17 shows two visualisations of Table 1. The income distribution of the world is divided into twelve regions, and the world total is shown as a black line. The variation in income means that it is necessary to use log scales on both axes of Fig. 17a. Figure 17b shows the numbers of people in each of the sixteen annual income bands and how many within each band live in each of the twelve regions. Again, it is necessary to use log scales in order to be able to see the whole picture. The distributions within Africa can be seen but it is far from simple to compare them with other regions. In short, while many different facets of inequality can be visualised, the whole is never visible, even when summarised in less than a couple of hundred well ordered numbers.

Figure 15 shows children affected by poverty in Europe. Wider international comparisons often have the United States missing, as they do not collect the information needed, do not feel the information needs to be collected, or—most fundamentally—cannot collect the information because the population have been conditioned to answer surveys in particular ways. Americans tend to report that they are happy almost instinctively when asked in a nation brought up to “have a good day”.

If the US were included, it would be to the extreme right of the chart. Note again how far over the United Kingdom is in that direction. Almost a quarter of children in the UK live below the family income poverty level now set across Europe at 60% of median national household income. This is a relative limit unlike the absolute measures used in the United States and hardly altered since their 1960s inception. Poverty and inequality are inexorably intertwined—one and the same thing. And it is where there is income inequality, and hence high poverty, even in the richest of nations that many more children grow up feeling worthless—that they cannot trust their friends—those that are not poor as well as those that are rich. Thus even children growing up in the highest income areas of Britain are not really healthy in many ways we would consider important. Table 2 shows precisely where the homes of the highest income earners in Britain tend now to be located.

Table 1 World income distribution

GDP/ capita	Central Africa	Southeastern Africa	Northern Africa	Southern Asia	Asia Pacific	Middle East	Eastern Asia	South America	Eastern Europe	North America	Western Europe	Japan	Total
32	0	0	1	0	0	0	0	0	0	0	0	0	1
64	1	1	3	0	0	0	0	0	0	0	0	0	5
128	4	6	10	0	1	0	0	1	0	0	0	0	22
256	13	23	27	1	4	2	4	6	0	0	0	0	80
512	23	59	54	23	19	9	27	18	1	2	0	0	235
1024	27	80	81	174	62	29	113	43	3	6	0	0	618
2048	19	52	98	496	139	62	275	74	17	14	0	0	1246
4096	8	25	92	503	168	86	386	94	58	26	3	0	1449
8192	3	15	53	172	102	90	317	88	87	47	25	0	1001
16384	1	10	17	19	43	62	164	59	62	87	99	19	641
32768	0	6	3	1	19	27	55	29	21	115	161	77	514
65536	0	2	0	0	8	7	11	11	2	86	86	31	244
131072	0	1	0	0	2	1	1	3	0	34	15	1	58
262144	0	0	0	0	0	0	0	1	0	7	1	0	9
524288	0	0	0	0	0	0	0	0	0	1	0	0	1
1048576	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	99	280	439	1389	566	374	1352	428	251	425	391	128	6123

Source: <http://www.worldmapper.org/data.html>, data file 3, Table 14

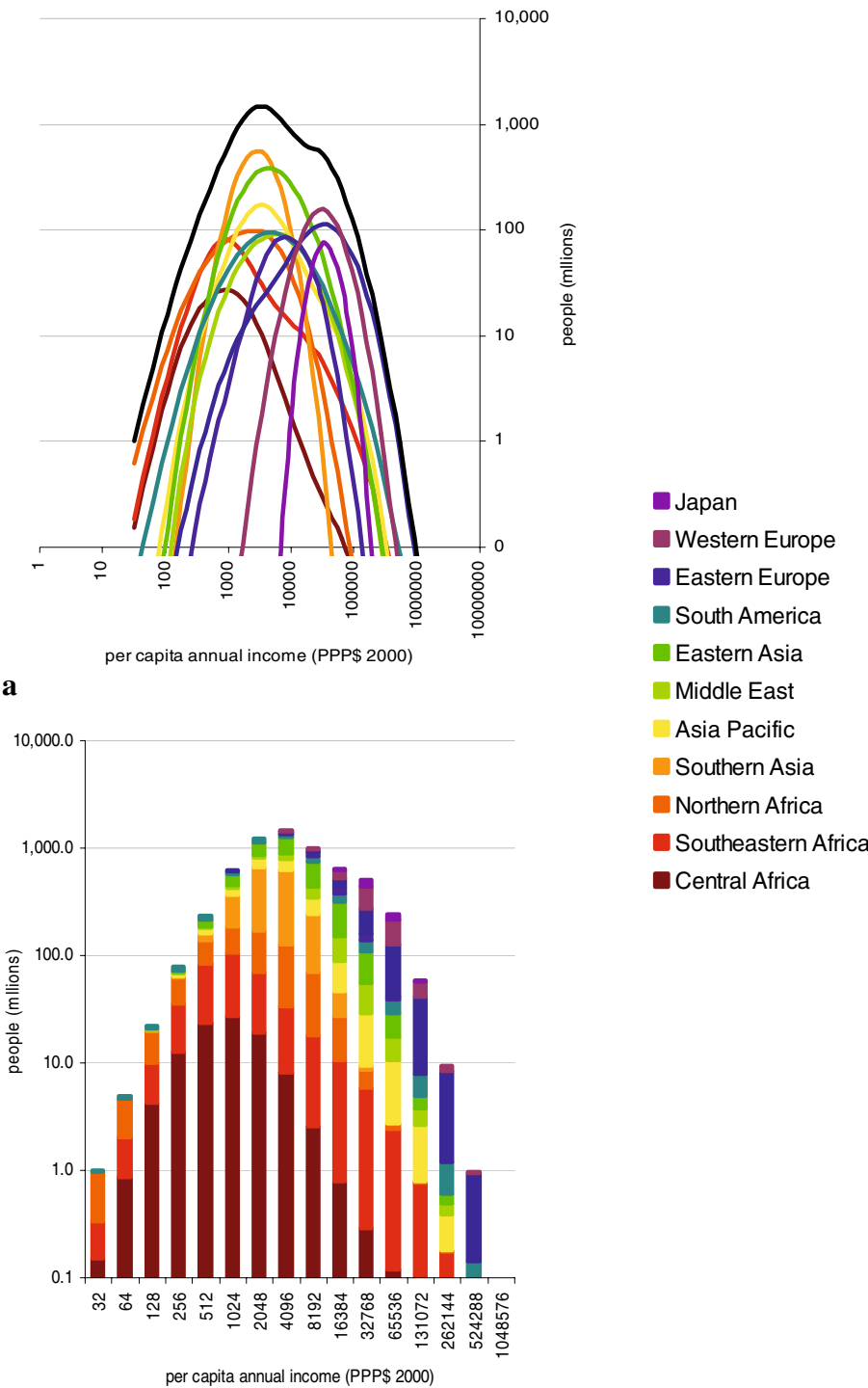


Fig. 17 Visualisations of world income. **a** Source : Table 1, **b** Source : Table 1

Table 2 Areas of Britain where the highest income earners most commonly live in recent years

Constituency	Proportion	Number
Kensington and Chelsea	8%	4,884
Cities of London and Westminster	6%	4,048
Hampstead and Highgate	5%	3,543
Richmond Park	5%	3,677
Esher and Walton	5%	3,697
Beaconsfield	5%	3,190
South West Surrey	4%	3,086
M Maidenhead	4%	2,756
Mole Valley	4%	2,869
Hammersmith and Fulham	4%	2,934
Finchley and Golders Green	4%	2,729
Tonbridge and Malling	4%	2,435
Sevenoaks	4%	2,380

Source: Some of the wealthiest areas in the world are in the UK

Adults with an income over £100,000 per annum in 2004 (source Barclays Bank): most concentrated 10% in all parliamentary constituencies of England and Wales

Conclusion

One reaction to our current state of affairs, a state of affairs that has changed far less in 150 years than we might think, is that we continue to blame the poor for the state we collectively find ourselves in. The continued re-labelling of the poor as ill, lazy, illegal, and stupid and in a multitude of other ways potentially undeserving is all around us. The paupers are still here. However, given how hugely expensive it is to maintain an exclusively rich elite, even one that only about 5% of people can be in, it is necessary that large numbers of people live in poverty in a country like Britain. The same is far less the case in many other European nations and in Japan. It is thus vital to understand the distribution of wealth to better understand that of poverty. The huge cost of maintaining the lives of a tiny proportion of people in luxury has to be born by the rest. A few of the rest can be asset wealthy—hold some noticeable wealth even if not enough to exclude themselves. More can be normal—neither rich nor poor—but they are now only half of all households in Britain. Nationally, a quarter of households in Britain are now poor and today in large parts of the country over half of all households are breadline poor, and up to a sixth are extremely poor in the supposedly united United Kingdom.

Money does not come out of the ether. As the exclusive rich become richer and richer their rights to others' time, labour and subservience grows. Even if their wealth falls, if the incomes of others also falls then they will even more desperately work for the rich; labour in factories in China, grow cash crops in Bangladesh, work in service in the new grand houses in London. This truism holds at a wide range of geographical scales, from within cities in England, to globally. If you are rich, enough is never enough, and for the rich social position is relative too. Losing even a

small proportion of your wealth could be very hard to take. No matter how much you have to begin with.

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