

Ballas, D., D. Dorling, and M. Shaw, 2007, *Social inequality, health, and well-being. Well-Being: individual, community, and social perspectives.* J. Haworth and G. Hart. Basingstoke: Palgrave.

Chapter 9 - Societal inequality, health, and well-being

Dimitris Ballas, Danny Dorling (University of Sheffield) &
Mary Shaw (University of Bristol)

Introduction

“A house may be large or small; as long as the neighboring (*sic*) houses are likewise small, it satisfies all social requirement for a residence. But let there arise next to the little house a palace, and the little house shrinks to a hut. The little house now makes it clear that its inmate has no social position at all to maintain, or but a very insignificant one; and however high it may shoot up in the course of civilization, if the neighboring (*sic*) palace rises in equal or even in greater measure, the occupant of the relatively little house will always find himself more uncomfortable, more dissatisfied, more cramped within his four walls.”

(Marx, 1847)

“In three dozen neighbourhoods of London and three in Glasgow most children aged under five are living in housing, provided by the state, with too few rooms for their family according to the 2001 census. The same source suggests that most under fives in Britain are growing up in homes, small palaces, with a surfeit of rooms.”

(Thomas and Dorling, 2007)

This chapter considers well-being at the ecological level and investigates the relationship between happiness and inequality across Britain. The chapter briefly reviews the theoretical background of happiness research and also considers its relevance to public policy. It can be argued that societies that are extremely polarised and divided are less desirable, and less ‘well’ than those which have elements of equity and communitarianism as their core values and principles.

Section 1 presents evidence for the recent widening of the gap between the rich and the poor leading to unprecedented post World War Two socio-economic polarisation and income inequalities in Britain and reviews the literature that investigates the relationship between inequalities, health and happiness. Section 2 explores the spatial dimensions of socio-economic polarisation by investigating the geographies of income and wealth in Britain. Further, section 3 explores the geographical distribution of happiness in England and Wales using data from the British Household Panel Survey. Finally, section 4 offers some concluding comments.

1. Inequalities, health and happiness: a review of evidence so far.

“Within each of the developed countries, including the United States, average life expectancy is five, ten, or even fifteen years shorter for people living in the poorest areas compared to those in the richest.”

(Wilkinson, 2005:1)

There has been extensive research on the relationship between income, wealth, happiness and health. Most relevant studies suggest that there is a positive relationship (e.g see Hagerty and Veehoven, 2001; Oswald, 1997) such that more income and wealth is associated with greater happiness and better health. However, as Clark and Oswald (2002) point out, while higher income is apparently associated with higher happiness for poor countries, the evidence is less strong among richer countries. In addition, it has long been argued that it is *inequality* that affects happiness rather than levels of income (Jencks, 2002). Further, a number of studies have shown a connection with health such that health is better in less unequal societies. This finding was recently disputed by, among others, Lynch et al. (2004) and their criticism has in turn been disputed with new evidence by Ram (2006). Thus, as the quote from Marx at the start of this chapter suggests, the relationship between inequalities and happiness has long been identified, but also long disputed. This debate has raged in the context of a huge growth in wealth and “mini-palaces” amongst the rich in Britain: people tend to compare themselves to their colleagues, friends, neighbours or so called “reference groups” and this in turn has an impact on happiness and health.

“When we are at home, most of us like to live in roughly the same style as our friends or neighbours, or better. If our friends start giving more elaborate parties, we feel we should do the same. Likewise if they have bigger houses or bigger cars.”

(Layard, 2005: 43)

People compare themselves most with their “near equals” (Runciman, 1966). In particular, as Clark and Oswald (2002) point out, the group of people to whom we compare our income is thought to be our “peer group”, defined as “people like me” (of the same sex, age and education). It could also be “others in the same household”, “myself in the past”, “friends and neighbours” etc. As Layard (2005) points out, income is much more than a means to buy things. It is also an indicator of how we are valued and for some a measure of how they value themselves.

Research by Wilkinson (1992) suggested that a more equal distribution of income was related to improved life expectancy in rich countries. Subsequent work showed that mortality was also lower in American states and metropolitan areas where incomes were more equally distributed. There are a growing and large number of studies supporting the view that inequality has a negative relationship with population health and happiness (Wilkinson and Pickett, 2006). As Jencks (2002) points out:

“...while economic goods and services are obviously important, many people believe that inequality also affects human welfare in ways that are independent of any given household’s purchasing power. Even if my family income remains constant, the distribution of income in my neighbourhood or my nation may influence my children’s educational opportunities, my life expectancy, my chance of being robbed, the probability I will vote and perhaps even my overall happiness.”

(Jencks, 2002: 57)

Nevertheless, it is unclear at which geographical level inequality is most damaging. As noted above, inequality matters because people compare themselves with their “peer groups”. But do they compare themselves to “peer groups” in their neighbourhood, city, region, country or possibly to diaspora groups in other countries or with peoples of whom they know little? There are many other kinds of non-geographical groups as well as diaspora to which we may compare ourselves and with whom we consider ourselves to be of a similar social standing. It is far from clear how reference groups are constituted. Given this confusion, some have elected to simply focus on inequality at the small area level, aiming to capture social comparisons within that level, without reference to the wider social structure (Wilkinson and Pickett, 2006). Wilkinson (1997) has argued that income inequality in small areas (such as streets, wards, or even towns) is affected by the degree of residential segregation of rich and poor and that the health of people in deprived neighbourhoods is poorer not because of the inequality within their neighbourhoods but because they are deprived in relation to the wider society.

“... the broad impression is that social class stratification establishes itself primarily as a national social structure, though there are perhaps also some more local civic hierarchies – for instance within cities and US states. But it should go without saying that classes are defined in relation to each other: one is higher because the other is lower, and vice versa. **The lower class identity of people in a poor neighbourhood is inevitably defined in relation to a hierarchy which includes a knowledge of the existence of superior classes who may live in other areas some distance away.**”

(Wilkinson and Pickett, 2006: 1774, our emphasis)

Endeavouring to investigate this issue Wilkinson and Pickett (2006) compiled a list of 155 published peer reviewed reports of research on the relation between income distribution and measures of population health. They classified these studies as “wholly supportive” or “unsupportive” according to whether they were international studies, using data for whole countries, whether their data were for large sub-national areas such as states, regions and metropolitan areas or whether they were for smaller units such as counties, census tracts or parishes. The proportion of analyses classified as wholly supportive falls from 83% (of all wholly supportive or unsupportive) in the international studies to 73% in the large sub-national areas, to 45% among the smallest spatial units. The implication of this is that the spatial scale at which people make their social comparisons is more likely to be the nation state (arguably reflecting socio-economic position) than it is to be locality (reflecting position within neighbourhood).

On the basis of the above, it can be argued that the degree of societal inequality expressed through the income and wealth distribution may have a huge impact on levels of happiness and well-being (Wolfson, 2003). It can be argued that if money is transferred from a richer person to a poorer person, the poor person gains proportionately more income, and thereby happiness, than the rich person loses. But the overall effects of redistribution may be greater still (the whole benefit being greater than the sum of the individual benefits). Along similar lines, as Jencks (2002) points out, when social scientists measure income inequality they assume that inequality has not changed if everyone's income rises by the same percentage. Therefore, it can be argued that a 1% increase in income is equally valuable to the rich and the poor, even though a 1% increase represents a much larger absolute increase for the rich. Jencks describes this assumption as the "One Percent Is Always The Same" (OPIATS) rule:

"This rule implies that if my income is \$100,000 and I give \$20,000 of it to the poor, my well-being falls by a fifth. If I divide my \$20,000 equally between ten people with incomes of \$10,000 ten people's well-being will rise by a fifth. The gains from this gift will thus exceed the losses by a factor of ten. The utilitarian case for governmental redistribution almost always reflects this logic: taxing the rich won't do them much harm, and helping the poor will do them a lot of good. If you look at the actual relationship between income and outcomes like health and happiness the OPIATS rule seldom describes the relationship perfectly but it comes far closer than the 'One Dollar is Always the Same' rule, which is the only rule under which income inequality does not affect health or happiness".

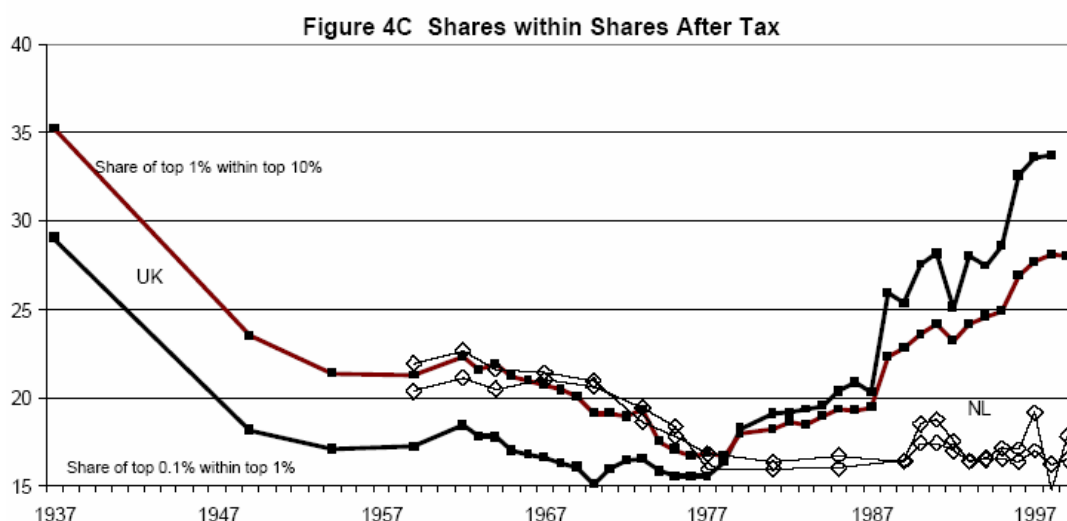
(Jencks, 2002: 57)

Nevertheless, what Jencks's economic example omits is the sociological argument that in losing \$20,000 the individual earning \$100,000 actually gains a better life through helping create and feeling part of a better society. This actual benefit is not included in the OPIATS rule – let alone any projected theological benefits involving rich men fitting through "needle's eye" for future lives! (all world religions are pro-redistribution!) The unhappiest man in the universe of hypothetical worlds would presumably be the one with an income of \$1 trillion a day, in a world where everyone else lived on \$1 a day. We rarely think clearly about income and wealth distributions as so much of our own identity is subsumed within them (if you are reading this you know you are relatively well-off – or are most probably a student and expect to be richer soon!)

The above brief review of literature on the impact of inequality on well-being and happiness suggests that public policies should aim to reduce income and wealth inequalities if their aim is to maximise population health and well-being. In this context, it is interesting to explore what has been happening in Britain over the last century in terms of the distribution of income, health and well-being. Social equity grew most clearly from the start of the century to the middle of the century. The absolute and relative gaps between rich and poor fell in what was most important: in the chances of children dying as infants, in the wealth of their parents, in their opportunities for education, and in the importance that where they lived – that geography - had on their lives. Analysing the results of a survey in the early 1950s,

comparing it to one he had commissioned over half a century earlier, Seebohm Rowntree declared that poverty had all but been eliminated by social reform (Rowntree, 2000). It had not (see Hatton and Bailey, 1999), but it is easy to forget just what had been achieved in those years and how hard it was fought for (Bevan, 1952). Social equality was further abated in the late 1950s. The income shares of the ‘richest of the rich’ as analysed by others show that clearly. This is seen in Figure 1, which describes the proportion of income that the richest segments of the UK and Dutch societies hold (Atkinson and Salverda, 2005). As Atkinson and Salverda (2005) point out, in the UK the share of the top 1% increased from 4.2% in 1977 to 7.1% in 1989, and rose a further 2 percentage points from 1990 to 1999. In addition, the share of the top 0.1% rose from 0.66% in 1977 to 1.81% in 1989, and a further 1.2 percentage points from 1990 to 1999. The same pattern is exhibited by the ‘shares within shares’ shown in Figure 9.1 (where 1 % is a 10th of the richest 10%): convergence up to 1977 and then the UK trend-line rises steadily, while the Netherlands’ lines are near-horizontal.

Figure 9.1: What proportion of income do the richest of the rich hold?



Source: A.B. Atkinson and W. Salverda, 2005: 906

Interestingly, analysis of mortality trends over time reaches almost identical conclusions as those for income (Dorling, 1997); wealth too shows the same pattern. The 1960s Labour governments presided over a period of slight increases in equality again, as did the late 1970s government, but their efforts when viewed over the course of the whole of the last century appear now to simply have been to have held back a revival in inequality. The economic “restructuring” and monetarist neoliberal policies of the 1980s and early 1990s have significantly increased income and wealth inequalities. There is little doubt that the distribution of income in Britain has become even more unequal since 1979 (Atkinson, 1996; Hills, 1996, Hills and Stewart, 2005). Although, average real incomes have grown significantly, at the bottom of the scale there has been little or no rise in real income, while top incomes have risen a great deal faster than the average (Atkinson, 1996; Green, 1996 & 1998; Pearce and Paxton, 2005). This revival of inequality brought us - by the start of this century - to levels of inequality we last experienced at the height of the 1930s depression. In terms of

absolute wealth, especially in comparison to most of the rest of the world, we are much richer. In terms of relative chances between social groups we are as unequal now as we were then (Dorling *et al.*, 2005).

More recent research suggests that the situation in the last decade has been deteriorating. In particular:

1) Housing wealth per child rose 20 times more in the best-off tenth as compared to the worst-off tenth of areas in Britain 1993-2003. (Shelter, 2005, *The great divide: an analysis of housing inequality*, London: Shelter).

2) The majority of 'extra' Higher Education places have gone to children from already advantaged areas and so the participation gap between social groups has been increasing (1997-2003 graduating cohorts, HEFCE Widening Participation report, January 2005 – note however that for cohorts graduating up to 2005 this trend may be changing).

3) 'Work rich' and 'work poor' geographical divisions are growing by area and by income to at least mid 2005 (for more details see Dorling, 2006).

From a geographical perspective, a decade ago Green (1996) pointed out that the social and economic processes, which determined the distribution of income, were spatially uneven. The regions which suffered the least in the recession of the early 1980s tended to gain most in the subsequent recovery. In contrast, the most depressed regions had not recovered the ground lost in the early 1980s (Green, 1996). A decade later and using census material from 2001, compared to 1991, the same process was seen to be continuing if not accelerating (Dorling and Thomas, 2004a). The social polarisation that Figure 1 above illustrates as having grown most rapidly in the 1980s and even more so in the 1990s was matched by spatial polarisation of the growth between regions, cities and neighbourhoods. The south east of England and especially its more affluent neighbourhoods (such as Kensington and Chelsea in London and the county of Surrey) saw wealth, opportunity and incomes concentrate within their populations. Few of the top 1% or 0.1% of income earners lived outside of the most affluent parts of the country and so when their wealth rose dramatically geographical inequalities rose too. Furthermore, those rises were reflected in smaller but still significant rises further down the income distribution – stretching it at every point and exacerbating difference and inequality between both people and places (Hills and Stewart, 2005).

2. Geographical Inequalities of Income and Wealth: what people want and need

“By necessities, I understand not only the commodities which are indispensably necessary for the support of life, but whatever the customs of the country renders it indecent for creditable people, even of the lower order, to be without. A creditable day labourer would be ashamed to appear in public without a linen shirt.”

(Smith, 1759: 383)

This section presents the most recent socio-geographical data currently available on polarisation and discusses the changing geographical distribution of inequality through income and poverty in England and Wales, highlighting how the trends identified through the 1970s, 1980s and 1990s are continuing unabated as social inequalities rise. We have had to exclude Scotland and Northern Ireland from this analysis because of lack of comparable data on income. Figures 9.2 and 9.3 below show the regions and cities we are considering. In all cases cities are defined as the built-up area of each city approximated by aggregations of parliamentary constituencies.

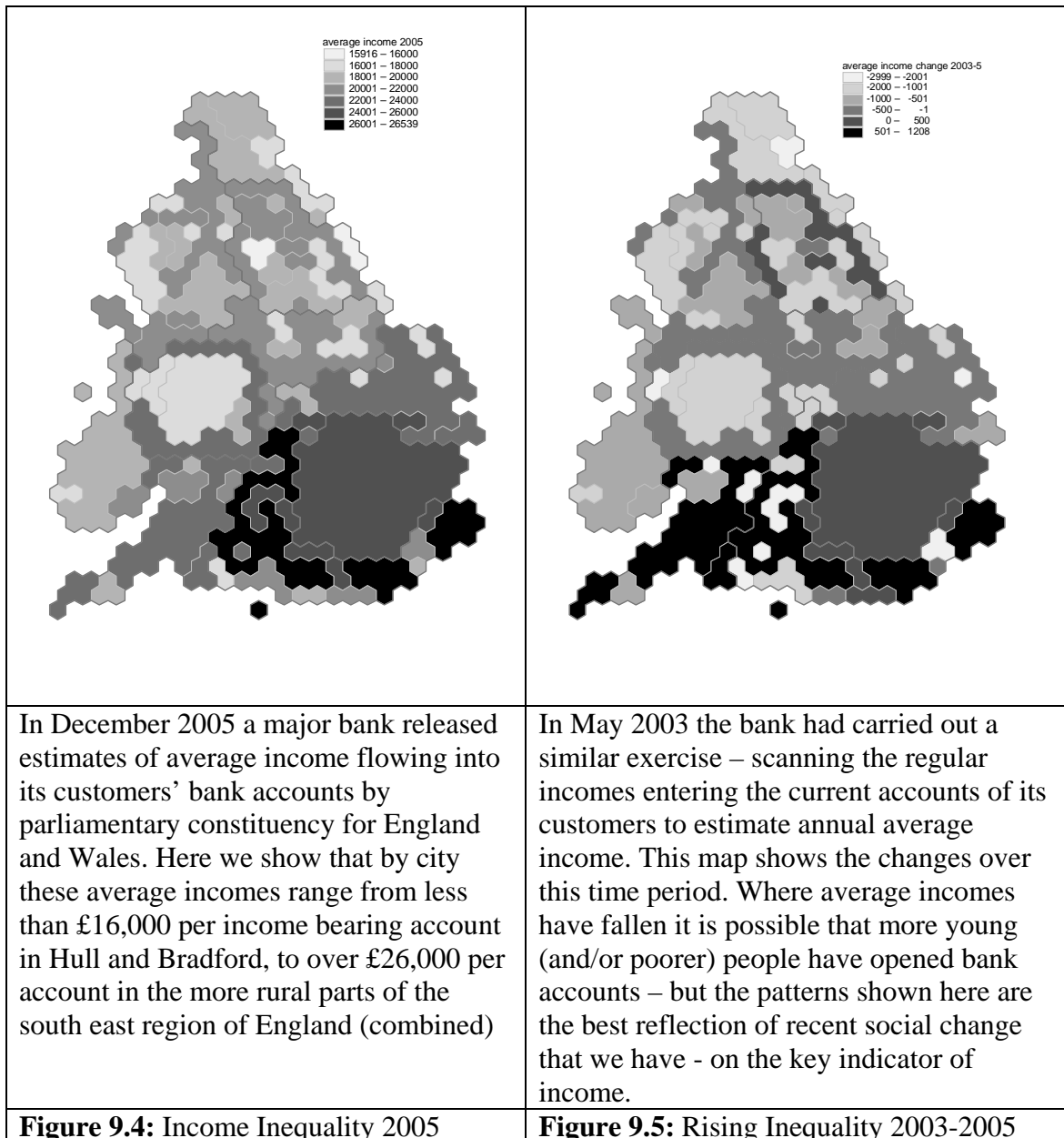
<p>This is a population cartogram map of the regions of the UK. To map the two key indicators of what people want and need we first divide people by region. Each hexagon in the map above is a parliamentary constituency.</p>	<p>We have identified the main cities of England and Wales and approximated their extent through the parliamentary constituencies that cover their built-up area. All the statistics below are shown for these cities and the more rural remainder of each region. You'll need to refer to this map to see where is where.</p>
<p>Figure 9.2: UK Regions by Population</p>	<p>Figure 9.3: English and Welsh Cities</p>

Incomes matter, even the smallest amounts can have vital implications. Money is a ticket to social interaction, to dignity and respect. This is easy to overlook when you have enough to get by:

“Interviewing single mothers on council estates a few years ago it was striking that most spoke about their depressing social isolation. They couldn’t

afford to keep up with former friends, because they hadn't the money to make even the most minimal gestures required of a friendship – sending birthday cards or buying rounds of drinks. As one said at the time; 'My friends will offer to buy me a round - but I have to say no, because I can't buy the next'. As a consequence, these women's social circles had shrunk to their mothers and their lovers, because these were the only relationships which could be maintained without the expectation of financial reciprocity."

(Russell, 2006: 93)



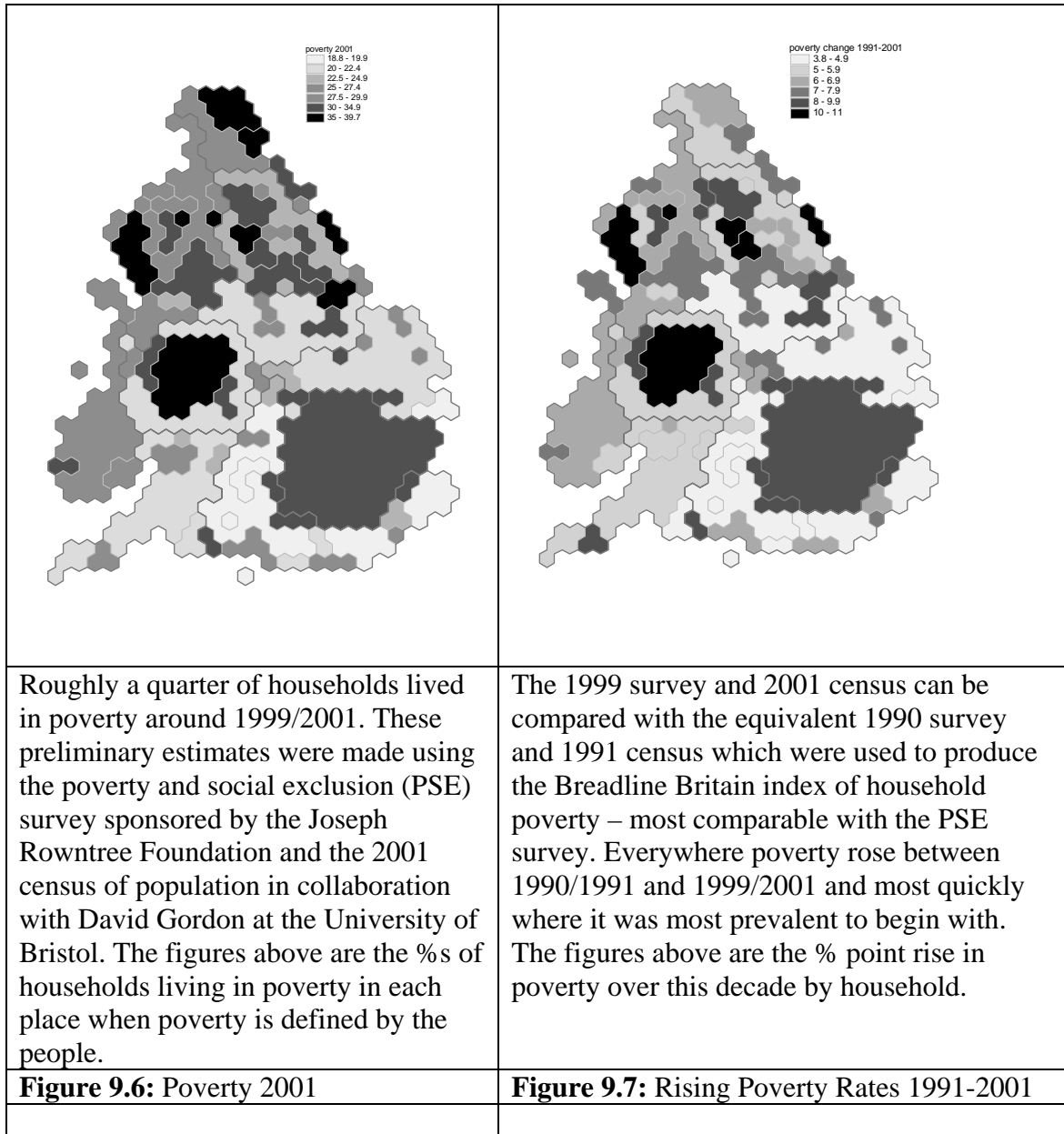
As Layard (2005) points out, friendship is one of the biggest sources of happiness and well-being. However, the ability to make and maintain friends, as suggested by the

above quote, is significantly affected by income. Looking at income distributions can therefore be seen as the equivalent of looking at a proxy of the “ability of making and keeping friends and friendship” in your “peer group” and hence well-being and happiness distributions. We are not saying that income is necessary to create and maintain friendship. For instance, homeless people report friends as being very important, and rich folk can have very shallow friendship networks. However, the ability to make friends is facilitated by income. Poor homeless people cannot choose to be friends with the rich man or woman (although the contrary is not true). Figures 4 and 5 below show the degree to which average incomes vary across these countries and how that inequality has risen in just the most recent two years (in addition to rises recorded between 1991- 2001, 1981-1991 and 1971-1981 in proxies for income by area).

As can be seen in Figure 9.4, there is a very clear North-South divide. According to the December 2005 data released by one of the largest high street banks on its customers’ incomes. The “rural remainder of the South East” (excluding London and other cities) had the highest average income (per person) in England and Wales (£26,539) followed by Crawley (£25,746), London (£25,153), Reading (£24,388) and Oxford (£23,239). In addition, there are relatively high average incomes in the “remainder of East of England” (£22,778), Bournemouth (£22,733), the “remainder of the South West” (£22,512), Milton Keynes (£22,334) and West Midlands (£22,116).

In contrast, Hull has the lowest average income (£15,916). Just above Hull are the cities of Bradford (£15,950), Stoke (£16,448), Leicester (£16,841), Birmingham (£16,909), Blackpool (£17,005), Rochdale (£17,070), Sunderland (£17,268) and Liverpool (£17,406). Money in and of itself cannot be eaten, provides no warmth and makes poor company. Above subsistence level money buys the right to leisure time and activities - Rowntree’s postage stamp, Adam Smith’s linen shirt, to escape Marx and Engel’s hovels, to have a drink with friends, to have friends, to pay for a phone call. Although crude summaries, the differences between the average incomes flowing through bank accounts in different British cities are a marker for collective measure of respect. In 2005 incomes were lowest, at £12,875, across all of England and Wales in the Birmingham, Sparkbrook and Small Heath constituency (where riots took place on the Lozells road in 2005). They were highest in Kensington and Chelsea at £50,438 (which has not experienced rioting since 1958 in Notting Hill).

Figure 9.5 shows the degree to which some cities and regions are catching up with the rest of the country. As can be seen, there is a general trend of ever-increasing social and economic polarisation: most of the areas experiencing the highest increases in average income are located in the South. In particular, the city of Bournemouth experienced the highest income increase, followed by the remainders of the South West and South East, Brighton and London. In contrast, most of the cities which are at the bottom of the 2005 average income distribution, seem to have experienced a decline between 2003-05. For instance, Hull and Stoke are amongst the cities that experienced significant declines in average income between 2003 and 2005. Other towns and cities and regions that experienced considerable decline include Middlesbrough, Luton, Newcastle, Wigan, Coventry, Doncaster, Milton Keynes, Birmingham, Mansfield and Bradford.



There is a similar geographical pattern when we look at the distribution of poverty. Figure 9.6 shows the geographical distribution of poverty around 1999/2001, on the basis of preliminary estimates made using the Poverty and Social Exclusion (PSE) survey sponsored by the Joseph Rowntree Foundation and the 2001 census of population in collaboration with David Gordon at the University of Bristol. The survey was based on the “Breadline Britain method” (Gordon *et al.* 2000), which measures relative poverty based on a lack of the perceived necessities of life. This has been widely accepted as a relative poverty measure whereby poverty is defined as a lack of having the items people need to play a normal part in society. Therefore Figure 9.6 shows the percentages of households living in poverty in each place when poverty is defined by people themselves. There are immediate material consequences to – for instance – not having a warm coat for your child to wear (one of the items used to calculate the measure). Thus the poverty map is map of what people *need* (at a basic level of need) but can also be read as a map of the basic things in life that people need to maintain dignity.

Hull, which, according to Figures 9.4 and 9.5 had the lowest average income, has also the highest poverty rate in the country in 2001 (39.7%). Hull is followed closely by Liverpool (38.5%), Sunderland (36.8%), Bradford (36.2%), Newcastle (36%), Birmingham (35.6%), Blackburn, (35.4%), Rochdale (35.2%), Nottingham (35%) and Leeds (33.8%). In contrast, the lowest poverty rates are observed in Aldershot (18.8%), Reading (19.3%) and the rural remainder of the South East (19.6%).

Figure 9.7 shows the change in these rates between 2001 and 1991. As can be seen, poverty rates using this relative measure have increased everywhere since 1991. In addition, the proportion rises to almost 2 out of 5 households in the worst off places. In particular, the highest rise in the poverty rate has been experienced in Bradford (11% change) followed by Birmingham (10.7%), Hull (10.5%), Huddersfield (10.3%), Liverpool (10%), Blackburn (10%), Leeds (9.3%) and Nottingham (9.3%). It is noteworthy that London is also amongst the cities experiencing a high rise in poverty rates. Poverty rates have increased everywhere, but amongst the cities and regions that experience the lowest increases are Aldershot (3.8% increase), Reading (4.3%), the “rest of the South East” (4.4%) and Bournemouth (4.5%).

3. Regional distributions of “unhappiness” in Britain

So far we have discussed the relationship between inequalities, health and happiness suggesting that there is a strong relationship between them. We have reviewed recent evidence suggesting that socio-economic polarisation and income inequalities in Britain have been rising considerably. Admittedly, given the available evidence all we can do to date is to suggest that there is a relationship, but it is difficult to believe that greater inequality improves health and increases aggregate happiness. We now turn to look at empirical evidence on the geographies of happiness and well-being. In particular, we attempt to investigate the geographical distribution of happiness in Britain based on data from the British Household Panel Survey (BHPS). This survey was also recently used by Clark and Oswald (2002) who attempted to measure the importance of material goods in relation to happiness. The BHPS is one of the most comprehensive surveys in Britain drawn from a representative sample of over 5,000 households. The aim of the survey is to deepen the understanding of social and economic change at the individual and household level in Britain, as well as to identify, model and forecast such changes, their causes and consequences in relation to a range of socio-economic variables (Taylor *et al.*, 2001). In the context of this chapter we use BHPS data to explore the geographical distribution of responses to the following question:

Have you recently been feeling reasonably happy, all things considered?

Table 9.1 shows the percentage of individuals (by social class) who answered that they were *less happy* or *much less so* (sorted in ascending order by the column for all social classes). Note that there are many subtle differences between the social classes, but that people tend to be happier in rural and southern areas.

REGION BY SOCIAL CLASS	CLASS 1	CLASS 2	CLASS 3	CLASSES 1 - 3	N
Rest of Yorks & Humberside	3.3	7.1	7.0	5.9	328
Tyne & Wear	10.0	7.1	3.4	7.2	264
East Midlands	5.3	8.1	11.2	7.9	782
Inner London	10.3	5.2	8.8	7.9	418
Rest of North West	4.9	9.2	12.3	8.5	454
South West	11.7	6.7	8.9	8.7	930
Greater Manchester	14.5	8.2	4.8	9.3	416
West Midlands Conurbation	10.5	8.9	8.8	9.3	453
East Anglia	10.7	6.5	13.3	9.5	390
Merseyside	17.6	9.2	0.0	9.5	233
West Yorkshire	14.5	7.7	9.6	10.2	364
Rest of South East	10.5	10.8	8.7	10.3	1,875
Outer London	8.9	13.3	6.9	10.7	668
Rest of West Midlands	8.9	11.6	14.9	11.5	506
Rest of North	19.7	10.4	8.5	12.4	400
Wales	11.1	12.9	15.3	13.0	533
South Yorkshire	17.6	11.6	24.2	15.4	293
<i>Great Britain</i>	<i>10.5</i>	<i>9.3</i>	<i>9.7</i>	<i>9.8</i>	<i>10,264</i>

Table 9.1: Distribution of “unhappiness” in England and Wales (*Class 1* comprises “Professional and Managerial & technical” occupations, *Class 2* comprises “skilled non-manual and manual” occupations and *Class 3* comprises “Partly-skilled” and “unskilled” occupations)

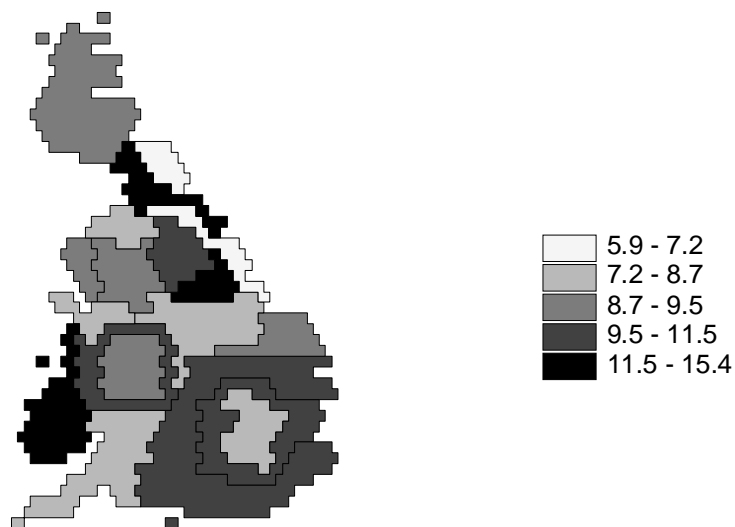


Figure 9.8: Distribution (%) of “unhappiness” in Britain in 1991

Figure 9.8 shows a cartogram depicting the spatial distribution of unhappiness for all social classes combined (column 4 in table 9.1). As can be seen, the North-South divide, which was evident in sections 3, is to an extent replicated in this simple map of unhappiness in Britain (excluding the affluent “Remainder of Yorkshire and the Humber” and somewhat less affluent Tyne and Wear region). Note that by class the best off are most unhappy in the “Rest of the North”, class 2 (skilled) in outer London

suburbia and class 3 (unskilled) in South Yorkshire. Different places suit different groups worst or better: skilled appear least unhappy in Inner London, unskilled in Tyne and Wear and the professional and managerial occupations seem to be most at ease in rural Yorkshire and Humberside. Figure 9.8 enhances further the argument that income and wealth level as well as income and wealth inequalities appear to be related to happiness, but it also suggests other possible factors at play. The latter may include quality of life indicators such as life expectancy, educational attainment, low-work related benefit claims, low rates of poverty and high house prices. It is interesting at this stage to examine relevant recent research findings pertaining to the state of English cities. Table 9.2 shows a number of the key indicators mentioned above, that are combined to create a very simple overall index of the quality of life in English cities.

The units constructed for the score are analogous to life expectancy and can be thought of as a crude indicator of quality of life. They are simply the sum of the five measures in the other columns, each standardised to have the mean and standard deviation of life expectancy. Change over time in this score can also be calculated and is given in Table 9.2, but note that the indicators start from a variety of dates and are only indicative of changing position from the early to mid 1990s. The largest increases of an additional 6.7 points are found in Oxford, Brighton and London. The next three largest increases are in Cambridge, Reading and York. The smallest three increases have been in Hull (least improvement), Burnley and Bradford, followed by Stoke, Huddersfield and Blackburn.

The indicators are sorted by change in overall score. This overall index confirms the North-South division, which was also described in the previous section. In particular, table 9.2 suggests that in general, English cities are clearly divided between those in the South-East of the country and those situated towards the North-West.

It is interesting to view data such as those presented in table 9.2 in parallel with geographical distributions of happiness or unhappiness as depicted in figure 9.8. It can reasonably be expected that the indicators listed in table 9.2 influence to an extent the distribution of happiness and well-being and there is a need to analyse these and other similar datasets in tandem in order to explore the arguments made in the context of this chapter in more detail.

5. Concluding comments

This chapter adds a little more evidences to the mounting case being made that there is a relationship between inequalities and well-being that needs to be examined in more detail. In particular, it has been suggested that the relationship between inequalities, happiness and well-being has long been identified, even though there has been considerable debate about the strength of this relationship. This chapter briefly reviews clear evidence that there is an increasing socio-economic polarisation and widening of inequalities in Britain. It also argues that this polarisation has a geographical dimension at various geographical levels. In particular, there is a clear and growing “North-South” divide in Britain, but there is also local socio-economic polarisation within regions and cities.

City	Life Expectancy 2001-2003	2001 % of adults with a degree	%working age claiming JSA/IS 2003	%of poverty by PSE 1999-2001	Average housing price '03 (£)	Average score 2003	Change in score over time
Cambridge	79.5	41	5.1	29	244862	82.3	5.6
Aldershot	79.0	22	3.7	17	238991	81.9	4.6
Reading	79.6	26	4.7	20	211794	81.5	5.3
Oxford	79.2	37	6.1	30	255181	80.9	6.7
Crawley	79.6	19	4.8	22	205506	79.8	4.7
Bournemouth	79.7	17	7.1	21	214296	79.1	5.0
York	79.4	23	5.4	25	147513	78.2	5.4
Worthing	78.8	16	6.4	20	186992	78.0	4.1
Southend	79.0	13	7.5	19	186481	77.6	4.2
Brighton	78.4	29	9.3	27	212361	77.6	6.8
London	78.6	30	10.3	33	283387	77.5	6.7
Bristol	78.9	23	7.7	25	160708	77.1	4.6
Southampton	78.8	19	6.9	25	172585	76.9	4.9
Norwich	79.8	18	7.5	27	138187	76.3	3.9
Portsmouth	78.8	16	6.6	25	157145	76.2	4.0
Swindon	78.2	15	6.6	22	150689	76.0	4.1
Milton Keynes	78.2	18	6.6	25	161625	76.0	4.2
Gloucester	78.4	16	8.5	22	141690	75.5	3.4
Northampton	78.2	17	7.8	24	135871	75.1	4.1
Warrington	77.9	17	6.8	23	119668	75.1	4.6
Ipswich	79.0	16	10.1	25	134514	74.7	3.5
Chatham	77.7	12	7.7	23	142374	74.2	2.8
Preston	77.7	17	7.2	26	97038	73.6	3.6
Derby	78.1	18	10.5	27	114280	73.1	4.2
Leeds	78.2	19	8.9	32	119262	72.8	3.1
Nottingham	77.5	18	9.8	28	123663	72.7	3.4
Telford	77.9	13	9	27	115722	72.6	2.9
Leicester	78.0	17	11	28	124812	72.6	2.3
Blackpool	77.2	13	8.9	24	103656	72.5	2.2
Plymouth	78.1	13	9.8	28	118978	72.4	3.5
Hastings	77.4	15	13.4	25	163128	72.3	3.7
Luton	77.2	14	9.7	28	143698	72.2	2.0
Peterborough	77.5	14	9.5	28	123089	72.1	2.1
Wakefield	77.5	14	9	28	110407	72.1	3.5
Coventry	77.8	16	10.9	28	111165	72.0	3.8
Huddersfield	77.2	15	8.7	29	97815	71.6	1.8
Manchester	76.7	19	11.6	30	119569	70.9	3.6
Sheffield	77.9	16	10.4	33	96328	70.8	3.6
Wigan	76.5	12	8.6	27	88946	70.7	2.6
Birkenhead	77.9	13	12.2	29	95632	70.6	3.3
Mansfield	77.1	9	9.4	28	94749	70.4	2.0
Bolton	76.8	15	10.4	29	89281	70.4	2.3
Grimsby	77.6	10	11.5	28	77898	70.0	2.6
Doncaster	77.3	11	10.6	30	82267	69.8	3.0
Birmingham	77.4	14	12.8	33	122794	69.7	2.2
Stoke	76.9	11	10.3	29	78834	69.7	1.7
Newcastle	77.1	16	12.8	34	111220	69.2	4.1
Barnsley	77.2	10	10.8	32	79492	68.9	3.0
Rochdale	76.4	14	12.2	31	92523	68.8	2.5
Burnley	76.8	12	10.7	31	55879	68.7	1.5
Bradford	76.9	13	11.5	33	75919	68.6	1.4
Middlesbrough	77.1	12	13.1	32	81760	68.4	3.1
Sunderland	76.6	12	12.4	34	91322	67.8	3.2
Blackburn	75.8	14	12.7	30	70969	67.8	1.9
Hull	76.6	12	17.1	33	72374	66.0	1.4
Liverpool	75.7	14	18	36	87607	64.7	2.8

Table 9.2: Key state of the city indicators, sorted by an overall score and change measure given (after Pritchard et al., 2005)

Given the evidence and recent research on the determinants of happiness and well-being, it has been argued that it is reasonable to assume that widening income and wealth inequalities and the resulting polarisation has a detrimental effect on the overall happiness and well-being of the population. Clearly, there is a need to have a closer examination of the data that include measurements of happiness and well-being. Section 4 of this chapter provided a brief discussion of such data and illustrated how it is possible to look at the geographical as well as the socio-economic distribution of happiness, using data from the British Household Panel Survey and some simple measures of well-being. More sophisticated analysis of this data in combination with the data and evidence presented in section 3 of this chapter is needed to provide a better understanding of the relationship between happiness and income and wealth inequalities and by extension a wide range of social justice issues. However, it can be argued that on the basis of the evidence presented in this chapter it becomes clearer that public policy that is aimed at income and wealth re-distribution and societal equality would probably lead to higher overall levels of happiness and well-being.

Acknowledgements: Funding from the Economic and Social Research Council (research fellowship grant number RES-163-27-1013) and the British Academy (British Academy Research Leave Fellowship) is gratefully acknowledged. The authors would like to thank John Pritchard at the University of Sheffield for all his help with the illustrations. The British Household Panel Survey data used in this chapter were made available through the UK Data Archive. The data were originally collected by the ESRC Research Centre on Micro-social Change at the University of Essex, now incorporated within the Institute for Social and Economic Research. All responsibility for the analysis and interpretation of the data presented in this chapter lies with the authors.

References

- Atkinson, A.B. (1996), Seeking to explain the distribution of income, in J. Hills (ed.) *New Inequalities: the changing distribution of income and wealth in the United Kingdom*, Cambridge University Press, Cambridge, 19-48
- Atkinson, A.B, Salveirda, W (2005), Top Incomes In The Netherlands And The United Kingdom Over The 20th Century, *Journal of The European Economic Association*, Vol. 3, No. 4, Pages 883-913
- Bevan, A (1952, 1990) *In Place of Fear*, London: Quartet.
- Clark, A, Oswald, A, (2002), A Simple Statistical Method for Measuring How Life Events affect Happiness, *International Journal of Epidemiology*, 2002, 31(6), 1139-1144.
- Dorling, D. (1997) Death in Britain: how local mortality rates have changed: 1950s-1990s, Report published by the Joseph Rowntree Foundation.
- Dorling, D. (2006) Class alignment, *Renewal*, vol. 14, pp. 8-19.

- Dorling, D., Mitchell, R., Orford, S., Shaw, M., Davey Smith, G., (2005), Inequalities and Christmas Yet to Come, *BMJ* 331:1409.
- Dorling, D. and Thomas, B. (2004a), *People and Places: a census atlas of the UK*, Bristol: Policy Press.
- Dorling, D. and Thomas, B. (2004b), "Know Your Place: Housing wealth and inequality in Great Britain 1980-2003 and beyond", Shelter Policy Library (<http://www.sheffield.ac.uk/sasi/publications/reports/knowyourplace.htm>)
- Gordon, D., Adelman, A., Ashworth, K., Bradshaw, J., Levitas, R., Middleton, S., Pantazis, C., Patsios, D., Payne, S., Townsend, P. and Williams, J. (2000), *Poverty and social exclusion in Britain*. York, Joseph Rowntree Foundation.
- Green, A. (1996), Aspects of the changing geography of poverty and wealth, in J. Hills (ed.) *New Inequalities: the changing distribution of income and wealth in the United Kingdom*, Cambridge University Press, Cambridge, 265-291
- Green, A. (1998), The geography of earnings and incomes in the 1990s, *Environment and Planning C: Government and Policy*, 16, 633-648
- Hagerty M, Veenhoven R. (2001) *Wealth and Happiness Revisited. Growing Wealth of Nations does go with Greater Happiness*. University of California-Davis, mimeo 2001. (<http://faculty.gsm.ucdavis.edu/~mrhagert/Papers/easterlinreply.pdf>)
- Hatton, T J, Bailey, R E (1999), *Seebom Rowntree and the Post-War Poverty Puzzle*, Centre for Economic Policy Research discussion paper 2147, CEPR, London
- Hills, J. (1996), Introduction: after the turning point, in J. Hills (ed.) *New Inequalities: the changing distribution of income and wealth in the United Kingdom*, Cambridge University Press, Cambridge, 1-16
- Hills, J, Stewart, K (eds) (2005), *A More Equal Society?: New Labour, Poverty, Inequality and Exclusion*, The Policy Press, Bristol
- Jencks, C (2002), Does inequality matter?, *Daedalus Winter 2002*,: 49-65
- Layard, R. (2005), *Happiness: Lessons from a New Science*, Allen Lane, London
- Lynch J, Davey Smith G, Harper S, Hillemeier M, Ross N, Kaplan GA, Wolfson M. (2004) Is income inequality a determinant of population health? Part 1. A Systematic review. *Millbank Quarterly* 2004; 82:5-99
- Low A, Low A. (2004) Measuring the gap: quantifying and comparing local health inequalities, *Journal of Public Health*, vol 26(4):388-395.
- Manor O., Matthews, S, Power, C (1997) Comparing measures of health inequality. *Social science and medicine* 45: 761-771.
- Marx, K (1847) [on-line version], *Wage, Labour and Capital*, [on-line document], Marx/Engels Internet Archive (www.marxists.org) 1993, 1999, Available from: <http://www.marxists.org/archive/marx/works/1847/wage-labour/index.htm>, Accessed 15 September 2006.

- Mitchell, R., Dorling, D. and Shaw, M. (2000) *Inequalities in life and death: what if Britain were more equal?* The Policy Press: Bristol.
- Oswald AJ. (1997), Happiness and economic performance. *Economic Journal* 107:1815–31
- Pearce, N and Paxton, W (2005), *Social Justice: Building a Fairer Britain*, Institute for Public Policy Research/Politico, London
- Pritchard, J, Thomas, B, Dorling, D, Ballas, D (2005), *The State of the Cities Database*, University of Sheffield project report to the Office for the Deputy Prime Minister, July 2005.
- Ram, R. (2006) Further examination of the cross-country association between income inequality and population health, *Social Science & Medicine*, 62, 779–791
- Rowntree, B.S. (2000) *Poverty: a study of Town Life*, centenary edition, Policy Press, Bristol
- Runciman, W (1966), *Relative Deprivation and Social Justice*, London, Routledge and Kegan Paul.
- Russell, J (2006), Friendship: needs, hopes, and hidden assumptions, in Buonfino, A and Mulgan G (eds) *Porcupines in Winter: the pleasures and pains of living together in modern Britain*, The Young Foundation, London
- Shaw, M., Dorling, D., Gordon, D. and Davey Smith, G. (1999) *The widening gap: health inequalities and policy in Britain*. The Policy Press: Bristol.
- Smith, A (1759), *The theory of the moral sentiments*, Reprint. Indianapolis: Liberty Classics, 1952.
- Taylor, M F, Brice J., Buck, N., Prentice-Lane, E (2001) *British Household Panel Survey User Manual Volume A: Introduction, Technical Report and Appendices*. Colchester: University of Essex.
- Thomas, B, Dorling, D (2007), *Identity in Britain: a-cradle-to-grave atlas*, Policy Press, Bristol (forthcoming)
- Veenhoven R. National wealth and individual happiness. In: Grunert K, Olander M (eds) (1989). *Understanding Economic Behavior*. Dordrecht: Kluwer Academic
- Wilkinson, R (2005), *The Impact of Inequality: How to make sick societies healthier*, The New Press, New York
- Wilkinson, RG and Pickett, KE. (2006) Income inequality and population health: A review and explanation of the evidence, *Social Science & Medicine*, Volume 62, Issue 7, April 2006, pp. 1768-1784
- Wolfson, J (2003), *The message of redistribution: disadvantage, public policy and the human good*, Catalyst working paper, Catalyst, London [Web: <http://www.catalystforum.org.uk/pdf/wolff.pdf>] Accessed on 5 December 2005.