

The Mappers and the Mapped

Pinning Down the Poor in the London Poverty Surveys, 1887-1935

Jerry White

University of East London

jerry.white@bbk.ac.uk

The Booth Maps, showing London poverty street by street and published in the 1880s and 1890s are among some of the best-known and most important maps of the metropolis ever made. They represented a revolutionary step forward in visual representations of urban poverty and proved highly influential in subsequent attempts to show the spatial reality of migration, poverty and other social phenomena in London and elsewhere. Indeed, poverty mapping remains a technique employed worldwide to identify clusters of poverty in both urban and rural settings.

The maps seem very much to have been the brainchild of the man whose name they continue to bear. Charles Booth (1840-1916) was born into a wealthy ship-owning family in Liverpool. As a child he was remarkable for little other than facility in mathematics. It was a skill thought especially to equip him for business and so he was inducted into the family firm at the age of 16. He applied himself with energy to the task, taking steps with his eldest brother to grow the enterprise, in particular creating a new steamship company to trade with Latin America.

Business might have been his life but it was his marriage to Mary Macaulay in 1871 that marked the true turning point in his life. Mary was a metropolitan bluestocking from a family of radical administrative reformers. This match encouraged an interest he'd already espoused in the scientific study of society's problems and in 1886, in the midst of a social and economic crisis impacting especially hard on the East End of London, he resolved to discover the depth of poverty and need in this crucible of the country's ills. He embarked at his own cost – he was a very wealthy man – on a 'poverty survey', making his own definition of what constituted a 'poverty line' as his investigations gathered pace.¹

The idea of the poverty maps seems to have been in Booth's mind from the very outset. Where it came from is unclear. Something similar, but far less ambitious, had been produced by the Belgian statistician Adolphe Quetelet who mapped incidents of crime in the 1820s; his work was translated into English in the 1840s but does not seem to have been widely known or commented upon. British antecedents have been noted in the Irish census of 1841 which mapped population density, and in the 'fever maps' charting cases of infectious disease published for Leeds in 1842 and Bethnal Green in 1847, and the maps of the various cholera outbreaks in Britain from 1849. But these had mostly been used to map events rather than being applied to the social classification of whole populations. Indeed the apparatus for constructing such a social classification of poverty did not exist until Charles Booth got to work in London in the 1880s.²

His first task was to devise a poverty line and his second was to enumerate the proportions of East London's population who lived above and below the line. In fact, he went further, dividing the population into eight 'classes' depending on family income. Essentially then this was an economic survey depending on assessing the earnings of a family's major breadwinners. He put four classes below the poverty line:

A -the lowest class of 'semi-criminal and degraded', more of a moral category than an economic one, as he admitted at the time;

B 'casual labour, hand to mouth existence, chronic want', 'very poor';

C and D 'the poor', discriminating between those whose earnings were irregular and those in fulltime work but on very low wages.

He then placed another four classes above the poverty line: E and F (both 'working class' from the regularly employed on fair wages to the 'comfortable'); and G and H (middle class and above).³

At the end of the 1880s, Booth concluded that for central London as a whole 30.7 per cent of the population lived below his poverty line, or some 1.8 million people. It was a proportion, and a number, that staggered many in the middle classes, who felt that the socialists' estimates of London poverty during the 1880s had been an exaggeration. In fact, Booth showed, they were a marked underestimate.⁴

The controversy that ensued over whether Booth's poverty line was set too high, as some contemporary observers affirmed, or was too imprecise, as many subsequent investigators concluded, need not concern us here: apart from noting that not everyone agreed with either his definitions or his approach. For out of Booth's first investigations of London poverty, and from his social and economic classification of London's diverse population, came what he is best remembered for now - the Booth maps of London poverty.

From the first investigations of 1886-9 it was clear that Booth had determined to map his findings. Why he did so is an open question. The answer he gave at the time, and I cite it below, was to test out in a public way the findings of the street survey to see whether they accorded with what others knew of the character of the London streets in question. But then, that purpose having been served, why publish them? One answer, presumably, was that the maps provided a striking graphic representation of what was considered to be reality on the ground. They showed whether or not poverty was spatially clustered or evenly distributed across the city: unsurprisingly they did indeed show clusters of poverty, but of greater moment perhaps was that London's economic diversity led to far more mixing of classes and mixing of poverty and comfort than many might have been led to expect. And a second answer might be this: Booth was interested in social action. He wanted steps to be taken to ameliorate poverty and its effects on contemporary London. For some decades government had devised one simple action when confronted with what was an acknowledged cluster of London's poorest: knock the people's homes down and move them on. Here the maps starkly identified the streets and neighbourhoods crying out, it seemed, for eviction and demolition.

As Booth's work progressed, classifying the people and drawing the maps became two sides of the same coin. The process leading to one led also to the other. The same people were involved, the same data used for Booth's statistical tables and for the maps that immediately flowed from them. It was an immense task. How was it done?

Booth described the process in his first volume, published in 1891 but based on papers he had read to the Royal Statistical Society of London in 1887 and 1888. He relied very heavily in the process of collecting information and devising the maps on one important group of local officials. These were the 270 or so school board visitors employed by the School Board for London, the body tasked from 1870 with establishing compulsory elementary education for all the children of London, however poor they were or dysfunctional their homes. He set

out how uniquely placed these officials were to give him the information he sought and described their relationship with the Londoners in their patch as follows:

The School Board Visitors perform amongst them a house-to-house visitation; every house in every street is in their books, and details are given of every family with children of school age. They begin their scheduling two or three years before the children attain school age, and a record remains in their books of children who have left school. Most of the visitors have been working in the district for several years, and thus have an extensive knowledge of the people.... They are in daily contact with the people, and have a very considerable knowledge of the parents of the school children, especially of the poorest amongst them, and of the conditions under which they live.⁵

Booth's staff supplemented these schedules by means of interviews with the school board visitors, noting down their descriptions 'of the inhabitants of street after street', these full 'of picturesque details'. But the school board visitors had a key function that Booth failed to mention: they policed the lives of the poor. For they were the law enforcement officers who could and did prosecute parents for failing to send their children to school or for permitting truancy, and whose prosecutions could and did lead to fines and imprisonment for those convicted. The late 1880s were no doubt a less fraught period than at the beginning of the 1870s, but even so nearly 13,000 summonses were issued in 1886, rising to nearly 29,000 in 1900. And we should not forget that the visitors were at war with some families, among them the poorest, and that the visitors' powers could be backed up by arrest and imprisonment.⁶

The visitors' schedules and interviews were the foundation of the poverty survey and the poverty maps constructed from them. It's worth looking in a little detail at the process. Booth and his 'secretaries', elite young men and women, generally university trained, and including Beatrice Potter (later Webb), divided the population of the streets for which they had information into the eight classes, and from these divisions 'the streets were classified according to their inhabitants'. Each class was accorded a colour code, from black (lowest class) to gold (wealthy). On a large scale map, 25 inches to the mile, the streets were then hand-painted in the colours that reflected best their class make-up. At this early stage a major problem arose. The fact was that many streets offered a mix of classes. Where the mix showed a majority of one class with a minority of another then the minority was represented by a line indicating that class (e.g. dark blue with a black line indicated a generally very poor population with a strain of semi-criminal and degraded). But a larger problem arose around the dividing line between those of the working class close either side of the poverty line. The poorest were denoted by pale blue for poor. But many streets were mixed and here a fudge

was devised of marking streets 'poverty and comfort mixed' and colouring them purple; in the final outcome street after street, indeed the whole of large neighbourhoods, was coloured in this way (Figure 1).

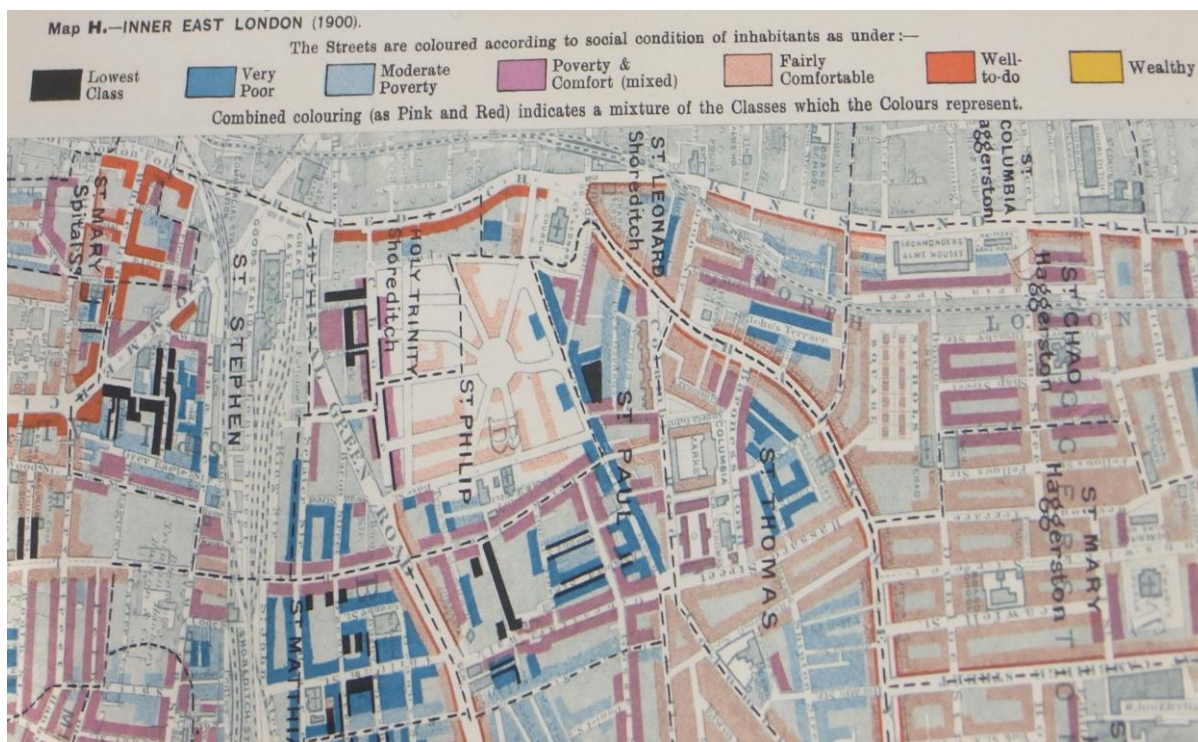


Figure 1: Booth's classification of streets

Once the largescale maps were coloured they were given a public airing. As Booth said:

It was possible to subject the map (at first there was only one, of East London) to the test of criticism, and it was mainly for this purpose that it was prepared. It was exhibited at Toynbee Hall and Oxford House, and was seen and very carefully studied by many who are intimately acquainted, not with the whole, but each with some part, of the district portrayed. Especially, we obtained most valuable aid in this way from the Relieving Officers and from the agents of the Charity Organization Society. The map stood the test very well. There were errors, but on reference they were, in almost every case, found to be due to mistake [sic] in the transfer of verbal into graphic description, or consequent on our having made a whole street the unit of colour, whereas different parts of the same street were of very different character. The map was revised, and now equally represents the facts as disclosed by this inquiry, and as agreed to by the best local authorities.⁷

When Booth extended his inquiry away from East London and throughout central London a very similar process was gone through, and the police were also consulted when it came to the black streets or streets with a black component.⁸

It is worth noting here then just who were consulted and whose views were taken into account in devising the poverty maps. They were not the poor themselves. Indeed, far from it. Rather, it was those who were paid to control and discipline the poor in some way. The school board visitors we have noted. Relieving officers were the agents of the poor law authorities employed to give or to deny aid to the destitute and very poor, either in their homes (the ‘deserving’ and the elderly) or in the workhouse, where family members were separated from one another and subject to institutional discipline. The Charity Organization Society, its agents often clergymen, policed the interface between private philanthropy, which was discouraged, and the poor law, so that families did not hawk their poverty from one agency to another and thus collect more than was due to them. And the Metropolitan Police speaks, as it were, for itself. The churches and the universities collaborated in the two earliest great East End university settlements mentioned by Booth, at Toynbee Hall (the first, 1883-4) at Wentworth Street, in Whitechapel on the border with Spitalfields, and at Oxford House (Bethnal Green, 1884). Charity organisation men and clergymen of one complexion or another were active among the founders, and all were outsiders.

By the time the first four poverty volumes were published in 1891 the maps had taken on a larger importance in Booth’s mind. They were no longer a drafting aid to establish some critical certainty that the tabulated results of the street survey were accurate. Now they were an essential aid to understanding:

In a general way the results, street by street and district by district, can be best shown graphically, and the reader is referred to the maps which are published separately in a case.

For this the very largescale maps were reduced down for printing to four sheets covering central London, though far from the whole ‘metropolis’, at a scale of 6 inches to the mile.

Booth continued his researches into the life and labour of the people in London right through the 1890s and past the turn of the new century. They were eventually published in seventeen volumes, one of the greatest monuments of social research ever undertaken. Extraordinary as it may seem, this continuation involved him in revising his poverty maps street by street to reflect the changes occurring in inner London during the later years of the survey. They were republished, still at 6 inches to the mile but now for a larger London that accorded pretty much with the boundary of the new London County Council formed in 1889. And they were republished not in the volumes dealing with poverty but in six of the seven

volumes now dealing with ‘Religious Influences’ studying the work of the churches in reforming the manners and religious laxity of the London poor.⁹



Figure 2: Booth's map of the London Docks.

Some key departures were made for these revisions. Now the key players were the local parish and other clergy, who could relate the street surveys to their work; and the police.

Perhaps the latter were most important of all, for every street in London was tramped by Booth's investigators accompanied by a local police officer who was considered to know the people well. The views of these officers were then noted in the famous ‘Booth notebooks’, available online and in their original format in the British Library of Political and Economic Science at the LSE. The maps were then produced in their final version after these perambulations (see figures 2 and 3).

What are we to make of these maps? First it's worth stressing just how top-down Booth's approach was here. That merely reflects the mores of the time and the generally superior attitude that educated men and women of all political persuasions, including the left, adopted to working people during this period. But whatever its origins, the people who were mapped were clearly not part of this mapping process. Indeed, every component of the information collected to compose the maps was drawn entirely from people whose function it was to

people moved around far faster than buildings. Booth himself had recognised that the London poor moved home as rapidly as ‘fish in a river’. They moved for a purpose, most frequently to better their housing conditions or to find cheaper accommodation, and this movement was not always haphazard, merely from one nearby house to another. It could take on form and direction and developed trends as housing became available in certain districts and harder to get in others. So the social map of London was always shifting faster than the physical environment. Any map of London poverty was obsolescent as soon as it was laid on the paper and obsolete in significant details inside a decade. A close comparison of the maps produced in 1889 and published a couple of years later, with those produced from around 1896 on, shows just this. There were a number of factors impacting on social change but we might pick out as especially important the expansion of commercial accommodation at the edge of the City squeezing working people further out; and a connected flight of middle-class people from the inner districts to newer suburbs further out, both leading to the increasing proletarianisation of neighbourhoods built just thirty or forty years before for the middle classes of one sort or another.

I say all this not to undermine the value of these maps to us today - they are uniquely important social documents and we should be grateful to have them – but so that we can better understand just what we are dealing with.

Booth’s definition of a poverty line proved highly controversial among social scientists but the techniques of mapping used by Booth were generally welcomed and proved influential. The colour-coding was used to describe the proportions of Jewish immigrants in East End streets in *The Jew in London* by Russell and Lewis in 1900, for example. And when the London School of Economics came to revisit London poverty forty years after Booth had begun his work, the poverty maps were unavoidably an integral part of the project.

That was unsurprising, for the man who led the LSE’s venture had himself been one of Charles Booth’s most important assistants. His name was Hubert Llewellyn Smith (1864-1945), born into the Bristol merchant class and yet another of the provincial-born Londonists who have made such a mark on our understanding of the great metropolis. He had been at Oxford, and like Booth was a mathematician, though unlike Booth he was committed to socialism and working-class betterment and had less of paternalism about him, at least during his early career. He was involved with the settlement movement, at Toynbee Hall and at Beaumont Square, Stepney, and had been an advocate for the workers during the Bryant and

May match-women's strike of 1888 and the Great Dock Strike of 1889, co-authoring a history of the latter struggle. After the Booth years he became a high-ranking civil servant working on labour problems and unemployment and was knighted in 1908.¹⁰ He remained active in public life even after retiring in 1927 and the following year until 1935 directed the LSE's social investigation published in nine volumes as the *New Survey of London Life and Labour*. Two of the nine volumes were given over entirely to folding maps showing London poverty in much the same way as Booth had done some forty years before.

In the intervening period much had changed. Most important of all, the New Survey had to deal with a far larger London. There had been extensive growth since 1900 and especially from 1924, and when the Survey began suburban growth was more prodigious than at any time before in history. So it was now essential to include most of the County of Middlesex, and those parts of Essex, Kent and Surrey that were now indisputably part of London's built-up area and inextricably attached to the capital.

The implications for the mapping project were onerous. Cost determined that the scale for the maps adopted by Booth of 6in to the mile could only be employed for central London (the 1889 area of the first iteration of the Booth maps in 1891), with a scale of 4 inches to the mile for the rest. Even so, the maps as finally produced were very usable, with the street names readily identifiable.

But now the maps were devised in a more sophisticated way, even though this long predated the age of the computer. There were two main sources. One was a Street Survey based on the techniques adopted by Booth, with information coming from LEA school attendance officers (successors to the school board visitors), from the officials working at employment or labour exchanges, from poor law officials (the relieving officers again) and the Metropolitan Police (in order to identify the black streets and streets with black lines). The other was a House Sample Survey. The emergence of statistically valid sampling techniques, enabling investigators to devise an accurate picture of large populations while uncovering the details of only a small proportion, had greatly enlarged since Booth's day. It made what would otherwise have been an unmanageable task (given the larger London to be surveyed) practicable by instructing surveyors to visit every fiftieth house in any district, a proportion reduced to one in 20 houses in smaller districts like Bethnal Green. Households in each street would be quizzed as to their family make-up, the earnings of the household both in the last week preceding the survey and in a week of full employment, the number of rooms

occupied by the household and so on. The results of these two approaches were then combined to construct the maps.

But what colour-coding system would now be used, forty years on from Booth? The Booth problem of mixed streets was identified by the New Survey from the outset: ‘The fact that the population of most streets is mixed, introduces a complication...’ This demanded that an amended classification system be devised for the changed circumstances of London at the end of the 1920s.

It will be noted that the “mixed streets” which in Charles Booth’s maps were coloured purple have disappeared. This title was applied to streets in which various degrees of poverty and welfare were so blended as to make it difficult to assign them to a definite grade of colour. Though some such device as the mixed street may have been inevitable in Charles Booth’s day, in view of his more minute subdivision of social classes, it was certainly a great weakness in his colour scheme that at least a third of the population of London were recorded as living in “mixed streets” – a description which gives the minimum of definite information as to the social grades of their inhabitants.

In the present Survey it has been found possible by a more minute subdivision of streets into sections, combined with a simplification of the general colour scheme, to dispense with the “mixed” street altogether, and to attach to every street section a significant colour, with or without the modification of a blue, black or red stripe.¹¹ (See Figure 4).

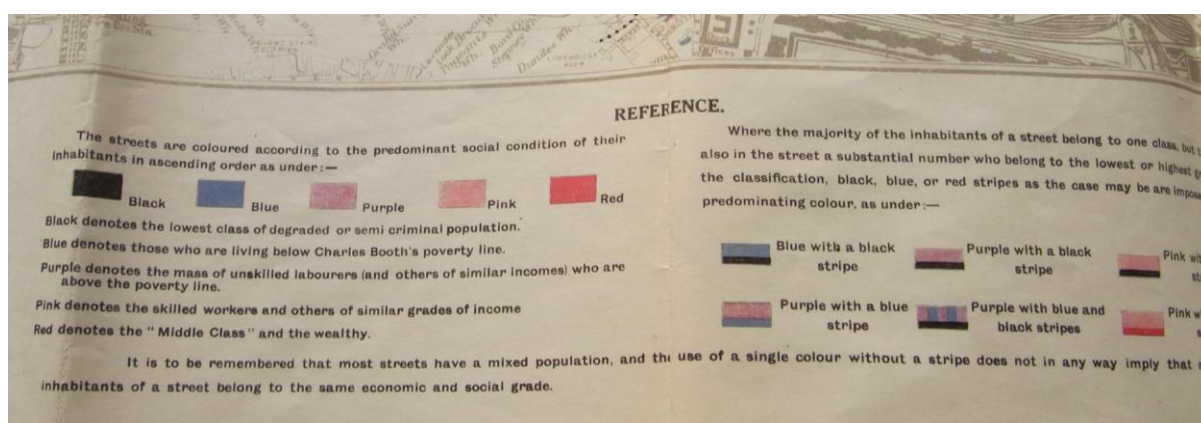


Figure 4: New Survey classification of streets

It might have been thought that the moral classification of 1890 was now in 1930 out of date, but this is what the New Survey said of the black streets:

The evidence on which certain streets have been marked with a black stripe, or in exceptional cases coloured black, is mainly of a non-statistical nature, being based partly on information given by the Police Authorities (including both the Uniformed Branch and the Criminal Investigation Department), partly on information derived from other observers, e.g. School Attendance Officers, clergy, social workers and others having an intimate knowledge of the general character of the inhabitants of the streets. The only definitely statistical element in the assessment of “black” streets was that afforded by the material kindly supplied by the C.I.D., which enabled the home addresses of 15,000 persons charged with indictable offences in London during the year to be located by streets. This information ... has not been regarded as decisive by itself for the purpose of street colouration. In accordance with Charles Booth, our main criterion has been ... the presence of “moral subnormality” or degradation of character as manifested in a variety of ways, including not only crime, but disorder, drunkenness, gambling and vice.¹²



Figure 5: Notting Hill in Booth's Survey

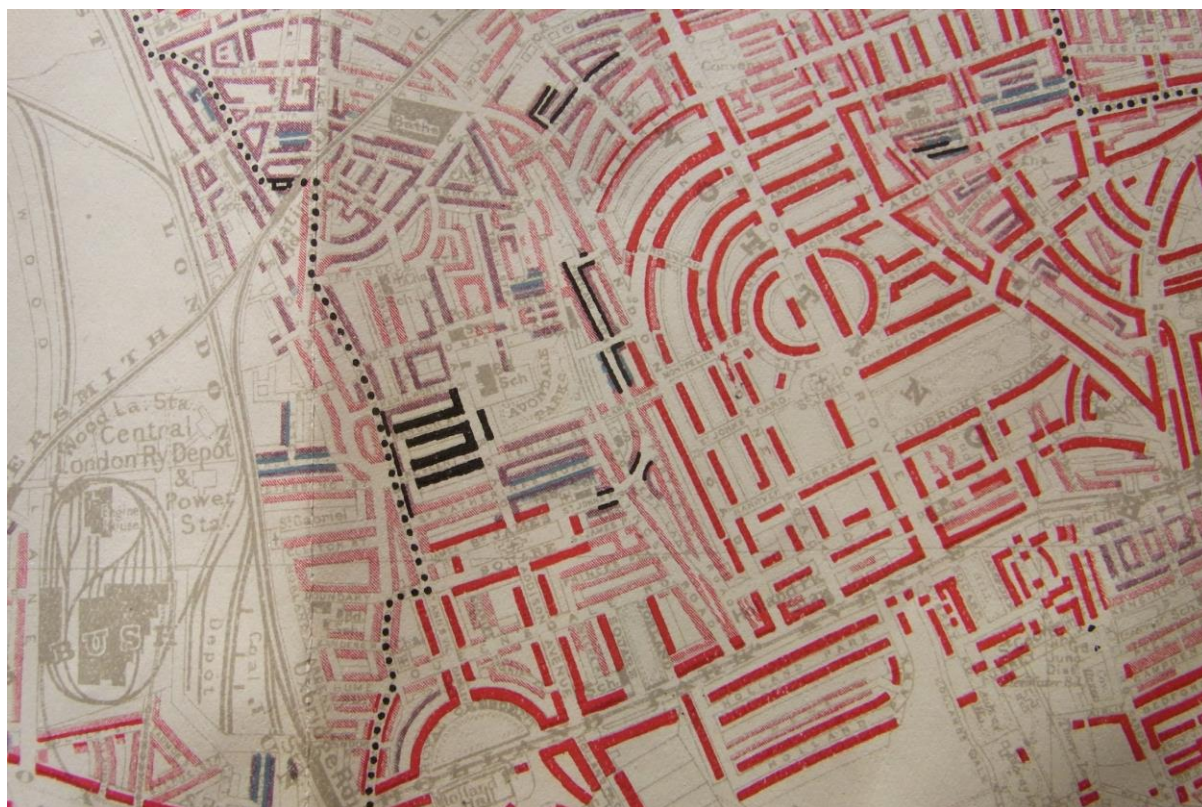


Figure 6: Notting Hill in the New Survey

The New Survey's overall results, analysed it's true to say before the worldwide financial crash of 1929 had really impacted on the metropolis, revealed a London far less poor, far less unequal, far more fair than had been the case in Charles Booth's day (see Figures 5 and 6). Just one figure will have to suffice here: on an upgraded Booth standard to take account of contemporary expectations of what a family might reasonably be able to purchase, the New Survey on one measure found 6 per cent of families in poverty in East London against 30 per cent in 1890.¹³

But how much otherwise had changed in the relationship between mappers and mapped? Though data-gathering techniques had grown more sophisticated in the intervening forty years, especially in obtaining the household survey data, the defects of the old survey were still visible. Nothing could more eloquently describe the continuation of the outsider's view in devising these maps, and indeed in implying to whom they would be useful on publication, than the description of how the black streets had been identified. Precisely nothing had changed here between Booth and the New Survey. Despite the efforts to eliminate the old

concept of ‘mixed streets’, mapping still proved incapable of satisfactorily pinning down the infinite varieties of London living standards. And nothing was said about the frailty and impermanence of this snapshot in time where London in just five years’ time would be several miles wider, filled with new suburban housing in every direction and more people than ever before in history, inevitably impacting on the streets in the survey.

Yet, when all this is said, how grateful we must remain for Booth and for his legacy, working through his disciples forty years on. These maps, even when properly contextualised, are so much better than nothing at all. And how woeful the neglect of our own generation, the lack of intellectual curiosity of our own times, that nothing comparable has been generated in the eighty-five years since the New Survey. The neglect becomes less excusable when we consider the potentials of present-day mapping techniques, of the interactive power of the internet potentially liberating for the first time the voices and experience of those being mapped, indeed blurring altogether the mapper and the mapped in ways that could not have been envisaged even twenty years ago. But then, perhaps, we are now no longer interested in inquiring into London poverty, or in questioning whether London has become more unequal or less fair. Or perhaps we no longer care.

¹ For Booth see *Oxford Dictionary of National Biography* (online version), Charles Booth, shipowner and social investigator, accessed 23 August 2015. T.S. and M.B. Simey, *Charles Booth. Social Scientist*, Oxford, 1960. David Englander and Rosemary O’Day, *Mr Charles Booth’s Inquiry. ‘Life and Labour of the People in London’ Reconsidered*, 1993.

² For these early maps see Jess Steele (ed), *The Streets of London. The Booth Notebooks – South East*, 1997, p 7.

³ Charles Booth, *Life and Labour of the People in London*, 1891, Vol. II, p 20.

⁴ Booth, *Life and Labour*, Vol. II, p 21.

⁵ Booth, *Life and Labour*, Vol. I, pp 5-6.

⁶ David Rubinstein, *School Attendance in London 1870-1904: A Social History*, Hull, 1969, pp 48-9.

⁷ Booth, *Life and Labour*, Vol. I, p24.

⁸ Booth, *Life and Labour*, Vol. II, pp16-17.

⁹ Charles Booth, *Life and Labour of the People in London*, 17 Vols., 1902-3.

¹⁰ *Oxford Dictionary of National Biography* (online version), Sir Hubert Llewellyn Smith, civil servant and social investigator, accessed 23 August 2015.

¹¹ Sir Hubert Llewellyn Smith (ed), *New Survey of Life and Labour in London*, 9 Vols., 1930-35, Vol. III, pp107-8.

¹² *New Survey*, Vol. III, pp 108-9.

¹³ See *New Survey*, Vol. III, ch.VI.