Chapter 4 A Contextual Analysis of the Emergence of Spatial Disparity Research

4.1 Spatial Disparities Without Spatial Disparity Research: The Pre-modern Age

The various categories defined in the last section appeared in scientific thought as topics of research at very different points in time. A firm interest in spatial differentiation was already to be found in the earliest geographical works. As early as in Strabo's (1983) *Geographica* written some 2,000 years ago, to describe of parts of the then known world and to identify differences between them was but a presentation of spatial differentiation. Basically the same was true for chorological works compiled over the next many centuries, including the *Geographia Generalis* of Bernhardus Varenius (1650), and even for the scientific contributions of chorological geography in the early twentieth century hallmarked by names such as Alfred Hettner and Richard Hartshorne (Warf 2010). In all these works, the spatial unevenness of physical geographical factors (such as location, relief, climate, vegetation) was a main factor along which various parts of the earth were distinguished and described.

No doubt, of course, that this chorological tradition also paid attention to certain forms of unevenness produced by social factors. The uneven distribution of population, differences in the efficiency of agricultural production or in the political order are just few topics that are, at least to some extent, imprints of human agency, and which gained attention from all these authors. In their works, however, the outcomes of social processes were usually presented as "given", the human agency standing in their background remained unrevealed. Furthermore, such texts often tended, at least implicitly, to overemphasize the role of physical factors over society. An extreme result of this was environmental determinism, which directly explained social phenomena by physical (mainly climatic) factors. This approach not only appeared in Montesquieu's (1989)[1752] *The Spirit of the Laws*, but it became especially popular at the turn of the nineteenth and twentieth centuries in the *Zeitgeist* infiltrated by evolutionary thoughts (cf. Judkins 2010; for examples see Huntington 1907, 1924; Semple 1911). This tendency was also fuelled by

geopolitical endeavors. Colonial powers could benefit much from presenting the lower technological level of the peoples they conquered as environmentally determined, thus, unavoidable. This was to justify their expansive imperial politics, which could now be interpreted as a civilizing project, not aimed at one-sided exploitation of the colonies but rather "bringing faith and civilization' to the 'savages' and 'barbarians'" (McEwan 2009, p. 125; cf. Livingstone 1992, 2002).

Meanwhile, the spatial aspect of social disparities only began to attract considerable attention as late as the nineteenth century. This fact is remarkable in light of the fact that spatial disparities are coeval with social inequalities, and, actually, with society itself (see Sect. 2.2). The vertical division of labor separated low-status manual activities from a relatively small number of high-status activities of control and coordination. Through this, it also brought significant spatial disparities into being since high-status activities became concentrated at few locations in the geographical space. These centers of authority were also to be found in the first city-states, where the emperor's palace and the temple stood in the center, with less prestigious activities located rather on the urban outskirts. This scheme with a contrast between center and periphery was also explicit in the early empires in Mesopotamia, Egypt, China and India. Especially great was the difference between cities and rural settlements, since high-status activities were, virtually without exception, located in urban centers. Thus, spatial disparities had already reached a considerable level before the debate over social inequalities emerged. Still, a discourse about spatial disparities similar to that about social disparities began only more than 2,000 years later.

One important reason for this time delay might be that although spatial disparities had existed for thousands of years, they remained invisible for the vast majority of society. The contrast between urban and rural areas, for instance, was only perceived by merchants and, in the medieval, by traveling journeymen and students. Emperors and kings were also mobile to some extent. Especially before the spread of literacy, the stability of political power and the efficient functioning of the state were strongly attached to the leader's personal presence. Thus, emperors and kings again and again spent some weeks or months far from their main seat, usually in residences spread over the area over which they reigned, in order to keep control of their subjects. This tradition continued to exist later on as well, even if its importance declined over centuries (Meusburger 1998a, pp. 7-11). Yet, all these "mobile" groups formed no more than a small fraction of society. Others such as the agricultural population in the countryside, strongly linked to the land, or most urban residents enjoying the privilege and defending walls of their city, usually got to know only their closest environment. Thus, spatial disparities attracted virtually no attention from researchers for a long time.

4.2 A Late Beginning for Spatial Inequality Research After the Industrial Revolution

4.2.1 The Industrial Revolution and the Emergence of Social Physics

The conditions that had caused the scientific negligence of spatial disparities changed radically during the eighteenth and nineteenth centuries due to the Industrial Revolution. In this period, the vertical division of labor increased to formerly unprecedented levels. To a large extent this tendency was the outcome of a rapid technological and organizational shift occurring in a society with a poor level of education and literacy on average. Under such circumstances, a radical division of labor in a vertical sense was necessary to establish productive jobs requiring no specific education, which could suck up the uneducated masses. Then, the efficient functioning of production necessitated a permanent and strong control over and coordination of these manual activities, which gave a further impetus to the vertical division of labor (Fassmann and Meusburger 1997). This process not only increased social and spatial disparities, but also made them visible for the broad masses. Since the vast majority of workplaces came into being in cities, a massive migration began from the countryside to urban centers. In England, for instance, which was the first to witness this tendency, the proportion of urban population rose between 1776 and 1871 from 25.9 % to 65.2 %, and almost half of the surplus (45.7%) resulted from immigration from rural regions (Williamson 1988). With a certain time delay, similar changes began in other Western European countries as well. In this context, the urban-rural divide became highly visible evidence for those flowing from the agricultural countryside into cities, where the industrial sector offered a vast number of workplaces. And it also became visible for urban dwellers, who suddenly witnessed the inflow of those giving an imprint of less favorable rural conditions in their social status as well as in their generally low level of education, and even in their personal appearance. Furthermore, in the cities as social groups of very different status got relatively close to each other in the geographical sense, social disparities became not only easier to see, but their spatial aspect also became highly explicit.

Besides these, improving statistical apparatus played an important role in that spatial disparities gained attention as a research issue. The strongly centralized absolute monarchies of Europe began to systematically collect statistical information about their subjects for administrative and military reasons. And this embraced not only data on the number of population. In France of the early nineteenth century, statistics about literacy and education were also collected, and, with a

¹ Furthermore, a significant part of the other 54.2 % was constituted by the children of first generation immigrants since active and fertile age cohorts were highly overrepresented in the latter group (Williamson 1988).

certain delay, other European states likewise expanded the circle of indicators they registered (Meusburger 1998a, p. 192; pp. 223–224). Hence, the data necessary for quantitative analysis was already accessible. Methods to efficiently process and evaluate statistical information were also provided soon by the newly emerging discipline of social physics. Social physics was brought into being by the idea that society, similarly to nature, follows certain regularities, which can be measured through statistical methods, which were already popular in the natural sciences. A pioneer advocate of this approach was the Belgian astronomer, mathematician, and statistician Adolphe Ouetelet. He conducted his first research on long-term demography (e.g. fertility and mortality statistics) from the 1820s onwards, and presented his concept in his main work the decade after (Quetelet 1835). Actually, Quetelet himself was barely interested in the social effects of industrialization (Lesthaeghe 2001), but the tools he used and especially the approach he followed had a significant influence on many social scientists. Similarly valuable was another new method: thematic mapping. Charles Dupin (1826), a French mathematician, published the world's first choropleth map about the rate of illiteracy of France at the level of departments in the very years when Quetelet began his statistical analyses (Friendly 2007). This cartographic method was soon developed further by the Italian geographer Adriano Balbi and the French lawyer André-Michel Guerry (Balbi and Guerry 1829). They depicted different phenomena in their mutual relation (such as the number of crimes in relation to the level of education), which made various indicators easy to compare. Later on, Guerry refined these cartographic methods, and also improved the analysis of social statistics from the level set by Quetelet (Guerry 1833, 1864).

These authors, however, not only invented statistical and cartographic techniques to measure spatial disparities. They also tried to explain the patterns they identified and provide a normative judgment on these. As Meusburger (1998a) points out, several authors, among them Dupin as well, apparently considered geographical inequalities in school attendance and literacy as a problem that should be solved. This problematization was clearly mirrored by their statements, in which they "pleased all friends of French civilization to undertake everything they can in order that 4,441 communes in Northern France and 9,688 in Southern France gain schools. That is the best favor one can do for the motherland" (Dupin; cited in Meusburger 1998a, p. 192). Hence, although the main motivation of early "social physicists" in the Francophone world was to analyze society as if it had been a subject of natural scientific research, in the light of the results they also formed explicit normative opinion, which clearly mirrored the ideals of Enlightenment and nationalism. Thanks to these statements, sciences in general and the French Enlightenment in particular took the first valuable steps to a scientific description and explanation of spatial disparities as well as to the emergence of a political discourse, which had in its core the issue of spatial inequalities.

4.2.2 A New Fashion in the Anglophone World: Spatial Disparity Research From "Moral Statistics" to Charles Booth and to American Social Surveys

Just as in the absolutist France, the statistical analysis of the spatial aspect of social inequalities soon became popular in Britain as well. Although officially gathered data sets were lacking here, private friendly and statistical societies and some affluent individuals began to collect remarkably detailed statistics on various social phenomena. This activity marked the emergence of a new movement in social science, which, just as its counterparts in France, aimed for the scientific analysis of society. Another similarity with then state-of-the-art research in France was the main topics, namely crime, education, and poverty. The firm interest in these "moral statistics" was rooted in the conviction that illiteracy and poor education end up in poor morals, which, finally, lead to poverty. Therefore, the implicit intention of these analyses was to identify spatial "hot spots" of social deprivation, where the level of education should be raised (Meusburger 1998a, pp. 194–196). The underlying presumption, however, soon turned out to be unsubstantiated in the light of empirical results. As Clay (1857) put it, "our present system of popular education is of little or no efficiency in saving the industrial classes from the moral dangers created by those drinking houses" (p. 32). The simple hypothesis about a deterministic relation between education and morality failed.

Still, despite these findings, research concentrating on "moral statistics" were still going on (Meusburger 2008). A main reason was political. During the "Great Depression" after 1873, Britain's economy faced a significant recession (Musson 1959), which, as Bulmer (2001) underlines, raised social tensions and led to sporadic unrest, and, in 1886 in London, to widespread riots as well (Bales 1999). In a few years, the social research movement reached its peak in Britain with contributions to the issue by the philanthropist Charles Booth. In his remarkably detailed analysis about London, Booth (1902–1903) was the first to identify the problem of social segregation and the isolation of neighborhoods, some highly geographical aspects of social disparities (Meusburger 2008).

Since his unique findings were widely reported all over the world (Bales 1999), Booth's work gave inspiration to many in other countries, especially Anglophone ones. In the United States, just as in Britain several decades before, wealthy individuals took the first steps. This trend soon opened the way for large-scale analysis backed by charity movements, which largely adopted the Boothian concept to US context (Bateman 2001; Bulmer 2001; Gordon 1973). During the 1910s, the new "fashion" appeared in Canada as well, where similar research was also carried out (Hunt 2002).

The results not only turned the attention of many to social problems, but also clearly indicated the relevance of analyzing social issues from a spatial aspect. In all these works, the spatial disparity of certain social phenomena was no longer presented as the mechanistic outcome of physical factors, and the authors aimed to reveal and understand the background of these inequalities. These were, actually,

the first scientific contributions to what Gilbert (2010, p. 1587) refers to as the main questions of "modern" spatial inequality research: "how to map, measure, and explain variations"? "How did the differences among areas that were being observed affect human life, and insofar as they did, how could the negative aspects be remedied?"

The endeavor of social scientists to reveal the spatiality of social inequalities was, however, not only the beginning of the tradition of spatial disparity research. To the same extent, it was itself a late result of the social disparity discourse, which had already existed for thousands of years, as it was presented in Sect. 2.3. Thus, projects focusing on spatial disparities showed many characteristic features of the whole disparity discourse. First, they emerged for the same reason as the whole disparity discourse had done. They were reactions to increasing social inequalities, which induced social tensions and, thus, had the potential for destabilizing the political system (cf. with the ideas of Plato and Aristotle on the link between social disparity and political stability in Sect. 2.3.2). Thus, these works were products of a context in which the issue of social inequality in general, and its spatial manifestation in particular, became regarded as serious challenges that had to be dealt with.

Second, just as for concepts about social disparity, there was a significant discrepancy between the "scientific" and "objective" statistical and cartographic analytical methods and the political bias of the analysis of spatial inequalities. As Meusburger (2008) underscores, a major explicit motivation of the various social survey movements was to get information about the spatial unevenness of certain factors, which were a priori considered as the main roots of social deprivation. The objective was to find out, where illiterate people lived, who, if educated, could make themselves familiar with the teachings of the Bible and other religious texts, so they would become "morally better" (Meusburger 2008). A similar concept was likewise present in the US and Canadian survey movements (Bateman 2001; Hunt 2002). Here these ideas were strongly intertwined with the Protestant tradition of Christianizing. Christian churches as well as private charity movements with many leading participants "explicitly defined in the public eye as Christians" (Bateman 2001, p. 65) were driven by the idea of "increasing well-being" through "moral improvement". This motivated them to initiate social surveys in the US and Canada, in order to gain data about the—especially urban—poor and about their distribution in space.

Thus, spatial disparity analyses had a significant religious motivation both in Britain and in North America. And this religious bias had far-reaching political consequences, which steered the development of spatial disparity research into a very specific direction.

4.2.3 A Political Discourse in the Making: Problematization of Spatial Inequalities

Due to the above presented ideological driving forces, the social survey movements, armed with the then most up-to-date analytical methods, were actually brought into being by certain political interests, which thoroughly infiltrated them. As Zimbalist (1977, p. 74) shows, if put in its social context, Charles Booth's survey movement can be regarded as a politically conservative, wealthy ship owner's reaction to Marxist social criticism. In 1885, the Marxist Social Democratic Federation in London claimed in a report that one quarter of the working class in London lived in "dire poverty". Booth, however, refused to accept this, as he put it, "incendiary" conclusion. Instead, he "determined to ascertain the facts of working-class life through objective, scientific investigation" (ibid.) to take the wind out of the Social Democrats' sails. Thus, his main motivation in carrying out such an analysis had its roots in his conservatism and religious attitude.

Given this, it does not seem accidental that the whole research concept had the issues of crime, poverty and education as its focal point. This approach, fully in line with that of the first researchers of "moral statistics", obviously fit Booth's political notions. If social deprivation is a consequence of immoral life and the rejection of conservative values, these are the most feasible indicators to reveal this connection. Furthermore, the simple fact of selecting these indicators for a scientific study suggested their "obvious" relevance for the research issue, even before the first empirical results were achieved. In the light of these, it is easy to understand why Booth concentrated on these very data. And it did not constitute any "problem" for him that the supposed direct link between education and crime had already been rejected by the empirical results of "moral analyses" much earlier, as was already presented in this section. In other words, Booth's motivation was strongly political, and his whole research concept was based on principles that certainly met his political expectations, but were actually indefensible in the light of available studies. Still, he emphasized from the beginning that his results would be "objective" and "scientific", using the image of science to make his expected findings unchallengeable by some "incendiary" Marxist claims. Thus, Booth's research promoted a political discourse, in which he was determined to fight against leftist slogans with his methods presented as "objective", but in fact biased by his own political conviction.

The motivation of those initiating similar movements in the US and in Canada was likewise political. The objective was much more than simply to understand certain social phenomena. This is clearly illustrated by the words of Reverend James A. Macdonald, a leading progressive Presbyterian in Canada, a main supporter of social surveys with a focus on cities (Hunt 2002). As he put it: "The city is the strategic point in the warfare against evil, the storm centre is there; there the fiercest battle waged." (quoted in Fraser 1988, p. 80). As Hunt (2002) shows, the main goal of the Presbyterians was to deliver facts about (urban) social problems to the Canadian public and to turn public attention to these issues. Through this

Presbyterians wanted to find supporters for their evangelical policy claims aimed at the cure of "moral problems". In the light of these it does not seem to be an accident that shortly after the Canadian Presbyterians first social survey on urban areas between 1909 and 1911 a strongly moralistic legislative program was adopted in 1913. In this, the main focus was on the criminalization of certain forms of sexual relations, the use of blasphemous language, and gambling (Hunt 2002), problems being rather typical in urban districts with deprived inhabitants. Furthermore, Hunt also underscores that in common talk in early twentieth century Canada, "the social" and "social problems" explicitly referred not only to the urban poor but to immigrants as well (ibid.), mostly concentrated in large cities. Thus, the moral steps urged by the Presbyterians were also obviously aimed at the "Canadianization" of newcomers (ibid.).

In the USA, the situation was rather similar. Although there had been two competing streams within the Protestant movement since the Civil War in 1861–1865 (Bateman 2001), both "saw America as the place where the Reformation of the Church was to take its final form, and where the Kingdom of God would ultimately be created on this earth" (pp. 67–68; cf. Niebuhr 1937). Thus, for them, "the political redemption of the nation was inseparable from its Christian redemption" (p. 68). Such as in Canada, those conducting social surveys in the US aimed to release precise statistics, "scientific facts" about "immoral" forms of life and its spatial hotspots. From this they expected that society would understand the significance of the problem and realize the necessity of "returning to God", thus, adopting Protestant objectives. In Bateman's (2001, p. 69) words, "what the people had been unwilling to hear from an archangel, they were now hearing, and accepting, from the social surveyors".

This means that the political goals of the supporters of social surveys in the USA and in Canada differed from those of Booth. Charles Booth was to react to the Social Democrats' political statements, by which they tried to draw public attention to certain social problems emerging in a mass-industrial society. Social surveyors in North America, however, had their interests not in denying problems, but in "problematization" (cf. Sect. 2.5.1). Those initiating social surveys in the United States and in Canada wanted to present a set of social phenomena as social problem, which should be dealt with, and which could only be cured through intervention. Through this rhetorical process, the supporters of such research created justification for their own policy initiatives. In the light of empirical results, these endeavors could be presented as necessary steps to solve a massive challenge. In other words, the main goal of social surveyors was to set up a political discourse, which enabled movements with evangelical notions to make themselves more visible. Consequently, they could strengthen their own identity, and find a way to the masses to emphasize their own importance and to convince the public about the righteousness of their social goals. And, just as in the case of Booth's project, this ideologically, politically biased notion was packed in the wrapping paper of the image of objectivity. That is why gathering and processing precise statistical and cartographic data was so important. And, meanwhile, each "objective" result could be used to substantiate the presumption that "lacking morals" was the ultimate reason for crime and poverty. Thus, no floor was given to other explanations to the problem that would have had arguments different to those of the surveyors.

To sum it up, early works concerning spatial disparities of social phenomena, although they relied on a number of up-to-date and "objective" scientific methods, were brought into being by specific political motivations. This political bias strongly influenced empirical results and their interpretation, even if this distortion might have not even been fully realized by the surveyors themselves. This does not mean, of course, that these research projects had not contributed to an understanding of the topics they concerned. With all their biases, they delivered a huge amount of empirical data. They described the spatial aspect of social disparities rather precisely, even if the background of these inequalities was often interpreted in a questionable way. They also improved the methods to quantify and visualize spatial disparities. Thanks to these it was also not unexampled that the empirical findings convinced the surveyors themselves about the false nature of some of their assumptions. For Booth, he realized that the Social Democrats' "incendiary" claim, that one-fourth of all inhabitants in London were living in poverty, was not an exaggeration. Booth, actually, found the correct number was closer to one-third (Bateman 2001). This revelation transformed Booth's attitude towards the social problems of the poor. Although he remained a firm conservative, he became an advocate of universal old age pensions to reduce poverty among the elderly (London School of Economics & Political Science, n.d.).

Altogether, the different movements aimed at analyzing social processes in their spatial manifestation proved the relevance of the spatial scope in disparity research. Furthermore, they contributed much to social sciences in general due to their new methods, approaches and findings. By the latter they gave new impetus foremost to sociology and political science, where this effect proved especially long-lasting. In the US, for instance, surveys remained popular, not only in the 1920s and 1930s, but even after World War II (cf. Bulmer 2001). In most of these new projects, however, the spatial approach was rather subordinate, if present at all. The only remarkable exception was urban sociology in the tradition of Robert Park, which emerged during the 1920s, and which had a firm interest in social disparities in the urban space. As an innovation compared to 19th and early twentieth century social surveyors, urban sociologists not only aimed to describe urban social inequalities, but also to identify the regularities in their background. This endeavor was especially manifest in the works of Park et al. (1925), Hoyt (1939), and Harris and Ullman (1945), which contained model-like representations of disparities in urban space. In these concepts many findings and ideas appeared again that had already been present in Booth's works. Some examples were the emergence of zones with relatively homogenous social structure, the isolation of poor neighborhoods, and various factors pushing out more affluent social strata from the center towards the urban periphery (Meusburger 2008).

Except for these valuable concepts, however, the once groundbreaking initiative of "moral" and social surveyors to detect spatial disparities produced by social processes gradually declined. On the one hand, as has already been already mentioned, sociology and political science, which otherwise benefited much from early

spatial disparity research, proved in the long term rather insensitive to the spatial scope. On the other hand, apart from a few exceptions, geography was that time quite uninterested in micro-level social phenomena.² While "moral" surveys were already bringing new and remarkable results in France and in Britain, geography was just in an early phase of institutionalization. Furthermore, it turned its attention mostly to newly explored regions of far-lying continents, which appeared in the mental map of many in Europe as potential targets of spatial expansion, thus, colonization (cf. Livingstone 1992). This also favored a macro-level approach. The main goal was to describe the potential strategic and economic benefits of areas to be colonized. From this point of view, processes at the micro-level seemed quite irrelevant. Thus, geography was rather uninterested in micro-level social phenomena in the cities of core areas of colonial empires. In consequence, the often controversial but still valuable scientific work carried out by many "moral" and social surveyors remained remarkably unconsidered in geography—and, in fact, in other disciplines as well. Meanwhile, however, another tradition emerged from the early twentieth century, which explicitly put spatial disparities in its focal point: the Marxist tradition.

² The few exceptions emerged within the domain of urban geography, where some authors paid great attention to the functional structure of cities (see for example De Geer 1923; Bobek, 1927; James, 1933). These works, however, merely focused on functional differentiation, and not directly on the asymmetrical accessibility of resources for certain social groups and individuals, thus, not on the issues of spatial inequality and spatial injustice (cf. Heineberg 2006, pp. 16–18).